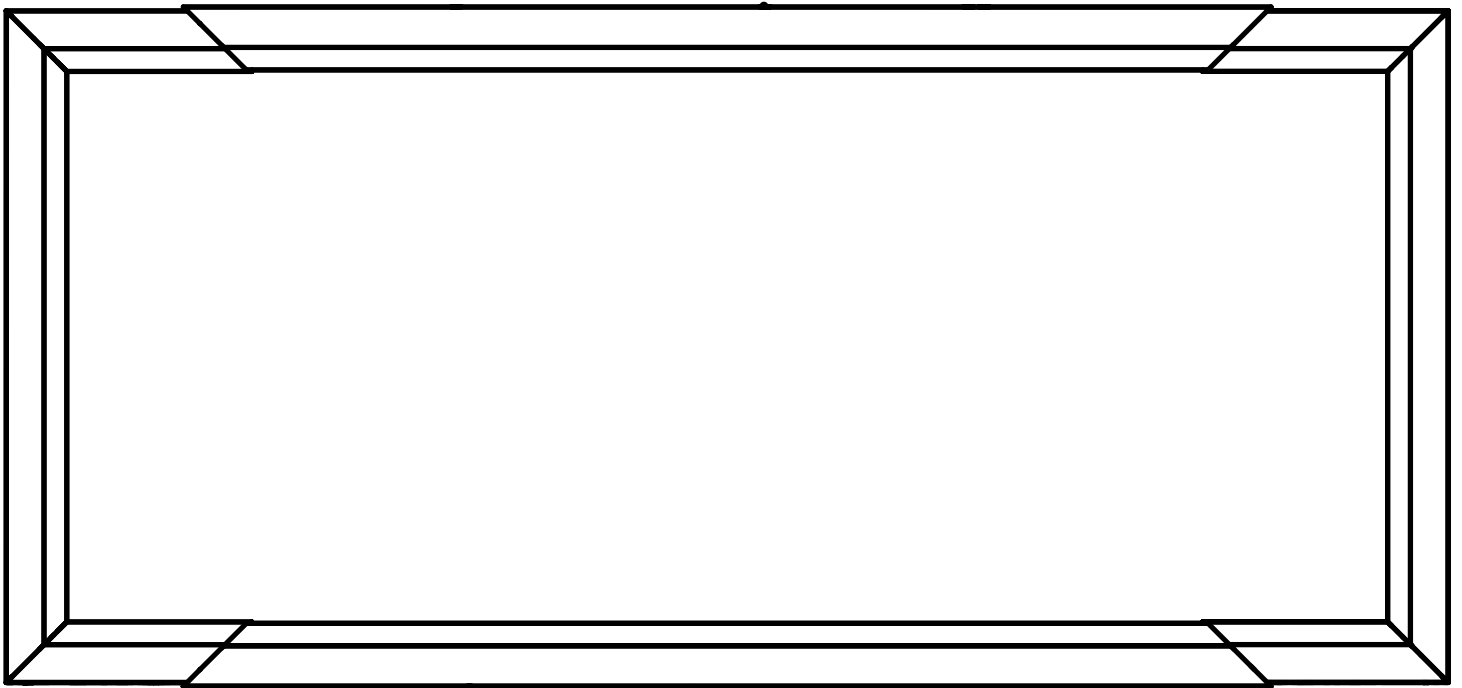


Transformer[®]

Owner's Manual



INSTALLERS: PLEASE LEAVE THIS
MANUAL WITH THE OWNER.



APPLY S/N
STICKER HERE



LIMITED ONE YEAR WARRANTY ON SCREEN INNOVATIONS PRODUCTS

Screen Innovations 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 according to Screen Innovations' 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 a person other than authorized Screen Innovations personnel.

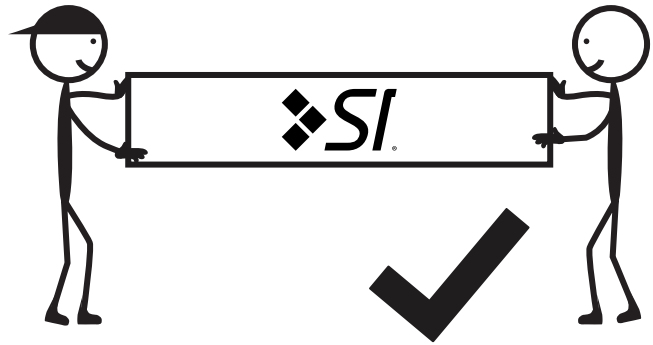
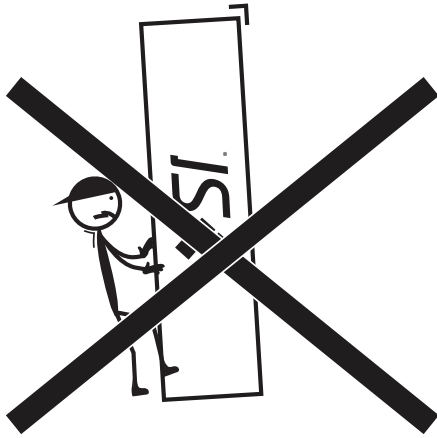
Screen Innovations' sole obligation under this warranty shall be to repair or to replace (at Screen Innovations' option) the defective part of the merchandise. Returns for service should be made to your Screen Innovations' dealer. If it is necessary for the dealer to return the screen or part to Screen Innovations, transportation expenses to and from Screen Innovations are payable by the purchaser and Screen Innovations 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, EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO FITNESS FOR USE AND MERCHANT ABILITY. 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. NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, OR FOR INCIDENTAL, DIRECT, OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

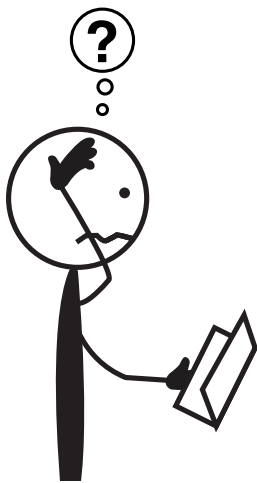
In the event that there is a defect in materials or workmanship of a Screen Innovations product, you may contact our Sales Partners at 9715-B Burnet Road Suite 400, Austin, TX 78758, (512) 832-6939.

IMPORTANT: THIS WARRANTY SHALL NOT BE VALID AND SCREEN INNOVATIONS SHALL NOT BE BOUND BY THIS WARRANTY IF THE PRODUCT IS NOT OPERATED IN ACCORDANCE WITH SCREEN INNOVATIONS' WRITTEN INSTRUCTIONS.

Keep your sales receipt to prove the date of purchase and your original ownership.



Installation requires 3 or more people. Bend knees when lifting.



512-832-6939

9715-B Burnet Road Suite 400, Austin, TX 78758

screeninnovations.com

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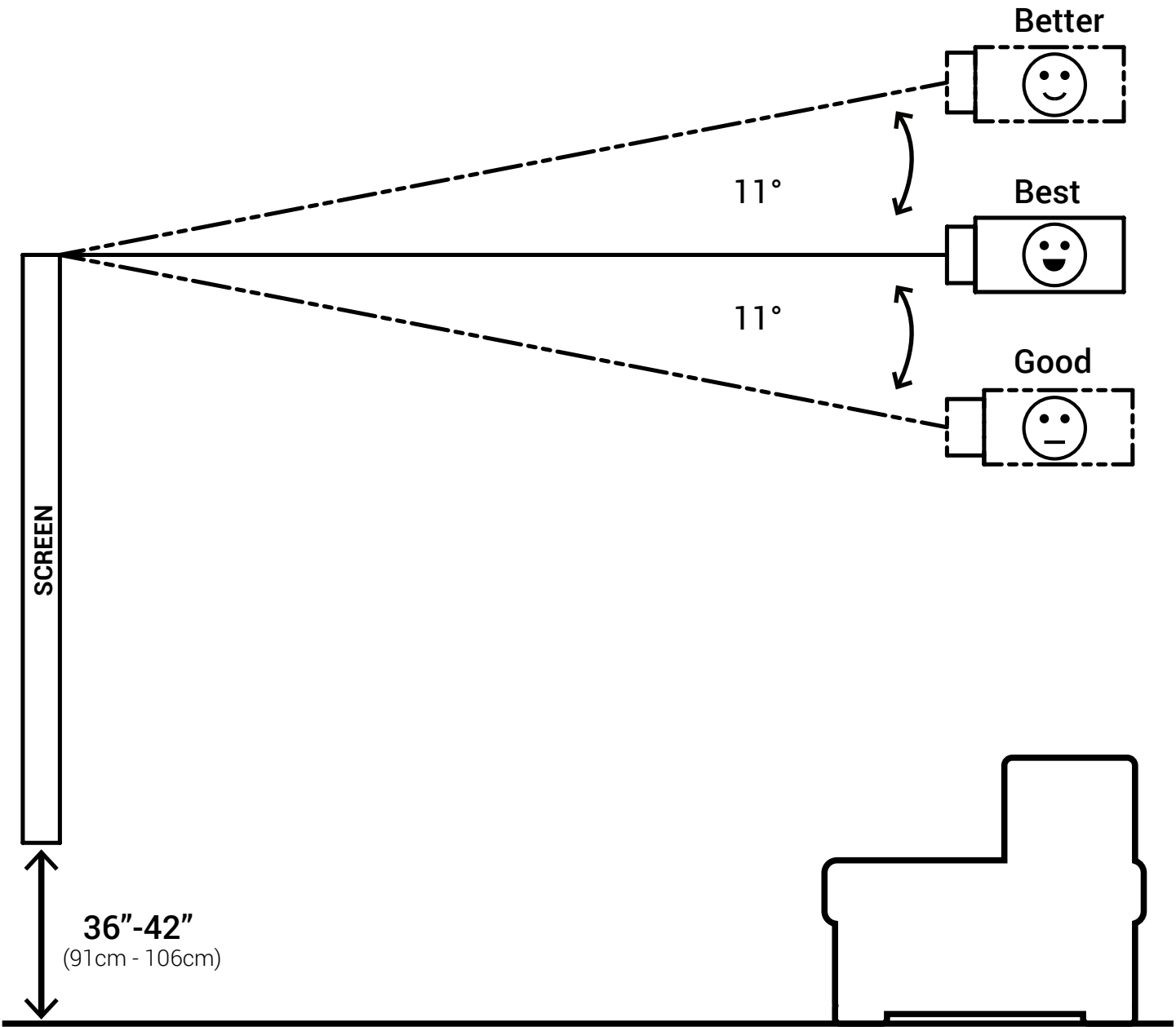
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CAUTION: READ THE INSTRUCTIONS IN THEIR ENTIRETY BEFORE PROCEEDING. ACTIONS CONTRARY TO THE INSTRUCTIONS INVALIDATE THE WARRANTY AND MAY RESULT IN SERIOUS DAMAGE AND/OR INJURY.

INSTALLER:

- The wall used for fixture installation must be able to support 500 lbs or more. Failure to properly secure the screen may result in injury and/or damage.
- Electrical work should be performed using appropriate electrical codes and regulation, by a licensed electrical professional.
- Before running cables in walls or ceilings see controls section on pages 36 and 37 for control cable requirements.
- Before removing the screen from the box, check for damage and to make sure all parts are included.
- Do not use any sharp blades when opening the screen packaging. Open by hand.
- Do not pull on the sides, crease, or fold the screen. The screen material is very delicate.
- Care in mounting and correct operation will result in long and satisfactory service from the SI screen.
- The screen should be level when installed. Always use a carpenter's level.
- Nothing should be fastened to any part of the screen assembly.

END USER:

- To prevent damage, the operating and maintenance of the screen should be performed by experienced professionals.
- This is a finished product. Do not write or draw on the surface.
- Do not put anything near right or left sides of the screen that would come in contact or impede the normal operation of the screen when opened.
- Damage to the screen can result if an object prevents the screen from fully opening
- The resting position for the screen is in the fully open 2.4:1 position. The screen will return to the this position if it does not receive a signal for 8 hours or when the on/off trigger goes to a low voltage.

