

Retractable, Below Ceiling Screen System





The Reference for Stunning™

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TO THE OWNER

Congratulations on purchasing the finest optical viewing screen in the world.

Your handcrafted Cabaret projection screen has been carefully inspected to ensure your optimal viewing experience will last for many years. Please take a moment to review this manual. It will guide you through the installation and the operation of your screen and will also provide you with detailed instructions on how to care for your screen's viewing surface.

From all of us at Stewart Filmscreen, we would like to thank you for choosing Cabaret. Should you have any questions, please don't hesitate to contact our customer service department at 1 (310) 784-5300, or toll free at 1 (800) 762-4999. We're here to help.

Jose Garcia Small Electric Screen Craftsman

ABOUT CABARET

The Stewart Filmscreen Cabaret offers a premium below ceiling viewing experience. With optional bracketing, the stylish contemporary case allows the screen to deploy either close to the wall or away from the wall, in front of your wall décor. With your choice of control options, LED lighting, paint color, and mounting options — along with Stewart's world-renowned premium screen materials — the Cabaret is one of our most advanced screen systems ever.

This owner's manual may describe options and features not equipped to the specific screen you have purchased.

IMPORTANT SAFETY INFORMATION

- > Carefully read the instructions.
- > This screen must be installed by a qualified electrician.
- > For supply connections, use wires rated for at least 75 C.
- > Use copper or aluminum conductors.
- > For indoor use only.
- > Do not connect low voltage to line voltage power.
- > Earth ground terminal connection must be made as shown in wiring diagrams.
- Proper short circuit and overload protection must be provided at the circuit breaker distribution panel. You may use up to a 20 amp maximum circuit breaker with adequate short circuit breaking capacity for your installation.

USING THIS MANUAL FOR INSTALLATION

If you are using this manual to install the Cabaret screen, you should be aware that it describes procedures for two types of mounting options. You must refer to the section for the type of mounting system you are utilizing.

For the instructions related to your specific mount type, refer to the appropriate page:

- Wall Mount (Page 10)
- Plasma Mount (Page 12)
- Ceiling Mount (Page 14)

For the instructions related to your specific controls, refer to the appropriate page:

- IR remote and receiver (Page 17)
- > 12 volt projector trigger (Page 19)
- > IR wall switch and receiver (Page 20)
- > Decora paddle wall switch (Page 21)
- IBT-100 for RS-232C interface (Page 22)

For the instructions related to the optional LED system, refer to (Page 23).

PREPARING THE INSTALLATION

Before proceeding with the installation of this screen, take time to thoroughly read and understand these installation instructions. Failure to comply with the instructions contained in this manual may result in voiding your warranty.

SPECIFICATIONS

Specifications regarding the individual screen dimensions, weight, etc., are provided by the factory when the unit is ordered.

Before beginning the installation

- Check the size and weight of the screen to be installed so that you can plan for the number of people required for installation.
- You will need at least two people to mount the smaller screens. More are needed for larger, heavier screens.

What's inside the box?

Inside your Cabaret unit box, you will find everything needed to get started enjoying your Stewart screen:

- > Cabaret unit, preassembled and prewired
- > Two wall mounts or plasma mounts or ceiling mounts (depends on what was ordered)
- Packing material
- > IR remote and IR receiver (standard control)
- Cabaret Quick Start Guide

You will need

- > A level
- A drill
- > A drop cloth
- > Tools for tightening fasteners
- > Ladders for the personnel supporting the screen during the mounting process
- > Fasteners appropriate for the surface on which the screen is being mounted
- We suggest a self-leveling laser due to the dual mounting of the wall or ceiling mounts. Both mounts will need to be accurately leveled to each other.

PREPARING THE INSTALLATION (CONTINUED)

Note: Bolts and other fasteners for the screen are standard gauges and sizes used in the U.S., regardless of the installation country. For this reason, sizes are expressed in inches rather than metric measurements.

Do not stand on the screen case or store it on its end. This will cause screen damage. If you are not going to install the screen immediately, make sure it remains horizontal during storage. Note: Failure to comply with the instructions and guidance contained in this manual may result in voiding your warranty.

Unpacking

Be sure to unpack carefully in a clean area. Use special care when handling the screen so that it does not become soiled or damaged. If you plan to repack your screen and hardware for transportation to another location, you may want to photograph or make a note of how it was packed. Retain the packing material for future use, if desired.

The Cabaret screen may have special retainers for the batten. These items may be left in place until after the screen has been mounted (see Figure 1).

IMPORTANT: Remove all batten retainers prior to activating the unit. Failure to do so will cause damage to the screen material. There will be one batten retainer on each end of the unit. Larger units come with an additional batten retainer on the middle of the unit. A single screw holds each batten retainer in place (see Figure 2).

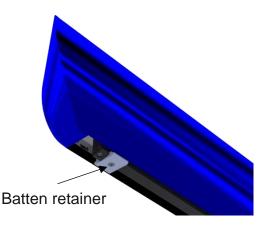


Figure 1: Cabaret bottom view with batten retainer

One

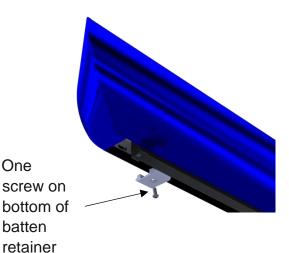


Figure 2: Cabaret bottom view with batten retainer removed

PREPARING THE INSTALLATION (CONTINUED)

When installing your Cabaret using any of the three mounts, there are a couple things to consider to make the installation a smooth and easy operation.

