

Solo / Pro 2

Installation Instructions

24v DC Motors



Please use these QR Codes to access the updated installation instructions and video tutorials.



Solo 2



Solo Pro 2

Thank you for purchasing an SI product. If you have any questions or need any assistance with your Solo Pro, we would love to help you.

Technical Support: 512.832.6939

Hours of Support: 7:30am - 5pm CST


screeninnovations.com

support@screeninnovations.com

INITIAL CONSIDERATIONS

Thank you for your purchase of Solo/Pro 2. The screen is mountable outdoors, but is not waterproof. It has not been designed to be run or left in the rain or condensing humidity. Also avoid water spray, splash and extreme heat or cold. Protect your Solo/Pro 2 and you can expect years of quality use.

For a quick install it is recommended you run appropriate wire to the installation location before installing the screen. See the Pre-Wire sections for your particular control method for details.

-  **The Short Throw material is not 100% opaque. Light sources behind the screen may be visible in the viewing surface.**

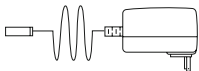
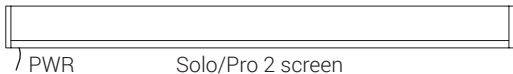
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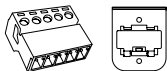
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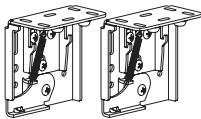
24v DC RTS - Parts in the Box



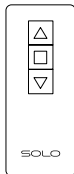
24v DC Power
Supply



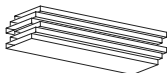
Terminal block
receptacle and bracket



(2) Ceiling/Wall
Locking brackets



RF Remote



(6) Leveling Shims



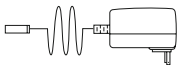
(6) Wood
fasteners

24v DC 485 - Parts in the Box



PWR 485

Solo/Pro 2 screen



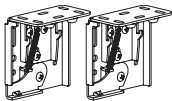
24v DC Power
Supply



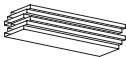
Terminal block
receptacle and bracket



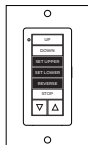
(6) Wood
fasteners



(2) Ceiling/Wall
Locking brackets



(6) Leveling
Shims

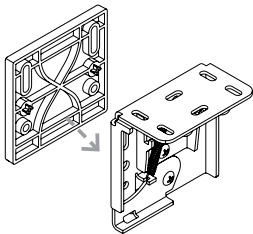


Decoset &
Interface

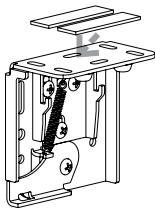
Additional accessories required for 485 control (pg 43)

SPACER BLOCKS & LEVELING SHIMS

Spacer Blocks are used to clear an obstruction on the wall. Connect spacer block to each wall bracket before installation.

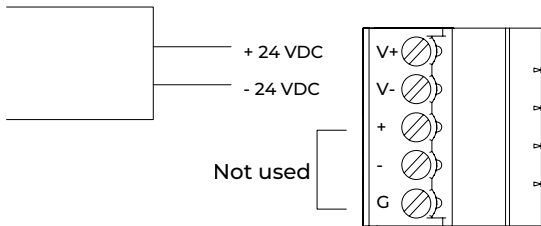


Leveling Shims are used if the ceiling or other mounting surface is out of level or plumb. Connect to ceiling brackets before installation.



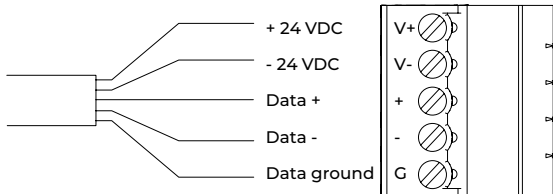
PRE-WIRE - 24v DC RTS

1. Run 2 conductor wires to the left side of screen cassette installation location (refer to pg. 11). Follow the power wire distance chart (refer to pg. 7) to ensure use of the correct wire gauge.
2. Terminate the wires with the provided terminal block as shown below.



