

Moab

Installation Instructions



INSTALLERS: Please leave this manual with the owner.

TABLE OF CONTENTS

General Connections.....4

Motor Connection Detail (Top Ports).....5 - 7

Device Connection Detail (Dry Contact Closure Pinout).....8

Moab LED Detail.....9

Moab Board Dip Switch Settings.....10

Moab Buttons Front (User Mode)11 - 16

Moab Buttons Front (Programming Mode)17 - 24

- Limit Setting Detail (Programming Mode).....20 - 21

Moab Wiring 12v Detail25

Moab IR Receiver Detail26

Removing and Re-installing Moab from Screen27

Externally Mounting Moab28

485 Device Connection Detail.....29 - 30

485 Device Auto Discovery and Programming.....31 - 33

485 Device RF Connection Detail.....34

485 Device RF Connection Detail (with Hub).....35

485 Device RF Connection (using RF Gateway)36 - 39

Moab to Moab Connection Detail40

Moab to TRO.Y Connection Detail41

SI 485 Simple Protocol42

Moab FAQs43

Moab Troubleshooting.....44

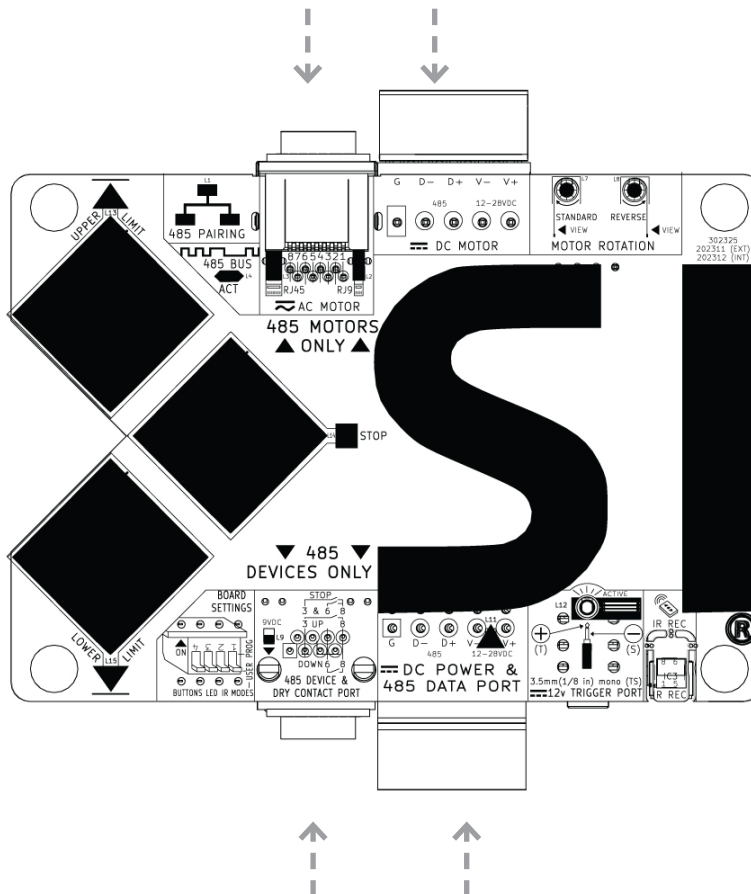
Notes.....45 - 46

GENERAL CONNECTIONS

485 Motor Connections:

- Top RJ45 silver port used for AC motors only compatible with RJ9 and RJ45 cable terminations
- Top Terminal Block white, 5 position, 3.81mm pitch header (comes with mating white plug)

Motor Connection (Only 1 of these can be used at a time)



485 Device Connections (Both of these can be used, simultaneously)

485 Device Connections:

- Bottom RJ45 black port for use with 485 keypads, 485 wireless controllers or 485 data hubs
- Bottom Terminal Block black, 5 position, 3.81mm pitch inverted header (comes with a mating black plug) for connection to DC power supplies

MOTOR CONNECTION DETAIL (TOP PORTS)

Terminal Block:

- Top Terminal Block
1(G),2(D-),3(D+),4(V-),5(V+)
(5 Position, 3.81 pitch)

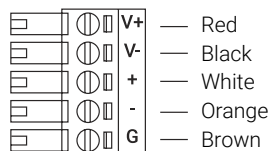
RJ45 (4P8C) (Colors from the pinout below are from T-568B):

- Top RJ45 Pins 1(D+),2(D-),4(V+),8(G)

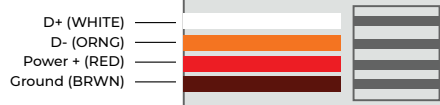
RJ9 (4P4C):

- Top RJ45 Pins 3(D+),4(D-),5(V+),6(G)

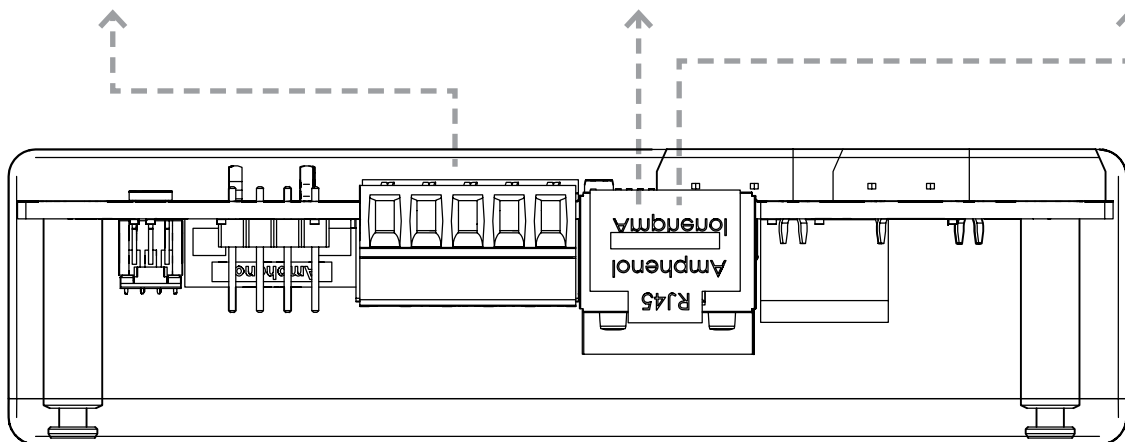
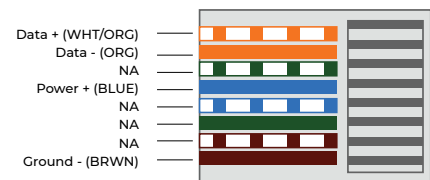
485 Motor connection
(Terminal Block)



485 Motor connection (RJ9)



485 Motor connection (RJ 45)



Note1: MOAB has protection for AC connected motors in the event a remote DC Power Supply is connected via bottom DC Input

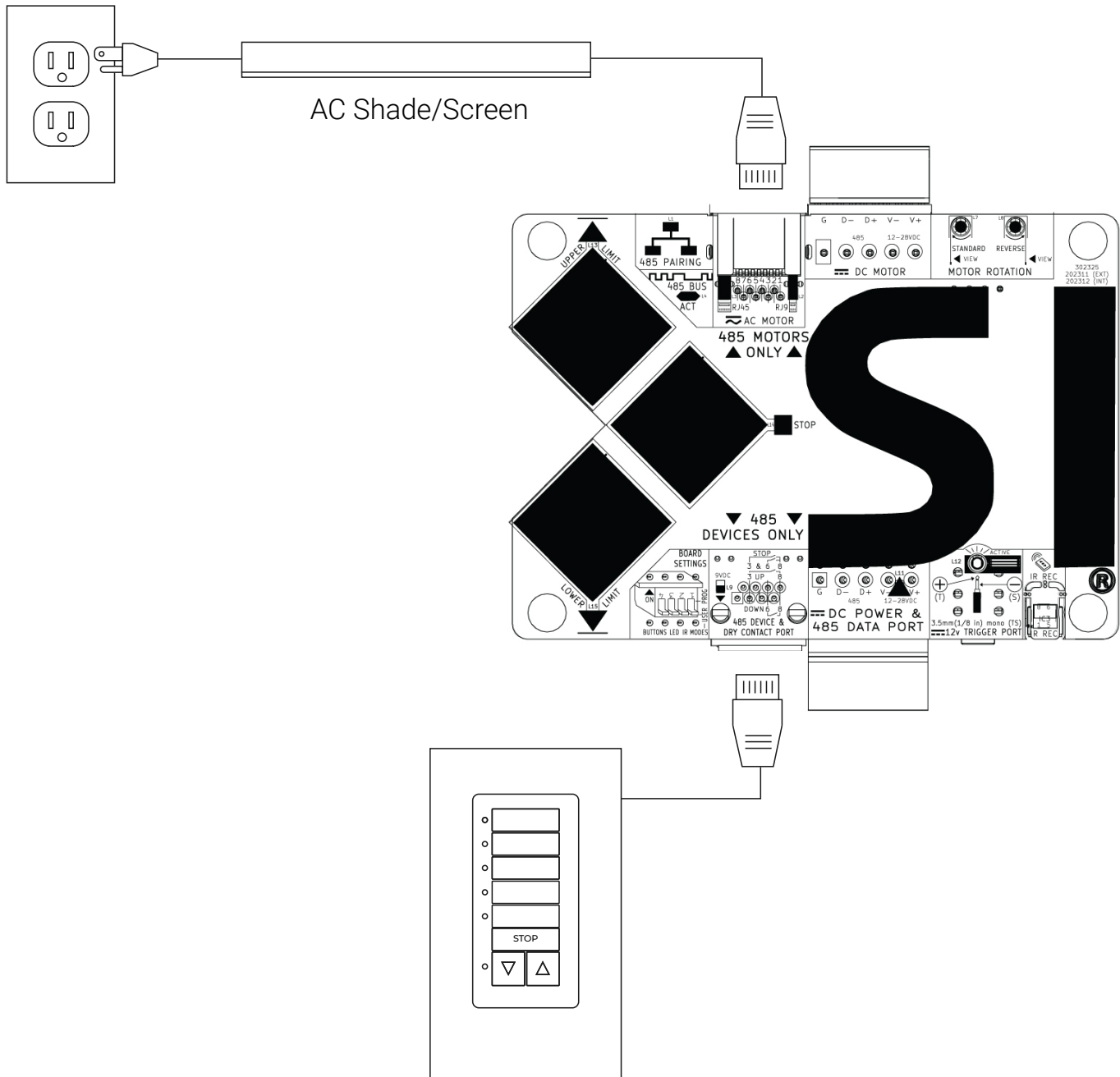
Note 2: The top RJ45 port protects and switches internally whenever an RJ9 or RJ45 cable is connected from an AC motor.