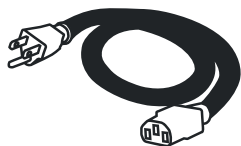
NOTE: The screen has been thoroughly inspected and tested at factory and found to be operating properly prior to shipment.

PARTS LIST

TRANSFORMER

NOTE: Unpack the long cardboard box first and check to make sure everything listed is included.

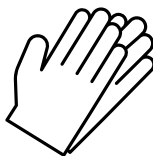
HARDWARE BOX



1X
Power Cord



20X to 30X
1/4" Lag
Screws



4X
Gloves



4X
#10-32
Flat Head
Screws



1X
1/8" Hex Key



1X
Top-Snapper



1X
Transformer
Remote



2X
AAA Batteries



1X
LED Remote

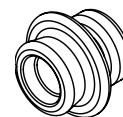


4X
1/8" Stereo Jacks

SPARE PARTS

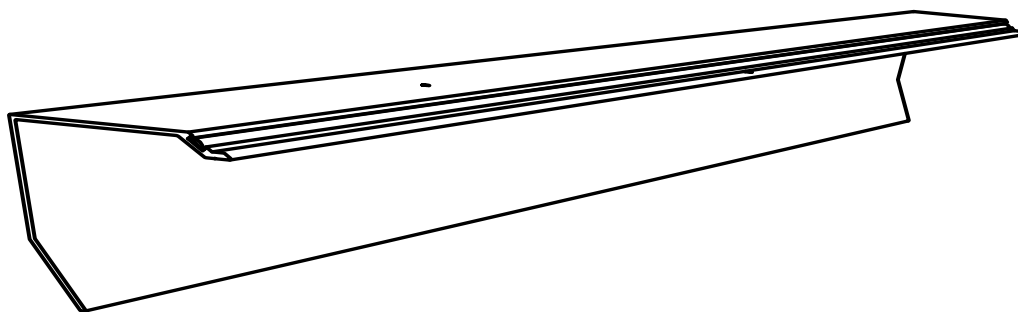


1X
IR Eye

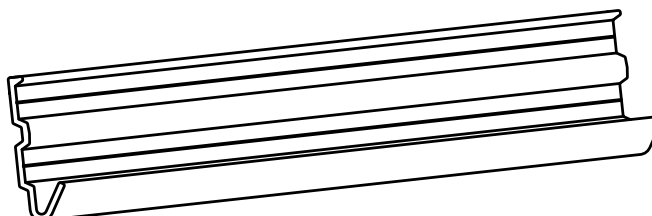


Snap Fixed

CENTER TRIM BOX

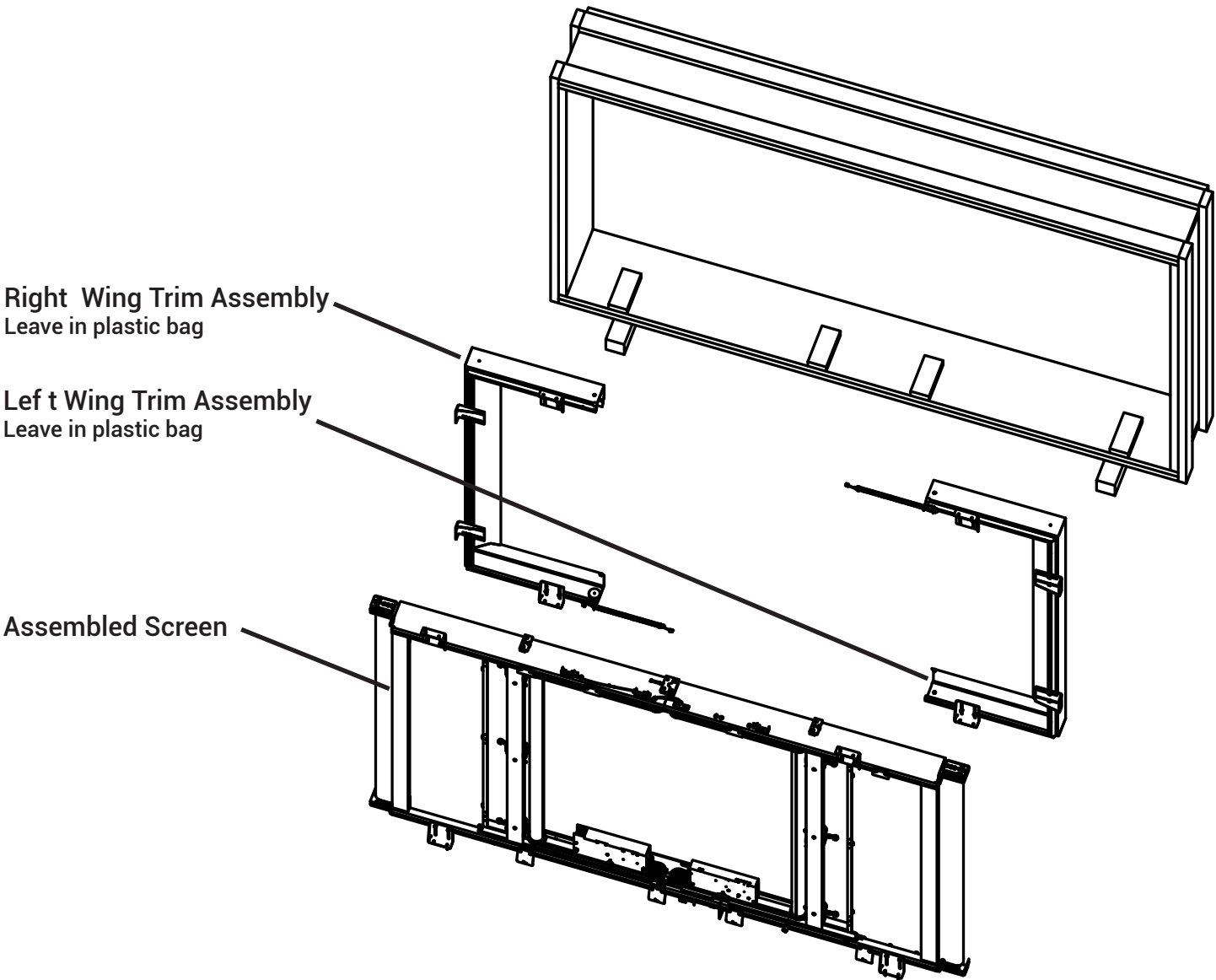


2X
Center Trim
Leave in plastic bag



1X
Long Wall Bracket

CRATE



UNPACK THE ASSEMBLED SCREEN

TRANSFORMER



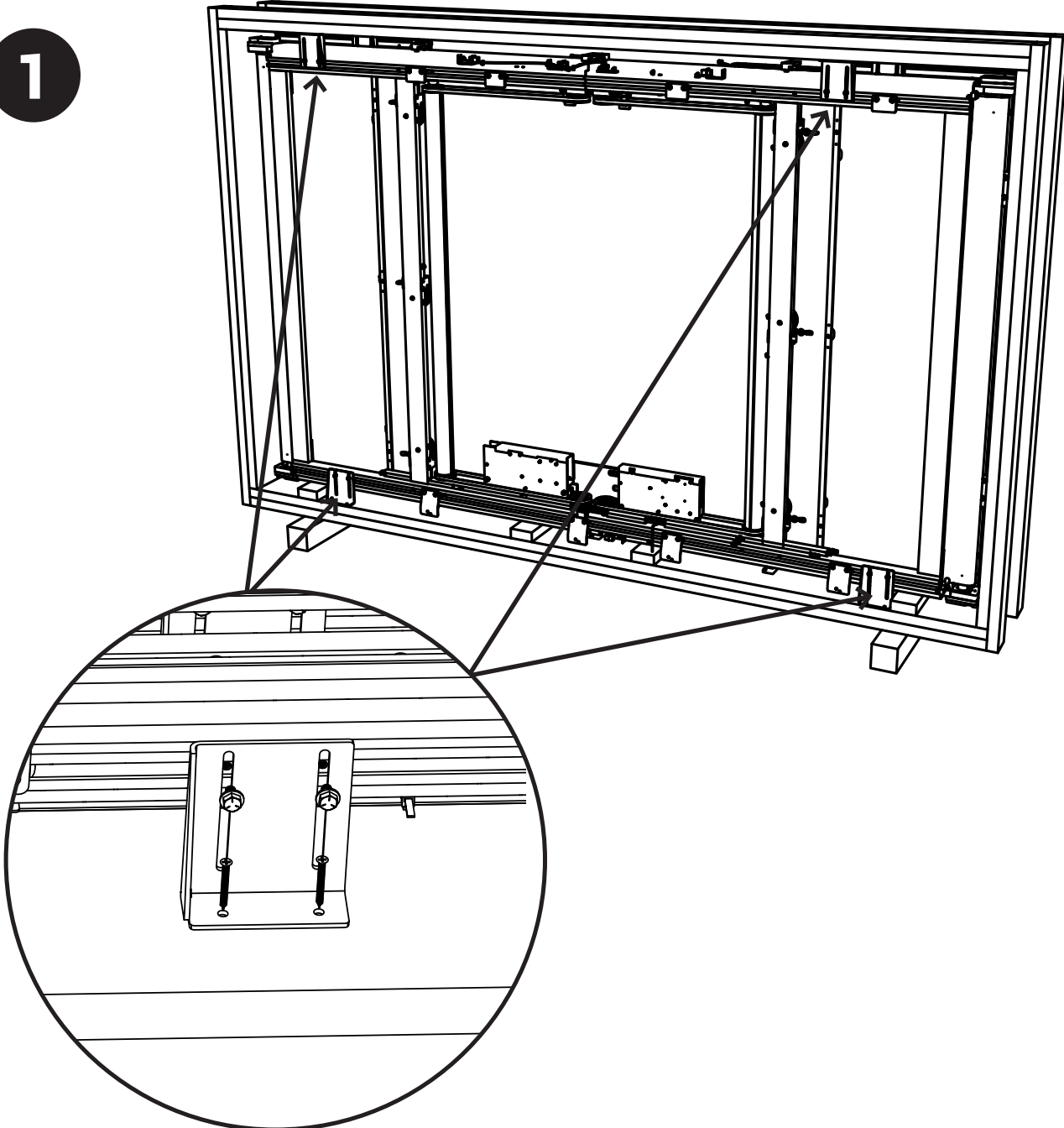
2+

INSTALLATION REQUIRES TWO OR MORE PEOPLE. PLEASE USE SAFE LIFTING AND RIGGING TECHNIQUES.



WEAR GLOVES TO PREVENT DAMAGING THE SCREEN MATERIAL. LIFT FROM THE FRAME PIECES NOT THE SCREEN MATERIAL.

1



Remove the shipping brackets from the crate and the assembled screen.