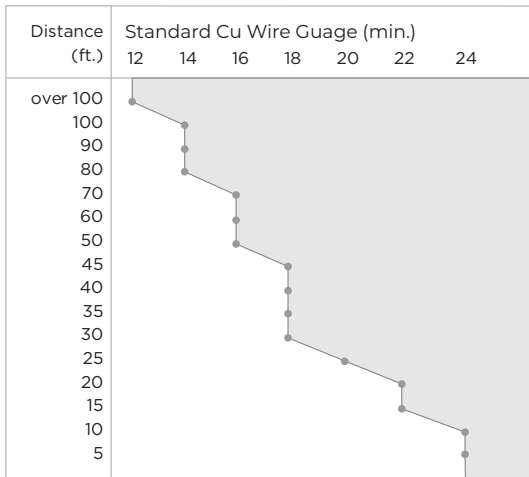
PRE-WIRE - 24v DC 485

1. Run minimum 5 conductor wire to the left side of screen cassette installation location (refer to pg. 11). To be sure you have the correct wire, order directly from SI (Part # - Non-Plenum - 800269/ 9020126 and Plenum rated - 9020127). If you are using third party wire, follow the power wire distance chart (refer to pg. 7) to ensure use of the correct wire gauge for the 24 VDC wires.
2. Terminate the wires with the provided terminal blocks shown below.



Pre-Wire - 24v DC 485

POWER WIRE DISTANCE CHART



Do not use any combination above the line.

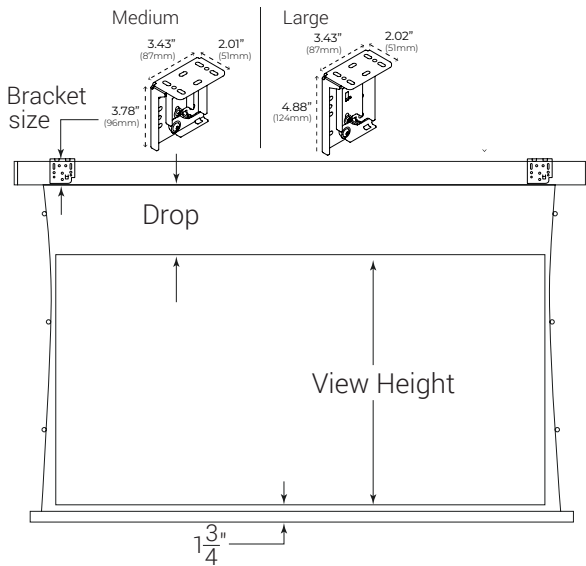
Power Wire Distance Chart

INSTALLATION

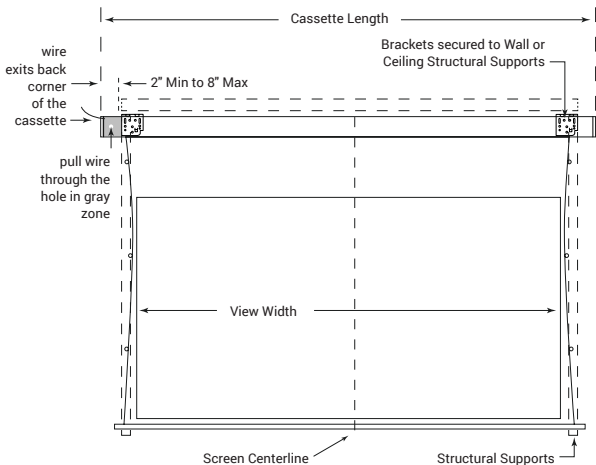
Proper mounting preparation will ensure a great installation. Mounting brackets must be level to each other, as well as plumb. They must be screwed into structural members of some kind, such as ceiling joists or wall studs. You may use the wood screws provided, or other anchors (not provided) capable of carrying the load, that are suitable to the substrate.

DO NOT MOUNT TO HOLLOW SHEET ROCK.

