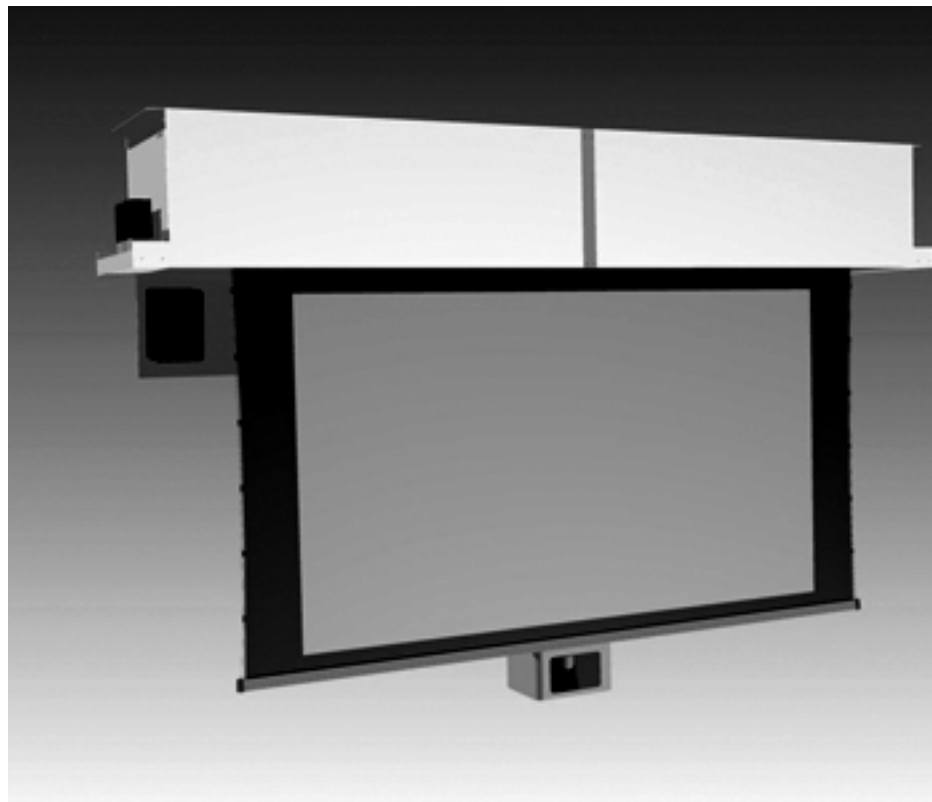


Video Conference Screen

OWNER'S MANUAL



To the Owner

Installation Instructions

Operating the Screen

Maintenance

VCS-1007

TO THE INSTALLER: BE SURE TO LEAVE THIS MANUAL WITH THE OWNER.

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Video Conference Screen

O W N E R ' S M A N U A L

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To THE OWNER

Congratulations on your purchase of the finest optical viewing screen available anywhere in the world!

Please take a moment to review this manual, it will help ensure you many years of trouble-free service from your new Stewart Filmscreen product.

About the Video Conference Screen

The Video Conference Screen housing consists of an automated electric door, electric retractable projection screen, and electrically operated camera pod. The system has been designed with sequential electrical operation. The door opens, the projection screen deploys followed by the camera pod. The door will never close on the screen or camera pod when they are deployed. The screen and camera pod can never be deployed while the door is closed.

Electrical input and switch connections are located in junction boxes on the left end and camera and (optional) speaker connectors are on the right end.

In some cases, to enable proper alignment of the displayed image on the screen, you may need to adjust the extension of the screen and camera pod. Follow the instructions in the section "Adjusting the Screen Extension" should changes to the factory settings become necessary.

Do not randomly start turning any of the motor's limit switches as damage will occur to the components and the electrical sequential operation will be jeopardized.

Due to the nature of the materials and construction, the unit's housing is somewhat flexible. Pay attention to this during installation as to avoid case twisting and front to back compression.