PREPARE THE INSTALLATION LOCATION

TRANSFORMER



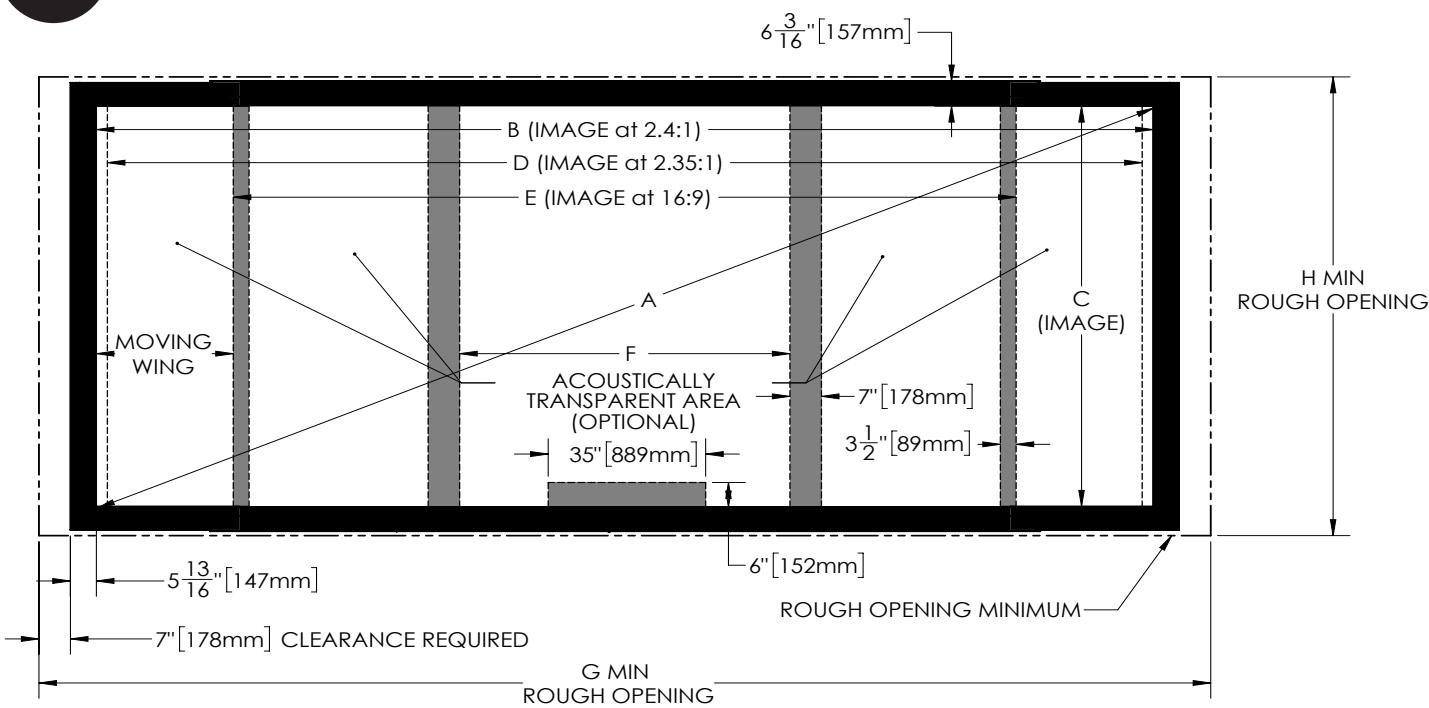
2+

INSTALLATION REQUIRES TWO OR MORE PEOPLE. PLEASE USE SAFE LIFTING AND RIGGING TECHNIQUES.



THE RESTING POSITION FOR THE SCREEN IS IN THE FULLY OPEN 2.4:1 POSITION. THE SCREEN WILL RETURN TO THE THIS POSITION IF IT DOES NOT RECIEVE A SIGNAL FOR 8 HOURS OR WHEN THE ON/OFF TRIGGER GOES TO A LOW VOLTAGE. PLAN THE INSTALLATION LOCATION ACCORDINGLY.

1

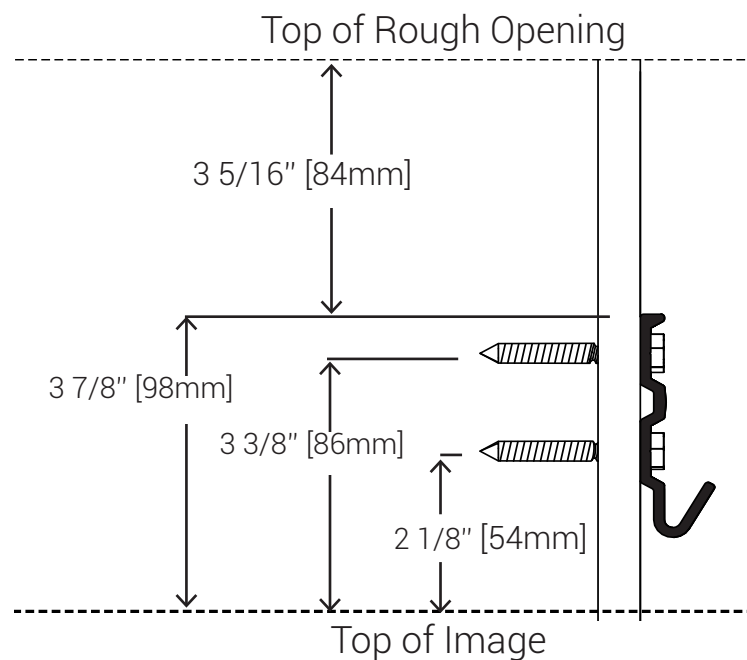
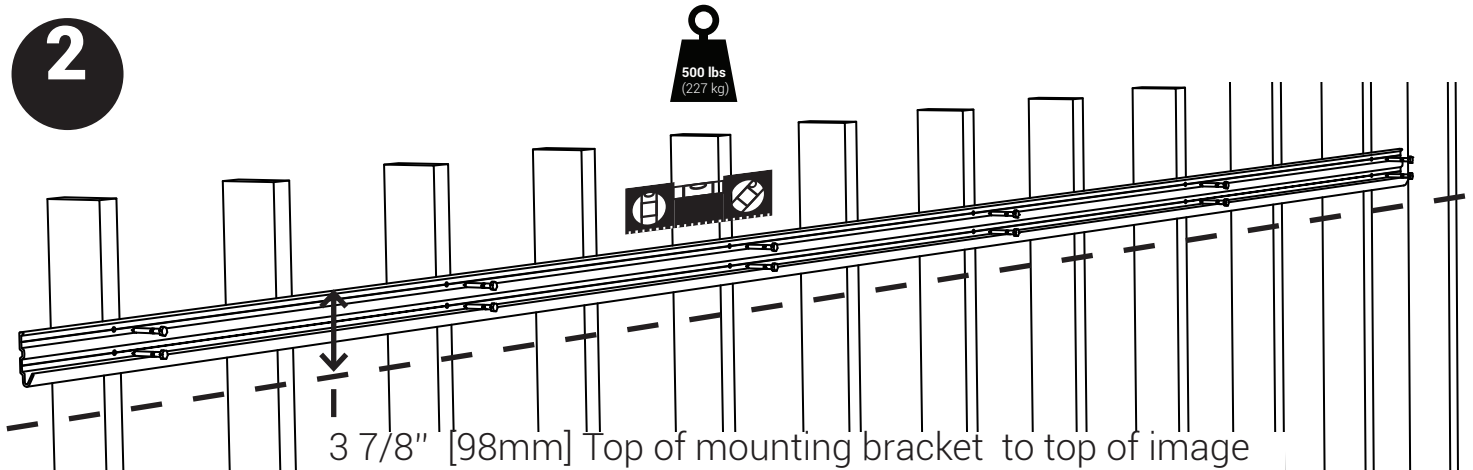


Refer to the signed approval drawing submitted with the order to make sure the installation location has the required minimum rough opening dimensions available.



SCREEN WEIGHS UP TO 500 LBS. MAKE SURE TO USE APPROPRIATE ANCHORS TO SAFELY SECURE WEIGHT OF SCREEN.

2



Center the mounting bracket about the desired viewing area. Mark stud locations on the mounting bracket. Then using the notch in the bracket for vertical positioning and marked locations for horizontal positioning; drill clearance holes in the mounting bracket. Make sure the bracket is level and at the correct height; then secure the bracket to structural supports as shown above.



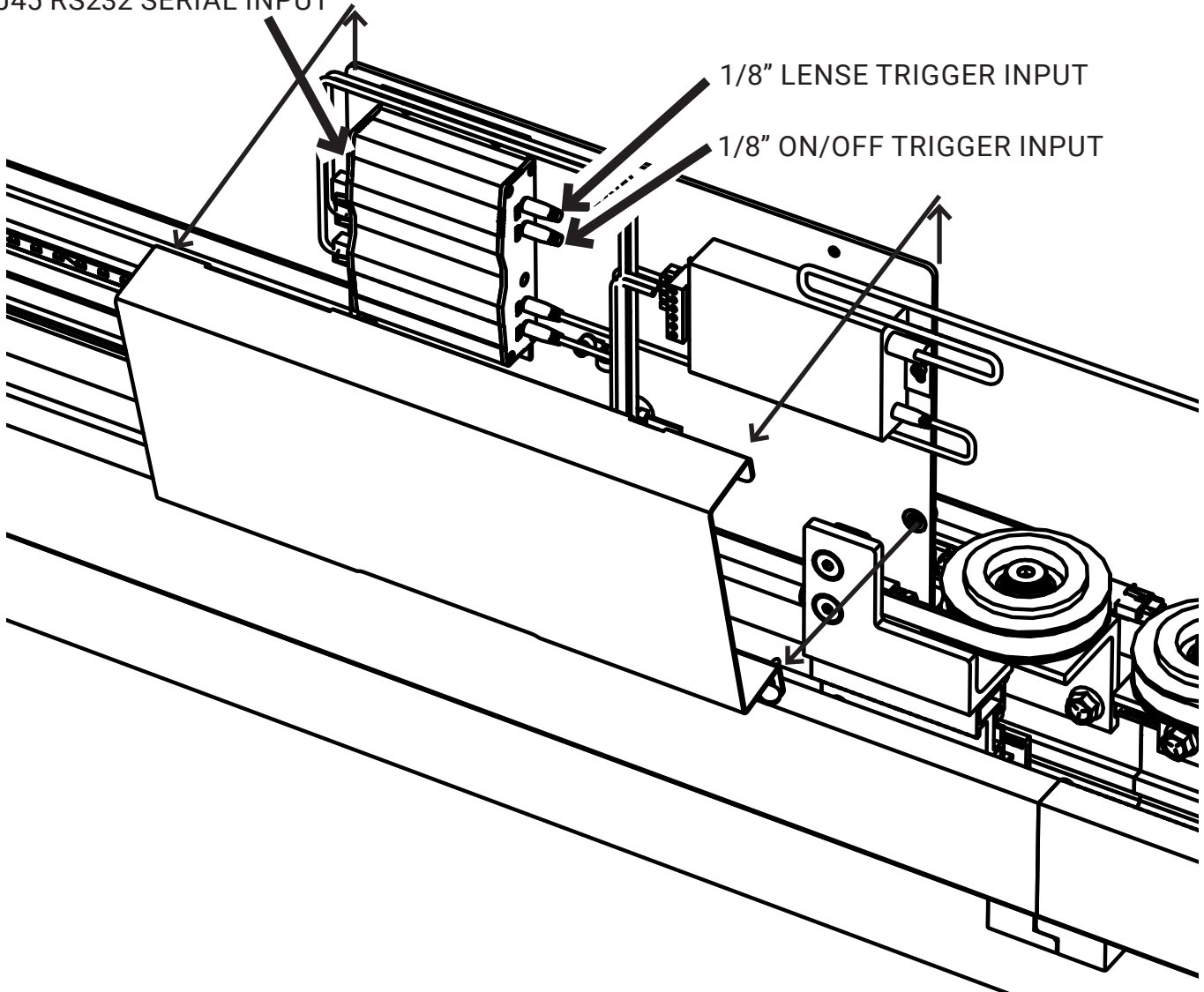
ONLY REMOVE THE CONTROLS COVER IF USING THE SERIAL PORT, LENSE TRIGGER, OR PROJECTOR TRIGGER. IF ONLY THE IR REMOTE WILL BE USE THEN THIS STEP IS NOT NECESARRY.

1

RJ45 RS232 SERIAL INPUT

1/8" LENSE TRIGGER INPUT

1/8" ON/OFF TRIGGER INPUT



Remove the cover on left side tray to get access to the serial port or trigger inputs.
See page 36 for details about the different 3rd party control options.

