

Stewart Shades

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

To the Owner

Installation Instructions

Operating the Shades

Maintenance

SS-0710

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

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

Contents

To the Owner	2
Preparing the Installation	2
Installation Procedures	5
Electrical Connections	11
Operating the Shades	18
Care and Cleaning	19
Troubleshooting	20
Product Warranty	21

TO THE OWNER

Congratulations on your purchase of a quality window shading system from Stewart. Our family of custom motorized window shading products are designed to meet the outside-light-control requirements of every room in your home.

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.

Note: The installation instructions are for shades with Somfy 110 volt motors. Other motors will vary in appearance and may not utilize the star-shaped head and bracket or a retaining ring, but the installation procedure is essentially the same. If you have questions, contact the factory.

About your Stewart Shades

Stewart Shades may be mounted with a fascia or headbox, or may simply use brackets. The shades may be mounted inside or outside the window frame. **Note:** Headbox systems recessed into the ceiling require a different procedure. Contact the factory for details.

Stewart shading systems are compatible with virtually any control specification, from wall switches to sophisticated control systems. Contact the factory for details.

PREPARING THE INSTALLATION

- ◆ **Before proceeding with installation, be sure to read and understand all the installation and operating instructions thoroughly.**
- ◆ **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.**

Getting started

Specifications regarding the individual shade dimensions, weight, mounting type, and controls are provided by the factory when the shades are ordered. Before beginning the installation, review this manual and:

- ◆ Check the order specifications for the type of mounting and control to be used.
- ◆ Ensure that the mounting area and electrical connections are prepared. Refer to the section “Electrical connections” to make your preparations.
- ◆ Determine if the fasteners provided with the shades are sufficient for the mounting area at the installation site.

Shade brackets must be installed with appropriate screws, and always into a solid surface. The mounting screws provided with your shade may or may not fit a particular installation. You must determine the proper type of fastener to use. Make sure mounting surfaces are solid and strong enough to support the shade system. When mounting to sheetrock, place brackets over a stud if possible. Otherwise, use appropriately-sized molly bolts, toggle screws, or other available fastening systems that will not pull out of the sheetrock under the weight of the shade system.

Things you need

You will need:

- ◆ Level
- ◆ Ladders appropriate for window height
- ◆ Drill
- ◆ Mounting brackets and/or fasteners if not using provided hardware
- ◆ Appropriate tools for fasteners used
- ◆ Electrical hook-up wire and associated components to connect control system

Unpacking

When you are ready to begin installation, unpack the shades. Do not discard any packaging materials until you confirm you have all necessary components and materials. Ensure you have each of the items listed for each shade:

- ◆ Shade roller/motor assembly
- ◆ Mounting brackets and fasteners
- ◆ Motor retaining ring
- ◆ Fascia or headbox (if ordered)
- ◆ Light lock channels (if ordered)
- ◆ Bracket caps and/or hole caps (for outside mount units only)

Various types of control units may be used. For example, you may use a low-voltage control unit with a switch, an automated control system, or a hard-wired switch.

Caution

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

Component overview

Refer to Figure 1 and Figure 2 for a view of key components.