Note3: Do not connect a 485 device to motor port (such as Janus, or other power supply)

MOTOR CONNECTION DETAIL (TOP PORTS) - AC MOTOR CONNECTION

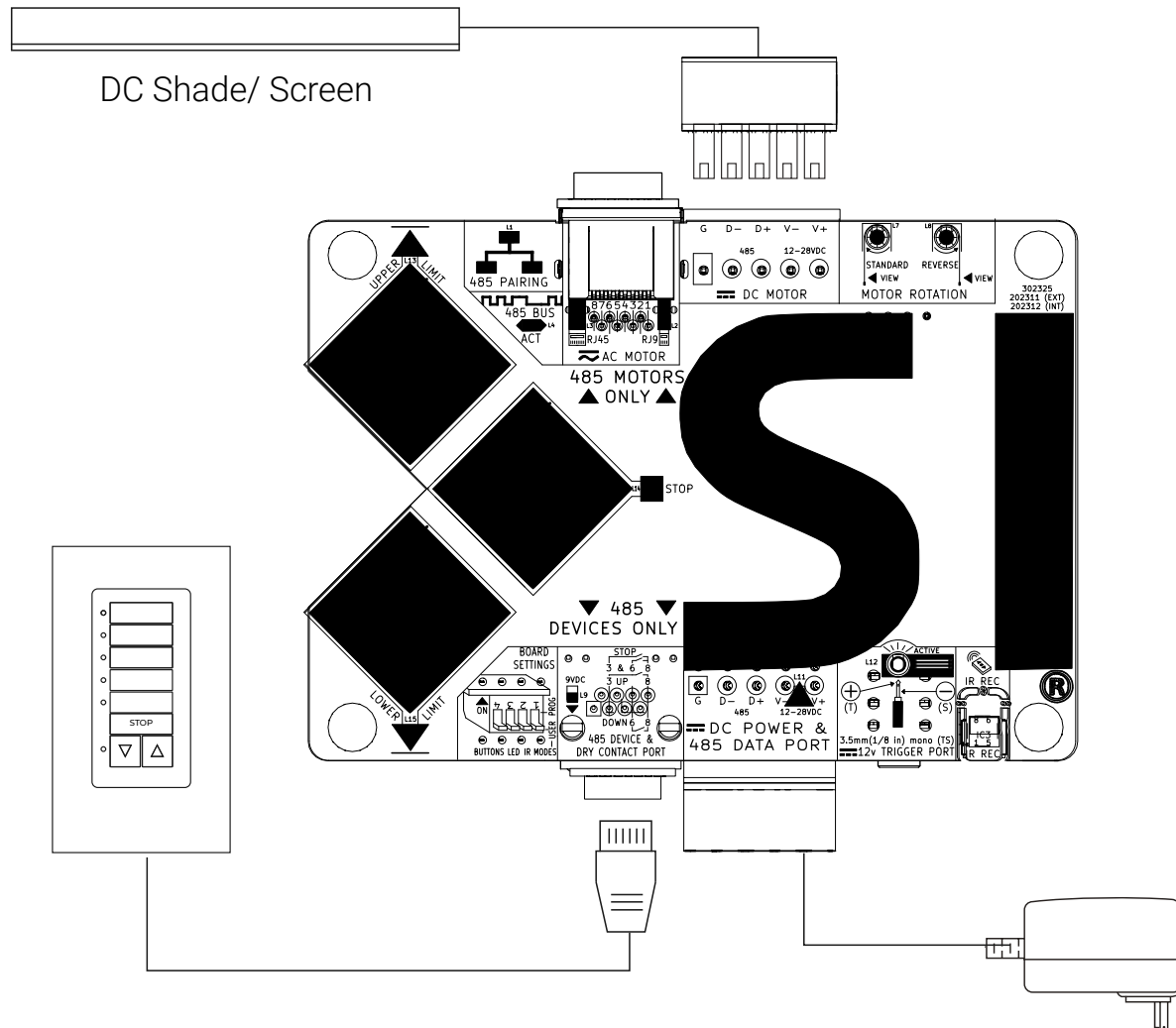
AC-Powered Motor (9v DC Power Input)

- AC Motor connected to top RJ45 silver port can provide 9V DC at 40mA; this can power Moab plus one 485 keypad or other 485 device. When requiring more, add an inline power injector or other powered data hub.



MOTOR CONNECTION DETAIL (TOP PORTS) - DC MOTOR CONNECTION

- DC-Powered Motor (Remote DC Power supply input)
 - 12–28V DC Power supply can be passed through Moab to power a DC-powered motor.
 - DO NOT CONNECT 485 devices or DC Power supplies to either motor port



- MOAB HAS A BUILT-IN PASSIVE 4-PORT 485 HUB
 - Can support one 485 motor via one of the two motor ports, and two 485 devices via one or both of the two 485 device ports.
 - DO NOT CONNECT 485 devices or DC Power supplies to either motor port.

DEVICE CONNECTION DETAIL (DRY CONTACT CLOSURE)

485 Connections:

- Bottom RJ45 and Bottom Terminal Block

Dry Contact:

- Bottom RJ45 Black Port, momentary dry contact using pins 3 and 8 for movement to the Upper Limit, pins 6 and 8 for movement to the lower Limit, and pins 3,6 and 8 for sending the Stop movement command If using T568B the colors are White/Green and Brown for UP and Green and Brown for DOWN

12v Trigger:

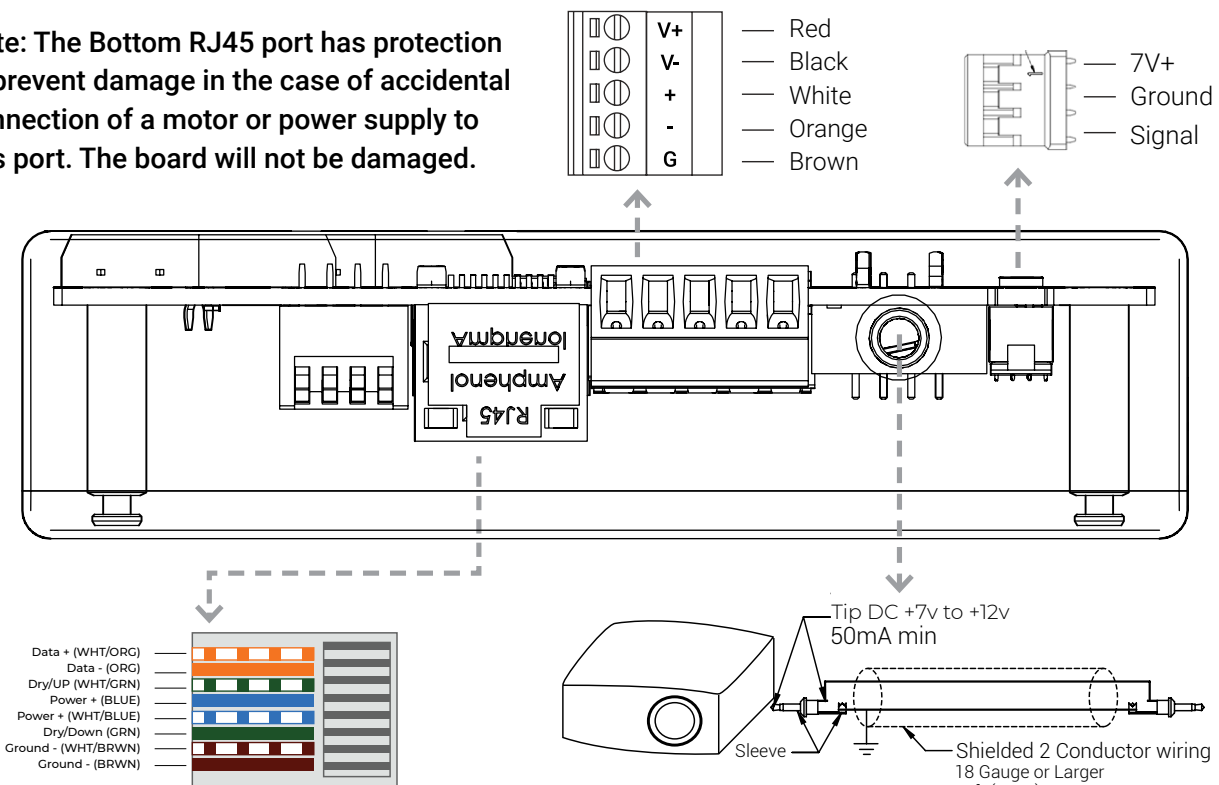
- 3.5mm (1/4") Mono TS Phone Jack

Remote IR Receiver:

- 1.5mm Molex 87439-0300 IR receiver can be detached from the PCB and extended using the included cable.

Note: Do not connect any SI legacy IR Receiver to Moab. Moab only works with attached receiver.

Note: The Bottom RJ45 port has protection to prevent damage in the case of accidental connection of a motor or power supply to this port. The board will not be damaged.



Note: Please check your 3.5mm TS cable is fully inserted into the connector or remove Moab from case for Proper 12v trigger operation

MOAB LED DETAIL

RED (3)

- UP BUTTON (on when pressed, flashing once threshold met when held)
- 485 PAIRING (on when motor not paired)
Pair motor to turn off (Flashes when in Pairing modes)
- 12v TRIGGER (on when trigger active)

GREEN (4)

- STOP BUTTON (on when pressed, flashing once threshold met when held)
- 485 DATA ACTIVITY (2, one on bottom RJ45)

BLUE (1)

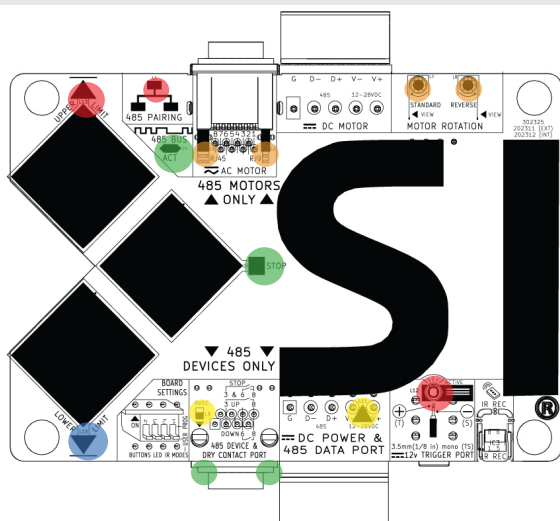
- DOWN BUTTON (on when pressed, flashing once threshold met when held)

ORANGE (4)

- RJ9 MOTOR CONNECTED (ON when connected to motor using an RJ9 cable)
- RJ45 MOTOR CONNECTED (ON when connected to motor using an RJ45 cable)
- STANDARD ROTATION (SR) (ON when paired motor reports that it is in this mode)
- REVERSE ROLL (RR) (ON when paired motor reports that it is in this mode)

YELLOW (2)

- DC POWER (FROM AC MOTOR), (ON when AC motor or DC P/S is powered and connected)
- DC POWER (FROM DC POWER SUPPLY) (on when DC power supply is connected)



MOAB BOARD DIP SWITCH SETTINGS

BUTTONS

- ON will allow the 3 buttons to work in both User or Programming mode
- OFF will not allow any buttons to work in both User or Programming mode