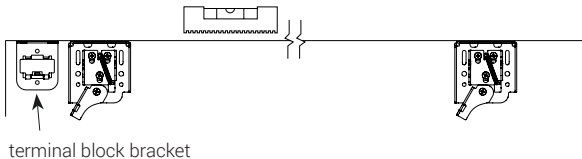
1. The drop is adjustable in the field between 0" and the MAX DROP (12", 24", or 36", **2" for short throw**) ordered for your screen. Use the drawing (refer to pg. 9) to pick a bracket height that will allow you to extend your screen to achieve the desired vertical position of your viewing area.



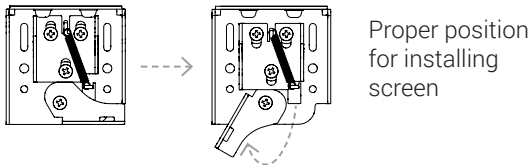
2. Determine the desired horizontal viewing position centerline of the projected viewing area.
3. The Solo/Pro 2 screen must be installed with the brackets between 2 - 8" range from each end of the cassette. Measure the overall length of the cassette to determine the min and max horizontal spacing of the mounts. Mark the location of the brackets over a stud or ceiling joist and within an appropriate distance from the ends. If the location of the stud or ceiling joist does not allow the center of the screen to match the projector lens' center, another board or plate will have to be installed on the wall or ceiling to take the mount fasteners.



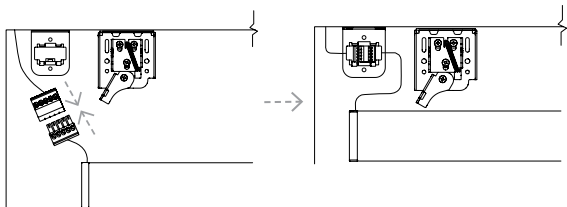
4. Secure the brackets to the wall or ceiling structural supports using appropriate fasteners. Make sure the brackets are along the same level line. Install the terminal block bracket next to the left bracket. This bracket is used to hold the power and/or controls terminal block easily out of sight.



5. Ensure the wall bracket lever is down.

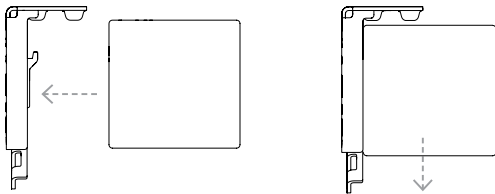


6. Connect the screen terminal block to the pre-wire terminal block. Then press the connected terminal block into the mount.

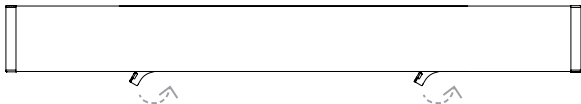


7. Hang the screen on the mounting brackets ensuring that all hooks are engaged in the channel in the back of the cassette.

⚠ Hanging the screen, will require 2 people.



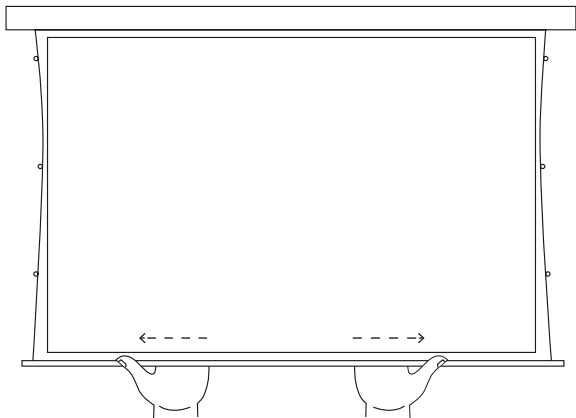
8. Slide the cassette left to right to verify it is positioned at your desired viewing location, then lock the screen in place, rotating the wall bracket lever to the upward position.



⚠ Remove the weight bar screw before deploying screen (see red label on the weight bar)

9. Use your preferred control method to deploy the screen material and remove the weight bar shipping locks.

10. If slight wrinkles are present, you may need to distribute the screen material at the weight bar.
(refer to pg. 39 - 40 for detailed instructions)



24v DC RTS - Running

Solo/Pro 2 is very easy to operate. The RF remote, supplied with the screen, controls the deployment and retraction from up to 30 feet away. Enjoy!