Wall Mount

If the selected mounting option during purchase was wall mount, then you will receive two wall mounts. Each mount has one hole pre-drilled to ensure that at least two studs are utilized for mounting (see Figure 3).



Figure 3: Cabaret wall mount (Front and back)

If the selected mounting option during purchase was wall plasma mount, then you will receive two wall plasma mounts. Each mount has one hole in the middle of the mount to push any wiring through and into the wall. The rear of the mount also has four holes to ensure that at least two holes on each mount are utilized for mounting onto a wall stud (see Figure 4).

Wall Plasma Mount



Figure 4: Cabaret plasma mount (Front and back)

Ceiling Mount

If the selected mounting option during purchase was ceiling mount, then you will receive two ceiling mounts. Each mount has two holes pre-drilled on top to ensure that at least two screws go into a ceiling stud (see Figure 5).

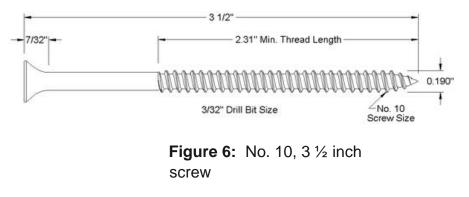


Figure 5: Cabaret ceiling mount

PREPARING THE INSTALLATION (CONTINUED)

Fasteners

The type of fasteners used for mounting is critical. This screen is too heavy to be mounted with molly or any other type of expanding wall anchors. They will pull away and fall if mounted to drywall. Additionally, if other weak fasteners are used, the Cabaret unit may fall. Be sure to use a total of two No. 10, 3 ½ inch deck screws on each mount (see Figure 6).



WALL MOUNT

Professional mounting techniques should be used. Stewart Filmscreen cannot be liable for substandard or faulty installations. Failure to comply with the instructions and guidance contained in this manual may result in voiding your warranty.

A CAUTION

Be careful not to touch or scratch the viewing surface.

Ensure that the wall surface is level and free of undulations. Use shimming if necessary.

This screen is too heavy to be mounted with molly or any other type of expanding wall anchors. They will pull away and fall if mounted to drywall.

- 1. Identify the location of wall studs where you can secure the wall mounts.
- 2. Use a level to accurately position the wall mounts on the wall (see Figure 7), and make certain that both wall mounts are within 12 inches from either edge of the case. This will prevent the case from tilting to either side.
- 3. Drill holes through the wall mounts into the studs.
- 4. Use 3 ½" screws to secure the wall mounts to the wall studs.
 - a. Note: These are heavy units. This screen must be mounted to studs or onto a wall with a continuous plywood sheath below the surface treatment (see Figure 7).

Check to make sure the wall mount is level.

- 5. Carefully lift and hook the channels on the back of the housing onto the wall mounts (see Figure 8).
- 6. For the minimum clearance dimensions, (see figure 9).

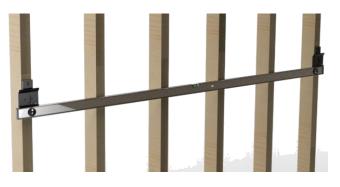


Figure 7: Wall mounts leveled and attached to two or more wall studs

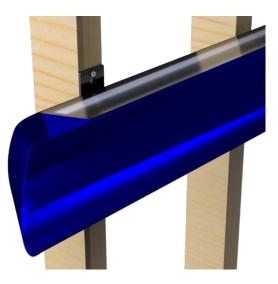


Figure 8: Back part of case hanging off wall mount

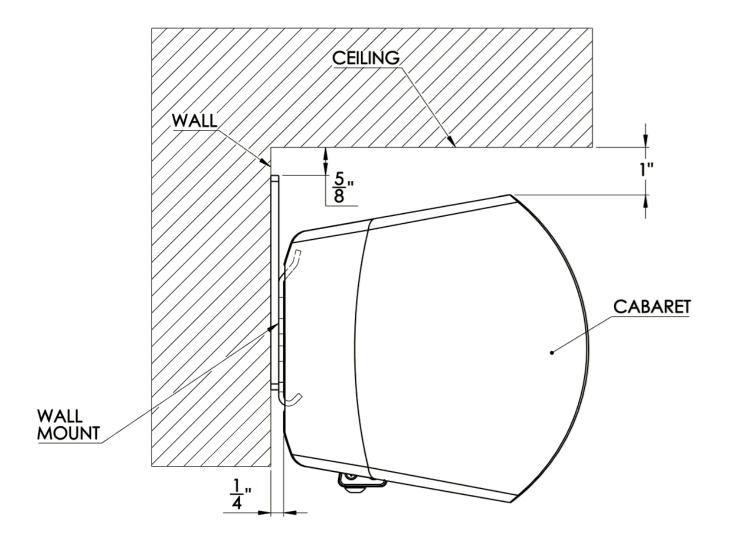


Figure 9: Wall mount detail with minimum clearance

PLASMA MOUNT

Professional mounting techniques should be used. Stewart Filmscreen cannot be liable for substandard or faulty installations. Failure to comply with the instructions and guidance contained in this manual may result in voiding your warranty.

Be careful not to touch or scratch the viewing surface.

