Motorized Projection Screen 16:9

User's Manual

SAFETY WARNINGS AND GUIDELINES

Please read this manual thoroughly, paying extra attention to these safety warnings and guidelines. Keep this manual in a safe place for future reference.

Installation and Operation

- This product should only be installed by a qualified structural contractor. Failure to follow proper structural code in regard to hanging equipment could result in serious injury or death.

- The ceiling or wall structure to which this projector screen will be attached must have a minimum load bearing capacity four times the total weight of the screen.

- Frequently inspect the installation for imbalance and signs of wear or damage to cables. Do not use if repair or adjustment is needed.

- Do not stand beneath this product while it is in operation.

- Prior to operation, ensure that the sticker on the housing and underbar is removed.

General

- This device is intended for indoor use only.

- Do not expose this device to water or moisture of any kind. If water does get in or on the device, unplug it from its power source and allow it to fully dry before reapplying power.

- Do not touch the device, the power cord, or any other connected cables with wet hands.

- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.

- All wires and cables installed inside the ceiling must be rated for in-wall/in-ceiling use by the UL or a similar certification agency. An in-wall rating is sufficient for

residential installations, while a riser or plenum rating is required for commercial installations. Please refer to your local building regulatory agency for guidance.

- Do not place or install this device in an area where it can be exposed to excessive amounts of dust, humidity, oil, smoke, or combustible vapors.

- When it is extended, take care not to shake the screen or attempt to manually lift it up.

- This device has no user serviceable parts. Do not attempt to repair or disassemble this device.

- The motor requires no periodic lubrication.

Power

- Remove power from the AC circuit prior to wiring the motor to the circuit by turning off the circuit breaker or the main power switch to the building.

- This device requires a grounded/earthed power connection for safe operation.

- If using a fixed electrical connection (directly wired to a power source), install a quick disconnect device inline where it can be readily accessible. If using a standard AC power plug, ensure that the power outlet is readily accessible so that power can be removed in the event of an emergency.

- All wires and cables installed inside the ceiling must be rated for in-wall/in-ceiling use by the UL or a similar certification agency. An in-wall rating is sufficient for residential installations, while a riser or plenum rating is required for commercial installations. Please refer to your local building regulatory agency for guidance.

- Unplug this device from the power source when not in use.

- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.

- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.

- Ensure that power is turned off and disconnected before making any electrical connections.

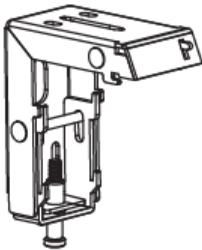- Remove the batteries from the controller if it will go unused for a lengthy period of time.

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website **www.monoprice.com** during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at **support@monoprice.com**
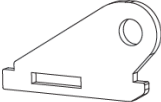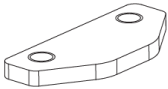
PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

All Models

1x Motorized projection screen	2x Floating brackets

8x 5x40 tapping screws	8x Anchors
1x Motor limit tool	1x M3 Allen wrench
1x User's manual	

Models 30448, 30449, and 30450 Only

2x Ceiling mount brackets	2x Ceiling lock brackets	4x M5x10 screws

INSTALLATION

This projection screen kit includes a pair of Floating Wall Brackets, which can be mounted to a wood stud wall, concrete wall, wood stud ceiling, or concrete ceiling. It also includes Ceiling Brackets, which attach to the Floating Wall Brackets and allow the screen to be suspended from the ceiling. The kit does NOT include suspension hardware other than the basic ceiling brackets. You will need to provide the mounting points and suspension cables/chains if you want to suspend the screen from the ceiling.