LED

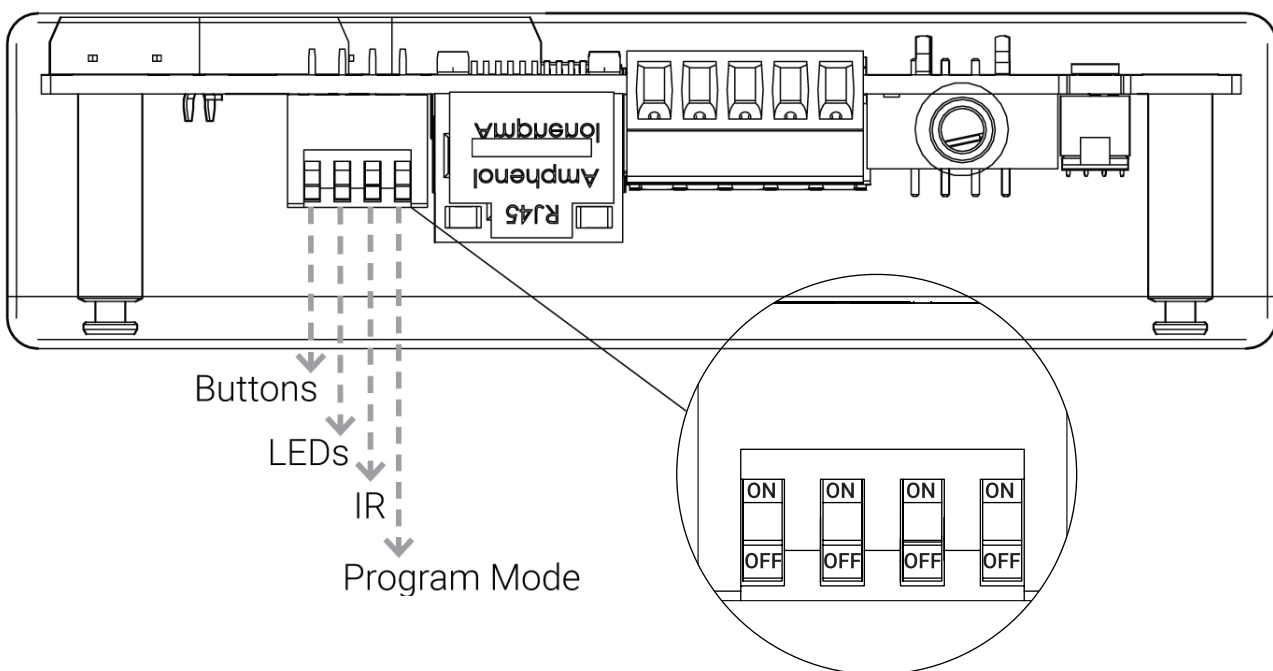
- ON allows all LEDs to be active
 - OFF does not allow LEDs to be active
- *The 485 Pairing LED, and the button LED's can be active regardless of the LED Setting Switch

IR

- ON allows the built in IR Rec to be active
- OFF does not allow the built-in IR Rec to be active

PROG

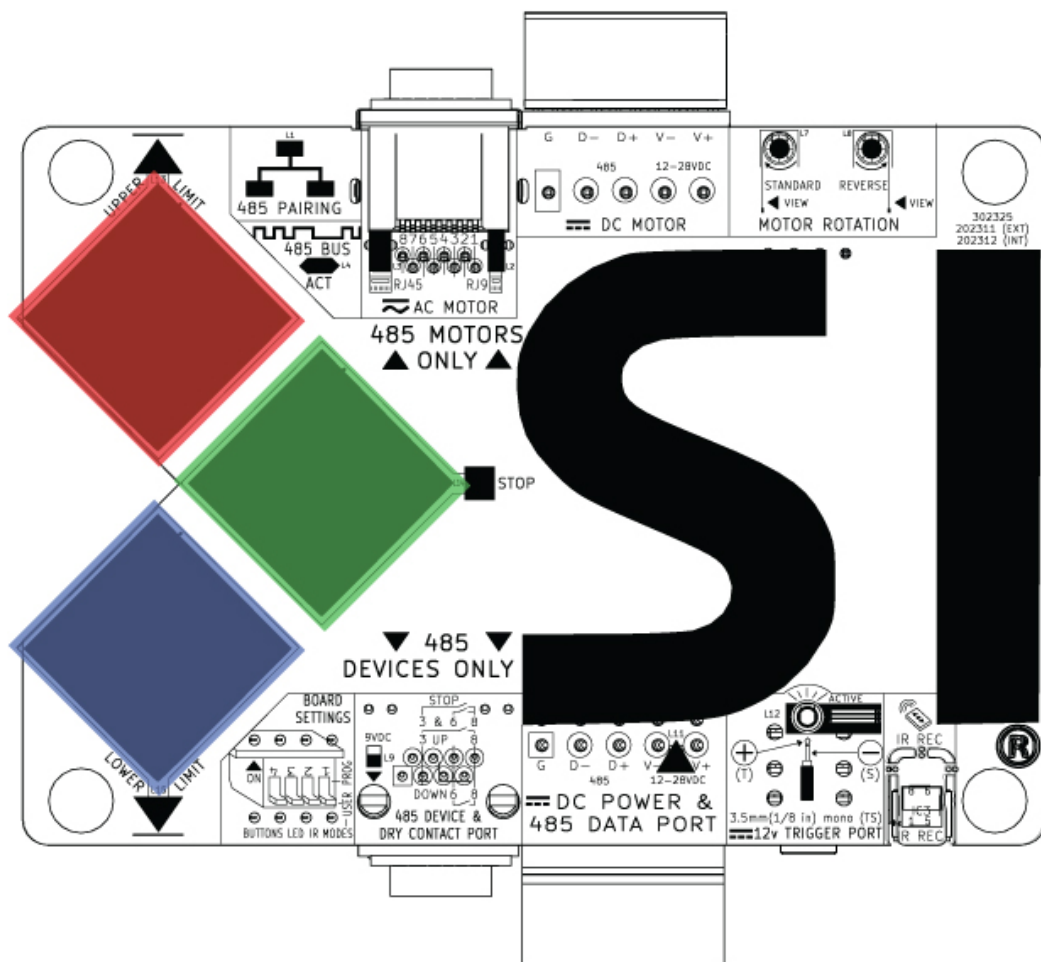
- ON puts the board into Programming mode
- OFF puts the board into User mode



MOAB BUTTONS FRONT (USER MODE)

USER BUTTONS

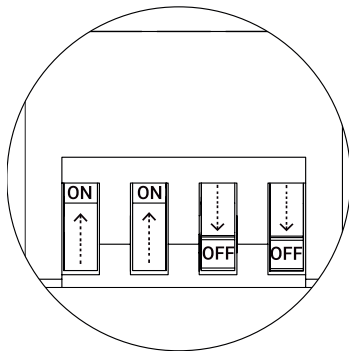
- Red, Green, and Blue buttons
- Buttons give a crisp, tactile feel with audible feedback, along with positive LED action to ensure command integrity.
- Rubber seal construction prevents contact contamination and allows easy cleaning.
 - Button press activates the corresponding color LED and the LED stays on until the button is released and turns off, and/or the button has been pressed past the (hold) threshold time and the LED now flashes.



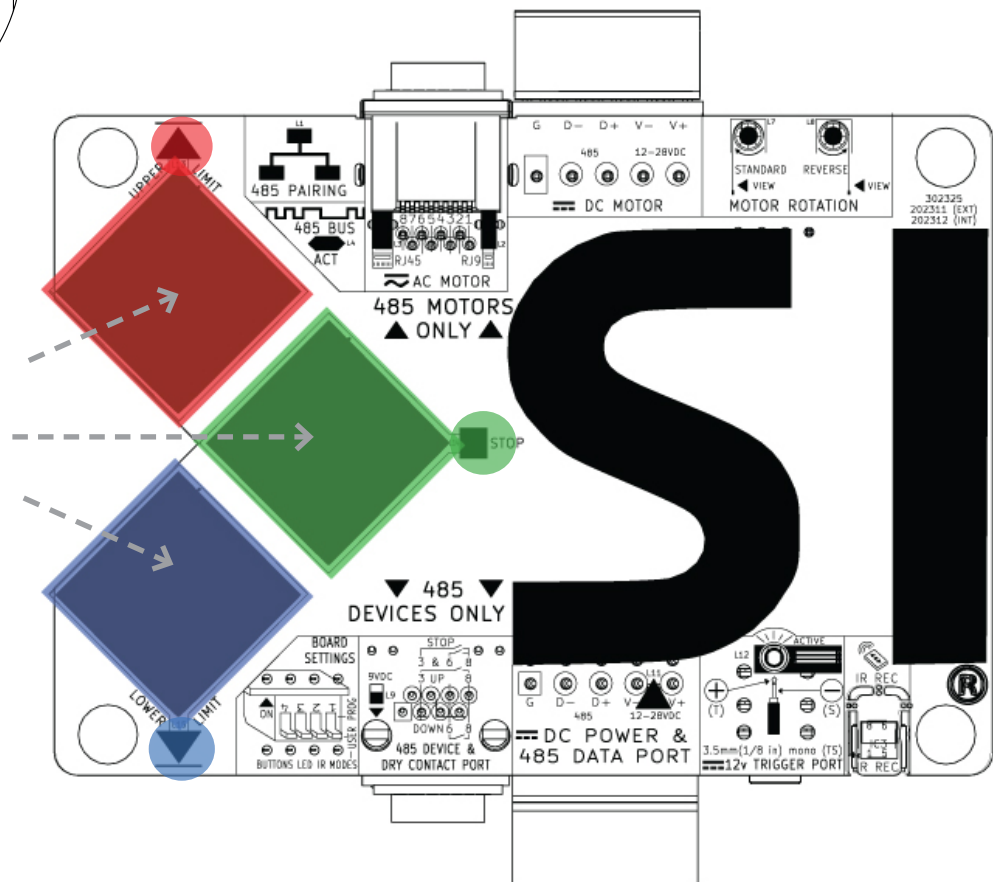
MOAB BUTTONS FRONT (USER MODE)

USER MODE – BASIC PRESS FUNCTIONS

- Red button press and release sends upper limit command
- Green button press and release sends stop command
- Blue button press and release sends lower limit command
- For a press and release command to be sent in user mode, ensure that you have pressed, released, and do not hold the button for more than 3 seconds. The corresponding LED will stay solid until the button release. If the LED begins to flash, the button has been held for more than 3 seconds and a different command may be sent to the motor



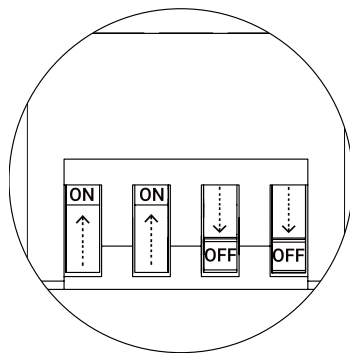
Button and LED mode ON



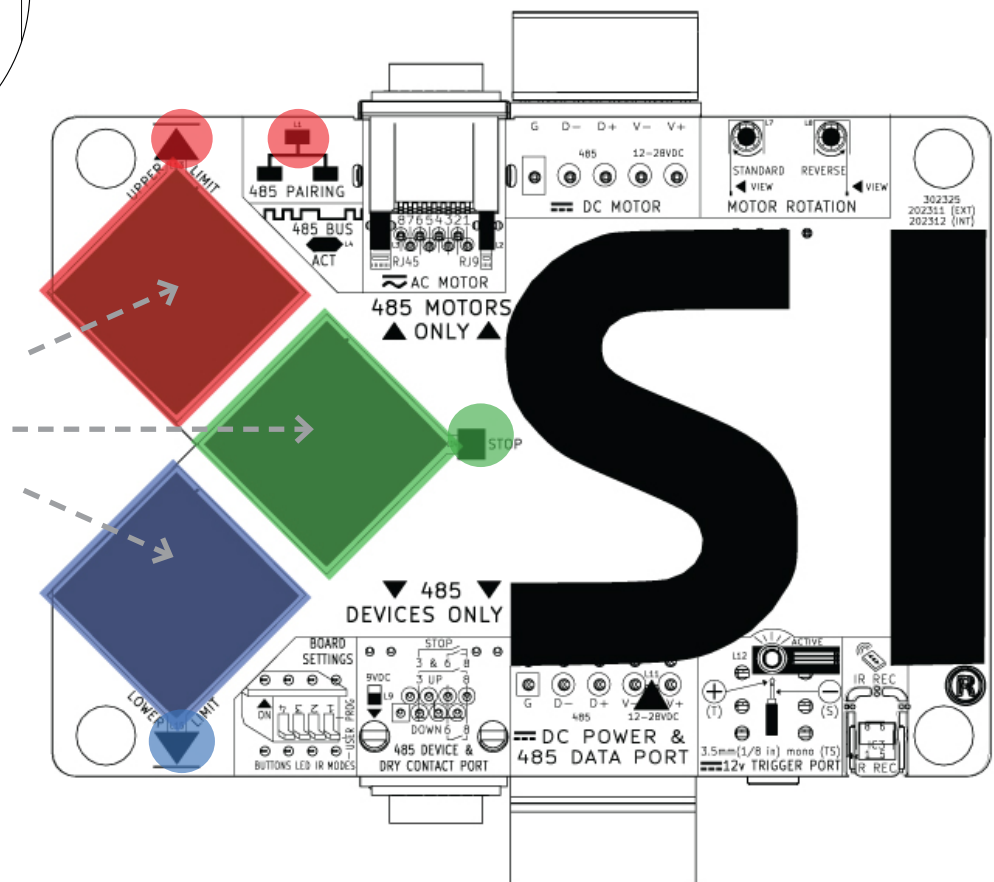
MOAB BUTTONS FRONT (USER MODE)

