

Surplus Shed • www.SurplusShed.com

MORE ITEMS ON OUR WEBSITE



SPRING/SUMMER 2005

SURPLUS OPTICS & ELECTRONICS CATALOG BARGAINS FOR FUN, HOBBY, EDUCATION OR PROFIT

- LENSES, MIRRORS, PRISMS, FILTERS
- EYEPIECES AND EYEPIECE LENS SETS
- SCIENTIFIC INSTRUMENTS
- OPTICAL DEVICES
- MILITARY SURPLUS
- EDUCATIONAL OPTICS
- RADIO/ELECTRONICS
- MISCELLANEOUS FUN STUFF









Table of Contents

Just Added	
Achromats	
Antiques	
Beamsplitters	
Binoculars	
Books	
Bulbs/Lamps	12
Camera Lenses	14
Cameras	15
Compass Parts	17
Educational Optics	19
Electric Components	23
Eyepieces/Sets	
Fiber Optics	
Filters	
Flats	
Glass Blanks	
Instruments	
Integrated Circuits	
Kits	
Lenses	
Magnifiers	70
Microscopes	
Mirrors	
Miscellaneous	82
Motors	
Objective Lenses	
Optical Windows	
Photographic Film/Paper	
Power Supplies/Adapters	.110
Prisms	.113
Radio/Electronics	
Reticles	
Solar	
Telephones	
Telescopes	
Tools	
Tubes	
VIP MEMBERSHIP	
Just Added	

JUST ARRIVED! DIAMOND VISIONICS DLP PROJECTION SYSTEM



We are selling these for parts as we don't have any bulbs and it appears that the bulb used in the instrument was an expensive mercury or Xenon type with a special mount. We have no way to determine if the system works. However, it's loaded with expensive and valuable components and made in 2001. Model 1001001-001 uses the Texas Instrument 1-Chip DLP (Digital

Light Processing) technology. The heart of the system is the DMD (Digital Micromirror Device) chip. The DMD chip is probably the world's most sophisticated light switch. It contains a rectangular array of up to 1.3 million hinge-mounted microscopic mirrors; each of these micromirrors measures less than one-fifth the width of a human hair. White light generated by the bulb passes through a color wheel as it travels to the surface of the DMD panel. The color wheel filters the light into red, green, and blue from which a single-chip DLP projection system can create at least 16.7 million colors. The instrument also includes a variable intensity wheel, projection optics, DLP processors, power supplies, 15" x 12" front surface mirror, 15" X 12" ground glass screen, lot of electronic component boards, fans, etc. Complete unit is 27" high by 15-1/2" wide but is in two sections that snap off and on. They have not been abused and the insides look clean. Original cost was \$3200.00 each. If you look at all 3 photos you'll get a good idea of the value. Complete manual copy included.

I1478 \$175 00

JUST ARRIVED! HANDHELD DIRECT VISION SPECTROSCOPE



A real beauty! Great for demonstrating spectra from any visible light source. Precision made heavy duty stainless steel construction with prism assembly, variable

optical slit and adjustable eyepiece. Easy to use: Optical slit adjusts by rotating the knurled end piece, and focus is slip type. Contrast and resolution of the spectrum is changed by adjusting the slit opening. 4 inches long by 1 inch diameter on the slit end. New with wood case. Edmund has a similar spectroscope for \$272.00.

I1479D \$49.00

JUST ARRIVED! VARIABLE RATE STROBE KIT



Includes P.C. board, components, flash tube, and instructions for building this solid state variable rate strobe kit. Flash rate 60 to 120 per minute. Unit can operate with standard "C" batteries (not included) on 12VDC or 6VDC depending on how you decide to wire it. Constructed on a PC board 4-1/4" x 2-7/8" with 4 holes for mounting in your enclosure. Full instructions includ-

ed for easy assembly.

K1001 \$8.50

JUST ARRIVED! 12VDC MOTOR SPEED CONTROLLER AND DIMMER KIT



Easy to build solid state kit allows you to control the speed and direction of 6-12vdc motors (one included) or control the intensity

of 6-12v incandescent lamps. Designed to operate off a 12VDC battery source (not included). Includes p.c. board (3" x 2-3/8") with 4 holes for mounting in your enclosure, all components, motor, and instructions.

K1002 \$15.00

JUST ARRIVED! BIPOLAR 12VDC STEPPING MOTOR AND DRIVER KIT



Kit contains all necessary components including stepping motor to construct this versatile solid state unit. Ideal for the beginner or robotics enthusiast to obtain the necessary theory and stepping motor operation techniques. Kit features operation from 12 VDC +-5%, battery or power supply capable of 1 Amp or better (power source not included), on-board controls and switches

for 1/2 step, full step, single step, CW, CCW rotation, speed control, run and hold. Unit uses a 4 leaded bipolar motor. Also contained are LEDs which show phase sequencing. Driver unit is constructed on a PC board (size 4" \times 3"). Complete with all components, motor and detailed instructions.

K1003 \$19.95

JUST ARRIVED! 4-1/8" DIA NEC TV PROJECTION LENS



Unused beauty. NEC TV projection lens. Designed for use in big screen TV projection systems. Front clear lens diameter of 4-1/8", rear clear lens diameter of 3 7/8", barrel length of 6 1/4" x 5 1/8" diameter (front) and 4 5/8" diameter (rear), multi-element (appears to be all glass as the lens assembly weighs 5 pounds), with coated optics. Black plastic barrel with 5/8" wide

notched front grip ring and $5\,^{\circ}1/8"$ diameter \times 3/4" wide barrel-center threaded mount. The lens projects a large image in a short distance. Great for education projects such as slide or transparency projector, etc in addition to TV projection. Designed to be nearly in contact with subject surface. The number 542 is stamped on the barrel and may be the NEC model number. We haven't taken one apart, but it looks like different types of large diameter optical elements. Includes black plastic front and rear lens covers.

L3294 \$15.00

JUST ARRIVED! LASER POLYGON GOLD MIRROR/MOTOR ASSY



Made by Toshiba, Model LSM-205-8BK. Motor is 24VDC and revolves at 4749 RPM. 8 flat gold coated mirrors revolve. Each rectangular mirror is 27mm long by 5mm wide. These were made to be used in laser scanner assemblies. Flange is 100mm diameter with 3 mounting holes. Unit is 50mm high. Unused.

L3361 \$10.00

JUST ARRIVED! ELECTRONIC CAMERA SHUTTER ASSEMBLY



This is an automatic shutter unit made for a camera and is a beauty. Complete with 2 solenoids, cadmium sulfide photo electric light sensor that determines the exposure and tells the solenoids when to open and close and hence the shutter speed. Has a Mitsubishi M51081P integrated circuit which we believe to be a self timing chip and film speed sensor. We don't know

what camera it was made for and don't have voltage requirements or other specs. Assembly is 2-3/4" long by 2" wide. Shutter opening is 1/2". They are marked "7X1E". Unused in original static shielding bag.

M2410 \$5.00

JUST ARRIVED! CD LASER DIODE/MOTOR ASSEMBLY



Here's the complete laser assembly that appears to have been made for CD's. Includes laser diode assembly with small right angle prism and focusing lens as well as a Mabuchi motor #RF-300C-11400 (runs off 5.9VDC). We don't have any additional specs, but this should be a lot of fun to experiment with. Unused. M2417 \$5.00

JUST ARRIVED! MOUNTED MILITARY 7X50 BINOC ERECTING PRISM ASSEMBLY



These are the right assembly for one of the military 7x50 binoculars. Well made mounted two prism erecting assembly is what you need for building a spotting scope or monocular. Two mounted porro prisms, 2 inches long by 1 inch high. Assembly is 2-1/2 inches thick by 2-1/2 diameter and the view openings are 1 inch diameter. Unused in original govt. packaging dated 1953.

Also could be a military collectable.

L3358 \$12.00

JUST ARRIVED! RHOMBOID PRISM, 40MM X 25MM, CTD



This looks and works like a mini periscope. Coated Rhomboidal prism, 40mm long, 25mm wide, and 10mm thick. O degree light deviation. Displaces image according to length of prism. Image position remains parallel to the old line of sight. Image is neither reverted nor inverted. Center and sides are blackened so the 25mm x 10mm top and bottom view thru portion

has no interfering images. Unused

\$15.00 L3362

JUST ARRIVED! SURPLUS SHED VIP MEMBERSHIPS

Join an elite group of customers who will receive the following benefits:1) Ten percent discount on all purchases2) Advance notice of "New This Week" items with reservation privilege3) Expedited order processing4)Free shipping twice monthly (contiguous USA only)(more frequent orders will be subject to our flat \$5 charge) 5) First look at new products being developed such as our Wollensak Super Wide Angle eyepieces6)Periodic exclusive specials7)We'll listen to your product ideas and if you have a prototype for an optical product, we may be able to help aet it into production. All this for a mere \$49 per year. Benefits will start the day of your purchase and will end one year later. No automatic renewals. We'll ask if you want to renew.

VIP1001 \$49.00

Achromats

36MM X 350MM ACHROMAT

Cemented doublet, 36mm diameter by 350mm focal length. Unused.

L1325 \$6.50

COATED ACHROMAT, 31.5MM DIA.

Focal length is 51mm. Coated cemented doublet. Made to be part of a military eyepiece assembly. These are lens elements #7~& 8. Unused.

L1492 \$7.00 or 10 for \$56.00

RECTANGULAR ACHROMAT, CTD

37.3mm diameter by 28.7mm wide by 11.5mm thick. Has curved edges. 105mm focal length. Coated

L1601 \$5.50 or 10 for \$45.00

15MM DIA MTD ACHROMAT



Achromat, in threaded barrel mount (has both inside and outside threads). Lens is 15mm diameter by 50mm focal length. Mounting is 18.8mm diameter by 12mm long. Not coated. Unused.

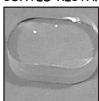
L1657 \$5.50 or 10 for \$40.00

MOUNTED FINDER ACHROMATS

50mm clear diameter cemented doublet mounted in brass cell with outside threads. One surface is coated. OD is 54mm. Focal length is 180mm.

L1684 \$6.00

COATED RECTANGULAR ACHROMAT



This makes a super magnifier. 31.7mm \times 23.7mm \times 10.2mm thick. Coated achromat with curved edges. 100mm focal length. Unused.

L1725 \$5.00 or 10 for \$40.00

HASTINGS TRIPLET - UNMOUNTED



These are typically used as high power magnifiers. Cemented three element design provides the ultimate in distortion and spherical

aberration free, color correct viewing. 15mm diameter, 10x magnification. Surface quality 60/40. Unused

L1865D \$18.50

MOUNTED ACHROMAT, 9MM DIA BY 40MM FL



Coated achromat in mounting. Clear lens diameter is 9mm and focal length is 40mm. Mounting is 13.5mm diameter by 8.9mm long, then machined to 9.5mm diameter by 5mm long with a center opening of 4.2mm. Clearly intended for a specific application. If you have a project that can use this achromat in its mounting, what a find! The lens is held in by a retaining ring so it

can be removed. Use it as is or use either the mounting or lens by itself. We have a good quantity of these and our price is super.

L2010 \$4.75 or 10 for \$35.00

15MM DIA X 40MM FL MTD ACHROMATIC LENS ASSY



Multi coated, multi element achromatic lens assembly mounted with threaded focusing mount. Clear front element lens diameter is 15mm, and clear back element diameter is 11mm diameter. Assembly is 20mm diameter by 13mm high. Focal length is 40mm. Unused. L2057 \$8.00 or 10 for \$65.00

MELLES GRIOT PRECISION ACHROMAT, 31.5MM DIA X 80MM FL Coated cemented doublet made by Mells Griot. These are precision optimized achromats in unused condition. 31.5mm diameter by 80mm focal length. In Melles Griot catalog for \$79.00 each.

L2076 \$9.00

TAMRON FAX-COPYER 160MM FL LENS W/MIRROR



Nice coated multi-element lens assembly with a quality front surface mirror. Designed to be used with a fax/copier machine and in excellent condition. Clear lens diameter is 49mm. Retaining ring holds the 30mm diameter by 3.3mm thick Pyrex front surface mirror which is easily removed. Great lens for experiments as you can use it as an eye inspection device, use the quali-

ty mirror by itself, or use the achromatic lens to make a small scope or finder. Includes protective lens cover.

L3005 \$7.25

ELGEET 8" FOCAL LENGTH MTD ACHROMAT



This is the front element of the Elgeet 4" F/2.7 Cine-Tel telephoto lens. Quality, coated Elgeet cemented doublet achromat with a front element clear diameter of 40mm. Focal length is 8 inches. Nicely mounted with threaded retaining ring. If you have one of the Cine-Tel telephoto lenses, then you need this as a spare. If not, get it for the mounted achromat.

Unused. **L3090** \$5.00

Antiques ANTIQUE 41MM RETICLE



A great find. These are in the original package. Marked "STOCK NO. 2060. ONE RETICLE - MARK 1. DIAMETER 41 MMS. EDMUND SALVAGE COMPANY. P.O. AUDUBON, NEW JERSEY. Looks like war surplus, probably for one of the military scopes. 41mm diameter by 5mm thick. Has vertical and horizontal dashed lines going 3/4 of the way up the center. Markings on left

and right side: 8, 12, 16, 20, 24, and 28.

A1601 \$4.00

ANTIQUE RETICLE FOR MILITARY M70F TELESCOPE



Unused in original packaging, dated in the 1940's. Reticle made for the military M70F telescope. 27.4mm diameter by 3.1mm thick. Has small cross hair and vertical and horizontal dashed lines going 1/2 of the way down from the center. Markings on left and right side: 8, 16, 24, and 32.

A1604 \$4.00

Beamsplitters 15MM COATED CUBE BEAMSPLITTER



Unused beauty in original packaging. 15mm \times 15mm cube beamsplitter. Transmission and reflection is in the ratio of 50/50. Made of BK7 with surface quality 60/40. Angle tolerance is +- 3 arc min and flatness is 1/2 wave. All sides are anti-reflection coated. Edmund's 15mm \times 15mm sells for \$118.80

L2046D \$19.00

30MM COATED CUBE BEAMSPLITTER



Unused beauty in original packaging. 30mm \times 30mm cube beamsplitter. Transmission and reflection is in the ratio of 50/50. Made of BK7 with surface quality 60/40. Angle tolerance is +- 3 arc min and flatness is about 1/2 wave. All sides are anti-reflection coated. Edmund's 30mm \times 30mm sells for \$157.50

L2047D \$35.00

40MM COATED CUBE BEAMSPLITTER



Unused beauty in original packaging. 40mm X 40mm cube beamsplitter. Transmission and reflection is in the ratio of 50/50. Made of BK7 with surface quality 60/40. Angle tolerance is +- 3 arc min and flatness is about 1/2 wave. All sides are anti-reflection coated. Edmund's 40mm X 40mm sells for \$240.90

L2048D \$45.00

20MM COATED CUBE BEAMSPLITTER



Unused beauty in original packaging. 20mm X 20mm cube beamsplitter. Transmission and reflection is in the ratio of 50/50. Made of BK7 with surface quality 60/40. Angle tolerance is +- 3 arc min and flatness is about 1/2 wave. All sides are anti-reflection coated. Edmund's 20mm X 20mm sells for \$125.90 **L2069D** \$25.00

MIRROR TYPE GLASS BEAMSPLITTER, 50MM SQ



Beamspitter appears to be 25% transmittance and 75% reflective. 50mm long \times 50mm wide. Unused.

M3014 \$2.50

Binoculars

OBJECTIVE COVER FOR STEINER 6X30 BINOCS



Unused and made for the quality Steiner 6×30 military binoculars. Brown rubber, 1.7" ID with a 2" long handle. Also fits eyepieces of some of the larger binoculars such as 14×70 .

M1601 \$0.50 or 10 for \$4.00

RAINGUARD/EYEPIECE COVER FOR STEINER 6X30 BINOCS



Unused and made to fit the eyepieces of the quality Steiner military 6×30 binoculars. 4" long by 1-1/2" wide. Has places for a strap. Brown rubber.

M1602 \$1.00 or 10 for \$8.00

WWII BRITISH MADE OFFICER'S POLISHED BRASS BINOCULARS



Rare WWII 6x30 porro prism binoculars. Made in the early 1940's by the best British optical houses. Prism and objective covers have been polished (could use a bit more elbow grease). These will look super in your office or living room. Quality optics throughout provide great sharp images. Individual focusing eyepieces. Vintage canvas case included. Excellent condition.

T1409 \$75.00

MILITARY PERISCOPIC BINOCULARS



Made for the Czechoslovakian People's Army and used in tanks. The coated optics deliver a crisp and bright 4x view with a reticle overlaid in the right-hand eyepiece. Rubber eyecups make for comfortable viewing and both eyepieces are fully focusing. An unusual quick-release turret assembly on top allows for rapid cleaning of the objectives, prisms, etc. Top and bottom

mounting brackets. Has a knob adjustment for the distance between your eyes, and a head rest. Heavy duty construction. Excellent condition

T1471 \$85.00

MILITARY PERISCOPIC BINOCULARS W/CASE & ACCESSORIES



Like new with original wood case. Made for the Czechoslovakian People's Army and used in tanks. The coated optics deliver a crisp and bright 4x view with a reticle overlaid in the right-hand eyepiece. Rubber eyecups make for comfortable viewing and both eyepieces are fully focusing. An unusual quick-release turret assembly on top allows for rapid cleaning of the

objectives, prisms, etc. Top and bottom mounting brackets. Has a knob adjustment for the distance between your eyes, and a head rest. Heavy duty construction. Includes spare top prism assembly, extra rubber eyeguard, lens cleaning cloth, stamped military paperwork, passport, and instruction manual (not in English). These are beauties and we only have a few.

T1475 \$125.00

IRON CURTAIN 6 X 30 MILITARY PRISM BINOCULARS



Made in the early 1950's in one of the Iron Curtain countries such as Bulgaria, these are rugged military porro prism binoculars complete with original leather case and leather eyepiece cover. Quality coated optics with individual focus eyepieces. Has range reticle in the right eyepiece. Designed to resist dust, etc. Used but in very good condition.

T1484 \$39.95

KERSHAW MK3 BINO PRISM WWII FIELD BINOCULARS



These British-produced British military binoculars are rugged construction, intended for field use during World War II. The Kershaw MK3 features a porro-II prism design for improved light transmission, and 6x magnification. The four base ports allow for nitrogen purging to eliminate the fog-prone oxygen otherwise present in the optical path, and drying of all internal

parts should the unit be water-saturated. Focusing is available for each eye. Each unit has a black-enameled brass body, coated optics, is marked BINO PRISM No. 2 MK3, X6, GRATICULES 1/20c APART AND 1/40c 1/20c AND 10c HIGH. Made between 1943 and 1944. These have seen the field, but are in very good working condition. Great military collectable that you can use and at a great price.

T1508 \$49.00

Books

TECH MANUAL FOR T-11/KC-1 AERIAL CAMERAS



One of our customers got his hands on the Operation and Maintenance Technical Manual, the Overhaul Technical Manual, and the Illustrated Parts Breakdown. We had some copies made and bound. There's about 300 pages. Covers Aerial Mapping Camera Type T-11, KC-1, KC-1B, and KC-9A.

M1498 \$30.00

MILITARY OPTICAL DESIGN HANDBOOK



Complete reprint of this classic, hard to find 630 page book. this handbook was developed by the Department of Defense with the assistance of a leading optical manufacturer. It provides engineering personnel with an introduction to optical theory, and treats to an advanced level the fundamentals and principles of optical design. There are 26 sections, an appendix and a

comprehensive index. There are 20 pages on eyepieces, 25 pages on mirror and prism systems, 25 pages on telescope objectives. Sections on microscope optics, infrared optical design, optical material, optical tests, coating, etc., etc. Military Standardization Handbook #MIL-HDBK-141, 5 October 1962. Lots of the optics referenced are available surplus.

M1514 \$50.00

BOOK OF GERMAN MILITARY OPTICAL EQUIPMENT



Here's a book with the specs of German military binoculars and other optical equipment. Lots of interesting info and photos in this 92 page soft cover book. Only problem is that it's written in German. If you can read German, you need this. If not, it's easy to figure out what each spec means. Great photos and some very unusual instruments defined. Unused.

M2050 \$17.50

FIBER LIGHTING BOOK FOR THE HOBBYIST AND CRAFTSMAN



This 36 page soft cover book by Walter A. Baldwin includes the basic principles of fiber lighting as well as basic construction techniques, craft applications and ideas. Fully illustrated with diagrams and photos. This is a great introduction to the use and application of fiber lighting in creative craft projects.

M2117 \$4.50

192 PAGE POPULAR OPTICS "HOW TO" BOOK



If you are interested in experimenting with optics, building optical instruments, or just learning, this is the book for you. Here is the main breakdown of the book: The Optical Bench, Graphical Ray Tracing, Basic Optical Math, All about Magnifiers, How to Condense and Project Light, Optical Drawing Devices, Telescopes you can Build, Homemade Telephoto Systems, and Fun with

Optics. Included is info on finding focal length, all kinds of info on different types of lenses and their uses, image formation, testing, determining the power of a magnifier, field of an eyepiece, make a telescope into a microscope, all kinds of info on projectors, Camera Lucida, reflector and refractor telescopes and inexpensive pipe mounts and tripods, making cradles, info on telephoto lenses and how they work and designs, how to make a simple spectroscope, etc., etc. 192 pages of interesting and fun stuff to do with optics. These are new and the latest edition.

M2291 \$14.95

Bulbs/Lamps

FLAME TIP BULB, 2.2 VOLT, .25A, MINI SCREW BASE



Low voltage, works with 1-1/2 volt batteries or your solar cells. Package of 4.

M2105P \$0.65

MTD 300 WATT AIRPORT LANDING LIGHT



Made by GE. 300 watt, 6.6 Amps. We guess that that means you need 48 volts to run it at full power. Mount is 12-1/2" long by

10" wide. If you have an airport or a landing strip for your airplane, you need these. If not, makes a great light.

M2113 \$10.00

8 WATT U-BEND TYPE FLUORESCENT BLACKLIGHT BULB



FTB-8T6-BL 8 Watt blacklight fluorescent bulb. Black light is the popular term for ultraviolet energy near the visible spectrum. Blacklights are used for a wide variety of applications including color matching, curing, sanitization, particle identification, art display, recreation, automotive, R12 chemical leak detection, and lots of fun stuff. We couldn't find these specific ones listed any-

where so we may be the only source for these replacement bulbs for your blacklight devices. U Bend shape with 4 pin base. We've been told that there are adapters that will allow you to screw these into a regular light socket, but haven't found them yet. Unused.One of our customers advises that this works in his 15 Watt Bug Zapper which needs UV!

M2138 \$1.50 or 10 for \$10.00

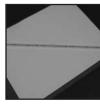
ANTIQUE WESTINGHOUSE MAZDA #1491 AUTO LAMPS - ORIGINAL BX 10 BULBS



Original unused boxes of ten Westinghouse Mazda #1491 automobile lamps (.8 amps, 2.4 volts) for the antique automobilia collector or antique car owner. Each original orange and black Westinghouse Mazda cardboard box (6 1/2" long x 2 1/2" deep x 2 1/2" high) holds ten unused bulbs in a cardboard insert. The end of the box indicates that these are G8 bulbs with DC

bayonet base. **M2306** \$15.00

SYLVANIA 625T2-1/2Q/CL/S COPIER LAMP



Made for photocopiers. 12-1/2" long by 5/16" diameter. Unused in original packaging M3020 \$5.00

MINI STROBE TUBE & REFLECTOR



Bright Xenon strobe tube and reflector is 0.96 inches by 0.89 inches by 0.74 inches deep. Unused with 2 copper tabs for anode & cathode and 1 aluminum tab for trigger lead.

R3118 \$1.00 or 10 for \$8.00

Camera Lenses

35MM STEREO CAMERA LENS/SHUTTER ASSY



This is the complete integrated lens and shutter assembly made for the Revere 35mm stereo cameras. Dual quality coated camera lenses made by Wollensak of Germany with iris control from f/3.5 to f/22. One turn of the control adjusts both lenses. Shutter speeds from 1/2 second to 1/200 second with "B" and "T". Cock the shutter and release, both go at the same

time. Coated optics. If you have ever wanted to build a 35mm stereo camera to take photos to use in your stereoscope, here's your opportunity. Or just get it for the two camera lenses, etc. Unused.

L2084 \$19.50

BURLE 75MM TV LENS "C" MOUNT AUTO IRIS



Unused beauty. Quality TV lens made by Burle. Model TC 1874C ES 75mm, f/1.8. Made for 1-inch format cameras. Has 24" long cable with 3 prong bayonet connector. Has level and ALC adjustments. Knurled ring focus adjustment. Standard "C" mount. Front and rear lens caps included. Original government cost was \$574.23

L2151 \$45.00

CARL ZEISS TESSAR CAMERA LENS



Made in West Germany for we believe a 126 film format camera. These are unused overruns. Tessar f/2.8, 45mm focal length. Coated multi-element quality lens with iris. Iris alone is worth our price for the entire assembly. Includes bayonet front lens cover marked "ZEISS IKON".One of our customers advised that these were made for the Zeiss Ikon Contaflex 126

camera. Thanks Tony. L2158 \$12.00

WOLLENSAK 160MM F/4.5 RAPTAR LENS SET



Unused beauties. Lens set consists of two mounted lens assemblies that were designed to go onto either side of the iris/shutter assembly for one of the cameras. We don't have the exact specs or spacing. Coated optics. Front assembly is 2-1/8" diameter (clear lens diameter is 1-3/8" diameter. Rear assembly is 1-3/4" diameter (clear lens diameter is 1-1/4". Focal

length is 160mm. Only have a few.

L3096 \$25.00

STEINHEIL CAMERA LENS/IRIS/SHUTTER ASSY



45mm, f/2.8 Steinheil Anastigmat camera lens assembly. Coated optics. Made in Germany. Has iris adjustment and shutter speed adjustment. Looks like the slowest speed is about 1 second, but we don't have the equipment to determine the fastest speed. We don't know what camera this was made for or what film format, but at this price it will be great to experiment

with. Assembly is 40mm diameter by 22mm deep. Clear front and rear lens diameter is 15mm. Steinheil made quality optics.

L3359 \$12.00

Cameras

KB18A MILITARY PANORAMIC AERIAL CAMERA W/ZEISS LENS



Designed for the U.S. Air Force for use in fighter/bomber aircraft or reconnaissance aircraft. It scans 180 degrees for photographic assessment of strike mission damage. It has automatic exposure control and a double Dove prism that rotates to provide the 2.25" by 9.40" image format. Takes 70mm by 250 ft. roll film. Has great resolution with the Carl Zeiss

3" focal length f/2.8 lens. Angle of view is 41 degrees, 6 seconds by 180 degrees. Shutter speeds from 1/100 to 1/4000. 300 exposures per roll of film. For unmodified use, needs 28VDC and 115VAC, 400 Hz. Partial manual copy included. Excellent condition. Manual copy included. Our low price was \$375.00. Now closing them out!

I1433 \$275.00

GBC 1/2" MULTI-PURPOSE CCTV B&W CAMERA.



Model CTC-2200 made by GBC CCTV Corp. They are like new and come with a 15VDC, 600mA power supply that plugs into standard 117VAC, 60Hz. Can also be battery operated from a 15 to 18VDC source. Designed for many months of use without adjustments, making it ideal for unattended operation. Features 2 to 1 interlace for the sharpest image transmission, and

features automatic light compensation for clear pictures from dawn to dusk. Has SO-259 coaxial socket to accept PL-259 plugs. Includes threaded mounting holes on top and bottom for table, ceiling or wall mounting. Takes standard "C" mount lenses (not included). These are government surplus so should be very good quality. 1/2" vidicon CCTV format. Camera is 8-1/2" long by 4-1/2" wide by 2" high.

