

Operating Instructions

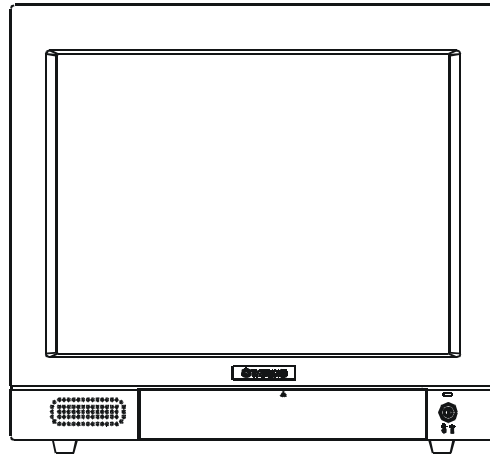
For Color Video Monitor

TCM-0902 / TCM-1001

TCM-1002S / TCM-1402S

TCM-1501 / TCM-1701

TCM-1901 / TCM-2102S



TATUNG Company Of America

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FCC INFORMATION

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If his equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

SAFETY PRECAUTIONS

1. Operate this unit only from the type of power source indicated on the label.
2. Do not block or cover ventilation openings on the back or bottom of the monitor cabinet.
3. Do not place this monitor near a radiator or heating vent.
4. Do not push objects of any kind through cabinet openings. This may result in fire or electrical shock.
5. Before adding attachments always ask a service technician to perform routine safety tests to determine that equipment is in safe operating condition. Ground potential tests should be part of the routine safety check made by the service technician.
6. Do not place monitor on an unstable cart, stand, or shelf where it may fall and injure personnel or damage equipment.

-
7. Route power cords so that they cannot be walked upon or tripped over. Do not allow anything to rest on the power cord.
 8. Do not install monitor in wet areas, or where it may be exposed to rain or water. Do not spill liquid of any kind on the unit.
 9. Unplug the power cord from the unit before cleaning the display. Use only a damp cloth. Do not use alcohol, spirits, or ammonia to clean the display. **DO NOT ATTEMPT TO CLEAN THE INTERIOR OF THIS UNIT- THIS ACTION MUST BE PERFORMED BY THE SERVICE TECHNICIAN AS REQUIRED DURING NORMAL MAINTENANCE.**
 10. Refer all servicing to qualified service personnel. **REMOVAL OF BACK COVER BY UNAUTHORIZED PERSONNEL MAY EXPOSE THE USER TO DANGEROUS VOLTAGES OR OTHER HAZARDS.**
 12. Unplug the unit immediately and notify the service technician.
 - A. If liquid has been spilled into the display or the display has been exposed to rain or water.
 - B. If the unit has been dropped or the cabinet damaged.
 - C. If fuses continue to blow.
 - D. If the power cord is damaged or frayed.
 - E. If a distinct change from normal operation is apparent.

When replacement parts are required, be sure that the service technician uses components specified by the manufacturer which have the same characteristics as the original parts. **UNAUTHORIZED SUBSTITUTIONS MAY RESULT IN FIRE, ELECTRICAL SHOCK OR OTHER HAZARDS.**

Upon completion of any service or repairs, ask the technician to perform safety checks to determine that the equipment is in safe operating condition.

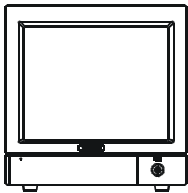
WARNING: Serious shock hazards exist within the covers of this monitor. Do not open the covers under any circumstances, there are no user serviceable components inside.

GENERAL FEATURES

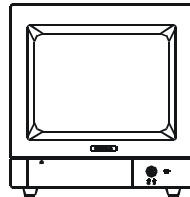
1. Compatible With : NTSC / PAL System
2. Scanning System : NTSC, 525 Lines, 60 Hz or PAL, 625 Lines, 50 Hz
3. Video Input Signal : CVBS1 / CVBS2 / S-Y/C
4. Audio Input Signal : AU1 / AU2
5. Input Power : 100~240V AC
6. Limited twelve months warranty

STANDARD SYSTEM COMPONENTS AND ATTACHMENTS

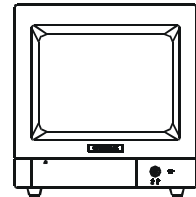
The various components and attachments are shown below:



