

# *VIDEOMATE 2030/2030P*

## *Video Slide Projector Instruction Manual*



**NAVITAR**  
The World Leader in Image Quality

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## *Product Overview*

Universities, boardrooms, and conventions have the common goal of effective information communication. Today's individual is continually being bombarded by sophisticated media presentation. To compete effectively for his attention (and retention) one must utilize similar techniques. The basis for most current efforts is electronic data manipulation.

A picture is still "worth a thousand words", therefore, in many presentations there is a need to insert pictures electronically for display, image enhancement, publishing, etc. Some of the "best" pictures around are stored on the millions of existing 35mm slides.

The sole function of the VideoMate 2030 (NTSC) & 2030 (PAL) is to provide an electronic representation of the contents of a normal 35mm slide. The output signals available are Composite Video and S-Video.

## *Product Description*

The VideoMate 2030 utilizes a standard Kodak slide transport mechanism to present the 35mm slide image to a "state-of-the-art" color CCD array. Included in the package is a color balanced illumination system and high resolution Navitar zoom imaging lens. The zoom lens permits both the viewing of "vertical" slides and some "blowing up" of the center portion of the image.

Output is standard Composite Video through the BNC connector and S-Video output is available through a 4-pin MiniDin plug.

## *Safety Precautions*

For safety, before connecting the projector to the main, ensure that the voltage selector is set to your main voltage and the required fuse is fitted. An incorrectly adjusted main voltage can damage the projector.

To prevent damage to equipment and operating personnel, please observe the following precautions:

Insure that the voltage source contains a satisfactory path to ground.

Do not operate where fluids could come into contact with electrical components.

Maintain a six inch (15cm) air space around all sides of equipment to allow proper ventilation.

Do not operate projector with a damaged cord or if the projector has been dropped or damaged until it has been examined by a qualified service technician.

Other than lamp changing, there are no user serviceable components. Opening of the unit will expose dangerous voltage levels and damage sensitive electronic components.

All repairs should be performed by a qualified service technician.

To protect unit from damaging condensation and thermal shocks, these procedures should be followed:

1. In cold weather, always put the unit in moisture proof container or enclosure before transporting.
2. Keep the unit warm while transporting or allow the unit's chassis to return to room temperature before being turned on.

The goal is to prevent warm moist air from striking cold electric and optical components and causing damaging condensation.

**Warning!** Never operate a cold projector.

### *Voltage Selection*

Check voltage setting.

The Navitar VideoMate will be exported throughout the world to countries with differing mains voltages. The projectors are already set during manufacture to a fixed main voltage.