PLUG IN POWER

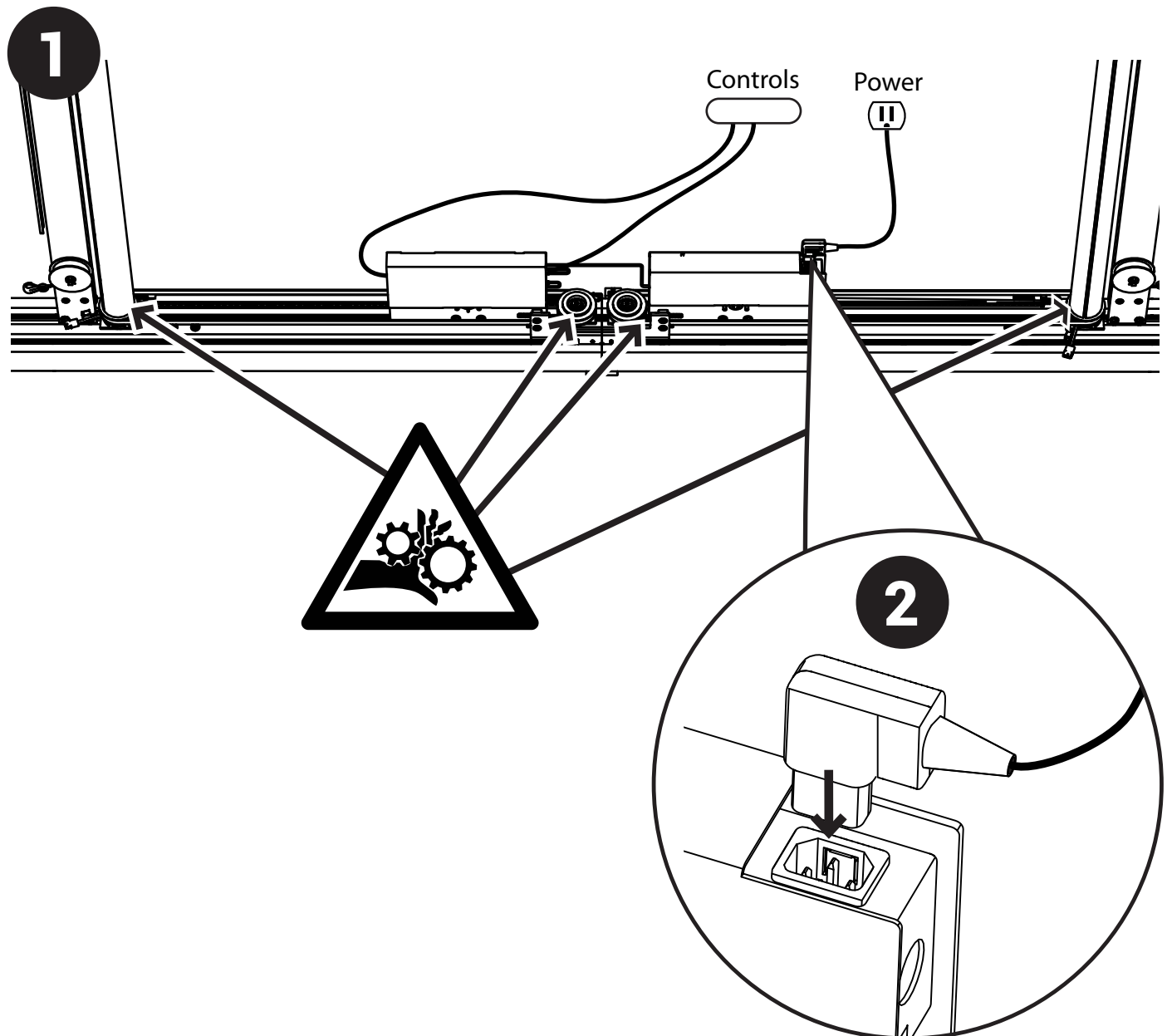
TRANSFORMER



TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH THE APPROPRIATE ELECTRICAL CODES AND REGULATIONS BY A LICENSED ELECTRICAL PROFESSIONAL. DO NOT CONNECT POWER WITH THE CIRCUIT BREAKER ON.



SCREEN WILL OPEN WHEN POWER IS TURNED ON. MAKE SURE THAT ALL BODY PARTS, TOOLS, AND WIRES ARE CLEAR OF ALL MOVING PARTS.



Once controls have been connected; return the cover and make sure that all wires are clear of the belt area. Then connect the IEC power cord to the right side electronics tray. The screen will move when power is connected. DO NOT turn the power breaker on until the frame is properly mounted on the wall.

MOUNT THE ASSEMBLED SCREEN

TRANSFORMER



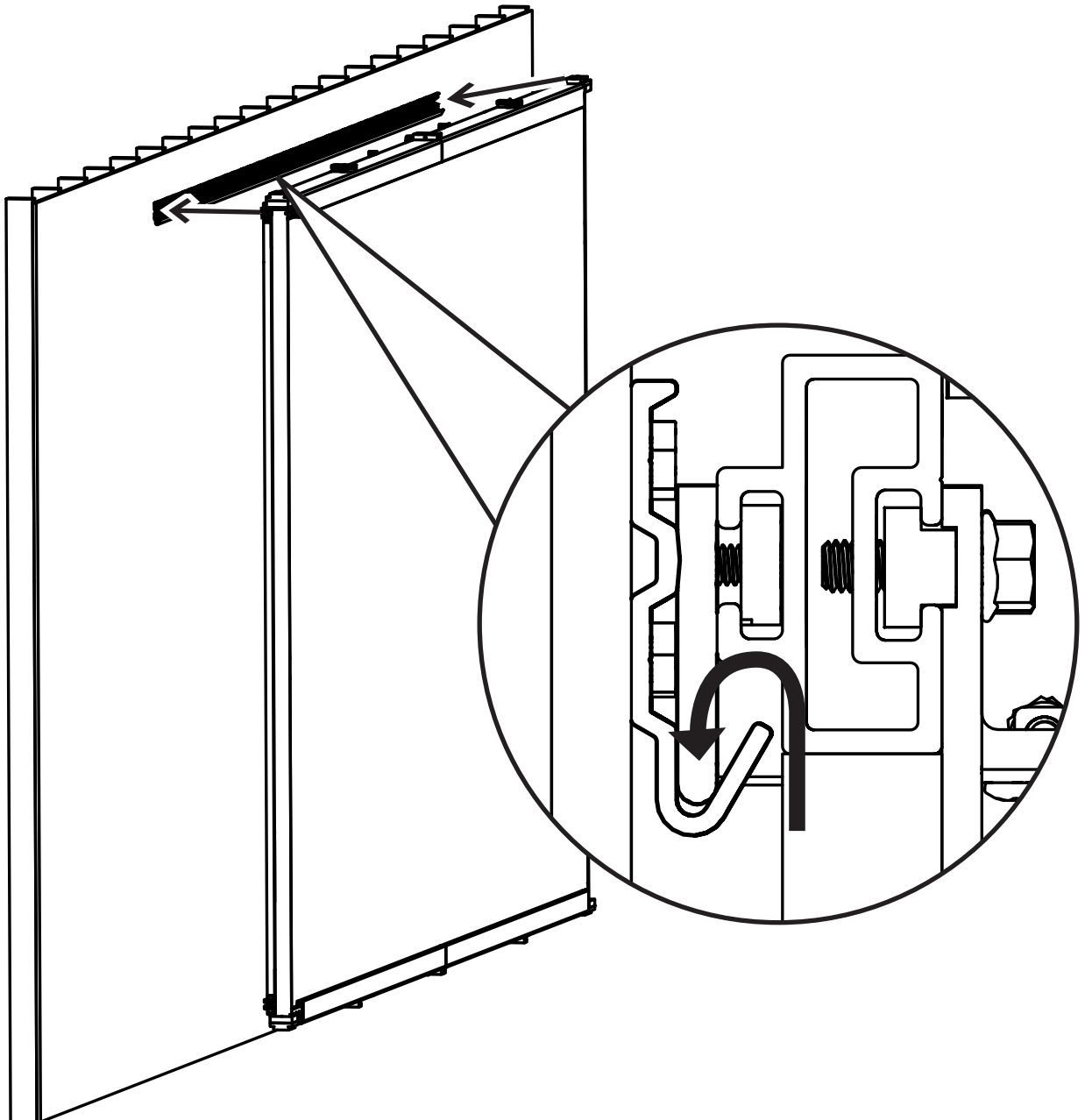
2+

INSTALLATION REQUIRES TWO OR MORE PEOPLE. PLEASE USE SAFE LIFTING AND RIGGING TECHNIQUES.

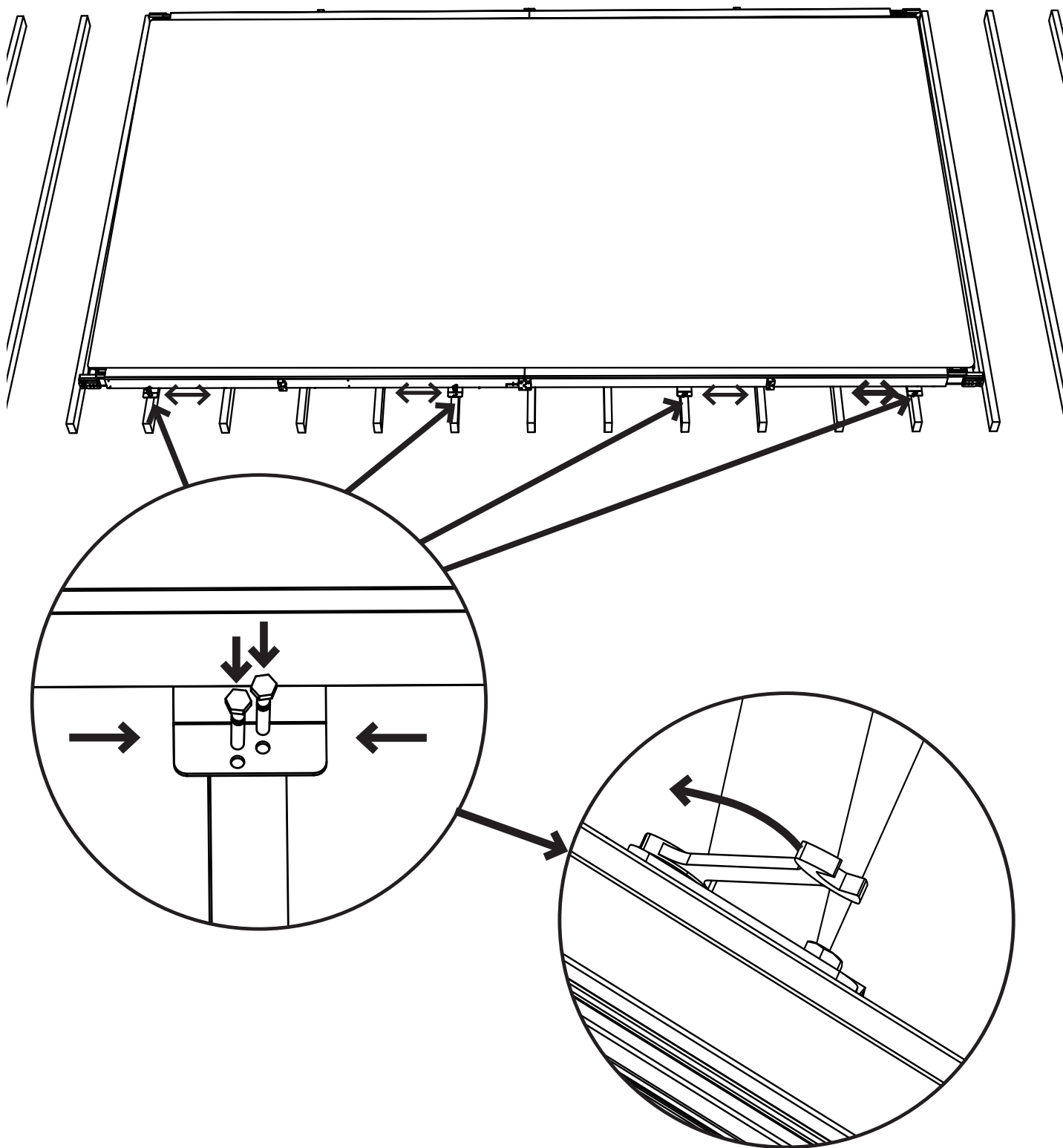


WEAR GLOVES TO PREVENT DAMAGING THE SCREEN MATERIAL. LIFT FROM THE FRAME PIECES NOT THE SCREEN MATERIAL.