RECEIVING AND REMOVAL FROM SHIPPING CRATE

The Video Conference Screen is large and heavy and requires special attention relating to shipping and transportation. Keep the following information in mind when moving the crate from the truck to the final mounting location.

- ◆ The shipping crate needs to remain flat at all times.
- ◆ The top of the crate needs to be kept up towards the sky.
- ◆ Never rotate the shipping crate onto its side.
- ◆ Never stand the crate on end.

Before removing the unit from the crate, review the installation instructions and ensure that the site is prepared. To remove the unit from the shipping crate:

1. Place the crate under the intended mounting location.
2. Remove crate lid.
3. Use appropriate methods to raise unit to mounting location. Preferred methods are automatic winches or hydraulic lifts.

PREPARING THE INSTALLATION

- ◆ **Before proceeding with the installation of this screen, take time to thoroughly read and understand these installation and operation instructions.**
- ◆ **All electrical wiring installations must conform to local and national codes and should be performed by qualified service personnel.**
- ◆ **There are no user-serviceable parts contained within the unit.**

Preparation

Specifications regarding the individual screen dimensions, weight, and controls are provided by the factory when the unit is ordered. Before beginning the installation:

- ◆ Check the specifications for the type of switch control to be used.
- ◆ Ensure that the mounting area and electrical connection are prepared.
- ◆ Check the size and weight of the screen to be installed so that you can plan for the number of people required for the mounting procedure. You need at least three people to mount the smaller screens; more are needed for larger, heavier screens.

You will need:

- ◆ Enough ladders for the personnel supporting the screen during the mounting process
- ◆ A level
- ◆ Fasteners appropriate for the surface on which the screen is being mounted
- ◆ A 5/32" (4 mm) hex ball driver or Allen key

Caution

During installation, do not place the unit on an unstable cart, stand, table, or ladder. The unit may fall, causing injury to a child or adult and damage to the unit.

Unpacking

If there is a piece of paper protruding from the screenroll, do not remove it. This paper will fall out as the screen is first deployed. (Some screens will not require this paper.) You will remove the screen lock-down brackets after you make the electrical connection; when the door is first opened it is stopped and the screen deploys. Refer to the information in "Operating the System."

STEP 1. HANGING THE CASE

Professional mounting techniques should be used. Stewart Filmscreen Corporation cannot be liable for substandard or faulty installations.

Make sure that you mount the screen so that the electrical box is on the left side (audience left).

The Video Conference Screen is fully assembled and ready to install into the ceiling or soffit. A false ceiling is not intended to support the weight of this product. The unit can be bolted directly to the support structure or suspended. Chain or threaded rod is typically used for suspended type installations. If the unit is to be mounted to plaster, masonry or other type of surface, use appropriate fasteners. Always use high grade / rated hardware.

1. Mount the housing via the mounting brackets located on the top ends.
 - Use the drilled holes on these ends for the specified mounting hardware.
 - Use appropriate attachment hardware to secure the housing. Use case hardened or rated fasteners.
2. Install the unit onto the support structure making sure that the bottom of the case is flush with the finished ceiling plane.
 - Avoid case torque or twisting as operational difficulties will ensue.
 - Do not compress the front to back with ceiling treatment as this too will cause improper door operation.
3. Use a carpenter's level to make sure the housing is level end to end as well as front to back. After mounting, check the door to make sure it is flush to the box at both ends and that there is proper clearance around its entire perimeter. Readjust mounting if required at this time.
4. Drywall or other ceiling material may be run flush to the housing. It is essential not to "compress" the housing front to back with any ceiling treatment or tiles as this will cause faulty door operation.

STEP 2. ELECTRICAL CONNECTION

Caution

Professional techniques should be used when making any electrical connection. A qualified electrician should perform these procedures.

Be sure to follow all standard safety procedures for installing electrical devices.

