DWIN TransVision DLP Projection System Instruction Manual

Contents

DWIN TransVision DLP Projection System

Product Information

- **Product Name:** TransVisionTM
- **Country of Origin:** USA
- **Model Number:** Rev. 7
- **Manufacturer:** TransVisionTM
- **Website:** https://manual-hub.com/

Product Usage Instructions

Safety Instructions

WARNING: HAZARDOUS VOLTAGE DO NOT OPEN

ATTENTION: COURANT ELECTRIQUE NE PAS OUYRIR

Important Safety Tips:

- Read and apply all of the safety and operating instructions provided with your video equipment.
- Keep all safety and operating instructions for future reference.
- Unplug this video equipment from the wall outlet before cleaning. Never use liquid or aerosol cleaners. Use only a damp cloth for cleaning.
- Do not use any attachments or accessories not recommended by the manufacturer as they may cause hazards.
- Do not use this video equipment near water. Avoid placing it near a bathtub, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- Do not place this video equipment on an unstable cart, stand, or table.
- Contact qualified personnel for servicing if any of the following conditions occur:
- **a)** When the power cord or plug is damaged or frayed.
- **b)** If liquid has been spilled into the video equipment.

- **c)** If the video equipment has been exposed to rain or water.
- **d)** If the video equipment does not operate normally by following the operating instructions.
- 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.

Programming SL-8000 Remote Control to Operate the TransVisionTM

The TransVisionTM is shipped with a factory pre-programmed remote control. To program the SL-8000 for TransVisionTM:

1. Press the TV and the MUTE buttons simultaneously. SET will appear on the LCD.
2. Enter the TransVisionTM's brand code: 177.
3. Press TV to complete the programming.

To operate other audio and video devices, refer to the SL-8000 Operating Manual.

Installation of the Controller

TransVisionTM Controller Rear Panel:

The TransVisionTM controller features various inputs and outputs:

- Switched +12VDC Outputs, RY1, RY2
- Red, Green, Blue, Sync, and Control Outputs
- RGBS Computer Inputs
- RS-232 Computer Input
- S-Video Inputs (S1, S2)
- Composite Video Inputs (V1, V2)
- Component Video Inputs (Y1, Cr1, Cb1), (Y2, Cr2, Cb2), (Y3, Cr3, Cb3)
- AC Power Receptacle

The TransVisionTM also has two switched +12VDC outlets labeled RY1 and RY2. These outlets may be used to trigger a relay in an electric screen, projector lift, or other relay-activated device. See the Relay Setup menu for more details.

Safety Instructions

WARNING HAZARDOUS VOLTAGE DO NOT OPEN
ATTENTION COURANT ELECTRIQUE NE PAS OUYRIR CAN SHOCK, BURN, OR CAUSE SEVERE INJURY OR DEATH. DO NOT REMOVE THE TOP COVER. REFER SERVICING TO QUALIFIED PERSONNEL.

1. Read and apply all of the safety and operating instructions provided with your video equipment.
2. Keep all safety and operating instructions for future reference.
3. Unplug this video equipment from the wall outlet before cleaning. Never use liquid or aerosol cleaners. Use only a damp cloth for cleaning.
4. Do not use any attachments or accessories not recommended by the manufacturer as they may cause

hazards.

5. Do not use this video equipment near water. Avoid placing it near a bathtub, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
6. Do not place this video equipment on an unstable cart, stand, or table. The video equipment may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.
    - **A.** Move any appliance and cart combination with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and a cart to overturn.
7. Side openings in the cabinet are provided for ventilation, and to ensure reliable operation of the video equipment and protect it from overheating. These openings must not be blocked or covered. Never place the video equipment on a bed, sofa, rug, or other similar surface that may block ventilation openings. Never place this product near or over a radiator or heat register. Do not place this product in a built-in installation such as a bookcase or rack unless proper ventilation is provided.
8. Operate only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
9. This unit is equipped with a three-conductor polarized alternating-current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
10. Route power-supply cords so that they will not be walked on or pinched by items placed on or against them. Pay particular attention to cords at plugs, convenience receptacles, and the points where they exit the products.
11. Protect your video equipment from lightning during a storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the unit due to lightning and power-line surges.
12. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
13. Never push objects of any kind into this video equipment through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video equipment.
14. Do not attempt to service this unit yourself as opening or removing cover may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.
15. Unplug this video equipment from the wall outlet, and refer servicing to qualified service personnel under the following conditions:
    - **a**. When the power cord or plug is damaged or frayed.
    - **b**. If liquid has been spilled into the video equipment.
    - **c**. If the video equipment has been exposed to rain or water.
    - **d**. If the video equipment does not operate normally follow the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work 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 will cause damage.
19. **WARNING:** To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
    - 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.

FCC

IMPORTANT INFORMATION FOR THE USER
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.
- Consult the dealer or and experienced radio/TV technician for help.

Introduction

- TransVision™ is a high quality video projection system comprised of two complementary components, a DLP™ Projector and Controller.
- The Controller unit provides source switching for nine different video inputs, including three component, two composite, two S-video and two RGB H & V Sync inputs and should be installed near its video component sources.
- The DLP™ Projector may be mounted on either floor or ceiling, and may be configured for front or rear projection.
- Signal connections between the Controller unit and the DLP™ projector is made by industry standard five 75 ohm coaxial cables with BNC connectors for RED, GREEN, BLUE, SYNC AND CONTROL signals. The CONTROL cable is used to transmit bi-directional control signals between the DLP™ projector and the Controller unit. The CONTROL cable must be connected in order the system to function properly.
- Two composite video inputs (V1, V2) and two S-Video inputs (S1, S2) are provided for NTSC (480i) or PAL (580i) video sources, such as off-air tuners, satellite systems, cable boxes, VCR and DVD players. S-Video inputs are highly recommended for use with DVD players and satellite systems.
- Three component video inputs (Y,Cr, Cb) are provided for regular DVD players (480i, 580i), progressive DVD

players (480p, 580p) and HD (480p, 540p, 720p, 1080i) sources.