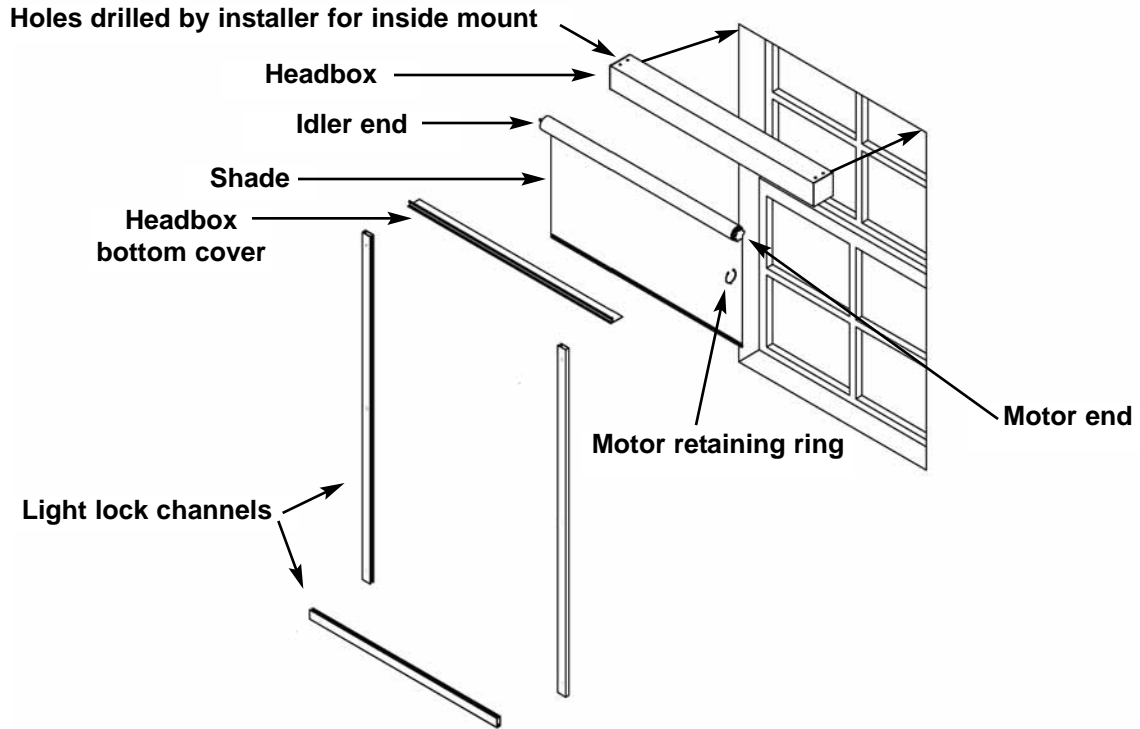


Figure 1. Shade with headbox, inside bracket mount

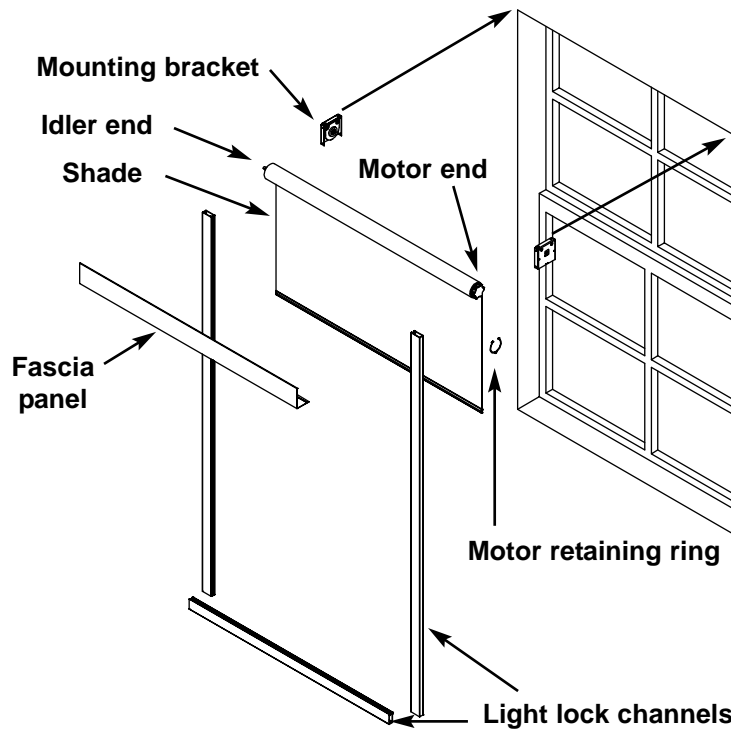


Figure 2. Shade with fascia, inside bracket mount

INSTALLATION PROCEDURES

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

Installation sequence—overview

Once the mounting area is prepared and the power source is available, the general installation sequence is:

1. Install the mounting hardware.
2. Insert the shade roller assembly into the brackets.
3. Route the motor electrical lead.
4. Test for proper shade operation.
5. Make adjustments to the fabric roll or limit settings (as needed).
6. Attach the fascia panel or headbox bottom cover.
7. Install the light lock channels, if ordered.

Procedures are described below.

Installing the mounting hardware

The first step is to install the mounting hardware into the prepared area. Follow the instructions for **bracket-only mounts**, **fascia** systems or **headbox** systems, according to the type of shades ordered.

For bracket-only mounts:

1. Position brackets inside the window frame recess for shades intended for Inside Bracket mount or on the wall face for Outside Bracket mount. Be sure to place the motor bracket correctly on the right or left side, as specified in the order.

For Outside Bracket mount, be sure to measure and mark accurately before securing brackets so that they are equally spaced from the sides of the window opening and the shade is centered properly.

2. Install shade brackets with appropriate fasteners into a solid surface.

Make sure mounting surfaces are solid and strong enough to support the shade system. When mounting to sheetrock, locate brackets over a stud if possible. Otherwise, use sufficiently-sized molly bolts, toggle screws, or other available fastening systems that will not pull out of the sheetrock under the weight of the shade system.

3. Make sure the brackets are level. Roller shades must be exactly level horizontally to prevent fabric from telescoping (traveling sideways as it rolls up).

For fascia systems:

1. Position brackets inside the window frame recess for shades intended for Inside Bracket mount, shown in Figure 2, or on the wall face for Outside Bracket mount. Be sure to place the motor bracket correctly on the right or left side, as specified in the order.

For Outside Bracket mount, be sure to measure and mark accurately before securing brackets so that they are equally spaced from the sides of the window opening and the shade is centered properly.

2. Install shade brackets with appropriate fasteners into a solid surface.

Make sure mounting surfaces are solid and strong enough to support the shade system. When mounting to sheetrock, locate brackets over a stud if possible. Otherwise, use sufficiently-sized molly bolts, toggle screws, or other available fastening systems that will not pull out of the sheetrock under the weight of the shade system.

3. Make sure the brackets are level. Roller shades must be exactly level horizontally to prevent fabric from telescoping (traveling sideways as it rolls up).

For headbox systems:

Headbox units are normally pre-assembled with end caps and mounting brackets in place. **Note:** The following instructions are for headbox systems mounted into the window recess or on the wall face. Headbox systems recessed into the ceiling area require a different procedure.

1. To mount the headbox, drill holes through the extrusion as necessary to attach with screws to the wall face (Outside Bracket mount) or inside the window frame (Inside Bracket mount). Stewart suggests that you place the mounting holes in the top of the headbox unit for Inside Bracket mount and in the back of the unit for Outside Bracket mount. Refer to Figure 1.
2. Make sure the brackets are level. Roller shades must be exactly level horizontally to prevent fabric from telescoping (traveling sideways as it rolls up).

Inserting the shade roller assembly into the brackets

1. Insert the spring-loaded idler end of the shade roller assembly into the idler bracket. **Note:** In Figure 3, the shade may appear to be unrolled slightly, but the shade should be completely rolled up when installing.
2. Gently push the shade assembly toward the idler bracket compressing the idler spring on the opposite side of the shade.
3. Position the star-shaped motor head into the motor bracket. Refer to Figure 3. The shade should be completely rolled up with the shade hem bar level with the bottom of the mounting brackets. The motor should be positioned so that the limit

buttons point down. **Note:** To access the limit buttons, you must remove the yellow cap on the star-shaped motor end.

4. Secure the motor in place with the retaining ring. Spread the retaining ring and slide it around and into the grooves on the star-shaped motor head.

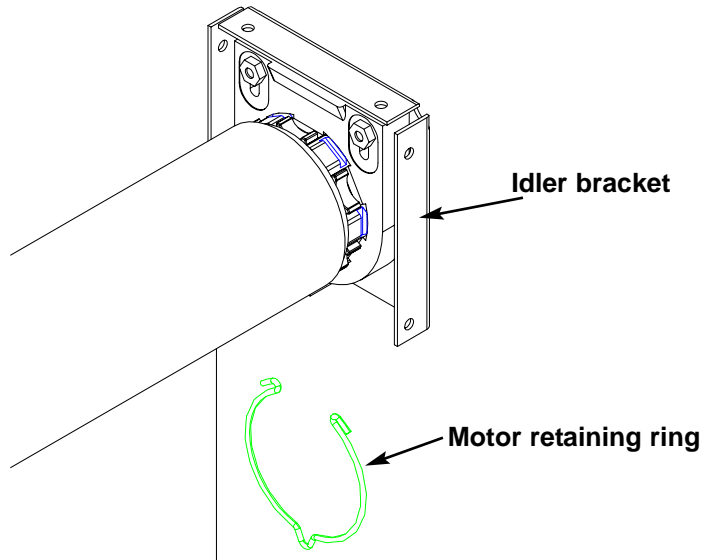


Figure 3. Securing the motor with the retaining ring

Routing the motor electrical lead

Electrical wiring connections must be done according to local codes by a licensed electrician.