Ensure that the wall surface is level and free of undulations. Use shimming if

- 1. Identify the location of wall studs where you can secure the plasma mounts.
- 2. Use a level to accurately position the plasma mounts on the wall (see Figure 10), and make certain that both wall mounts are within 6 inches from either edge of the case. This will prevent the case from tilting to either side.
- 3. Drill holes through the plasma mounts into the studs.
- Use 3 ¹/₂" screws to secure the wall mounts to the wall studs.
 Note:

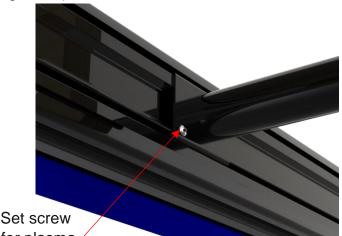


Figure 10: Plasma mounts leveled and attached to two wall studs

- a. These are heavy units. Plasma mounts must be mounted to at least one wall stud per mount or to a continuous plywood sheath below the surface treatment (see Figure 11).
- b. Check to make sure the wall mount is level.
- 5. Carefully lift and hook the channels on the back of the housing onto the plasma mounts. Add the ¼"-20 set screw onto the plasma mount to prevent unwanted movement (see Figure 12).
- 6. For the minimum clearance dimensions, (see figure 13).



Figure 11: Plasma mount mounted with cover sliding on



for plasma mount

Figure 12: Back part of case hanging off plasma mount

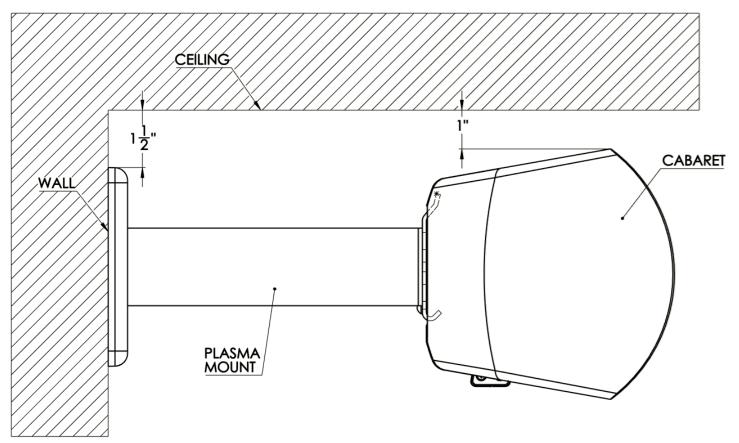


Figure 13: Wall mount detail with minimum clearance (plasma mount length will vary depending on your order)

CEILING MOUNT

Professional mounting techniques should be used. Stewart Filmscreen cannot be liable for substandard or faulty installations. Failure to comply with the instructions and guidance contained in this manual may result in voiding the warranty.

During installation, do not place the unit on an unstable cart, stand, table or ladder. The unit may fall, causing injury to you or others as well as cause possible damage to the unit.

Do not mount to drywall only. There must be wood joists behind the drywall to secure the screen.

- Use a magnetic stud finder, or similar appropriate means, to identify the location of solid ceiling joists. If the joists or rafters are parallel to the screen case, blocking is required between structural elements.
- 2. Use a level or other straight edge to properly align both ceiling mounts as straight as possible. Make certain that both wall mounts are within 6 inches from either edge of the case. This will prevent the case from tilting to either side.
- Screw the ceiling brackets into the joists (see Figure 14). Ensure the screws are mounted to solid wood and that both ceiling brackets are properly aligned to each other.
- Lift the case up to the ceiling and into the mounting brackets. Gently slide case backwards, up, and into the ceiling bracket to engage and lock in place (see Figure 15).
- Lastly, add the ¼"-20 set screw onto the ceiling mount to prevent unwanted movement.
- For the minimum clearance dimensions, (see figure 16).

Set screw for ceiling mount



Figure 14. Ceiling brackets screwed onto ceiling joists

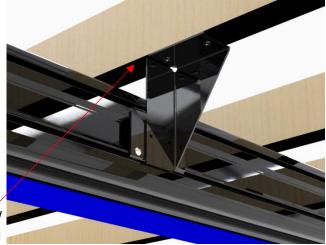


Figure 15: Cabaret case extrusion hanging off of ceiling mount

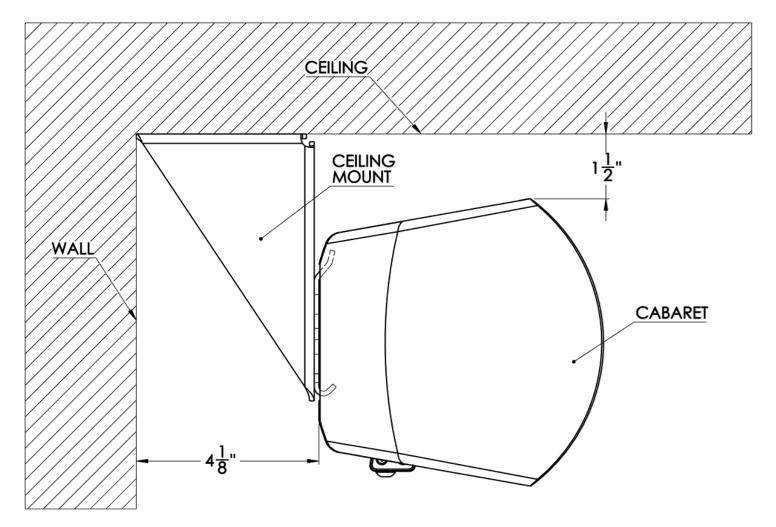


Figure 16: Ceiling mount detail with minimum clearance

ELECTRICAL

The Cabaret screen system can be controlled through IR remote control, keypads, dry contact outputs, internet protocol (IP), and low-voltage trigger outputs.

Cabaret is to be installed and used within the scope of the appropriate electrical codes and regulations. Failure to do so may cause malfunctioning or damage to the screen.

Note: This manual refers to AC (electrical alternating current) to represent electrical power. Your location may use 120 V, 220 V, or other electrical power. Screen systems are manufactured using the electrical power type specified for the location. Use appropriate power sources for your location.