Do not disassemble or alter the configuration of the motor or the unit's electrical connections. This may cause injury to you or damage to the product and will void the product warranty.

The electrical connection should be made only to the type of power source indicated on the marking label.

The motor requires standard AC input (unless an alternate voltage has been specified).

This manual includes instructions for LVC (low voltage control) switch. If your system uses another type, be sure you know how to make the connections. Contact the factory as needed.

General suggestions for wiring:

- ◆ Soldering is recommended.
- ◆ The use of wire nuts is acceptable.

Preparation—Removing access panel

All connections are made to the electrical box on the side of the unit (audience left). An access panel covers the electrical connections. To remove the access panel on the underside of the unit, remove the two hex screws. Replace the access panel after the electrical connections have been made.

High voltage AC input connection

We advise this connection be done by a qualified AV technician or electrician. Stewart Filmscreen Corp. cannot be held liable for faulty or substandard connections.

Connect the AC input line to the electrical junction box located on the left end of the housing. You will make three connections:

- ◆ White is neutral.
- ◆ Black is hot.
- ◆ Green is ground.

Use 3 conductor 16 ga minimum romex or service cord for hookup. Wire nuts can be used for the connections.

Low Voltage Control with 3-button momentary wall switch (standard control)

A standard Low Voltage Control is sequentially tied to each motor. A 3-button momentary switch can be connected to the switching input terminals. Use 20 - 24 ga. 4-conductor electronic communication wire to connect to the switch input wire located in the switch connection junction box.

The color connections are:

- ◆ White is common.
- ◆ Red is up.
- ◆ Black is down.
- ◆ Yellow is stop.

A parallel connection to this switching input can also be made to other associated A/V switching networks. Any additional switches connected here must be "momentary" type.

Once the connections have been made a "Down" command will open the door. Once the door has opened, the projection screen will deploy. Upon deployment of the projection screen the video camera pod will deploy. When an "Up" command is given, the camera pod will retract. At that time the projection screen will retract followed by the closing of the door.

Camera connection box and optional speaker connector

The video camera connection box is located on the right end plate of the housing. An optional speaker terminal connector block is also in this location. If you have optional speakers included, they are connected here.

OPERATING THE SCREEN

The factory has secured the screen and camera pod for transportation. Follow the "First time activation" instructions to ensure any packing products and/or system lockdown brackets are completely removed when the door is first opened, before deployment of the screen and camera pod.

First time activation

1. Open the door to approximately 90 degrees and press "Stop."
2. At this time it is imperative that you remove any screen lockdown brackets and/or foam retention blocks. Do not allow the unit to cycle further until you remove all shipping protection materials.
3. Press "Down," the door kicks back slightly and the projection screen deploys. The first time you operate the screen, the protective paper falls out as the screen unrolls. Once the screen is fully deployed, make sure that no packing paper remains on the screenroll. The screen can be damaged if loose paper or shipping materials remain.
4. When the screen reaches its fully deployed position, the camera pod automatically deploys. This system is electrically sequenced so you do not have individual control of the motors.

Caution

Stop the door before the screen deploys.

General operation

To lower the screen and camera pod, press the Down button. The door opens, the screen lowers, and then the camera pod lowers. If you want to use the screen without the camera pod, press the Stop button after the screen deploys, but before the camera pod lowers.

To retract the screen and camera pod, press the Up button. The camera pod raises, followed by the screen. Finally the door closes.

When you lower or retract the screen, it will stop at its factory preset limit. If an obstacle (such as a person or furniture) gets in the path of the screen as it is lowered, you should use the switch control to stop the screen's motion; it will not automatically stop if it hits an obstacle.

In general, when the screen is not in use, store it in the fully retracted position.

Caution

Do not operate the motor(s) when any of the following occurs:

- ◆ **The unit emits any smoke, heat, abnormal noise or unusual electrical type odor.**
- ◆ **The unit is damaged in some way, such as damage from a water leak.**
- ◆ **Obstructions are permitting correct deployment of door, screen or camera pod.**

If any of these situations occur, remove obstructions and / or call a qualified service person if required.