Wood wall installation   Wood ceiling installation   Concrete wall installation   Concrete ceiling installation
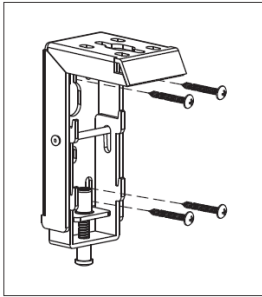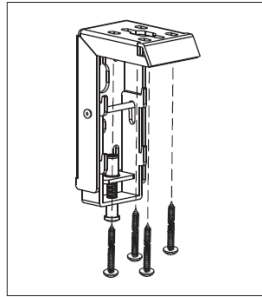
Mounting Guidelines

- If mounting to a wall, use a carpenter's level to ensure that the brackets are mounted level with each other. For best results, draw an erasable line on the wall to serve as a guide for the locations to mount the brackets.
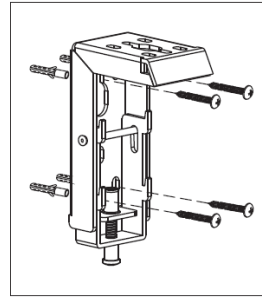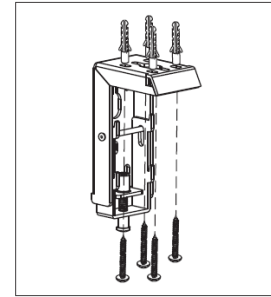
- If mounting to a ceiling, measure the distance from the wall to ensure that the screen is parallel with the wall. For best results, mount the brackets flush with the wall.

- Use a pencil to mark the drill holes through the bracket. Use a carpenter's level to check that the marked drill holes are level if mounting to a wall. Otherwise, measure the marked drill holes from the wall to ensure that the screen will be parallel with the wall.

- If mounting to wood studs, drill a 4mm pilot hole 40mm deep into the stud.

- If mounting to a concrete wall or ceiling, drill 5mm anchor holes 40mm deep into the concrete, then insert the anchors.

- If you wish to suspend the screen from the ceiling, you will need to obtain the hardware for the suspension points and the suspension cable/chain.

- If suspending the screen from the ceiling, measure the distance for the mounting points from the wall to ensure that the screen is parallel with the wall.

- Always take care when mounting the screen to properly secure the brackets and screen to the wall or ceiling. An unsecure installation can result in the screen

housing falling from its mounting location. Falling objects can really hurt before they kill you.

Standard Installation Instructions

1. Follow the above guidelines to attach the floating wall brackets to the wall or ceiling. If you wish to suspend the screen, skip ahead to the *Suspension Installation Instructions* section below.

2. Loosen the Locking Screw on each bracket to lower the Lock Piece, as shown in the image below.
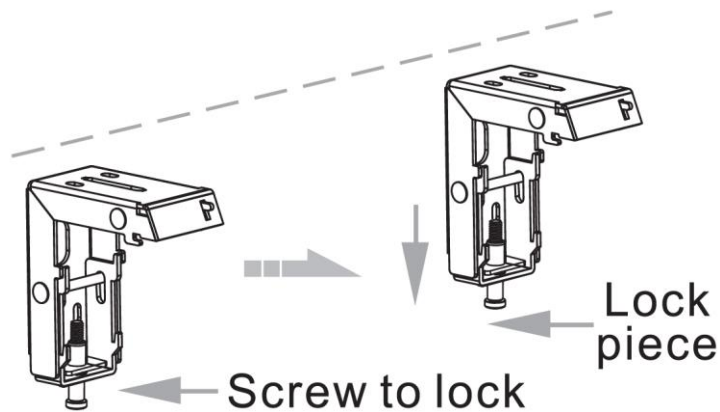
3. Lift the screen until the top of the housing is contacting the bracket, then slide it in until the back of the housing is contacting the bracket. The groove at the top of the housing will mate with the hook on the bracket. Next, tighten the Locking Screw so that the Up and Down Locking Teeth mate with the grooves on the back of the housing, as shown in the image below.