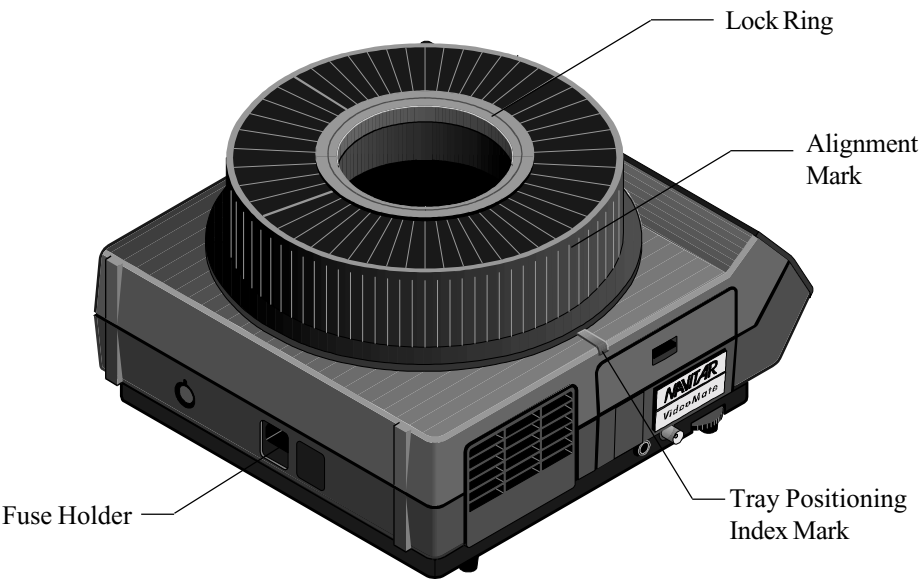
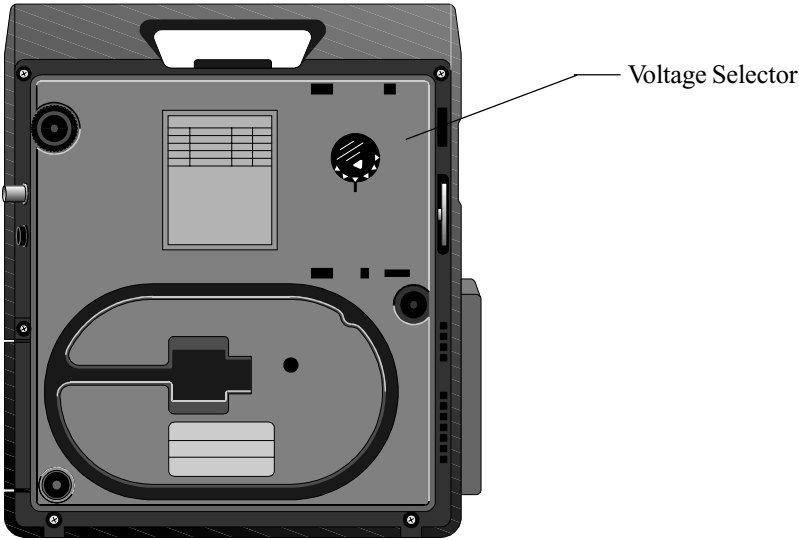
100-200V mains:

Shipments to countries with 100 or 200V mains will be equipped with a 5A fuse. A spare fuse for replacement is also supplied.

220, 230, or 240V mains:

Shipments to countries with 220, 230 or 240V mains will be equipped with 2.5A fuse. A spare fuse for replacement is also supplied.

Before you switch on your projector ensure that voltage is correctly adjusted! An incorrectly adjusted mains voltage can damage the projector. The voltage selector must show your country's actual mains voltage. To set the voltage selector simply turn the selector until the arrow of your main voltage lines up with the arrow on the projector housing. To fit or check the fuse, pull out the fuse holder located beneath the main socket.



## *Installation*

Before installing please review precautions.

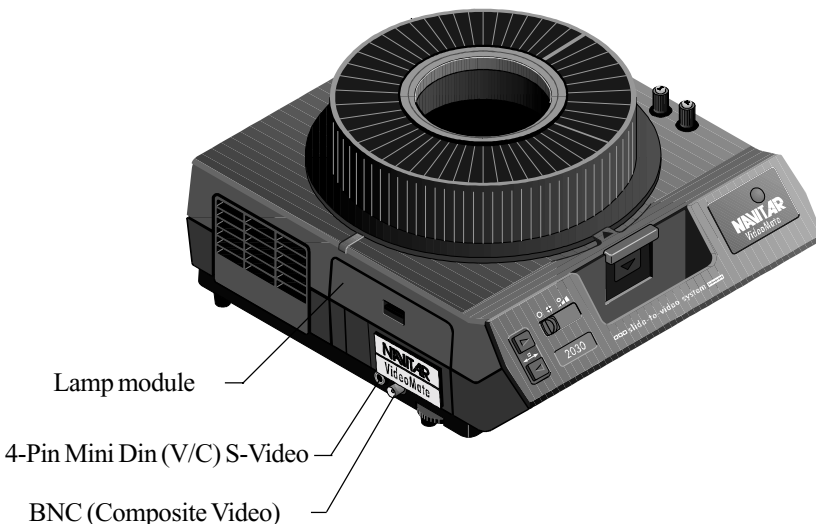
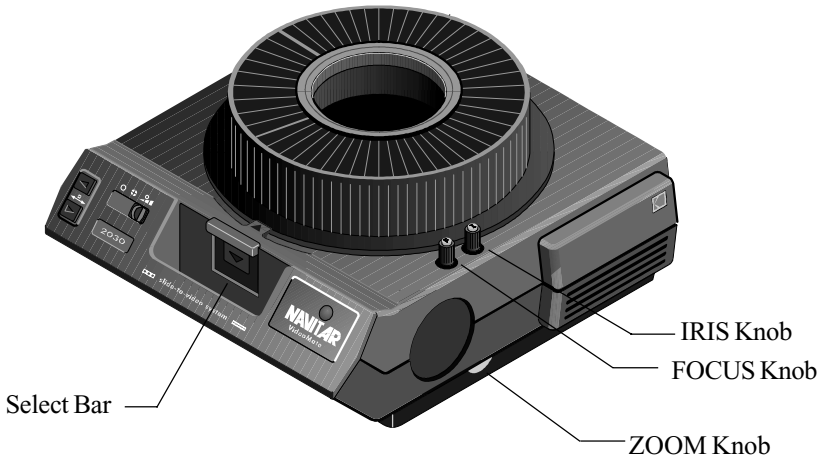
For those users familiar with both the operation of 35mm slide projector and their own video displays, the following is an abbreviated start-up procedure.