- Two RGB inputs are provided for HD (480p, 580p, 720p, 1080i) sources and computer graphics with VGA, SVGA, and XGA resolution.
- An infrared wireless remote control with on-screen graphics selects the input source and adjusts all of the operating controls. The system may also be controlled from the front panel or from a RS-232 serial port.
- Both units, the projector and the controller, have IR sensors, allowing the system to be controlled from either unit.
- Video and Image settings for each individual video input may be adjusted and stored separately in the system's memory. These settings are restored for each input when selected.
- The TransVision™ determines the video signal type by measuring horizontal and vertical scanning frequencies. If the video signal matches a predefined video source, the TransVision™ selects video and image settings from the system's memory. The predefined video sources include: 480i, 480p, 580i, 580p, 1080i, 540p, and 720p.
- In addition to predefined video sources, the TransVision™ allows the user to create up to three new video source memory locations per video input.
- For more details on how to create memory location for new video sources refer to the "Image Setup menu".
- Two 12 V screen trigger outputs are also provided to trigger a relay in an electric screen, projector lift, or other relay-activated device.

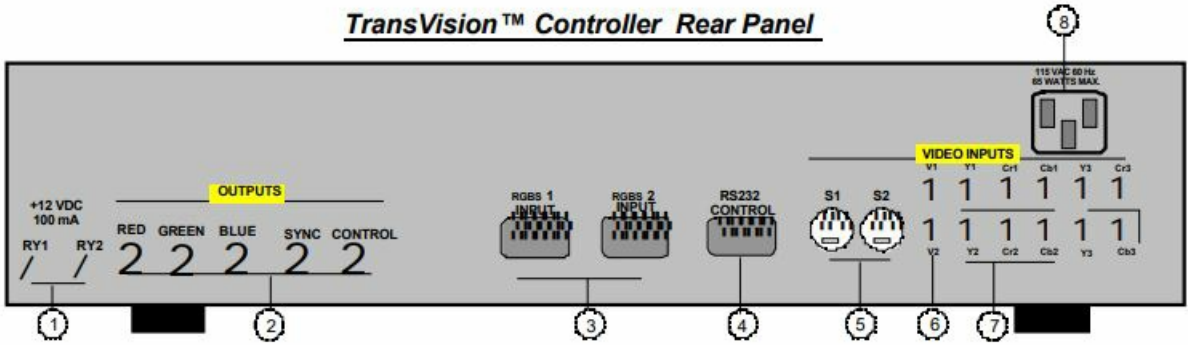
Programming SL-8000 Remote Control to Operate the TransVision™

- The TransVision™ is shipped with a factory pre-programmed remote control.
- To program the SL-8000 for TransVision™:

1. Press the TV and the MUTE buttons simultaneously. SET will appear on the LCD.
2. Enter the TransVision™'s brand code: 177.
3. Press TV to complete the programming.

To operate other audio and video devices refer to the "SL-8000 Operating Manual."

Installation of the Controller



1. Switched +12VDC Outputs, RY1, RY2 2.5mm DC Plug
2. Red, Green, Blue, Sync and Control Outputs BNC
3. RGBS Computer Inputs 15 pin HD Socket
4. RS-232 Computer Input 9 pin D Plug
5. S-Video Inputs (S1, S2) 4 pin Mini-Din

6. Composite Video Inputs (V1, V2) RCA Type
7. Component Video Inputs (Y1, Cr1, Cb1) RCA Type (Y2, Cr2, Cb2) (Y3, Cr3, Cb3)
8. AC Power Receptacle

SWITCHED +12VDC OUTPUTS

- The TransVision™ has two switched +12 VDC outlets labeled as RY1 and RY2. These outlets may be used to trigger a relay in an electric screen, projector lift or other relay activated device. See “Relay Setup” menu for more details.

RED, GREEN, BLUE, SYNC & CONTROL OUTPUTS

- The output video signal from the Controller to the DLP™ projector is made by five 75 Ohm coaxial cables with BNC connectors for RED, GREEN, BLUE, SYNC and CONTROL outputs. The CONTROL cable is used to transmit bi-directional control signals between the projector and the Controller unit. The
- CONTROL cable must be connected in order for the system to function properly.

To test the connection:

- Press INFO on the remote
- The screen will display either “Controller connected” or “Controller not connected.”

RGBS INPUTS

- The RGBS1 and RGBS2 inputs are provided for HD (480p, 580p, 720p, 1080i) sources and computer graphics with VGA, SVGA, and XGA resolution. For computer graphics with VGA, SVGA, or XGA, it is recommended to set the computer to 60 Hz vertical frequency.
- For these inputs, the system provides source switching, converts H & V Sync to composite Sync, provides control of contrast and brightness, and amplifies RGB video signals to allow the use of longer cable lengths.

The following are the pin assignments for the 15 PIN “D” connector:

1. Red
2. Green
3. Blue
    - Horizontal Sync
    - Vertical Sync
    - Ground
4. 6-9. Ground

RS-232 COMPUTER INPUT

- The RS-232C serial interface is provided for external control of the TransVision™ from a central controller, such as a Home Theater control computer, Smart Home automation system, etc.

- For DB9 connector pin-out and RS232 command list, please refer to “TransVision™ RS232 Control” section.

S-VIDEO INPUTS (S1, S2)

- The S1 and S2 inputs are provided for NTSC (480i) or PAL (580i) video sources, such as off-air tuners, satellite systems, cable boxes, SVHS VCR and DVD players. S-Video inputs, instead of composite video inputs, are recommended for use with DVD players and satellite systems.
- For these inputs, the system provides source switching, contrast, brightness, color, tint and sharpness controls, and amplifies S-video signals to allow the use of longer cable lengths.