Suspension Installation Instructions

WARNING!!! Always take care when mounting the screen to properly secure the brackets and screen to the wall or ceiling. An unsecu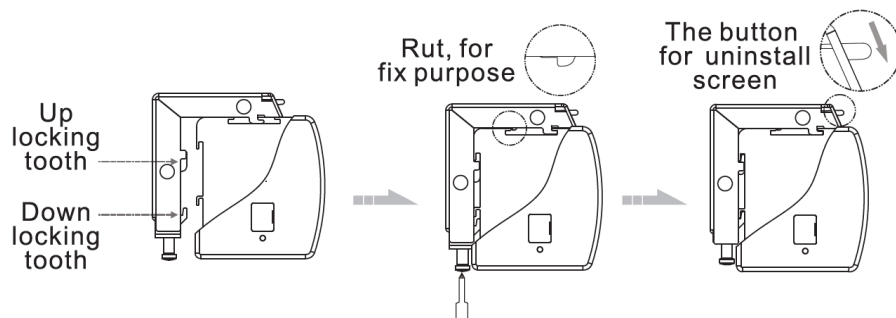re installation can result in the screen housing falling from its mounting location. Falling objects can really hurt before they kill you.

1. Insert one of the Ceiling Lock Brackets through the slot on one of the Ceiling Mount Brackets. Next, insert the vertical tab on the Ceiling Mount Bracket through the slot in the top of one of the Floating Brackets, then secure it in place using 2x M5x10 screws, as shown in the image below. Repeat with the other set of brackets.
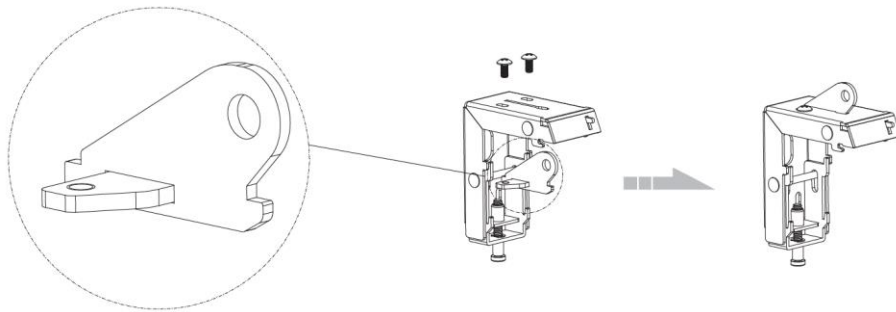
4. Loosen the Locking Screw on each bracket to lower the Lock Piece, as shown in the image below.

Lock piece

Screw to lock
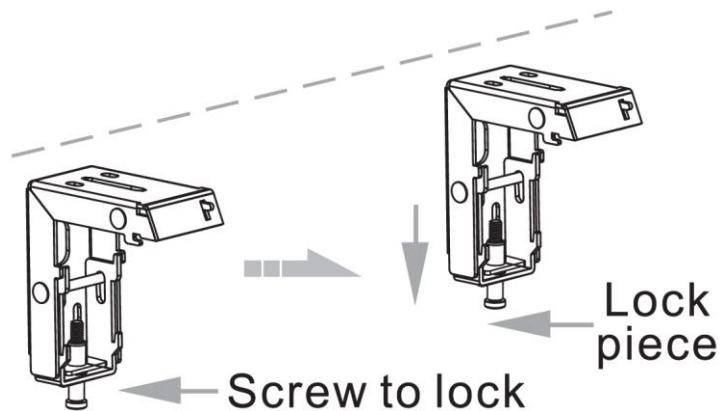
3. Place one of the Floating Bracket assemblies on the top of the screen housing, then slide it horizontally until the bracket is in contact with the back of the housing. Tighten the Locking Screw until the Up and Down Locking Teeth mate with the grooves in the back of the housing. Repeat for the other bracket.
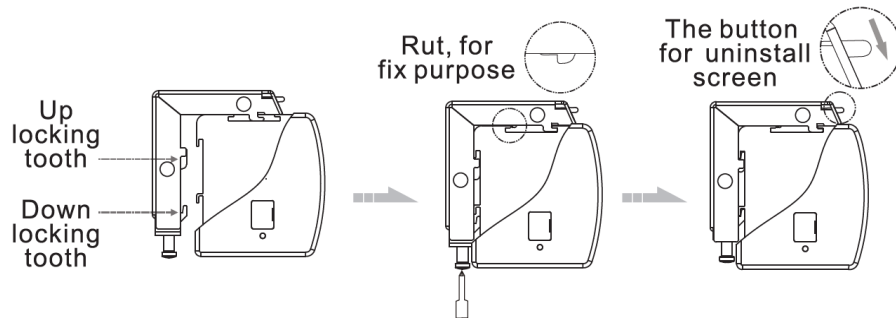
4. Using two people, suspend the screen and bracket assembly from your suspension points on the ceiling. Use a carpenter's level to ensure that the housing is level.
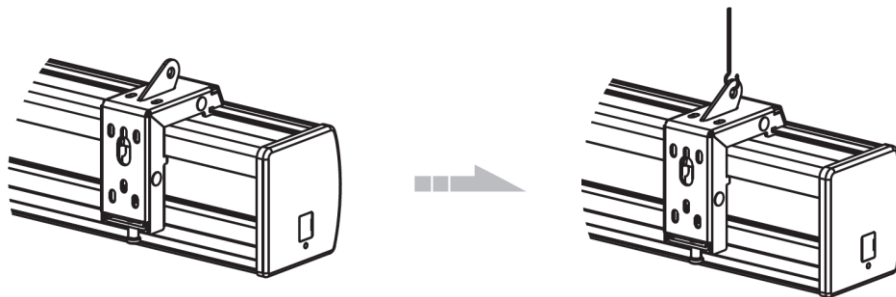
REMOVING THE SCREEN