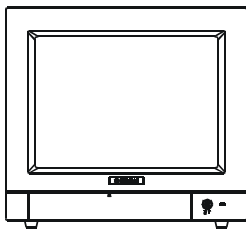
TCM-0902



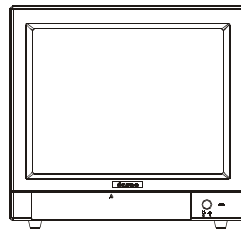
TCM-1001



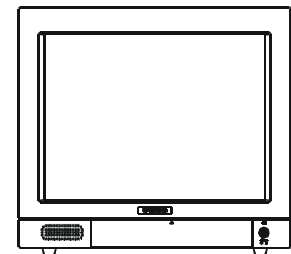
TCM-1002S



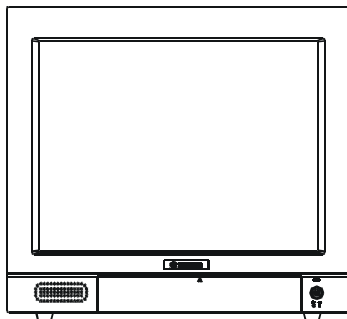
TCM-1402S



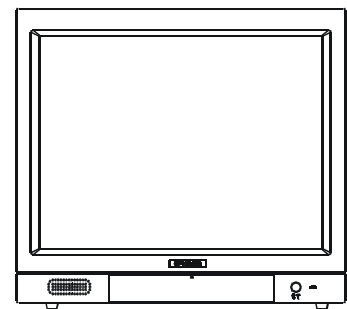
TCM-1501



TCM-1701



TCM-1901

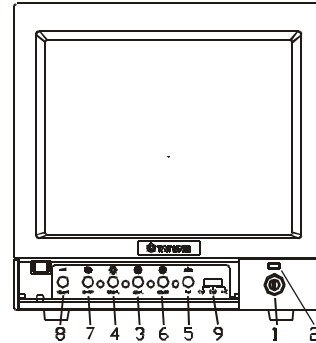


TCM-2102S

TCM-0902 MONITOR FRONT AND REAR VIEW

Front View

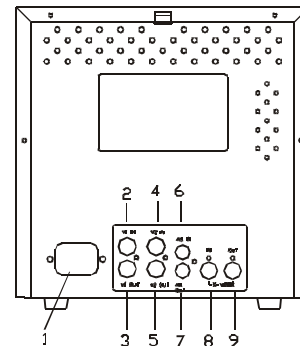
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / CVBS2 / S-Y/C Select Switch



TCM-0902

Rear View

1. Power Inlet
2. Video 1 Input : BNC Connector
3. Video 1 Output : BNC Connector
4. Video 2 Input : BNC Connector
5. Video 2 Output : BNC Connector
6. Audio 1 Input : RCA Jack
7. Audio 1 Output : RCA Jack
8. S-Y/C Input Connector
9. S-Y/C Output Connector

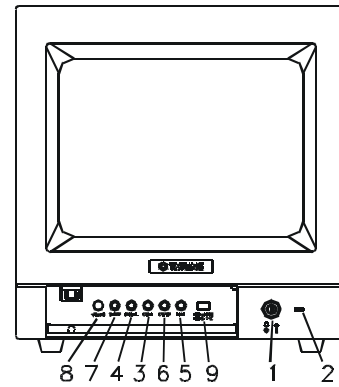


TCM-0902

TCM-1001 MONITOR FRONT AND REAR VIEW

Front View

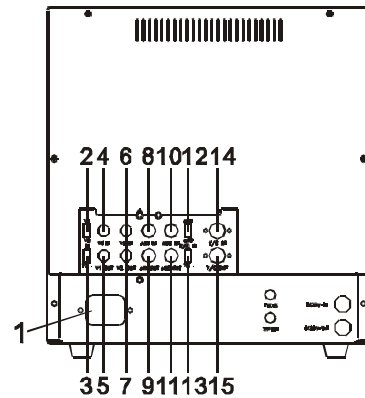
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS / S-Y/C Select Switch



