

- by a qualified technician to restore the video equipment to normal operation.
- e If the video equipment has been dropped or the cabinet has been damaged.
- f. When the video equipment exhibits a distinct change in performance.
16. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
  17. Upon Completion of any service or repairs to this video equipment, ask the service technician to perform routine safety checks to determine that the system is in safe operating condition.
  - 18@ Do not place anything on the video equipment. heavy objects placed on any part of this system vwill cause damage.
  19. **WARNING: To prevent fire or shock hazard, do not expose this appliance to rain or moisture.**
  - 20- **CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.**

**NOTE 1:** This equipment is designed to operate in the USA, Canada and other countries where the broadcasting system and AC house current is exactly the same as in the USA and Canada.

#### **IMPORTANT INFORMATION FOR THE USER**

**Note:** 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. The 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 communication. However, there is no guarantee that harmful interference will not occur in a particular installation. If this 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.
- 0 Consult the dealer or and experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two condition:  
( 1 ) this device may not cause harmful interference, and ( 2 ) this device must accept interference received, including interference that may cause undesired operation.

**Note:** Changes or modifications may cause this unit to fail to comply v,/ith Part 15 of the FCC Rules and may void the user's authority to operate the equipment.

#### SPECIFICATIONS

**Video Input Terminals (Seven Inputs)**

Composite Video		1	Vp-p	75	ohm
Component Video					
	Y:	1	Vp-p	75	Ohm
	R-Y:	0.7	Vp-p	75	Ohm
	B-Y:	0.7	Vp-p	75	Ohm
S-Video	Y:	1	Vp-p	75	Ohm
	C:	0.28	Vp-p	75	Ohm
RGBS Input		0.7	Vp-p	75	Ohm
H & V Sync Input	TTL Levels				

RS232 Serial Computer Control

**Output Terminals**

RGBS outputs	0.7 Vp-p	75	Ohm
V & H/C SYNC Output	1.5 Vp-p	75	Ohm
Horizontal Frequency	31.5 - 64		kHz
Vertical Frequency	50 or 60	Hz	

**Power Requirements:**

Model 7ranScanner-1	117 VAC 60Hz
Operating range	(105 to 130) VAC
Model TranScanner-2	220 VAC 50Hz
Operating range	(205 to 240) VAC

**Power Consumption:** 45 Watt Max

**Dimensions:** (WxHxD) 17 " x 3. 5 " x 1 3 "

**Accessories Included:**

- Wireless Remote Control
- \* 6' AC Line Cord
- Operator's Manual
- 2.5mm DC Jack

**Factory Installed Optional Accessories:**

19" Rack-mount Kit

The TranScanner is a variable line multiplier designed for use with projectors that have a scanning frequency between 31.5kHz to 64kHz.

The TranScanner cannot be used with a conventional television receiver or projector.

The projector or monitor used with the TranScanner must have an RGB+S input and a horizontal scanning frequency of between 31.5 kHz - 64 kHz.

Operating at this higher frequency, the TranScanner multiplies the number of scanning lines, interpolating the additional picture information from detail found in the original source material.

The scanning lines visible on conventional large screen displays are virtually eliminated and the new picture is bright, colorful, and "film like".

The TranScanner provides source switching for seven different inputs including two component ( Y, R-Y, B-Y ), two composite video inputs, two S-VIDEO (Y/C) inputs and one RGB H & V Sync input.

An infra red wireless remote control with on-screen graphics selects the input source and adjusts all of the operating controls.

Video controls include: contrast, brightness, color, tint, sharpness.

Settings for each individual video input may be adjusted and stored separately in the controller's nonvolatile memory. These settings will be restored each time that input is selected.

Additional three "**Personal preference**" video settings can be stored and recalled for all inputs with exception of the RGB input-

## Programming MBC500PL Remote Control to Operate TranScanner

The TranScanner is shipped with a factory pre-programmed remote control that controls the TranScanner as well as three additional products, such as the Dwin HDP-500 Data Projector, a VCR and a Cable Box or other source device.

To operate other equipment refer to "**MBCSOOPL multibrand-remote control**" specifications on page 14 of this manual.

To change the program codes for any one of the device positions on the remote, or to restore codes after the batteries are changed, follow these instructions to reprogram the remote:

1. Press "**MODE**" repeatedly to select "**TV**" operating mode. This is the position that will control the TranScanner.
2. Press and hold "**LEARN**" until mode indicator lights (about 4 seconds).
3. Enter the TranScanner's brand code of **133**.
4. Press "**LEARN**" to enter the code and exit the Programming mode.

All four mode indicators should light briefly, then turn off to indicate the brand code **133** has been programmed.

### RGB H & V Sync Input

This input is provided for sources such as personal computers, video cameras, graphic generators, and other video equipment with an RGB and Sync output.

Since these sources already operate at a horizontal frequency that is higher than conventional NTSC or PAL video, the TranScanner does not multiply their scan rate. However, the TranScanner provides source switching for these inputs, converts H & V Sync to composite Sync, and amplifies RGB video signals to allow the use of longer cable lengths.

The TranScanner will automatically switch to the RGB input if proper horizontal or composite Sync is applied at pin 13 of the D-15 RGB connector.

To switch to a different input press "**SOURCE**" or "**MENU**" buttons on the remote control.

## Installation

The TranScanner has inputs for six different video sources plus an RGBS input via a D15 connector.

## TranScanner Rear Panel

- i. RGBS Computer Input
2. Screen Control Output
3. V and H/C Sync, Red, Green, Blue Outputs
4. RS-232 Computer Input
5. S-Video Inputs ( S1 S2 )
6. Composite Video Inputs (V1, V2)
  
7. Component Video Inputs

15 pin HD Socket 2.5mm DC Plug BNC 9 pin D Plug 4 pin Mini-Din RCA Type RCA Type

### **1. RGBS COMPUTER INPUT**

This input is provided for sources like personal computers, video cameras, graphic generators and other video equipment with a RGB and Sync output.

The pin assignments for the 15 PIN "D" connector are as follows:

1. Red
2. Green
3. Blue
13. Horizontal or Composite Sync
14. Vertical Sync
- 6-9. Ground

The RGB source must be an analog signal with a horizontal frequency which is compatible with the scanning frequencies of the projector or monitor.

This input can be directly connected from most personal computers such as IBM PS-2 Series, Macintosh "MAC II" Series, and computers with "VGA", S-VGA or X-VGA Graphic Cards.

## **2. SCREEN CONTROL OUTPUT**

The TranScanner has a switched +12 VDC outlet which may be used to trigger an electric screen, projector lift or some other activated relay. The connector is a 2.5 mm power plug. When the TranScanner is turned on the + 12 VDC screen control output will cause the screen to lower and it will retract when the TranScanner is turned off.