I1440 \$45.00

KB-18B MILITARY PANORAMIC AERIAL CAMERA W/ZEISS LENS



These are unused, mint condition and include the camera control and body cover. The camera is the same design as the KB-18A except that the magazine assembly has

been improved. Designed for the U.S. Air Force for use in fighter/bomber aircraft or reconnaissance aircraft. It scans 180 degrees for photographic assessment of strike mission damage. It has automatic exposure control and a double Dove prism that rotates to provide the 2.25" by 9.40" image format. Takes 70mm by 250 ft. roll film. Has great resolution with the sharp Carl Zeiss 3" focal length f/2.8 lens. Angle of view is 41 degrees, 6 seconds by 180 degrees. Shutter speeds from 1/100 to 1/4000. 300 exposures per roll of film. For unmodified use, needs 28VDC and 115VAC, 400 Hz. Modification suggestions included for land use. We do not have cables. Manual copy included.

I1475 \$475.00

TEKTRONIX C-51 SCOPE CAMERA W/WRITING SPEED ENHANCER



Same as our #R1458 but has the Tektronix writing speed enhancer attached. This is one of the fastest writing speeds of any Tektronix scope camera. Has electronic-actuated shutter, photometer exposure aid and automatic single-sweep control. The lens assembly is a JML Optical 56mm f/1.2 lens. Not sure how it gets its power. There is a 6 prong plug on the side. We

have seen these selling used for over \$1600.00. The lens alone is worth our price for the entire unit. Good condition.

R1459 \$65.00

COLOR CMOS CAMERA <\$10



ZoomCam ISA Model 1575 made by Zoom Telephonics. These are unused and include a 10 foot cable with ferrite noise filter and 9-pin circular mini-DIN plug to connect into your video-ready faxmodem or video capture card (modem or card not included). This camera has a lot of features and a wealth of parts. Includes a high-quality f/1.9 multi-element anti-reflection coated lens

with a focal length of 4.8mm and a 50 degree wide angle field of view. Adjustable focus from 2 inches to infinity. The camera automatically adjusts for exposure, contrast, backlight, and fluorescent light "flicker" for high performance over a broad range of light conditions. Resolution is 352 X 288 pixels. It uses an advanced CMOS array to provide high resolution color live action video or point-and-click imagecapture. With a little creativity you should be able to adapt this to an unlimited amount of uses. Will run off 9 volts DC. Power consumption is 600mW nominal, 48mW sleep mode. We don't have schematic diagrams, so you will have to do some tracing to see what each pin goes to. Should be a fun and rewarding project. There are drivers that can be downloaded from http://www.zoom.com/ts1/cam/isa.shtml. The case is a contemporary design with weighted base and only 1.88" wide by 3.3" long by 2.43" high and has a standard mount for camera tripod. Take a look at all 3 photos to get a better idea of what you will get for such a pittance. Unused R1460 \$9.75

Compass Parts

JOHN E. HAND 7-1/2" COMPASS CARD



If you have one of the large brass John E. Hand military compasses that needs a replacement compass card, you are in luck! Looks like

this is made of an acrylic material. Disc is 7-11/16" diameter. This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice collectable. Put it in a frame and hang it on the wall in your family room or office.

M2179 \$15.00

JOHN E. HAND 2-1/2" NAVY COMPASS CARD



If you have one of the Navy John E. Hand military compasses that needs a replacement compass card, you are in luck! Made of aluminum, the card is 2-1/2" diameter and has degrees in 10's with markers at the half way spot and lines for each 2 degrees This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice

collectable. Put it in a frame with our M2179 and M2181 and hang it on the wall in your family room or office.

M2180 \$5.00

U.S. NAVY BRASS COMPASS CORRECTOR CARD



Made by John E. Hand & Sons of Philadelphia. The brass disc is 2-7/8" diameter and is to be used with the No. 5 Boat Compass. U.S.Navy Compass Corrector Mark 1, Mod O. Our understanding is that compasses had to be corrected because of the ship's magnetism. This is an original part.

M2181 \$6.50

JOHN E. HAND 4-7/8" MILITARY COMPASS CARD

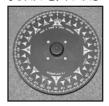


If you have one of the John E. Hand military compasses that needs a replacement compass card, you are in luck! Made of aluminum, the card is 4-7/8" diameter and is

different from the other ones we have in that the degrees are in two levels and go around the card about 3/4 of the way. This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice collectable. Put it in a frame with our M2179, M2180 and M2181, and hang it on the wall in your family room or office.

M2195 \$7.50

JOHN E. HAND 2-1/2" DIAMETER MILITARY COMPASS CARD



If you have one of the Navy John E. Hand military compasses that needs this replacement compass card, you are in luck! 2-1/2" diameter black-enameled aluminum with white numerics and notations, has degrees in 10's with markers at the half way spot and lines for each 2 degrees, with additional directional pointers and reversed numerics for mirrored compasses. Includes

attached center spindle and bottom 4-hole mounting bracket. This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice nautical collectable. Put it in a frame with our M2179, M2180, and M2181 for display in your family room or office.

M2207 \$7.00

JOHN E. HAND 4" MILITARY COMPASS CARD



If you have one of the John E. Hand military compasses that needs a replacement compass card, you are in luck! Made of aluminum, the card is 4 inches diameter. This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice collectable. Put it in a frame with our M2179, M2180, M2181, M2195, and/or M2207 and

hang it on the wall in your family room or office.

M2408 \$7.50

Educational Optics

EDUCATIONAL SET OF 50MM LENSES



Set of 6 lenses, 50mm diameter. Made of glass with polished faces and ground edges. Set consists one each of the following: double

convex, plano-convex, converging concave-convex, diverging convex-concave, double concave, and plano-concave. Set comes in a hinged wood display box.

L1875D \$12.00

EDUCATIONAL DCX 38MM X 50MM



Part of our educational optics series. Double convex, spherical glass lens, with a focal length of approx. 50mm and diameter of 38mm. Made of glass with polished face and ground edges. Refractive index is approx. 1.52. Unused and individually boxed. Perfect for educational projects, but focal length is not in close tolerance from lens to lens, so not good for use in a

product you are going to manufacture where the focal length needs to be exactly the same.

L1901D \$1.50 or 10 for \$12.00

EDUCATIONAL DCX 38MM X 75MM

L1902D \$1.40 or 10 for \$11.00

EDUCATIONAL DCX 38MM X 150MM

L1903D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 38MM X 200MM

L1904D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 38MM X 250MM

L1905D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 38MM X 300MM

L1906D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 38MM X 500MM

L1907D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 38MM X 1000MM

L1908D \$1.25 or 10 for \$9.00

EDUCATIONAL DCX 50MM X 50MM

Part of our educational optics series. Double convex, spherical glass lens, with a focal length of approx. 50mm. Made of glass with polished face and ground edges. Refractive index is approx. 1.52. Unused and individually boxed. Perfect for educational projects, but focal length is not in close tolerance from lens to lens, so not good for use in a product you are going to manufacture where the focal length needs to be exactly the same.

L1911D \$1.75 or 10 for \$12.00

EDUCATIONAL DCX 50MM X 75MM

L1912D \$1.75 or 10 for \$12.00

EDUCATIONAL DCX 50MM X 150MM

L1913D \$1.50 or 10 for \$10.00

EDUCATIONAL DCX 50MM X 200MM

L1914D \$1.50 or 10 for \$10.00

EDUCATIONAL DCX 50MM X 250MM

L1915D \$1.50 or 10 for \$10.00

EDUCATIONAL DCX 50MM X 300MM

L1916D \$1.50 or 10 for \$10.00

EDUCATIONAL DCX 50MM X 500MM

L1917D \$1.50 or 10 for \$10.00

EDUCATIONAL DCX 50MM X 1000MM

L1918D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 38MM X -50MM

Part of our educational optics series. Double concave, spherical glass lens, with a focal length of approx. -50mm and diameter of 38mm. Made of glass with polished face and ground edges. Refractive index is approx. 1.52. Unused and individually boxed. Perfect for educational projects, but focal length is not in close tolerance from lens to lens, so not good for use in a product you are going to manufacture where the focal length needs to be exactly the same.

L1951D \$1.50 or 10 for \$12.00

EDUCATIONAL DCV 38MM X -75MM

L1952D \$1.40 or 10 for \$11.00

EDUCATIONAL DCV 38MM X -150MM

L1953D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 38MM X -200MM

L1954D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 38MM X -250MM

L1955D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 38MM X -300MM

L1956D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 38MM X -500MM

L1957D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 38MM X -1000MM

L1958D \$1.25 or 10 for \$9.00

EDUCATIONAL DCV 50MM X -50MM

Part of our educational optics series. Double concave, spherical glass lens, with a focal length of approx. -50mm. Made of glass with polished face and ground edges. Refractive index is approx. 1.52. Unused and individually boxed. Perfect for educational projects, but focal length is not in close tolerance from lens to lens, so not good for use in a product you are going to manufacture where the focal length needs to be exactly the same.

L1961D \$2.00 or 10 for \$16.00

EDUCATIONAL DCV 50MM X -150MM

L1963D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 50MM X -200MM

L1964D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 50MM X -250MM

L1965D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 50MM X -300MM

L1966D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 50MM X -500MM

L1967D \$1.50 or 10 for \$10.00

EDUCATIONAL DCV 50MM X -1000MM

L1968D \$1.50 or 10 for \$10.00

Electric Components NIDEC BETA V WISPER FAN



12VDC brushless fan #TA225DC. Nidec Model M33404-18G. Has 7 blades and unit is 2-1/4" square. Mounted on a metal frame that is 9-1/2" long with holes to fit into a specific unit. Mounting can be easily removed. Has 2-1/2" lead with 2 pin pc connector. Includes fan guard.

M2027P \$3.00

SUNON 60MM SQUARE 12VDC BRUSHLESS FAN



Unused Sunon 12VDC, 2.2W brushless fan model #KDE1206PHSI. Fan is 60mm square and 15mm deep with 12" leads.

M2152 \$3.50

TWO POSITION HEAVY DUTY TOGGLE SWITCH



Two position toggle switch made by Eaton Corporation. Part number is 8951K163. Specification ranges are 10A 250VAC and 15A 125VAC with 4 contact connections. Nice

large, red switch is 3/4" long \times 1/2" wide with 2 hole mounting bracket. Switch is 2" long from mounting bracket to mounting bracket and is 1" deep. Unused.

M2162 \$2.00

SWITCHCRAFT 2 POSITION DPDT SLIDER SWITCH



Switchcraft 2 position switch operates at 3A 125vac or .5A at 125vdc. Aluminum housing is 1 3/8" long \times 3/4" wide with 2 mounting holes. Has 9 copper contacts on rear of switch. Throw is black and 5/16" long. Unused. M2166 \$0.75 or 10 for \$5.00

2 POSITION SPST TOGGLE SWITCH



Two position toggle switch is 35mm from tip of switch to rear. Threaded for mounting and includes 6 sided nut. Rated at 3A at 250 volts and 6A at 125 volts. Switch is barbell design and made of metal.

M2182 \$0.75 or 10 for \$5.00

LIGHTED 3-COLOR, 3-POSITION SWITCH



Measuring 3" deep \times 3/4" wide, this well-constructed switch appears to be constructed for DC operation. It's composed of a zinc frame, opaque three-position flip lever with a small red, yellow, and green filter attached to be rear, in front of a 1/2" long \times 3/16" wide bulb (up=green, center=yellow, down=red). The lever is held in position by a series of insulated spring

steel tabs that each have a solder terminal in the rear of the switch. The switch front panel has two 1mm threaded mounting holes.

M2186 \$3.50

MINIATURE BATTERY STATUS METER



Brand new stock, manufactured by Hunt Electronics Co. of Dallas TX. The meter measures 1 3/8" wide \times 11/16" high \times 1 1/2" deep, with plastic casing, black needle, red "Replace", yellow, and green "Good" zones, dual rear solder tabs, and should fit a 1 5/16" \times 5/8" (33mm \times 16mm) panel hole. Without additional components, 3VDC brings meter to full scale.

M2187 \$0.75 or 10 for \$6.00

LEVITON 125/250VAC TURN SWITCH



Two position switch, measuring 20mm long \times 18mm wide \times 30mm total depth (20mm mast height). Threaded for mounting in a 10mm hole, includes mounting hex nut and connection wiring (approx. 5" black, 25" red). Rated 3A @ 125V, 1A @ 250V, 1A @ 125VT.

M2188 \$0.75 or 10 for \$6.00

JUD-CO PRESSURE PUSH ON/PUSH OFF SWITCH



Two-position switch, measuring 17mm long \times 13mm wide \times 25mm total depth (17mm mast height). Threaded for mounting in a 10mm hole, includes mounting ring and connection wiring (three wires, each approx. 4" long). No switch rating; wiring indicates 300V 80 degrees C.

M2189 \$0.50 or 10 for \$4.00

30MM WIRE-WOUND FERRITE RING/CORE



An interesting component for the electronics "do-ityourselfer"! A 30mm diameter x 8mm high gray Ferrite ring/core, wound with red plastic-insulated fine gauge conductive wire. May have been designed to be used as a filter choke in a power supply, but no doubt you'll have other use ideas. We've got a good supply, so if you build a product that needs them, we've proba-

bly got the quantity you need.

M2199 \$0.50 or 10 for \$4.00

BATTERY HOLDER - 3 AA CELLS



A must-have for those DC battery-powered projects and for quick replacement of an existing holder! New 2 5/16" long x 1 15/16" wide x 5/8" high black plastic 3battery holders with contacts, springs, and pre-wired. M2209 \$0.35 or 10 for \$2.50

115VAC 8-PIN MINI RELAY



Numbered 156-4157 and 242-20275, these small (1 1/8" long \times 7/8" wide \times 1 1/4" high) white plasticcased relays are great for the electronics hobbyist! Casing includes a schematic diagram on the top. New bulk stock.

M2212 \$0.75 or 10 for \$6.00

DELTA 12VDC BRUSHLESS FAN, 120MM SQ.



Delta 12VDC, .60A brushless fan, model WFB1212HE. Roughly 130 CFM. The fan measures 120mm square x38mm deep, with 11" leads to a MXT2-1 #2695 two-pin female plug.

M2214 \$5.00

6 DIGIT 24VDC PANEL MOUNT COUNTER



Tamura Electric model #E650. 24VDC, 650mW, 10CPS. White numbers on black background. 29mm wide by 22mm high by 35mm deep. Has 5 inch long 2 wire lead with end plug. Unused.

\$2.50 M2419

ANSLEY DIP PLUG CONNECTORS



T&B/ANSLEY Catalog #609-M141H. Series 609 standard 14 pin DIP plug. Rated at 1 amp, 150 volts. Unused box of 50

R1431 \$10.00

9V RED LED W/SWITCH, RESISTOR & LEADS



New This Week, 12/16/01Works off 9vdc battery. Great for astronomy use with your dark adapted eyes, or build into your equipment. LED is mounted on switch assembly with 20 Ohm resistor, and 4-1/2" long leads (center lead is positive).

R1439 \$0.60 or 10 for \$5.00

3 CONDUCTOR ELECTRICAL CORD



40" long electrical cord with 3 prong male on one end and female on the other end. This is the type that will fit your computer, printer, and other electronic equipment.

R1446 \$1.50

SNAP MOUNT 6800 MICROFARAD CAPACITOR, 25VDC



Aluminum snap mount electrolytic capacitor, 6800 microfarad, 25 VDC. Length is 1.57" and diameter is 1". These were made for Panasonic by ACOM division of Matsushita Electric. Unused.

R1462L \$0.85 or 10 for \$7.00

TRON HEB-AA IN-LINE WATERPROOF FUSEHOLDER



In-the-line waterproof fuseholder by Tron. For trouble free fuse protection in wet locations on circuits of up to 600V, 30A. For 13/32" x 1-1/2" fuses. Wire range #12 to #8. Unused.

R1464L \$3.00

7 FOOT, 3 CONDUCTOR ELECTRICAL CORD



Standard 3 prong AC connector on one end and the other end has two wires tinned and the other has a ground connector. Made by Victor Corp. 18 AWG, Type SPT-2, 105 degrees C. Unused

R2004P \$1.25 or 10 for \$10.00

20 FOOT STEREO HEADPHONE CABLE



For connection between headphones and amp/receiver, etc. Stereo 1/8" mini plug to stereo 1/4" phone jack. Unused.

R2021L \$3.00

CLAROSTAT 4 OHM WIRE WOUND 100 WATT POWER RESISTOR



Unused in original box. Clarostat #VK100N. 4 ohms, 100 watts. Enamel, fixed resistance, with tabs. Includes N100 mounting bracket.

R2022P \$2.50

20 AMP EMI LINE FILTER



SAE EMI #HP 1-20. Rated 20 amps, 115/250 VAC 50/60 Hz. Has 1/4" quick connect type terminals for all electrical connections. 3-3/4" \times 3-1/4" \times 1-1/2". Has 4 mounting holes off to each side.

R2030 \$5.00

12VDC SOLENOID VALVE



Originally designed for use in automotive anti-pollution systems, these valves are perfect for low volume vacuum or air pressure applications. Normally open valve. When energized, port closes and other port vents. Plastic body purge valve, 50 PSID maximum operating pressure. 30 ohm coil, draws 0.4 amps. PC mount solder terminals. $2-3/4" \times 1" \times 1-3/4"$. Unused.

R3041 \$1.25

KLIXON/TI 250VAC, 1.5AMP CIRCUIT BREAKER



Single pole circuit breaker, Model #51MC2-123-1.5. Has toggle type on/off. 250VAC, 60 Hz, 1.5 amps. Behind panel curve 123. 2" x 2" x 0.75".

R3042 \$1.25

CENTRALAB 5 POSITION, 4 POLE ROTARY WAFER SWITCH



These were made by Centralab for H.H.Scott. PC mount with 1/4" diameter by 1/2" long shaft. 3 wafers are shorting and back wafer is non-shorting. Unused. R3043 \$4.50

RED LED WITH 8" LONG CABLE AND MINI PHONE PLUG



Mini phone plug on one end and red LED on the other. Should make a good panel indicator as the plastic LED holder will fit snug in a panel hole. Cut the cable in 2 and wind up with a mini plug and a mounted red LED. Will light with a 1-1/2V battery. Assembly is 8-1/2" long. Unused.

R3052 \$0.75 or 10 for \$6.00

MOUNTED SPST SWITCH



Made to switch on/off an Elgeet Optical projection device. SPST switch rated at 125VAC, 5A. Has 5-1/2" leads. Metal plate is 2-1/2" x 1-3/4". 4 mounting holes in the corners. Unused.

R3054 \$0.50

3 SECTION VARIABLE CAPACITOR



We don't have the specs on these, but our understanding is they were made to be used in radio receivers. 3-1/4" long by 1-7/8" wide. Shaft is 3" long.

R3055 \$4.50

BULB HOLDER/REFLECTOR/STAND



Holds standard 15mm diameter bayonet base bayonet bulbs. Steeply curved metal reflector is 90mm long by 67mm wide. Stand has 2 mounting holes. 6" long wire attached to bulb socket.

R3056 \$1.50

BABCOCK 6VDC HC-RELAY, ENCLOSED



Model AP342095 6VDC enclosed relay. Probably made to easily fit on a circuit board. 8 pins on the bottom. Here are the numbers on one side of the relay: In addition to the AP number above, there is "5A250VAC" and "HC2-P-DC6V". On the other side: "MATSUSHITA"; "7A 1/6HP 125,250VAC"; "3A30VDC". Hope you know what all this means! Unused.

R3058 \$1.75

3-PIN COPPER-WOUND VARIABLE CHOKE



Brand new bulk stock: 9 uH chokes for your electronics project needs. These units measure 40mm long \times 16mm in diameter, with white plastic spool-like construction, top section copper wire winding, and black plastic base with 3-pin connection/contacts. Has ferrite tuning core. The top of the choke is labeled 433-510, and I 9. R3068 \$1.00 or 10 for \$8.00

HH SCOTT DUAL POT TONE CONTROL



Manufactured by CentraLab for HH Scott to be used in one of their audio amplifiers. CentraLab part # BA1115-008. HH Scott part # 021-1125-060. 1" long \times 3/8" diameter shaft, dual connected turnpot base, each pot has 4 connections. They are dual, 1 Meg. linear pots with a tap and were used in the H.H. Scott vacuum tube receivers for the base and treble tone controls.

Unused. **R3069** \$2.50

MAGNETIC REED SWITCH



Overall length is 60mm. These are hermetically sealed switches that are activated by magnets. Normally off and switches on with magnet. Use with any magnet or our M2415 or M2416 magnets. Handles 1 amp, 50VDC and 250VAC. Unused

R3115 \$0.50 or 10 for \$4.00

Eyepieces/Sets SMALL EYEPIECE LENS ASSY

Looks like 4 elements, coated and mounted in a outside threaded barrel 12.6mm diameter by 9.4mm long. Focal length about 10 mm. Short eye relief but good field of view and sharp color corrected images. You'll need to get creative to find a way to fasten this to a standard size eyepiece holder.

L1620 \$5.00

9.25X BRASS MICROSCOPE EYEPIECE



Standard 23mm size. Long eye relief, great for eyeglass wearers. Multiple elements, coated. Not a wide field, but sharp images. Beautiful brass eyepiece. L1640 \$15.00

EYEPIECE LENS SETS - ERFLE, 18MM FL

Here's the optics you need to build your own eyepieces. We include some basic mounting instructions, or use your own ideas. Most of the achromats are coated, and some of the DCX (double convex) or PCX (plano convex) are also coated. Here's what you get: ERFLE: Two achromats and one DCX or PCX

L1652 \$8.50

EYEPIECE LENS SETS - ERFLE, 30MM FL

Here's the optics you need to build your own eyepieces. We include some basic mounting instructions, or use your own ideas. Most of the achromats are coated, and some of the DCX (double convex) or PCX (plano convex) are also coated. Here's what you get: ERFLE: Two achromats and one DCX or PCX

L1715 \$9.50

PROFESSIONALLY MADE PLOSSL EYEPIECES - 12.5MM FOCAL LENGTH



Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 52 degree field of view. 10mm eye relief. Well corrected, and a great value. Unused.New,lower price. Was \$28.50

L1721 \$22.50

PROFESSIONALLY MADE PLOSSL EYEPIECES - 25MM FOCAL LENGTH

Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 52 degree field of view. 20mm eye relief. Also has a rubber finger grip. Well corrected, and a great value. Unused.

L1722 \$28.50

PROFESSIONALLY MADE PLOSSL EYEPIECES - 40MM FOCAL LENGTH



Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 43 degree field of view. 32mm eye relief. Also has rubber finger grip. Well corrected, and a great value. Unused.

L1723 \$28.50

2X BARLOW LENS 1-1/4" ACHROMATIC



Pofessionally made barlow lens, achromatic and coated. Metal barrel for standard 1-1/4" eyepieces. Doubles the power of your eypieces. Includes front and rear covers and eyepiece set screw. Unused.

L1731 \$28.50

PROFESSIONALLY MADE PLOSSL EYEPIECES - 6.5MM FOCAL LENGTH



Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 52 degree field of view. 6mm eye relief. Well corrected, and a great value. Unused.New,lower price. Was \$28.50

L1732 \$22.50

PROFESSIONALLY MADE 10MM PLOSSL EYEPIECE

Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 51 degree field of view, and 8mm eye relief. Well corrected, and a great value. Unused.New,lower price.

Was \$28.50

L1795 \$22.50

4MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE

Made to fit the 0.965 Japanese standard. 2 element Huygenian eyepiece. Unused with plastic container.

L1796 \$3.75

6MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE

Made to fit the 0.965 Japanese standard. 2 element Huygenian eyepiece. Unused with plastic container.

L1797 \$3.75

8MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE

Made to fit the 0.965 Japanese standard. 2 element Huygenian eyepiece. Unused with plastic container.

L1798 \$3.75

12.5MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE



Made to fit the 0.965 Japanese standard. 2 element Huygenian eyepiece. Unused with plastic container. L1799 \$3.75

20MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE

Made to fit the 0.965 Japanese standard. 2 element Huygenian eyepiece. Unused with plastic container.

L1800 \$3.75

25MM INEXPENSIVE 0.965 TELESCOPE EYEPIECE

These are made to fit the 0.965 Japanese standard. We have several different focal lengths. All are 2 element Huygenian eyepieces. Unused with plastic container.

L1801 \$3.75

2", 80MM FL, PLOSSL EYEPIECE



4 element Plossl design. We used surplus optics to build these. Some elements originally cost our government hundreds of dollars each. Fits standard 2" telescope focuser. 4 elements, 4 all coated. Super eyepiece for the price. Unused FL 80mm, FOV 35 degrees (Barrel Limited), ER 65mm, EA 35mm Focal Length (FL), Field of View in degrees (FOV), Eye Relief (ER),

Clear Exit Aperture (EA)

L1837 \$39.50

10X WIDE FIELD MICROSCOPE EYEPIECES



Standard microscope eyepiece size. Coated optics. Wide field. 10X. Unused in plastic container with threaded cap.

L1861D \$12.50

15X HUYGENIAN MICROSCOPE EYEPIECE



Huygenian design is most widely used in microscopes. Standard size. 15X. Unused, with plastic container. Good quality especially for the price!!

L1864D \$6.50

2", 38MM FL, ERFLE EYEPIECE UPGRADED



Our great 2" eyepiece is now even better. We added a black anodized aluminum barrel that's threaded for filters. 5 element erfle design. Now using new optics made especially for us. Fits standard 2" telescope focuser. Coated optics. 60 degree field of view, 16mm eye relief, and 35mm clear exit aperture. Super eyepiece for the price. Unused.

L2008A \$47.50

PROFESSIONALLY MADE 30MM PLOSSL EYEPIECE

New This Week, 12/16/01Standard 1-1/4" size plossl, 4 element coated optics with metal barrel, eyeguard, threaded for filters, and rubber finger grip. 46 degree field of view, 24mm eye relief, and 30mm focal length. Well corrected, and a great value. Unused.

L2022 \$28.50

PROFESSIONAL 15MM KELLNER 1-1/4" EYEPIECE



Kellner eyepieces were the most popular eyepieces for moderately wide field telescopic systems prior to the advent of some of the newer (and more expensive) designs. 3 element coated optics with field of view approximately 40 degrees and eye relief about 10mm. Fits standard 1-1/4" focusers. Metal barrel with knurled finger grip, and threaded for filters (thread is

courser than that used for standard eyepiece filters, but ID is slightly larger. Put a little masking tape over the outside thread of your filter and it will screw in nice and secure). 15mm focal length. Plastic container included. Unused and a great value.

L2032 \$17.50

7.5MM FL 1-1/4" EYEPIECE



Six element design for sharp image from edge to edge. 40 degree field of view. Eye relief is 10mm, and exit aperture is 6.5mm. Coated optics and threaded for filters. Unused.

L2062 \$19.50

PROFESSIONALLY MADE PLOSSL EYEPIECES - 4MM FOCAL LENGTH

Standard 1-1/4" size plossl, 4 element coated eyepieces with metal barrel, eyeguard, and threaded for filters. 52 degree field of view. 5mm eye relief. Well corrected, and a great value. Unused.

L2063 \$22.50

INEXPENSIVE .965 MIRROR STAR DIAGONAL



These are made to fit the 0.967 Japanese standard. 90 degree mirror diagonal. View the stars without neck damage. Fits 0.965" telescope focusers and accepts 0.967" eyepieces. Includes end caps and thumbscrew to secure your eyepiece. Unused.