TCM-1001

Rear View

1. Power Inlet
2. Video 1 / Video 2 Select Switch
3. Video Load Impedance Switch
4. Video 1 Input : BNC Connector
5. Video 1 Output : BNC Connector
6. Video 2 Input : BNC Connector
7. Video 2 Output : BNC Connector
8. Audio 1 Input : RCA Jack
9. Audio 1 Output : RCA Jack
10. Audio 2 Input : RCA Jack
11. Audio 2 Output : RCA Jack
12. Audio 1 / Audio 2 Select Switch
13. S-Y/C Load Impedance Switch
14. S-Y/C Input Connector
15. S-Y/C Output Connector

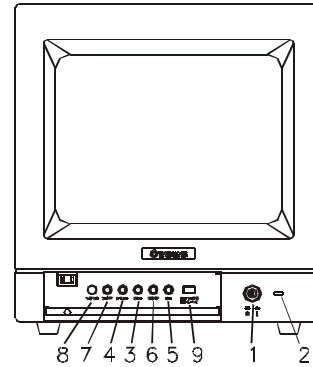


TCM-1001

TCM-1002S MONITOR FRONT AND REAR VIEW

Front View

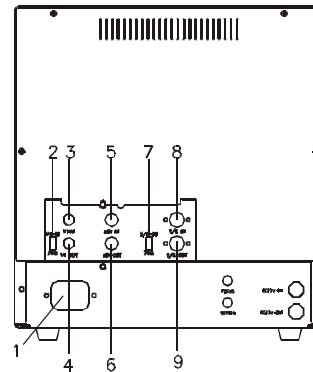
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / S-Y/C Select Switch



TCM-1002S

Rear View

1. Power Inlet
2. Video Load Impedance Switch
3. Video 1 Input : BNC Connector
4. Video 1 Output : BNC Connector
5. Audio 1 Input : RCA Jack
6. Audio 1 Output : RCA Jack
7. S-Y/C Load Impedance Switch
8. S-Y/C Input Connector
9. S-Y/C Output Connector

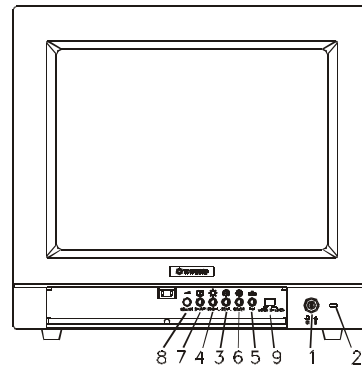


TCM-1002S

TCM-1402S MONITOR FRONT AND REAR VIEW

Front View

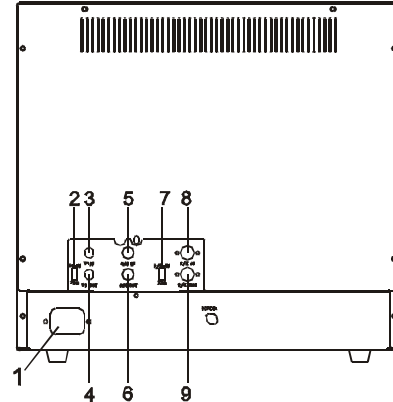
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / S-Y/C Select Switch



TCM-1402S

Rear View

1. Power Inlet
2. Video Load Impedance Switch
3. Video 1 Input : BNC Connector
4. Video 1 Output : BNC Connector
5. Audio 1 Input : RCA Jack
6. Audio 1 Output : RCA Jack
7. S-Y/C Load Impedance Switch
8. S-Y/C Input Connector
9. S-Y/C Output Connector

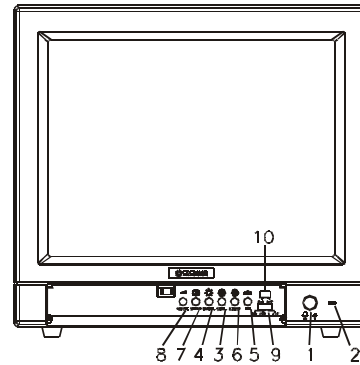


TCM-1402S

TCM-1501 MONITOR FRONT AND REAR VIEW

Front View

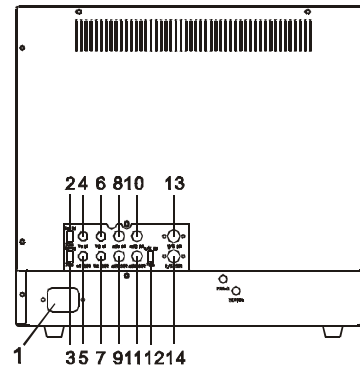
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / CVBS2 / S-Y/C Select Switch
10. Audio 1 / Audio 2 Select Switch



