

cirruscreens

Alto Series



INSTALLATION MANUAL

Motorized Non-Tab Tension Projection Screen

IMPORTANT: BEFORE YOU BEGIN

- To avoid staining or scratching the screen, wash your hands and clean the work area before starting.
- Do not use knives or sharp objects to open the packing boxes.
- To avoid a serious fire hazard, DO NOT install the screen over an electrical outlet or switch.

1. Important Safety Precautions and Warnings

Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

1. Read and follow all instructions and warnings in this manual. Keep for future reference.
2. Do not use this apparatus near water.
3. Clean the screen housing only with dry microfiber cloth ONLY.
4. Do not block any ventilation openings. Install according to manufacturer's instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
6. Do not override the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades- one wider than the other. A grounding type of plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles and the point where it exits from the apparatus
8. Only use attachments/accessories specified by the manufacturer.
9. Unplug this apparatus during lightning storms or when unused for long periods of time.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been spilled or objects have fallen any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
11. Do not expose this equipment to dripping or splashing; ensure that no object filled with liquids, such as vases, are placed on or near the equipment.
12. To completely disconnect this equipment from the AC mains, disconnect the power supply cord plug from the AC receptacle.

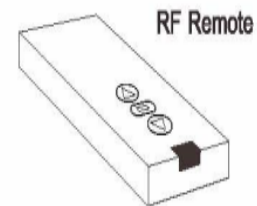
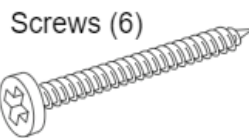
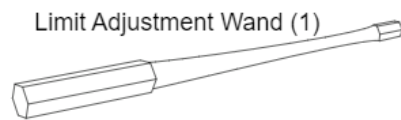
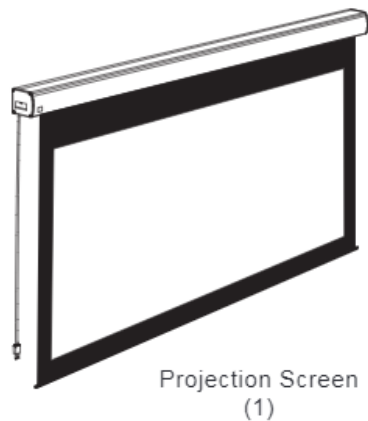


Before you unpack the projection screen, read the entire manual to become familiar with the steps involved for installation and operation. Cirrus Screens recommends that you get a qualified installation professional to perform these steps. Cirrus Screens is not responsible for any damage or injury that occurs from incorrect installation or operation.

If there are any problems please contact your authorized Cirrus Screens dealer.

Make Note of your Serial Number: _____

2. Packaging Contents



3. Pre- Installation

Before installing the projection screen, review this section thoroughly to be sure that no additional work is needed to prepare the job for mounting and controlling the screen.

3.1. Required for Installation

Have an assistant help with installation to prevent damage or injury. The following tools will be needed to complete the installation:

- Electric or Cordless Drill
- Level
- Pencil
- Screwdriver

3.2. Unpacking the Projection Screen

As you unpack the projection screen:

- Remove all accessories from the box before discarding any packaging. Use the Package Contents section to verify that everything has been removed.

3.3 Powering the Screen

Operating Voltage: 120 Volts AC

Amperage: .97 Amps

The screen has a nine-foot power cable permanently attached to the left side of the screen as seen from the viewing area. Install or locate a receptacle close enough to plug the screen in prior to installation.

3.4. Mounting Considerations

The design of the brackets allows for wall, ceiling, or hanging mounting. Plan the final height of the screen's viewing surface prior to installation. Make sure there is enough room for the screen to hang freely below the mounting location when extended.



Warning! The building structure and material in the mounting location must be capable of safely supporting the weight of the projection screen. Included hardware is only meant for use with wood, surfaces with wood bracing behind them, or concrete surfaces. Confirm with an engineer or contractor that the building material will safely support the weight of the screen using the included mounting hardware.

3.5. Control Method

Cirrus Screens can be controlled via Manual button, IR remote, wireless 12-volt trigger, RF remote, or RS232. Complete instructions for each method are described in the Control Setup section. Decide on the method that will be used before installation begins to avoid any issues with control later. Pre-wire any cables from projectors or control systems prior to closing the walls or ceiling.

4. Installation

4.1 Mounting to wood Joists or Studs

No pre-drilling is necessary for most applications.