L2070 \$3.95

PROFESSIONALLY MADE 15MM PLOSSL EYEPIECE

Standard 1-1/4" size plossl, 4 element coated optics with metal barrel, eye-guard, and threaded for filters. 52 degree field of view, 15mm focal length and 12mm eye relief. Well corrected, and a great value. Includes plastic eyepiece container. Unused.

L2164 \$28.50

INEXPENSIVE 1-1/4" MIRROR STAR DIAGONAL



90 degree mirror diagonal. View the stars without neck damage. Fits standard 1-1/4" telescope focusers and accepts standard 1-1/4" eyepieces. Mirror appears to be decent

quality. Plastic tubing. Includes end caps and thumbscrew to secure your eyepiece. Unused.

L2177 \$9.75

2", 53MM FL, PLOSSL EYEPIECE UPGRADED



Our great 2" eyepiece is now even better. We added a black anodized aluminum barrel that's threaded for filters. 4 element Plossl design. We used new coated optics to build these. Fits standard 2" telescope focuser. Perfect eye relief for eyeglass wearers. Super eyepiece for the price. Unused FL 53mm, FOV 50 degrees (Barrel Limited), ER 60mm, EA 35mm Focal

Length (FL), Field of View in degrees (FOV), Eye Relief (ER), Clear Exit Aperture (EA)

L2189A \$47.50

16MM FL 1-1/4" 4 ELEMENT EYEPIECE



You'll get sharp color corrected images thru your telescope with this all air spaced 4 element design. Fits standard 1-1/4" focusers. 16mm focal length with a 25mm eye relief. Perfect for eyeglass wearers. Exit Aperture is 10mm. Coated optics. Unused. L3024 \$17.50

QUALITY 40MM .965 EYEPIECE



We've had lots of requests for quality long focal length .965 size eyepiece to fit the smaller Japanese standard telescope focusers. This is a well corrected 40mm focal length 3 element eyepiece with multi-coated optics. Great eye relief of 35mm is excellent for eyeglass wearers. Exit aperture is 13mm

L3025 \$17.50

HUGE MILITARY ERFLE EYEPIECE W/RETICLE



Incredible wide field with bulls eye reticle. 38mm focal length. Not sure what kind of optical instrument these were made for as they are large, heavy and have lots of metal. Weighs 3 pounds. Front and rear lens element clear diameter is 1-3/4". Mounting ring diameter is almost 4" diameter. Coated optics. Only have a few. L3029 \$65.00

ZOOM EYEPIECE?? 15MM TO 25MM



If you are building your own scope and don't need standard eyepiece size, this is for you! This is a multi-element zoom lens assembly that was made for some projection system. Coated optics. Zooms from 15mm to 25mm with a smooth push/pull operation, and gives great images with one of our copy lenses or objectives. Nice field of view as well. Coated optics. Large end of

the barrel is 1-3/8" diameter (just a bit larger than the standard 1-1/4" telescope eyepiece - maybe you can build an adapter). Like new condition. L3042 \$11.50

6.5MM WIDE ANGLE 1-1/4" EYEPIECE



This is the best we've seen in a high power eyepiece. Wide 65 degree field of view, 10 glass lens elements, all coated. Clear exit aperture is 11mm and eye relief is 10mm. Sharp images. Barrel is threaded for filters. Includes eyepiece container. Unused.

L3061 \$32.50

25MM FL F/1.5 LENS ASSY



Multi-element lens assembly with coated optics. Has the DYOTAR name on it. Not sure what these were made for, but make a great 25mm focal length eyepiece. Largest part of the barrel is 25mm diameter. Assembly is 48mm long. Use this in conjunction with our M2104 barrel and a little mounting creativity and you've got a quality eyepiece for little \$.

L3062 \$5.00

15MM TO 25MM ZOOM 1-1/4" EYEPIECE



This is a 7 element zoom eyepiece (see second photo for breakdown of parts). Coated optics. Zooms from 15mm to 25mm with a smooth push/pull operation, and gives nice sharp images. Better than 50 degree field of view and 15mm eye relief. Fits standard 1-1/4" focusers. May not work full range with a Newtonian scope because of the limited focuser travel. Unused.

L3073 \$22.50

1.25" 19.9MM WF KELLNER EYEPIECE



This eyepiece is a 3 element wide field Kellner design with coated optics and has a threaded barrel which accepts standard filters. Fits 1.25" telescope focusers. The optics are new wide field binocular eyepieces that we re-mounted for telescope use. Only have a limited supply so act quickly if you'd like one of these in your collection. Eye relief is 13mm and exit aperture is

17mm. Focal length is 19.9mm. Will give you great views.

L3148 \$19.50

1.25" 23.3MM WF KELLNER EYEPIECE



This eyepiece is a 3 element wide field Kellner design with coated optics and has a threaded barrel which accepts standard filters. Fits 1.25" telescope focusers. The optics are new wide field binocular eyepieces that we remounted for telescope use. Only have a limited supply so act quickly if you'd like one of these in your collection. Eye relief is 13mm and exit aperture is

17mm. Focal length is 23.3mm. Will give you great views.

L3149 \$19.50

BOYER-PARIS 20MM FL LENS ASSY



Made in Paris, France to fit many of the 16mm projectors. These are in unused condition. 20mm focal length, f/1.5. Multi-element assembly. Coated optics. Will make a great 20mm eyepiece if you want to get a bit creative with the barrel. Nice, sharp, color corrected images from edge to edge when used with one of our objectives. Barrel is 55mm long and 25mm diam-

eter at the top, 30mm diameter at the bottom.

L3185 \$7.50

2" BARLOW LENS, 2X



You've been asking for this for some time. Here's a new 2X Barlow lens for 2" focusers. Coated achromatic lens assembly with 2" barrel threaded for filters. Get twice the use out of your 2" eyepieces.

L3203 \$44.50

QUALITY 17MM .965



We've had lots of requests for quality .965" size eyepieces to fit the smaller Japanese standard telescope focusers. This is a well corrected 17mm focal length 4 element eyepiece with coated optics. Eye relief is 2mm and exit aperture is 7mm. Sharp color corrected images edge to edge.

L3317 \$15.50

1-1/4", 41MM FL, ERFLE EYEPIECE



5 element erfle design. We used surplus optics to build these. Some elements originally cost our government hundreds of dollars each. Fits standard 1-1/4"telescope focuser. Coated optics. Great field of view (same design as our L2008 2" 38mm Erfle 60 degree eyepiece, but limited by the barrel), 40mm eye relief (perfect for eyeglass wearers), and 30mm clear

exit aperture. Super eyepiece for the price. Threaded for filters. Unused. L3350 \$24.50

MILITARY EYEPIECE FOR M13A1 BINOCULARS



Unused in the original military packaging. This is the complete assembly focusing eyepiece with diopter scale for the left side M13A1, 6x30 military binocular. Dated in the 1950's, so may be considered an antique. Eyepiece is 22mm focal length with a nice field of view. Limited supply. Great military collectable.

L3360 \$12.50

FILTERS FOR 1-1/4" EYEPIECES (RED)



Glass filters with standard thread to fit your 1-1/4" eyepieces. Unused \$7.50

FILTERS FOR 1-1/4" EYEPIECES (BLUE)

Glass filters with standard thread to fit your 1-1/4" eyepieces. Unused M1501 \$7.50

FILTERS FOR 1-1/4" EYEPIECES (YELLOW)



Glass filters with standard thread to fit your 1-1/4" eyepieces. Unused \$7.50

FILTERS FOR 1-1/4" EYEPIECES (MOON)

Glass filters with standard thread to fit your 1-1/4" eyepieces. Unused **M1503** \$7.50

FILTERS FOR 1-1/4 EYEPIECES (SET OF 4)

Glass filters with standard thread to fit your 1-1/4" eyepieces. Unused M1504 \$25.00

1-1/4" UNIVERSAL CAMERA ADAPTER



Fits standard 1-1/4" telescope eyepiece holders. Composed of a T-adapter for prime focus photography and an extension tube for eyepiece projection photography. A setscrew in the extension tube holds the eyepiece in place. Black anodized aluminum. Unused. M1513 \$14.50

PLASTIC EYEPIECE CONTAINER



Protect your 1-1/4" eyepieces. Container ID is 1-7/16" and 2" deep with cover that is 1-1/4" deep. Unused. M1528 \$0.75

MOON FILTER FOR 1-1/4" NON STD THREAD EYEPIECES



This fits our Professional Kellner eyepiece series as well as our inexpensive Huygenian 1-1/4" telescope eyepieces. Unused.

M2053 \$6.50

MOON FILTER FOR .965



This fits our inexpensive 0.965" Japanese standard telescope eyepieces. Unused.

M2061 \$3.50

THREADED BARREL FOR 1-1/4" EYEPIECES



If you are building your own eyepieces and want a professional barrel threaded for filters, this is what you need. Black anodized aluminum, threaded for standard telescope filters. Fits 1-1/4" focusers. 1-1/8" long and threaded all the way thru. Unused.

M2104 \$4.00

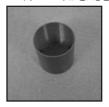
2" X 2.5" THREADED EYEPIECE BARREL



If you're building your own 2" eyepieces, this black anodized aluminum barrel is exactly what you need. These are brand new and are 2" diameter x 2.5" long and threaded all the way through. Accepts your 48mm filters.

M3022 \$8.00

2" X 2" THREADED EYEPIECE BARREL



If you're building your own 2" eyepieces, this black anodized aluminum barrel is exactly what you need. These are brand new and are 2" diameter \times 2" long and threaded all the way through. Accepts your 48mm filters.

M3023 \$7.50

Fiber Optics FIBER OPTIC FACE PLATE, 35MM DIA X 6MM THICK



This is an optical device bundling lots of glass optical fibers. It transfers the light and image with high efficiency and low distortion. They are used in CRT's, camera tubes, CCD coupling, and image intensifiers. They replace optical lenses in a number of applications and there is no focal point to consider. These are great to experiment with as you can see the image of newsprint

follow the curve of the face plate. If you have light reflected from the flat side, you'll see a bulls eye that varies in diameter as you change plate's orientation. These are polished, in great condition, and have serial numbers on the edge. Flat on one side and concave on the other. 35mm diameter by 6mm thick.

L3172 \$5.00

FIBER OPTIC FACE PLATE, 35MM DIA X 11MM THICK



This is an optical device bundling lots of glass optical fibers. It transfers the light and image with high efficiency and low distortion. They are used in CRT's, camera tubes, CCD coupling, and image intensifiers. They replace optical lenses in a number of applications and there is no focal point to consider. These are great to experiment with as you can see the image of newsprint

follow the curve of the face plate. If you have light reflected from the flat side, you'll see a bulls eye that varies in diameter as you change plate's orientation. These are polished, in great condition, and have serial numbers on the edge. Flat on one side and concave on the other. 35mm diameter by 11mm thick.

L3173 \$7.00

FIBER OPTIC BUNDLE



This is great for special effects or to simulate a star field. Illuminate with a flashlight or other light source. Use filters over your light for different effects. Has hundreds of different length strands with polished ends to give a point of light at the end. Opens to about 12" diameter and is 3" high. For a super display, get a 12" square mirror and put a hole in the center to

accommodate the bundle. Put your light source under the mirror. See our second photo online for the result.

M2014P \$12.00

SHORT FLEXIBLE FIBER OPTIC LIGHT GUIDE



Short flexible fiber optic light guide. 2-3/4" long by 2.2mm thick. Metal tip ends are 2.8mm diameter. **M2042** \$5.00 or 10 for \$38.00

SMALL FIBER OPTIC SPRAY



Has about 75 different fiber optic strands, the longest is 8 inches. Each strand has a polished end which gives a point of light when the bottom is illuminated with a flashlight or other light source. Great for experimenting with and demonstrating fiber optic properties.

M2044 \$1.50

B&L FLEXIBLE FIBER OPTIC LIGHT GUIDE, 6" LONG

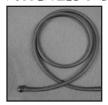


Made by Bausch & Lomb, Catalog #32-14-06. Nominal fiber diameter is 3/16". Ends are .21" diameter. Aluminum sheathing outside diameter is .381". Non-coherent light guide is precision-drawn 20-micron fibers of 1.62 index glass, each coated with a protective and internally reflective clad of 1.52 index, then bundled and sheathed with aluminum strip-wound cable.

Incident light gathering efficiency is 60% at the receiving end. Light transmitting efficiency is 5% absorbance per foot. Range from visible to near infra red. Working temperature range is -40 degrees F to +160 degrees F. In original containers.

M2167 \$8.00

RUBBERIZED BALL END FIBER OPTIC LIGHT GUIDE, 36" LONG



Extremely flexible fiber optic light guide is 36" long and the diameter of the end is 6mm (3mm light diameter). The ball end is approximately 12mm diameter (3mm light diameter). Quality non-coherent light guide, very flexible and only have a few.

M2169 \$20.00

B&L FLEXIBLE FIBER OPTIC LIGHT GUIDE, 24" LENGTH



Manufactured by Bausch & Lomb, Catalog #32-01-24. This non-coherent (light transmitting, non image-carrying) light guide contains precision-drawn 20-micron fibers of 1.62 index glass, each coated with a protective and internally reflective clad of 1.52 index; then bundled and Polyvinyl Chloride-sheathed. Nominal fiber diameter is 1/16"; sheathing outside diameter of 1/8";

minimum bend radius of 1/2". Ends are 1/8" diameter. Incident light gathering efficiency is 60% at the receiving end. Light transmitting efficiency is 5% absorbance loss per foot. Transmittance capability ranges from visible to near infra red. Working temperature range -40 degrees F to +160 degrees F. In original container.

M2191 \$9.00

B&L FLEXIBLE FIBER OPTIC LIGHT GUIDE, 36" LENGTH



Manufactured by Bausch & Lomb, Catalog #32-01-36. This non-coherent (light transmitting, non image-carrying) light guide contains precision-drawn 20-micron fibers of 1.62 index glass, each coated with a protective and internally reflective clad of 1.52 index; then bundled and Polyvinyl Chloride-sheathed. Nominal fiber diameter is 1/16"; sheathing outside diameter of 1/8";

minimum bend radius of 1/2". Ends are 1/8" diameter. Incident light gathering efficiency is 60% at the receiving end. Light transmitting efficiency is 5% absorbance loss per foot. Transmittance capability ranges from visible to near infra red. Working temperature range -40 degrees F to +160 degrees F. In original container.

M2192 \$10.50

B&L FLEXIBLE FIBER OPTIC LIGHT GUIDE, 60" LENGTH



Manufactured by Bausch & Lomb, Catalog #32-02-60. This non-coherent (light transmitting, non image-carrying) light guide contains precision-drawn 20-micron fibers of 1.62 index glass, each coated with a protective and internally reflective clad of 1.52 index; then bundled and Polyvinyl Chloride-sheathed. Nominal fiber diameter is 3/32"; sheathing outside diameter of

5/32"; minimum bend radius of 3/4". Ends are 4mm in diameter. Incident light gathering efficiency is 60% at the receiving end. Light transmitting efficiency is 5% absorbance loss per foot. Transmittance capability ranges from visible to near infra red. Working temperature range -40 degrees F to +160 degrees F. In original container.

M2201 \$15.00

FIBER OPTIC SPRAY - 8 1/2" STRANDS



A beautiful fiber optic spray, containing hundreds of hair-thickness same-length glass optic strands with polished ends. Opens up to 12-14" wide \times 4 1/2" high. Great for creating special optical effects using a substem light source, motor, colored light filters, or mirror/s. Rigid plastic 8mm thick \times 3" long stem, with a 7mm diameter light core.

M2202 \$10.00

MERET OPTICAL 4 CH VIDEO AND AUDIO FIBER OPTIC XMTR



Made by Meret Optical Communications Model CRM1005UL. Takes standard 115VAC, 60Hz. Includes power supply and 4

channel video to fiber optic amplifier/transmitter removable module and 4 channel audio to fiber optic amplifier/transmitter removable module. Excellent condition.

R3040 \$35.00

DYONICS OPTO-FIBER-METRIC RELAY SWITCH



Manufactured by Dyonics of Woburn MA, these switching units are in like new condition. This is a complete photo-electric switching unit including light source. Attach two fiber optic light guides and point the ends toward one another. When the beam of light is broken, the switch is activated. The unit measures 4 1/8" wide \times 4 1/4" high \times 6 7/8" deep, with light green

texture-enameled aluminum case. It features front panel power switch & indicator and sensitivity adjuster, and dual rear panel setting switches (O,C,N and N,D), screw terminals for COM, NO, and NC, delay screw adjuster, and hard-wired 3-prong AC cord. Weight is approx. 4 lbs. Works of standard 115VAC, 60Hz.

R3063 \$25.00

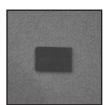
Filters

2-1/2" YELLOW FILTER

Light yellow Type III made by Bell & Howell for the U.S. Army. In size 8 mount.

M1179 \$3.00

GREEN MILITARY RECTANGULAR FILTER



Made to be used with the M1923 military aiming device.
Green filter, 35mm long by 23.8mm wide, by 2.2mm thick. One end has

rounded corners.

M1417 \$0.50 or 50 for \$10.00

66MM YELLOW B&H FILTER

Mounted yellow Aero 2 filter manufactured by Bell & Howell. Clear filter diameter is 66.4mm. Mount is 76mm diameter with 71.5mm diameter outside thread protruding. Unused.

M1422 \$2.50

OPTICAL INTERFERENCE FILTERS, \$5

Interference filters will pass only a specific band of light wavelength. They are produced using a number of layers of thin film of known refractive indicies. Differences between the layers produce destructive and constructive interferences resulting in high transmittance of some wavelengths and high reflectance of others. They generally cost from 50 to 100 each (these originally cost 94 each). They are 20.5mm diameter by 3mm thick. However, we don't know what wavelength band transmits thru them. No visible light gets through, so it must be IR or UV. Unused.

M1455 \$5.00

AMBER GLASS FILTER

30mm diameter by 2.3mm thick. Comes in individual pouch. Unused.

M1464 \$0.75

4-1/4" CLEAR FILTER/WINDOW

Clear optical glass, 4-1/4" diameter by 1/4" thick. Perfect for the front of your large camera or telescope to protect the objective.

M1471 \$3.00 or 2 for \$5.00

92MM DIAMETER YELLOW OPTICAL GLASS FILTER



These are high quality glass filters that are difficult to find these days. Yellow optical glass 92mm diameter by 7.4mm thick. Made to be used with one or more military aerial cameras. Not mounted.

M1558 \$4.00

4-3/4" DIAMETER YELLOW GLASS FILTER



This looks like a more current production type filter. 4-3/4" diameter by 0.15" thick. Yellow. Not mounted. Unused.

M1559 \$3.00

KODAK SERIES VI SKYLIGHT FILTER



Series VI Kodak Skylight filter. 41.4mm OD. Clear filter diameter is 40mm. In original Kodak plastic container. Unused.

M1587 \$2.50

MTD 30MM THREADED YELLOW FILTER



Glass yellow filter with 30mm clear diameter. Mounting is 38mm diameter with 36mm diameter threads. Has threaded retaining ring to hold the filter in place.

M1603 \$1.75

50MM DIA SHADE 5 DARK FILTER



These were made to be cut for eyeglasses for some filter application. Dark optical glass polished on both sides. Master box indicates "shade 5". 50mm diameter by 3mm thick. Might make a nice moon filter for 2" eyepieces.

M2067 \$0.50 or 10 for \$4.00

RECTANGULAR GOLD CTD FILTER/BEAMSPLITTER



4.25" X 2" X 0.06" thick. Master box is marked "GOLD/CR". Not sure what the original application was but it acts almost like a beamsplitter. One side reflects about 75% while transmitting about 25%. The other side transmits about the same but with very little reflection. Looks like a fun piece to experiment with.One of our customers was able to do an analysis of

its composition. Here's his findings: "180 Angstroms of gold deposited over 30 angstroms of chromium on glass containing tin oxide" $\,$

M2068 \$0.75 or 10 for \$5.50

YELLOW OPTICAL GLASS PLATE 4-1/2" X 2-3/16"



Schott yellow optical glass plate. Ground but not polished. 4-1/2" long by 2-3/16" wide by 3/16" thick. Unused.

M2079 \$0.75 or 10 for \$5.00

ND WINDOW, 4.3" X 2" X .3" THICK



Neutral density window. Optical glass, marked on the side ND320. Not sure what the 320 refers to. Appears to be medium density.

Has arrow on side pointing to one surface. Made by Perkin Elmer for some precision specialty application.

M2083 \$5.25

RECTANGULAR INTERFERENCE FILTER/BEAMSPLITTER



 $2" \times 7/8" \times 0.05"$ thick. Not sure what the original application was but it acts like a beamsplitter reflecting about 75% and transmitting about 25%. Look thru it and you'll see a blue tone, look at a reflection and it appears to have a gold coating. Clearly will be a fun piece to experiment with.

M2085 \$0.50 or 10 for \$3.50

N-3 NEUTRAL DENSITY FILTER, 63MM DIA



Glass neutral density filter, 63mm diameter by 6.3mm thick. Box is marked N-3 density.

M2108 \$1.25 or 10 for \$10.00

MTD GLASS FILTER SET; RED, ND & AMBER



Filters are 30mm diameter, and mounting is 39mm dia. Looks like they were made to snap in place as there is a ring on the back side that sticks out 4mm and is 33mm diameter. Too big to be used as is in your 1-1/4" telescope eyepieces but maybe you can get creative with them. The Neutral Density one is quite dark and may make a decent moon filter. We believe these were

made for some military application.

M2140 \$5.00

50MM X 50MM MIRRORED INTERFERENCE FILTER



This filter is mirrored on both sides and if you hold it very close to a lamp, it shows a deep red color. If you hold it up to a ceiling fluorescent light, it looks like a regular mirror. 50mm long \times 50mm wide \times 1mm thick. M2145 \$2.50

50MM X 50MM GREEN INTERFERENCE FILTER



This filter is reflective on both sides and shows a deep green color when held up to a light. It loses it's mirrored effect when looking at a light source. 50mm long \times 50mm wide \times 1mm thick. We have a limited supply of these.

M2147 \$2.50

55MM X 50MM ORANGE INTERFERENCE FILTER



This filter is reflective on both sides and shows a deep orange color when held up to a light. It loses it's mirrored effect when looking at a light source. 55mm long \times 50mm wide \times 1mm thick. Haven't got many of these. M3019 \$2.50

KODACHROME SERIES VI HAZE FILTER



Unused haze filter made by Eastman Kodak is 40mm outside diameter and clear lens diameter is 37mm. In original package.

M3024 \$3.00

GREEN FILTER

Optical glass in threaded mount, 37mm diameter. Unused.

M5002 \$3.00 or 10 for \$20.00

50MM YELLOW FILTER

Made by Bell & Howell for the 75mmf/2.3 Baltar lens. Eq K1 (yellow). Outside thread on ring is 51mm on one side, and inside thread is 50mm on the other side.

M9007 \$2.00

AERIAL CAMERA FILTERS-5-1/2" DIA. (RED)

Mounted filters designed to snap onto the large aerial camera lenses. These were made with the high quality optical glass that is difficult to find these days. 5-1/2" clear filter diameter. Mounting diameter is 6-7/16"

M9010 \$10.00

Flats

90MM OPTICAL FLAT, 1/20 WAVE, DUAL SURFACE



We had these before and sold out. Just got some more in. Unused, Fused Silica Optical Glass flats with 1/20 wave accuracy on both sides! Either face can be used for test applications. 90mm diameter by 21mm thick.

L1890 \$175.00

25MM OPTICAL FLAT, 1/20 WAVE, DUAL SURFACE



Unused, Fused Silica Optical Glass flats with 1/20 wave accuracy on both sides! Either face can be used for test applications. 25mm diameter by 21mm thick. L1891 \$45.00

50.5MM DIA OPTICAL FLAT, 1/4 WAVE, DUAL SURFACE



Brand new, current production, optical glass flats with 1/4 wave accuracy on both sides! Either face can be used for test applications. 50.5mm diameter by 15mm thick.

L3163D \$48.50

PERKIN ELMER 1/20TH WAVE COATED ELLIPTICAL FLAT WINDOW



Beautiful small-sized (19mm long \times 13mm wide \times 3mm deep) precision-made elliptical flats from Perkin Elmer, numbered 677 6108 002. Each window is 1/20th wave on both sides, measures 17mm long \times 13mm wide, is offset 2mm, and is anti-reflective coated. Ground edges. New in original sewn packets.

L3201 \$15.00

Glass Blanks

70MM DIA SCHOTT CROWN GLASS MOULDED BLANK



Quality crown glass made by Schott. These are unused blanks designed to be ground & polished into eyeglasses anywhere from + or - 6 diopters. 70mm diameter by 4mm thick. Meniscus shape. Great for experimenting with your grind and polish expertise, or if you are in the ophthalmology business, you need these and we've got a good supply.

L2130 \$0.50 or 10 for \$4.00

THICK 4" DIA LENS/MIRROR BLANK



Optical glass but has a few bubbles, so was probably meant to be used for condenser lenses, but should also be excellent to grind and polish for a mirror. These have a convex side and a flat side. 4 inches diameter by 2 inches thick at the center. You can see thru it and it will make a nice paper weight, or attach your favorite photo, drawing, comic, etc on the bottom for a

magnified view. Almost 2 pounds of glass.

L2133P \$6.50

65MM DIA SCHOTT GREEN WELD 2.0 GLASS MOULDED BLANK



Quality glass made by Schott, green weld 2.0. These are unused blanks designed to be ground & polished into eyeglasses for welders anywhere from + or - 6 diopters. 65mm diameter by 4mm thick. Meniscus shape. Great for experimenting with your grind and polish expertise, or if you are in the ophthalmology business, you need these and we've got a good supply.

L2154 \$0.50 or 10 for \$4.00

THICK 2-7/16" DIAMETER LENS/MIRROR BLANK



Optical glass but has a few bubbles so was probably meant to be used for condenser lenses, but should also be excellent to grind and polish for a mirror. These have a convex side and a flat side. 2-7/16" diameter by 1-1/8" thick at the center and 7/8" thick at the edge. You can see through it and it will make a nice paper weight or attach your favorite photo, drawing, comic,

etc. on the bottom for a magnified view. Almost 7 ounces of glass.

L3141 \$3.50

THICK LENS/MIRROR BLANK, 1-7/8" DIA.

Optical glass but has a few bubbles, so was probably meant to be used for condenser lenses, but should also be excellent to grind and polish a lens or small mirror. These have a convex side and a flat side and the diameter is 1-7/8" \times 1-1/4" thick. You can see through it and it will make a good paper weight at the very least (weighs 4.6 oz.).

L3179 \$2.00

1.8" FLINT BLANK, SSK4



If you are trying your hand at making achromats, negative lenses, or flats with high dispersion glass, here's another heavy flint blank. 1.8" diameter by 0.6" thick. Type SSK4 made by Schott, this glass has an index of 1.61764 and an abbe v number of 55.1. Glass number is 618551.

L3219 \$1.50 or 10 for \$12.00

PYREX TELESCOPE MIRROR BLANK, 4-1/4 INCH DIAMETER



For grinding and polishing your own telescope mirror. 4-1/4 inch diameter by 3/4 inch thick Pyrex Glass. Unused.

L3357 \$5.00

Instruments

STUDENT SPECTROMETER



Unused and a real beauty. Heavy duty high quality rugged metal construction throughout. Consists of a telescope with eyepiece and

21mm clear diameter achromatic focusing objective lens, and a collimator with removable adjustable slit and achromatic focusing 21mm clear diameter objective. The 7-1/2" diameter graduated circle has lines for each degree and is numbered at every 10 degrees. Telescope and collimator are each 8" long. Center table is designed to hold either a prism or grating. Vernier control and scale for precision measurement. Telescope and table rotate about a vertical axis. Spectrometers are used to measure and/or observe spectrum, absorption bands, angles of refraction and reflection, etc. The slit and collimator produce a parallel beam of light which then falls on your prism or grating. The resulting spectrum is then observed through the telescope.