TCM-1501

Rear View

1. Power Inlet
2. Video 1 Load Impedance Switch
3. Video 2 Load Impedance Switch
4. Video 1 Input : BNC Connector
5. Video 1 Output : BNC Connector
6. Video 2 Input : BNC Connector
7. Video 2 Output : BNC Connector
8. Audio 1 Input : RCA Jack
9. Audio 1 Output : RCA Jack
10. Audio 2 Input : RCA Jack
11. Audio 2 Output : RCA Jack
12. S-Y/C Load Impedance Switch
13. S-Y/C Input Connector
14. S-Y/C Output Connector

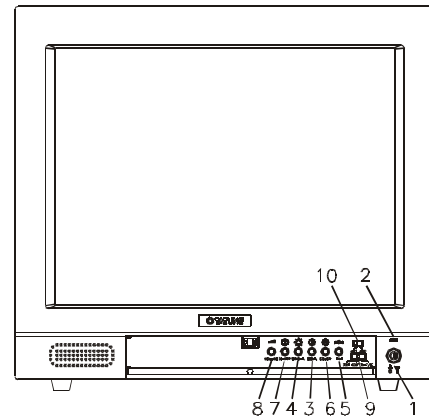


TCM-1501

TCM-1701 MONITOR FRONT AND REAR VIEW

Front View

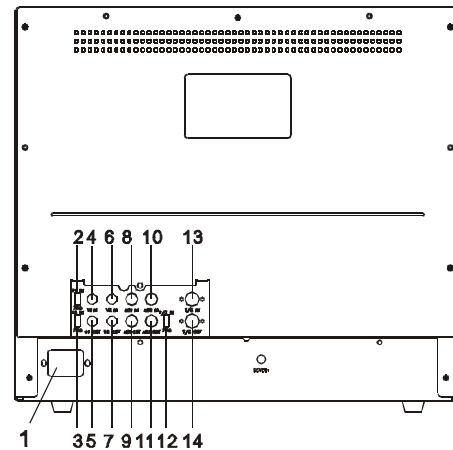
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / CVBS2 / S-Y/C Select Switch
10. Audio 1 / Audio 2 Select Switch



TCM-1701

Rear View

1. Power Inlet
2. Video 1 Load Impedance Switch
3. Video 2 Load Impedance Switch
4. Video 1 Input : BNC Connector
5. Video 1 Output : BNC Connector
6. Video 2 Input : BNC Connector
7. Video 2 Output : BNC Connector
8. Audio 1 Input : RCA Jack
9. Audio 1 Output : RCA Jack
10. Audio 2 Input : RCA Jack
11. Audio 2 Output : RCA Jack
12. S-Y/C Load Impedance Switch
13. S-Y/C Input Connector
14. S-Y/C Output Connector

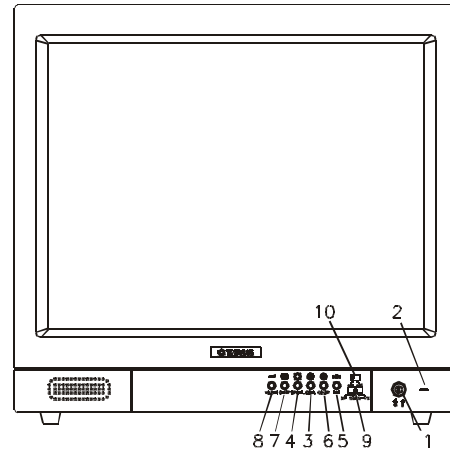


TCM-1701

TCM-1901 MONITOR FRONT AND REAR VIEW

Front View

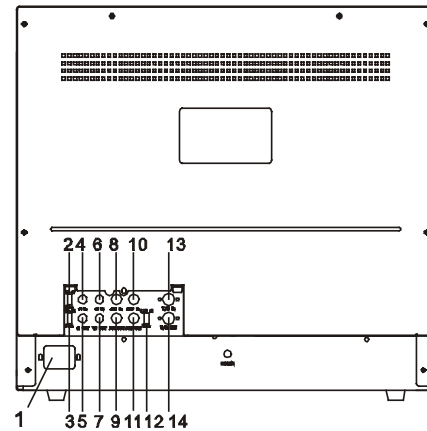
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / CVBS2 / S-Y/C Select Switch
10. Audio 1 / Audio 2 Select Switch