MOTOR WIRING

The Cabaret' screen system's motor is prewired at the factory. No additional motor wiring is required.

The following pages will outline standard and optional control types for Cabaret.

Connections

The following Stewart Filmscreen accessories can be wired into the cabaret RJ25 or dry contact/trigger wire on the rear, audience left side of the case.

- IR wall switch
- IBT-100 for RS-232 (third party automation)
- Decora wall switch
- > Projector trigger

IR RECEIVER AND REMOTE (STANDARD)

A 3-button IR (infrared) remote control (see Figure 17) is supplied for the standard control system IMC (see Figure 18). The IMC control board comes ready to be operated via IR and projector trigger right out of the box. You may visit <u>StewartFilmscreen.com</u> for a full list of IR Hex codes if you want to program the IR to another remote.



then the receiver will be pre-installed at the factory. No further connections need to be made by the customer or installer. Simply plug in the power and use the supplied 3 button remote to operate the screen.

Note: Cabaret may come with one RJ25 male output (if equipped). The maximum length of the RJ25 cable plugged into the unit shall not exceed 50'.

Dry closure modules from any home automation system can be interfaced, utilizing up/down/common type terminations **only** on the dry contact/trigger cable (see Figure 19).

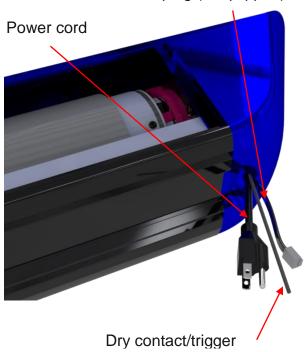


Figure 19: Rear, audience left of case with 10 ft. power cord, RJ25 output (if equipped) and a dry contact/trigger wire

IMC WITH IR RECEIVER AND REMOTE (CONTINUED)

OPERATION

Note: After the screen has been properly mounted, check that the batten retainers have all

been removed. Using the IR remote, press the "down" button and the Cabaret screen will automatically extend fully to its preset limit and will power itself off. Press the "up" button once, and the Cabaret screen will automatically retract back into the case and power itself off. If a custom position is desired, simply press the "stop" button at any time during the screen's deployment or retraction.

Note: See the section, "Adjusting Screen Deployment" (see Page 30), for information regarding the default limits to which the screen can be adjusted up or down from the factory preset.

12 VOLT PROJECTOR TRIGGER (STANDARD)

The dry contact/trigger wire, coming out of the rear audience left of the case, can be used to terminate a triggering system for the projector. Since Stewart Filmscreen cannot be certain how long of a cable will be needed for every single application, the trigger cable will have to be assembled by the installer. (Figure 20) below shows what the dry contact/trigger wire looks like and how to terminate the trigger functionality.

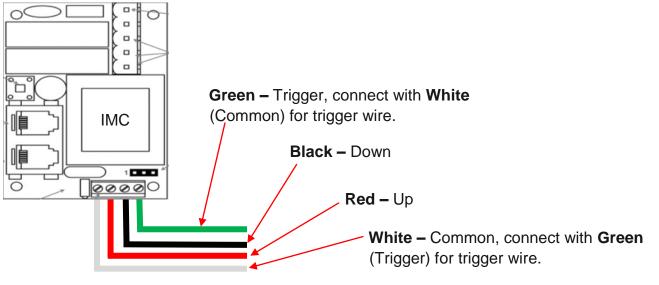


Figure 20: IMC Low Voltage connections for Dry Contact/Trigger wire

HOW IT WORKS

When a trigger-signal equipped projector is turned on or off, voltage is either supplied or withdrawn via a class II two-conductor wire connected to the screen. 12 volts DC, 200 milliamps, should be applied to Green and White wires with the + voltage on Green. When 12 volts is no longer present, the screen will retract. The projector delivers between 5 and 12 volts when it is powered. The screen control (IMC) interprets this voltage as a prompt to deploy the screen. If there is a sudden change in voltage, the motor is paused for ½ of a second before reversing direction. This is to prevent strain on the motor mechanism and to prevent damage to any material controlled by the motor. The IMC is designed to be energized constantly, so that it can react promptly and accurately to the control options you have selected for your specific installation. When the projector and screen are energized, the control system relay is also energized. In the retracted position, relays are automatically de-energized after 120 seconds of operation to reduce power consumption.

IR WALL SWITCH AND REMOTE (IF EQUIPPED)

A 3-button IR (infrared) remote control (see Figure 17) is supplied in conjunction with the 3 button IR (infrared) wall switch (see Figure 21) for the IMC (see Figure 18). The IMC control board comes ready to be operated via IR and projector trigger right out of the box. You may visit <u>StewartFilmscreen.com</u> for a full list of IR Hex codes if you want to program the IR to another remote.

GETTING STARTED

Making the Connections

- 1. Locate the RJ25 accessory plug cable on the back of the Cabaret (see Figure 19).
- 2. Connect the male RJ 25 accessory plug cable into the IR wall switch female RJ25 port (see Figure 22).
- 3. Install the IR wall switch anywhere in the room, making sure that there are no obstructions between the eye and the screen.
- 4. Please note that you may want to hide the cable inside your wall to ensure a clean install.

Note: Cabaret may come with one RJ25 male output (if equipped). The maximum length of the RJ25 cable plugged into the unit shall not exceed 50'.

OPERATION

After the screen has been properly mounted, check that the batten retainers have all been removed. Using the IR remote, press the "down" button and the Cabaret screen will automatically extend to its preset limit and will power itself off. Press the "up" button once and the Cabaret screen will automatically retract back into the case and power itself off. If a custom position is desired, simply press the "stop" button at any time during the screen's deployment or retraction.