RF controlled projection screens operate at 433.42MHz. Minimize or eliminate any sources of RF interference and shielding. Any metal, wire, or foliage can reduce or block the signal - reducing the operating range of the controls. Other nearby transmitters may cause interference also.

1. Connect the power supply - Solo/Pro 2 with an RTS motor is shipped with the remote already paired to the screen. Plug the power supply into the wall and plug the connectors together.
2. The screen is ready for operation.

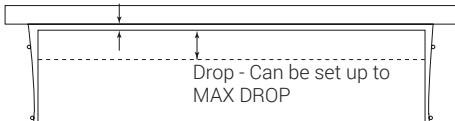
PROGRAMMING - 24v DC RTS

Setting the Drop - Solo/Pro 2 is factory preset to have 1" of drop, the distance between the top of the viewing area and the cassette. The drop can be changed to be up to the MAX DROP (see model number or order information for your screen's max drop) to customize the viewing surface's vertical position. To adjust the drop, do the following:

1. Press the down button on the RF remote to send the screen to its lower limit and wait until it stops there. Screen must be at its current lower limit before you can alter it.
2. Hold the UP and DOWN buttons simultaneously until the screen jogs once.
3. Use the DOWN and UP buttons to position the viewing area vertically, up to Max Drop from the bottom of the cassette.

- ⚠ DO NOT set the lower limit (top of viewing) more than MAX DROP from the cassette. Doing so risks damaging the screen material.
4. Once the viewing area is positioned, hold the middle square STOP button until the screen jogs once. This saves the new lower limit. If this Step is not completed, the screen will jog once after about 3 minutes, indicating that its no longer in program mode, and the motor will only recall the previous lower limit. No changes will be saved.

1" Factory default drop

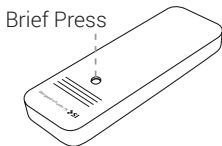


PAIRING ANOTHER RF REMOTE USING ORIGINAL REMOTE

If another remote was purchased, it will not come paired to your screen motor. To pair it, first take the working remote supplied with the Solo/Pro 2 and press the Program button on the back of the remote until the screen jogs once. Holding the new remote, briefly press* the Program button on the back. The screen will jog once. The new remote is now paired with the screen.



Original Remote



New Remote

*A brief press is about $\frac{1}{2}$ second long. Too short or too long of a button press may not perform the desired operation.

PROGRAMMING LV(24v) 485 - WITH DECOSET (incl.)

Setting the Drop:

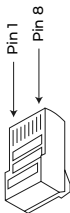
Solo/Pro 2 is factory preset to have 1" of drop, the distance between the top of the viewing area and the cassette. The drop can be adjusted up to the MAX DROP (see model number or order information for your screen's MAX DROP) to customize the viewing surface's vertical position.

NOTE: Refer to pgs 12 - 15 in the included Decoset instructions. Alternatively you can scan the QR code here to access the instructions.



PROGRAMMING 24v DC 485 - WITH IP CONTROLLER (optional)

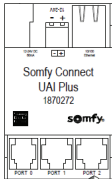
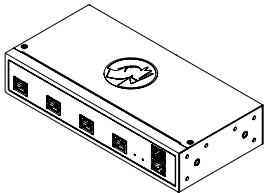
485 screens are most commonly used with the IP controller. The screens are fully commissioned via the IP controller web interface. Only after fully commissioning your screen should you then use your control system's programming guide to integrate your screen into it.