1. Route the motor electrical lead (pigtail) for your particular installation. Refer to Figure 4 for proper lead location.

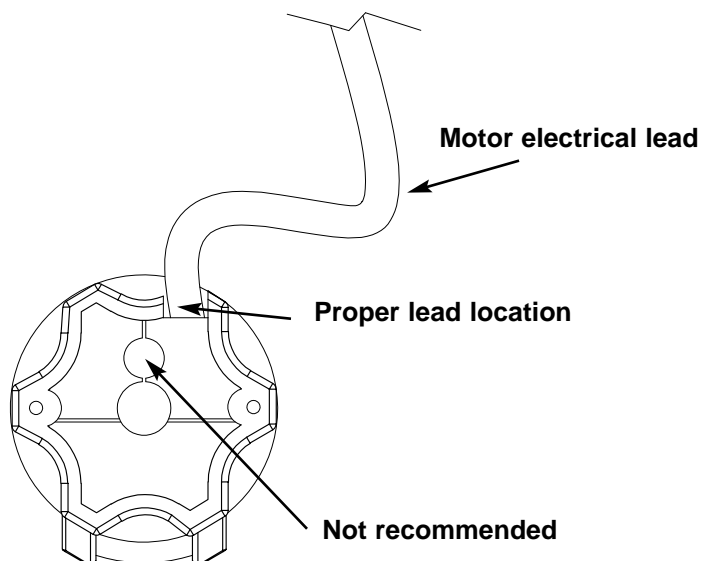


Figure 4. Routing the motor lead

If required, you may drill through bracketing and/or the extrusion. If you need to drill, use extreme caution and adhere to all applicable code requirements.

2. Make all necessary electrical and control connections. Refer to the section “Electrical Connections” in this manual.
3. Install all control devices.

Testing for proper shade operation

Before completing the installation of the fascia panel or headbox cover and light lock channels, we recommend that you test for proper shade operation.

Make sure nothing is in the way to obstruct travel of the shade fabric. Operate the shade to a totally closed position, then raise it so that it is fully open. Check for proper fabric travel, ensuring it rolls up correctly.

Refer to the section “Operating the Shades” in this manual.

Making adjustments to the fabric roll or limit settings

If your shade does not roll up straight, and you have confirmed the shade system is level, you may need to shim the fabric on the roller tube.

To create a shim, lower the shade fully and attach a small piece of masking or duct tape to the tube end opposite the side that is telescoping outward. The purpose is to build up the diameter of the tube and cause any uneven fabric buildup to level out. This provides proper vertical tracking of the shade.

If you need to adjust the limit settings, refer to the section “Operating the Shades” in this manual.

Attaching the fascia panel or headbox bottom cover

Once the shades are functioning properly, attach the fascia panel or headbox bottom cover.

For fascia systems:

Attach the fascia panel as shown in Figure 5.

1. Holding the fascia panel at an angle, hook the upper lip of the fascia into the notch at the top of the mounting brackets.
2. Push in on the fascia until it snaps securely into place. The bottom of the fascia has a small lip on the inside of the extrusion that will slip into the grooves on the bottom of the mounting brackets.

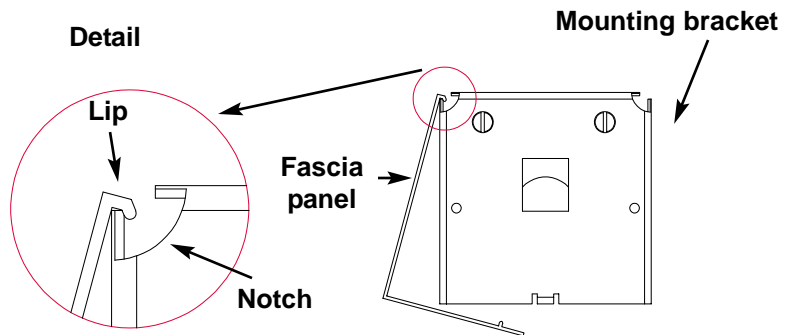


Figure 5. Attaching the fascia panel, with detail

For headbox systems:

1. Hold the bottom cover so the hook is upright and facing forward.
2. Raise the cover up into the box. Refer to Figure 6.
3. Bring the cover forward until it touches the front inside of the headbox, and then lower the cover until it hooks onto the headbox lip.
4. Since the cover is secured by its own weight, nothing additional is necessary to hold it in place.

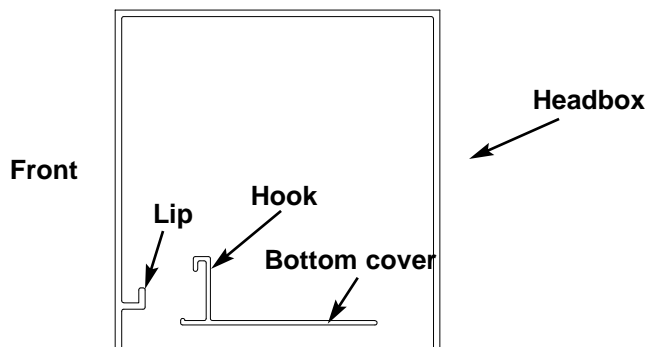


Figure 6. Attaching the headbox cover

Installing the light lock channels (if ordered)

The channels should be placed inside the window frame so that the shade material falls in the center of the channel. The bottom sill channel fits between the two side channels.

For outside mount:

If the side channel has been ordered with mounting holes pre-drilled from the factory, face the ½" (1.25 cm) hole openings toward the room. Run the mounting screws through the smaller holes on the back side of the channels. Use the hole caps (supplied with outside mount only) to cover the holes after installation is complete. Refer to Figures 7 and 8.