I1430D \$125.00

OIL ANALYZER-UNUSED GRAPHITE FURNACE ATOMIC ABSORPTION SPECTROMETER

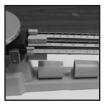


An absolute beauty!! Made by Perkin Elmer for the military to measure concentrations of wear metals in aircraft lubricating oil. It is a complete system with built in microprocessor, display and printer. Considered portable, it consists of two units in separate cases with interconnecting cables and a third very strong shipping case that holds everything. The analyzer can simulta-

neously measure (in parts per million) the concentrations of nine metals. The instrument is easy to operate. Simply introduce a small sample of your oil, water or fluid you want to analyze into the graphite tube in the furnace using the supplied injector probe and press the start button. After the automatic analysis cycle (about 1.5 minutes) is completed, the unit prints out onto paper tape the metal concentrations. The optics in this thing are impressive. There are two hollow cathode lamps (HCL) that provide the spectral line sources for the metal analysis for iron, silver, aluminum, chromium, copper, magnesium, nickel, silicon, and titanium. The transfer optics consists of mirrors that combine the spectral output light beams of the two HCLs into a single light beam. The light beam is transmitted thru the graphite furnace tube (the furnace reaches temperatures up to 3000 degrees C and actually vaporizes the metals in the sample) and onto the entrance slit of the polychromator. The spectral light is focused onto a diffraction grating and the nine spectral lines unique to the metals are separated and positioned on the focal plane. At each focal plane position is an exit slit and the secondary optics measures each light output. In addition to the complete instrument, you get 20 extra graphite tubes, 6 calibration standards, other supplies, a tool kit, and Operation & Maintenance instructions with illustrated parts breakdown. Unused and in mint condition. Original cost was \$70,156.36 each!! Our price is less than 2% of what our government originally paid for them. Looks like they bought more than they needed. Sorry, but we are not allowed to ship these outside of the United States

I1434 \$1,250.00

TRIPLE BEAM BALANCE



0.1g. Unused. **I1435D \$85.00**

A single pan, low form balance that has three beams with centre indicating sliding weights giving total weighing capacity of 610g. Supplementary weights are included to extend the capacity to 2610g. Spring loaded zero adjust compensator and magnetic damping are provided. Stainless steel pan is of 150mm diameter. Beams: 0-500g x 100g; 0-100g x 10g; and 0-10g x

INTERMEDIATE SPECTROMETER



This instrument is designed for high performance student use. It has a cast aluminum alloy main structure. The collimator tube is mounted on the fixed pillar and telescope tube

on the moveable part. Both the collimator and telescope have 175mm focal length, 32mm clear aperture object glass at their one ends. The collimator has a precision slit 6mm high and telescope has Ramsden eye-piece 15X at their other ends. Both collimator and telescope have rack and pinion focusing and means for leveling their axes and squaring them to the axis of rotation. The scale is 127mm diameter with a protective shield that is fixed to the telescope movement and the prism table is attached to the double ended vernier which reads to 1 minute arc. Both telescope and table can be rotated independently by hand about the same vertical axis. These can be clamped at the desired positions and adjusted precisely with the help of fine adjustment screws. Prism table is marked with lines to assist placing the prism with respect to the table leveling screws and has screwed holes for fixing prism and grating holders. Prism holder can accommodate prisms up to 38mm high. Supplied with prism holder, grating holder, magnifier glass, tommy bar for adjustment of optical axis and dense flint glass prism, equilateral 32x32mm. In wood case. New/Unused I1476D \$325.00

DIAMOND VISIONICS DLP PROJECTION SYSTEM



We are selling these for parts as we don't have any bulbs and it appears that the bulb used in the instrument was an expensive mercury or Xenon type with a special mount. We have no way to determine if the system works. However, it's loaded with expensive and valuable components and made in 2001. Model 1001001-001 uses the Texas Instrument 1-Chip DLP (Digital

Light Processing) technology. The heart of the system is the DMD (Digital Micromirror Device) chip. The DMD chip is probably the world's most sophisticated light switch. It contains a rectangular array of up to 1.3 million hinge-mounted microscopic mirrors; each of these micromirrors measures less than one-fifth the width of a human hair. White light generated by the bulb passes through a color wheel as it travels to the surface of the DMD panel. The color wheel filters the light into red, green, and blue from which a single-chip DLP projection system can create at least 16.7 million colors. The instrument also includes a variable intensity wheel, projection optics, DLP processors, power supplies, 15" x 12" front surface mirror, 15" X 12" ground glass screen, lot of electronic component boards, fans, etc. Complete unit is 27" high by 15-1/2" wide but is in two sections that snap off and on. They have not been abused and the insides look clean. Original cost was \$3200.00 each. If you look at all 3 photos you'll get a good idea of the value. Complete manual copy included.

I1478 \$175.00

JUST ARRIVED! HANDHELD DIRECT VISION SPECTROSCOPE



A real beauty! Great for demonstrating spectra from any visible light source. Precision made heavy duty stainless steel construction with prism assembly, variable

optical slit and adjustable eyepiece. Easy to use: Optical slit adjusts by rotating the knurled end piece, and focus is slip type. Contrast and resolution of the spectrum is changed by adjusting the slit opening. 4 inches long by 1 inch diameter on the slit end. New with wood case. Edmund has a similar spectroscope for \$272.00.

I1479D \$49.00

Integrated Circuits 74LS00 INTEGRATED CIRCUIT

14 pin Quad 2-input NAND gate. The 74LS series of bipolar digital integrated circuits have been the workhorse of digital circuits for more than two decades. Unused.

R1449 \$0.17 or 10 for \$1.50

74LS27 INTEGRATED CIRCUIT

14 pin Triple 3-input NOR gate. The 74LS series of bipolar digital integrated circuits have been the workhorse of digital circuits for more than two decades. Unused.

R1451 \$0.19 or 10 for \$1.70

74LS38 INTEGRATED CIRCUIT

14 pin Quad 2-input NAND buffer (open collector). The 74LS series of bipolar digital integrated circuits have been the workhorse of digital circuits for more than two decades. Unused.

R1452 \$0.19 or 10 for \$1.70

74LS74 INTEGRATED CIRCUIT

14 pin Dual D-type flop-flop w/preset and clear. The 74LS series of bipolar digital integrated circuits have been the workhorse of digital circuits for more than two decades. Unused.

R1453 \$0.19 or 10 for \$1.70

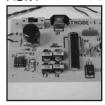
14 PIN LOW PROFILE SOCKET

For use with the 14 pin 74LS series and other 14 pin integrated circuits. Unused.

R1454 \$0.06 or 10 for \$0.50

Kits

NEW! VARIABLE RATE STROBE KIT



Includes P.C. board, components, flash tube, and instructions for building this solid state variable rate strobe kit. Flash rate 60 to 120 per minute. Unit can operate with standard "C" batteries (not included) on 12VDC or 6VDC depending on how you decide to wire it. Constructed on a PC board 4-1/4" x 2-7/8" with 4 holes for mounting in your enclosure. Full instructions includ-

ed for easy assembly.

K1001 \$8.50

NEW! 12VDC MOTOR SPEED CONTROLLER AND DIMMER KIT



Easy to build solid state kit allows you to control the speed and direction of 6-12vdc motors (one included) or control the intensity of 6-12v incandescent lamps. Designed to operate off a 12VDC battery source (not included). Includes p.c. board (3" \times 2-3/8") with 4 holes for mounting in your enclosure, all components, motor, and instructions.

K1002 \$15.00

NEW! BIPOLAR 12VDC STEPPING MOTOR AND DRIVER KIT



Kit contains all necessary components including stepping motor to construct this versatile solid state unit. Ideal for the beginner or robotics enthusiast to obtain the necessary theory and stepping motor operation techniques. Kit features operation from 12 VDC +-5%, battery or power supply capable of 1 Amp or better (power source not included), on-board controls and switches

for 1/2 step, full step, single step, CW, CCW rotation, speed control, run and hold. Unit uses a 4 leaded bipolar motor. Also contained are LEDs which show phase sequencing. Driver unit is constructed on a PC board (size 4" \times 3"). Complete with all components, motor and detailed instructions.

K1003 \$19.95

Lenses OPTICAL COMBINER

Coated, multi element optical combiner assembly. No idea what it was designed to be used in, but this looks like an eyepiece with approx. 1" focal length. Attached to it is a square viewer that sees thru the "eyepiece". There is a lever that moves the lens as if focusing. It is labeled -2 thru 0 to +2. The label indicates that this Optical Combiner assy is "part of NV/HUD system" Original government cost \$2108.84 each. Unit measurers 2-1/2" $\times 2-1/2$ " $\times 1-3/4$ ". Unused with rubber lens caps. Rare.

L1329 \$95.00

TINY RECTANGULAR NEGATIVE LENS

Glass plano concave lens measures 10.8mm X 8mm. -65mm focal length. L1373 \$0.50 or 40 for \$10.00

51MM DIA. PCX LENS WITH TRAPEZOID GRID



Plano convex lens, 51mm diameter by 175mm focal length. Has trapezoid grid across most of the lens. Unusual! Like new.

L1542 \$4.50

B&H SOUND FILMO LENS



Strong negative objective lens assembly (looks like 2 elements air spaced). In original Bell & Howell box marked: 1" obj. with 40mm opening 71 sound. Probably made to go with one of the B&H sound projectors. L1659 \$5.00

5-3/4" DIA 800MM FL PCX W/CTR HOLE

Unused beauty. Made for some kind of government telescope. Coated plano convex lens, 5-3/4" diameter by 800mm focal length with a 1-3/4" center hole. 1/4" thick. Part of an objective assembly, but no clue what the completed scope looked like. Says "Lens Objective" on the package.

L1758 \$18.00

5-3/5" DIA. NEGATIVE LENS W/1/2" CTR HOLE

Negative meniscus lens . 5-3/8" diameter by 3/4" edge thickness. Focal length of -800mm.

L1823 \$15.00

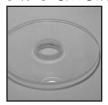
MTD ERECTING LENS ASSEMBLY



Multi element coated optics erecting lens assembly. Quality optics, taken from military scopes. Barrel is 40mm long by 17.7mm diameter (except back 10mm is 21mm diameter).

L1881 \$8.00

5-7/16" DIA DCX, 525MM FL W/CTR HOLE



Unused double convex lens, 5-7/16" diameter by 525mm focal length with 1-1/4" center hole. **L1898** \$12.00

5-7/16" DIA NEG MENISCUS, -900MM FL W/CTR HOLE

Unused negative meniscus lens, 5-7/16" diameter by -900mm focal length with 2-1/2" center hole.

L1899 \$12.00

16MM DIA CTD TRIPLET, 50MM FL



Coated triplet lens, 16mm diameter by 50mm focal length. 12mm thick.

L2050 \$7.00 or 10 for \$56.00

DCX ACRYLIC LENS 14MM DIA X 48MM FL

14mm diameter double convex lens with 48mm focal length made of optical acrylic.

L2082 \$0.50 or 10 for \$3.50

17MM F/1.4 PROJECTION LENS



Kalart Automar projection lens. 17mm focal length, f/1.4. 3 elements, coated. 1-1/8" long. Threaded barrel is 7/8" diameter. Front flange is 1-1/4" diameter. Unused.

L2088 \$6.00

TELEX SUPER SESTAR 2" F/1.2 PROJECTION LENS



Coated, 5 element projection lens. Clear front element is 44mm diameter. Rear element clear diameter is 18.75mm diameter. Assembly is 76.3mm long by 54mm diameter. Unused beauty.

L2089 \$9.00

66MM CLEAR DIAMETER CATADIOPTIC NIGHT VISION LENS

This was made to be used with night vision image intensifiers and has a very short focal length. If you are experimenting with image intensifiers or want to upgrade your device, this is for you. One of our customers kindly advised that these were made for the military PVS-3 night vision scopes.

L2124 \$49.00

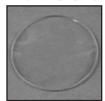
ELECTRIC EYE ASPHERIC LENS?



This is a double convex lens with one side very sharply curved. 1-3/4" diameter. 50mm focal length from the slightly curved side. We've been told that this was made for those electric eyes that send a beam of light across a door and sends an alarm or beep when someone crosses thru the beam.

L3033 \$1.50

5" DIAMETER DOUBLE CONVEX LENS 13" FL



Beautiful lens in mint condition. Diameter is 5" with a 13" focal length. Looks like plate glass.

L3051 \$6.50

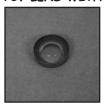
KALART 2" F/1.6 PROJECTION LENS



Kalart Automar projection lens. 50mm focal length, f/1.6. Coated optics. 2-5/8" long. Threaded barrel is 1-1/8" diameter. Front diameter is 1-1/2". With a little creativity, this could make a nice 50mm eyepiece. Gives sharp wide field images when used with a copy lens or one of our objectives. Unused with front and rear lens caps.

L3057 \$7.00

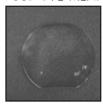
PCV LENS WITH FISHEYE EFFECT



Coated plano concave lens, 44mm diameter by -38mm focal length. Edge thickness is 12mm. Gives a great wide fisheye type view. Like new.

L3069 \$4.00

POSITIVE MENISCUS LENS 65MM X 56MM X 114MM FL



Unused, coated positive meniscus lens 65mm diameter but truncated top and bottom to 56mm. Focal length is 114mm

L3077 \$4.00

ILEX .62X OPTICAL LENS ASSEMBLY



Beautiful lens assembly with coated optics. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 4" long with a 1" diameter barrel.

L3084 \$1.75

KOWA COPY LENS 5.4" FL (137MM), F/4.5



Beautifully coated copy lens made by in Japan by Kowa for use in fax machines. Multi-element. The Kowa part number is 76133. The assembly is 55mm diameter and 50mm long with a clear lens diameter of 37mm. The focal length is 137mm.

L3132 \$5.00

ASPHERIC CONDENSER LENS, 1.75" DIA X 1" FL



Glass aspheric condenser lens, 1-3/4" diameter by 1 inch back focal length. Aspherics offer superior aberration correction for light concentration that would normally require several spherical elements.

L3136 \$5.50

NEGATIVE ASPHERIC LENS. 16.5MM DIA X -2000MM FL



Glass aspheric lens, 16.5mm diameter by -2000mm focal length. Our guess is that this was made as a special correction lens for some optical device. Only have a few.

L3137 \$3.50

KOWA COPY LENS 112MM FOCAL LENGTH



Beautifully coated copy lens made in Japan by Kowa for use in fax machines. The assembly is 48mm diameter and 45mm long with a clear multi-element lens diameter of 35mm. The focal length is 112mm. Plastic lens covers included.

L3138 \$4.00

ILEX 1.5X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics. Made by Ilex Optical Co for Compugraphic. Compugraphic part #56641. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 3.5" long with

a 1" diameter barrel.

L3139 \$2.00

ILEX 1.75X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics. Made by Ilex Optical Co for Compugraphic. Compugraphic part #56642. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 2 5/8" long with

a 1" diameter barrel.

L3140 \$2.25

KOWA 0.875X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics made in Japan by Kowa for Compugraphic. Compugraphic part #56636. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 5 1/4" long with

a 1" diameter barrel.

L3143 \$1.75

KOWA 1.125X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics made in Japan by Kowa for Compugraphic. Compugraphic part #46638. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 5" long with

a 1" diameter barrel. L3144 \$2.00

ILEX 2.0X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics. Made by Ilex Optical Co for Compugraphic. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 2.25" long with a 1" diameter barrel. Unused.

L3156 \$2.50

ILEX 5.25X OPTICAL LENS ASSY



Beautiful lens assembly with coated optics. Made by Ilex Optical Co for Compugraphic. We think these were designed to be used with optical comparators or photo typesetting machines. If you've got one then this is a great bargain. If not, take it apart for the optics. Has a 3 mounting hole flange and is 1.75" long with a 1" diameter barrel. Unused

L3160 \$2.50

POSITIVE MENISCUS LENS, 42.4MM DIA. X 4000MM FOCAL LENGTH

You've been asking for long focal length lenses. This one is 4000mm! Unused, coated positive meniscus lens with a diameter of 42.4mm.

L3177 \$4.00 or 10 for \$30.00

23X LENS ASSEMBLY - MICROFICHE PROJECTION?



We think these were made for microfiche projection, but not certain. Beautiful brand new lens assembly in the original packaging! Barrel is 34mm long \times 28mm OD with groove about 20mm from the front. Clearly made to go into some instrument and be held in place using the groove. Front element is 14mm diameter and back element is 10mm. Multi-element, with coated optics.

Marked "Mag. 23X" Gloss black-enameled aluminum barrel. Makes \dot{a} nice color corrected magnifier, but has a narrow field of view.

L3204 \$4.00

D.O. INDUSTRIES 50MM F/4.5 ENLARGER LENS



Unused in original box with front and back lens caps. Iris operates with click stops from f/4.5 TO f/22. 50mm focal length. We've found them selling used for up to \$40.

L3221 \$10.00

MTD NEGATIVE AIR SPACED DOUBLET, 15MM DIA X -667MM FL



Coated air spaced doublet, in a threaded mount. Clear front lens diameter is 15mm, clear back lens is 10mm. Mount is 25mm diameter by 17mm long. Focal length is -667mm. Unused

L3254 \$5.75

CYLINDRICAL LENS. PCX - 4" LONG X 1/8" WIDE X 3MM FL



Cylindrical lenses (also called astigmatic lenses) have at least one surface that is formed like a portion of a cylinder. They are used in rangefinders to produce astigmatism, or the stretching of a point of light into a line. Plano-convex cylindrical lenses have a positive focal length, which makes them ideal for collecting and focusing light for many imaging applications. These

cylindrical lenses measure 4" long \times 1/8" wide \times 1/16" deep, with polished concave top and flat base surfaces, and ground ends. The edges along the length may have some slight roughness due to their thinness. Focal length is 3mm. A great find for the optics hobbyist or experimenter!

L3289 \$4.00 or 5 for \$15.00

4-1/8" DIA NEC TV PROJECTION LENS

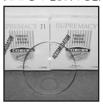


Unused beauty. NEC TV projection lens. Designed for use in big screen TV projection systems. Front clear lens diameter of 4-1/8", rear clear lens diameter of 3 7/8", barrel

length of 6.1/4" $\times 5.1/8$ " diameter (front) and 4 5/8" diameter (rear), multi-element (appears to be all glass as the lens assembly weighs 5 pounds), with coated optics. Black plastic barrel with 5/8" wide notched front grip ring and 5 1/8" diameter x 3/4" wide barrel-center threaded mount. The lens projects a large image in a short distance. Great for education projects such as slide or transparency projector, etc in addition to TV projection. Designed to be nearly in contact with subject surface. The number 542 is stamped on the barrel and may be the NEC model number. We haven't taken one apart, but it looks like different types of large diameter optical elements. Includes black plastic front and rear lens covers.

L3294 \$15.00

COBURN SUPREMACY 71MM DIAM. SEMI-FINISHED HARD RESIN LENSES



Military surplus plastic lens blanks, manufactured by Coburn Optical Industries, Inc. of Muskogee OK. Made from CR39 resin, these Accommodator model concave lenses are impact-resistant (not shatterproof or unbreakable), are 71mm diameter and feature a 22mm diameter low-segment slight magnification zone (shown in the listing picture). Ground 8mm thick edge; approx-

imately 15mm depth. Unused stock, in the original wrapping and boxes. Price is for a set of 2.

L3309 \$4.50

B&L STEREO RHOMBOID ARM



Made by Bausch & Lomb for their Model 240 Aerial Photo Interpretation Zoom Stereoscope. Catalog #53-70-28. Our understanding is that the instrument has two of these arms and optional stereo lenses that fit on the end (we have some). It's quite an interesting piece with lots of optics in it. If you look straight thru the top section, you get a clear upside down image. The

top section rotates, and the image rotates as well. If you turn it 180 degrees, the image becomes right side up and correct left to right. There is also a control that moves one of the lens assemblies and appears to zoom the image a little. Inside is a Right Angle Prism with 1 inch square faces. Also an elliptical front surface mirror, 16mm x 22mm, two cemented doublets, and 5 single element lenses. Clearly an expensive piece. If you have the Model 240 instrument, then you need two of these as spares. If not, then what a great optical piece to experiment with.

L3313 \$22.50

1X STEREO LENS FITS L3313 RHOMBOID ARM



Bausch & Lomb CAT. NO.53-70-30. Made to fit the B&L 53-70-28 Stereo Rhomboid Arm. Inside is an elliptical front surface aluminized mirror, major axis is 34mm and minor access is 24mm. 5.5mm thick. Mirror material is optical glass, Index of 1.517 and Abbe V# 64.5. Openings are 25mm. Top has bayonet type mount. 3 screws hold the diagonal onto the assembly, so it can

easily be removed for other applications. Of course, if you have one of the B&L Model 240 Aerial Photo Interpretation Zoom Stereoscopes, then you definitely need these.

L3314 \$10.00

2X STEREO LENS FITS L3313 RHOMBOID ARM



Bausch & Lomb CAT. NO.53-70-31. Made to fit the B&L 53-70-28 Stereo Rhomboid Arm. Inside is a coated cemented doublet lens with a focal length of 52.4mm, and an elliptical front surface aluminized mirror, major axis is 34mm and minor access is 24mm. 5.5mm thick. Mirror material is optical glass, Index of 1.517 and Abbe V# 64.5. Top has bayonet type mount with a

25mm opening. Of course, if you have one of the B&L Model 240 Aerial Photo Interpretation Zoom Stereoscopes, then you definitely need these.

L3315 \$12.00

0.43X STEREO LENS FITS L3313 RHOMBOID ARM



Bausch & Lomb CAT. NO.53-70-29. Made to fit the B&L 53-70-28 Stereo Rhomboid Arm. Inside is a coated cemented doublet lens with a focal length of 620.4mm, a coated double concave lens with a focal length of -55mm, and an elliptical front surface aluminized mirror, major axis is 34mm and minor access is 24mm. 4.5mm thick. Mirror material is optical glass,

Index of 1.517 and Abbe V# 64.5. Top has bayonet type mount with a 25mm opening. Of course, if you have one of the B&L Model 240 Aerial Photo Interpretation Zoom Stereoscopes, then you definitely need these. L3316 \$15.00

EXPERIMENTERS MULTI-ELEMENT LENS ASSEMBLY



We don't have a clue what this was originally designed for, but you can use it as is as an objective lens, or take it apart to get six different lens elements, positive and negative between 30 and 40mm diameter. As is, the focal length is about 9 inches and gives a nice clear, sharp color corrected image with an eyepiece. One of the lens elements has what appears to be a strong

dichroic coating reflecting red on the coated side. There is a lever that when turned moves a group of lenses up and down the barrel, but it doesn't appear to effect the focal length. Barrel is 55mm diameter by 60mm long. Clearly a quality piece. If you can figure out what it was made for, you might be able to re-sell them at a profit. Unused.

L3338 \$7.50

FUJI MIRRORED COPIER LENS 187MM FL. EYE/FACE INSPECTION?



L3342 \$5.50

Unused with front and rear covers. Front element has a 55mm clear diameter. Mirrored lens easily unscrews from the back. It's a 40mm diameter negative lens with the rear center 20mm aluminized. The focal length is perfect for viewing your eye, nose, teeth, etc. Assembly is 77mm diameter by 45mm long with a flange 90mm diameter.

Magnifiers

DOUBLET 10X FOLDING MAGNIFIER



We had these before and sold out. Pocket folding magnifier. Double lens to give flat field and minimum chromatic aberration. Lens diameter is 16mm. Plastic mount. Only 35mm by 25mm by 15mm thick when folded. Magnification 10X. Unused.

L1842D \$1.25 or 5 for \$5.00

JEWELER'S/WATCHMAKER'S EYELOUPE



Glass lens mounted in light weight black plastic eye cup cell. 4X magnification with working distance of 2". Lens diameter is 1". Watchmakers and jewelers hold the cell in their eye socket by squinting slightly. Unused.

L1859D \$1.25

4" DIAMETER MAGNIFIER



Glass magnifier, 4" diameter, mounted in nickel plated frame and 4" long handle. Provides wide field viewing with crisp, sharp images at all points. The lens is recessed in its frame to prevent chips and scratches. Unused.

L1860D \$4.50

7X POCKET COMPARATOR



Focusing magnifier accepts standard 27mm reticles. Three element achromatic glass lens system. Eyelens clear lens diameter is 21mm. Has acrylic base to allow light on the object. Includes linear scale, 20mm × 0.1mm. Other reticles available. Has hundreds of applications including linear measurements, angles, hole diameters, thread sizes, etc. Unused with case.

L1873D \$28.50

FOLDING POUCH MAGNIFIER



Pocket type with 40mm diameter glass lens mounted in a leather case that also serves as a handle. 3X magnification. Unused.

L1874D \$1.25

4X FOLDING POCKET MAGNIFIER



Pocket type with 27mm clear diameter lens mounted in a plastic case that also serves as a handle. 4X magnification. Unused.

L1895D \$0.75

75MM DIAMETER MAGNIFIER



Glass magnifier, 75mm diameter, mounted in nickel plated frame and 3-1/2" long handle. Provides wide field viewing with crisp, sharp images at all points. The lens is recessed in its frame to prevent chips and scratches. Unused.

L2044D \$3.25

50MM DIAMETER MAGNIFIER

Glass magnifier, 50mm diameter, mounted in nickel plated frame and 2-5/8" long handle. Provides wide field viewing with crisp, sharp images at all points. The lens is recessed in its frame to prevent chips and scratches. Unused.

L2045D \$2.50

38MM DIAMETER MAGNIFIER



Glass magnifier, 38mm diameter, mounted in nickel plated frame and 3-1/2" long handle. Provides wide field viewing with crisp, sharp images at all points. The lens is recessed in its frame to prevent chips and scratches. Unused.

L2096D \$0.95

10X COMPOUND LENS MAGNIFIER



Two element glass lens in black finish metal mount gives flat field and 10x magnification. Clear lens diameter is 25mm. Field of view is 31mm and working distance is 25mm. Length is 122mm. High power and easy to use hand held design. Excellent for critical viewing applications including the inspection of optical components. Unused.

L2101D \$8.50

LINEN TESTER MAGNIFIER

Collapsible, single element precision glass DCX lens mounted in silver grey finished metal mount. 6X magnification with 25mm \times 25mm opening and mm lines etched on the inner faces of the viewer's base. Unused

L2123D \$8.00

QUALITY FOLDING MAGNIFIER



Thick lens system in metal mount. Single special thick lens precision made to give good flat field and minimum chromatic aberration. Clear lens diameter is 17mm. Glass thick lens in metal cell with retaining rings Gives 10X magnification. Folded, only 30mm long by 20mm wide. Unused, with case.

L2173D \$6.75

B&L 4X INSPECTION EYE LOUPE



Considered the standard in the industry for years, the Bausch & Lomb eye loupe has a precision ground and polished optical crown glass lens. The lens surfaces are finished to optic standards with no waves or surface defects to distort vision. Light weight plastic cell with black interior rests comfortable in your eye socket. Lens diameter is 1", and the loupe yields a nice clear.

distortion-free image. 4X magnification with working distance of 2.5". Used by watchmakers, jewelers, component manufacturers, tool makers, etc. B&L Model 814173. Unused in the original B&L box.