MOAB-USER MODE – BASIC HOLD FUNCTIONS

- Red button press and hold for more than 3 seconds to start the 485-device auto-configuration mode
- Green button press and hold for more than 3 seconds to start the device channel to motor assignment
- Blue button press and hold for more than 3 seconds to start the 485-device auto-configuration mode
- For a press and hold command to be sent in user mode, ensure that you press and hold the button for more than 3 seconds. The corresponding LED will begin to flash once this threshold is met; you can now release the button and the corresponding LED will stop flashing



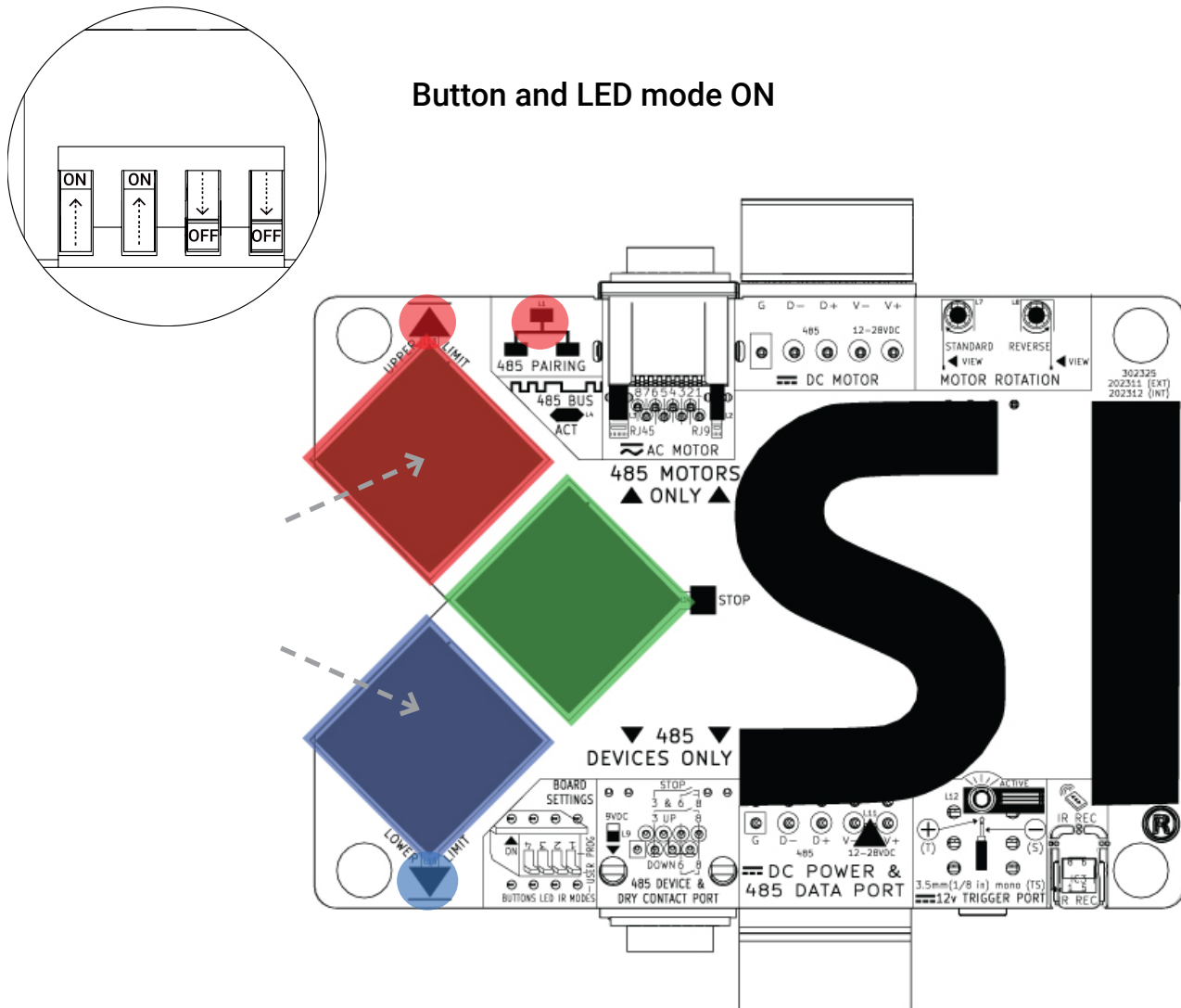
Button and LED mode ON



MOAB BUTTONS FRONT (USER MODE)

MOAB-USER MODE – ADVANCED HOLD FUNCTIONS

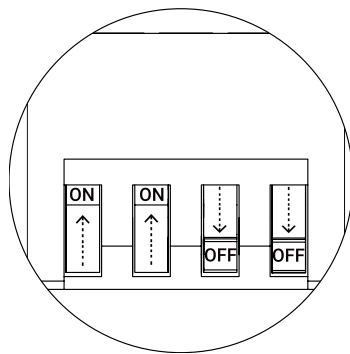
- Erasing 485-device learned buttons
 - This feature will erase 485-Device learned buttons
 - Press and hold the Red and Blue buttons for more than 3 seconds
 - Once the Red and Blue button LEDs begin to flash, the 485 pairing LED will also start to flash. The 485-device learned buttons will be erased, and the 485 pairing LED stops flashing.



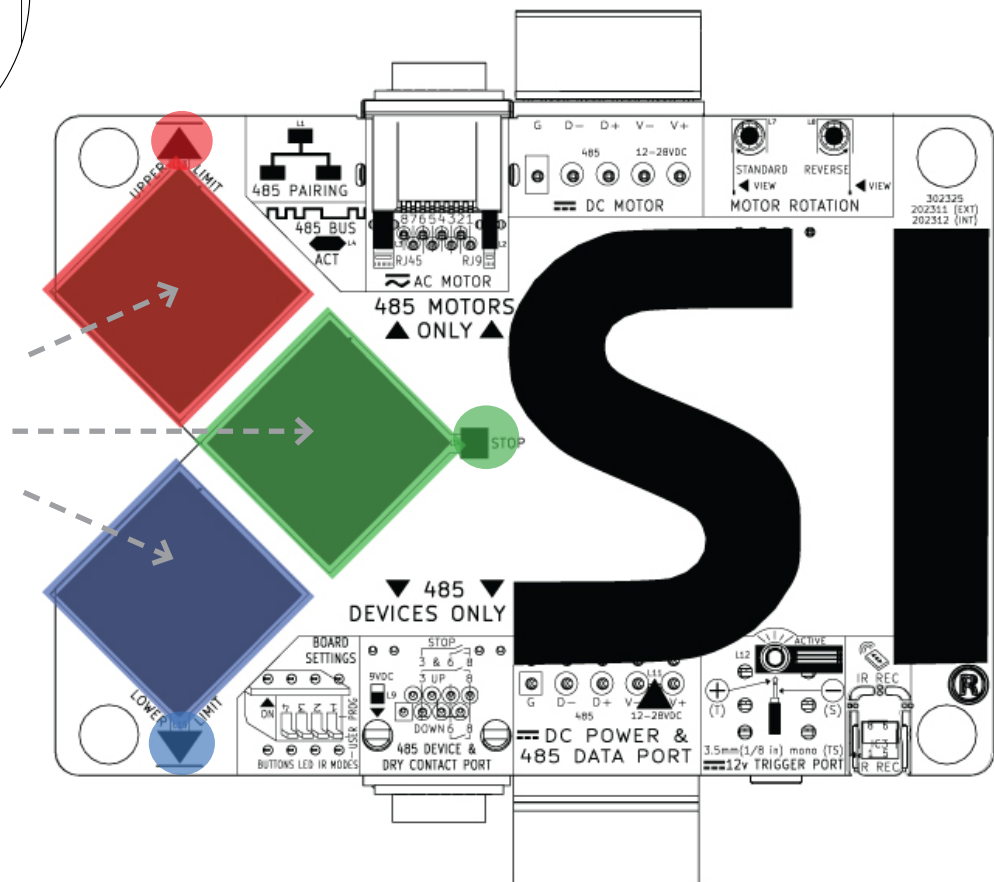
MOAB BUTTONS FRONT (USER MODE)

USER MODE-MOAB FACTORY RESET

- It may be necessary to erase the group or motor address or to repair with a different motor
- Hold the UP (Red), STOP (Green), and the DOWN (Blue) buttons for 3 second until all three button LED's start flashing (approximately 3 seconds).
- This command performs two functions:
 - Erases paired motor address from Moab
 - Erases the Moab 485 group address (Moab will now send broadcast commands until motor or group is repaired, i.e., FFFFFFFF)