COMPOSITE VIDEO INPUTS (V1, V2)

- The V1 and V2 inputs are provided for NTSC (480i) or PAL (580i) video sources, such as off-air tuners, satellite systems, cable boxes, VCR and DVD players.
- For these inputs, the system provides source switching, contrast, brightness, color, tint and sharpness controls, and amplifies video signals to allow the use of longer cable lengths.

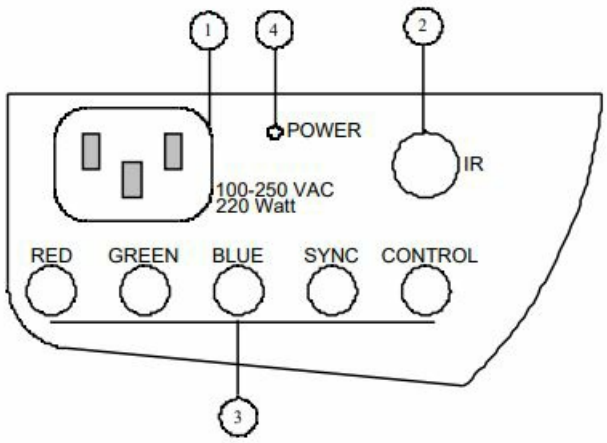
COMPONENT VIDEO INPUTS (Y-Cr-Cb)

- Three component video Y, Cr, Cb inputs are provided for interlaced component video signals from regular DVD players (480i, 580i), progressive component video signals from progressive DVD players (480p, 580p), and progressive or interlaced HD signals (480p, 540p, 720p, 1080i) from HD sources. The TransVision™ determines which type of component video signal is applied to its input and processes it accordingly.
- For these inputs, the system provides source switching, contrast, brightness and color controls, and amplifies video signals to allow the use of longer cable lengths.

AC POWER RECEPTACLE

- The AC power receptacle should be connected to a non-switched 120 VAC outlet using the power cord provided with the TransVision™ system.

Installation of the Projector



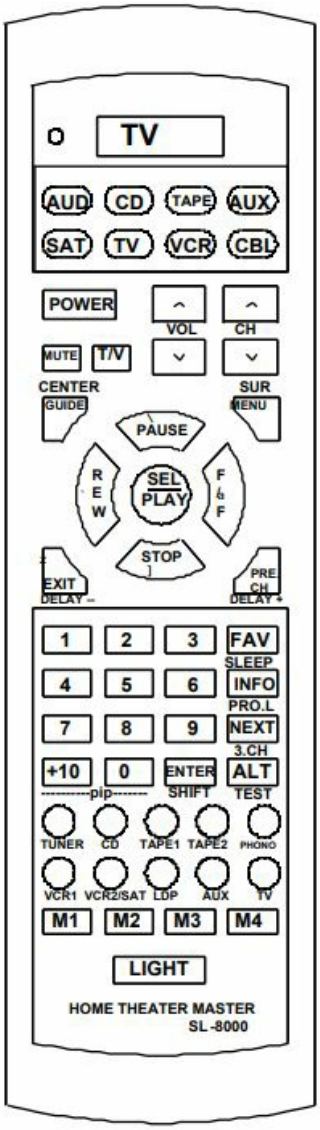
1. The AC power receptacle should be connected to a non-switched 100-250VAC outlet using the power cord

provided with the TransVision™ system.

2. The IR Sensor points toward the screen so that IR commands sent by the remote control are received by the system. This sensor should not be covered to insure proper operation.
3. The RED, GREEN, BLUE, SYNC and CONTROL inputs should be connected to the matching connectors on the TransVision's Controller using high quality coaxial cables with BNC connectors. Note that ALL FIVE connections must be made for proper operation regardless of the type of input video sources used.
4. The POWER LED is a multi-purpose indicator:

- When the LED is dark the AC power to the unit is turned off.
- When the LED is flashing on and off, power is connected and the unit is in the standby mode.
- When the LED is on the unit is powered on.
- When the LED is flashing fast, this indicates that the lamp is hot and the unit can not be turned on. You need to wait approximately 1min to turn the unit on.

Quick Reference Remote Control Operation



- The remote control provided with the TransVision™ is a universal remote control capable of controlling eight different devices.
- Select a TV device to control the TransVision™.
- Press the TV to turn the TransVision™ ON.

- Press POWER to turn the TransVision™ ON or OFF.
- Press MENU to display the Main menu, or to return to the previous menu.
- Use the numbered buttons for direct switching of inputs.
- To select a specific input, press a numbered button.

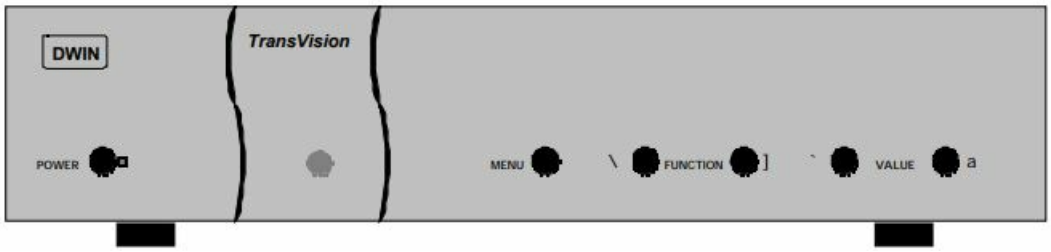
For Press

- **Video** inputs 1 & 2
- **S-Video** inputs 3 & 4
- **Component** inputs 5, 6, & 7
- **RGB** inputs 8 & 9
- **Press** up \ or down] to sequences through the on-screen menu options.
- **Press** left ` or right to adjust values or to move to a sub-menu.
- **Press** SEL to move to a sub-menu.
- **Press** EXIT to clear the on-screen menus.
- **Press** ENTER to perform a selected function.
- **Press** INFO to display the system status.
- **Press** ALT followed by numbered buttons 1-3 to select the corresponding aspect ratio.