ADJUSTING THE SCREEN EXTENSION

The extension and retraction limit switches have been preset at the factory. In general, we advise you to avoid readjusting these switches.

In some cases, to enable proper alignment of the displayed image on the screen, you may need to adjust the extension of the screen or the mask. If adjustment to the extension is necessary, carefully follow these instructions.

Modifying the screen extension

Caution

Improper adjustment of any of the motor's limit switches can cause irreparable damage to the screen and related components, resulting in voiding the factory warranty.

You can increase the extension of the screen and mask up to 3" / 7.6 cm past the factory preset stop, or you can decrease the extension by approximately 4" (10 cm) from the factory preset stop. **Do not** attempt to modify the screen extension beyond these recommended amounts. Improper adjustments to the screen's deployment setting will cause screen problems.

The limit switches are located on the left side of the screen roller tube inside the housing.

To increase the screen's fully extended (screen down) stop position:

1. Lower the screen to its current stop position.
2. Locate the white "Down" extension limit located on the motor's head, left side of the screen tube. Use an electrician style screwdriver or 4 mm hex key to turn this switch in a counter-clockwise direction. If the power is applied to the motor, the screen will drop incrementally as the switch is turned.

Note: One complete turn of the switch will make approximately a 1" (2.5 cm) change in the screen stop position.

To decrease the screen extension:

1. Lower the screen until it is extended about halfway down and then press "Stop."
2. Locate the white "Down" extension limit switch located on the left side of the screen tube. Use an electrician style screwdriver or 4 mm hex key to turn the switch in a clockwise direction.

Note: One complete turn of the switch will make approximately a 1" (2.5 cm) change in the screen stop position.

3. Activate the screen in the down direction until it reaches the newly reduced stop position. Repeat this procedure until the desired stop position is reached.

Once you have made the adjustment, whenever you lower the screen, it will automatically stop at the new position.

Note: It is recommended that you make a note of any changes made to the factory preset.

Caution

The screen is fully retracted when the batten stops just inside the bottom of the housing. Do not attempt adjustments with the "yellow" (UP) retraction limit switch that will further retract the screen. Incorrect adjustment of the switch will cause severe and permanent screen damage. This switch also controls the signal for the door closure. Improper adjustment could cause the door to close prematurely on the screen. Consult the factory if you have any questions.

SCREEN CARE AND CLEANING

With reasonable care, you may expect many years of trouble-free use of your Stewart Video Conference Screen.

We encourage you to keep your screen clean. To protect your screen when it is not in use, store it in the fully retracted position.

Avoid getting any foreign material on the screen, as cleaning may prove very difficult. It may not be possible to remove scratches, paint, ink, etc.

General maintenance

The screen surface is delicate. Special attention to these instructions should be followed when cleaning.

- ◆ A draftsman-style brush may be used to lightly whisk away any loose dirt or dust particles. (This type of brush can be found in office supply stores).
- ◆ Newer style soft synthetic dusting wands can also be used to lightly whisk away any loose dirt or dust particles.
- ◆ For tougher spots, use a mild solution detergent, water, and a sponge. Rub lightly. Blot with a damp sponge to absorb excess water. Do not try to dry off residual watermarks as they will evaporate in a few minutes.
- ◆ Aggressive or abrasive cleaning action will deteriorate the screen's optical quality.
- ◆ Never use solvents, abrasives, chemicals or any other substances to clean the screen.

Replacement parts and service

No user-serviceable parts are contained within the unit. Contact your dealer or the factory if you require part replacement or service.