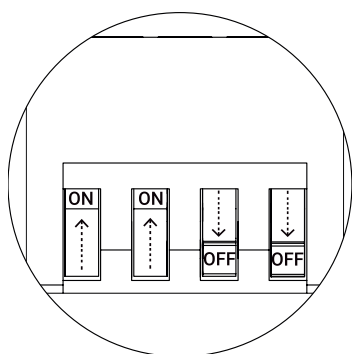
Button and LED mode ON



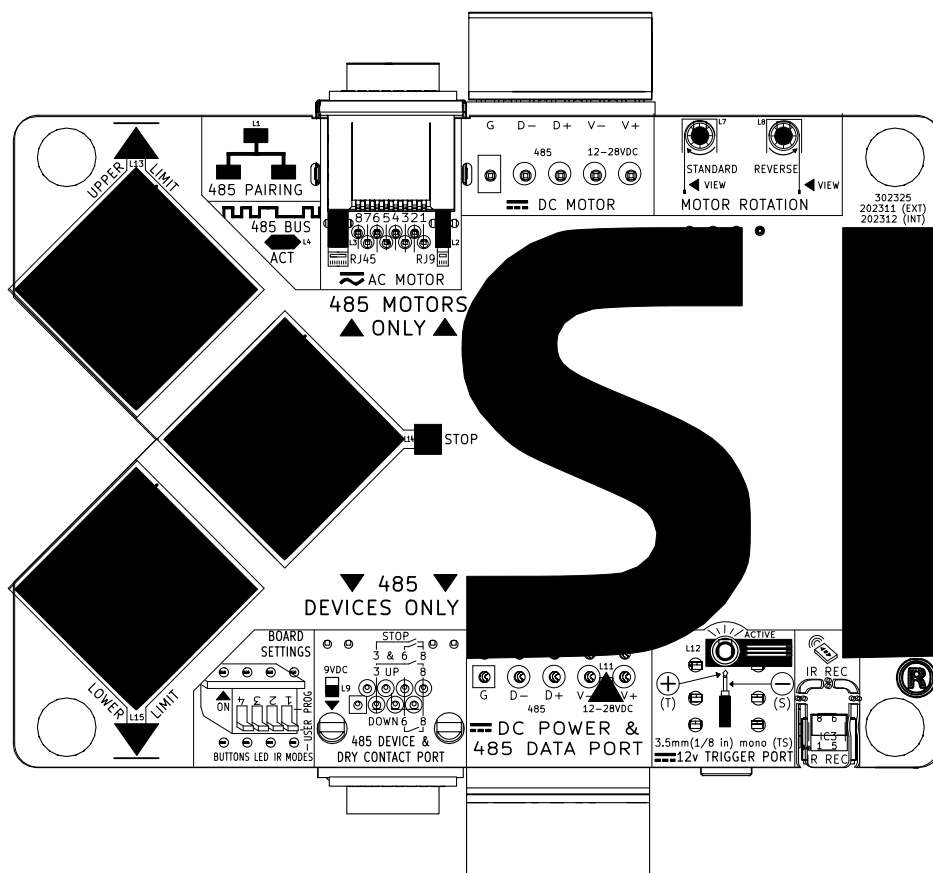
MOAB BUTTONS FRONT

COMPLETE USER MODE BUTTON CHART

| BUTTONS | ON PRESS | ON RELEASE < 3 Seconds | ON HOLDING > 3 Seconds |
|------------|--------------|----------------------------|---|
| Red | Nothing sent | Moves motor to upper limit | Auto programs 485 device(s) to motor |
| Green | Nothing sent | Stops any motor movement | Starts 485 device channel to 485 motor assignment |
| Blue | Nothing sent | Moves motor to lower limit | Auto programs 485 device(s) to motor |
| Red + Blue | Nothing sent | Nothing sent | Erases 485-device channel to 485 motor assignment |



Button and LED mode ON

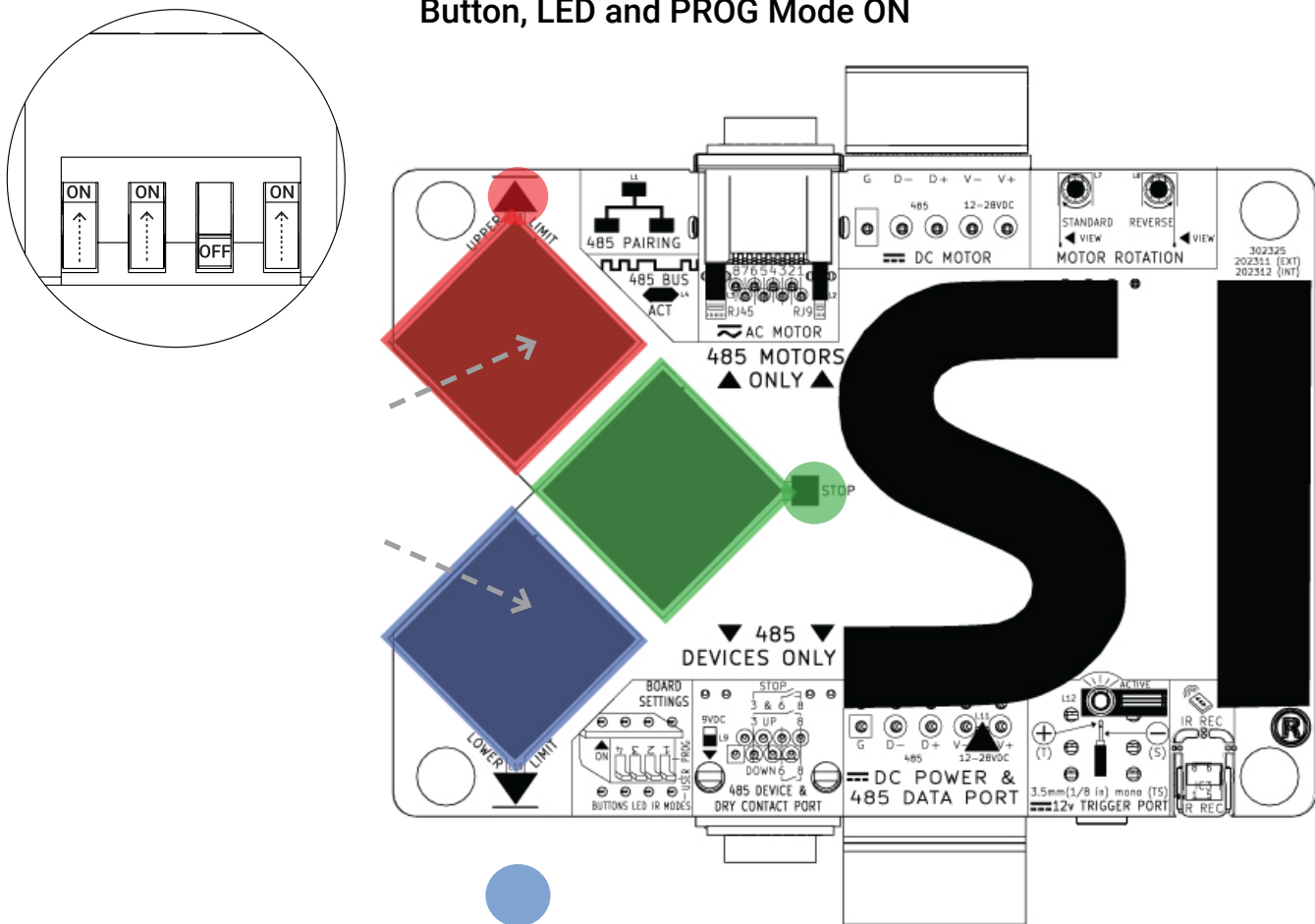


MOAB BUTTONS FRONT (PROGRAMMING MODE)

PROG MODE – BASIC PRESS FUNCTIONS

- Red button press and release sends fine up command*
- Blue button press and release sends fine down command*
- For a press and release command to be sent in the prog mode, ensure to do a press, release, and do not hold the button for more than one second. Corresponding LED will stay solid until button release. If the LED begins to flash, you have held the button for more than one second and a different command could be sent to the motor

Button, LED and PROG Mode ON



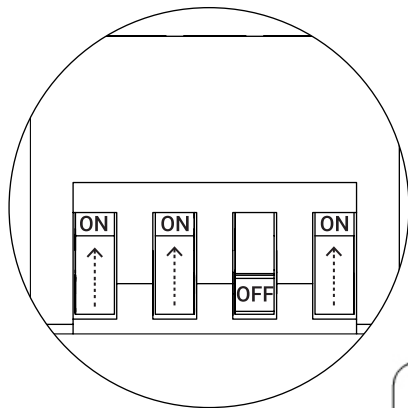
NOTE: Movement commands sent while in the PROG MODE, CAN move past the current limits set. Care must be taken not to exceed past material or damage may occur

***Fine commands are typically available with AC motors. However Low-Voltage motors will not respond to these fine commands.**

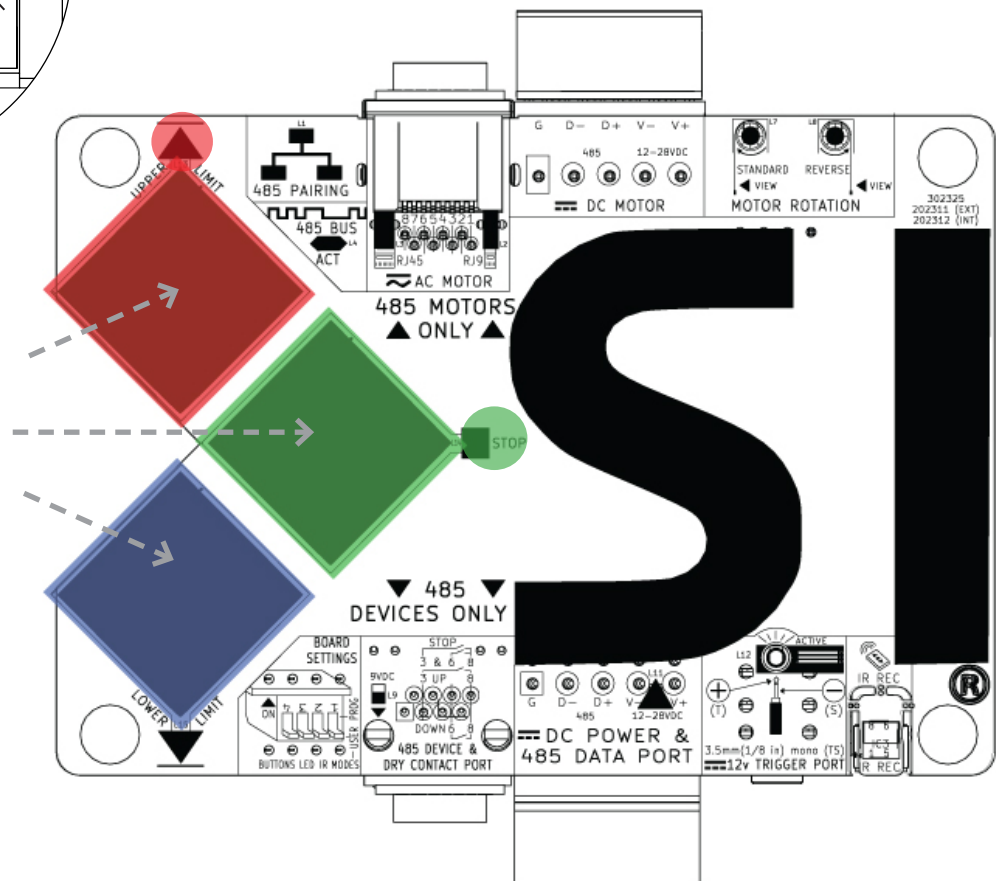
MOAB BUTTONS FRONT (PROGRAMMING MODE)

MOAB-PROG MODE – BASIC HOLD FUNCTIONS

- Red button press and hold continuously sends the fast up comand, and stops sending this comand on the release
- Stop button press and hold for more than one second starts the 485 Motor Pairing mode
- Blue button press and hold continuously sends the fast down comand, and stops sending this comand upon release