Note: See the section, "Adjusting Screen Deployment" (see Page 30), for information regarding the default limits to which the screen can be adjusted up or down from the factory preset.



Figure 21. Front of IR wall switch



Figure 22: Rear of IR wall switch with RJ25 input

DECORA PADDLE WALL SWITCH (STANDARD IN BOX)

A three position momentary wall switch (see Figure 23) can be equipped with the standard IMC control. The IMC control board comes ready to be operated via the Decora paddle wall switch right out of the box.

GETTING STARTED

Making the Connections

- 1. Make an extended wire connection to the four conductor wire from the dry contact/trigger cord from the back of the Cabaret case.
- 2. Cut the other end of the wire and expose the four conductors.
- 3. Connect your wires to the Decora wall switch with the corresponding colors (see Figure 24).

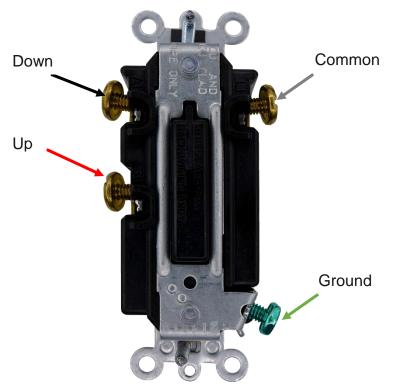




Figure 23: Front of Decora wall switch

Figure 24: Rear of Decora Wall Switch

Decora wall switch is to be wired through the dry contact/trigger cord only. The dry contact/trigger cord is low voltage. Do not wire the wall switch through a high voltage power line.

IBT-100 for Serial (RS-232C) CONNECTIVITY (IF EQUIPPED)

An IBT-100 can be equipped to plug in through the RJ accessory plug on the back of the Cabaret case on the audience left side. This unique piece of hardware combined with its integrated firmware and optional ancillary software can be used to interface CS-Bus controllers with external RS-232C networks to enable seamless bi-directional control and feedback. The IBT-100 can also control the LED control system (ILC) through the same RJ25 accessory plug on the audience left side.

GETTING STARTED

Making the Connections

- 1. Locate the RJ25 male cable from the back of the Cabaret case (see Figure 19).
- 2. Connect the RJ25 male cable to the RJ25 female port on the IBT-100 (see Figure 25).
- 3. Connect your third party RS-232C connection to the female RS-232C port on the IBT-100.

Note: Cabaret may come with one RJ25 male output (if equipped). The maximum length of the RJ25 cable plugged into the unit shall not exceed 50'.



Figure 25: IBT-100, showing RJ25

For more information on how to set up the IBT-100 and how to program into your home automation system, please visit the <u>converging systems online manual</u>, page 4, linked here.

LED CONTROL SYSTEM (IF EQUIPPED)

Cabaret can be optioned with a state of the art LED system which can be controlled with a standard IR remote via an inboard IR receiver (see figure 26) or an 11-button IR digital keypad (optional) (see Figure 29). On the audience right, you will find the ILC (Intelligent Lighting Control) control board (see Figure 27) which communicates directly with the IMC that is already onboard to control the screen (see Figure 18). You may visit <u>StewartFilmscreen.com</u> for a full list of IR Hex codes if you want to program the IR for the LEDs to another remote. If you are adding the ILC after the fact, be sure to connect the IMC on PORT – 1 from the ILC on PORT – 1 (see Figure 34) using CAT V cable. Visit the <u>Converging Systems manual for more information on the ILC</u>.



Figure 26: IR remote and receiver

GETTING STARTED

Making the Connections

If an IR receiver is optioned at the time of purchase, then the receiver will be pre-installed at the factory. No further connections need to be made by the customer or installer. Simply plug in the power and use the supplied handheld remote to operate the LEDs.

Note: Cabaret may come with one RJ25 male output (if equipped). The maximum length of the RJ25 cable plugged into the unit shall not exceed 50' (see Figure 28).

Any home automation system needs to plug into the IMC's PORT - 0. No connection to the ILC is necessary.

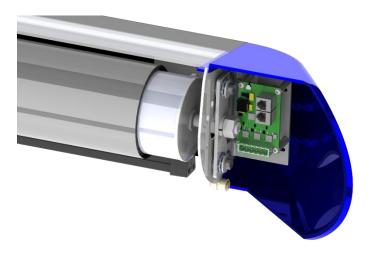


Figure 27: ILC control system on audience right

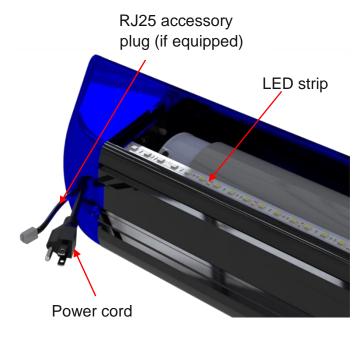


Figure 28: Rear, audience right of case with power cord, RJ25 output (if equipped) and LED strip inside case under the acrylic-glass top

IR WALL SWITCH AND REMOTE FOR LED (IF EQUIPPED)

An 11-button IR (infrared) remote control (see Figure 26) is supplied in conjunction with the IR wall switch (see Figure 29) for the ILC (see Figure 27). Instead of receiving an IR receiver eye inside the case, you will get a wall switch with the eye built in.