To remove the screen from the brackets, unscrew the Locking Screws on the brackets to disengage the Up and Down Locking Teeth from the grooves in the back of the housing. Press down on the levers on the front of each bracket, then slide housing forward to disengage the hook on the bracket from the groove in the top of the housing.

WIRING

Warning! Please unplug the receiver/power module before opening to make changes.

The receiver must be wired to an AC power source and to the motor prior to operation. Use the information in the following table to wire the power source, motor, and an external switch (optional).

Model	No.	ID	Name	230V Color	115V Color
Power Line	1	L	Live Wire	Brown	Black
	2	E	Earth Wire	Yellow Green	Green
	3	N	Null Wire	Blue	White
Motor Line	4	N	Null Wire	Blue	Blue
	5	E	Earth Wire	Yellow Green	Yellow Green
	6	R	Up/Down Wire	Brown	Brown
	7	L	Up/Down Wire	Black	Black
External Switch	8	Up	Up Wire		
	9	Stop	Stop Wire		
	10	Down	Down Wire		
	11	Con	Concentric Wire		
	12	3	RS-232 TXD		
	13	5	RS-232 GND		

Wall switch wiring diagram: CON, DOWN, STOP, UP, 3 RS232−TXD, 5 RS232−GND

Note that if the screen raises when you select the down option and lowers when you select the up option, toggle the Direction Exchange Switch (SW1) to the opposite position.
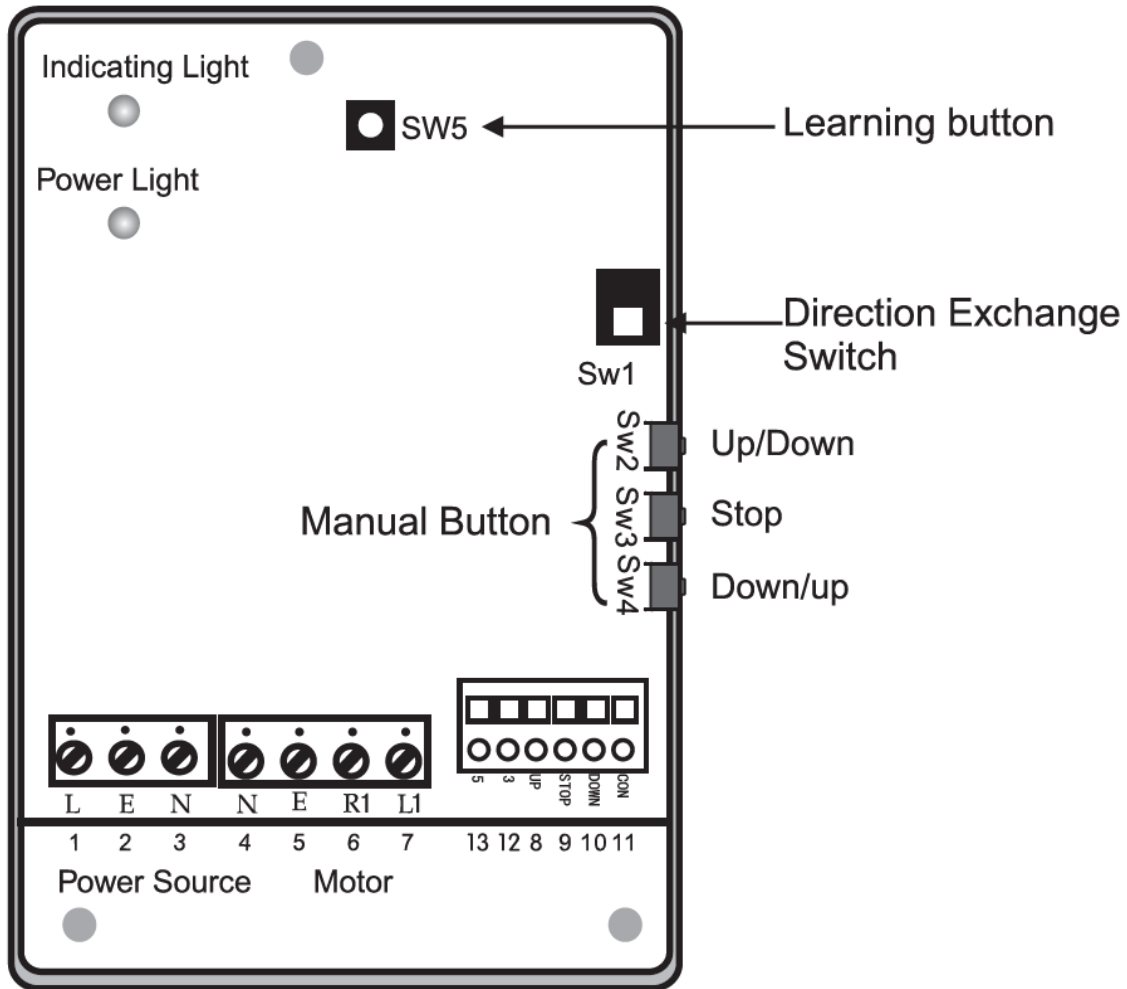
TENSION ADJUSTMENT

(Models 30448, 30449, and 30450 only)

To adjust the tension, push the M3 hex wrench into the adjustment hole, then push in and turn. Turn it clockwise to tighten the tension and counterclockwise to loosen the tension.

Loosen condition	Adjusting condition	Tension condition
Push forward	Push forwar and turn clockwise to tighten	Remove
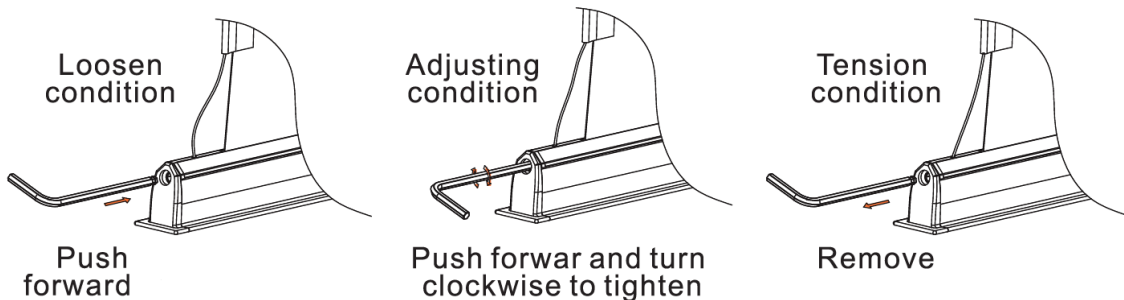
UP AND DOWN LIMITS

The screen up and down limits are set at the factory, so normally there is no need to adjust them. However, if the need arises, use the included motor limit setting tool to adjust the up and/or down limits.