Button, LED, and PROG Mode ON

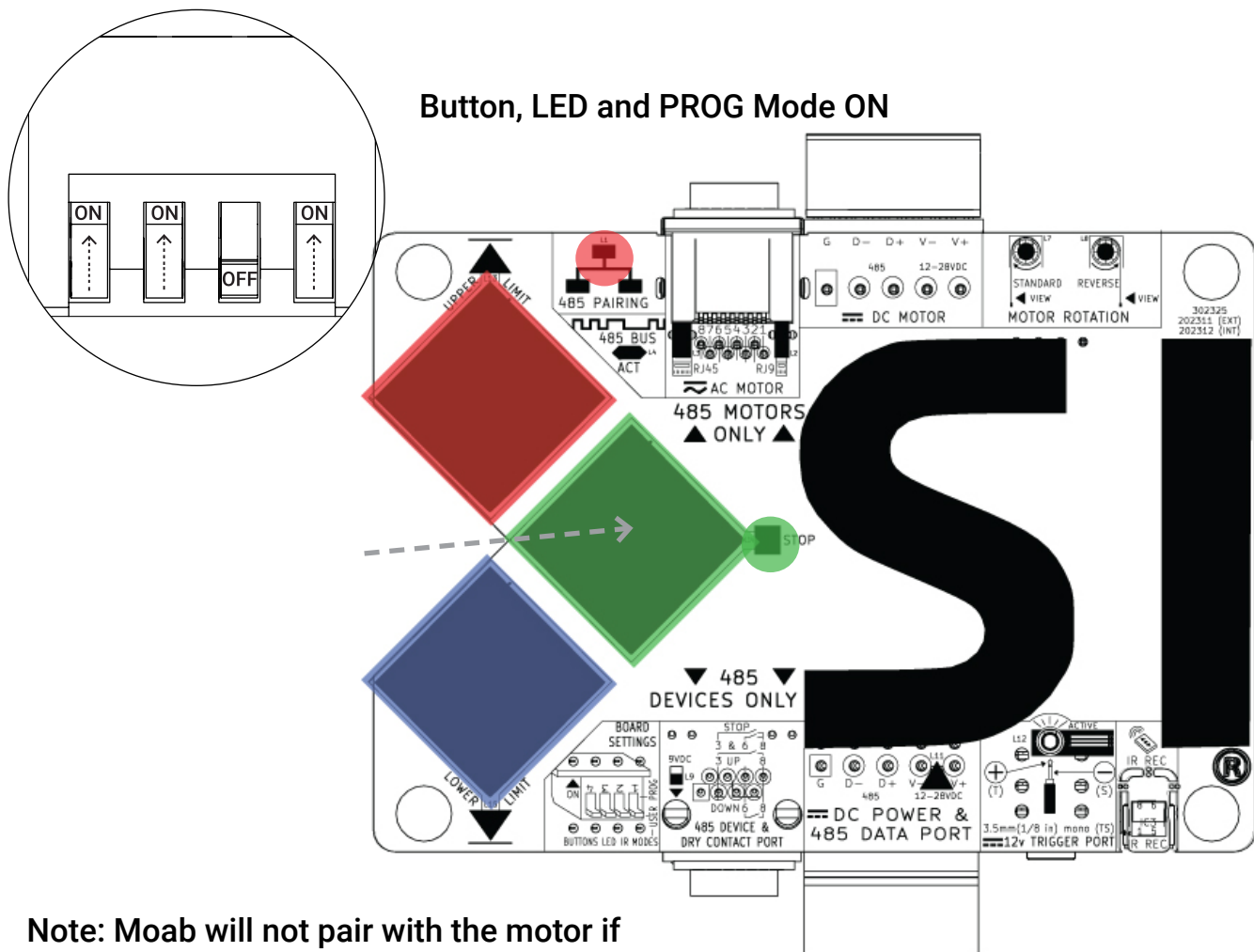


NOTE: Movement commands sent while in the PROG MODE, CAN move past the current limits set. Care must be taken not to exceed past material or damage may occur.

MOAB BUTTONS FRONT (PROGRAMMING MODE)

PROG MODE – MOTOR PAIRING DETAIL

- Motors are paired at the factory.
- If replacing a motor, or if you see the 485 PAIRED LED on, set the PROG MODE Switch to ON.
- Verify the motor you would like to pair is connected to one of the motor ports, and disconnect any additional devices connected to a 485 port.
- Next Hold the STOP (green) button for one second until the 485 PAIRING LED turns off.
- If the 485 PAIRING LED does not turn off, check your motor/power connections; if you still cannot get the motor to pair, contact SI support.
- Moab uses broadcast addresses during the 485 pairing processes, please d/c any other 485 devices during this step.

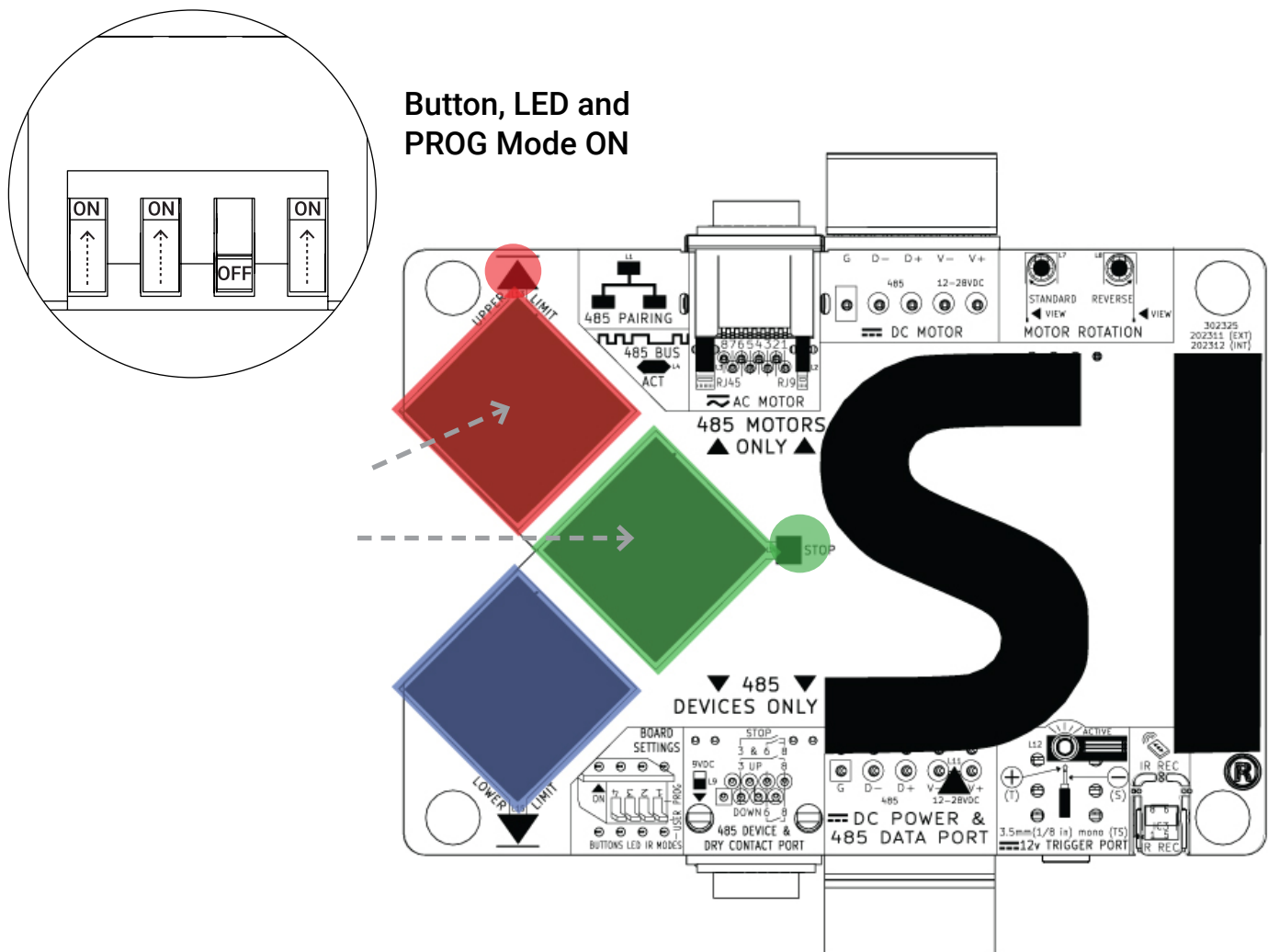


MOAB BUTTONS FRONT (PROGRAMMING MODE)

LIMIT SETTING DETAIL

PROG MODE – UPPER LIMIT

- Motor limits are set at the factory.
- To adjust the upper limit, set the PROG MODE switch to ON.
- Next using the UP (Red) and DOWN (Blue) buttons, move the screen to the desired upper limit.
- Hold both the UP (Red) and STOP (Green) buttons for one second until the UP (Red) and STOP (Green) LEDs flash
- The motor now has a new upper limit set. You may now switch the PROG mode back to OFF and use the buttons to test the newly set limit.
- Care must be taken when setting limits, as damage to the screen material may occur if you move the motor too far past the upper or lower limit. Contact SI support for help with setting limits on your screen

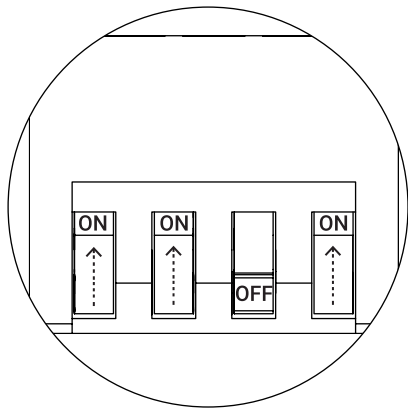


MOAB BUTTONS FRONT (PROGRAMMING MODE)

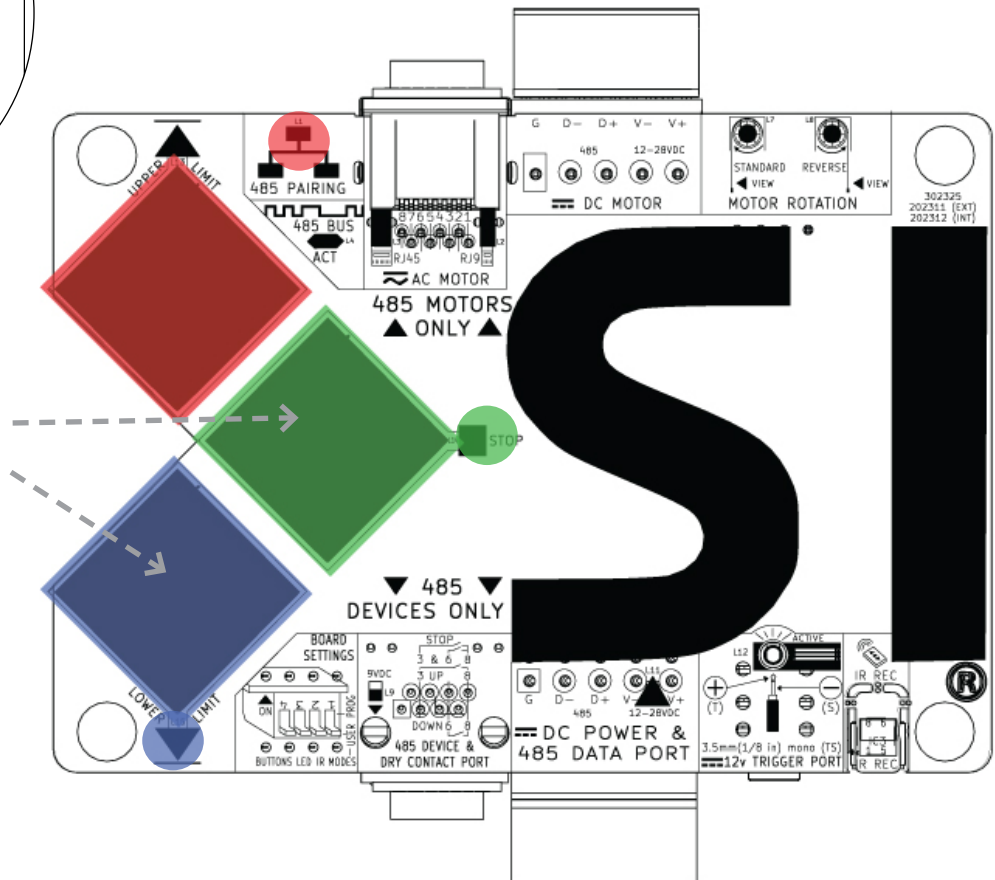
LIMIT SETTING DETAIL

PROG MODE - LOWER LIMIT

- Motor limits are set at the factory.
- To adjust the lower limit, then set the PROG MODE Switch to ON.
- Next using the UP (Red) and DOWN (Blue) buttons move the screen to the desired lower limit.
- Hold both the DOWN (Blue) and STOP (Green) buttons for 1 second until the DOWN (Blue) and STOP (Green) LEDs flash.
- The motor now has a new lower limit set, and you can now switch the PROG mode back to OFF and use the buttons to test your newly set limit.