GETTING STARTED

Making the Connections

- 5. Locate the RJ25 accessory plug cable on the back of the Cabaret on audience right side (see Figure 28).
- Connect the male RJ 25 accessory plug cable into the IR wall switch female RJ25 port (see Figure 30).
- 7. Install the IR wall switch anywhere in the room, making sure that there are no obstructions between the eye and the screen.
- 8. Please note that you may want to hide the cable inside your wall to ensure a clean install.

Note: Cabaret may come with one RJ25 male output (if equipped). The maximum length of the RJ25 cable plugged into the unit shall not exceed 50'.



Figure 29: Front of IR wall switch



Figure 30: Rear of IR wall switch with RJ25 input

OPERATING THE SCREEN

The method you use to raise and lower the screen depends on the type of control system and motor you have installed.

A CAUTION

Be careful not to touch or scratch the screen's viewing surface.

Note: When you lower or retract the screen, it will stop at its preset limit. If an obstacle, such as a person or any furniture, is in the path of the screen as it is lowered, use the switch control to stop the screen's motion. The screen will *not* automatically stop if it hits an obstacle.

The motor is designed to be used for short operations such as lowering the screen in preparation for viewing. The motor is not designed for continuous duty. If the motor operates continually for more than a few minutes, it may automatically shut off to prevent damage from overheating. If the motor occasionally needs to be run more than normal, i.e., during initial setup and positioning, allow time for the motor to cool down.

In general, when the screen is not in use, you should store it in the fully retracted position to protect the screen's surface. It is best practice however, to deploy the screen for extended periods. Periodic deployment on a regular basis will maximize the flatness and uniformity of the screen's surface. The screen benefits from frequent and extended periods of deployment.

If the unit emits any smoke, heat, abnormal noise or unusual odor, the unit is most likely damaged in some way — such as damage from a water leak or power surge. Do not operate the motor if any of these situations occur. Call a qualified service person for assistance.

INTELLIGENT MOTOR CONTROL (IMC) WIRING

The IMC is a low voltage screen control that allows for switching conductors to be run in Class II (small wire, exposed, no conduit) and will interface with outboard video switching systems.

The IMC has the capability of being operated through a wall switch, infrared remote, radio frequency remote, internet protocol (IP) control system, and a screen trigger through a projector. The IMC is the most robust controller offered for Cabaret. For a detailed look at what the IMC has on board, please see below (see Figure 31).

Note: The IMC comes from the factory, prewired to the motor and to the power cable. For servicing purposes, the pin layout for the high voltage side of the connections is provided (see Figure 32). Always have a qualified electrician handle high voltage connections.

AC load side	IMC 100	Motor Power Connectors
BLACK	Pin 1	AC Line +
WHITE	Pin 2	AC Neutral
NC	Pin 3	Motor RED Line
NC	Pin 4	Motor BLACK Line
NC	Pin 5	Motor Neutral
GREEN	NC	Connect Ground to "Grounding" lug on IMC housing. Also connect ground wire from motor housing to same lug

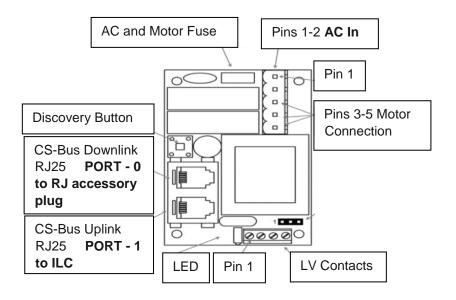


Figure 31: IMC control board schematic

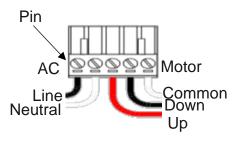


Figure 32: High voltage pin schematic

INTELLIGENT MOTOR CONTROL (IMC) WIRING (CONTINUED)

The IMC can be wired to any dry contact wall switch (see Figure 33). If you would like a wall switch, you may order directly from Stewart Filmscreen.

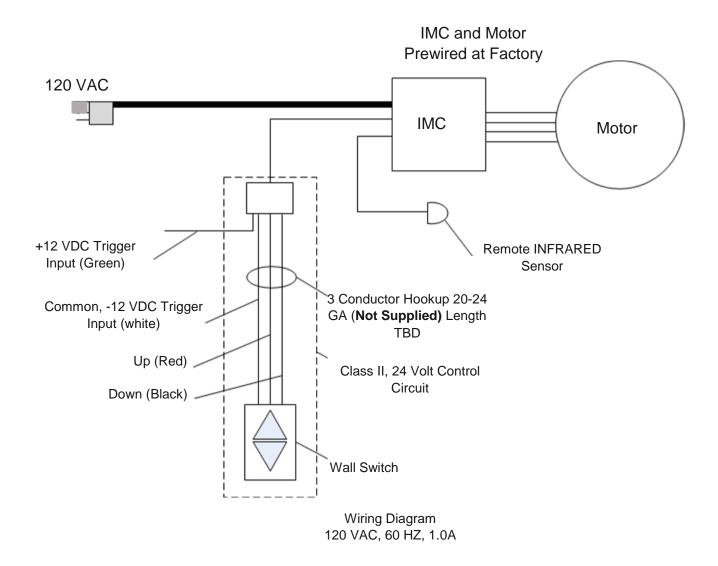


Figure 33: IMC wiring diagram

IMC SPECIFICATIONS

Network (IP) Connection	Through Separate (Single) e-Node
RS-232c Connection	Through Separate (Single) IBT-100
Compliance	ETL Listing to UL 325, FCCA, CE, RoHS
Dimensions	.78" x 2.75" x 1.1"

INTELLIGENT LIGHTING CONTROL (ILC) WIRING

The ILC is a state of the art controller for RGB (full color) component LED strips. Unlike traditional LED lighting controllers which simply activate and in some cases dim LED elements, the ILC allows over 16 million colors to be user selected, saved in memory and dimmed to any level. For ease of color selection, an embedded color computer permits any hue to be easily selected with the simple press of a button.