1



Lift the screen assembly up from the bottom metal frame onto the long wall bracket and make sure the brackets on the frame are in the lip on the wall bracket as shown.

2

Slide the lower mounting brackets left or right such that the holes align with a stud or structural support. Then secure to the stud with appropriate fasteners. Then tighten the screws on the back of the lower mounting brackets to lock in place.

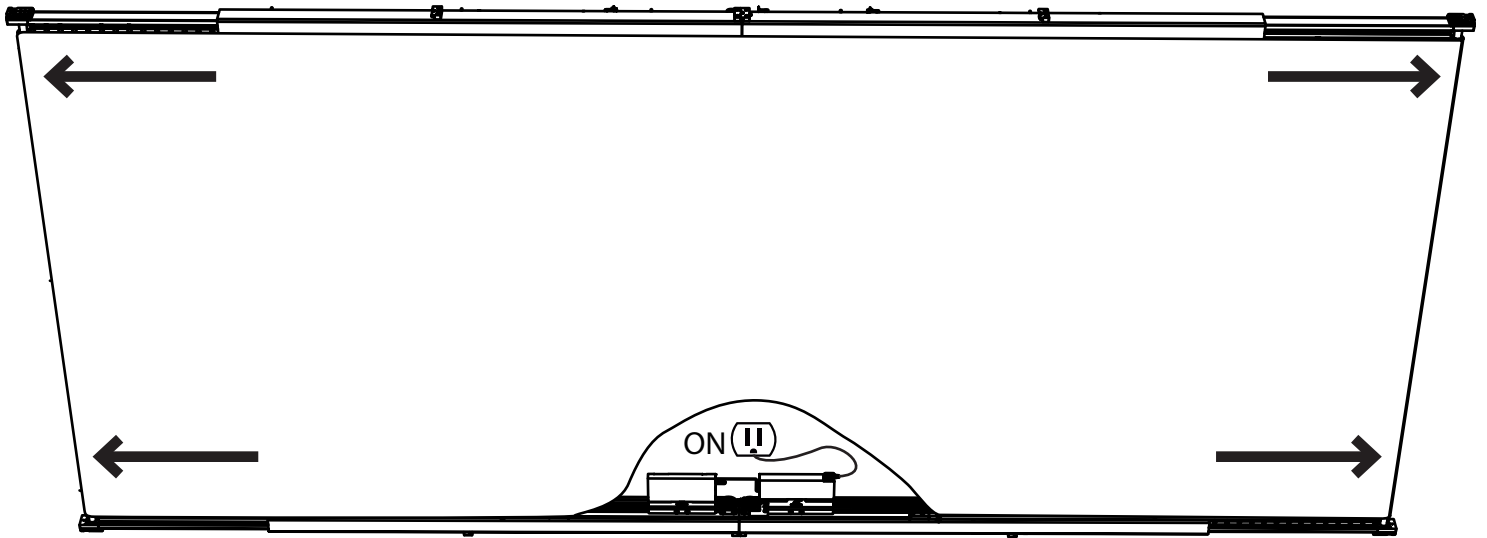
CONNECT POWER

TRANSFORMER



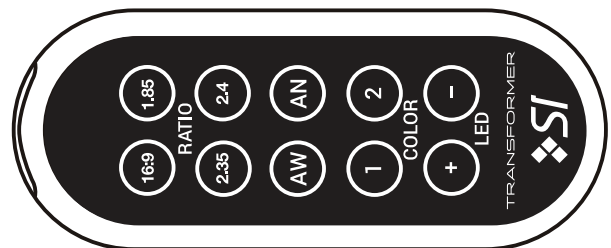
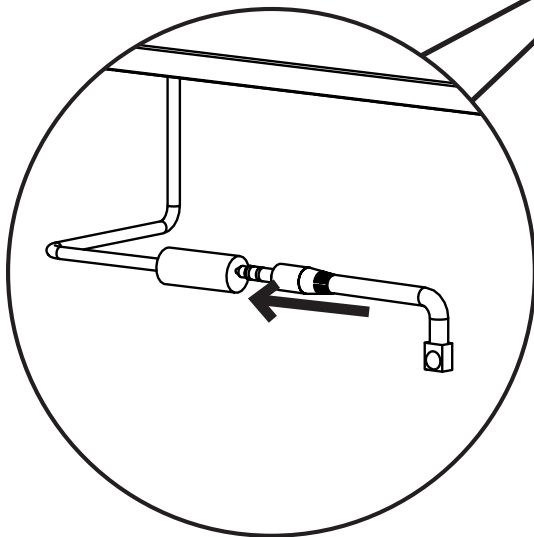
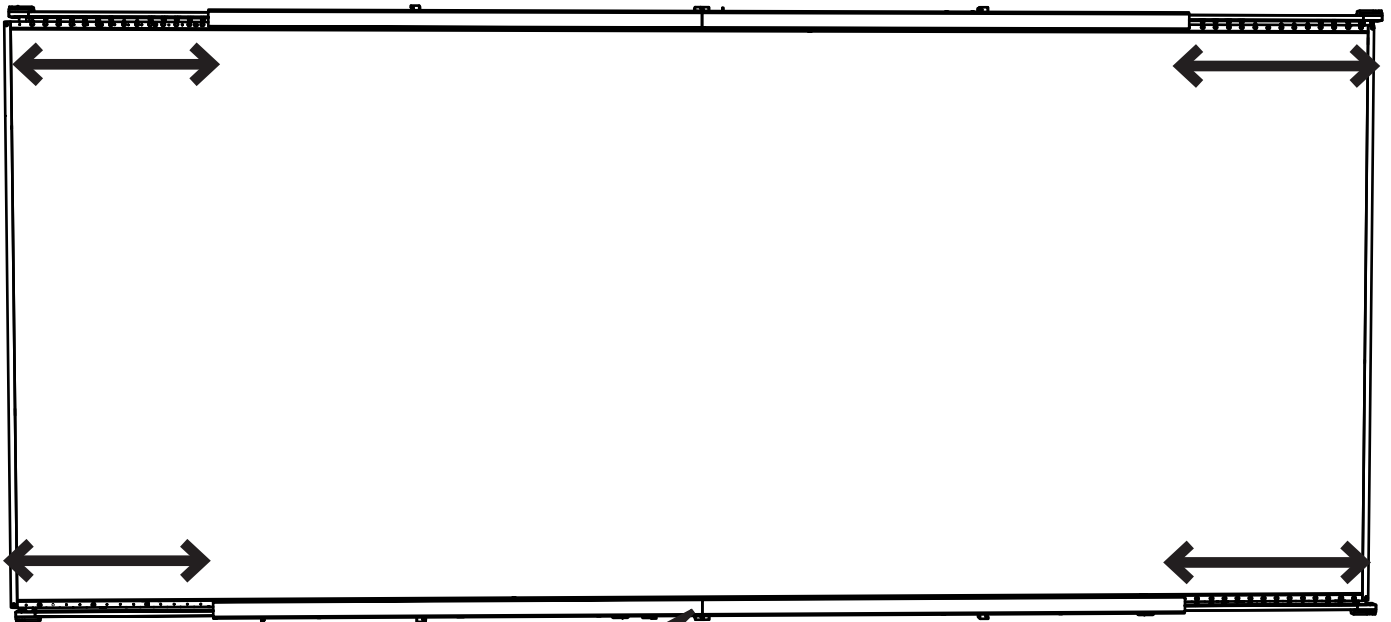
SCREEN WILL OPEN WHEN POWER IS TURNED ON. MAKE SURE THAT ALL BODY PARTS, TOOLS, AND WIRES ARE CLEAR OF ALL MOVING PARTS.

1



Connect power to the circuit and let the screen open to it's fully open position.

1

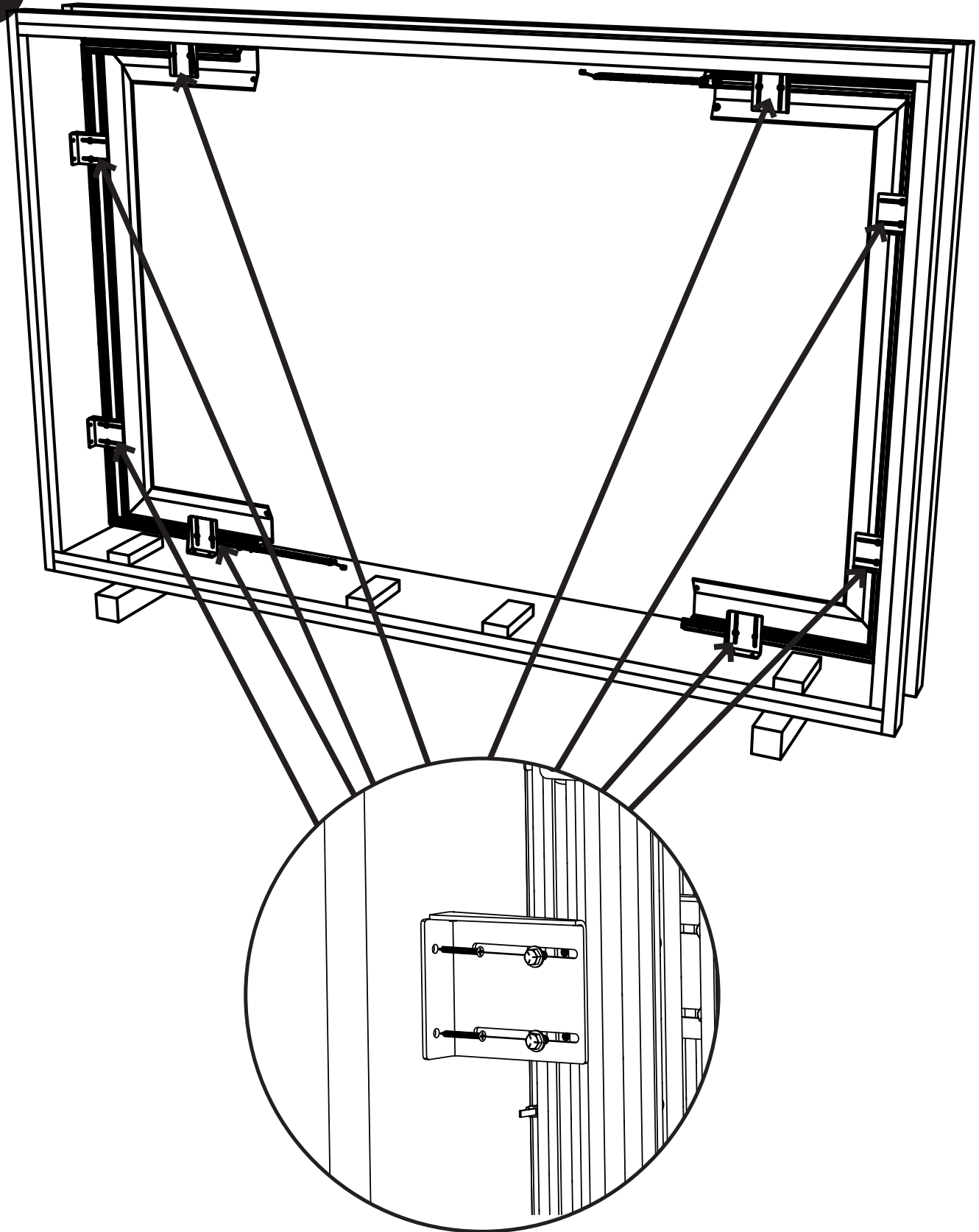


Plug in the IR eye for control of the screen. Press the 16:9 button to close the screen, and adjust the fixed snaps to make the screen flat. You may need to move the outermost fixed snaps in to make the screen flat at the transition, then adjust snaps working towards middle to make the screen flat. Cycle the screen several times between the 2.4 and 16:9 aspect ratios to make sure that the screen material is lying flat. Before proceeding make sure that the screen is in its minimum closed position (16:9) and then disconnect the IR eye..