L3161 \$4.25

MTD 22MM FL TRIPLET/11X MAGNIFIER, CTD



This makes a great color corrected flat field magnifier. Three element, coated optics. Clear glass diameter is 10mm. Mounting is 15mm diameter by 12mm long. You could make this into an inexpensive 22mm eyepiece which will give a nice sharp flat field image. Used as a magnifier, it is 11x. Carry one in your pocket, purse, glove compartment, shirt pocket, jacket, etc. Unused.

Have a large quantity of these, so if you want to build this into your product, we can probably supply your needs.

L3275 \$6.00 or 10 for \$45.00

27MM ANGLE RETICLE FOR POCKET COMPARATOR

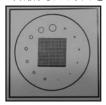


High quality 27mm diameter glass reticle with great stability. Patterns are made with low reflection hard chrome deposition which imparts high contrast for easy readability. Printing is on the side of the reticle which makes contact with the object, thus minimizing the error due to parallax. This one has angle scales 0 degrees to 80 degrees in 5 degree divisions and 80 to

90 degrees in 1 degree divisions. Radius scale 0.1 to 1mm in 0.1mm and 1-10mm in 0.5mm radii. Angle scale 29 degrees, 55 degrees, 60 degrees, and 118 degrees. Ten circles on left 0.1 to 1.0 in 0.1mm divisions and ten circles on right from 0.005" to 1/64" dia. Three linear scales: 1) 10-0-10mm with 0 to 1mm in 0.05 divisions, 1mm to 5mm in 0.1 divisions, 5mm to 10mm in 0.5mm divisions 2) 0 to 0.5" in 0.005" divisions and 3) 0 to 1/8" in 1/64" divisions. Fits our L1873D 7X pocket Comparator. Unused.

M1538D \$12.00

27MM GRAPH RETICLE FOR POCKET COMPARATOR



High quality 27mm diameter glass reticle with great stability. Patterns are made with low reflection hard chrome deposition which imparts high contrast for easy readability. Printing is on the side of the reticle which makes contact with the object, thus minimizing the error due to parallax. G raph of 10mm \times 10mm divided into 0.5mm squares. Ten circles from 0.1mm to 1mm in

0.1mm increments and three circles of 1.5mm, 2mm and 2.5mm dia. Horizontal scale 10mm in 0.1mm divisions. Fits our L1873D 7X pocket Comparator. Unused.

M1539D \$12.00

27MM PROTRACTOR RETICLE FOR POCKET COMPARATOR

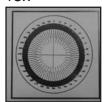


High quality 27mm diameter glass reticle with great stability. Patterns are made with low reflection hard chrome deposition which imparts high contrast for easy readability. Printing is on the side of the reticle which makes contact with the object, thus minimizing the error due to parallax. Protractor scale 0 degrees to 180 degrees numbered every 10 degrees., divided each

degree. Radius scales 0 to 10mm in 0.5mm divisions. Fits our L1873D 7X pocket Comparator. Unused.

M1540D \$12.00

27MM 360 DEGREE PROTRACTOR RETICLE FOR POCKET COMPARA-TOR

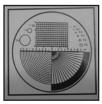


High quality 27mm diameter glass reticle with great stability. Patterns are made with low reflection hard chrome deposition which imparts high contrast for easy readability. Printing is on the side of the reticle which makes contact with the object, thus minimizing the error due to parallax. Protractor scale 0 degrees to 360 degrees numbered every 10 degrees, divided each

degree. Fits our L1873D 7X pocket Comparator. Unused.

M1548D \$12.00

27MM ANGLE/RADIUS/GRID RETICLE FOR POCKET COMPARATOR



High quality 27mm diameter glass reticle with great stability. Patterns are made with low reflection hard chrome deposition which imparts high contrast for easy readability. Printing is on the side of the reticle which makes contact with the object, thus minimizing the error due to parallax. Angle scales 0 degrees to 90 degrees in 1 degree divisions. Radius scale 0.5 to 10mm

radii in increments of 0.5mm. Two circles 1.5mm and 3mm dia. Seven circles from 0 to 0.7mm in steps of 0.1mm. Linear scale 20mm with 0.1mm divisions. 0.3" X 0.4" grid in 0.025". Fits our L1873D 7X pocket Comparator. Unused.

M1599D \$12.00

Microscopes

SET OF 4 ACH MICROSCOPE OBJECTIVES

Standard JIS 36mm type in bright chrome finish. Unused, good quality, great price. Set includes 4X/0.10, 10X/0.25, 40X/0.65, and 100X/1.25 oil. 40X & 100X are spring loaded.

L1866D \$48.50

4 X ACHROMATIC MICROSCOPE OBJECTIVE



Standard JIS 36mm type in bright chrome finish. Unused, good quality, great price. 4X/0.10 L1867D \$7.50

10X ACHROMATIC MICROSCOPE OBJECTIVE



Standard JIS 36mm type in bright chrome finish. Unused, good quality, great price. 10X/0.25 L1868D \$9.00

40X ACHROMATIC MICROSCOPE OBJECTIVE



Standard JIS 36mm type in bright chrome finish. Unused, good quality, great price. 40X/0.65. Spring loaded.

L1869D \$15.00

100X ACHROMATIC MICROSCOPE OBJECTIVE



Standard JIS 36mm type in bright chrome finish. Unused, good quality, great price. 100X/1.25 oil. Spring loaded.

L1870D \$29.00

20X ACHROMATIC MICROSCOPE OBJECTIVE



Standard JIS 36mm type in bright chrome finish. 20X. Unused, good quality, great price.

L2188D \$11.00

MICROSCOPE COVER GLASS - SIZE 24 X 50MM



These are thickness #2 (0.17 - 0.25mm). 1/2 oz package contains about 23 pieces. Two sizes available: 24 \times 40mm and 24 \times 50mm. The 24 \times 50 may be antique as the box is labeled "Made in Occupied Japan". Old, but in original unopened containers.

M1151 \$1.00

MICROSCOPE MECHANICAL STAGE



Unused beauty. Precision stage that easily clamps onto your microscope. Horizontal movement 75mm and vertical movement 44mm, each by rack and pinion. Both scales are graduated and read by verniers. Spring finger to hold slides. Heavy duty.

M1527D \$28.50

HAND MICROTOME



Design for slicing micro thin sections of a specimen for viewing with your microscope. Sample to be sectioned is supported in styropith or other material and placed in the central well. Turning the milled knob at the base of the microtome moves the piston up and raises the sample. Sections can be cut from the top flat plate stage with a razor. Piston has 19mm overall travel with

click stops at 20 micron intervals. Advances 500 microns for each complete turn. Top stage is 63mm diameter and well is 11mm diameter. Unused.

M1571D \$24.50

COMPOUND MICROSCOPE PHOTO ADAPTER



Here's what you need to take 35mm photos thru your microscope. Quality aluminum construction. Fits standard 25mm microscope tube tube (including our T1480 Student Microscope). Unit has 2 sections with bayonet thread to easily come apart so you can insert your eyepiece. Other end has standard "T" thread to fit your camera's T-Adapter (available at most camera stores if

you don't already have one for your camera). Unused.

M1573D \$19.50

MICROSCOPE SUB STAGE ILLUMINATOR



Light alloy vented housing fitted with glass blue filter on one side and clear diffuse filter on the other side. Works off standard

110VAC, or if you are traveling, remove the adapter and the unit will work with standard Continental Europe 220VAC. Has in line on/off switch. Fits standard microscopes (plugs into the mirror socket) such as our Student Microscope #T1480. Unused.

M1574D \$19.50

CORNING MICROSCOPE COVER GLASS, 35MM X 50MM



Corning optical glass No. 0211. Microscope cover glass thickness #1 (0.13 - 0.16mm). 35mm X 50mm. Made of the highest quality glass with high corrosion resistance. Water white and free from lead oxide. Production controlled for flatness and thickness so the surfaces are uniform and practically free from irregularities. In plastic container with slip off cover. Packaged 1 oz. per

box (approximately 70 per box). Unused. **M1584** \$3.00 or 10 for \$22.00

15 WATT 230VAC T29 PYGMY BC BULB FOR MICROSCOPE ILLUMINATOR



These are replacement bulbs for our M1574D, Microscope Sub Stage Illuminator. Made by Phillips. New.

M2177D \$1.25

STEREO MICROSCOPE



Unused stereo microscope with a large working distance and field of view. The whole microscope head can be rotated 360 degrees and can be raised and lowered on its vertical pillar. The

interpupillary distance is adjustable between 55mm and 75mm. The microscope is focused by a rack and pinion mechanism. Comes with built in paired 2X achromatic objectives and a matched pair of 10X wide field eyepieces. Gives 20X magnification. Includes 3-1/4" round reversible (white or black) stage Perfect for science experiments, gem analysis, etc.

T1477D \$95.00

STUDENT MICROSCOPE



Well constructed microscope with 3 objective turret including 4X, 10X, & 40X objectives. Includes 10X & 15X eyepieces to give up to 600X. Metal stand tilts for easy viewing. Has rack & pinion coarse and fine controls. Dual mirror to reflect light. Has stage fitted with iris diaphragm. Abbe condenser N.A. 1.25, and filter support with rack & pinion movement. These provisions

allow the use of optional 100X oil immersion objective for up to 1500X. Unused. Terrific microscope for the price.

T1480D \$95.00

Mirrors

2-1/2" DIA SPHERICAL MIRROR-24" FL

Made for small reflecting telescopes. 2-1/2" diameter by 0.40" thick, 24" focal length. May have some minor scratches that won't effect the image. Great for kids scope or optical experiments.

L1565 \$6.00

5-3/4" NEGATIVE LENS W/CENTER MIRROR



Another unused beauty. Clearly part of the same objective assembly that L1758 was for. Negative meniscus lens, 5-3/4" diameter by -2000mm focal length by 0.35" thick. Center mirror is convex and 2-3/4" diameter with a 7/8" diameter opening in the center. Says "Lens Corrector No. 3, 2nd Mirror" on the package.

L1757 \$18.00

MTD HIGH QUALITY DIAGONAL



This is a beauty. Unused in original box. Not sure what the original design was for as the label states "1x stereo lens. CAT. NO.53-70-30. Clearly made for right angle viewing for some instrument. Openings are 25mm. Top has bayonet type mount. 3 screws hold the diagonal onto the assembly, so it can easily be removed for other applications.

L1768 \$15.00

2" DIA F/2 UNCTD SPHERICAL MIRROR

Full thickness Pyrex spherical mirror, 2" diameter by 1/2" thick. Focal length is 4". Polished but not aluminized. Like new.

L1882 \$5.00

MOUNTED 2.5" ELLIPTICAL F.S. MIRROR



 $2.5" \times 2.1"$ elliptical mirror. Looks like about 1/8 wave accuracy. 0.35" thick. The last 1/2" around, the thickness tapers off to 0.14" at the very edge. Made to fit a specific military optical device. Mounting is yoke style and has 3 mounting holes. Would make a great telescope diagonal but you'll probably want to remove the mounting (looks like it's cemented to the

back). Unused in original military packaging. Original Govt. cost was \$298.91.

L2137 \$13.50

FRONT SURFACE MIRROR, 7-3/4" LONG BY 1-5/8" WIDE



Aluminized front surface mirror, 7-3/4" long by 1-5/8" wide by 1/4" thick. Plate glass mirror with excellent coating. Unused, mint condition.

L2193 \$3.00 or 2 for \$5.00

PRECISION MTD 6-1/2" DIA F/1.4 ZERODUR SPHERICAL MIRROR



This is an absolute beauty with 3 micrometer controls for precision alignment. The Zerodur is 6-3/4" diameter by 2" thick. 9" focal length. Might have some very thin cleaning scratches but otherwise in perfect condition. We tested with a 200 line per inch ronchi tester and got nice straight lines all the way. Super quality made by Perkin Elmer. Mounting is 9" diameter by 2-

1/2" thick with the micrometer controls protruding 2". This is a rare find. Only have a few.

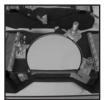
L3017 \$425.00

17MM BK7 FRONT SURFACE MIRROR



Quality front surface mirror, 17mm diameter by 2mm thick. First surface is aluminized. Made of BK7 optical glass. Looks like at least 1/4 wave accuracy. New. L3129D \$5.00

PRECISION MTD 6-1/2" DIA F/1.5 ZERODUR SPHERICAL MIRROR



This is an absolute beauty with 3 micrometer controls for precision alignment. The Zerodur mirror is 6-1/2" diameter by 3/4" thick. Bottom is truncated at 5-1/4" from the top. Focal length is 10.5". We tested with a 200 line per inch ronchi tester and got nice straight lines all the way. Superior quality made by Perkin Elmer. Mounting is 16" long \times 8 1/4" wide \times approxi-

mately 4 1/4" deep and the micrometer controls protrude 2". This is a rare find and only have a few.

L3151 \$425.00

PERKIN ELMER RECT FS MIRROR, 55MM X 20MM X 4MM.



Quality Perkin Elmer rectangular front surface mirror is 55mm long x 20mm wide x 4mm thick. Each comes in a plastic container. Unused.

L3164 \$3.00

UNCOATED 2-1/2" F/10 SPHERICAL MIRROR



Plate glass. Polished but not aluminized. 24" focal length. Uncoated mirrors are sometimes used in solar projection scopes.

L3171 \$2.50

PRECISION 50MM MIRROR MTD ON STAND



Perkin Elmer #L1165113 "TGS Flat Mirror Assembly". Designed to be used in a Perkin Elmer detector unit with lasers. Mirror is 50mm diameter by 5mm thick and appears to be at least 1/10 wave accuracy. It's mounted on a metal assembly with 4 mounting screws. The top of the mirror sits 100mm from the bottom of the stand. The unit screws into a wood base which is

enclosed in a protective box. Installation instructions are included. Unused. Only have a few.

L3184 \$65.00

LARGE LASER FRONT SURFACE MIRROR, 14-1/2" LONG



This is a beauty, but we don't know what wavelength the coating is for. Mint condition bluish reflective coating that you can partially see thru. In visible light, it appears to have a very slight curve. Focal length is much too long for us to measure. The mirror is 14-1/2" long by 8-1/4" wide and tapers to 5" wide. Thickness is 5/8". Optical glass. Our understanding is that these

originally cost over \$1000.00 each. Unused. Only have a few.

L3194 \$78.00

LASER POLYGON GOLD MIRROR/MOTOR ASSY



Made by Toshiba, Model LSM-205-8BK. Motor is 24VDC and revolves at 4749 RPM. 8 flat gold coated mirrors revolve. Each rectangular mirror is 27mm long by 5mm wide. These were made to be used in laser scanner assemblies. Flange is 100mm diameter with 3 mounting holes. Unit is 50mm high. Unused.

L3361 \$10.00

SMALL 2 WAY MIRROR

2 way mirror mounted in a square tube at 45 degrees. Mirror is 5/8" X 7/16". Tube is 1-1/4" long. Look thru the top of the tube and see reflection at 90 degree right angle. Look straight through the mirror for the same view.

L9036 \$1.00 or 10 for \$7.00

55MM X 50MM HOT MIRROR



Hot mirrors reflect harmful infra red radiation (heat) and transmit visual. 55mm long by 50mm wide by 4mm thick. Like new condition.

M2110 \$2.75

Miscellaneous

GRAB BAG OF OPTICAL STUFF

Mix of lenses, mirrors, prisms, and/or strange optical things that we have only small quantities of. No two grab bags are the same. You'll be pleased or your money back, no questions asked.

L1477 \$25.00

RECTANGULAR FROSTED GLASS



Glass is 77mm long x 55mm wide and 2mm thick. L3117 \$0.50 or 10 for \$3.50

2" RUBBER EYEGUARD?



Made for the government and called "Eyeshield Assembly'. Will fit over 2" eyepieces. Has a threaded insert 1-3/4" ID by 2-1/4" OD that is removable. However, the eye end opening is only 3/4" diameter. You'll probably want to use an exacto knife or other sharp blade to cut that end opening larger. The interesting thing about this is that there are rubber flaps

that will protect your eyepiece from dust etc. When you press the eye-guard against your eye, the flaps open, exposing your eyepiece. We have been told that this is the eyeguard for the AN/TVS-2 series night vision sights. The flaps are to keep the light from the image intensifier from lighting up your face for the enemy to see with their night vision sight. Unused

M1184 \$4.00 or 10 for \$30.00

MILITARY WOOD CASE



Quality military wood case with metal hinges and handles. 15-1/4" \times 14" \times 8-1/2". Inside dimensions: 13-3/4" \times 12-1/4" \times 6".

M1474 \$19.00

PIPETTER



For repetitive accurate dispensing of liquids. Range is 0.2ml to 10ml. Accuracy from 1ml to 10ml is +- 1%. Precision from 1ml to 10ml is +-

0.5%. Amber glass reservoir with 500cc capacity. Autoclavable to 250 degrees. Made by Tri-Continent Scientific, Catalog #232 Omnimatic. Only glass and inert fluorocarbon materials in contact with reagent. Compatible with all reagents, except HF. Unused in original packaging, with instructions.

M1495 \$15.00

DELTALITE NIGHT LIGHT



Great cool-glow illumination draws only 2/100ths of a watt of electricity. Costs about 2 cents a year to run. Useful life is over 100,000 hours. You'll never have to replace another night light bulb. Leave plugged in all the time. Safe for children as there is no glass or bulb that can break or explode. Unit mounts flush to the wall. The DeltaLite Electroluminescent material pro-

duces a cool flat lithe. Great for bathrooms, bedrooms, etc., or bring one with you to the hotel when on business or vacation. Unused. UL approved. Price is for a package of 2.

M1515 \$4.00 or 3 for \$9.99

DELTALITE NIGHT LIGHT WITH OUTLET



Same as our #M1515, but also has an electrical outlet in front so you don't loose an outlet by installing the night light. Great cool-glow illumination draws only 2/100ths of a watt of electricity. Costs about 2 cents a year to run. Useful life is over 100,000 hours. You'll never have to replace another night light bulb. Leave plugged in all the time. Safe for children as there is no

glass or bulb that can break or explode. Unit mounts flush to the wall. The DeltaLite Electroluminescent material produces a cool flat lithe. Great for bathrooms, bedrooms, etc., or bring one with you to the hotel when on business or vacation. Unused. UL approved. Price is for a package of 2.

M1516 \$6.00 or 3 for \$15.00

METAL YOKE



9" high by 4-3/4" Inside width.

Center rod is 1-3/4" long by 5/8"

diameter. Heavy duty.

M1520 \$4.50

BINOCULAR EYEPIECE COVER/FILTER HOLDER



An interesting device that fits over both binocular eyepieces to protect them, and has a compartment to hold two filters 35mm diameter. 4-5/8" by 2-3/16" inside measurement. Made to fit specific military binoculars, so you'll probably have to fasten it on somehow. Our M1525 neck strap fits it nicely. One of our customers advises that these are designed for the Carl Zeiss

7x40 DF or EF NVA (National Volks Army) Checkpoint Charlie binoculars. He has seen them selling for \$10+

M1524 \$1.75

RUBBER OBJECTIVE/EYEPIECE COVER



Unused. 2-1/16" ID with 2" long handle. Brown. Made to fit specific military binoculars (we don't know which ones). Also fits nicely over some of the oversized eyepieces such as the ones in our T1473 French observation binoculars.

M1526 \$0.75 or 10 for \$5.00

SPHEROMETER



Made of brass. Legs and screw are of stainless steel. Screw pitch 1mm, reading to 0.01mm. Three legged type. Has circular divided plate, vertical scale and micrometer screw. Use this to measure the radius of curvature of a lens or mirror. Unused.

M1535D \$15.00

BRASS WEIGHT SET



All weights are machined brass, accurately adjusted and marked. Housed in a hinged wooden box. Set of 10 weights: 200g, 100g, 50g, two 20g, 10g, 5g, two 2g, and 1g. Unused.

M1536D \$13.50

SMALLER BRASS WEIGHT SET



All weights are brass, accurately adjusted and marked. Housed in a hinged wooden box. Set includes: 100g, 50g, two 20g, 10g, 5g, two 2g, and fractional weights from 1mg to 500mg. Forceps included. Unused. M1537D \$12.50

DIFFRACTION GRATING REPLICA, 15,000 LPI



Made by Hilger Analytical. Student's Grating, 15,000 LPI. 1-3/4" \times 1-1/8" clear size mounted to 2-1/2" \times 1-3/4". This is an optical component that separates white light into its component wavelengths. Perfect for use with our I1430D Spectrometer. Unused with plastic case.

M1541D \$15.00

2500 LPI DIFFRACTION GRATING REPLICA



Student's Grating, 2,500 Lines Per Inch. 1-3/4" \times 1-1/8" clear size mounted to 2-1/2" \times 1-3/4". This is an optical component that separates white light into its component wavelengths. Perfect for use with our I1430D Spectrometer. Unused with plastic case. M1568D \$15.00

7500 LPI DIFFRACTION GRATING REPLICA



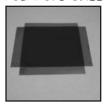
Student's Grating, 7,500 Lines Per Inch. 1-3/4" \times 1-1/8" clear size mounted to 2-1/2" \times 1-3/4". This is an optical component that separates white light into its component wavelengths. Perfect for use with our I1430D Spectrometer. Unused with plastic case. M1569D \$15.00

ADJUSTABLE OPTICAL SLIT



Adjustable slit opens from 0 to approximately 3mm. This is the same slit used in our #I1430D Spectrometer. Barrel OD is 22mm. Unit is 50mm long. m1570D \$15.00

POLAROID SHEET PAIRS, 8.5" X 10.87"

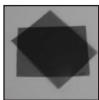


Sold in pairs so you can demonstrate the effects of polarizing. If the two sheets are parallel, the light will be transmitted thru them. If perpendicular, very little light will pass. As you rotate one sheet against the other, you can vary the amount of transmitted light. These sheets are 0.27mm thick, have a protective polyethylene liner on one side, and the other side is coated

with a broadband anti-reflective coating. The liner should be removed prior to use, but we are told that it shows some bi-refringence so it can be used to demonstrate 1/4 wave plate phenomena if left in place. Can be easily cut with scissors to different sizes. Unused. Price is for a pair.

M1581 \$7.50

POLAROID SHEET PAIRS, 5.4" X 5.4"



Sold in pairs so you can demonstrate the effects of polarizing. If the two sheets are parallel, the light will be transmitted thru them. If perpendicular, very little light will pass. As you rotate one sheet against the other, you can vary the amount of transmitted light. These sheets are 0.27mm thick, have a protective polyethylene liner on one side, and the other side is coated

with a broadband anti-reflective coating. The liner should be removed prior to use, but we are told that it shows some bi-refringence so it can be used to demonstrate 1/4 wave plate phenomena if left in place. Can be easily cut with scissors to different sizes. Unused. Price is for a pair.

M1582 \$2.50

PKG OF 20 POLAROID SHEETS 2" X 2"



Use these to demonstrate the effects of polarizing. If two sheets are parallel, the light will be transmitted thru them. If perpendicular, very little light will pass. As you rotate one sheet against another, you can vary the amount of transmitted light. These sheets are 0.27mm thick, have a protective polyethylene liner on one side, and the other side is coated with a broadband

anti-reflective coating. The liner should be removed prior to use, but we are told that it shows some bi-refringence so it can be used to demonstrate 1/4 wave plate phenomena if left in place. Unused. Price is for a package of 20.

M1583 \$5.00

5" OPTICAL ACRYLIC DOME



1/2 sphere dome made of thick clear optical acrylic. 5" diameter and 2-1/2" deep. Use to display and protect your valuable optical stuff, or keep small amounts of cookies, brownies, flowers, etc. dust free. Get two to make a complete sphere.

M1588 \$5.00

WILLSON VENTILATED SAFETY GOGGLES



Large wraparound distortion free polycarbonate lens protects eyes against small flying particles and fits over most prescription glasses. Flexible ventilated frame. Impact resistant but not unbreakable. Complies with OSHA/ANSI Z87.1 standards. Willson Vue-Guard brand. Unused in original packaging.

M1596 \$2.00

OUTSERTS EYELENS SET FOR MILITARY BIOLOGICAL/CHEMICAL MASKS



These are unused replacement eyelens sets (2 to a package) for the military ABC-M17 and M17A1 field protective masks. If you have one of these gas masks, then here's your chance to get a replacement outserts eyelens set. Or, here's a start to building your own mask, goggles, or whatever. Original cost was \$16.94 per set. 3-3/4" wide by 3-1/2". Clear, scratch resist-

ant plastic material surrounded by rubber. Price is for a set of two.

M1600 \$1.50

STAINLESS STEEL VERNIER CALIPER

Low cost stainless steel vernier caliper. Measures up to 5". Labeled in both inches and centimeters. Unused, with case.

M1606D \$7.95

PENTAX T-MOUNT

This adapter allows your camera to accept the myriad of lenses and accessories (such as our camera adapter M1513) that conforms to the T-Mount standard. Quality metal construction. For Pentax K type Bayonet cameras.

M1608D \$10.00

MINOLTA T-MOUNT

This adapter allows your camera to accept the myriad of lenses and accessories (such as our camera adapter M1513) that conforms to the T-Mount standard. Quality metal construction.

M1609D \$10.00

NIKON T-MOUNT

This adapter allows your camera to accept the myriad of lenses and accessories (such as our camera adapter M1513) that conforms to the T-Mount standard. Quality metal construction.

M1610D \$10.00

MICROMETER, 0 TO 25MM, 0.01MM GRADUATION

This is super for the price. Metal micrometer measures from 0 to 25mm with 0.01mm graduations. Plastic case included. Unused.

M1611D \$12.00

INEXPENSIVE METAL VERNIER CALIPER



Low cost vernier caliper. Measures up to 5". Labeled in both inches and centimeters. Unused with case. M1612D \$3.00

43" LONG CAMERA STRAP



Here's your chance to get a back-up strap for your camera. These were made to go with the Nimslo 3D cameras. Unused.

M2008P \$0.50 or 10 for \$3.50

HANKSCRAFT COMPLETE MOTOR/GEAR DISPLAY ASSY



Consists of a plastic housing with a DC motor and some gears. Housing is $4\text{-}3/4\text{"}\times3\text{-}5/8\text{"}\times1\text{-}7/8\text{"}$ deep. An arm is included that attaches to the gear and protrudes out each side of the unit. There are holes to attach a display piece. Works off standard "D" battery which fits into the assembly. Use this device for a motion display or attach a small flag and you've got a

flag waiver. Or use it as an educational tool to demonstrate how motors and gears can be used. Unused.

M2018P \$3.00

AEROTECH AVS105 MOTOR-DRIVEN VERTICAL TRANSLATION STAGE



The AVS105 series stages offer the ideal solution for applications that require very small incremental movements in elevation above a horizontal plane. Their small profiles and precise motion capability make these stages ideal for use in semiconductor wafer inspection and testing, fiber optics assembly and inspection, automated tool alignment, and machine vision inspection sys-

tems. This is Model AVS-105-1 with the following features: Crossed-roller bearings for excellent stability; Submicron closed-loop positioning; Preloaded vertical bearing; and Adjustable limits and manual adjust knob. Travel is 5mm and maximum load is 22 pounds. Includes 50 pole stepping motor and 15 foot cable with connectors. Stage is 7-3/4" by 3-1/4". Add 3" to the length with motor attached. Table is 3" square. Like new condition. Only have a few.

M2049 \$225.00

FLANDERS HEPA FILTER MODULE



Made to be used on clean room equipment. 17.625" X 17.625" X 5.5". Model #TH5217L17L007SU-F06A000000. Made by Flanders Filters, Inc. Specs: Resistance is 0.52; Penetration is 0.000065%; Test flow 160 CFM. The term "HEPA filter" stands for "High Efficiency Particulate Air filter". These filters are so efficient in removing small particles that they

will capture the tiny particles contained in cigarette smoke. Like new. Only have a few.