1. Check the voltage setting before powering on. Make sure that the setting is correct. In addition, the fuse needs to be checked.
2. Plug in power cable.
3. Connect peripheral equipment to the BNC and/or S-Video Connector located under the lamp module.
4. Make sure there is no slide left in the slide gate. Place slide tray on the projector with the "0" slide slot at the gate index.
5. Turn on peripherals and set the VideoMate power switch to high. If white light from the projector spills onto the monitor screen when the projector is first turned on, the automatic dark-screen shutter built into the projector is not engaged. To engage the shutter, simply press the select bar. The shutter will engage and the projector light will be blocked.
6. Select a relatively "white" slide to represent the highest signal level the electronic must accommodate. Adjust the Iris Control "I" and the peripheral controls to produce a suitable image. The Focus control "F" should also be adjusted at this time. Turn Zoom wheel to achieve desired magnification.

NOTE: A very dark slide may require readjustment of the Iris Control, but normally, a setting can be reached that produces an acceptable display throughout the range of slides.

The more the iris is open, the less the depth of field. What this means is that with the darker slides, you will open the iris more and will be able to judge focus more critically; but also means that any deformities in the slide will cause a visible "out-of-focus" condition.

9. To shut down the system, hold down the select bar and rotate the slide tray to the "0" index position. Set the power switch to "off".
10. For instructions regarding setting up slide tray changing lamps, etc., refer to the appropriate section of the manual.





## *Slide Tray Set-Up*

This system was designed to permit usage of prepared presentations without reorientation of the slides in the tray.

Your new Navitar VideoMate will accept Kodak Ektapro 80, Kodak Ektagraphic 80 for holding 80 slides with a maximum slide mount thickness of 3.2mm and Kodak Carousel Transvue 140 Slide Tray for holding 140 slides with a maximum mount thickness of 1.6mm. We recommend the 80 slide tray more maximum reliability.

For those setting up a new tray and/or presentation:

1. Arrange your slides in the order you wish them to appear in the presentation. Orient them such that they are upright and reading correctly from left to right.
2. Rotate each slide to turn the image upside down (do not turn the slide over). Mark a sequential number in the upper right corner of each slide (this will be extremely useful should the slides become mixed). Use a felt tipped marker rather than a label that will be loosened by the heat.
3. Make sure the bottom metal plate on the slide tray is indexed into the "0" position (the plate will not rotate with respect to the top tray). Remove the top lock ring by rotating it counterclockwise.
4. Insert slide number 1 into slot "1". The number written on the upper right corner of each slide should be at the top and facing the next higher numbered slot. Load all slides and replace and lock the top lock ring.

## *Slide Tray Installation*

1. Center the tray over the post of the projector.
2. Gently rotate the tray until the "0" slide slot is at the index mark and the tray will drop into position. If the tray doesn't drop into position, check if the lower metal plate is located in the zero position (rotate until it locks).

### *Slide Tray Removal*

To remove the tray from the projector without losing slides:

1. Hold the selector bar down and rotate the tray back to the zero index position.
2. Lift the tray at a point opposite the index mark.