The ILC has the capability of being operated through a wall switch, infrared remote, and digital wall keypad through **PORT – 0**. PORT – 0 is typically seen as the RJ25 accessory plug on the audience right side of the case. The ILC is the most robust LED controller on the market and offered for Cabaret. For a detailed look at what the ILC has on board, please see below (see Figure 34).

If you want to connect the ILC to external home automation systems, you will need to go through the IMC, PORT – 0. PORT – 0 on the IMC is typically seen as the RJ25 accessory plug (see Figure 19).

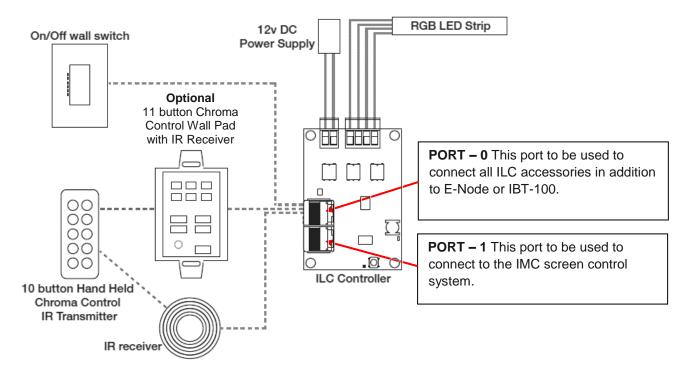


Figure 34: ILC wiring diagram

ACAUTION

Improperly adjusted motor limit switches can result in irreparable damage to the projection screen or motor and will void your warranty.

Stewart Filmscreen uses tubular Somfy motors in many of our projection screens. Users may require adjusting the limit switches at some point in time.

Tool required: 4 mm hex key or 5/32" hex driver. You can also use an electrician's 1/8th inch flat blade screwdriver.

Note: *Never* use an electric drill or powered screwdriver to adjust Somfy motor limit switches as this will damage the internal timing assembly in the motor. The switches are designed for manual (by hand) incremental adjustment only.

ADJUSTING THE SCREEN'S DEPLOYED (DOWN) STOPPING POSITION

This is the number one adjustment that users may need to make. A projection screen may require that the deployed stopping position, the "White" switch, be readjusted from the factory setting.

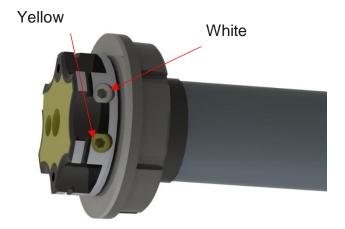
This adjustment will be made using the "White" limit switch (see Figure 35). It is important to remember that you cannot reduce the screen's deployment setting when the screen is currently stopped at its full "down" setting. You must use the control switch to raise the screen up a foot or so *before* attempting a motor limit switch adjustment. If the screen is operated by a screen trigger, you must reduce the "White" limit switch when the screen is stopped in its fully retracted, "up" position. Turn the "White" motor limit switch clockwise to reduce top masking settings.

Turning the motor limit switch counterclockwise will increase or extend the screen's deployed stopping position. Switches are sensitive. Go slowly and do quarter turns at all times with the 5/32" hex driver to prevent damage to the motor and to the screen. **Do not extend the screen so far that the aluminum roller tube becomes exposed. There must be at least one full wrap of the screen left on the roller tube when the screen is resting at its final deployed setting.** If you turn the limit switch too much (clockwise) and the screen is now stopping short of where you want it, simply turn it in the opposite direction (counterclockwise) and the screen will automatically drop in increments as you rotate the switch.

LIMIT SWITCH ADJUSTMENT (CONTINUED)

ADJUST THE SCREEN'S RETRACTED (UP) STOPPING POSITION

CAUTION: Making adjustments to the "Yellow" switch can inadvertently damage the screen or the motor if the fully retracted stopping position is set too high into the housing. This will cause the screen's batten bar to impact the screen roll and may cause optical damage to the screen. Improper adjustment can also cause the batten to jam into the housing which obstructs it from deploying when the "down" command is sent. Left in this position, the motor will fail due to overrun. Only qualified, experienced technicians should attempt to make adjustments to the "up" Yellow limit switch (see Figure 35).





NOTE: Failure to follow these directions may result in voiding your warranty.

In the fully "up" retracted stopping position, the screen's batten bar must hang freely underneath the screen roller tube. The batten bar cannot contact or press against the projection screen roll. Make sure to check and correctly adjust the yellow or "up" limit switch to avoid screen damage from a compacted batten bar. Switches are sensitive. Go slowly and do quarter turns at all times with the 5/32" hex driver to prevent damage to the motor and to the screen.

Counterclockwise adjustments of this switch will raise the batten bar and clockwise adjustments will lower the batten's top setting. Lowering the batten's top stopping position is valuable when trying to align the screen's batten with the bottom of the Cabaret case.

Please remember that improperly adjusted motor limit switches will cause damage to your projection screen or motor. Make sure that both of the motor limit switches have been properly adjusted, allowing the projection screen to stop correctly at both the retracted and deployed positions.

FASCIA REMOVAL

Cabaret offers a two-piece construction that allows the front fascia to come off for servicing. This allows easy access to the control system and roller tube assembly without having to take the entire unit down. To remove the fascia:

1. Remove acrylic glass from top of case. Simply lift up with your fingers and place in a safe location (see Figure 36).



Figure 36: Audience left, front of unit, showing acrylic glass removed

2. Lift bottom of fascia through screen slot opening by pulling in an upwards motion towards the front of the case (see Figure 37).