ATTACH THE TRIM

TRANSFORMER

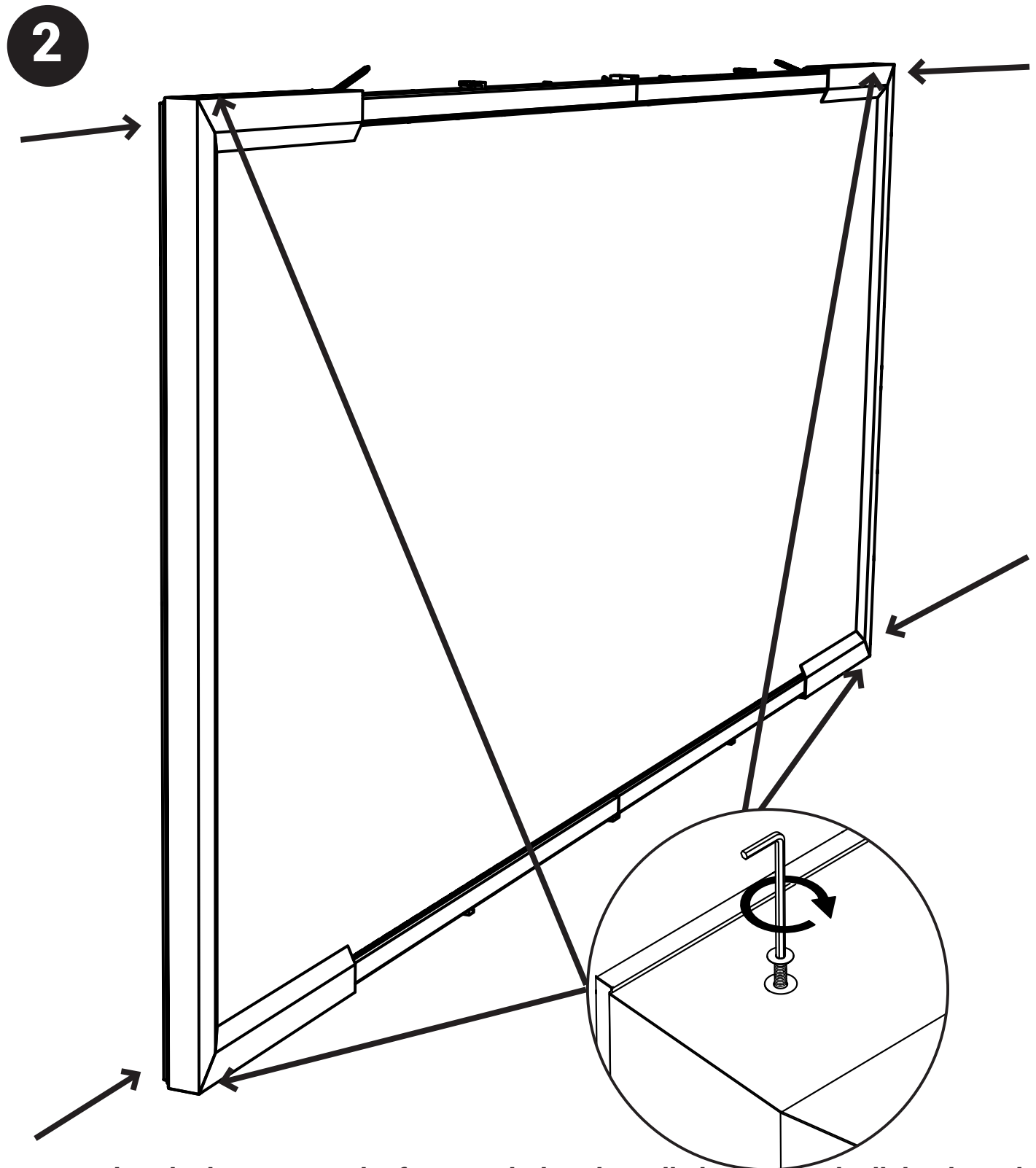
1



Remove the wing trim from the crate by removing the shipping brackets from the crate and then removing the shipping brackets from the wing trim assemblies.

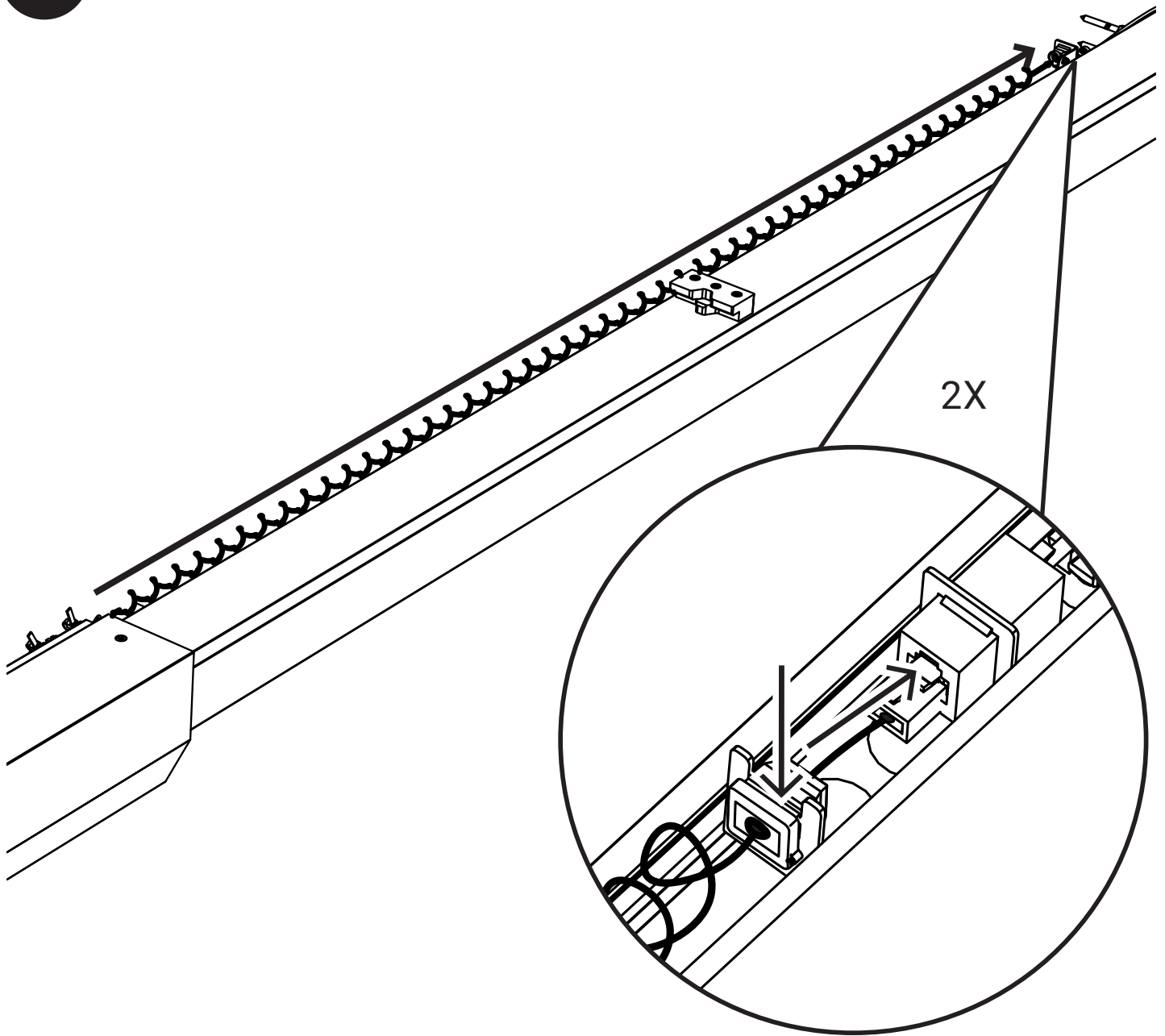
ATTACH THE TRIM

TRANSFORMER



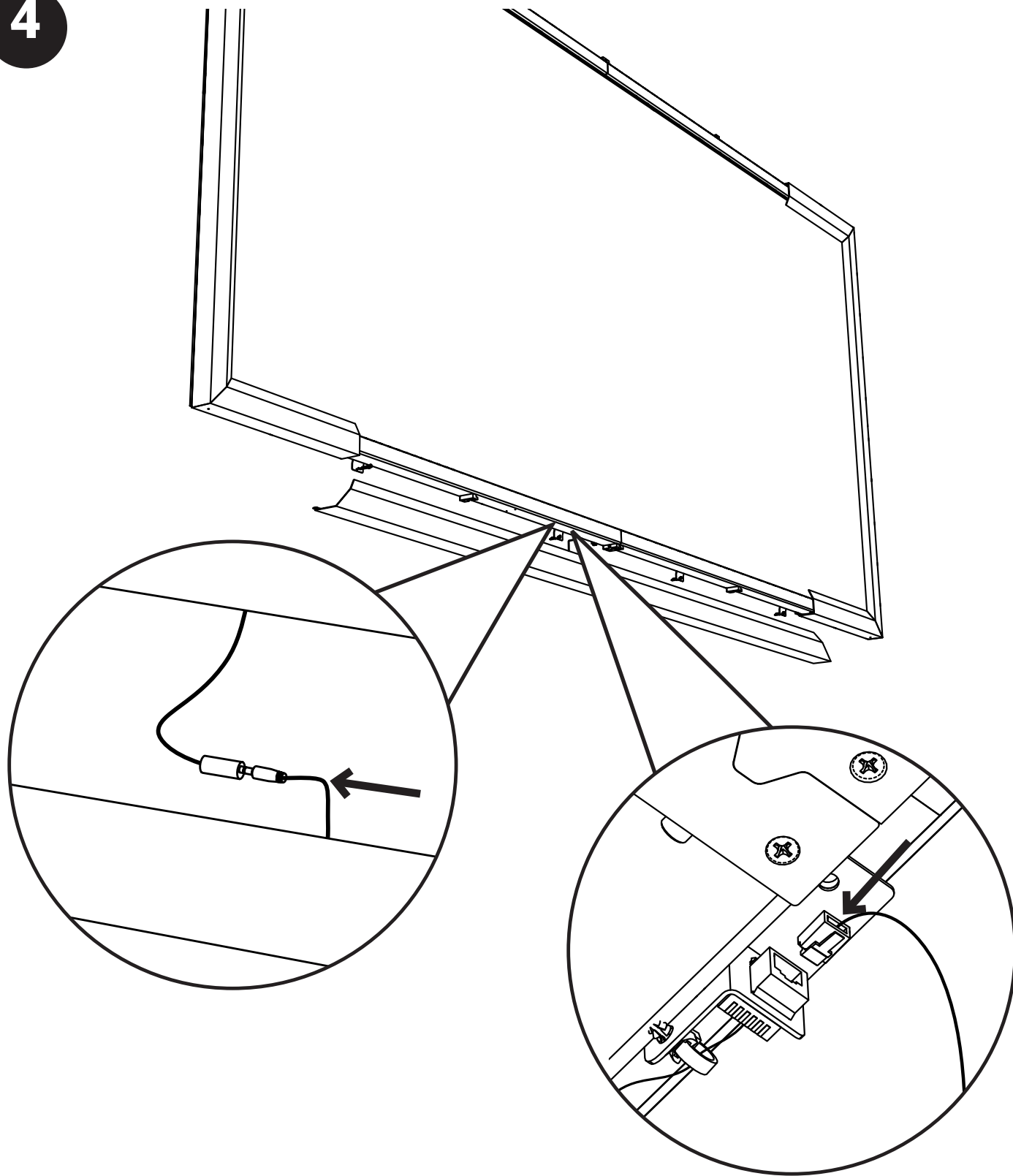
NOTE: The trim is put on to the frame such that the coiled cable for the lights is at the top.