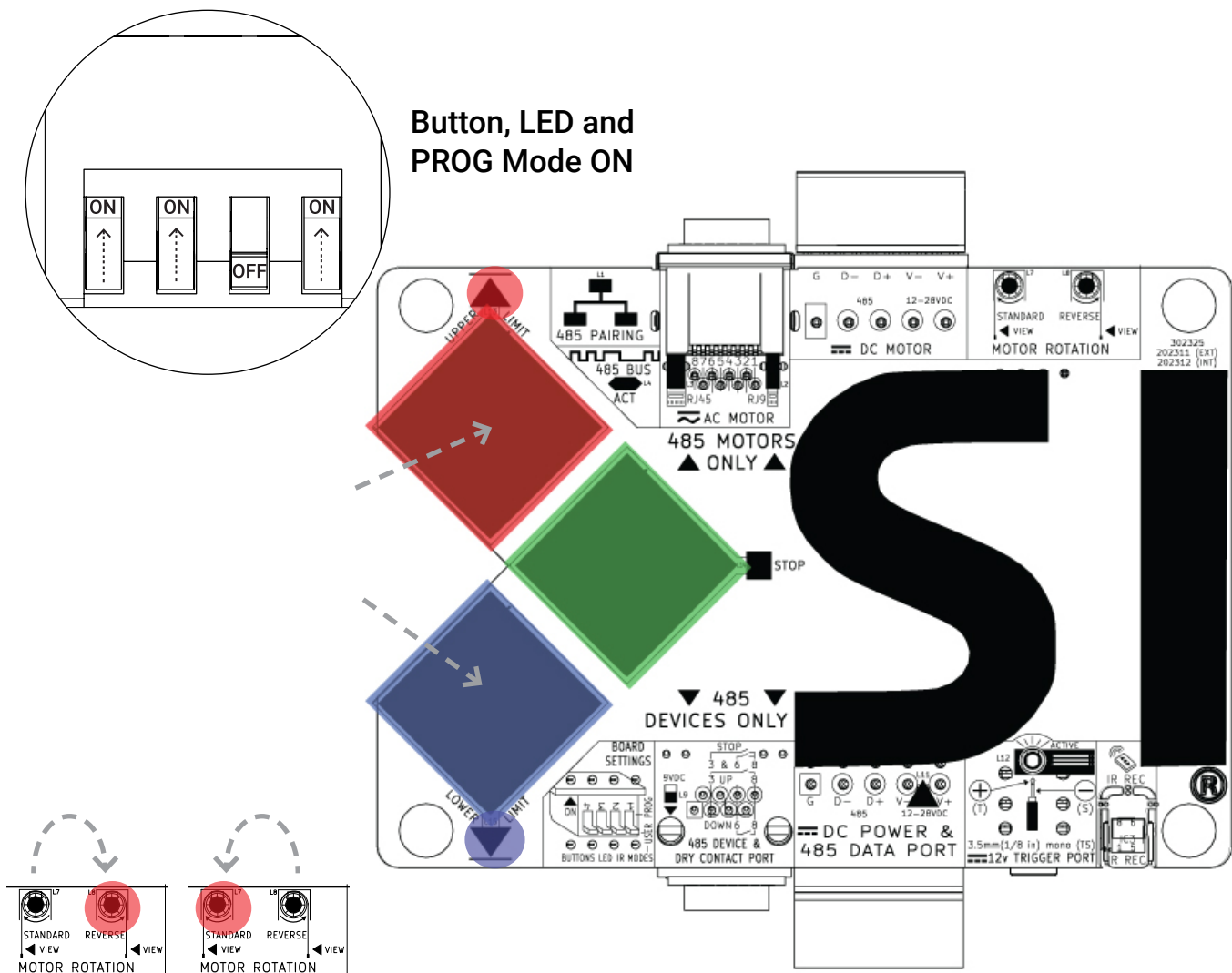
Button, LED and PROG Mode ON



MOAB BUTTONS FRONT (PROGRAMMING MODE)

PROG MODE – ROTATION

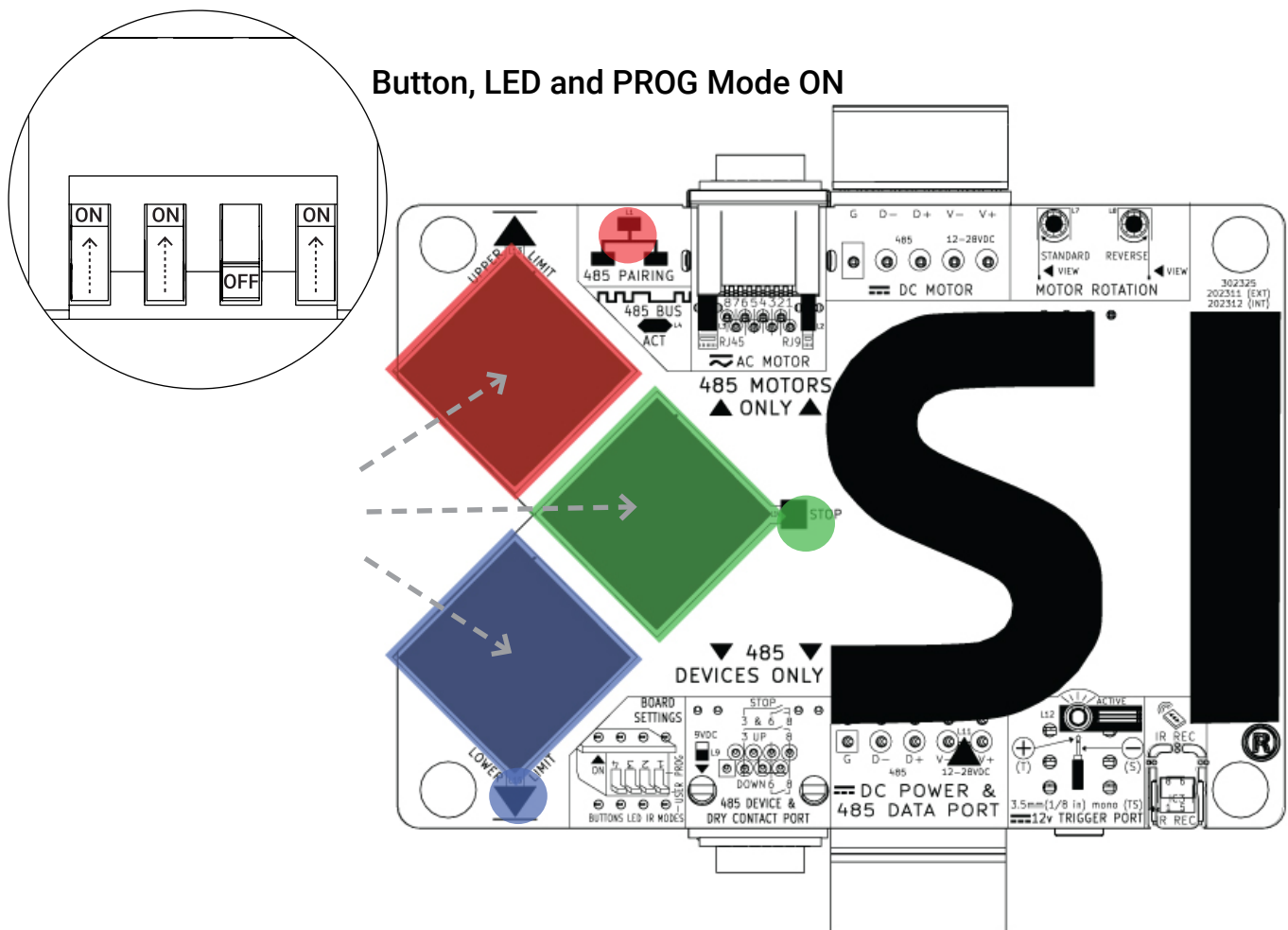
- Motor rotation is set at the factory.
- In the event you need to change the motor rotation, set the PROG MODE Switch to ON.
- Hold the UP (Red) and DOWN (blue) buttons for one second.
- The motor rotation LED will change to the new rotation; you are ready to test the direction using the small movement presses on the UP (Red) and DOWN (Blue) buttons.
- If the motor rotation LED does not change or they are both off, you may need to repair or factory reset the motor. For help, contact SI support.



MOAB BUTTONS FRONT (PROGRAMMING MODE)

PROG MODE – MOTOR FACTORY RESET

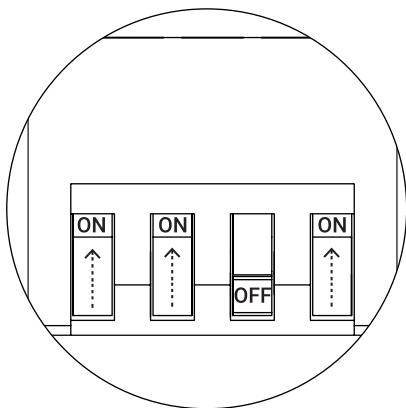
- In the event you are instructed to perform a motor factory reset, set the PROG MODE switch to ON.
- Hold the UP (Red), STOP (Green), and the DOWN (Blue) buttons for one second, until all three button LED's begin to flash.
- This command performs three functions:
 - Sends a factory reset over 485 bus to the currently-paired motor. If unpaired it does not send anything,
 - Erases paired motor address from Moab
 - Erases the Moab 485 group address (Moab will now send broadcast commands until motor or group is repaired)