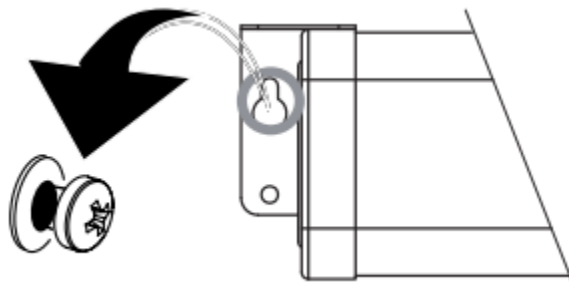
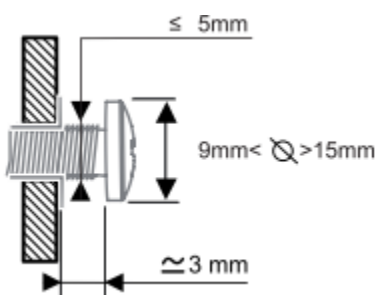


Warning! If holes are pre-drilled, use no larger than a 5/32" bit. Larger holes will not properly grip the threads, and the projection screen could fall.

4.2 Mounting to Concrete Ceiling or Wall

Use the included anchors for the mounting holes and install the screws into the anchors.

- Use a 7/32" masonry bit to drill a hole for each screw
- Insert the anchors into the holes until they are flush
- Do not install anchors in mortar joints.



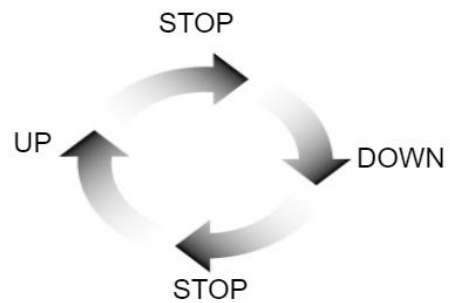
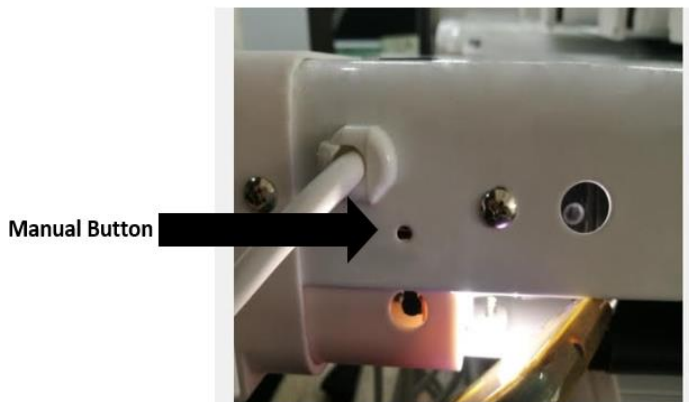
5. Control Setup

RF Control:

The RF remote works within 30 meters from the screen. Certain construction materials could negatively affect this range.

Manual Control:

In order to manually bring the screen UP, DOWN and to STOP it, you can click the manual control switch which works on a continuous cycle.



RS232 Serial Control:

The screen can be controlled via RS232 serial to perform the functions UP, DOWN, and STOP by connecting to pins 1 and 2 on the EXT CTRL RJ12 input. This is a one-way communication, so no status is available back to the automation controller.

Controller Port Configuration:

Baud rate: 2400

Data Bit: 8 bits

Initial Bit: 1

Parity: None

Stop Bit: 1

EXT CTRL RJ12 Pins:

RS232 control uses pin 1 for Ground (GND), and 2 Data Receive (RXD) on the EXT CTRL RJ12 jack.