RJ45

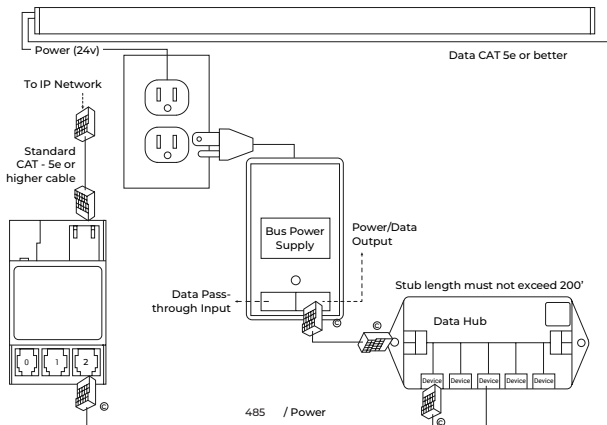
485 Wiring Pinout		
Utilizing RJ-45 TIA-568B termination standard		
Pin#	Color	Function
1	Orange White	SDN RS485 (+)
2	Orange	SDN RS485 (-)
3	Green White	Reserved
4	Blue	Power 24v DC
5	Blue White	Power 24v DC
6	Green	Reserved
7	Brown White	SDN RS485 Ground
8	Brown	SDN RS485 Ground

For Screen Data, use Pins 1,2 & 8



485 screens are programmed using the IP controller via the web interface. This programming can be done with a Windows or Mac computer either over LAN or wired directly to IP controller. The following instructions are for a Windows computer, but the steps for programming on a Mac are very similar. For a complete guide to program IP controller on a Mac, please visit our website. Before attempting to program any motors with IP controller, verify that the firmware is up to date. To adjust the lower limit of an 485 screen, follow the steps below.

Screen with UAI+ / SIFI block diagram



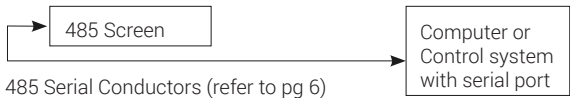
1. Launch Windows File Explorer
2. Click on the "Network" tab
3. Double click on the IP Controller, the default web browser will launch. **Skip to Pg 25 if you have TRO.Y**
4. For the UAI+/SI.FI - At the landing page, click the three lines in the top right corner, then click "Settings"
5. Select the "SDN" tab on the top left
6. Press the spyglass to auto discover motors on the 485 network (may have to press it more than once)
7. Click on the motor you want to program
8. Name the motor
9. Right click on the down limit count
10. Move the screen up or down using the buttons in the popup window
11. Click set to confirm the limit
12. Operate the screen up and then back down to verify the position of the limit. **If you are done, Skip pg 25.**

4. Click on the Integration table button.
5. Click on the Device table button.
6. Click on the 485 Discovery button and start the discovery. When you see the motor you want to program, click on the Import Discovered devices button. Then click Back.
7. Name the motor you want to program and click on Accept. Then click Back.
8. Click on the Config button of the motor you want to program.
9. Click on the Limit button and click on the adjust Lower limit button, now use the controls to position the motors to the new limit
11. Click set to confirm the new limit
12. Operate the screen up and then back down to verify the position of the limit

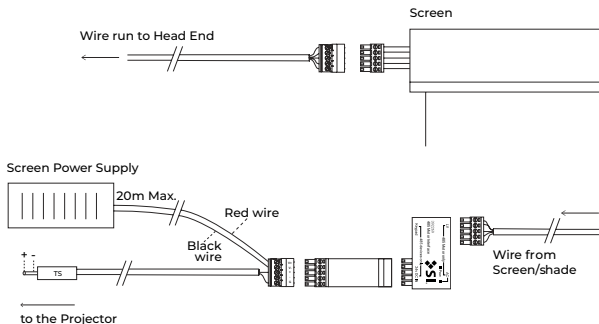
CONTROL LV(24v) 485 WITH 3RD PARTY - VIA SERIAL

There are several options to control a Solo 2 485 screen with 3rd party controls. To integrate with your preferred solution see the corresponding programming guide and/or the system manufacturers instructions. **Note: To change the programming (lower limit) you will need either a DecoSet or IP Controller.**

- For connection to your control system with an IP Controller refer to pinout image (pg 22). Then use your control system's programming guide to send commands to control the screen. For further integration help call support at 512.832.6939.