For Press

- **4:3** Std 1
- **Anamorphic** 2
- **LetterBox** 3
- Press FAV to perform automatic aspect ratio selection.
- The brand code for TransVision™ is “177.”

THE FRONT PANEL CONTROLS

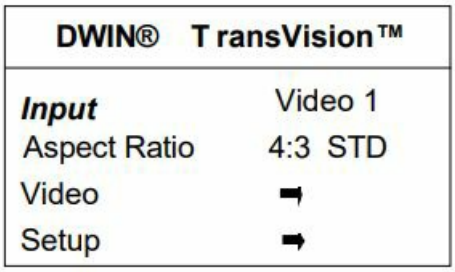


- The TransVision™’s front panel controls include:
- A POWER button to turn the system On or Off.
- A MENU button to display the Main menu, or to return to the previous menu.
- Up \ and down] FUNCTION buttons to sequences through the on-screen menu options.
- Left ` and right VALUE buttons to adjust values or to move to a sub-menu.
- An indicator light which is lit when the unit is turned on and blinks when a valid IR command is received.

USING THE CONTROL MENUS

Main Menu

- The Main menu offers a choice of input selection, aspect ratio selection, video controls, and set-up functions.
- Press MENU to display the Main menu.
- Scroll up \ or]down the list to highlight the desired option.
- Press left ` or right to move to a sub-menu.
- Press EXIT on the remote to clear the screen immediately.
- The “Time Out” feature will automatically clear the screen unless another button is pressed.



Input Option

- From the Main menu scroll up \ or down] to highlight the “Input” option.
- Use the left ` or right buttons to select the input sources.
- Or use the numbered buttons 1 through 9 on the remote control for direct switching of inputs.
- For composite video inputs, press 1 and 2; for S-Video inputs, press 3 and 4; for component video inputs, press 5, 6, and 7; and for RGB inputs, press 8 and 9.

1. Video 1
2. Video 2
3. S-Video 1
4. S-Video 2
5. Component 1
6. Component 2
7. Component 3
8. RGB 1
9. RGB 2

Aspect Ratio Option

DWIN® TRANSVISION™

- Input Aspect Ratio Video Setup Video 1 Letterbox
- From the Main menu scroll up _ or down _ to highlight the “Aspect
- Ratio” option. This enables to select the aspect ratio.
- Use the left _ or right _ buttons to select the aspect ratio.
- Or use the numbered buttons 1 through 3 on the remote control for direct selection.
- Press ALT 1 for 4:3 Std; press ALT 2 for anamorphic; press ALT 3 for a letterbox.

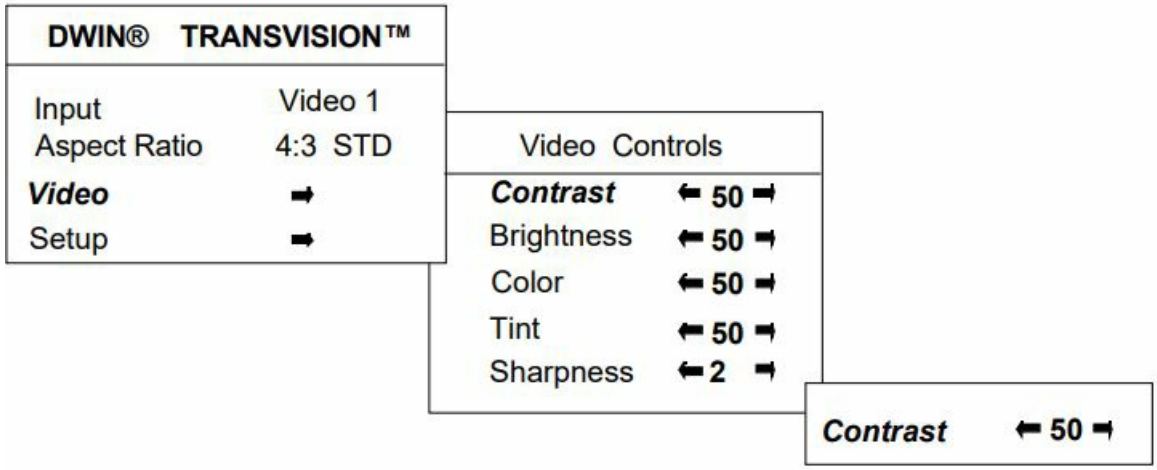
1. 4 x 3 STD
2. Anamorphic

3. Letterbox

- Once an aspect ratio is selected for a specific input, it will be entered into the system memory so that the next time that input is selected, the same aspect ratio will appear.
- Aspect ratio selection is only available for 480i, 480i, 480p or 580p signals. For 540p, 720p and 1080i signals, the system will automatically select the 16:9 aspect ratio.
- To automatically select the aspect ratio that best matches the input signal, press the FAV button on the remote. The unit will then analyze the signal and adjust the aspect ratio accordingly.

Video Control Menu

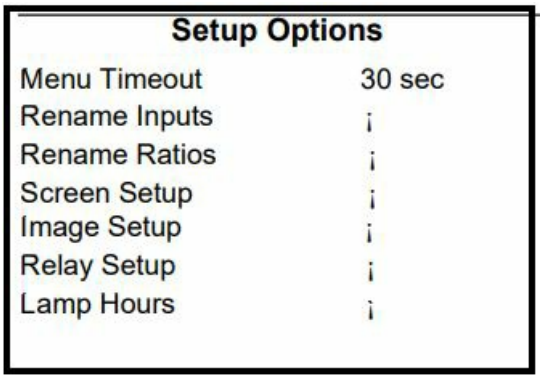
- From the Main menu scroll up _ or down _ to highlight the “Video” option.
- Use left _ or right _ buttons to advance to the “Video Control” menu.