M2052 \$50.00

MEADE INTRO TO LX5 AUDIO CASSETTE



If you have a Meade LX5, here's the audio cassette that gives you instructions on how to put it together and use it. Lot's of the info is useful for any similar scope. On the other side is some interesting basic astronomy information. Quality noise reduction tape that can be recorded over.

M2056 \$1.00

DIOPTER SCALE FOR MILITARY M-3 BINOCULAR



Unused in original box dated in the 1940's. Diopter scale for the military M-3 binoculars. Mfg by Westinghouse. If you have the M-3 binoculars, then here's your replacement diopter scale. Great inexpensive military collectable. Unused.

M2057 \$1.00

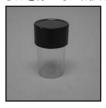
THE AMATEUR SCIENTIST ON CD-ROM - LATEST EDITION



This is dynamite!!From the archives of Scientific American Magazine, more than 72 years of experiments and projects from all The Amateur Astronomer, The Amateur Telescope Maker, and The Amateur Scientist columns from the beginning in 1928 thru 2001. Every article is complete with all photos, sketches, etc. More than 1,000 projects in every major field

of science. These are actual construction articles rated by difficulty, cost, target age, and safety. Fully searchable text, updated and corrected. Articles from such well known people as Albert Ingalls and C.L. Strong, Jearl Walker, Shawn Carlson, and others. This is the most complete resource ever assembled for science hobbyists, home schoolers, educators, science fair participants, researchers, schools, colleges, clubs, organizations, etc. Covers the following areas of science: Astronomy, Archeology, Biology, Chemistry, Earth Science, Mathematics and Physics. Includes extensive Technical Notes and Tools & Techniques and tons of helpful science secrets that have never appeared in Scientific American. This comprehensive package also includes over 2,000 pages of helpful Technical Notes that never appeared in the magazine covering topics from choosing binoculars for astronomy to monitoring earthquakes, as well as the full text of Procedures in Experimental Physics by John Strong, a classic and much sought after reference on instrument making. In addition, there is a sample software library with demo programs, shareware, freeware, and other items of use to amateur scientists in all subject areas. This is just super. Works with Windows, Mac OS, Unix & Linux. Requires 32 MB RAM and Netscape 4.0 or higher or Internet Explorer or higher. Publisher's price: \$39.99 M2071 \$21.00

SCREW TOP MICROSCOPE OBJECTIVE CONTAINERS



These are made for the standard size microscope objectives. If you've got objectives lying around unprotected, you need these. Unused **M2075** \$0.50 or 10 for \$4.00

ASTROSPEC 3000 UV EXTREME REPLACEMENT LENSES-CLEAR



If you have the Astrospec 3000 safety eyeglasses, then you need these replacement lenses, or you can just attach a rubber band thru the side slots. These have UV protection, are anti-static, anti-scratch, and have a truly unique anti-fog coating that offers unparalled fog resistance in extreme conditions. These are unused government surplus.

M2080 \$1.00 or 10 for \$7.50

HEAVY DUTY HINGED ALUMINUM MILITARY CASE



Perfect for protecting your valuable astro or electronics equipment. Has rigid foam dividers and padding, 4 clasps, and two handles. 18" long by 15" wide by 14" high.

M2081 \$29.00

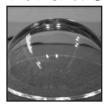
ASTROSPEC 3000 UV EXTREME REPLACEMENT LENSES-GRAY



If you have the Astrospec 3000 safety eyeglasses, then you need these replacement lenses, or you can just attach a rubber band thru the side slots. These have UV protection, are anti-static, anti-scratch, and have a truly unique anti-fog coating that offers unparalled fog resistance in extreme conditions. These are unused government surplus.

M2084 \$1.00 or 10 for \$7.50

4-1/4" OPTICAL ACRYLIC DOME



1/2 sphere dome made of thick clear optical acrylic. 4-1/4" diameter and 1-3/4" deep. Use to display and protect your valuable optical stuff, or keep small amounts of cookies, brownies, flowers, etc. dust free. Get two to make a complete sphere. Similar to our larger #M1588. Unused.

M2090 \$4.00

BARREL MOUNTED 30MM IRIS DIAPHRAGM



A real beauty. Made to be used as part of a camera lens assembly. Knurled ring provides very smooth iris opening from 5mm to 30mm diameter. Has 15 leaves. Mounting ring is 80mm diameter with 4 mounting holes and unscrews if not needed. Has markings f/4.7 to f/32. Front and rear of the barrel have internal threads. Barrel is 25mm long and 54mm I.D. Clearly a

precision made piece. Unused.

M2093 \$15.00

1920'S SWISS ARMY SNOW GOGGLES



Quality dark glass in metal housing with tie straps. Comes in a nice metal case. Antique military collectible made in the 1920's-a rare find.

M2096 \$15.00

ALPENFLAGE BDU (BATTLE DRESS UNIFORM) JACKET-MEDIUM



Quality Swiss BDU jacket with 2 large cargo pockets and a zipper front. Made of 50% polyester and 50% cotton and in new condition. These are a bit off our normal product focus, but we couldn't pass them up!

M2097 \$16.00

ALPENFLAGE BDU (BATTLE DRESS UNIFORM) JACKET-LARGE



Quality Swiss BDU jacket with 2 large cargo pockets and a zipper front. Made of 50% polyester and 50% cotton and in new condition. These are a bit off our normal product focus, but we couldn't pass them up! M2098 \$16.00

ALPENFLAGE BDU (BATTLE DRESS UNIFORM) PANTS-MEDIUM



Quality Swiss BDU pants with 2 large cargo pockets in front and a Velcro pocket in back. Made of 50% polyester and 50% cotton and in new condition. These are a bit off our normal product focus, but we couldn't pass them up!

M2099 \$12.00

ALPENFLAGE BDU (BATTLE DRESS UNIFORM) PANTS-LARGE



Quality Swiss BDU pants with 2 large cargo pockets in front and a Velcro pocket in back. Made of 50% polyester and 50% cotton and in new condition. These are a bit off our normal product focus, but we couldn't pass them up!

M2100 \$12.00

GERMAN ARMY ISSUE SUITCASE



Beautiful, heavy duty nylon suitcase with zipper front. Has internal tie straps for safely securing contents. Spring loaded latch to secure after fully zipped. Has a snap enclosed ID window and a heavy duty handle. Only have a few. 21" long by 15-1/2" high by 9" wide. Like new condition.

M2101 \$15.00

EYEPIECE CASE??



Will hold 4 of your 1-1/4" eyepieces or 12 of your .965 eyepieces. Will also hold two 2" eyepieces together with one 1-1/4". Compact size: 8" long by 7" wide by 3-1/2" high. Molded black plastic. Usable ID is 6-1/2" \times 4-1/2" \times 2" deep. .965" eyepieces can stand up but 1-1/4" need to be horizontal. Has clasp for tight closing and spot for easy holding. Lots of other uses. Has two

mounting holes on the bottom. Great for holding parts on your work bench. Unused

M2116 \$2.00

BRASS ZERO BACKLASH GEAR



Brass double gear with springs to provide zero backlash. Gear is 2-1/2" diameter with 1/4" center hole. M2130 \$4.00

BELDEN CORP 6 FOOT LONG AIR CONDITIONER REPLACEMENT CORD



Belden replacement cord No. 17141-S, 15 Amps, 250 volt for your air conditioner-think summertime! 6 Ft. #14-3. Type SPT-3. Unused in original packaging. **M2133** \$1.75

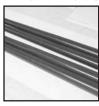
JOHN E. HAND BRASS MARITIME DRAW MARKERS



At the start of all maritime voyages, a watch rotation among the crew is established and a friction-free way to accomplish this task was to lay these 12 markers face down, shuffle them as you would dominoes and let each crewman pull a marker. Quickly and fairly, the watch rotation was set. Made in England and encased in navy blue leather. Set of 12 markers are made of

polished brass. M2184 \$11.50

HARD WOOD LEGS FOR TABLE/TRIPOD/CHAIR, 23.5"



Made of hard wood (we don't have a clue what kind but they weigh 11oz. ea.), 23-1/2" long with 1/4" thread on the top and 1-1/2" brass furl on the bottom. Top diameter is 1-1/4". Leg tapers to 3/4". Not sure what these were originally made for, but you can get creative with these at our prices, and we've got lots of them. Price is for a set of 4.

M2194 \$7.50

HIGH QUALITY OPTICAL ELEMENT OR LENS HOLDER



Not certain what equipment these optical holders were originally used with, but they could be adapted to hold an optical element or lens up to 54mm diameter in the center, and a small prism or mirror on top. Each holder measures 4-3/8" long x 2-1/2" wide x 1-1/4" deep, and is precision-constructed of black texture-enameled aluminum with a black plastic-knobbed tightening screw on

the top, 5mm wide groove on the lower dual Allen bolt-attached guide, and base thumbscrew height adjuster with black rubber foot.

M2213 \$6.50

PARAMOUNT PICTURES 3-D PROJECTION SYSTEM



A superb find for the vintage 3-D enthusiast!!! The Paramount 3-D Projection system works with the flat projection lens of movie theatre projectors to produce a more panoramic and 3-D projected image (same width with 20% decreased height) of movies made for 3-D. Anamorphic lenses are not needed and should not be used. The system mounts on the front of the projec-

tion lens, and modifies the image via the internal multiple front surface mirror assembly. These 3-D conversion systems were apparently produced by Paramount for movie theater usage during the Cinemascope era and we were told they were used with Friday the 13th part 3 in 3-D and the Jaws 3-D movie. This is the more modern system that uses polarization instead of the two color system used back in the 50's. The system is contained in a portable 24" wide x 12 1/4" high x 12" deep black textured vinyl-covered wooden box with handle, dual latches, and reinforced corners. The foaminsulated interior contains the system components: lens holder, assembly mounting plate, 2 assembly support rails, the projection unit with polarizer set, aperture plates, two Allen wrenches, hardware bag with Allen bolts and locking knobs, and system instruction manual. Aluminum construction. Lightly used. Mirror assembly is in mint condition. This is an incredible buy at our price as we understand they cost Paramount \$1000.00 each. We think you may be able to use your camera to photograph thru it(slides?) and then attach it to your slide projector (we haven't tried that idea)or make a stereo print for use in your old stereo viewer (we tried it with a digital camera and it works great). How about make you own 3-D movies? We know you'll get creative with this one. Get two? One for your camera and one for projection.

M2234 \$75.00

6" DIAMETER WHEEL WITH SOLID RUBBER TIRE



A good replacement wheel for lawn mowers, lawn carts, go carts, wagons, trash containers, or for those unique mobile projects (i.e. robotics). The wheel is 1 1/2" wide, with a white plastic 5" diameter center with 3/8" diameter axle hole, and 1/2" thick solid black rubber tire with diamond-shaped tread. Buy a few and save! \$3.00 or 4 for \$10.00

MILITARY BAR CODE READER SET - MSI/SYMBOL



Functional Army surplus bar code reader units in reinforced and foam-insulated 2-part green plastic transit cases. Each set was manufactured circa 1988, and includes the bar code reader (BCR: manufactured by MSI Data Corporation, Model 1410-PDT-LS), gun-style laser scanner with 24" coil cord (Model LS-8100 manufactured by Symbol Technologies, Inc.), black vinyl BCR

case/holster, black vinyl laser scanner holster, black BCR holster carry strap, black BCR holster belt, interface BCR cable, BCR diagnostic plug, null modem interface cable, gender changer/adapter, and a technical manual. RS232 interface connections. The BCR is enclosed in a waterproof casing that measures 8.125" high x 4.125" wide x 2.375" deep, and weighs 40 oz. with batteries installed. The laser scanner measures 7.15" high \times 1.70" wide x 4.20" deep, and weighs 8 oz. The BCR uses 10 AA alkaline or NiCad batteries for power, and an Eveready CR2016 3 volt lithium coin cell battery (or equivalent) for memory retention. The laser scanner is powered by the BCR. These sets were used as part of the Army LOGMARS(T) automated marking and reading symbols system, and carry a military application-specific CAM chip. We checked and found that they scan, read and enter the bar code numbers into the reader, and they pass the internal tests. Each set is in excellent, virtually unused, condition! We did an internet search and found some selling for around \$1200.00! Only have a few. Batteries not included. Includes ARMY Tech Manual

M2308 \$225.00

THREE ARM BOLTS FOR TRIPODS ETC



Has 1/4-20 stud by 3/4"long. These 3 arm knobs with projecting studs have a hub diameter of 7/8". Knob arm length is 7/8" from the center. Hub is textured thermoplastic. Very similar to the leg height adjustment bolts used in many Meade and other tripods.

M2403 \$0.50 or 10 for \$4.00

UNUSED SLIDE PROJECTION ASSEMBLY



We believe these were made for some of the Kodak 35mm slide projectors. We know it fits the Kodak Ektagraphic III ATS projector. Assembly includes a Halogen 300 Watt, 82 Volt GE #EXR projection lamp (used in Kodak Carousel slide projectors), a dichroic mirror, 50mm x 45mm x 2mm thick, and a DCX condenser lens, 50mm wide x 55mm long. The mirror pass-

es the heat straight thru and reflects the light thru the condenser lens. Front has a small door labeled "Reading Light" that opens to expose an opaque Fresnel lens that lets out some light from inside. We see the projection bulb alone selling for more than our price for the entire assembly. Unused.

M2407 \$15.00

VINTAGE TOY TRAIN MAZDA LAMPS-ORIGINAL BOX



Box of 10 Mazda-1453 toy train lamps. Great collectable if you don't need them for your train. 12 volts, .25 Amp. Screw base. These are old and the box looks old. Lamps are unused. Limited supply.

M2409 \$10.00

ELECTRONIC CAMERA SHUTTER ASSEMBLY



This is an automatic shutter unit made for a camera and is a beauty. Complete with 2 solenoids, cadmium sulfide photo electric light sensor that determines the exposure and tells the solenoids when to open and close and hence the shutter speed. Has a Mitsubishi M51081P integrated circuit which we believe to be a self timing chip and film speed sensor. We don't know

what camera it was made for and don't have voltage requirements or other specs. Assembly is 2-3/4" long by 2" wide. Shutter opening is 1/2". They are marked "7X1E". Unused in original static shielding bag.

M2410 \$5.00

ROUND CERAMIC MAGNETS, 18MM DIA BY 5MM THICK



Strong magnets, perfect size for experimenting. Unused package of 10

M2415 \$2.50 or 10 for \$20.00

ROUND CERAMIC MAGNETS, 13MM DIA BY 5MM THICK, 2MM CENTER HOLE



Strong magnets, perfect size for experimenting. Has a 2mm diameter center hole. Unused package of 10 M2416 \$1.50 or 10 for \$12.00

CD LASER DIODE/MOTOR ASSEMBLY



Here's the complete laser assembly that appears to have been made for CD's. Includes laser diode assembly with small right angle prism and focusing lens as well as a Mabuchi motor #RF-300C-11400 (runs off 5.9VDC). We don't have any additional specs, but this should be a lot of fun to experiment with. Unused. **M2417** \$5.00

ENIDINE DASHPOT SHOCK ABSORBERS W/HARDWARE



Miniature hydraulic non-adjustable shock absorber in a fully threaded cylinder body. Dashpot type damping. Provides effective reliable deceleration and vibration control for light loads. Enidine #4E5490. 60mm long (including 10mm long rod) and 11mm diameter. Includes hardware. Unused

M2421 \$4.75

INEXPENSIVE 2.75" DIA FRENCH BAROMETER



Made in France, these very nice looking barometers show when the weather is improving or deteriorating. Measures barometric pressure from below 28 inches to above 31 inches (<950 millibars to >1060 millibars). Has adjustable indicator that can be set over the pressure indicator to quickly see the direction of movement. Plastic housing. Has a set screw adjustment in case you

drop it and it gets out of alignment. Front is 2.75" diameter, rear is 2-1/8" diameter by 3/4" deep so you can easily mount it into a nice wood base.

Unused. **M3015 \$5.00**

INEXPENSIVE 2.75" DIA FRENCH THERMOMETERS



Made in France, these very nice looking thermometers show temperature in degrees F and degrees C. Plastic housing. Front is 2.75" diameter, rear is 2-1/8" diameter by 3/8" deep so you can easily mount it into a nice wood base. Unused.

M3016 \$5.00

INEXPENSIVE 2.75" DIA FRENCH/GERMAN QUARTZ CLOCK



Quartz movement made in Germany, and the housing and assembly made in France. These very nice looking clocks include a second hand. Plastic housing. Front is 2.75" diameter, rear is 2-1/8" diameter by 1/2" deep so you can easily mount it into a nice wood base. Takes a standard 1-1/2 volt battery (not included). Unused.

M3017 \$5.00

INEXPENSIVE WEATHER STATION



Consists of our M3015 barometer, M3017 clock, and M3016 thermometer. You could make a wood base for them and you'll have a nice set for your desk or wall.

M3018 \$12.00

MYLAR ROLL FOR OVERHEAD PROJECTION



If you still use overhead projectors and write on mylar sheets to project your creation, this is what you need. 8.5" wide by 100 feet long. Of course there are lots of other uses for mylar. Unused in original package.

M3021 \$8.50

Motors GEARHEAD MOTOR, 120VAC, 1/3RPM, CCW



Autotrol Model 700. 120VAC, 60Hz. 1/3RPM motor counter clockwise. Gear is 1/3" diameter and 2.4" long. 2.4 watts.

M2001P \$4.50 or 10 for \$35.00

SMALL DC MOTOR, 3950 RPM, PK OF 6



Low cost motor to power toys, models, etc. Operates on any DC voltage from 1 to 5 volts. Works well with flashlight battery. 3950 RPM. 5gr-cm load. KKK brand, Japan. Well built with spring steel brushes, fiber washers and brass bushings. 4" color coded lead. 7/8" diameter by 7/8" long. Shaft is 1/8" long. These have been in storage for years, so may need a drop of

oil. Unused. Package of 6

M2002P \$5.00

12VDC CANON CASSETTE MOTOR



Model MD39-R5CN-F. Nice motor that runs off 12VDC. Made to go into cassette machines. Has 7" long two wire cord. Unused.

M2009P \$2.50 or 10 for \$20.00

PANCAKE STEPPER MOTOR



Appears to be 50 steps per revolution. 1-3/4" diameter by only 3/8" thick. Has 3" long 5 wire lead with 6 prong end plug. Has 6/32 threaded shaft 1/2" long. Has two mounting ears, 3-3/16" distance between the two. We are told that this is a great motor for robotics applications but we don't have any additional specs. On the back of the motor is the numbers 6001336 and

SI-3420, Japan. Unused.

M2015P \$3.25

QUALITY MABUCHI HOBBY MOTOR



This is perfect for toys, robotics, solar power demos, and science projects. High quality model RF-500T-10750 by Mabuchi. Marked 5.9VDC, 10ma, but will run on 1.5v battery. We have large quantities of these so build them into your product and we'll supply them. Unused.

M2022P \$0.99 or 10 for \$6.00

2000RPM TAPE DRIVE MOTOR



Nippon Audio Motor Model #NAM-3A. 13.2VDC input. 2000RPM. Our understanding is that this was designed for use in a tape drive. 1-5/8" diameter by 1-3/4" long. Has 5-1/2" long 3 wire leads. Unused.

M2028P \$2.25

AIRPAX 12V STEPPER MOTOR



Made by Airpax for Digital. Digital part number 70-18658-00. Airpax #S-A83709-M4. 12V, 0.4A. Has 6 leads, 3-1/2" long with connector. Shaft is 1/4" diameter with a 1/2" worm type shaft over it. Total shaft length is 1-1/2". Has plate attached with mounting holes. Unused in original box.

M2038P \$4.50

GRAB BAG OF 12 HOBBY SIZE MOTORS

Here's a mix of motors that are perfect for experimenters, students, hobbyists, and entrepreneurs. Some will run on as low as 1VDC and some run off standard 115VAC. If you find one that you can use in your newly created product, we can supply you with the quantities you need.

M2043P \$15.00

BEAU TORQUE MOTOR MODEL 30T38



Made by Beau Motor Div. of UMC Electronics. Model 30T38. 95 volts, 60 Hz, single phase, 25 watts, 950 RPM. We believe these were made to be used in video tape recorders. 3" diameter by 2.8" long and a 1" long shaft. Unused.

M2064P \$5.00

1 RPM, 115VAC MOTOR WITH GEAR



Made by Singer Controls Co of America, model 414-287-20. One revolution per minute, CCW. Works off 115VAC 60 Hz, 3 W. 1-7/8" diameter by 3/4" thick. Has 20" long wires.

M2089P \$4.50 or 10 for \$35.00

40 RPH LONG SHAFT SYNCHRON AC MOTOR



Synchron #366661-6, 110VAC, 60Hz motor which is self-starting and made for long life operation. 40 revolutions per hour. Has an aluminum rotor cover and a precision rotor shaft with double bearings for quiet operation. Gearcase is sealed to permit mounting in any position. CW rotation. Shaft, 3/16" dia. x 3-1/8" long. Motor is 2" diameter by 1-3/8" deep. Two mounting

holes and 7" wire leads.

M2106P \$8.50

HIGH TOLERANCE 5VDC BRUSHLESS BALL BEARING MOTORIZED SPINDLE



This motorized spindle, designed for Digital Equipment Corporation, is designed for a rotational speed of 5400 RPM and consists of an eight-pole permanent magnet rotor with integral disk mounting hub, a three-phase wye wound stator winding, and a three terminal interconnect. The connection to the driver electronics is through a flexible printed circuit assembly. This spin-

dle was designed to be utilized in a 2.5 inch disk storage device and requires a special driver to operate. Spec sheet included and we have got a large quantity of these if you can incorporate them into a product. Unused.

M2160 \$5.00

SMALL DC MOTORIZED GEAR ASSEMBLY



An interesting assembly for the electronics "do-ityourselfer". The assembly black plastic casing measures 4 15/16" long x 1 5/16" wide, and includes a 1" long mounted motor with screw shaft, connected to dual plastic gears. The final gear has an 1/8" diameter positioning hole near the edge that aligns with a notch in the case side panel. Power to the motor is supplied

through dual wires connected to what appear to be DC battery clips. A dual-wired 1/8" plug is attached to the casing and motor. The assembly has four base attachment tabs. Runs on 1.5 VDC (slow) to 9 VDC (fast) range. Output gear rotates between 30 and 50 RPM.

M2185 \$3.00

AIRPAX 12VDC STEPPER MOTOR



Model A83709-M4. 0.4Amps/Phase. 15 degree/step. Has 6 wires, 4" long terminated in what looks like a pc type plug. 3/4" long shaft with a worm gear attached that makes the length 1-1/2". 2-1/4" diameter by 7/8" thick. Unused

R2028 \$2.00

MABUCHI RE-140RA-90019B MINI MOTORS



Same as our R3057 except the terminals are attached. These are great for school and hobby projects, robotics, solar, etc. 1" long with 1/4" shaft and 0.82" diameter. Runs on 1 to 3VDC. Unused.

R3057A \$0.75 or 10 for \$6.00

BEST BRAND SMALL HOBBY MOTORS



These are great for school and hobby projects, robotics, solar, etc. Each Best FG-3 motor measures 1 1/2" long with 1/4" long shaft, 1" wide, and 3/4" deep. Operates in the 1.5-3VDC range. Pre-wired with two 5 1/2" leads with tinned ends. We have large quantities of these, so if you need some to build into your project/s or product, we can supply them.

New/unused stock. R3079 \$0.50 or 10 for \$4.00

Objective Lenses OBJECTIVE LENS FOR 6 X 30 BINOCULARS

Doublet achromat made for 6 \times 30mm binoculars. 32mm diameter by approx. 130mm focal length. cemented, not coated.

L1316 \$6.50

27MM DIA OBJECTIVE IN BRASS CELL



Achromatic doublet objective. 27mm diameter by 285mm focal length. Mounted in brass cell and held in place with retaining ring. Cell is 31.6mm diameter, and 34.6mm long. Cell reduces to 28.8mm diameter at middle.

L1403 \$8.00

MOUNTED MULTI-ELEMENT OBJECTIVE



Coated, multi-element objective lens assembly. 36mm clear diameter by 6" focal length. Barrel is 45.7mm diameter by 45mm long. Sharp, color free image. Great for finderscope.

L1436 \$8.00

OBJECTIVE LENS, 38MM X 297MM FOCAL LENGTH

Coated, cemented doublet, achromatic objective lens designed to be used in one of the military finders. Made up of a double convex lens (refractive index of 1.5230, Abbe V# of 58.600) and a meniscus diverging lens (refractive index of 1.6210, Abbe V# of 36.200). Diameter is 38.1mm. Equivalent focal length is 296.72mm, and back focal length is 296.164mm. Unused. L1533 \$7.25

53.6MM DIA. CTD ACHROMAT



Cemented doublet, 53.6mm diameter by 170 mm focal length. Coated. Great for finder or small scope. Sharp, color corrected images. Unused.

L1590 \$7.50 or 10 for \$60.00

TINY BESELER 125MM FL OBJ ASSY



Objective lens assembly made by Beseler. 125mm focal length, and assembly is only 12mm diameter and 16mm long, and threaded on the end.. Achromatic. Coated optics. Combine this with our tiny eyepiece assembly (L1620) for a super small telescope.

L1643 \$5.00

MTD 15.3MM OBJECTIVE LENS, 55MM FL



Quality coated optics. Barrel is 21.1mm diameter on top half and 19.7mm diameter on bottom half. 12.8mm long.

L1880 \$7.00

51MM DIA OBJECTIVE, 180MM FL

Cemented doublet objective lens, 51mm diameter by 180mm focal length. Perfect size for a finder or small scope. Not coated.

L2147 \$6.00

MTD 70MM DIA OBJECTIVE, 800MM FL



Coated air spaced glass doublet objective lens, 70mm clear diameter by 800mm focal length. Plastic mount with threaded end. Mount is 74mm diameter. Threaded end is 70mm diameter. This will make a great quality telescope objective. Unused \$19.00 L2148

68MM DIA OBJECTIVE LENS. 360MM FL



Here's a great lens for a finder or spotting scope. Coated optics. Cemented doublet achromat, 68mm diameter by 360mm focal length. We had these made for us in response to customer requests. Get two to make a super binocular. New.

L2160D \$29.50

ACHROMAT OBJECTIVE 36MM DIA BY 100MM FL, CTD



Coated cemented doublet achromat objective lens. 36mm diameter by 100mm focal length. These are brand new, not surplus. We had these made for us and can get any quantity you may need for your optical product.

L2190D \$16.00 or 10 for \$135.00

MTD 80MM DIA OBJECTIVE, 400MM FL



Coated air spaced glass doublet objective lens, 80mm clear diameter by 400mm focal length. Plastic mount with O.D. of 95mm and front lip to butt against a tube up to about 100mm O.D. This will make a great quality telescope objective for a wide field scope, spotting scope or finder for your large scope. Unused

L2196 \$29.00

MTD 80MM DIA OBJECTIVE, 900MM FL

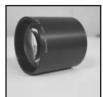


Coated air spaced glass doublet objective lens, 80mm clear diameter by 900mm focal length. Plastic mount with O.D. of 95mm and front

lip to butt against a tube up to about 100mm O.D. This is a great quality telescope objective and will make a nice scope. Unused

L3002 \$29.00

43MM DIA WIDE FIELD OBJECTIVE ASSY



Unused beauties. Focal length is 150mm. Multi-element coated objective assembly. Barrel is 50mm diameter by 50mm long. Nice, sharp color corrected images even with wide field eyepieces. Also makes a great magnifier.