Slide the wing trim pieces on to the main screen assembly until it hits the bumper on the end of the frame. Then align the hole in the wing trim with the hole in the frame and secure with the 10-32 flat head screw. Do NOT overtighten the screw.



Stretch the coiled cable on the top of wing trim pieces to the port on the frame. Slide the black strain relief in into the slot and then plug the cable into the port.

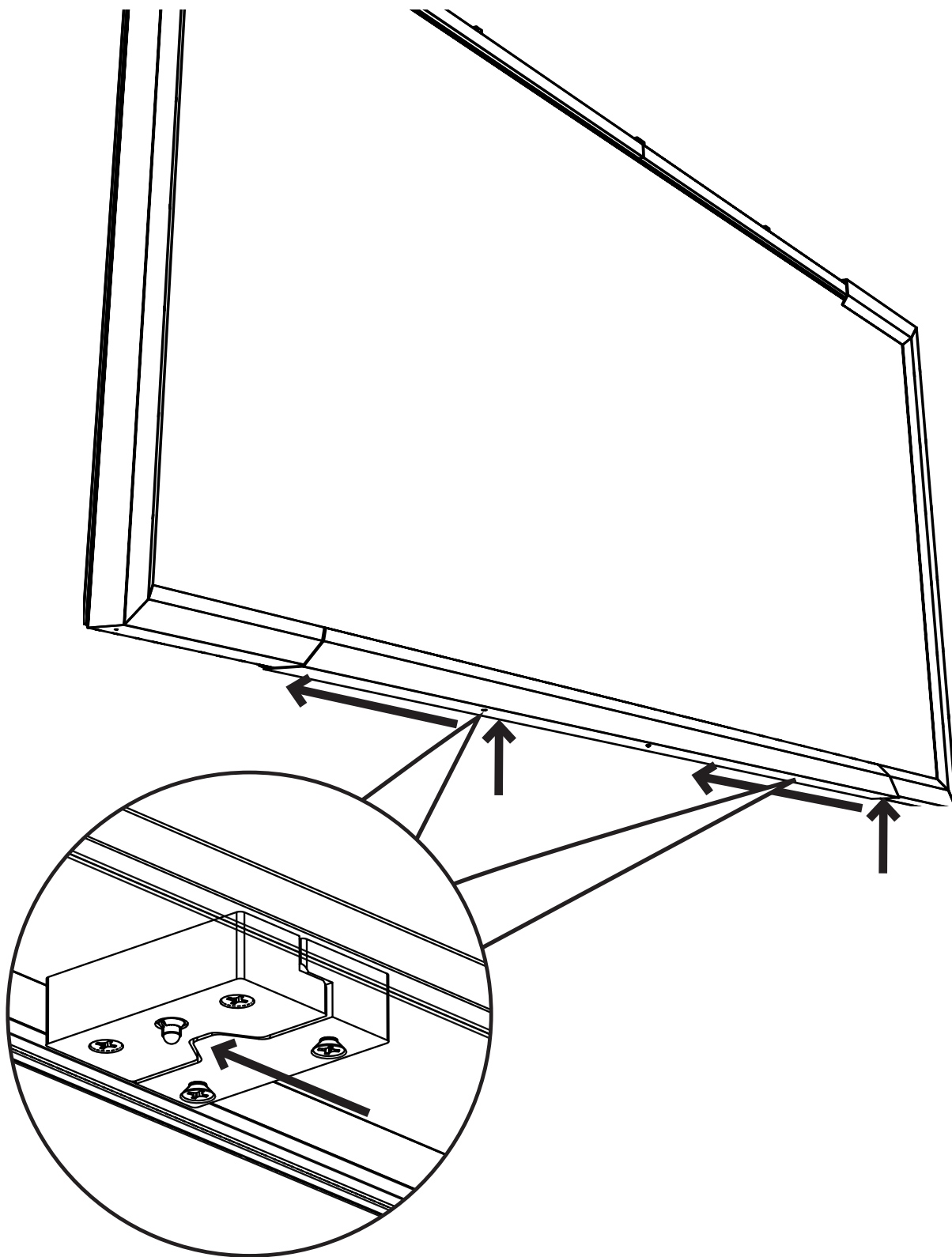
4



NOTE: The bottom trim piece is the piece with the IR eye dome connected to it.

Place the bottom trim just below the bottom of the screen and connect the IR eye mono jack into the port hanging from the bottom of the screen. Plug in the phone jack connected to the LED in to the port mounted to the bottom of the frame.

5

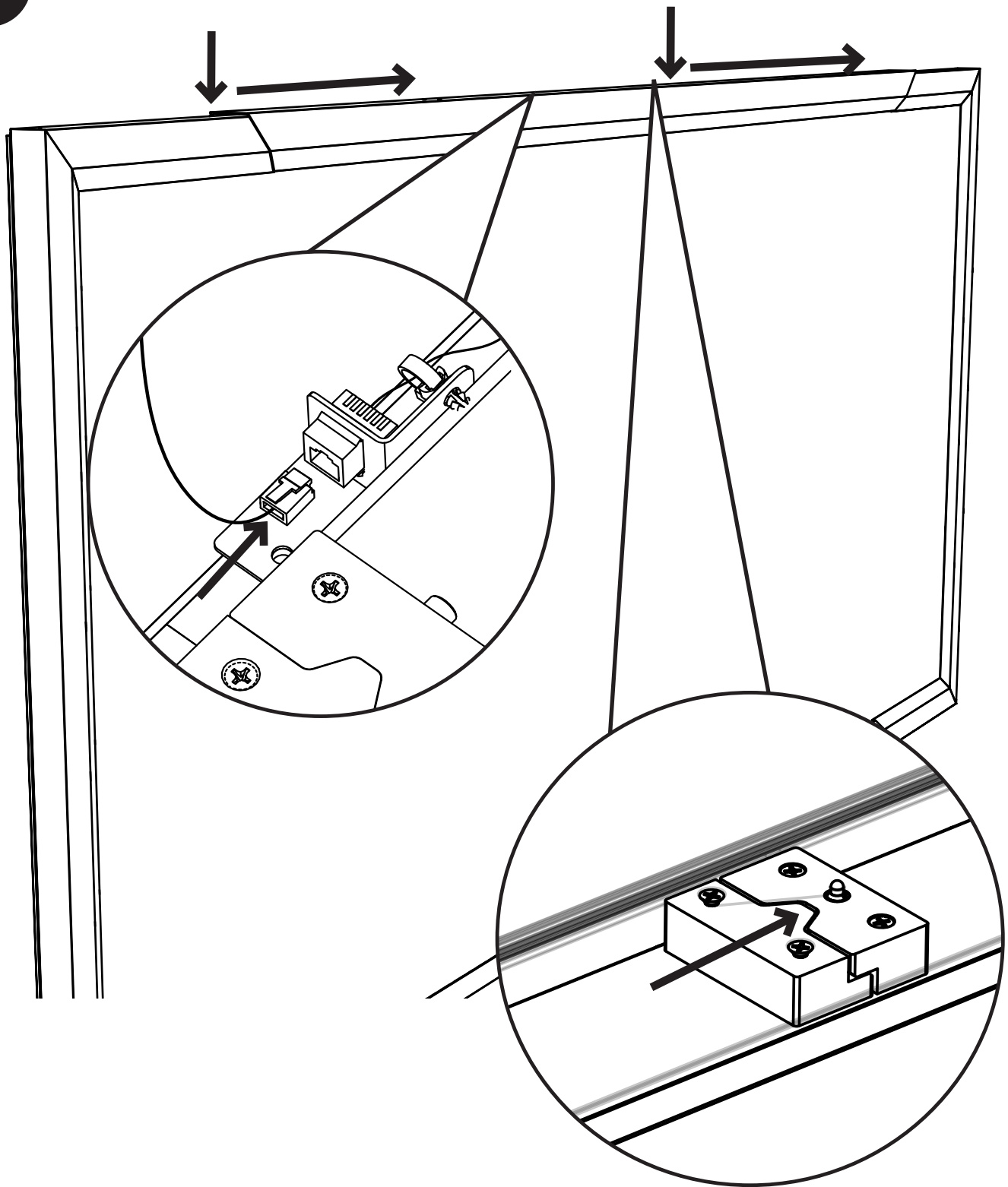


Lift up the trim and slide to the **LEFT** until the blocks line up and the plunger clicks into place to secure the trim. The trim is correctly installed when the trim will no longer slide back to the right.

ATTACH THE TRIM

TRANSFORMER

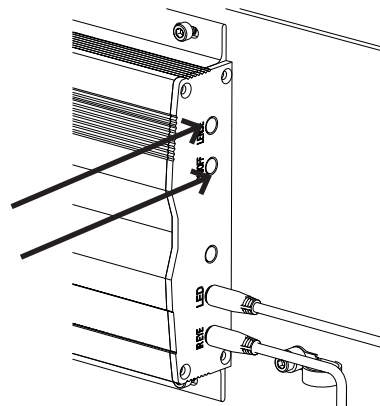
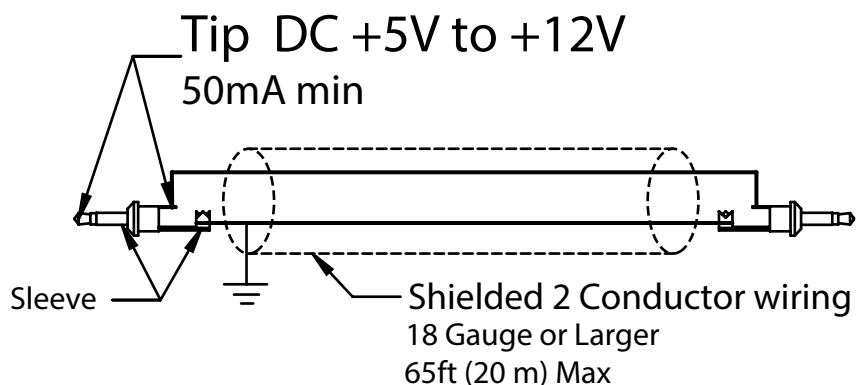
6



Connect the lights to the port at the top. Then rest the trim on frame and slide to the RIGHT until the blocks line up and the plunger clicks into place to secure the trim. The trim is correctly installed when the trim will no longer slide back to the left.

LOW VOLTAGE TRIGGERS (OPTIONAL)

TRANSFORMER



Projector ON/OFF Trigger

- Screen will move to the Preset 1 position (factory set to 16:9) when trigger transfers from low to high voltage.
- Screen will move to RESTING position (hard programmed to 2.40:1) when trigger transfers from high to low voltage.

Anamorphic Lense Trigger

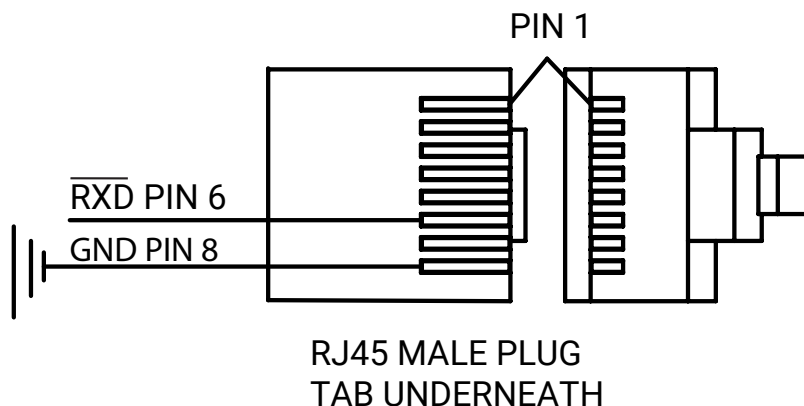
- Screen will move to the Preset 5 position (factory set to 2.40:1) when trigger transfers from low to high voltage.
- Screen will move to the Preset 6 position (factory set to 16:9) when trigger transfers from high to low voltage.