- Use the up _ or down _ buttons to select the desired video control option.
- Use left _ or right _ buttons to adjust video settings.
- Once you press the left _ or right _ buttons this menu will be replaced with a single line display at the bottom of the screen. This allows you to see the picture while adjusting the control settings.
- To restore the full menu, press MENU.
- Picture setting changes made with the Video menu are saved in memory for each of the nine video inputs. Many video sources are different enough to warrant this fine-tuning and these settings will be recalled each time video input is switched.

Setup Menu

- From the Main menu scroll up \ or down] to highlight the “Setup” option.
- Use the left ` or right buttons to advance to the “Setup Options” menu.



Menu Timeout

- This feature selects the length of time before the on-screen menus disappear from the screen.
- Use the left ` or right buttons to select “15”,”30”,”45” or ”60” seconds.

Rename Inputs

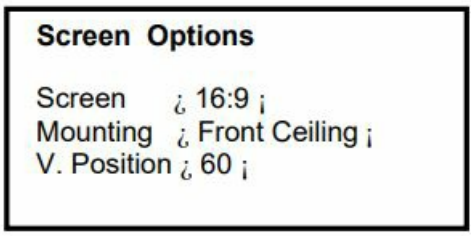
- This feature is for changing Input names that appear on the Main menu. A Default name is provided for each input such as Video 1.
- Scroll up \ or down] the Default list to highlight a desired input.
- Scroll right with a cursor key to the first character in the New Names listing.
- When the first character is highlighted (as shown), use the up \ or down] cursors to scroll through the alphanumeric options.
- **Default** New Names
- **Video** 1 Video 1
- Scrolling up \ starts with the letter “A” and continues to the end of the alphabet followed by numbers and punctuation marks. Scrolling down] repeats the process in exactly the opposite order.
- Choose a character for the first space
- Then scroll right again and select the next character.
- Each name is comprised of eleven letters, numbers, or spaces.
- When you have completed renaming the first input, scroll left ` to exit the New Names column.
- Scroll up \ or down] the Default list to repeat the process for all of the inputs you wish to relabel.

Rename Ratios

- The “Aspect Ratio” refers to the format of the played video signal. For example, a DVD player that is connected to the Y/Cr/Cb input may be used to playback either standard 4:3 aspect ratio format or letterbox format. This menu permits to rename the aspect ratios. A Default name is provided for each aspect ratio such as 4:3 STD, Letterbox, or Anamorphic.
- Default New Names
  - 4 x 3 STD 4 x 3 STD
- To enter a different name, use the cursor to highlight Rename Aspect Ratios and follow the same instructions as in the Rename Inputs menu.

Screen Setup

- The Screen Setup menu is used to correctly position the projected image onto the screen. A white field pattern is generated upon entering the menu and is used to select the desired screen aspect ratio, mounting position, and, vertical position of the prospective projected image for the 16:9 or 15:9 screen aspect ratio.



To Select the Aspect Ratio of Your Screen:

- Select the “Screen” option in the “Screen Options” menu.
- Use the left ` or right buttons to select either 4:3, 16:9, 16:9A or 15:9 aspect ratio.
- **16:9A** aspect ratio should be selected when an optional anamorphic lens is used with the projector.
- The mounting option allows you to choose from “Front Floor,” “Front Ceiling,” “Rear Floor,” or “Rear Ceiling” configurations.

To Set the Mounting Position of Your Projector:

- Select the “Mounting” option in the “Screen Options” menu.
- Use the left ` or right buttons to select the desired position.
- For screens with a 16:9 or 15:9 aspect ratio, the vertical position can be adjusted.

To adjust the vertical position:

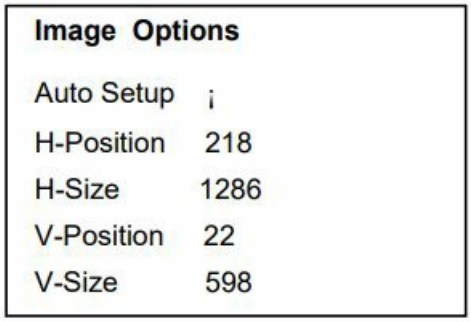
- Select the “V. Position” option in the “Screen Options” menu.
- Use the left ` or right buttons to position the white field pattern with the screen.

Image Setup

- The Image Setup menu allows you to position and adjust the video image size. Video image parameters vary from different video sources and must be adjusted to properly fit the screen.

To Adjust the Video Image Size and Position:

- Select either the “H-Position,” “H-size,” “V-Position,” or “V-size” option in the “Image Options” menu.
- Use the left ` or right buttons to set the desired image size or position.
- The “Auto Setup” option operates for RGB inputs only. The “Auto Setup” option measures the video image boundaries and automatically positions and adjusts the projected image size to properly fit the screen.



New Video Source

- The TransVision™ determines the video signal type by measuring horizontal and vertical scanning frequencies. If the video signal matches a predefined video source, the TransVision™ selects video image settings from the system's memory.
- The predefined video sources include: 480i, 480p, 580i, 580p, 1080i, 540p, and 720p.
- In addition to predefined video sources, the TransVision allows the user to create up to three new video source memory locations per video input.
- When a new video source is applied the TransVision™ displays New Video Source" message. To create a new source memory, go to the Image Setup menu.
- Use the left ` or right buttons, to select "Yes."
- Press ENTER.
- **New** Video Source
    - **Highlight** Yes and press "ENTER" to save
- **No** Yes

Relay Setup

- The Relay Setup allows you to assign the TransVision™'s RY1 and RY2 screen trigger outputs to a particular aspect ratio for screen masking.
- **Relay** 1 OFF Power 4:3 16:9
- **Relay** 2 OFF Power 4:3 16:9
- **OFF** – The relay is off.
- **Power** – The relay is on when the unit is on.
- **4:3** – Relay is on when 4:3 Aspect Ratio is selected.
- **16:9** – Relay is on when Anamorphic or LetterBox Aspect Ratios are selected.

Lamp Hours

- The Lamp Hours must be reset to 0 when a bulb is replaced.