### *Slide Tray Jam*

The tray may jam if a damaged slide is caught in the gate.  
To release the tray:

1. Move the power switch to "off".
2. Push the select bar down and the slide should come up.

If the tray is still jammed:

1. Hold the release tab on the projector post out while lifting the tray on the side opposite the index mark. When the tray is removed, the select bar will release the slide.
2. Invert the slide and rotate the bottom metal plate until it locks into the zero position.
3. Turn the tray back upright and remove the lock ring. If the slide is undamaged, return it to its proper slot. Replace the lock ring and continue.

## Lamps

The VideoMate will function with either of the following 82 volt or 85 watt lamps. One provides a higher color temperature, with the other exhibits a much longer life.

Do not use 82 volt, 25-300 watt slide projection lamps or your equipment will suffer severe damage.

Lamp	Volt	Watt	Life (Hours)	Color Temp.
ESH	82	85	250	2950K
ESJ*	82	85	40	3350K
* Standard lamp supplied.				

## Replacement of the Lamp

The entire illumination system is contained in a unit called a lamp module. This module is a drawer type configuration which may be removed from the projector for lamp changing. If anticipated usage of the VideoMate is such that the downtime associated with changing a lamp would be detrimental to the goal, a second (spare) VideoMate lamp may be purchased which will reduce the lapse to a fraction of a minute. It will also eliminate the accumulation of partially burned lamps with unknown remaining life. Please call for price and availability.

To replace the lamp:

1. Turn power off and allow the unit to cool down before handling.
2. Press down on the door latch of the lamp module and pull slowly outward until the module clears the projector.
3. Unclasp the wire bail which holds the lamp in place and push from underneath the lamp to slide the lamp out of the receptacle.

4. Reverse the procedure to insert a new lamp (make sure the new lamp is properly seated).
5. Lock the new lamp in place with wire bail.

### *Fuses*

Always switch off the projector and unplug the main lead before replacing a fuse. Avoid the risk of fire, replace only with a fuse of same type and rating.

Simply pull out the fuse holder, remove the blown fuse and fit the required replacement.

1. 1 x T2.5 A H/250 V for 220, 230 and 240V
2. 1 x 5A Slowblow/250 V for 100, 115 and 130V

## Troubleshooting

### *Symptom #1:*

*After switching on, projector is not operable.*

#### Possible Cause:

1. All equipment not “powered up”. Check outlets and individual unit (monitor, video projector, etc.).
2. Check input voltage selector.
3. Lamp blown. Look in film gate for “light on condition”. Also depress select bar to check for stuck gate shutter.
4. Fuse is blown. Check fuse and replace if necessary.
5. Wait 1 minute with the power switch off and try to restart.
6. Bad cables.

### *Symptom #2*

*Unable to recover picture after brief interruption of power.*

#### Possible Cause:

1. The lamp has blown with the thermal shock of turning on.
2. The gate shutter is stuck in the closed position. Push down on the select bar.

### *Symptom #3*

*The tray can not be moved.*

#### Possible cause:

Tray has not been placed correctly on the transport ring. Lift off the tray, switch projector on and then off again and then replace tray.

### *Symptom #4*

*Image too dark or too light.*

Possible cause:

1. Illumination level inadequate. Set knob "I" as required.
2. Monitor not adjusted properly.

### *Symptom #5*

*Image not sharp.*

Possible cause:

1. Adjust focus knob.
2. Illumination level is too high or too low. Adjust illumination knob.
3. Monitor not adjusted.
4. Substandard cabling. Make sure cables are "ground shield video" grade.