L3027 \$5.00

52MM SPOTTING SCOPE OBJECTIVE



Cemented doublet, 52mm diameter by 230mm focal length. Not coated. Unused. L3034 \$6.00 or 10 for \$50.00

ACHROMAT OBJECTIVE 36MM DIA BY 135MM FL. CTD



Coated cemented doublet achromat objective lens. 36mm diameter by 135mm focal length. These are brand new, not surplus. We had these made for us and can get any quantity you may need for your optical product.

L3108 \$16.50 or 10 for \$140.00

FUJINON COPY LENS, 290MM FL



Here's a great objective lens for a "copy" scope or finder scope. Or use as a projection or collimator lens. Multi-element symmetrical design. Coated optics. Front and back elements are 55mm diameter with center stop for razor sharp color corrected images with an eyepiece. Assembly is 65mm diameter by 70mm long. Focal length is 290mm. Fujinon Model #110174.

Fujinon makes superior optics. Unused, mint condition.

L3334 \$7.50

Optical Windows OPTICAL WINDOW, 20MM DIA. 19.85mm diameter, and 2.14mm thick.

L1385 \$0.75 or 10 for \$5.00

3.1" DIAMETER OPTICAL WINDOW

Clear optical window 3.1" diameter by .36" thick. Like new.

L2091 \$3.00

OPTICAL WINDOW, 3" DIAMETER

Quality optical window, 3" diameter by 3/8" thick. Slightly tapered such that the other side is 2-3/4" diameter. not coated.

L3012 \$2.25

OPTICAL GLASS PARALLEL PLATE

Unused 1/4" thick optical glass plate, $14\ 3/8$ " long by $9\ 1/4$ " wide. Ground and polished optical glass with parallel sides. Great for use as an optical window or for experiments.

M2013P \$5.00

CLEAR 5" SQUARE PLATE GLASS

Plate glass, 5 inches by 5 inches by 0.08 inches thick. Great to protect stamps or other items you want to display. These were actually made for part of a solar assembly. We have huge quantities of these so we can accommodate you if you want to incorporate these into your product. Unused. Pack of 10

M2115 \$2.00 or 5 for \$7.50

ND OPTICAL GLASS PARALLEL PLATE, 17" X 9.5"

Unused light neutral density 1/8" thick optical glass plate, 17" long by 9 1/2" wide. Ground and polished optical glass with parallel sides. These were made for Dennison copiers. Great for use as an optical window or for experiments. M2128 \$5.00

ND OPTICAL GLASS PARALLEL PLATE, 12" X 8.75"

Unused light neutral density 1/8" thick optical glass plate, 12" long by 8-3/4" wide. Ground and polished optical glass with parallel sides. These were made for Dennison copiers. Great for use as an optical window or for experiments.

M2129 \$4.00

12.7MM DIA OPTICAL WINDOW

Quality optical window, 12.7mm diameter by 3.1mm thick. M3007 \$0.75 or 10 for \$5.00

SCHOTT THIN GLASS, 12" X 12"

Quality clear glass made in Germany by Schott is 12" square and 1.2mm thick (0.05"). Not sure of the type of glass but it looks like plate. Perfect for delicate glass used in clock faces or picture frames, or get creative for your own application. Our understanding is that thin glass of this type is not made in the US. These were imported from Germany. Not sure who they were originally imported for but they got stored for several years in their original wood crates and we have several thousand pieces. If you have a product that needs quality German thin glass, we can supply it. Price is for a package of 20 pieces, 12" square. Quantity price is for 5 packages of 20. Unused.

M3012 \$25.00 or 5 for \$100.00

100MM DIA OPTICAL WINDOW

Unused optical window made of optical glass. 100mm diameter by 3mm thick.

M5003 \$2.50

Photographic Film/Paper

AGFA-GEVAERT 9.5" SQ. PHOTOGRAPHIC FILM PLATES



Unused photographic film plates made by Agfa-Gevaert of Belgium are 9.5" square and 2mm thick. These are precision parallel surface glass film plates. 10 plates per package. Open only in darkroom. Marked "AVIPHOT DIA C". Not sure when they were made as there is no date on them. Our understanding is that they have very long shelf life and they have been kept

cool. If you don't need them for the film, they seem to be useful for ground glass imaging. A rare find. Price is per package of 10.

M2149C \$75.00

KODAK PROFESSIONAL POLYCONTRAST RAPID RC B&W PHOTOGRAPHIC PAPER



A fast selective-contrast black & white enlarging paper. Intended for commercial, industrial, news, aerial, and police photography. Also useful for advertising displays, photofinishing, and other applications that call for a general-purpose black & white paper with a neutral-black image tone. New unused unopened boxed rolls of 105mm x 200 ft. If you don't need it in a roll,

you can get about 580 sheets 105mm \times 105mm. Smooth texture, glossy surface, white base, medium weight. Kodak catalog# 15401-250500. Marked expirations in 12/1976 but our understanding is that the shelf life on these is decades.

M2216C \$25.00

Power Supplies/Adapters CALCULATOR POWER SUPPLY



Model B905-019-1 has an input of 120VAC, 50/60Hz, 8 watts and an output of 9VAC, 275MA. Nice long cord terminates with a 2 prong female connection. Unused. M2143 \$2.50

DYNAMIC INSTRUMENT CORP. AC TO 14.5VDC ADAPTER



Input is 120vac, 60Hz, 8 watts and output is 14.5vdc at 22.5ma. Leads are 9 feet long 16 gauge wire. Unused. **M2153** \$1.25

COILS, INC. TRUE TEMPER CORDLESS ELECTRIC CHARGER-TYPE 2



AC adapter charger model #2730-3 made by Coils, Inc.. Input is 120vac, 60Hz, 5w and output is 3vac, 300ma. Cord is 4 1/2 feet long and terminates to a 2 female prong plug which is $3/4^{\circ}$ long x $3/8^{\circ}$ wide. M2154 \$2.00

KIC 12VDC, 300MA ADAPTER



Input is 120VAC, 60HZ, 9W and output is 12VDC, 300mA. Made by KIC, Model # 41-12-300D and is made for indoor use only. Class 2 transformer. Has a very long cord and terminates with a coaxial plug. M3025 \$1,25

SUN MICROSYSTEMS SPARCSTATION 10 POWER SUPPLY 140WATTS



Part #300-1081-05 power supply taken from SPARCstation 10 units and in good working condition. Accepts AC from 100 to 240V,

50/60Hz and provides DC +5V, 20.5A; DC +12V, 3A; and DC -12V, 0.1A. Has 3 fans, on/off switch, and standard AC in plug and AC out. We see them selling used for \$60+ R1467P \$23.00

GAME AC/DC ADAPTER, 10VDC AT 550MA



Nuby SE-14 adapter made to power the Sega Game Gear products and we understand that it will also work with Nintendo. Provides 10VDC at 550 mA from standard 120VAC, 60HZ, Model 48-10-550D, Most 12VDC devices work fine with 10VDC. Has coaxial plug, 5mm OD and 1.5mm ID. 10 foot cord. Here's an inexpensive DC source at high current. Unused.

R2006P \$1.50 or 100 for \$99.00

REGULATED CAR/BOAT VOLTAGE CONVERTER



Plugs into your car or boat's cigarette/power outlet and converts the 12 volts to 6VDC, 7.5VDC, or 9VDC, 300 MA. Includes a universal 5-way plug and has polarity reverse capability. Use this to power your portable electronic items such as tape recorders, radios, calculators, CB radios, etc. Fen-Tone Model #FCB-1034. Unused.

R2015P \$3.00

AC/DC ADAPTER, 9VDC AT 120MA



Use this to power your 9 volt radios, electronic devices and projects. Has 5 foot 9 inch cord with small coax plug (OD 3.4mm, ID 1.3mm) on the end. Unused. R2016P \$1.00

PACE AC TO 12VDC CHARGER



Model P5807 converts standard 120VAC 60Hz to 12VDC, 50mA to charge your rechargeable radio or recorder batteries. Has a standard mini plug and a mini plug jack to 9V battery plug adapter. Unused in original blister pack.

R2026P \$2.95

REGULATED POWER SUPPLY, 5VDC, 5A



Model SPS 40-5 by Standard Power, Inc. Features: Voltage adjustment potentiometer; Foldback current limiting; 115/230VAC 47-440 Hz input; 0.1% line/load regulation; Temperature compensated circuitry; 0.1% ripple. This is a series regulated, solid state power supply. The output is floating, hence the voltage may be plus or minus or referenced to another voltage.

Includes instruction sheet.

R3062 \$12.00

POWER SUPPLY, PLUS/MINUS 15VDC AT 5 AMPS



Great unused power supply. Standard 120VAC, 60Hz in with outputs of plus 15 volts DC and minus 15 volts DC at 5 amps. Has heavy duty transformer, heat sink, power transistors and lots of other components on a circuit board 10-3/4 inches long by 4-1/4 inches wide. Weighs almost 5 pounds. CEI Model C209H-0006 R3114 \$10.00

Prisms LONG PRISM MOUNTED



3.9" long with a base of 1.29", and 0.66" high. 90 degree prism fastened to a base that is 5.2" long by 2.5" wide. Base is silvered except 1.2" in the center, which is blackened out. Like new.

L1364 \$18.00

TINY PENTA PRISM

A beauty, only 20.3mm long with faces of 13mm square. Surfaces have not been aluminized.

L1676 \$5.00

63.5MM CORNER CUBE PRISM



These corner cube retroreflectors (trihedral prisms) reflect any beam entering it back to its source, regardless of the prism's orientation. Used in surveying, precision alignment, etc. Unused beauties. Made of BK7, beam deviation 180 degrees +/-3 arc seconds and working distance 1000 meters and more.

L1792 \$95.00

BK7 EQUILATERAL PRISM



These prisms have equal 60 degree angles and are used to disperse light into its constituent colors. Made of BK7 Optical glass. Index of Refraction is 1.517. 25mm \times 25mm \times 25mm. 60/40 surface quality with 1/2 wave accuracy. Angle is within +- 5 arc min. Unused.

L1851D \$7.50

F2 EQUILATERAL DISPERSION PRISM

These prisms have equal 60 degree angles and are used to disperse light into its constituent colors. $35\text{mm} \times 35\text{mm} \times 35\text{mm}$. Made of F2 optical glass. The higher the refractive index of the prism material, the greater will be the separation of wave length. Index of Refraction is 1.620. 60/40 surface quality with 1/2 wave accuracy. Angle is within +- 5 arc min. Unused. L1885D \$19.50

SF2 EQUILATERAL DISPERSION PRISM

These prisms have equal 60 degree angles and are used to disperse light into its constituent colors. $25\text{mm} \times 25\text{mm} \times 25\text{mm}$. Made of SF2 optical glass. The higher the refractive index of the prism material, the greater will be the separation of wave length. Index of Refraction is 1.648. 60/40 surface quality with 1/2 wave accuracy. Angle is within +- 5 arc min. Unused

L1886D \$19.50

25.4MM CORNER CUBE PRISM



These corner cube retroreflectors (trihedral prisms) reflect any beam entering it back to its source, regardless of the prism's orienta-

tion. Used in surveying, precision alignment, etc. Unused beauties. Made of BK7 with a tolerance of +- 2.3 arc seconds.

L1892 \$59.00

RIGHT ANGLE PRISM 30MM X 42MM X 30MM



Made of BK-7 optical glass. Length & width are 30mm, and hypotenuse is 42mm. Right angle prisms are used to achieve a 90 degree light path bend. The image will be erect and reverse left to right. Can also be used in combination for image/beam displacement. These are unused and have surface quality of 60-40, dimensional tolerance of +- 0.2 arc min, angle and pyramid tolerance

of +- 3 arc mins, and surface flatness of about 1/2 wave.

L2001D \$12.00

MEDIUM SIZE DOVE PRISM



42.25mm long by 10mm wide by 10mm high. Face is 14.15mm by 10mm. Dove prisms are also called image rotators because if you look through the prism and rotate it about a longitudinal axis, the image rotates through an angle twice as much as the prism. Unused. Made of BK-7 optical glass. Surface finish 60-40 with 1/2 wave flatness.

L2002D \$12.00

COATED LITTROW DISPERSION PRISMS



30-60-90 degree prisms. 37.9mm long by 22mm wide and 22mm high. One surface is coated with AlSiO and protected with black paint. It diverts the beam by 60 degrees without inverting or reverting the image. Unused. Made of BK-7 optical glass with surface quality of 60-40 and flatness of 1/2 wave.

L2003D \$14.00

RIGHT ANGLE PRISM 25MM X 35MM X 25MM



Made of BK-7 optical glass. Length & width are 25mm, and hypotenuse is 35mm.Right angle prisms are used to achieve a 90 degree light path bend. The image will be erect and reverse left to right. Can also be used in combination for image/beam displacement. These are unused and have surface quality of 60-40, dimensional tolerance of +- 0.2 arc min, angle and pyramid tolerance

of +- 3 arc mins, and surface flatness of 1/2 wave.

L2004D \$9.00

RIGHT ANGLE PRISM 20MM X 28MM X 20MM

Made of BK-7 optical glass. Length & width are 20mm, and hypotenuse is 28 mm.Right angle prisms are used to achieve a 90 degree light path bend. The image will be erect and reverse left to right. Can also be used in combination for image/beam displacement. These are unused and have surface quality of 60-40, dimensional tolerance of +- 0.2 arc min, angle and pyramid tolerance of +- 3 arc mins, and surface flatness of 1/2 wave.

L2005D \$8.00

15MM PENTA PRISM



Penta prisms are 5 sided prisms that reflect light rays thru a 90 degree angle by 2 reflections. They do not invert or revert the image. The reflecting surfaces are aluminized and protected by black paint. This one has 15mm square faces. These prisms also shorten the length of an instrument. Made of BK7 optical glass with 60/40 surface quality, dimensional tolerance of

+-0.10mm, angle tolerance of +-5 arc mins, and 1/2 wave flatness. Unused. Edmund sells similar prism for \$72.50

L2097D \$25.00

25MM PENTA PRISM



Penta prisms are 5 sided prisms that reflect light rays thru a 90 degree angle by 2 reflections. They do not invert or revert the image. The reflecting surfaces are aluminized and protected by black paint. This one has 25mm square faces. These prisms also shorten the length of an instrument. Made of BK7 optical glass with 60/40 surface quality, dimensional tolerance of

+-0.10mm, angle tolerance of +-5 arc mins, and 1/2 wave flatness. Unused. Edmund sells similar prism for \$99.00

L2098D \$39.00

45 DEGREE REFLECTION PRISMS



These 3 sided prisms are used to deflect a beam thru a 45 degree angle. Shortest side is 19mm by 19mm, and the longest side is 32.5mm long by 19mm wide. Made of BK7 optical glass with 60/40 surface quality, dimensional tolerance of +-0.20mm, angle tolerance of +-5 arc mins, and 1/2 wave flatness. The larger reflecting surface is aluminized and protected by black paint.

Unused. **L2099D \$7.50**

RIGHT ANGLE PRISM 10MM X 14MM X 10MM



Made of BK-7 optical glass. Length & width are 10mm, and hypotenuse is 14mm.Right angle prisms are used to achieve a 90 degree light path bend. The image will be erect and reverse left to right. Can also be used in combination for image/beam displacement. These are unused and have surface quality of 60-40, dimensional tolerance of +- 0.2 arc min, angle and pyramid tolerance

of +- 3 arc mins, and surface flatness of 1/2 wave.

L2100D \$4.50

LARGER 45 DEGREE REFLECTION PRISMS



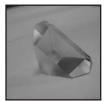
paint. Unused. **L2102D \$15.50** These 3 sided prisms are used to deflect a beam thru a 45 degree angle. Shortest side is 25mm by 40mm wide, and the longest side is 43mm long by 40mm wide. . Made of BK7 optical glass with 60/40 surface quality, dimensional tolerance of +-0.20mm, angle tolerance of +-5 arc mins, and 1/2 wave flatness. The larger reflecting surface is aluminized and protected by black

TINY RIGHT ANGLE PRISM



Sides are only 9.6mm square and the hypotenuse is 13.8mm **L2132** \$2.25

AMICI ROOF PRISMS



Amici prisms invert the image and bend the line of sight thru a 90 degree angle. They are excellent as prism diagonals in optical systems because they erect the inverted image. Can be used with your telescope as a diagonal that keeps correct left/right orientation. Face is 20mm long. Prism is 34mm long by 18mm wide. L2146 \$12.50

WEDGE PRISM 27MM X 19MM X 14MM



Not sure what these were designed for as they are polished on the two longest sides, but only ground on the shortest side. Longest sides are 27mm and 23mm. Shortest side is 14mm. Width is 19mm. Like new. L2171 \$5.00

RHOMBOIDAL PRISM, 60MM LONG



Coated Rhomboidal prism, 60mm long, 15mm thick, and 15mm high. O degree light deviation. Displaces image according to length of prism. Image position remains parallel to the old line of sight. Image is neither reverted nor inverted. Unused

L3011 \$18.00

UNUSED 6X30 BINOCULAR PORRO PRISMS



Quality porro prisms made for 6x30 binoculars. If you've been looking for replacement you are in luck. Or use them to create a full spectrum rainbow from a ray of sunlight. Base is 43mm long, height is 21.25mm, and width is 21mm. Mint condition

L3023 \$4.00

SPECIALTY 25MM RIGHT ANGLE PRISM



Hypotenuse is 25mm long by 20mm wide. One side is 23mm long and the other is 16mm. Prism is flattened at the top and has a bevel at the bottom. Clearly designed to go into a specific optical device. Unused. L3026 \$2.50 or 5 for \$10.00

LARGE EQUILATERAL PRISM



A beautiful piece made of optical glass. Hypotenuse is aluminized and is 95mm \times 90mm. Sides are 65mm \times 95mm. Prisms have small edge chips that won't interfere with your application.

L3052 \$10.00

90 DEGREE AMICI PRISM ASSY FOR NIGHT VISION



Made for one of the military night vision scopes, this 90 degree assembly has a beautiful 45mm long amici roof prism, a 2" optical window, and a negative lens assembly. If you have the scope these were made for (we don't know which one), you need this. If not get if for the components, especially the amici prism which inverts the image and bends the line of sight thru a 90

degree angle. Amici prisms are are excellent as prism diagonals in optical systems because they erect the inverted image and can be used with your telescope as a diagonal that keeps correct left/right orientation.

L3082 \$15.00

UNIQUE PRISM



Look through the prism and your image is moved to the left and rotated 90 degrees. Prism is a very unique design with 4 faces with the following dimensions:1.Rectangular shaped with the short sides being 15mm long and the long side 25mm and the opposite side has a shallow slope of roughly 20mm.2.Long side is 34mm and opposite side is 16mm, short side is

19mm and the other side, which slopes back at a 45 degree angle is 25mm long.3.Long side is 33mm and the opposite side is curved and approximately 15mm long. The short side is 13mm and faces a 45 degree back slope approximately 29mm in length.4.Long side is 26mm and opposite side is 23mm and the sides are 15mm and 18mm.Very interesting piece and haven't got a lot of them.

L3111 \$8.00

EQUILATERAL PRISM, 90 X 85 X 65MM, ALUM

L3122



This is a beautiful optical glass prism. Hypotenuse is aluminized and is $90\text{mm} \times 85\text{mm}$. Sides are $65\text{mm} \times 95\text{mm}$. Prisms have minor edge chips that won't interfere with your application. These are similar to our item L3052 but with a smaller hypotenuse.

EDMUND SCIENTIFIC RA PRISM, 13 X 23 X 16MM, ALUM

\$8.00



These are commercial quality right angle prisms made by Edmund Scientific. Their part number is 32,286. Each face is 13mm by 16mm and the aluminized hypotenuse is 23mm long by 13mm wide. Right angle prisms are used to achieve a 90 degree light path bend. Listed in the 2000 Edmund catalog for \$27.15 each. Unused in original packaging. Hypotenuse is aluminized

on the outside so it can also be used as a 45 degree mirror.

L3124 \$6.00

MOUNTED ERECTING PRISM ASSEMBLY



Well made mounted two prism erecting assembly is what you need for building a spotting scope or monocular. Assembly is 15mm thick and 28mm diameter and the view openings are 9mm diameter.

L3125 \$5.00

RIGHT ANGLE PRISM, 40MM HYPOTENUSE, 28MM SIDES



Quality right angle prism with 40mm long hypotenuse and 28mm square sides. Unused L3134 \$9.00

RIGHT ANGLE PRISM 15MM X 21MM X 15MM



Made of BK-7 optical glass. Length & width are 15mm, and hypotenuse is 21mm.Right angle prisms are used to achieve a 90 degree light path bend. The image will be erect and reverse left to right. Can also be used in combination for image/beam displacement. These are unused and have surface quality of 60-40, dimensional tolerance of +- 0.2 arc min, angle and pyramid tolerance

of +- 3 arc mins, and surface flatness of 1/2 wave.

L3152D \$5.00

PRECISION PRISM, SLIGHTLY UNUSUAL



Looks and acts like a right angle prism, but it's length is twice as long, or could be 1/2 of a dove prism. Polished hypotenuse is 28mm by 20mm. Prism is 40mm long. Polished bottom is 20mm square. Polished side is 40mm by 20mm. Made by Perkin Elmer for some specific optical device. Probably to shift the image 20mm from where it would be if the prism was cut as a RA

prism. Unused. Only have a few.

L3155 \$12.00

UNUSED 60MM CORNER CUBE RETROREFLECTOR PRISM



These corner cube retroreflectors (trihedral prisms) reflect any beam entering it back to its source, regardless of the prism's orientation. Used in surveying, precision alignment, etc. There are three total internal reflections within the corner cube. Unused beauties. Rear and sides are aluminized for high reflection. 60mm across and 49mm deep.

L3339 \$39.50 or 3 for \$99.99

COMPLETE PRISM KIT



Kit of the most popular prisms. All are unused and made of BK7 optical glass (except the corner cube-not sure which glass it's made of). Kit includes: 25mm Equilateral Prism, 22mm \times 38mm \times 22mm Littrow Dispersion Prism, 30mm Cube Beamsplitter, Right Angle Prism 20mm \times 28mm \times 20mm, 45 degree Reflection Prism 19mm \times 32.5mm \times 19mm, 15mm Penta Prism, Dove

Prism $10 \times 42 \times 10$, 60mm Corner Cube Retroreflector Trihedral Prism, and carrying case. Elsewhere, just one of these prisms could cost you more than our price for the entire set.

L3353 \$98.50

MOUNTED MILITARY 7X50 BINOC ERECTING PRISM ASSEMBLY



These are the right assembly for one of the military 7×50 binoculars. Well made mounted two prism erecting assembly is what you need for building a spotting scope or monocular. Two mounted porro prisms, 2 inches long by 1 inch high. Assembly is 2-1/2 inches thick by 2-1/2 diameter and the view openings are 1 inch diameter. Unused in original govt. packaging dated 1953.

Also could be a military collectable.

L3358 \$12.00

RHOMBOID PRISM, 40MM X 25MM, CTD



This looks and works like a mini periscope. Coated Rhomboidal prism, 40mm long, 25mm wide, and 10mm thick. O degree light deviation. Displaces image according to length of prism. Image position remains parallel to the old line of sight. Image is neither reverted nor inverted. Center and sides are blackened so the $25\text{mm} \times 10\text{mm}$ top and bottom view thru portion

has no interfering images. Unused

L3362 \$15.00

Radio/Electronics PANASONIC LITHIUM COIN BATTERY #BR2032



Panasonic battery #BR2032 is a 3 volt, coin type lithium battery. These are surplus but unused. The BR2032 has extremely small self-discharge for long service and shelf life. They are used in cameras, calculators, watches, and lots of other electronic devices. If you need them, here is your inexpensive source.

M2142 \$0.50 or 10 for \$3.50

PC KEYBOARD CABLE EXTENDER - 6' 5-PIN DIN MALE/FEMALE



Manufactured by Woods Industries, this 5-pin DIN male to female 6' 5mm diameter light gray cable lets you extend your existing keyboard cable, allowing for more flexibility and comfort. This #5988 model is designed for standard PC keyboards (not adaptable to PS/2-type keyboards). New in the original plastic-covered hanging card.

M2198 \$2.00

CR1002 COMMUNICATIONS RECORDER



The CR1002 is a voice recorder, time code generator and analysis unit all in one. Compact, rugged and versatile voice logging communications recorder. Designed to withstand vibration, dust, rain and extreme temperatures, the CR1002 incorporates the patented POSILOCK 1000 cassette tape transport mechanism, engineered to operate under the severe environmental

conditions found in airborne, mobile and manpack operations. Here are some of the features: Uses standard cassettes; Auto reverse recording or continuous loop recording, selectable from the keyboard; Dual speed operation, keyboard selectable, 1-7/8 ips or 15/16 ips; Built-in-time code generator and reader, with time search; Extensive self-test (BITE); Automatic recording (VOX, COR); Auto replay, cue and review facilities; Real time clock with battery back-up. The recorder has microprocessors controlling its functions to ensure versatility and ease of use. Made by Signal Design, Inc for the military (They were bought by Dynamic Instruments, San Diego, CA) and while no longer manufactured, it is still supported. Will accept any power source from 12VDC to 28VDC. Unused with operator manual. Does not include cables or wiring diagrams. Original cost was \$3000.00

R1440 \$175.00

OMNI DIRECTIONAL SCANNER DIPOLE ASSEMBLY



Wide band scanner antenna vertically polarized 8 element omnidirectional dipole assembly. Stands about 6 feet high. Attach your cable and mast and you should get great reception from the lowest scanner frequencies to the highest.

R1444 \$14.50

CONTELCO-GUARD DETECTOR



Type ME-400 detector with 14" antenna. Not a clue what this is for but our guess is that it's some kind of detector in the 140 to 150MHz area. On the bottom it says "This device should be used for the both of ME-418, ME-450 with product number over three thousands." (Whatever that means). Has 3 circuit boards and a few components and power connector on the side.

Metal case is $5-3/8" \times 2-3/8" \times 1-3/4"$ high. If you can figure out what its for, it's a steal at 4 bucks. Or use the case and antenna for your own project. They look new.

R1455 \$4.00

KIKUSUI COS6100M 100MHZ OSCILLOSCOPE



This is a powerful 100 Mhz oscilloscope with 5 channels and 12 traces. It has a four way trigger off either channels 1, 2, 3, or ALT. Trigger lock for stable automatic triggering for complex signals such as video

waveforms. Can display several Lissajous patterns at the same time. 5 mV to 5 V per division (1 mV with magnifier) and 2% accuracy. Sweep speeds are 20 ns to 500 ms. This is the scope that is being used in production, testing, R&D, and home shops because of its versatility and portability. Tested and in good working condition. Complete manual copy included. Only have a few.

R1456 \$225.00

U.S. ARMY VEHICLE TEST METER



Model STE/ICE-R made by G.E. or RCA for the Army. The instrument is a versatile diagnostic tool for testing and taking measurements on vehicle engines as well as many other types of electrical and mechanical equipment. Unfortunately we don't have the cables or optional transducers that came with the original unit, but we do have the complete Technical Manual which

will be included with each order. There are lots of tests that can be set up with the 2 digit test select switches. Digital readout for test results. These are in like new condition and cost our government \$7248.00 each and we have them at an unbelievably low price. You'll have to get creative to replace the cables if you want to use it as designed, but the instrument is loaded with military spec parts and uses are probably limited only by your imagination. Sorry, but we are not allowed to ship these outside the United States.

R1466US \$35.00

FIRE ALARM SPEAKER/STROBE



Unit has 4" \times 2" strobe and 4" heavy magnet speaker with transformer. Transformer calls for 25 volts. Lots of components. Great unit to experiment with or use it as a replacement. Don't have the specs or the manufacturer's name. 6-1/2" long by 4-1/2" wide by 3" deep. Like new condition. Speaker alone is worth more than our price for the entire strobe unit. Take a look at all

3 photos to get a better idea of the quality.