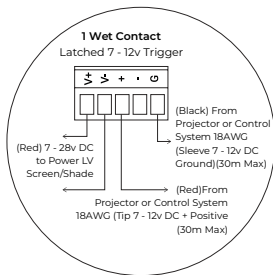
USING 485 MOTOR INTERFACE WITH FONTUS FOR 3RD PARTY CONTROLS - LV MOTORS



CONTROL 485 WITH 3RD PARTY (WET CONTACT) via FONTUS

Projector Wet Contact Closure(12v trigger)Input

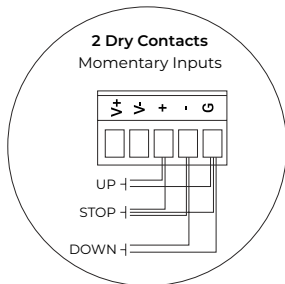
NOTE: Refer to the drawings on pg 28. See below for the 12v trigger Fontus pinout. For more details, refer to pg 6 of the pdf in the included Fontus instructions. Alternatively you can scan the QR code here to access the instructions.



CONTROL 485 WITH 3RD PARTY (DRY CONTACT) via FONTUS

Projector Dry Contact Closure Input

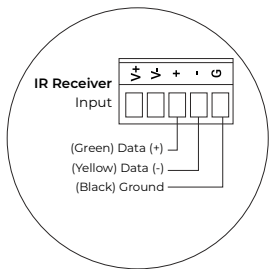
NOTE: Refer to the drawings on pg 28. See below for the Dry Contact Fontus pinout. For more details, refer to pg 7 of the pdf in the included Fontus instructions. Alternatively you can scan the QR code here to access the instructions.



CONTROL 485 WITH 3RD PARTY (IR) via FONTUS

IR Input

NOTE: Refer to the drawings on pg 28. See below for the IR Fontus pinout. For more details, refer to pg 8 of the pdf in the included Fontus instructions. Alternatively you can scan the QR code here to access the instructions.



CONTROL 485 WITH 3RD PARTY (IR) via FONTUS - PROGRAMMING

Hexcodes

Third party IR universal control systems may be used to control the screen and commands may be learned from the SI IR Remote or using these hex codes:

Note: Fontus can only respond to these IR codes. No serial connection can be made.



0000 006c 0000 000c 0006 011b 0006 011b
0006 00bb 0006 00bb 0006 00bb 0006 00bb
0006 00bb 0006 00bb 0006 00bb 0006 00bb
0006 011b 0006 08a4



0000 006c 0000 000c 0006 011b 0006 011b
0006 00bb 0006 00bb 0006 00bb 0006 00bb
0006 00bb 0006 00bb 0006 00bb 0006 011b
0006 011b 0006 08a4



0000 006c 0000 000c 0006 011b 0006 011b
0006 00bb 0006 00bb 0006 00bb 0006 00bb
0006 00bb 0006 00bb 0006 00bb 0006 011b
0006 00bb 0006 08a4

CONTROL 485 SCREENS WITH INCLUDED DECOSET KEYPAD

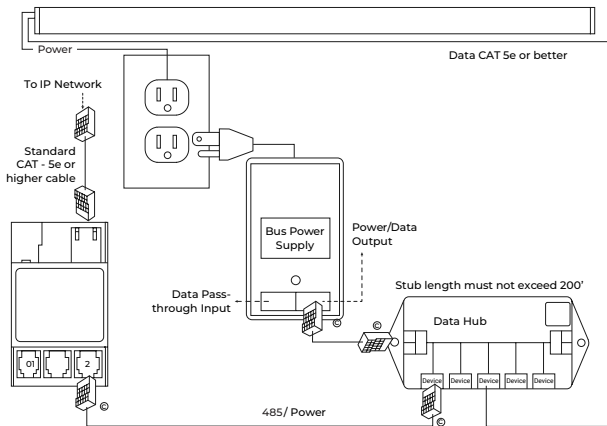
NOTE: Refer to pgs 17- 19 in the included Decoset instructions. Alternatively you can scan the QR code here to access the instructions.