TCM-1901

Rear View

1. Power Inlet
2. Video 1 Load Impedance Switch
3. Video 2 Load Impedance Switch
4. Video 1 Input : BNC Connector
5. Video 1 Output : BNC Connector
6. Video 2 Input : BNC Connector
7. Video 2 Output : BNC Connector
8. Audio 1 Input : RCA Jack
9. Audio 1 Output : RCA Jack
10. Audio 2 Input : RCA Jack
11. Audio 2 Output : RCA Jack
12. S-Y/C Load Impedance Switch
13. S-Y/C Input Connector
14. S-Y/C Output Connector

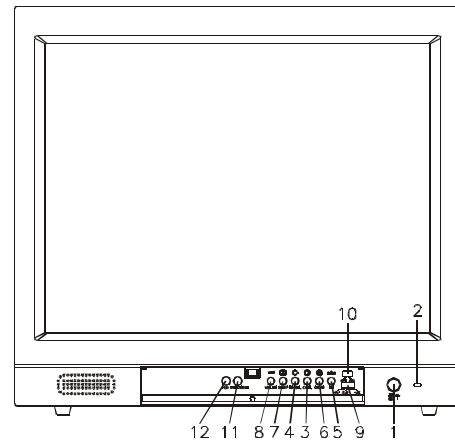


TCM-1901

TCM-2102S MONITOR FRONT AND REAR VIEW

Front View

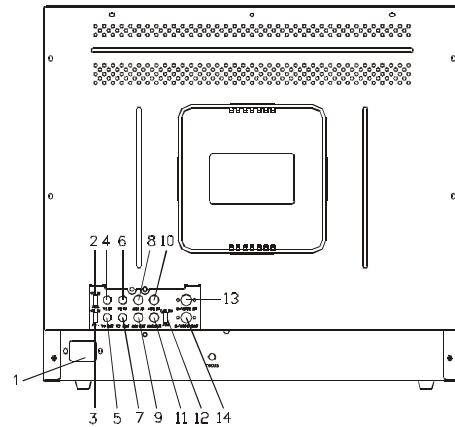
1. Power On/Off Switch
2. Power-On Indicator
3. Contrast Adjustment
4. Brightness Adjustment
5. Tint Adjustment
6. Color Adjustment
7. Sharpness Adjustment
8. Volume Adjustment
9. CVBS1 / CVBS2 / S-Y/C Select Switch
10. Audio1 / Audio2 Select Switch
11. Underscan Select Switch
12. 16:9 Select Switch



TCM-2102S

Rear View

1. Power Inlet
2. Video 1 Load Impedance Switch
3. Video 2 Load Impedance Switch
4. Video 1 Input : BNC Connector
5. Video 1 Output : BNC Connector
6. Video 2 Input : BNC Connector
7. Video 2 Output : BNC Connector
8. Audio 1 Input : RCA Jack
9. Audio 1 Output : RCA Jack
10. Audio 2 Input : RCA Jack
11. Audio 2 Output : RCA Jack
12. S-Y/C Load Impedance Switch
13. S-Y/C Input Connector
14. S-Y/C Output Connector



TCM-2102S

OPERATION

Operating Instructions

1. Place the monitor on a flat and firm surface (see Safety Precautions on page 2).
2. This monitor can be operated between 100VAC to 240VAC.
3. Plug the power cord into AC outlet on the wall.
4. Link the A / V terminal from your devices into the audio / video in RCA/BNC connectors of the monitor.
5. Turn your device system power switch ON. then turn the monitor power switch ON.
The power indicator will be ON at this moment.
6. Allow about 30 seconds for the display tube to warm up, then the image should appear on the screen.
7. The monitor will detect the frequency of the input signal automatically, and the image may be adjusted through the function VR on front control panel.
8. Adjust the user controls to optimize picture quality.

MAINTENANCE

If the quality of the picture is poor and cannot be improved by making adjustments on the front control panel, inspect all system connections and cable runs.