To Reset the Lamp Hours:

- Scroll down] to highlight the "Reset" option.
- Use the left ` or right buttons to advance to the "Reset Lamp Hours" menu.
- Use the left ` or right buttons, to select "Yes."

- Press ENTER.

Lamp Hours

- O Hours
- Reset ¡
- Reset Lamp Hours
  - **Highlight** Yes and press “ENTER”
- **No** Yes

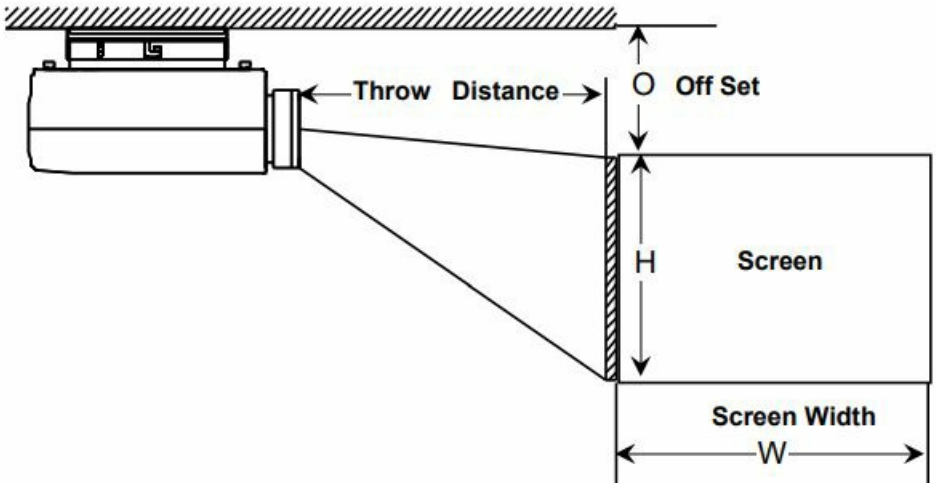
Physical Mounting Instructions

Physical and electrical installation of the TransVision™ must be performed only by a trained professional who is knowledgeable about both the specifics of the TransVision™ and the requirements of the local building and electrical codes in your state.
Physical installation of the TransVision™ may be divided into three steps:

1. Pre-installation planning, which includes plotting the projector-to-screen distance. This requires knowledge of the screen size and placement. From this step you will determine where the projector is located.
2. Location of the installation position and preparation, including drilling holes and assembling the mounting hardware.
3. Installation of the ceiling mount bracket and placing the projector in the mount.
   Once the physical installation is complete, the unit should be properly adjusted for focus using the lens, for positioning using the physical adjustments made possible by the mounting hardware and for size and centering using the electronic adjustments in the menu control system.

PRE-INSTALLATION PLANNING

- Before starting the installation you will need to calculate the projector to screen distance and the ceiling to picture-start offset. The throw distance and the precise center of the screen are then used to determine the exact location for the physical installation of the projector.



Throw Distance Calculation

- The TransVision’s™ zoom lens allows for a wide range of throw distance options – the distance from the

projector to the screen.

- For maximum flexibility in adjustment we recommend that, where possible, the projector be installed in the middle range of the possible distances.
- However, the unit may be installed at any point within the allowable range.
- To obtain the minimum throw distance, multiply the screen width by 1.4.
- To obtain the maximum throw distance, multiply the screen width by 2.2.

Screen Offset

- The screen offset is the distance between the top of the picture area of the screen and the ceiling. This distance is important and it should be calculated before the screen is installed to ensure proper positioning of the projector in relation to the screen. Incorrect screen offset may cause image keystone distortion and cannot be compensated either with the mounting system or electronically.
- Screen offset will vary according to the aspect ratio of the screen and the screen width.
- For screens with a 4:3 aspect ratio, the offset is within a range of approximately six to eight inches.
- For screens with a 16:9 or 15:9 aspect ratio, the minimum offset is six to eight inches and may be increased using the “V.Position” setting option in the Screen Setup menu.
- The maximum screen offset for wide aspect ratio screens may be calculated using the following formulas:
- **For 16:9** screens, multiply the screen width by 0.19 + 6”
- **For 15:9** screens, multiply the screen width by 0.15 + 6”
- **Note** that the mounting system enables you to make small adjustments to the vertical tilt without introducing visible keystone distortion.
- For floor-mounted installations, the picture offset is the distance between the mounting surface of the projector and the bottom of the picture. In order to deliver pictures that are free of keystone distortion, be certain to calculate the offset distance before ordering screens and/or cabinetry.
- Although some adjustment range is available in floor-mounted systems by using the adjustable feet, it is always better to use the least amount of mechanical adjustment necessary.

Ceiling Mount Preparation

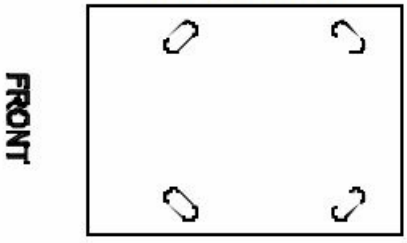
- Once the throw distance has been calculated and the screen installed, the next step in the installation is to locate the precise mounting position of the projector.
- **IMPORTANT NOTE:** Before proceeding further with the installation, make certain that video signal/control wiring and AC power have been run to the projector location. Keep in mind that the connections to the projector are at the front of the unit, so you should place them slightly to the front and right or left of the “A” point established above.
- **Also note:** that the ceiling must be capable of safely supporting the weight of the projector and mount, which is in excess of 25 pounds.

CEILING MOUNT INSTALLATION AND PROJECTOR MOUNTING

- The ceiling mount kit consist of thee parts. Before beginning the installation process, first identify each of the three parts of the mounting system as shown in the diagrams below.
- Mount the part “A” to the ceiling, making certain that the “FRONT” marking facing the screen.