TROUBLESHOOTING

Problem description	Probable cause	Action to take
Door won't open. Screen won't operate.	No AC power available. Outboard switching problem. Door not fully opened.	Check to see if the circuit breaker has switched off. Reset if needed. Check outboard switching apparatus. Check voltage availability. Contact an electrician. Check that the toggle switch is in the correct middle position.
Screen or camera won't roll up or down (even though power is available).	Bad connection at switch.	Have an electrician or qualified service person check the connection as follows: • If you have a <i>low voltage control</i> unit, check switch-line connections.
Roller tube motors chatter when power is activated.	Can be caused by voltage drop, bad connections.	Have an electrician or qualified service person check all hook-ups including all outboard wiring.
Unit hums in up mode. (Screen has already retracted.)	The screen batten is retracting too far into the case. Failure to correct can damage motor and screen. Do not use the unit until this problem is resolved.	Have a qualified service person adjust the yellow UP limit switch. Deploy screen and turn the adjusting screw (yellow) clockwise.
Screen / camera drops when up direction is activated (grinding noise occurs).	Drop in voltage.	Motors require full voltage. Have an electrician or qualified service person check available voltage.
Screen / camera continues past bottom stop position.	White limit switch is out of adjustment.	Readjust the white DOWN limit switch.
Screen or Camera Pod retract too far into case.	Yellow limit switch out of adjustment. Failure to correct can damage motor and screen. Do not use the unit until this problem is resolved.	Have a qualified service person readjust the yellow UP limit switches.
Motor shuts off. Motor has been in use for more than 2 minutes.	Motor is designed for short operations (lowering and retracting), not continuous duty. Longer operation, such as during setup and positioning, causes the motor to overheat and shut off.	Allow the motor to cool down. Complete cooling can take up to an hour. Heat gain is cumulative and takes time to dissipate. If motor use is initiated before it has cooled completely, the motor will shut down again when it reaches maximum temperature.
Dirt, finger prints, marks, etc. on screen surface.	Improper handling of screen.	Brush off or use a mild detergent solution with clean rag or cotton swab.
Indentations appear on screen surface.	Debris or particles adhering to screen due to static cling.	Check back of screen; gently brush debris away by hand.

PRODUCT WARRANTY

LIMITED ONE YEAR WARRANTY ON STEWART FILMSCREEN CORP PROJECTION SCREENS SYSTEM

STEWART FILMSCREEN CORPORATION (Stewart) warrants its screens to the original purchaser only, to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase by the original purchaser provided they are properly operated and maintained according to Stewart instructions and are not damaged due to improper handling or treatment after shipment from the factory.

This warranty does not apply to equipment showing evidence of misuse, abuse, or accidental damage, or which has been tampered with or repaired by person other than authorized Stewart personnel.

Stewart's sole obligation under this warranty shall be to repair or to replace (at Stewart's discretion) the defective part of the merchandise. This warranty expressly does not cover any costs of removal, installation, framing, or other costs incident to replacing the screen or returning it to Stewart. Returns for service should be made to your Stewart dealer. If it is necessary for the dealer to return the screen or part to Stewart, transportation expenses to and from Stewart are payable by the purchaser and Stewart is not responsible for damage in shipment. To protect yourself against damage or loss in transit, insure the product and prepay all transportation expenses.

This warranty is in lieu of all other warranties, expressed or implied, including warranties as to fitness for use and merchantability. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the one (1) year warranty period. This warranty gives you specific legal rights, and you may also have other rights which vary from state-to-state. In no event will Stewart be liable for sums in excess of the purchase price of the product. No liability is assumed by Stewart for expenses or damages resulting from interruption in operation of equipment, or for incidental, direct, or consequential damages of any nature.

In the event that there is a defect in materials or workmanship of a Stewart Screen, you may contact our Customer Service Department at 1161 W Sepulveda Blvd, Torrance, California 90502-2797 (310-784-5300) Toll free (800-762-4999).

IMPORTANT: This warranty shall not be valid and Stewart shall not be bound by this warranty if the product is not operated and maintained in accordance with Stewart's written instructions.

Stewart
Filmscreen Corporation®

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1-800-762-4999 ♦ Fax (310) 326-6870