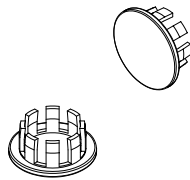


Figure 7. Hole caps for outside mount light lock channels

Place the optional bracket covers on each of the end brackets. The bracket covers are provided with either a magnetic or an adhesive strip and only need to be securely and firmly pressed against each bracket face.

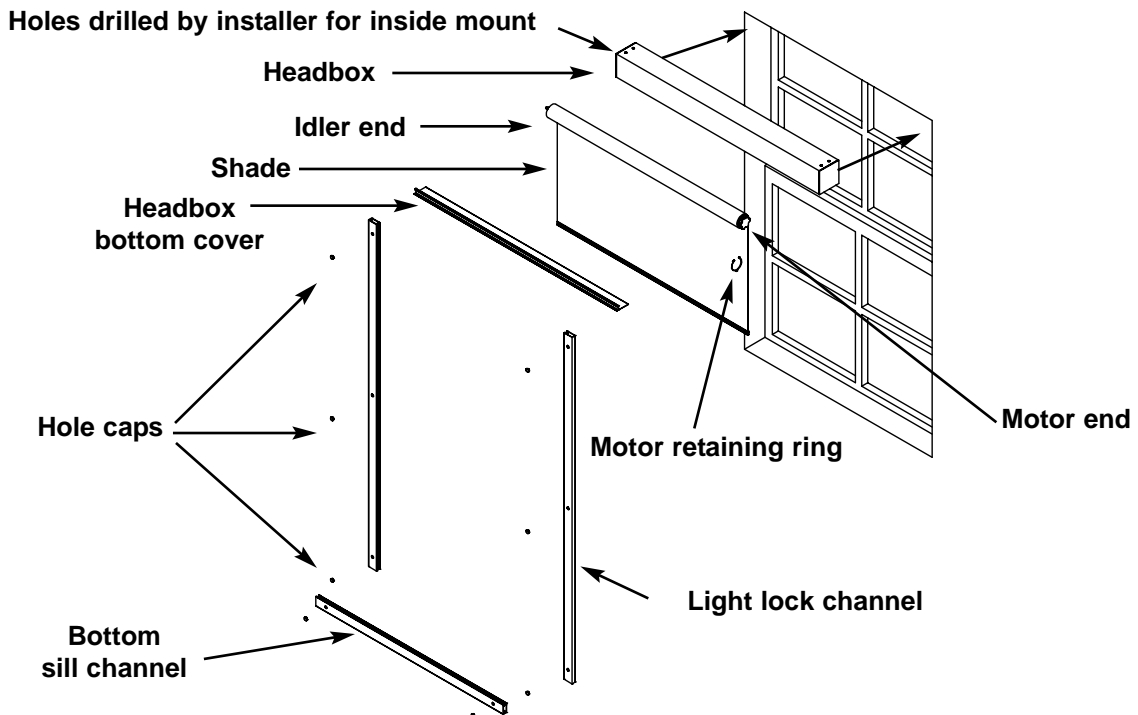


Figure 8. Attaching the headbox

ELECTRICAL CONNECTIONS

This section provides illustrations for various controllers and wiring schemes. There are many ways motorized roller shades can be wired, depending on a number of factors. This section includes some of the most common configurations. Contact the factory if you do not find instructions you need for your specific application.

Note: The control board layout shown may vary, though connection is essentially the same.

Single shade controlled by dry contact toggle switch

Figure 9 illustrates the wiring diagram for a single shade control with a dry contact toggle switch. The toggle switch is connected using the dry contact terminals as shown. If you need to control more than one shade with one toggle switch, the dry contact connections can be linked with wire from one control to another. Other dry contract controls can be used in place of the toggle switch.

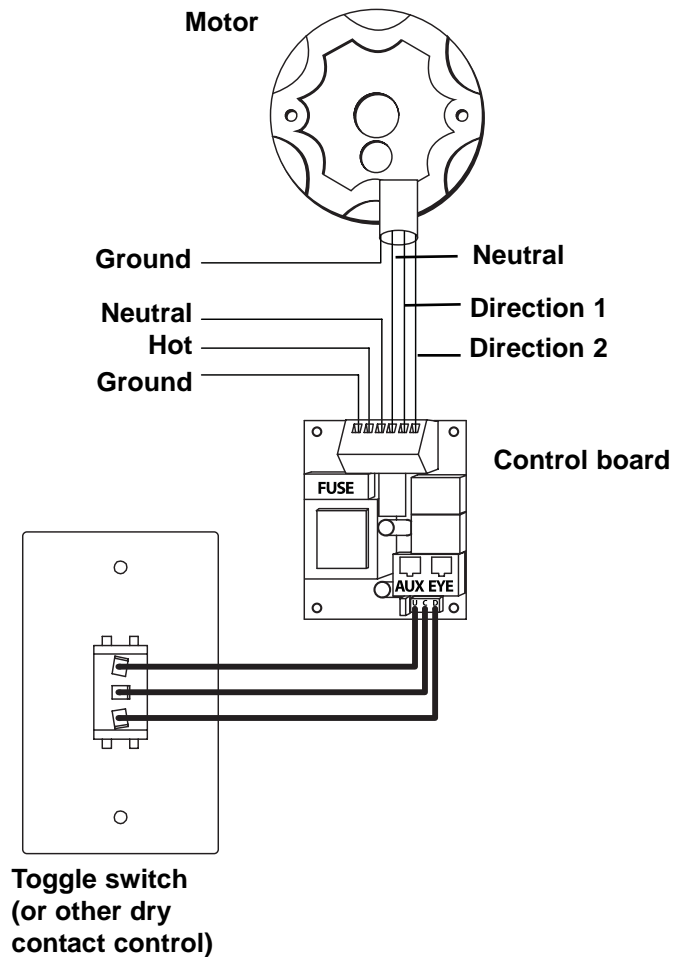


Figure 9. Single shade with dry contact toggle switch

Connecting a single IR (or RF)

Figure 10 illustrates the connection of a single shade to an infrared (IR) or radio frequency (RF) receiver for remote control operation.