- Place Part B inside Part A and then secure the two pieces together using the four hex head screws provided, making certain that the “FRONT” marking facing the screen.
- Place two center screws on both, left and right sides of the part “B” and insert them only half way.
- Turn the projector upside down and remove the four feet attached to the projector.
- Place Part C mounting bracket over the bottom of the projector, with the “FRONT” marking facing toward the lens.
- Replace the projector feet through the holes in the Part C mounting bracket and hand tighten them until they are secure against the plate and so that there is no slippage between the mounting plate and the projector.
- Raise the Part C/Projector assembly and hang from part ”B” by sliding two center side screws on part “B” into the “L” shaped groove at the outer edges of the Part “C” mounting bracket. Secure the two assemblies together using the HEX screws on the left and right sides of the projector.
- The projector is now suspended from the ceiling mount bracket.
- Connect the AC Power Cord to the projector and connect it to an unswitched AC outlet. Connect the projector to the TransVision Controller using the five-coax connections previously provided.

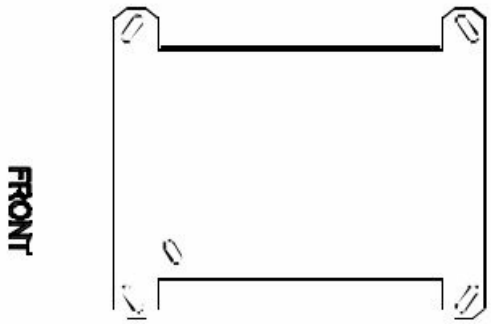
Ceiling Mount Kit



Ceiling bracket A

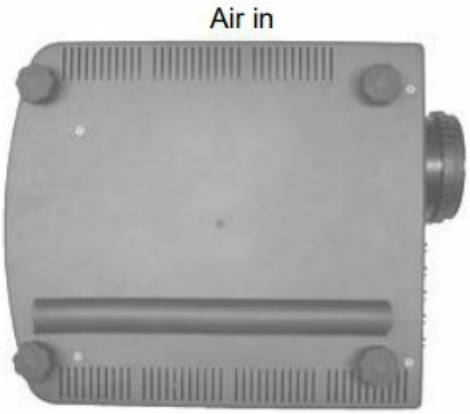
Ceiling bracket B

- When the projector is floor mounted, the use of the mounting hardware is not required. However, you will need to calculate the throw distance and screen offset as shown in the previous section.



Ceiling bracket C

- For floor mount installations remember to calculate the offset from the bottom of the picture to the floor. If the projector is mounted inside a cabinet and NOT placed directly on the floor, the offset is the distance between the bottom of the projector's feet and the bottom of the picture.
- When the unit is floor mounted, a 1" rubber tube must be attached to the bottom of the projector in order to block hot air circulation inside the unit.
- Attach the supplied rubber tube near the "out" vent on the right side of the projector so that exhaust air is properly channeled out of the unit and away from the floor.
- When the unit is mounted inside a cabinet, be certain that an exhaust vent is provided so that the hot air generated by the projector may be safely removed from the cabinet.



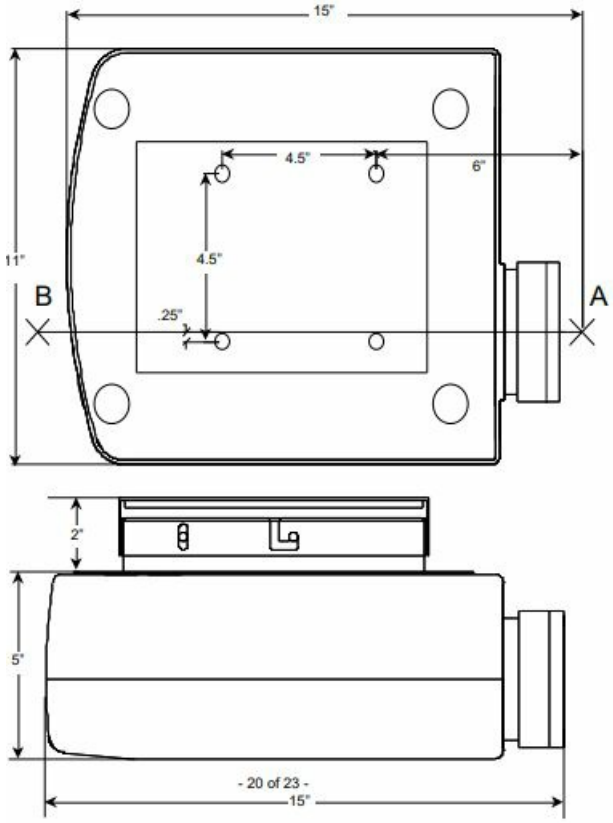
For Floor mount

- Before completing the installation, double check all screws, mounting hardware and the projector feet to make certain that they are securely tightened so that no further movement of the projector/mounting assembly is possible.
- After the physical mounting is complete, horizontal and vertical adjustments are made to center and align the projected image to the screen. The white field pattern, as described in Screen Set-Up menu section, is used to make the three dimensional adjustments.
- Before these dimensional adjustments can be made, you must:
- Turn system on.
- Adjust the zoom and focus.
- Once on screen menus can be clearly viewed, go to Screen Set-Up menu.
- Select the proper screen aspect ratio.
- Make the following horizontal and vertical adjustments to align the white field pattern to the screen:
- To move image left to right, loosen all four feet to rotate the projector. Once desired position is obtained, tighten all four feet.
- To move image up and down, loosen hex screws on the left and right side of ceiling mount and tilt projector.

Once desired position is obtained, refasten all four hex screws.

- To align image parallel to the screen, loosen hex screws on the front and rear of the ceiling mount and level the projector. Once image is aligned, refasten all four hex screws.

PHYSICAL DIMENSIONS



TransVision™ RS232 Control

The RS232 interface for the TransVision™ can be operated from any terminal, such as a Windows 95 PC running HyperTerminal.