CONTROL AC(110v) 485 WITH 3RD PARTY - VIA IP CONTROLLER

More details about how to integrate with your preferred solution see the corresponding programming guide and/or the system manufacturers instructions. When using an IP Controller, you will connect to Solo2 as shown in the following drawing with the RS-485 connection. Connecting your 3rd party control system to Solo 2 uses an IP network connection. Connect your IP Controller to the same IP network as your control system and follow the respective IP Controller programming guide to complete the connection.

For further integration help call SI support at 512.832.6939.

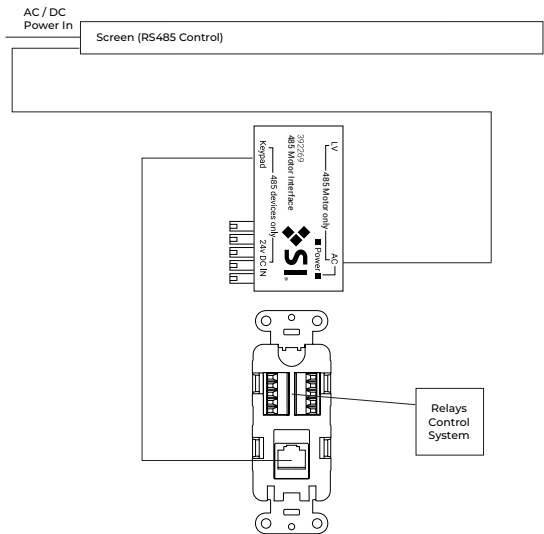


Example of SI.FI/ UAI+ connection

CONTROL LV(24v) 485 WITH 3RD PARTY - VIA DCT

Momentary dry contact closure via included DecoSet switch. See following block diagram. See 485 wiring pinout (pg 21) for wiring termination. See DecoSet instructions (pg 11) to integrate control system dry contact closure into your system.

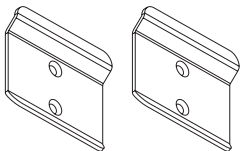




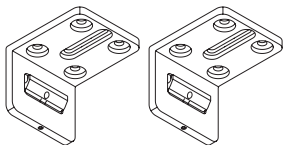
Control LV(24v) 485 - with 3rd party via DCT

MOUNTING ACCESSORIES

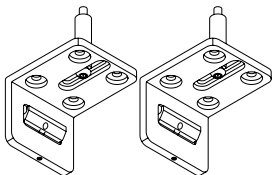
(purchased separately)



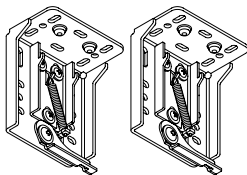
Zero Gap Wall Brackets



Décora Ceiling Brackets

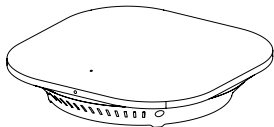


Décora Flying Brackets



Ceiling/Wall Locking Brackets (incl. standard)

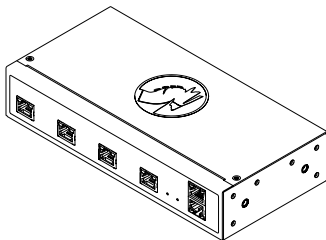
MOTOR ACCESSORIES - LV(24v) RTS (purchased separately)



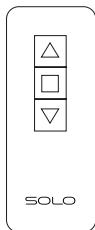
LinkProZ



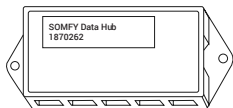
Connect



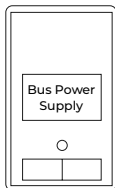
TRO.Y



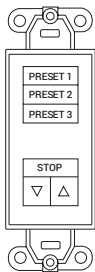
MOTOR ACCESSORIES - 24v DC 485 (purchased separately)



Data Hub



Bus Power Supply



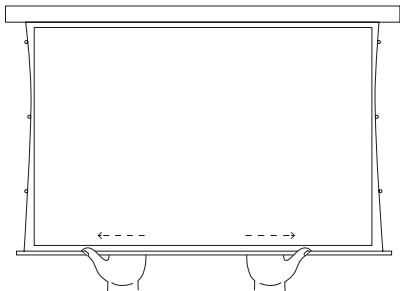
Decoflex Wall Switch

STORAGE AND TRANSPORT

Before storing or transporting Solo/Pro 2, make sure the screen is fully retracted. Disconnect the motor power supply and any control wiring to make sure the screen does not deploy. Failing to do so may damage the screen.