To reduce the risk of electrical shock, do not remove the cover or back of monitor. No user-serviceable parts are inside. Refer servicing to qualified personnel, or contact the Tatung Customer Service Department for assistance. Refer to the Warranty and Return Information section.

SPECIFICATIONS

MODEL	TCM-0902	TCM-1002S	TCM-1402S	TCM-2102S
ELECTRICAL				
Input Voltage	100~240V AC, 60 / 50HZ , full range			
Power Consumption	43W	50W	60W	70W
Horizontal Resolution	300 lines, Y/C more than 350 lines	300 lines, Y/C more than 350 lines	350 lines, Y/C more than 450 lines	400 lines, Y/C more than 450 lines
Sweep Linearity	10%			
GENERAL				
Input / Output				
Video / S-Video	2 BNC inputs, 75ohms, auto termination 2 looping through outputs 1 input DIN 1 loop through output	1 BNC inputs, 75ohms, or Hi-Z 1 looping through outputs 1 input DIN 1 loop through output	1 BNC inputs, 75ohms, or Hi-Z 1 looping through outputs 1 input DIN 1 loop through output	2 BNC inputs, 75ohms, or Hi-Z 2 looping through outputs 1 input DIN 1 loop through output
Audio	1 RCA input, Hi-Z 1 loop through output	1 RCA input, Hi-Z 1 loop through output	1 RCA input, Hi-Z 1 loop through output	2 RCA input, Hi-Z 2 loop through output
Dimensions (mm)	222x227x303	260x280.5x297	356x333x381	480x440x466
Weight (N.W.)	6.4kgs	7.8kgs	13.2kgs	25.5kgs

MODEL	TCM-1001	TCM-1501	TCM-1701	TCM-1901
ELECTRICAL				
Input Voltage	100~240V AC, 60 / 50HZ , full range			
Power Consumption	50W	70W	72W	78W
Horizontal Resolution	700 lines, Y/C more than 800 lines	700 lines, Y/C more than 800 lines	700 lines, Y/C more than 800 lines	700 lines, Y/C more than 800 lines
Sweep Linearity	10%			
GENERAL				
Input / Output				
Video / S-Video	2 BNC inputs, 75ohms, or Hi-Z 2 looping through outputs 1 input DIN 1 loop through output	2 BNC inputs, 75ohms, or Hi-Z 2 looping through outputs 1 input DIN 1 loop through output	2 BNC inputs, 75ohms, or Hi-Z 2 looping through outputs 1 input DIN 1 loop through output	2 BNC inputs, 75ohms, or Hi-Z 2 looping through outputs 1 input DIN 1 loop through output
Audio	2 RCA input, Hi-Z 2 loop through output	2 RCA input, Hi-Z 2 loop through output	2 RCA input, Hi-Z 2 loop through output	2 RCA input, Hi-Z 2 loop through output
Dimensions (mm)	260x280.5x297	356x333x381	405x370.5x406	442x415x445
Weight (N.W.)	7.8kgs	15.7kgs	19.4kgs	24kgs

ENVIRONMENTAL

Operating Temperature 32° to 106°F (0° to 41°C)
Humidity 0% to 90% (non-condensing)

RACK MOUNT KIT TRD-294

TRD-294 can hold two 9" CRT monitors side by side mounting on the rack, monitor model: TCM-0902, TBM-0903.