Communication Port Set-Up Connector pin-out

- **Baud Rate:** 9600 3 TX (Transmit Data)
- **Parity:** none 2 RX (Receive Data)
- **Stop bits**: 1 5 GND (Signal Ground)
- **Num. of bits:** 8 bits
- **Flow control:** none
- Each command is enclosed in the [ ] character envelope.
- **Note:** Sequential commands must be separated with proper delays.
- Any command followed by POWER ON must be delayed 10 seconds.
- Any command followed by INPUT SELECT must be delayed 1 second.
- The following table lists the commands available.

POWER CONTROL

- **[PON]** Power on

- **[POFF]** Power off
- **ASPECT** RATIO SELECT
- **[S1]** 4:3Std
- **[S2]** Anamorphic
- **[S3]** Letterbox

RELAY CONTROL

- **[Y1ON]** RY1 on
- **[Y1OFF]** RY1 off
- **[Y2ON]** RY2 on
- **[Y2OFF]** RY2 off

INPUT SELECT

- **[I1]** Video 1
- **[I2]** Video 2
- **[I3]** S-Video 1
- **[I4]** S-Video 2
- **[I5]** YCrCb 1
- **[I6]** YCrCb 2
- **[I6]** YCrCb 3
- **[I8]** RGB 1
- **[I9]** RGB 2

VIDEO SETTINGS

- **Contrast** [Rxxx] set value between 0 -100
- **Color** [Cxxx] set value between 0 –100
- **Brightness** [Bxxx] set value between 0 – 100
- **Tint** [Txxx] set value between 0 -100
- **Sharpness** [Ax] set value between 0 – 3

SPECIFICATIONS

- **Display Device:** 0.9 inch 1024 x 768 DMD™
    - (Digital Micro-mirror Device)

Native Resolution:

- 1024 x 768 for 4:3 screen
    - 1024 x 576 for 16:9 screen
- 1024 x 768 for 16:9A screen
    - 1024 x 614 for 15:9 screen

- **Screen Configuration:** Front or rear throw, floor or ceiling-mounted
- **Image Size:** 60-200 inch diagonal
- **Throw Distance:** (1.4 to 2.2) x screen width

Projection Offset:

- **For 4:3** screen 6″ to 8″ from the lens center
- **For 16:9** adjustable from 6″ to 25% of screen height.
- **Light Source:** 150 Watt UHP
- **Lamp Life:** 2000 hours
- **Light Output:** 1000 Lumens
- **Contrast Ratio:** 500:1 full on/off
- **Scan Rates:** Horizontal 15-64 Khz
    - Vertical 50-85 Hz
- **Dimensions (WxHxD):** 11″ x 6″ x 13″ projector
- 17″ x 3.5″ x 12.75 controller
- **Standard Colors:** White or Dark Gray
- **Weight:** 12 lb projector
- 22 lb controller
- **Input Video Signals:** NTSC or PAL composite, component, S-Video (480i, 580i)
    - Progressive DVD, component (480p, 580p)
- High Definition, component or RGB (1080i, 480p, 540p, 720p)
    - Computer RGB VGA, SVGA, XGA (640 x 480, 800 x 600, 1024 x 768)
- **Power Input:** Projector 100-250 VAC 220 Watt Auto-Switch power supply
- **Controller:** 45 Watt 100-130 VAC or 200-250 VAC Factory preset
- **Operating Temperature:** 10 to 32 Deg. C
- **Limited Warranty:** One-year limited parts and labor Lamp is not included
- **Accessories:** Two power cables, one for the projector and one for the controller 8 device preprogrammed remote control User’s manual
- **Optional Accessories:** Replacement Lamp Ceiling mount kit with three-dimensional tilt adjustments
    - RGB cables 25′, 50′, 75′, 100′ 19″ rack-mount kit for the Controller

Limited Warranty

- This warranty applies only to the first person or entity that purchases the TransVision™ for personal or business use and not for the purpose of distribution or resale.
- The warranty period is for one (1) year from the date of purchase for labor and parts.
- The standard Limited Warranty excludes the lamp, which is warrantied 30 days from the date of factory shipment.
- DWIN Electronics shall not be liable or in any way responsible for any incidental or consequential damages of any kind.
- This warranty covers all defects in material and workmanship when shipped in its original container, with the following specific exceptions.

These are: damage to or deterioration of any accessory or decorative surface;

- damage caused by improper installation or adjustment;
- damage caused by accident, unreasonable use, or neglect;
- damage from failure to follow instructions contained in your operating instructions;
- damage from the performance of repairs by someone not authorized by DWIN Electronics;
- any unit on which the serial number has been effaced, modified, or removed;
- damage occurring during shipment;
- units that have been altered or modified in design, appearance, or construction.
- This warranty covers only the actual defects within the PRODUCT itself and DOES NOT cover the costs of installation or removal from a fixed installation, normal set-up or adjustments, claims based on any misrepresentation by the seller, or performance variations resulting from installation-related circumstances such as signal quality, AC power or incompatibilities with display devices or computer software.
- DWIN Electronics will, at its option, either repair or replace the defect or replace the defective product or part thereof at no charge to the owner for parts and labor covered by this warranty. If a unit is examined that is not in need of repair, you will be charged for the examination.
- You must pay shipping charges incurred in getting your product to the factory. We will pay the return shipping charges if the repairs are covered by the warranty. Please save the original shipping cartons. A charge will be made for additional cartons.

If your product needs service, you should notify us at:

SERVICE DEPARTMENT

- DWIN Electronics, Inc.
- 710 North Mariposa St.
- Burbank, CA 91506
- Tel. (818) 239 – 1500
- Fax (818) 239 – 1506
- You'll need to present the original bill of sale to establish the date of purchase.

Documents / Resources

	DWIN TransVision DLP Projection System [pdf] Instruction Manual TransVision, TransVision DLP Projection System, DLP Projection System, Projection System, System

References