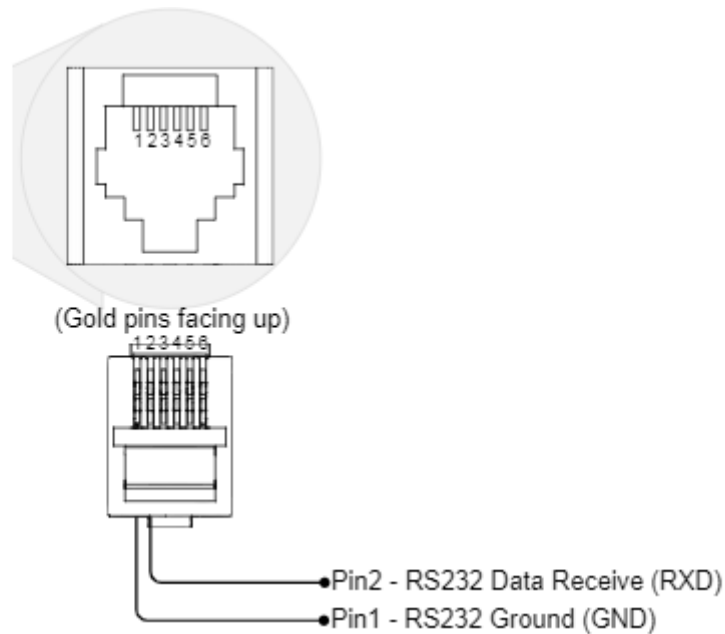


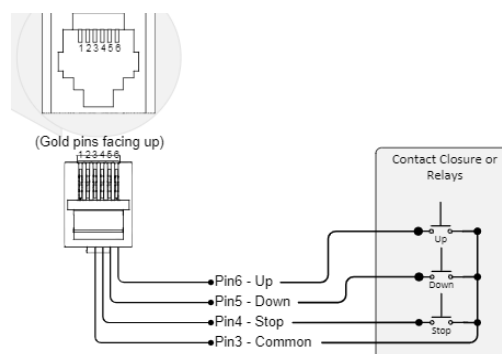
Table 1 RS232 Command Structure

OUTPUT	HEX VALUE
UP	0xFF, 0xEE, 0xEE, 0xEE, 0xDD
DOWN	0xFF, 0xEE, 0xEE, 0xEE, 0xEE
STOP	0xFF, 0xEE, 0xEE, 0xEE, 0xCC

Contact Closure and Relay Control

The Cirrus Screens motorized screen may also be controlled via contact closure or relay control.

1. Run a Cat5e/6 cable from the control system processor location to the projection screen.
2. Cut the RJ12 cable and leave about 12" of cable attached to the connector.
3. Terminate conductors in the Cat5e/6 to the desired pins of the RJ12 connector as shown in the diagram below. Insulate the ends of the unused RJ12 conductors to prevent short circuits.
4. Terminate the same conductors to the appropriate wires on the RS232 port or contact/relay connection of the control system processor.

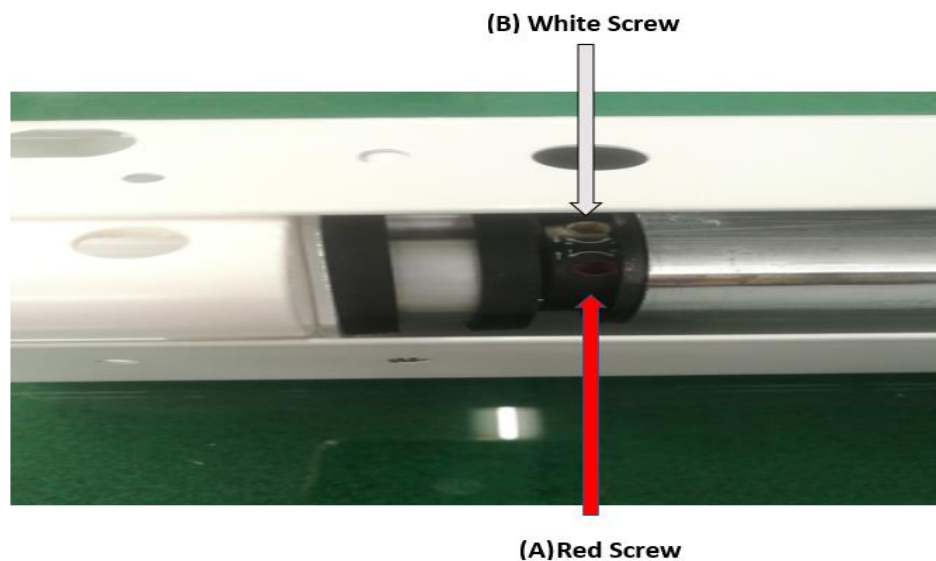


6. Cleaning the Projection Screen

Cirrus Screens are designed to provide many years of trouble-free use. After the screen is installed and adjusted, no further maintenance is required for the operation of the screen, unless the viewing surface gets dirty. Follow these guidelines to clean any marks or residue from the viewing surface:

- Do not clean the screen case with water
- Wash the screen with a mild organic cleaner diluted with water and ensure to clean the entire screen not just one spot.
- Use a dry Microfiber cloth to clean dust and dirt from the housing and screen on a regular basis.