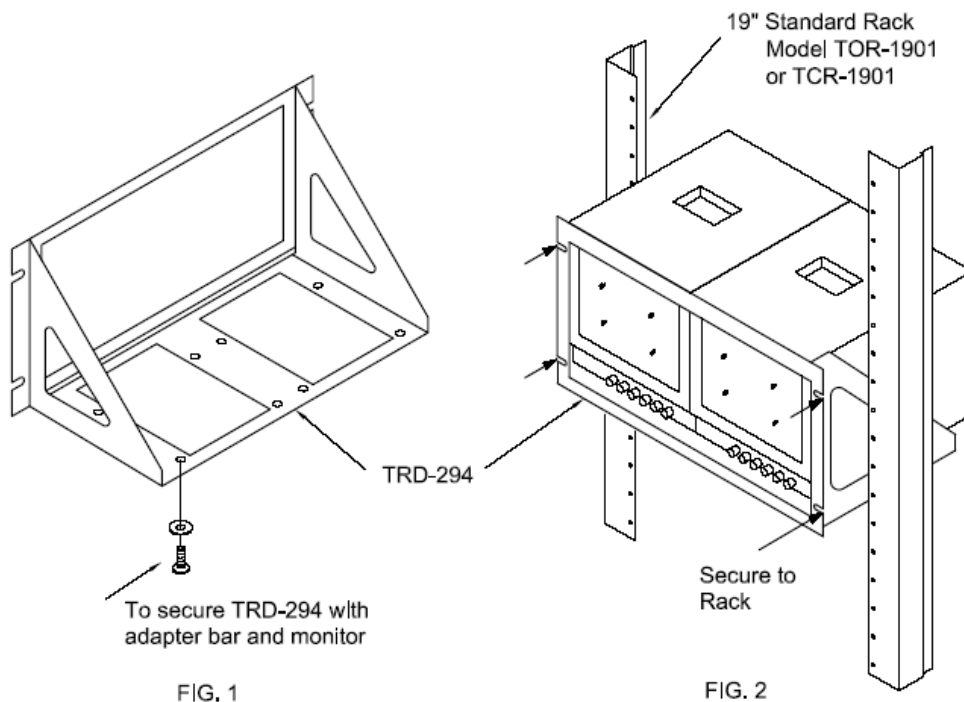
The installation procedure is simple:

1. Unscrew 4 rubber-foot from bottom of each monitor.
2. Secure monitors with TRD-294 bracket (FIG. 1) by using the screws and adapter bars provided in the package.
3. Secure the brackets directly to the rack frame, see FIG. 2 below.

Warning: At least two persons are necessary to place the monitor mounting the rack.

Notes:

1. Standard 19" Open rack TOR-1901 and Cabinet rack TCR-1901 are available in stock.
2. The gap between monitors or other equipment can be covered by blank panel or vent panel, 1U, 2U, 3U available. (Contact salesperson for detail)



RACK MOUNT KIT TRK-141

TRK-141 used for rack mount of 14" or 15" CRT color monitors, model: TCM1402S and TCM-1501.

The installation procedure is simple:

1. Unscrew two Screw (M5 x 10mm) on each side of the monitor.
2. Secure TRK-141 bracket to both side of the monitor with the screw provided in the package. (FIG. 1)
3. Secure the brackets directly to the rack frame, see FIG. 2 below.

Warning: At least two persons are necessary to place the monitor mounting the rack.

Notes:

1. Standard 19" Open rack TOR-1901 and Cabinet rack TCR-1901 are available in stock.
2. The gap between monitors or other equipment can be covered by blank panel or vent panel, 1U, 2U, 3U available. (Contact salesperson for detail)