Low Voltage Trigger Summary

Trigger Input	HIGH Voltage Position	LOW Voltage Position
ON/OFF	preset 1 (16:9)	RESTING (2.40:1)
LENSE	Preset 5 (2.40:1)	Preset 6 (16:9)

Note that the trigger action is caused by the change of voltage from either high to low or low to high. Therefore the order of when that change occurs determines the state of the screen.

For example if the projector ON/OFF trigger is turned on it will begin moving the screen to 16:9, however once the LENSE trigger is turned on it will move the screen to 2.4:1 even though the on/off voltage is still high.



Command	Action Description
\$P1	Screen moves to preset 1 position (factory set to 16:9).
\$P2	Screen moves to preset 2 position (factory set to 1.85:1).
\$P3	Screen moves to preset 3 position (factory set to 2.35:1).
\$P4	Screen moves to preset 4 position (factory set to 2.40:1).
\$P5	Screen moves to preset 5 position (factory set to 2.40:1).
\$P6	Screen moves to preset 6 position (factory set to 16:9).
\$AW	Screen moves to anamorphic wide preset.
\$AN	Screen moves to anamorphic narrow preset.
\$F1	Screen moves to factory set 16:9 position.
\$F2	Screen moves to factory set 1.85:1 position.
\$F3	Screen moves to factory set 2.35:1 position.
\$F4	Screen moves to factory set 2.40:1 position.
\$OF	Screen moves to RESTING position.

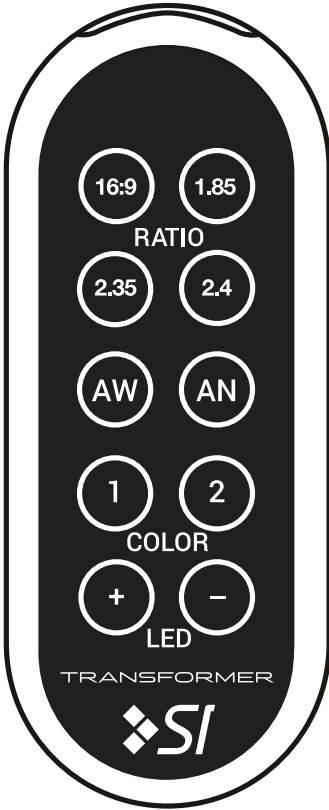
Notes

- 9,600 baudrate, 8 bits, no parity, one stop (standard), no line terminations
- Normal operations will use \$P1 - \$P6 to select watching preference.
- \$AW, \$AN will be used for anamorphic modes.
- \$F4 may be used to force a rest position move



ONLY USE THE IR RECIEVER PROVIDED BY SI WITH THE SHIPMENT. THE IR RECIEVER IS INSTALLED IN THE TRIM PIECE AND CONNECTED TO THE 1/8" STEREO JACK IN THE CONTROLLER AS ONE OF THE LAST STEPS OF INSTALLATION.

Primary Functions - Normal Mode



Button Press	Action Description
16:9	Screen moves to preset 1 position (factory set to 16:9).
1.85	Screen moves to preset 2 position (factory set to 1.85:1).
2.35	Screen moves to preset 3 position (factory set to 2.35:1).
2.4	Screen moves to preset 4 position (factory set to 2.40:1).
AW	Screen moves to preset 5 position (factory set to 2.40:1).
AN	Screen moves to preset 6 position (factory set to 16:9).
1	changes LED lights to DIY color 1 (see page 38 to change).
2	changes LED lights to DIY color 2 (see page 38 to change).
+	Turns LED lights on.
-	Turns LED ligths off.
+ *	Enters preset setting mode.
- **	Enters field maintenance mode. (For factory use only)

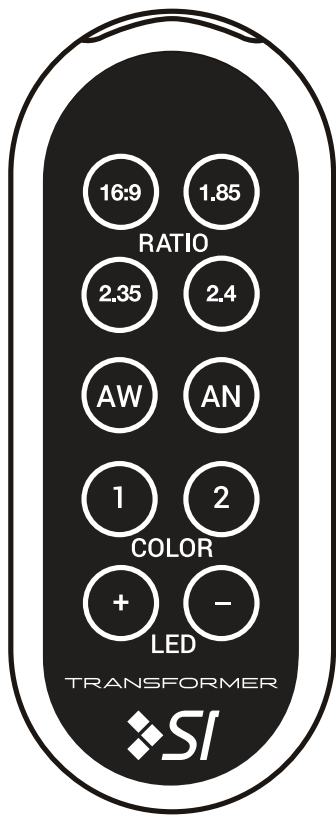
* press and hold for 4-5 seconds. Screen lights will fade between colors indicating screen is in preset setting mode.

** long press and hold for 12-15 seconds. (For factory use only; Contact SI if instructions for using this mode are required.)

Note

- All presets are set at the factory however they can be adjusted by holding down the "+" button for 4 to 5 seconds to enter the preset setting mode.

Preset Setting Mode



Button Press	Action Description
16:9	Save current aspect ratio position into preset 1.
1.85	Save current aspect ratio position into preset 2.
2.35	Save current aspect ratio position into preset 3.
2.4	Save current aspect ratio position into preset 4.
AW	Save current aspect ratio position into preset 5.
AN	Save current aspect ratio position into preset 6.
1	Jogs screen open to wider aspect ratio.
2	Jogs screen closed to more narrow aspect ratio.
+	Restores factory default preset settings.
-	Exits preset setting mode to normal mode.

* press and hold for 4-5 seconds

Notes

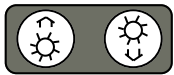
- To return to normal mode press the " - " button.
- To restore factory default preset settings press and hold the " + " button
- Lights will provide flash feedback when new preset is properly stored.

IR Hex Codes

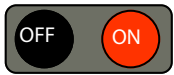
The following RS1 protocol codes are provided in pronto hex code format to be used when programming a 3rd party universal IR remote or control system. See remote's manufacturer for instructions on how to use the codes.

Key	Pronto Hex Code	Key	Pronto Hex Code
16:9	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0180	1.85	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0180
2.35	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0026 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0026 0013 0026 0013 0180	2.4	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0026 0013 0026 0013 0180
AW	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0026 0013 0013 0013 0180	AN	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0026 0013 0013 0013 0180
1	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0013 0013 0026 0013 0180	2	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0013 0013 0026 0013 0180
+	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0026 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0013 0013 0013 0013 0180	-	0000 006d 0002 001a 0013 0026 0013 0026 0013 0013 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0026 0013 0026 0013 0026 0013 0026 0013 0013 0013 0026 0013 0026 0013 0013 0013 0013 0013 0013 0013 0026 0013 0013 0013 0026 0013 0013 0013 0013 0013 0180

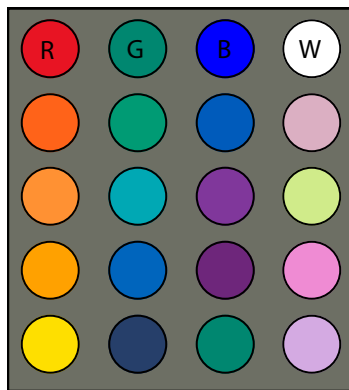
LED remote operates with one CR2032 battery.



Increase / Decrease Brightness

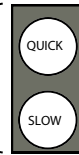


Discrete OFF / ON

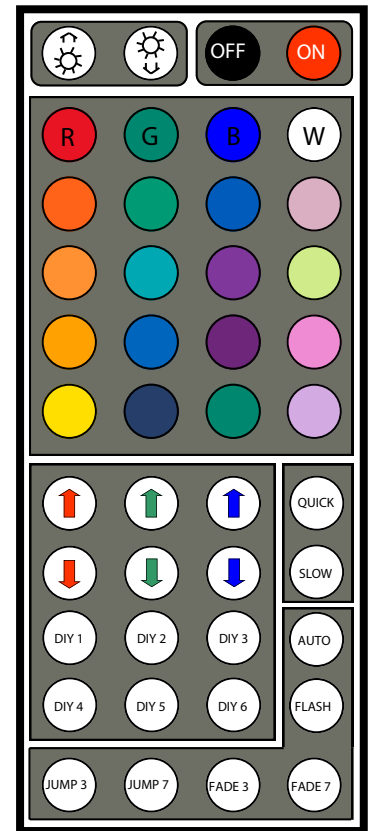
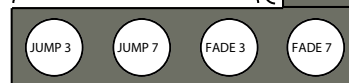


Static
Color
Keys

Increase / Decrease Speed of
Pre-programmed Sequence



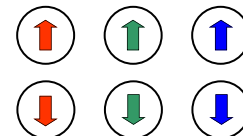
Pre-programmed
Sequences



DIY Key programming instructions:

Step 1) Press any of the DIY 1 through DIY 6 keys  to activate the programming of that key.

Step 2) Use the 6 Up and Down arrow keys to adjust the amount of Red, Green, or Blue, denoted by the arrow color.



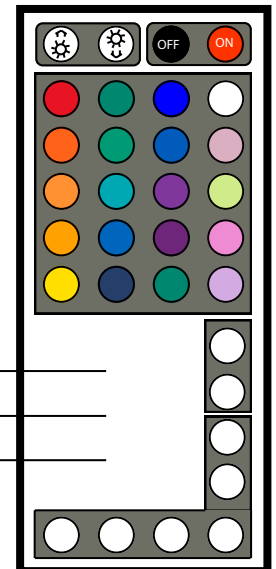
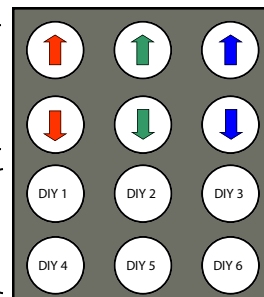
Step 3) When the color has been adjusted to your liking, press the same DIY key to lock-in the color you've created. To retrieve the color, simply press the assigned DIY key. Note: All DIY keys are independent of each other, allowing programming of 6 unique user-defined settings.



User-Programmable
DIY Key Section

Step 2)

Step 1)



LED Lighting Hex Codes

2013 5CA3	2013 5DA2	2013 41BE	2013 40BF
2013 58A7	2013 59A6	2013 45BA	2013 44BB
2013 54AB	2013 55AA	2013 49B6	2013 48B7
2013 50AF	2013 51AE	2013 4DB2	2013 4CB3
2013 1CE3	2013 1DE2	2013 1EE1	2013 1FE0
2013 18E7	2013 19E6	2013 1AE5	2013 1BE4
2013 14EB	2013 15EA	2013 16E9	2013 17E8
2013 10EF	2013 11EE	2013 12ED	2013 13EC
2013 0CF3	2013 0DF2	2013 0EF1	2013 0FF0
2013 08F7	2013 09F6	2013 0AF5	2013 0BF4
2013 04FB	2013 05FA	2013 06F9	2013 07F8



NEVER SCRUB, USE SOLVENTS, OR ANY ABRASIVE
SUBSTANCE THAT MIGHT DAMAGE THE MATERIAL.

Slate® & Pure®

Suggested Method:

Microfiber cloth towel
and distilled water
applied with lightly
rubbing the surface until
the spot is removed.

Alternate Method:

Can be cleaned with a
microfiber cloth. Mix a
solution of 1oz simple
green to 20ozs water.
You can lightly rub the
surface until the spot is
removed.

Please allow 10 minutes
of drying time before
retracting motorized
screens.



TRANSFORMER

NOTES:

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