R1470 \$7.50

PIEZO HORN SIREN ASSEMBLY



These are taken out of unused fire alarm systems. Can use anywhere from 3 to 24VDC to activate the Piezo horn. Very Loud!! Unit is 2-3/4" square and has mounting strips attached.

R1472 \$5.00

HP 334A DISTORTION ANALYZER



The Hewlett Packard Model 334A distortion analyzer covers 5 Hz to 600 KHz range. Measures down to 0.1% full-scale distortion. Measures noise as low as 25 micro volts, and voltages from 300 micro volts to 300 V rms full scale. Some features include Auto Nulling (which speeds up the time consuming portion of measurements), an AM detector (which has a frequency range

from 550 KHz to 65 MHz), and a 1 KHz High-Pass filter.

R1474 \$150.00

METER MOVEMENT



Not a clue what the specs are on these, but this is a nice meter movement mounted in a plastic jar. Has a 2.5" long wire to connect to whatever it is to measure. Has a 7mm long red pointer. Movement is 25mm high by 20mm long by 15mm wide, and in good condition. R1476 \$2.00

5" X 7" DUAL CONE SPEAKER



Has protective fabric covering. 3.2 ohms, 8 watts. Heavy magnet. 4 mounting holes.

R1477 \$4.00

COMPACT ENCLOSED SPEAKER SYSTEM



This is a beauty. Super compact speaker system that appears to have been designed for use with your computer as it has a 26" long cord with a 2 prong PC card plug on the end. Quality 2-1/2" speaker with heavy magnet for excellent sound reproduction which is enclosed in a 4-1/4" \times 3" \times 2-1/4" deep black bakelite case. The enclosure has felt backing and a 5/8" open-

ing for improved sound. Use with your computer, car stereo, or wherever you need a quality small speaker system. Like new.

R2008P \$2.50 or 2 for \$4.00

MOUNTED 2" DIA 8 OHM SPEAKER



Made by Shogyo. 8 ohm speaker, 2" diameter, 0.2 watts. Looks like it was made to fit on a computer circuit board. Has plastic mounting with feet to snap in place. Has 6" leads.

R2012P \$0.75 or 10 for \$5.00

PUSH TO TALK CB HAND MICROPHONE



Blue Bird hand CB microphone. Features shielded coiled cord with 4 pin plug. Has 2-1/2" long push to talk switch and variable Min/Max voice control. Unused. R2018P \$5.00

LITRONIC ARGUS 2202 PCMCIA READER



This is a parallel port attached two socket PcCard Reader. Designed as a desktop interface for users of PcCards such aas the Fortezza secure token. The Fortezza secure token is used to provide e-mail security across the internet for selected Department of Defense users. It's IBM PC compatible. The unit connects into your computer's printer parallel port, and

your printer connects to the reader's printer port. Included is an AC adapter that supplies 15VDC at 800mA. Drivers are available from www.litronic.com for Windows 95, NT, and 98. Power supply and parallel cable alone is worth our price for the complete unit. Unused in original packaging.

R2032 \$19.50

FIRE ALARM STROBE UNIT



4" x 2" strobe with lots of electronic components. Has two 7" long wires to go to power. We believe 25 volts is the power requirement as these were made to be part of our R1470 complete Fire Alarm/Speaker Strobe unit. Great unit to experiment with or use it as a replacement. Don't have the specs or the manufacturer's name. Like new condition. Take a look at the

second photo to see the component board.

R2033 \$3.50

REPLACEMENT MULTIMETER METER



Made by Q.V.S., Inc. with a NSN 6625-00-656-2321 and Model number DAAB07-80-C-1730. This meter was made to go into one of the military multimeters that measures ohms, ac volts, and dc volts. The lined increment marker for ohms is every 2 ohms up to 30; 5 ohms per line from 30 to 50; 10 ohms per line from 50 to 100; 20 ohms per line from 100 to 200; and markers

at 500, 1000, and 2000. FS=50UA. The dimensions are 3 1/2" diameter x 1 3/4" deep and has 3 mounting holes. Make your own multimeter with this? Unused in original box.

R2039 \$5.50

TELESOUND STEREO FROM MONO TV



Solid state device designed to give high fidelity simulated stereo sound from your television's monaural signal. Use it with your walkman or portable TV. Made by TeleSound, Inc of NJ. This is a stereo amplifier with a matrix circuit that gives two channels, each with 7 watts RMS output. Has separate bass and treble controls and a balance control. Unused in original packag-

ing with instructions, power adapter and cables. Nice looking.

R3035 \$22.50

MICROCOM OFFICEPORTE DESKTOP VOICE/DATA/FAX MODEM & SPEAKERPHONE



This system offers the following features: V-34 data transfer at speeds up to 33,600 bps, fax send and receive with transfer at speeds up to 14,400 bps, fully supported for cellular systems, full duplex speaker-phone with echo cancellation, automatic Voice/Data switching, analog simultaneous Voice and Data, personal Voice Mail functions with the supplied software, pro-

grammable speaker volume control, distinctive ring detection, automatic speed negotiation, industry-standard AT command set compatibility. These units are unused in their original packaging and include a power adapter, telephone cable, fax/data/voice mail communications and internet software on 3.5" disc, data cable, modem and user manual. Operating Systems: Microsoft Windows Version 3.1; Microsoft Windows for Workgroups Version 3.11 (or higher); Microsoft Windows 95; Windows NT. If you are using these windows versions, this is a great buy. If not, then put your creativity to work.

R3036 \$15.00

JERROLD DIRECTIONAL COUPLER/SPLITTER



Model DC-8 directional coupler made by Jerrold. Frequency range is 12-216 Mhz and is designed to be used with 75 ohm coaxial cable as mixing, splitting or line-bridging devices and comes with an installation sheet showing the hook up for all three applications. R3038 \$1.00

AUDIO/VISUAL FLASH CIRCUIT BOARD



Hook your audio speaker wires up to this circuit board and set it to flash with the rhythm of the music. 2 positions to mount Christmas type lights onto the back of the board and hook ups for your audio component output to the other side of the board. 2 potentiometers on the front are separated by a two position switch allowing control of the lights and intensity. Has

a standard 2 prong ac cord to plug into your audio system and a 2 prong female plug to drive another device. Unused and a really original piece. R3048 \$3.50

DIGITAL DEC WRITER 90IP RECHARGEABLE NICAD BATTERY PACK - UNUSED



Digital product code LJ90X - AP. This NiCad replacement battery pack is meant for Digital's DEC Writer 90iP mid-1990's portable inkjet printers. Unused, with vinyl case and installation instructions, in the original sealed plastic hang pack. 12VDC nominal voltage, 600 mAh capacity (1 hr. charge), 1A operating current, 6 hours/150 mA recharge in printer.

R3095 \$10.00

INEXPENSIVE ELECTROPHONIC BRAND MICROPHONE



A nice inexpensive plastic cassette recorder microphone for your basic recording or PA needs. These unused mics probably accompanied 1970's Electrophonic brand cassette players. Each measures 4 3/4" long \times 3/4" diameter at the head end, with black plastic one-piece body, aluminum screen, black-enameled brushed aluminum Electrophonic label, and 5' cord

with standard 1/8" plug. Electrophonic part# 23-12741.

R3098 \$2.50

Reticles

MOUNTED RETICLE, 22MM CLEAR DIA



The top outside diameter is 37mm and the rear threaded outside diameter is 30mm and the assembly is 17mm long. Front and rear clear diameter is 22mm and there is an elaborate reticle pattern in the center. The reticle pattern consists of a + sign with vertical dashes which span through a series of 8 horizontal dashes with every other horizontal line marked with

the numbers 8, 15, 24, 32. The horizontal dashes end here and the vertical line terminates with the number 42. Have no idea what application this reticle was used for but it looks military.

L3126 \$4.00

LENS/RECTICLE ASSY, MOUNTED



Lens is 25mm diameter with a focal length of approx. 380mm and recticle that has numbers from 4 to 32, cross hair, solid and dotted curved lines. One side of the cross hair is labeled HE, and the other AP. Rectangular mount. Unused.

M1404 \$6.50

SQUARE VERTICAL HAIRLINE RETICLE

12mm square. Designed to be used with a military aiming circle. Made up of 2 pieces of optical glass. Refractive index of 1.5230 and 1.5838. Abbe constant of 58.6 and 46.0. Unused in original packing.

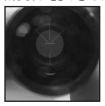
M1428 \$3.50 or 10 for \$25.00

27MM COLLIMATOR RETICLE

Concentric rings with center hole and cross hairs. Thin die-cut metal, black. We've been told that this makes a fine replacement for the reticle in the N3-C gunsight.

M1487 \$2.00

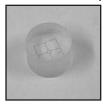
MOUNTED RETICLE ASSEMBLY



20mm diameter barrel by 33mm long with opening to light the reticle which is in the center of the barrel. Reticle has large inverted V with its tip in the center of the reticle. Small "V"s to the left and right of center. Also has vertical line towards center of the V. Unused.

M1530 \$5.00

GLASS RETICLE, 9MM DIA



Optical glass reticle 9mm diameter by 7mm thick. Polished flat on one side, and the other side is ground with a small center circle surrounded by 4 squares. Reticle is very visible from either side.

M1545 \$1.50

8.6MM DIA CROSSHAIR



This is glass, 8.6mm diameter by 1.2mm thick with a metal coating on one side with a crosshair in the center. Only light thru the crosshair gets seen.

M2055 \$0.75**

21MM GLASS RETICLE COMPLEX CROSSHAIR SCALE



Beautifully-made 21mm diameter x slightly over 1mm thick clear glass reticle. Ground and beveled edge. Scale has 20 graduations on the horizontal axis, with 0, 20, 40, 60, 80 and 100 values; 8 graduations on the vertical axis, no values. Unused stock.

M2320 \$2.25

Solar SOLAR KEY CHAIN LIGHT



Unique key chain made by Chronar. The unit has a solar cell which charges its rechargeable battery. Switch on the side turns on the light. 2-1/4" long by 1-1/4" wide. Even if you don't need a key chain, you need this for the parts. The solar panel and other components disassemble easily. Get a second one to sit on your car's dash. Unused in original box. For first use you'll need

to leave it in the sun for a couple of days to get a good charge.

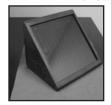
M2036P \$3.00

RAW SILICON WAFERS - 100MM DIAMETER - PKG OF 25



Manufactured by Monsanto, these wafers are the same type used in solar cell and semi-conductor manufacturing. Resistivity of .5-2.0 ohms, thickness of 0.0185-0.0215", and diameter of 3.898-3.976". Great for experiments! Price is for a package of 25 M2215 \$10.00

SOLAR POWERED OUTDOOR LIGHT WITH 6" SQ SOLAR PANEL



We got them because the batteries do not work. The battery is a lead acid rechargeable type and we do not know if they are available. You may be able to use some Nickel Cadmium batteries, but we haven't experimented with the idea. However, if you don't want to replace the batteries, get them for the parts. Has a weather protected 6" by 6" solar panel, light bulb with

5 sided reflector shield, light sensor assembly, Auto/Off switch, all protected by weatherproof ABS construction. Model CH-WI by Sunergy. Take a look at all 3 photos to get an idea of all you get for such a bargain price.

M3009 \$7.00

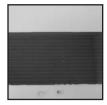
GLASS SOLAR PANEL, 6" SQUARE



Provides 9 to 10 volts unloaded, and about 100ma. Harness the Sun's energy!! Has white vinyl on the back with copper solder strips. Easy to attach leads. Perfect for use with some of our small motors. Unused.

R1471P \$5.00 or 10 for \$40.00

GLASS SOLAR PANELS, 12" X 6"



Provides about 9 volts at around 1 watt. Harness the Sun's energy!! You can use the included metal clips to attach leads or solder direct. Works great with our hobby motors. Get several and hook them up in series or parallel for more voltage or power.

R2010P \$4.00

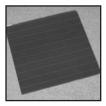
GLASS SOLAR PANEL - 12" LONG X 2-1/4" WIDE



Harness the Sun's energy! Provides about 5 volts at .5 watts and 110 mA. Includes metal clips to attach leads or solder to. Works great with our hobby motors- get several and hook them up in series or parallel for more voltage or power.

R3094 \$2.50

GLASS SOLAR PANEL - 4" SQUARE



Harness the Sun's energy! Provides about 6-8 volts at approx 75mA. The white-enameled reverse includes two 1/4" \times 1/8" contact areas for wire solder or clip connections. Works great with our hobby motors-get several and hook them up in series or parallel for more voltage or power! These were originally made for recharging nickel cadmium batteries.

R3104 \$3.00

Telephones REAL TOUCH TONE DESK PHONE



Not a cheap hand held discount department store flip phone but a true desk phone with a real bell (with loudness control) and handset with removable microphone and earphone buttons. Great spare phone and super for classroom education.

M1589 \$8.00

HAND TELEPHONE WITH 9' MODULAR CORD



Great spare phone that plugs into those phone jacks you may have all over your house. Has tone/pulse switch, ringer on/off switch and power on/off. Doesn't have labels on the numbers or switches but we'll include a template. Lots of electronics in this (see our second photo). Use as a spare or take apart for the earpiece, microphone, ringer and components. Has two

circuit boards. Great for education to show the components of a modern phone. Coiled modular cord would cost you as much as our price for the entire phone with cord. Unused.

R2011P \$3.00

ITT SYSTEM 3100 EXECUTIVE TELEPHONE



This is an unused in the original box PBX compatible phone that has lots of great features. However, if you don't have the system to connect to, only the standard touch tone phone dialing will work unless you become creative and figure out a way. Some of the features include: Voice mail, Speaker for handsfree operation, conference button, hold button, speaker volume control,

background music, 8 programmable buttons and 3 fixed function buttons, mute button, ringer control and Call Transfer button. Model 281075/MOE/20M Pearl Grey. User's guide with operating instructions included. We did an internet search and found some selling for \$299.00. R3033 \$19.00

WANG SPEAKER/HANDSET PHONE



Brand new units will work well if all you need is a receiving unit. Does not have dialing capability. **R3037** \$5.00

Telescopes MEADE 8 X 50MM FINDER



Model #07424 white finder made by Meade. 8 power with 50mm achromatic objective. Unused in original box. Coated optics. Our price is much lower than Meade dealer cost. Only have a few. L2078 \$40.00

8 X 21MM COMPACT ERECT IMAGE FINDER SCOPE



Made by Meade for the ETX Telescope, this is a great compact scope not only as intended for a finder, but for use at sports events, plays, etc. 8 power. Has 21mm diameter cemented doublet achromatic objective, roof prism, and eyepiece with crosshair. Objective end adjusts for focusing. 3-1/4" long by 1-1/4" diameter. Nice wide field of view. Coated optics.

Unused in original box. Get two and make a binocular?

L2079 \$15.00

LEITZ WETZLAR ARTILLERY COLLIMATOR



Superior Leitz optics. The main assembly is secured around the gun's barrel by two chains that fasten to the back of the housing.

There are two Leitz scope assemblies with focusing eyepieces and unusually complex grid reticles. Has a precision rotary stage with fine control, several levels, and other accessories. This boresight collimator was clearly an expensive military device. Like new condition in its original wood case with Leitz and other markings. Weighs 60 pounds including the case.

T1469 \$225.00

LEITZ WETZLAR BORESIGHT TELESCOPE



Model A1A1. Unused beauty made in Germany with superb coated optics. Designed to align the military gun muzzles with the gunner's sight. Includes right angle erect viewing, a great focusing eyepiece and a unique precision reticle. Focuses from 3 feet to infinity. Reticle has crosshair with square grid throughout, and numbers & letters running vertical and horizontal on

each side of center. Objective is only 15mm diameter but the instrument provides sharp correct wide field images. 9-1/2" long and right angle assembly is 5" long. If you've always wanted to have a Leitz military optical item, here's your chance and at a fraction of original cost.

T1483 \$75.00

MILITARY SIGHTING TELESCOPE

Made in Italy, this was designed to be attached to one of their military firing devices. Sighting Telescope No. 76. Gives 1.8X. Has a prism erecting system, coated optics and viewing is at a comfortable 60 degree angle. Eyepiece has reticle and rubber eye guard. Comes complete with battery operated light source that connects to the scope to illuminate the reticle. Takes 2 standard "D" cells. Includes original metal case.

T1491 \$65.00

UNIQUE OPTICAL ASSEMBLY



Looks like a telescope, but not a clue how they were used. We were told that they came out of some spectrophotometers. The unit is 11-1/2" long by 3-1/2" diameter. Clear objective lens diameter is 2". Coated optics. Image thru the eyepiece end is inverted and very small. There is a lever that slides the internal optics thru the tube that gives the system a different

focal length, and at the same time adjusts the variable iris. May be that in its intended application, the f/stop needed to be the same. Heavy duty metal construction (the wall is 1/4" thick). Clearly an expensive item, and a real bargain at our price especially if you can get creative with it.

T1510 \$45.00

Tools PRECISION 2-1/2" DIAL INDICATOR, .0005" GRAD., LUG BACK



Ames model 303, jeweled dial indicator. Clear dial diameter is 2-1/2". Dial reading is 0-25-0. Graduation is 0.0005". Has adjustable "within tolerance" indicators. Lug-On-Center back. See second photo for back. With a little creativity, you could build a precision spherometer.

M2173 \$25.00

PRECISION 2-1/2" DIAL INDICATOR, .0005" GRAD., ADJ BACK



Ames model 303, jeweled dial indicator. Clear dial diameter is 2-1/2". Dial reading is 0-25-0. Graduation is 0.0005". Has adjustable "within tolerance" indicators. Adjustable back. See second photo for back. With a little creativity, you could build a precision spherometer.

M2174 \$25.00

PRECISION 2-1/2" DIAL INDICATOR, .0005" GRAD., POST BACK



Ames model 303, jeweled dial indicator. Clear dial diameter is 2-1/2". Dial reading is 0-25-0. Graduation is 0.0005". Has adjustable "within tolerance" indicators. Post back. See second photo for back. With a little creativity, you could build a precision spherometer.

M2175 \$25.00

Tubes 6198A VIDICON TUBE



Unused in original packing. Made by General Electrodynamics Corp. Made for industrial television applications. Features small size and simplicity. Utilizes magnetic focus and deflection.

R1428 \$22.00

AMPERITE DELAY RELAY 26NO30T



Unused in original box. This may be an antique as the manufacturer address has only a 2 digit zip code. Has base wiring info on the box. Fits standard 9 pin miniature tube socket.

R1441 \$5.00

GE 710/6011 VACUUM TUBE



4 pin mercury-vapor vacuum tube with large anode cap. 6-1/4" long by 1-5/8" diameter. Used and untested but they appear to be in good condition. We've seen the tested ones selling for \$75 and more. Specs included. R4026 \$8.00

GE 2050A VACUUM TUBE



In box. Looks unused. **R4163 \$4.50**

VIP MEMBERSHIP

SURPLUS SHED VIP MEMBERSHIPS

Join an elite group of customers who will receive the following benefits:1) Ten percent discount on all purchases2) Advance notice of "New This Week" items with reservation privilege3) Expedited order processing4) Free shipping twice monthly (contiguous USA only) (more frequent orders will be subject to our flat \$5 charge) 5) First look at new products being developed such as our Wollensak Super Wide Angle eyepieces6) Periodic exclusive specials7) We'll listen to your product ideas and if you have a prototype for an optical product, we may be able to help get it into production. All this for a mere \$49 per year. Benefits will start the day of your purchase and will end one year later. No automatic renewals. We'll ask if you want to renew.

VIP1001 \$49.00

JUST ARRIVED! BOYER-PARIS 20MM FL LENS ASSY



Made in Paris, France to fit many of the 16mm projectors. These are in unused condition. 20mm focal length, f/1.5. Multi-element assembly. Coated optics. Will make a great 20mm eyepiece if you want to get a bit creative with the barrel. Nice, sharp, color corrected images from edge to edge when used with one of our objectives. Barrel is 55mm long and 25mm diam-

eter at the top, 30mm diameter at the bottom.

L3185 \$7.50

JUST ARRIVED! 192 PAGE POPULAR OPTICS "HOW TO" BOOK



If you are interested in experimenting with optics, building optical instruments, or just learning, this is the book for you. Here is the main breakdown of the book: The Optical Bench, Graphical Ray Tracing, Basic Optical Math, All about Magnifiers, How to Condense and Project Light, Optical Drawing Devices, Telescopes you can Build, Homemade Telephoto Systems, and Fun with

Optics. Included is info on finding focal length, all kinds of info on different types of lenses and their uses, image formation, testing, determining the power of a magnifier, field of an eyepiece, make a telescope into a microscope, all kinds of info on projectors, Camera Lucida, reflector and refractor telescopes and inexpensive pipe mounts and tripods, making cradles, info on telephoto lenses and how they work and designs, how to make a simple spectroscope, etc., etc. 192 pages of interesting and fun stuff to do with optics. These are new and the latest edition.

M2291 \$14.95

JUST ARRIVED! MINI STROBE TUBE & REFLECTOR



Bright Xenon strobe tube and reflector is 0.96 inches by 0.89 inches by 0.74 inches deep. Unused with 2 copper tabs for anode & cathode and 1 aluminum tab for trigger lead.

R3118 \$1.00 or 10 for \$8.00

JUST ARRIVED! STEINHEIL CAMERA LENS/IRIS/SHUTTER ASSY



45mm, f/2.8 Steinheil Anastigmat camera lens assembly. Coated optics. Made in Germany. Has iris adjustment and shutter speed adjustment. Looks like the slowest speed is about 1 second, but we don't have the equipment to determine the fastest speed. We don't know what camera this was made for or what film format, but at this price it will be great to experiment

with. Assembly is 40mm diameter by 22mm deep. Clear front and rear lens diameter is 15mm. Steinheil made quality optics.

L3359 \$12.00

JUST ARRIVED! JOHN E. HAND 4" MILITARY COMPASS CARD



If you have one of the John E. Hand military compasses that needs a replacement compass card, you are in luck! Made of aluminum, the card is 4 inches diameter. This is an original John E. Hand & Sons of Philadelphia part. If you don't have a compass to put these in, this should make a nice collectable. Put it in a frame with our M2179, M2180, M2181, M2195, and/or M2207 and

hang it on the wall in your family room or office.

M2408 \$7.50

JUST ARRIVED! UNUSED SLIDE PROJECTION ASSEMBLY



We believe these were made for some of the Kodak 35mm slide projectors. We know it fits the Kodak Ektagraphic III ATS projector. Assembly includes a Halogen 300 Watt, 82 Volt GE #EXR projection lamp (used in Kodak Carousel slide projectors), a dichroic mirror, 50mm \times 45mm \times 2mm thick, and a DCX condenser lens, 50mm wide \times 55mm long. The mirror pass-

es the heat straight thru and reflects the light thru the condenser lens. Front has a small door labeled "Reading Light" that opens to expose an opaque Fresnel lens that lets out some light from inside. We see the projection beginned by the condense selling for more than our price for the entire assembly. Unused.

M2407 \$15.00

JUST ARRIVED! ROUND CERAMIC MAGNETS, 18MM DIA BY 5MM THICK



Strong magnets, perfect size for experimenting. Unused package of 10 M2415 \$2.50 or 10 for \$20.00

JUST ARRIVED! ROUND CERAMIC MAGNETS, 13MM DIA BY 5MM THICK, 2MM CENTER HOLE



Strong magnets, perfect size for experimenting. Has a 2mm diameter center hole. Unused package of 10 M2416 \$1.50 or 10 for \$12.00

JUST ARRIVED! OPTYL-7 LENS/OPTICAL/CD-DVD CLEANER



This is the best we have found for cleaning your lenses. Cleans all optical surfaces, leaves no haze, dissipates static completely, and leaves no sticky residue. It does not contain alcohol, ammonia, or harsh detergents. Rexton's Optyl-7 cleans all optical surfaces: lenses, mirrors, prisms, windows, slides, dvd's, cd's and leaves no haze. It cleans plastic or glass camera lenses, coated

or uncoated. The manufacturer advised us that NASA uses it on the shuttle!! Comes in 8 oz bottles with spray top.

M2422 \$3.75

JUST ARRIVED! FUJINON COPY LENS, 290MM FL



Here's a great objective lens for a "copy" scope or finder scope. Or use as a projection or collimator lens. Multi-element symmetrical design. Coated optics. Front and back elements are 55mm diameter with center stop for razor sharp color corrected images with an eyepiece. Assembly is 65mm diameter by 70mm long. Focal length is 290mm. Fujinon Model #110174.

Fujinon makes superior optics. Unused, mint condition.

L3334 \$7.50

LENSES, LENSES, LENSES

We have thousands of positive and negative meniscus, double convex, plano convex, bi-convex, double concave, plano concave, and triplet lenses. And we have them in all sizes and focal lengths.

Check out our "Lens Finder" category at our web site, www.SurplusShed.com. It's easy to use. You can search by lens type, diameter range and focal length range. All in stock for immediate delivery.

Most achromats are \$7 each or 10 for \$56; most single element lenses are \$4 each or 10 for \$30. Mounted, camera, unusual, and large lenses can be found in the appropriate category at our "Item Quick Find" drop down box, or you can use our "Search the Shed" feature

CUSTOM NEW LENSES

If you have a need for new lenses or mirrors in quantities of 100 or more, we should be able to save you a lot of \$\$\$. Go to our "Lens Finder" category on our web site and click on the "RFQ form" button. You'll have an opportunity to give us your specs and we'll promptly get back to you with our best pricing. We can deliver quality new optics according to your specifications and time table at very low prices.

DEALER FRANCHISES AVAILABLE

"Do you have a regular brick & mortar electronics or science related store? See some stuff in our catalog or website that might fit or complement your product line? We can set you up as a Surplus Shed Dealer. Send a brief description of your operation and the product categories you are interested in to: Dealer Department, Surplus Shed, 8408 Allentown Pike, Blandon. PA 19510. We'll send you our Dealer Package for your review.

ALL USED OR SURPLUS AND IN GOOD CONDITION UNLESS OTHERWISE STATED. ITEMS WITH A "D" AT THE END OF THE STOCK NUMBER ARE CURRENT PRODUCTION AND ARE AVAILABLE IN ANY QUANTITY. CONTACT US FOR QUANTITY AND DEALER PRICING. PLEASE ADD \$5 FOR SHIPPING CHARGES (ANY SIZE ORDER SHIPPED TO A U.S. DESTINATION).

ORDER FORM

<u>It</u>	<u>em #</u>	Description	<u>Qty.</u>	<u>Price</u>	<u>Subtotal</u>
			Order total:		
		PA Residents ad			
		Shipping: \$5 to	US addresses:		
			Total:		
Nar					
Add	lress:				
			·		
Phone:					
		METHOD (OF PAYMEN	Γ	
0	Check of	or Money Order			
0	Discov	er			
0	Visa				
0	MasterCard				
0	American Express				
Cre	dit Card #	:			
Expiration Date:					
Sigi	nature:				

SATISFACTION GUARANTEED. RETURN ANY ITEM WITHIN 10 DAYS OF RECEIPT FOR FULL REFUND LESS OUR ACTUAL SHIPPING COST.



8408 Allentown Pike Blandon, PA 19510 VISA, MASTERCARD, AMERICAN EXPRESS, & DISCOVER WELCOME

E-MAIL: SURPLUSHED@aol.com

Our website is updated weekly - www.SurplusShed.com Phone toll free: 877-778-7758 or regular: 610-926-9226 Our warehouse is open for visitors every sat. 8AM to 4:30 PM at 1050 Maidencreek Rd., Fleetwood, PA 19522

PRSRT STD
US POSTAGE
PAID
READING PA
PERMIT NO 146