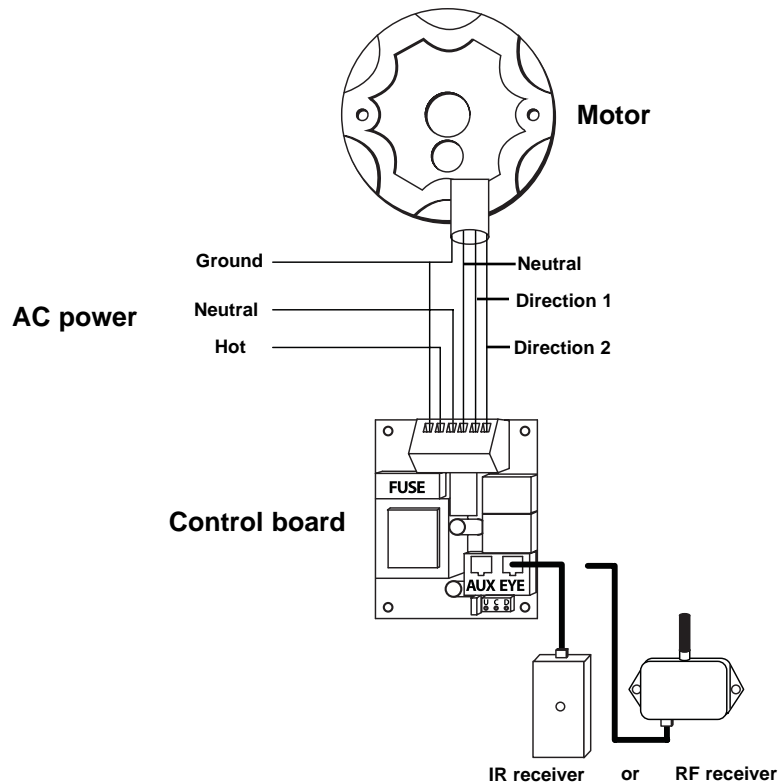


Figure 10. Connecting a single IR or RF receiver

Individual home runs

To operate multiple shades in a room by means of a hard-wired control system, use individual home run wiring. From the shade motors, run the wiring to the shade control panel where the individual shade controls are located.

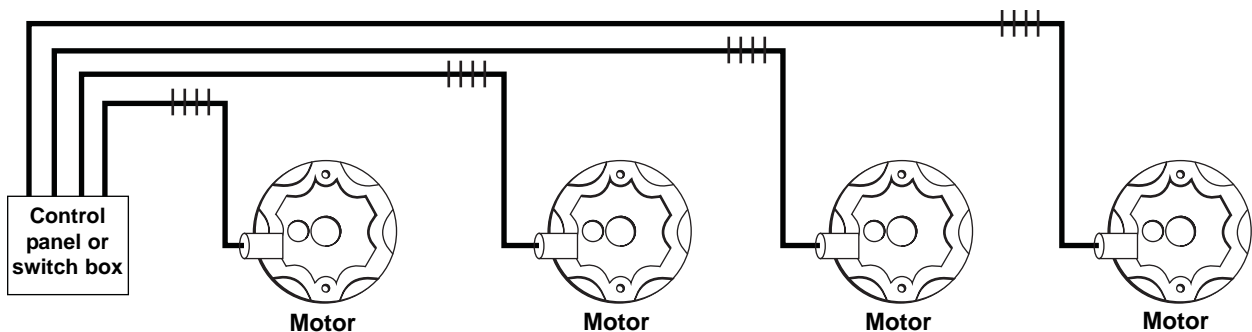


Figure 11. Individual home runs

Bus wiring

Complex systems may use a bus module to link auxiliary control equipment and multiple shades.

- ◆ Bus cables must be a 6-conductor straight-through cable terminated with a 6P6C RJ-25 connector.
- ◆ Maximum bus length is 1000 feet (305 m).
- ◆ Accessories should be no more than 100 feet (30.5 m) from their power source.
- ◆ Any accessory that is not a motor control unit must be plugged into an Eye port in order to receive power.
- ◆ You can plug an Eye to an Aux, or an Aux to an Aux, but never an Eye to an Eye. In Figure 12, between control boards 5 and 6, the bus cable goes from Aux to Aux so that the last component has an open Eye port for connection to accessory devices.

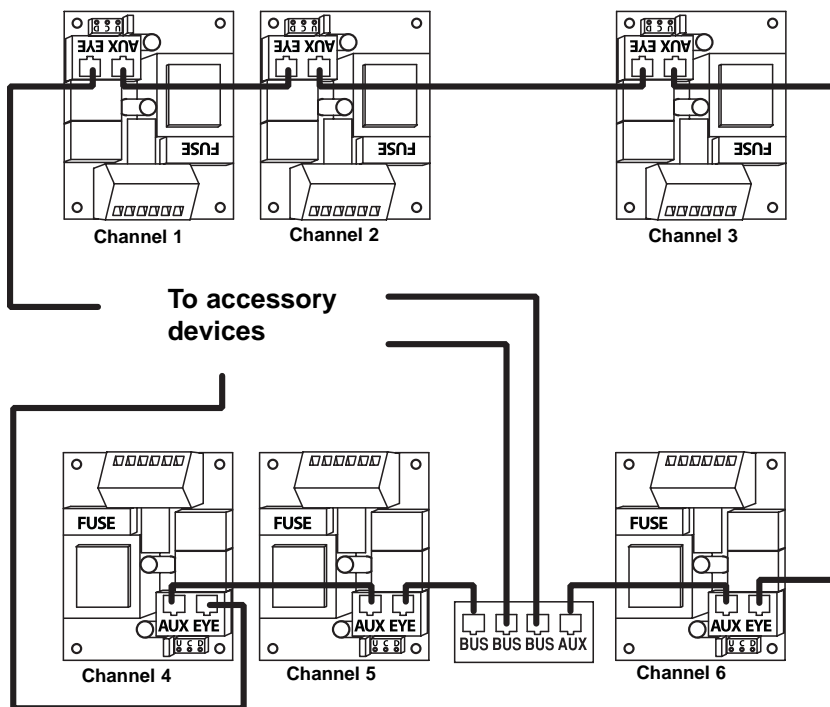


Figure 12. Bus wiring

Connecting control unit and multiple shades with RJ-11

The RF, IR, and RS-232 control connections are made with RJ-11 phone-style cable as shown in Figure 13. Plug the controls into the port labeled "Eye." The wire must be run straight. This means that, when looking at the end connections on a single line with the connectors oriented the same way, all the black wires should be on the same side. When connecting additional controls to the system, use RJ-11 cable linking the controls via an "Aux" port on the first control, and an "Eye" port on the next. Add additional controls by continuing the chain.