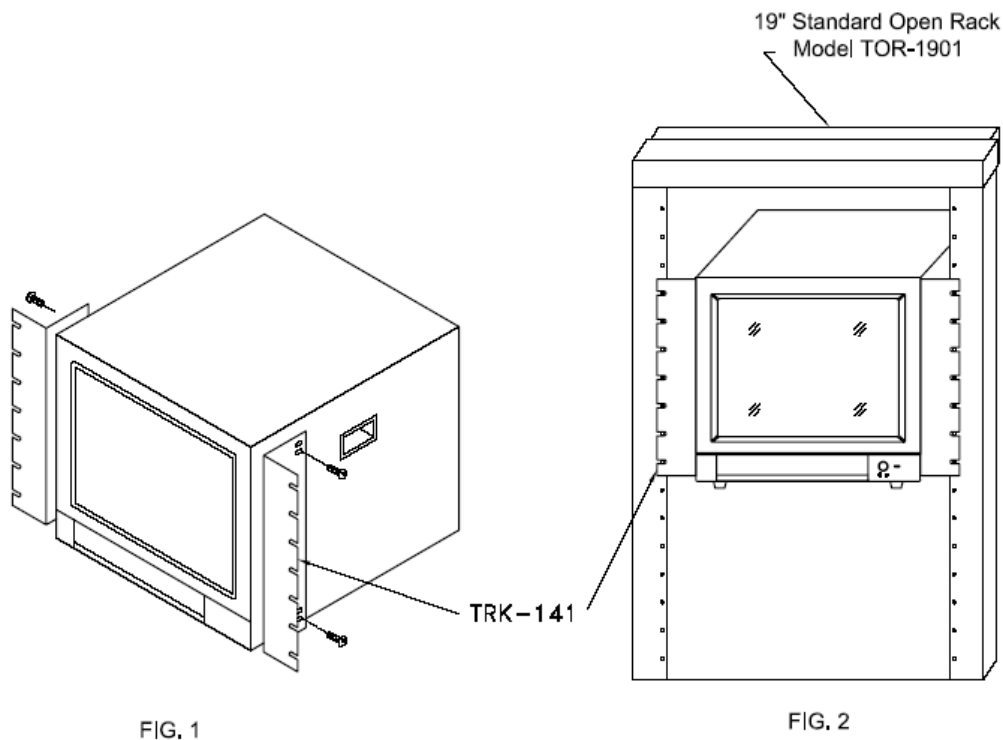


FIG. 1

FIG. 2

RACK MOUNT KIT TRK-171, TRK-191

TRK-171 used for mount 17" CRT color monitor TCM-1701 on the rack.

TRK-191 for 19" monitor, model: TCM-1901, VT19726DVR.

The installation procedure is simple:

1. Unscrew three Screws (M6) on each side of the monitor.
2. Secure mounting brackets to both side of the monitor with original screws. (FIG 1)
3. Secure the brackets directly to the rack frame, see FIG. 2 below.

Warning: At least two persons are necessary to mount the monitor on the rack.

Notes:

1. Standard 19" Open rack TOR-1901 and Cabinet rack TCR-1901 are available in stock.
2. The gap between monitors or other equipment can be covered by blank panel or vent panel, 1U, 2U, 3U available. (Contact salesperson for detail)

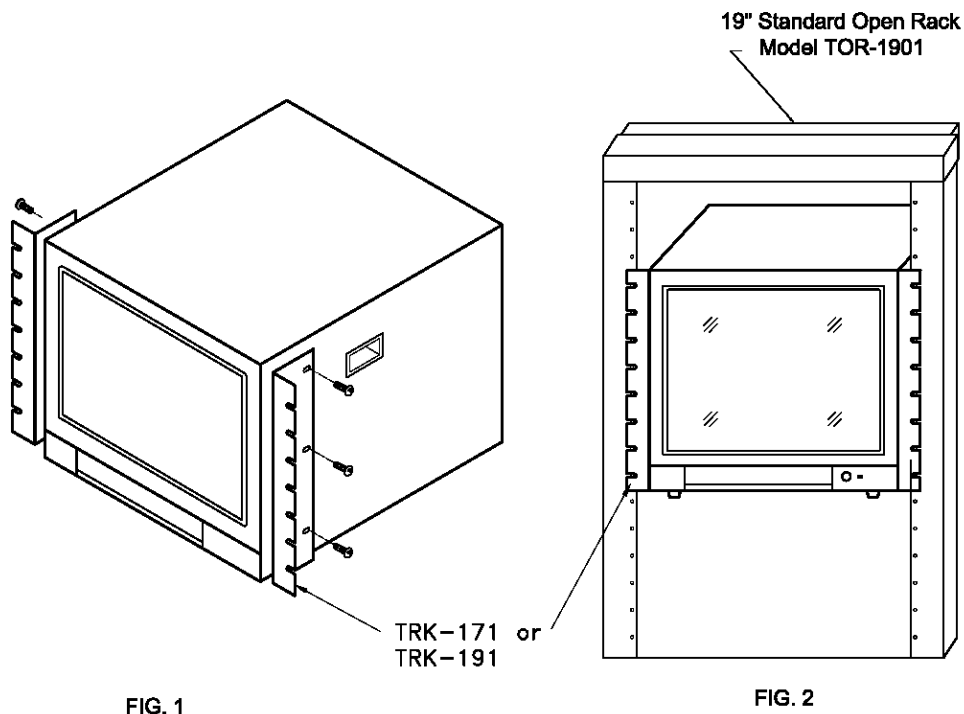


FIG. 1

FIG. 2

TATUNG COMPANY OF AMERICA
2850 EL PRESIDIO ST.
LONG BEACH, CA90810
(800)827-2850

3121-0266-09