Figure 37: Audience left, front of unit, showing fascia tilted forward

 Lift in an upwards motion once the bottom clip is free, and remove the fascia (see Figure 38). Set aside in a safe location.

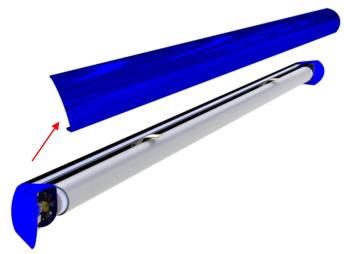


Figure 38: Audience left, front of unit, showing fascia removed

Installation is the reverse of the uninstalling instructions.

CARING FOR AND CLEANING THE SCREEN

With reasonable care, you may expect many years of dependable use of your Stewart projection screen.

GENERAL MAINTENANCE

The surface of your screen is delicate, so we encourage you to keep your screen clean. Special attention to these instructions should be followed when cleaning.

- > Oils and grease from hands can easily transfer to screen material.
- > Be careful not to touch or scratch the viewing surface.
- Avoid getting any foreign objects on the screen as cleaning may prove very difficult. It may not be possible to remove scratches, paint, ink, etc.
- A draftsman-style brush may be used to lightly whisk away any loose dirt or dust particles. This type of brush is usually available at office supply stores. Stewart Filmscreen has an optional screen cleaning kit that contains the proper type of brush. Contact your dealer if you would like to obtain this cleaning kit (see Figure 39).



Figure 39: Stewart Filmscreen Cleaning Kit

- For tougher spots, you can make a cleaning solution using a water-based detergent and warm water. To make the solution, mix one part Simple Green, 409, or other water-based industrial cleaner with three parts warm water. Moisten a clean cotton cloth or cotton swab with this solution, moisten the stained area, and gently lift off the stain. Never use an aggressive scrubbing action as you could damage the screen surface by removing the optical coating. Remoisten the area with clean water and dab dry with a clean sponge or cotton cloth. Any residual watermarks will evaporate on their own within minutes.
- Contact the factory if you have questions about removing difficult spots.

Do not use cleaners containing alcohol as they can damage the optical surface of the screen fabric.

TROUBLESHOOTING

Refer to the following guidelines if you encounter any difficulty in the operation of your Stewart screen. Problems related to electrical or motor function may require a qualified service person or electrician. Should you have a problem that is not addressed below, please call Stewart Filmscreen at 1 (310-784-5300) or toll free 1 (800-762-4999) for assistance.

Problem	Cause	Action Steps
The screen won't operate	No AC power available	Check to see if the circuit breaker has switched off. Reset if needed. Check the outboard switching apparatus. Check voltage availability. Contact an electrician
The screen won't roll up or down (even though power is available)	Bad connection at the switch. Polarity of IMC line may be bad	Have an electrician or qualified service person check control board connections
The screen roller chatters when power is activated	Can be caused by voltage drop, bad connections, or a defective switch	Have an electrician or qualified service person check all hookups including outboard wiring
The unit hums in "up" mode	The screen batten is retracting too far into the case. Failure to correct can damage the motor and the screen. Do not use the unit until this problem is resolved	Have a qualified service person adjust the "Yellow" UP limit switch
The screen drops when "up" direction is activated	Could be a drop in voltage	Screen motor requires full voltage. Have an electrician or qualified service person check available voltage
The screen continues past bottom stop position	"White" limit switch is out of adjustment	Readjust the "White" down limit switch. See the section on Adjusting Screen Deployment of this manual (Page 24)
The batten retracts too far into case	"Yellow" limit switch is out of adjustment. Failure to correct can damage motor and screen. Do not use the unit until the problem is resolved	Have a qualified service person adjust the "Yellow up" limit switch

The motor shuts off. The motor has been in use for more than 2 minutes	The motor is designed for short operations (lowering and retracting), not continuous duty. Longer operation causes the motor to overheat and shut off	Allow the motor to cool down. Complete cooling can take an hour or more. 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, fingerprints, marks, etc., on the screen surface	Improper handling of screen	Lightly brush off or use a mild water-based detergent solution with a clean rag or cotton swab
Indentions appear on screen surface	Debris or particles adhering to screen due to static cling	Check back of screen; gently brush debris away with a soft brush

ONE (1) YEAR LIMITED WARRANTY

STEWART FILMSCREEN CORPORATION (Stewart) warrants all products to the original purchaser only. Stewart products are guaranteed 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 or eighteen (18) months from date of manufacture, as defined in the serial number. Additionally, all products must be properly operated and maintained according to Stewart instructions and cannot be 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, including neglect caused by improper installation (i.e. proximity to hot lights, exposure to extreme heat or cold, exposure to excessive humidity, etc.).

Stewart on-site warranty repair services are not available for this product. Stewart's sole obligation under this warranty shall be to repair or to replace (at Stewart's sole discretion) the defective part of the merchandise. This warranty expressly does not cover any costs of removal, installation, framing, or other costs incidental 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 (freight) expenses to and from Stewart are payable by the purchaser. Stewart is not responsible for damage in shipment. To protect 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 or merchantability. Any implied warranties of fitness for use or merchantability, which 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, CA 90502- 2797, or call us at 1 (310) 784-5300, or toll free at 1 (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 shall not be liable for any and all consequential damage(s) occasioned by the breach of any written or implied warranty pertaining to the sale of a Stewart Filmscreen product in excess of the purchase price of the product sold.



The Reference for Stunning™

www.StewartFilmscreen.com

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