The bottom of the control should be placed in a deep junction box. The bottom of the control should be isolated to avoid electrical shorts.

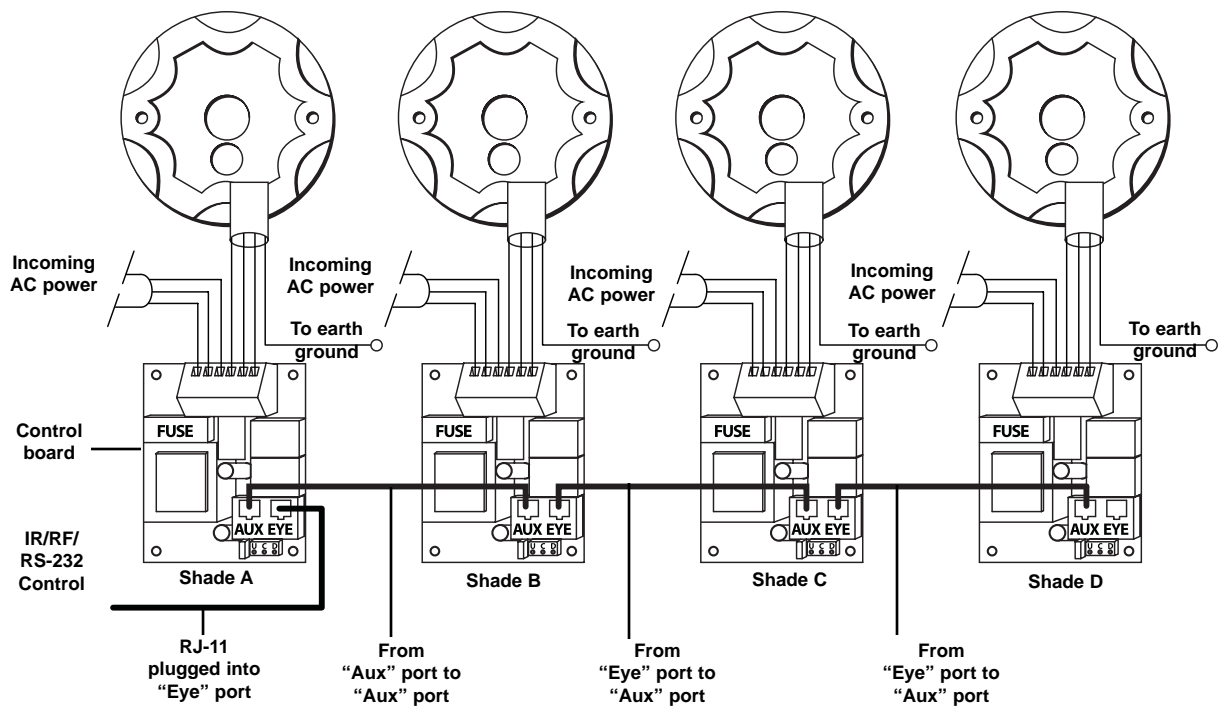


Figure 13. Connecting control unit and multiple shades with RJ-11

Connecting multiple shades to IR (or RF)

Figure 14 illustrates the connection of multiple shades to an infrared (IR) or radio frequency (RF) receiver for remote control operation. Note that the connections are made from the Eye port to the Aux port.

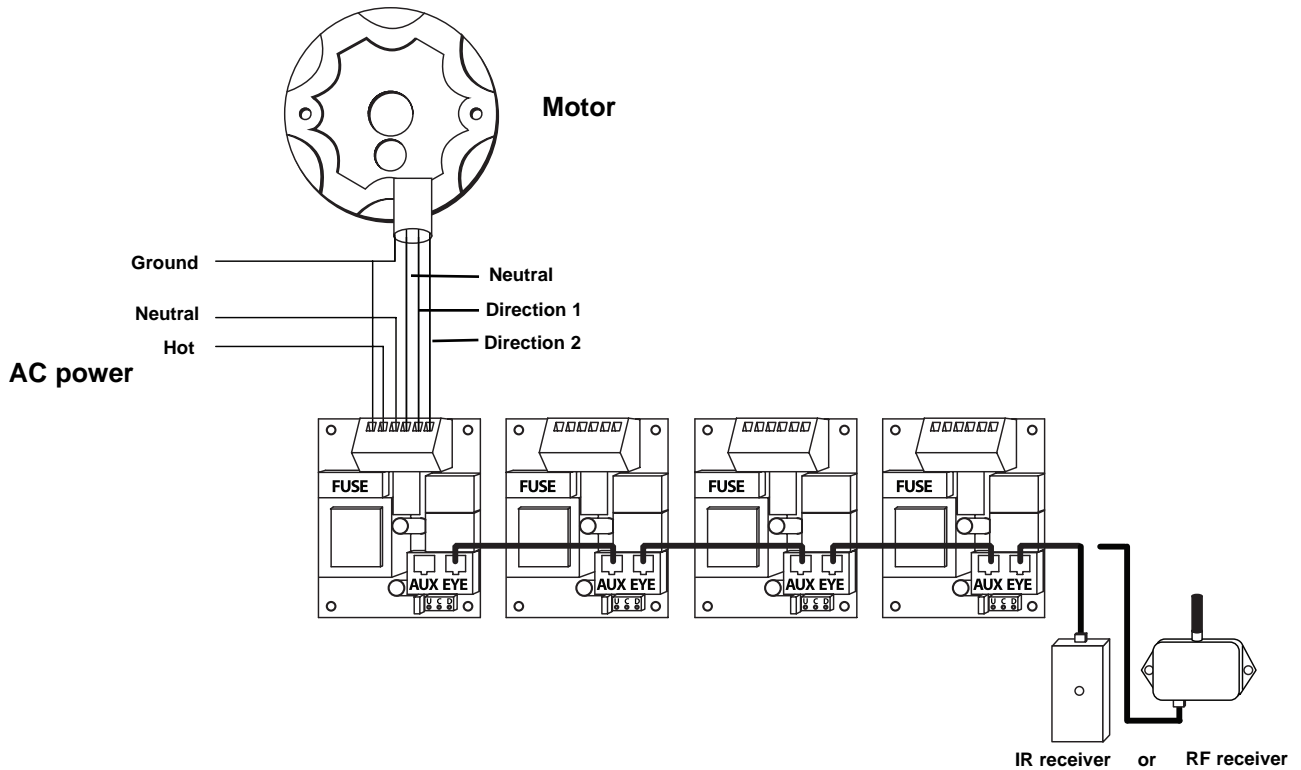


Figure 14. Connecting multiple shades to an IR control

Two shades with one wall switch (DPDT Wiring)

Figure 15 illustrates double pole, double throw (DPDT) wiring. This allows you to control two shades with one wall switch.