- Turn the green limit clockwise to retract the screen less or counterclockwise to retract the screen more.

- Turn the yellow limit clockwise to extend the screen less or counterclockwise to extend the screen more.
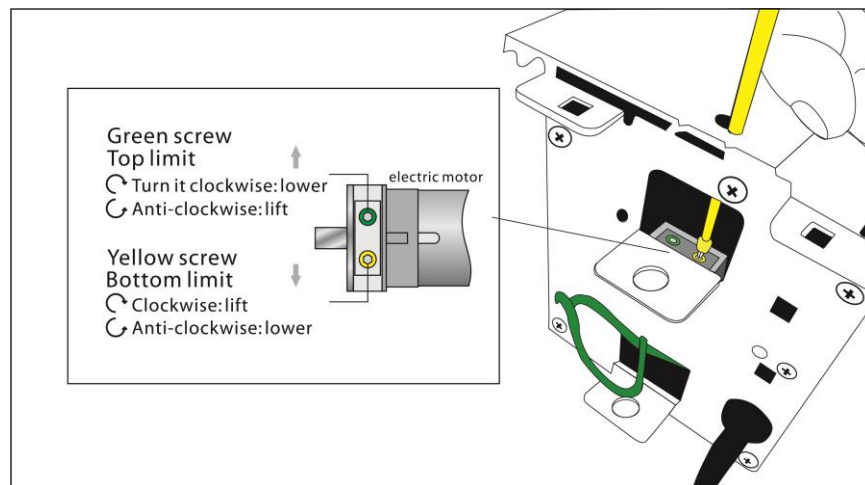
OPERATION

The screen can be controlled using one of four methods:

1. Use the included RF remote control, or

2. Use the buttons on the receiver, or

3. Use an external dry contract switch, or

4. Use a computer to control the screen using RS-232 or RS-485 commands.

RS-232/RS-485 CONTROL

You can use a computer with RS-232 or RS-485 control to raise and lower the screen. The communications protocol is:

Data Bits: 8 digits	Initial Digits: Digit 1	Stop Digits: Digit 1	Baud Rate: 2400

UP: 0xFF   0xEE   0xEE   0xEE   0XDD

STOP: 0xFF   0xEE   0xEE   0xEE   0XCC

DOWN: 0xFF   0xEE   0xEE   0xEE   0XEE

MICRO UP: 0xFF   0xEE   0xEE   0xEE   0xC9

MICRO DOWN: 0xFF   0xEE   0xEE   0xEE   0xE9

INITIAL CODE: 0xFF   0xXX   0xXX   0xXX   0xAA

Note that the "xx" means any hex code except for "E"

PROGRAMMING AND CLEARING THE REMOTE

(Models 30448, 30449, and 30450 only)

If you wish to use a remote control other than the one provided, you will need to ensure that it is an RF remote (not IR) operating at 868 MHz. You will then need to "program" the system to recognize the remote.

Setting Programming

1. Press the Learning Button (SW5) on the receiver. The LED will begin flashing green indicating that it is programming mode.

2. Press the Up/Stop button on your remote control until the LED stop flashing and illuminated steadily, indicating that the programming was successful.

Clear Programming

1. Press and hold the Learning Button (SW5) on the receiver for 5 seconds. The LED will flash slowly, then quickly.

2. Release the button, then press it once again. The LED will illuminate steadily, indicating that the programming is cleared.

Notes:

- You must set the programming within 15 seconds of pressing the Learning Button or the programming will fail.

- Do not start programming while the screen is in motion.