It is preferred to store or transport your Solo/Pro 2 horizontally. Shock and vibration experienced during transportation may shift the screen material and cause slight wrinkles. If this occurs, the wrinkles may be removed in most cassettes by manually redistributing the material with the following steps:


1. Bump the bottom of the weight bar up several times along it.
2. Use 2 fingers to pinch the material just above the middle of the weight bar and lightly pull on the material to smooth out any wrinkles at the weight bar.



3. Repeat the process to move the material from the center toward the other edge.
4. If the screen has been stored in a wrinkled condition. The wrinkles may not fall out immediately. If wrinkles remain after an hour, call 512.832.6939 (opt.1) for further instructions.

⚠ Storage temperature is important for the screen material. Store it between 0°C and 50°C.

CARE AND MAINTENANCE

 **DO NOT scrub the screen material. This will damage the viewing surface.**

These screens are designed and engineered to be virtually maintenance free. There are no user serviceable parts inside, except for the screen material. The screen needs to be kept clean - free of dust, dirt, hair, particles, and any other foreign material. Loose material will cause dimples in viewing and can be carefully brushed away with a microfiber cloth. Smudges and splotches from water soluble dirt may be removed with a damp microfiber cloth. Although the cassette is protective, it should not be handled roughly. Inadvertent small scratches, dents or dings may be unsightly, but they will not affect the operation of the screen. Wipe any smudges or handprints off with a damp cloth. Dry thoroughly after wiping.

TROUBLESHOOTING

Solo/Pro 2 is 100% programmed and tested at the factory. In case of a malfunction please use the troubleshooting guide table.

Symptom	Possible Cause	Solution
Screen won't run	No power to 24v DC supply	Check for power at your plug and/ check for breaker box.
Vertical wrinkles in screen	Material has shifted at the weight bar	Gently move the material out to each end of the weight bar until smooth.
When down button is pressed, screen stops halfway	An intermediate stop was set for the motor	Call SI Customer Support to fix at 512.832.6939, Opt. 1
Dimples in screen	Debris rolled up in screen material	Clean material per instructions on Pg 30.

Tech Support: 512.832.6939

Symptom	Possible Cause	Solution
For RTS	Remote too far away	Move to within 30 ft. of Solo
RTS won't operate	Remote orientation	Hold remote vertical
	RF interference	Turn off other sources of RF
	RF Shielding	Move to position where metal objects, wiring, or foliage does not block the signal.
	Remote battery is dead	Replace with CR2430 3V lithium button battery
	Antenna is not exposed.	Adjust the antenna location.

Symptom	Possible Cause	Solution
For 485	Incorrect or poor cable termination.	Check the wire pinouts and termination. Look for broken, loose, or damaged wires. Determine if necessary.
RS 485 won't operate	via IP Controller	Check that the green LED on IP Controller is flashing. If not, make sure power is available via the bus power supply or PoE (with expansion card only).
	IP Controller is not powered.	

Symptom	Possible Cause	Solution
RS 485 won't operate (cont.)	IP Controller is not on the local network.	Use the service keypad (if available) to validate the 485 network and motors are operating properly before troubleshooting SIFI network problems. Check that the IP Controller is communicating on the local network. Ping the device via the windows command prompt, or make sure the device shows up in the network tab of the Windows File Explorer.

WARRANTY

New SI products carry a standard 1- year warranty on parts and labor.

FCC INFORMATION

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including that which may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

⚠ Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

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v. 1.6 | 27 July 2021