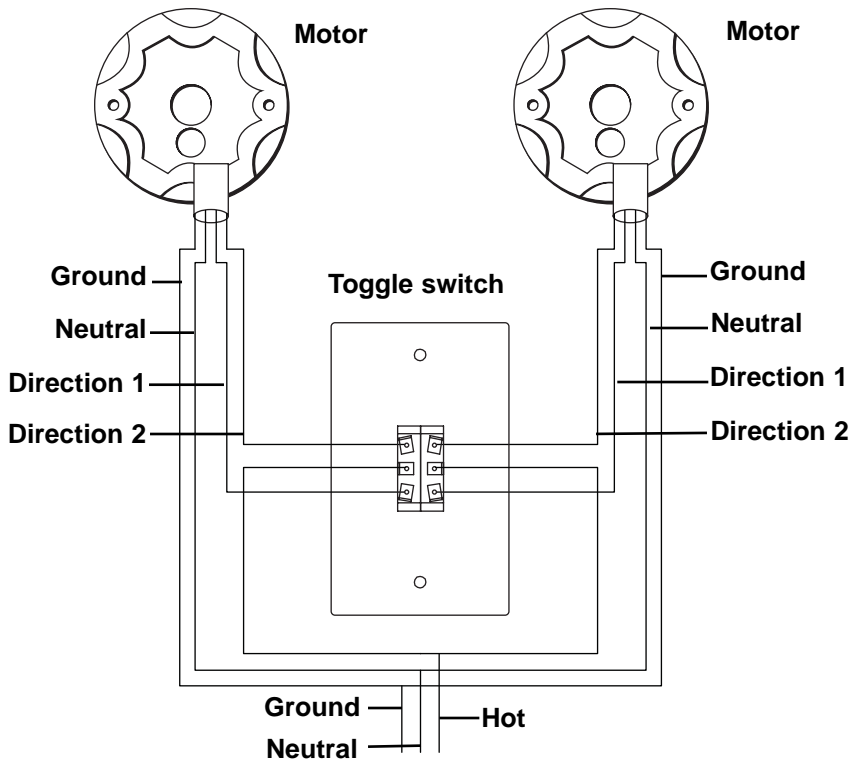


Figure 15. DPDT wiring; two shades connected by one wall switch

Single switch with isolated relays to two shades

If you want to control two shades with one switch use isolated relays. Refer to Figure 16.

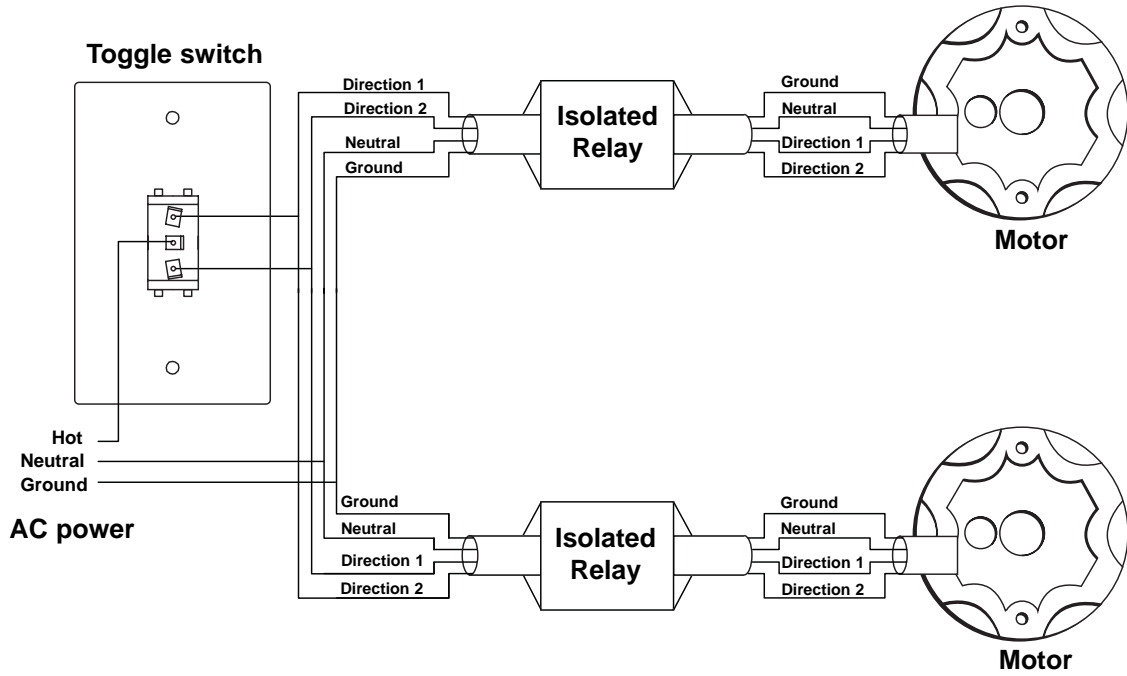


Figure 16. Single switch using isolated relays

Isolated relay parallel hookup

To control multiple shades with one switch or controller, you can use a parallel hookup with isolated relays. Refer to Figure 17.