- When you program the system for a different remote control, the included remote will no longer work until the programming is cleared.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website **www.monoprice.com** during regular business hours, 7 days a week. You can also get assistance through email by sending a message to **tech@monoprice.com**

SPECIFICATIONS

Model	7931
Screen Size	106"
Aspect Ratio	16:9
Remote Control Type	IR
Screen Material	Fabric
Screen Color	Matte white
Screen Gain	1.0
Viewing Angles	160°
Viewing Area	92.1" x 52.0" (2340 x 1320 mm)
Total Screen Height	77.7" (1973mm)
Left/Right Borders	2.0" (50mm)
Top Border	19.7" (500mm)
Bottom Border	2.0" (50mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	101.7" x 3.9" x 3.5" (2584 x 100 x 90 mm)
Weight	31.1 lbs. (14.1 kg)

Model	7932
Screen Size	120"
Aspect Ratio	16:9
Remote Control Type	IR
Screen Material	Fabric
Screen Color	Matte white
Screen Gain	1.0
Viewing Angles	160°
Viewing Area	104.6" x 58.8" (2656 x 1494 mm)
Total Screen Height	80.6" (2047mm)
Left/Right Borders	2.0" (50mm)
Top Border	15.7" (400mm)
Bottom Border	2.0" (50mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	114.4" x 3.9" x 3.5" (2906 x 100 x 90 mm)
Weight	31.5 lbs.(14.3 kg)

Model	7933
Screen Size	133"
Aspect Ratio	16:9
Remote Control Type	IR
Screen Material	Fabric
Screen Color	Matte white
Screen Gain	1.0
Viewing Angles	160°
Viewing Area	115.9" x 65.2" (2945 x 1656 mm)
Total Screen Height	85.8" (2179mm)
Left/Right Borders	2.0" (50mm)
Top Border	11.8" (300mm)
Bottom Border	3.1" (80mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	127.7" x 5.6" x 5.3" (3655 x 236 x 226 mm)
Weight	61.7 lbs. (28.0 kg)

Model	30448
Screen Size	106"
Aspect Ratio	16:9
Remote Control Type	RF (868 MHz)
Screen Material	ISF Ultra HD
Screen Color	White
Screen Gain	1.3
Viewing Angles	160°
Viewing Area	92.4" x 52.0" (2346 x 1320 mm)
Total Screen Height	69.9" (1776mm)
Left/Right Borders	3.1" (80mm)
Top Border	15.8" (400mm)
Bottom Border	1.2" (30mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	107.0" x 4.7" x 4.3" (2718 x 119 x 110 mm)
Weight	40.6 lbs. (18.4 kg)

Model	30449
Screen Size	120"
Aspect Ratio	16:9
Remote Control Type	RF (868 MHz)
Screen Material	ISF Ultra HD
Screen Color	White
Screen Gain	1.3
Viewing Angles	160°
Viewing Area	104.6" x 58.8" (2656 x 1494 mm)
Total Screen Height	76.8" (1950mm)
Left/Right Borders	3.1" (80mm)
Top Border	15.8" (400mm)
Bottom Border	1.2" (30mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	119.2" x 4.7" x 4.3" (3028 x 119 x 110 mm)
Weight	45.6 lbs. (20.7 kg)

Model	30450
Screen Size	150"
Aspect Ratio	16:9
Remote Control Type	RF (868 MHz)
Screen Material	ISF Ultra HD
Screen Color	White
Screen Gain	1.3
Viewing Angles	160°
Viewing Area	130.7" x 73.5" (3321 x 1868 mm)
Total Screen Height	91.9" (2334mm)
Left/Right Borders	3.1" (80mm)
Top Border	15.8" (400mm)
Bottom Border	1.6" (40mm)
Power Requirements	100 ~ 120 VAC, 60Hz, 90 watts
Case Material	Aluminum
Case Dimensions	144.4" x 5.4" x 5.2" (3667 x 138 x 131 mm)
Weight	90.2 lbs. (40.9 kg)