### *Symptom #6*

*Image does not stabilize.*

Possible cause:

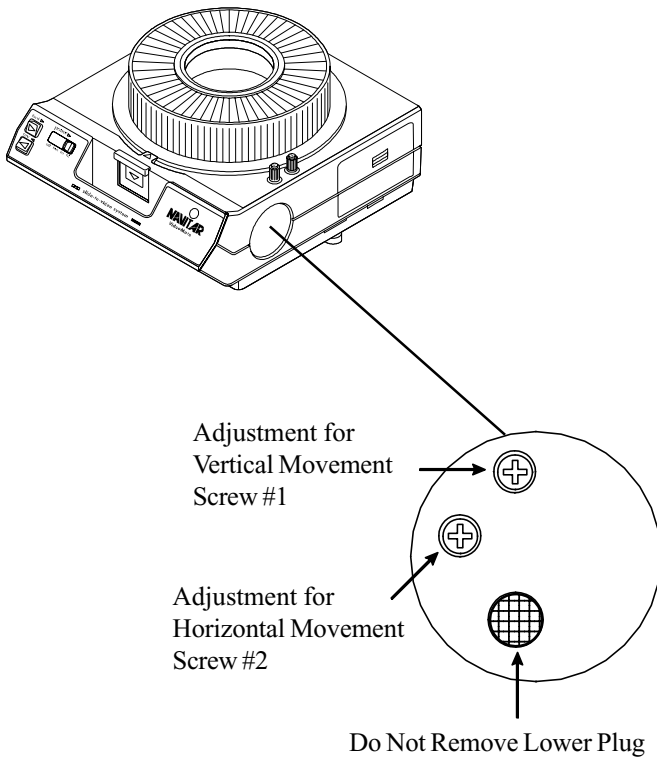
Improper "sync" signal. Check peripheral equipment requirements.

Camera Specifications	
Pick-up Device	1/2" Interline Transfer CCD
Pixel Count	752 (H) x 582 (V)
Color Filter	Complimentary Color Mosaic
Signal System	PAL Standard (NTSC Available)
Horizontal Resolution	450 TV lines
Sensitivity	F1.4 (5 Lux), 3200K° color temperature
Genlock	No genlock
S/N Ratio	50dB standard
Projector Specifications	
Model Number	1-12385
Power Consumption	191 watts, 1.7 amps
Power	100-240 volt, 50Hz
Projection Lamp	82 volt, 85 watt GE ESJ
Slide Projector	Modified Kodak Ektalite 1000
Lens	17-35mm zoom, f/2.8
Iris/Focus Control	Manual
Slide Tray Capacity	Kodak 80/140 slide tray
Controls/Manual	On/off, forward/reverse, zoom in/out, focus & iris
Remote Operation	Remote controllable by contact closure using SAV type 6-pin Din remote connector to control forward/reverse
Camera Connectors	BNC - Composite Video
Dimensions	Length 11.11 in./282mm      Height 4.69 in/119mm Width 12.93 in./328mm      Weight 15 lbs./6.82kg.
Video Cables (optional)	Model 8-11113, 12 foot S-Video cable. Model 8-11787, 12 foot video cable.

*Appendix*

Due to transportation, the image position might shift from the factory setting. To correct this shift:

1. Remove the two plugs as shown in the figure below:
2. Using the Phillips screw driver, rotate screw #1 to adjust the vertical position and screw #2 to adjust the horizontal position.
3. Replace the hole plugs.





## 1 Year Parts /1 Year Labor

This product is warranted to be free from defects in material and workmanship for a period of five years from the date of invoice to the original purchaser.

If during the warranty period the product is found to be defective, it will be repaired or replaced at the facilities of Navitar. However, Navitar reserves the right to refund the purchase price if the replacement or repair is not commercially practical or timely. Parts not manufactured by Navitar carry only the warranty of their manufacturer. Lamps and fuses carry no warranty.

This warranty does not cover damage caused in transit; damage caused by misuse, neglect or carelessness; or damage resulting from either improper servicing or modification by someone other than Navitar. Further, this warranty does not cover any routine maintenance work that is reasonably expected to be performed by the purchaser.

No responsibility is assumed for unsatisfactory operating performance due to environmental conditions such as humidity, dust, corrosive chemicals, deposition of oil or other foreign matter, spillage or other conditions beyond the control of Navitar.

For service, repair or return procedures under this warranty, contact your distributor, your local Navitar field officer or Navitar direct at (716) 359-4000 or (800) 828-6778 in the United States.

Except as stated herein, Navitar makes no other warranties, expressed or implied by law, whether of merchantability, fitness for a particular purpose or otherwise. Further, Navitar shall not, under any circumstances, be liable for incidental, consequential or other damages.

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