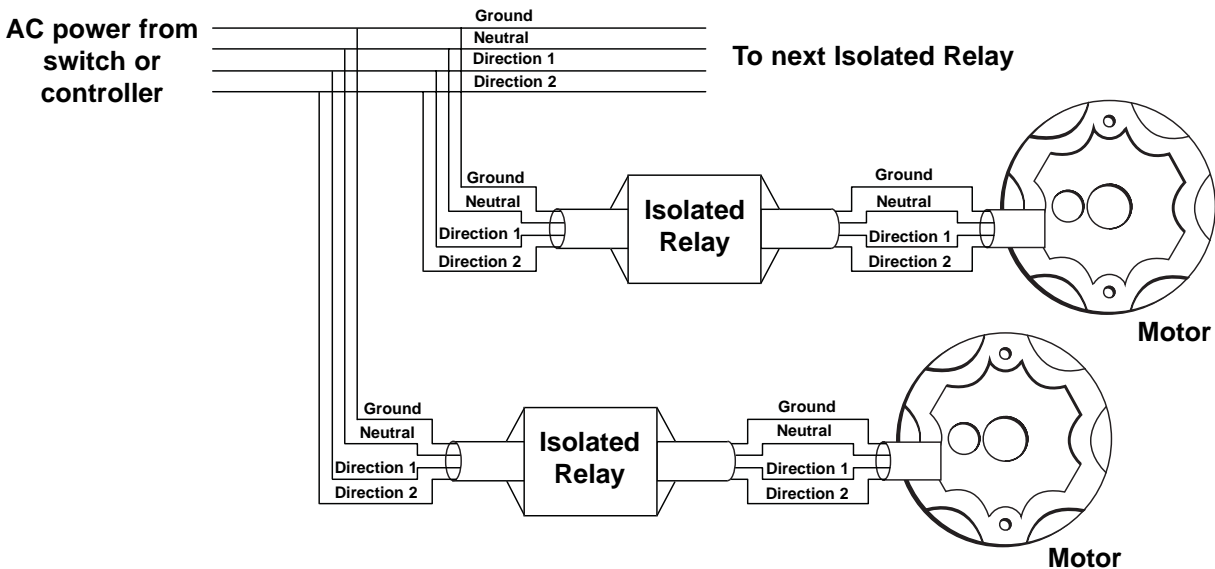


Figure 17. Isolated relay parallel hookup

OPERATING THE SHADES

The method you use to raise and lower the shades depends on the type of switch control device you have selected.

Note: The motor is designed to be used for short operations such as raising or lowering the shade. The motor is not designed for continuous duty. If the motor operates continually for more than a few minutes, it will automatically shut off to prevent damage from overheating. If the motor occasionally needs to be run more than normal, for example during initial setup and positioning, allow at least 15 minutes for the motor to cool down.

Caution

Do not operate the motor when any of the following occurs:

- ◆ **The unit emits any smoke, heat, abnormal noise or unusual odor.**
- ◆ **The unit is damaged in some way, such as damage from a water leak.**

If any of these situations occur, call a qualified service person.

Adjusting the shade limits

When you lower or retract a shade, it will stop at its preset limit. The limits are set at the factory according to the shade's dimensions. When operated, the shade should stop automatically at full open and full closed.

If adjustments are required, follow these steps:

1. Remove the yellow cap on the star-shaped motor end. Refer to Figure 18.
2. Press both the yellow and white limit buttons.
3. Lower the shade to the desired full closed position. Stop the shade at this length. Depress the button on the side where the fabric rolls out of the tube.
4. Raise the shade to the desired full open position. Stop the shade and then depress the second button.
5. Test the shade operation to verify that it stops at the full open and full closed positions.

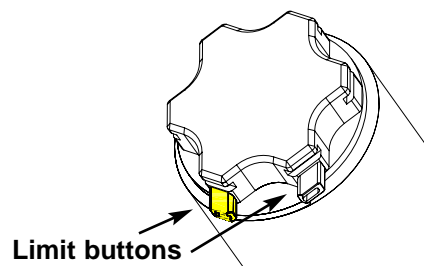


Figure 18. Motor head with limit button

CARE AND CLEANING

With reasonable care, you may expect many years of trouble-free use of your Stewart Shades. Under normal conditions, no maintenance (such as lubrication or adjustments) is required. However, proper care of your shade fabric is essential for long service life.

- ◆ Periodically check shade operation to confirm the fabric rolls up evenly on the roller tube. Irregularity in shade roll-up could result in damage to the outer edges of the shade fabric.
- ◆ Be sure nothing obstructs the shade fabric movement. Objects setting on the window sill or inserted into the light lock channels will impede proper shade operation and may cause severe damage.

Cleaning the shade fabric

We encourage you to keep your shades clean. Avoid getting any foreign material on the screen. It may not be possible to remove scratches, paint, ink, etc.

Vinyl, polyester, and fiberglass materials can usually be cleaned with a soft brush or clean cloth using a very mild detergent and distilled water. Never use window cleaner or any ammonia-based compound. Always rinse the fabric if detergent is used.

On flocked fabrics, use only distilled water (no detergent).

If you are not sure which type of fabric you have, contact the factory or use only distilled water.

Never use abrasives, or rub the fabric hard, as doing so may discolor or otherwise damage the material.

Cleaning hardware components

Wipe hardware components (brackets and extrusions) with a soft clean cloth, which may be dampened with water if necessary. DO NOT use cleaning fluids or abrasive materials of any kind, as this may damage the finish of any metal or plastic materials.

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

Refer to the following guidelines if you encounter a difficulty in the operation of your Stewart Shades. Problems related to electrical or motor function may require a qualified service person or electrician.

Should you have a problem that is not addressed here, call the Stewart Filmscreen Corporation.

Problem description	Probable cause	Action to take
Shade motors won't operate.	No AC power available.	Check to see if the circuit breaker has switched off. Reset if needed. Check voltage availability. Contact an electrician.
Shades won't roll up or down (even though power is available).	Improper connection at switch or other terminal point.	Have an electrician or qualified service person check the connections.
Roller chatters when power is activated.	Can be caused by voltage drop, improper connections, or a defective switch.	Have an electrician or qualified service person check all hook-ups including all outboard wiring.
Shade drops when up direction is activated (grinding noise occurs).	Drop in voltage.	Motor requires full voltage. Have an electrician or qualified service person check available voltage.
Dirt, finger prints, marks, etc. on shade surface.	Improper handling of shade.	Refer to the section "Care and cleaning" on p. 19.

Limited One Year Warranty on Stewart Filmscreen Corp Products

STEWART FILMSCREEN CORPORATION (Stewart) warrants its products 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 product 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 product or part to Stewart, transportation expenses to and from Stewart are payable by the purchaser and Stewart is not responsible for any damage that may occur during transportation. 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 Filmscreen product, 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.

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F I L M S C R E E N

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