7. Adjusting Screen Length Limits:



We recommend that only an experienced AV installer to undertake below procedures:

Deployed Limit (Amount of Black Drop):

- **Red screw**
- If the picture is too high on the screen you can reduce the amount of black drop. As seen in the diagram above, turning the **(A) (RED)** screw **counter clockwise** will **REDUCE** the amount of black drop.
- If the picture is too low, you will need to lower the screen casing. **Only**, if the black drop has already been reduced (as in the step above) can you increase the amount of black drop. The screen comes from the factory with the **maximum** amount of black drop.
- Trying to lower it further will cause the screen to roll back onto itself and could void the warranty. Contact your dealer if you are unsure about how much black drop is available on your model.
- Turning the screw **2 (two)** complete revolutions will change the amount of drop by approximately **1 inch**.

Retracted Limit:

- **White screw**- This limit is factory set and we recommend that it is not altered.
- Altering this adjustment could cause the screen to retract too far into the case or to overdrive the motor. Doing this will void warranty.

- If you want the batten bar to sit outside of the case when the screen is closed, then turning the **(B) (White)** screw **counter clockwise** will cause the bar to sit **LOWER** when the screen is closed.
- Turning the screw **2(two)** complete revolutions will change the amount of drop by approximately **1 inch**.

8. Programming Remote:

1. press the Manual Switch button to deploy the screen for about 20 cm then press is again to stop. (this procedure slows a better view on the motion of the screen only)
2. Press and hold the Manual Switch button for approximately 5 seconds until the screen will move up or down one time, then release the button. The screen is now ready to pair the remote.
3. Press the UP button on the remote once. The screen should move up and down once, showing the signal was received and the remote has been paired successfully. Try the UP/STOP/DOWN buttons to check the functions.
4. On step 3, if the UP button is not pressed within 8 seconds, then the code pairing operation will be cancelled, and you will have to go back to step 2.

9. Troubleshooting

Since Cirrus Screens are designed for function trouble-free that will last for years of enjoyment. Most problems that occur are due to simple issues. If you have trouble, please check the list of simple fixes below. If the problem persists, please contact your authorized dealer.

Issues:	Solution:
Screen does not react to any control	<ul style="list-style-type: none"> • Power cable to the film screen is incorrectly connected or plugged into an outlet that does have power. • Check connections and verify power on the outlet. • Check control method selected (IR or low voltage) and try an alternate method.
Screen goes lower than desired or does not retract far enough	<ul style="list-style-type: none"> • Adjust the up and down limit as described.
RF does not work	<ul style="list-style-type: none"> • Check the batteries in the IR/RF remote that you are using. • Ensure that you are within range of the remote being used. The factory remote will work at a distance of up to 8m/30m in most situations. • If you have chosen to “hard-wire” the IR connection into a RJ-11 connector, be sure that you have the appropriate wires on the correct pins, ad described in the RS232 control section.

Other Troubleshooting Tips:

- The screen is built with a thermal overload protection for the motor. If the screen stops moving up/down, then the protection circuit may have kicked in. This can happen when programming the screen and it is moved up/down several times within a few minutes. This will reset after approximately 10 minutes.

- If the manual button is used to program screen limits, then you may have inadvertently reprogrammed the 12v trigger or RF remote. Make sure to use the switch **under the rubber plug** to set the limits on the screen.
- If the screen moves by itself, it maybe in programming mode. Please make sure the Manual control button is not jammed and moves freely.



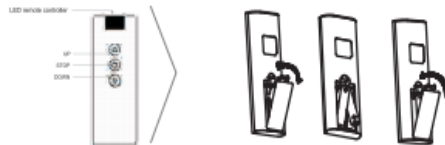
According to the surface of installation, choose the appropriate screws needed for mounting (Use Mounting Screws for wood surfaces, use Mounting Screws and Concrete Anchors for concrete surfaces)

	Recommended for fixed installation			Recommended for traditional installation
	Wall + Ceiling	Ceiling	Wall	Suspended
1				
2				
3				
4				

Power connection



Radio Frequency control



Caution

- Keep the controller away from high temperature and humidity.
- Please change the battery when the signal is low.
- Please remove the battery from the remote control when the controller is not being used for a long time.
- Please use the same type of battery as originally supplied.
- If the receiver is to be out of use for a long time, please turn the electricity off or unplug it.