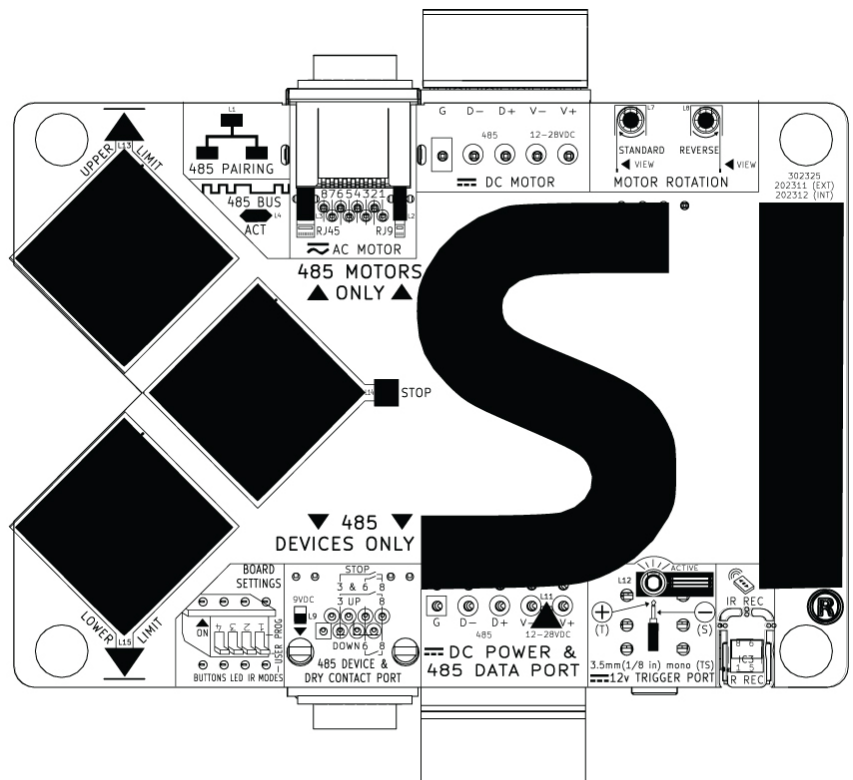
MOAB BUTTONS FRONT (PROGRAMMING MODE)

| BUTTONS | ON PRESS | ON RELEASE <1 Second | ON HOLDING >1 seconds |
|------------------|----------------------|----------------------|--|
| Red | Sends fine UP cmd* | Nothing sent | Continuously sends limit fast UP to motor |
| Green | Nothing sent | Send STOP cmd | Discover and pair motor (Broadcast) |
| Blue | Sends fine DOWN cmd* | Nothing sent | Continuously sends limit fast DOWN to motor |
| Red + Green | Nothing sent | Nothing sent | Sends set upper limit at current location to motor |
| Blue + Green | Nothing sent | Nothing sent | Sends set lower limit at current location to motor |
| Red + Blue | Nothing sent | Nothing sent | Sends rotation toggle to Motor (3 times) |
| Red+ Green+ Blue | Nothing sent | Nothing sent | Sends factory reset cmd to a paired Motor, erases paired motor ID from Moab, erases Moab group address |

***Fine commands are typically available with AC motors. However Low-Voltage motors will not respond to these fine commands.**



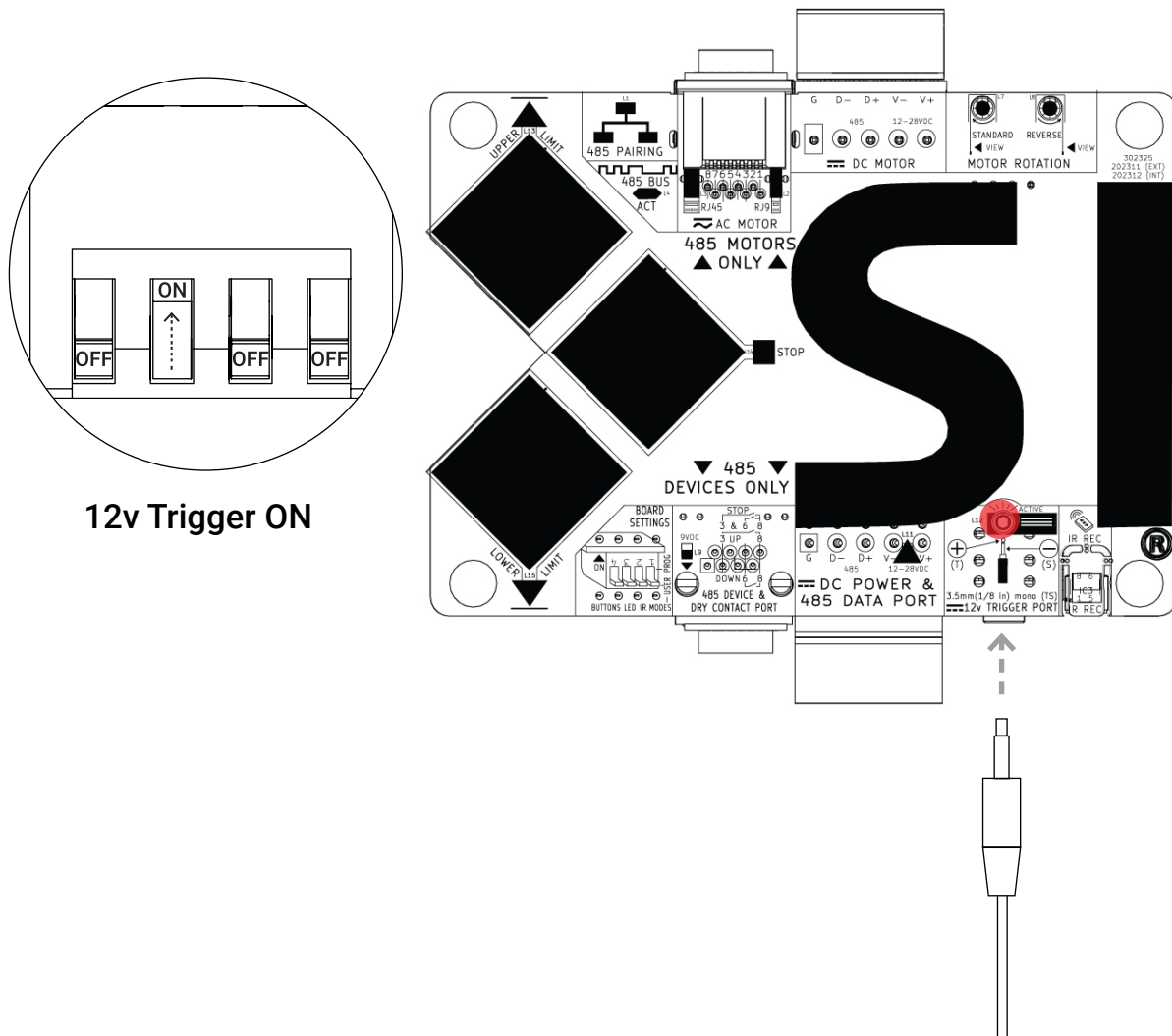
**Button, LED and
PROG Mode ON**



MOAB WIRING 12V DETAIL

MOAB 12v DC TRIGGER

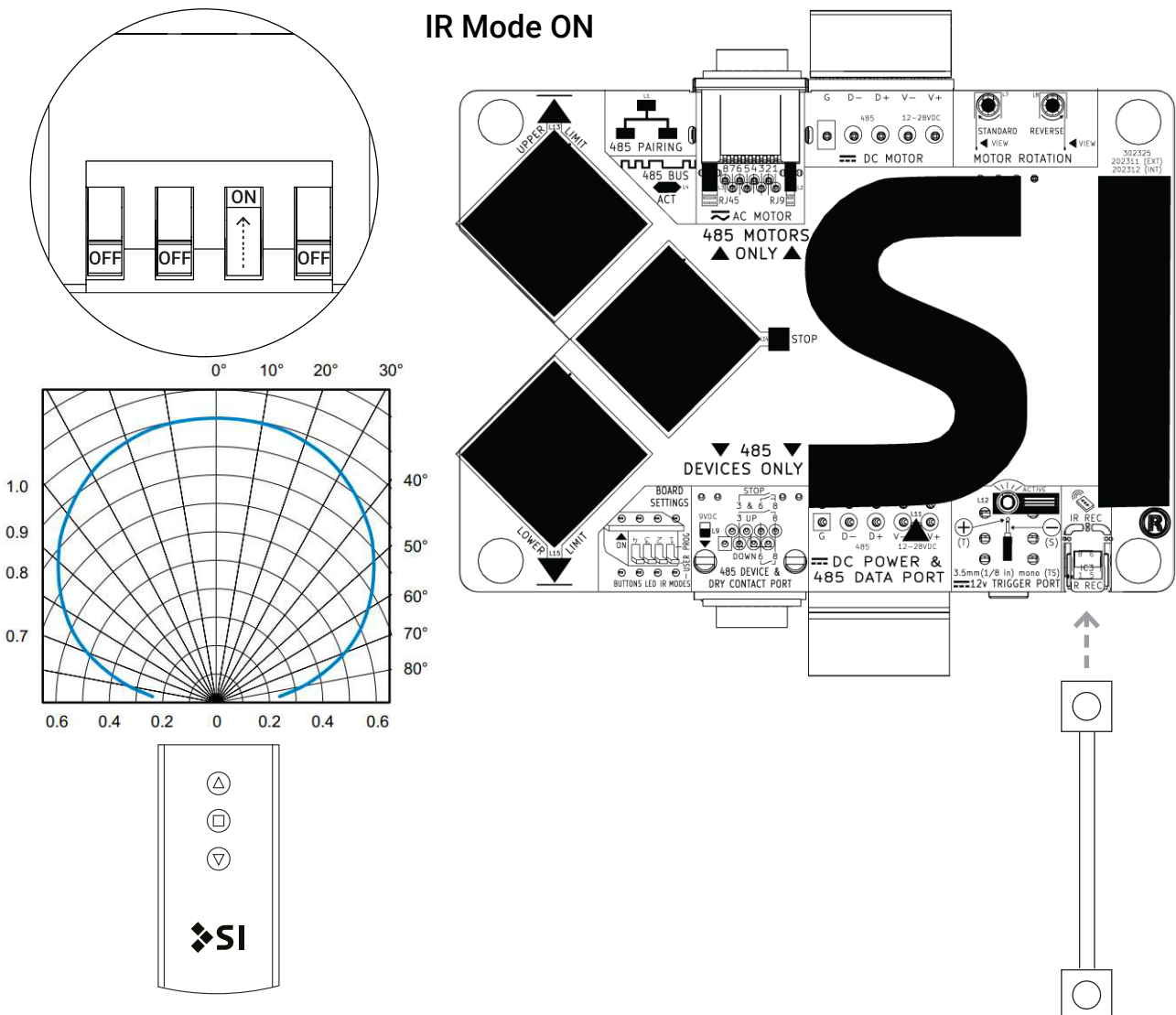
- Use a 3.5mm (1/4") mono TS phone jack to connect to the 3.5mm port on the bottom of the Moab board.
- The 12v DC trigger is a latched continuous control signal.
- When a voltage from 7-12v DC is applied on this port, Moab will turn on the active LED and send a 485 command to the motor node ID on the built-in 4-port 485 hub on the Moab board. This will move the paired motor to the lower limit if connected and power applied.
- When this same voltage is removed from the port, Moab sends a 485 command to the motor node ID on the built-in 4-port 485 hub on the Moab board. This moves the paired motor to the lower limit if connected and power applied.



MOAB IR RECEIVER DETAIL

MOAB FEATURES

- IR ON setting allows the IR Receiver to be active
- State-of-the-art built-in infrared sensor
- Internal DSP filtering for PCM to improved accuracy
- Improved immunity against ambient light and FL lighting
- Improved directivity with ultra wide IR reception
- May also be removed from PCB and extended for placement in the slot under the screen with included extension cable. For external moab, locate the slot on the right side just above the Din Rail feature, using a large flathead screw driver, gently pry the bottom away from the top. Unplug the IR cable to remove the IR Receiver from PCB, place your thumb over the IR Receiver and forefinger over the rear connector and gently move the IR Receiver back and forth a few times until it breaks away from the PCB. Now reconnect the IR Receiver with the included extension cable.



INSTALLING/ REMOVING MOAB - 485 SCREENS

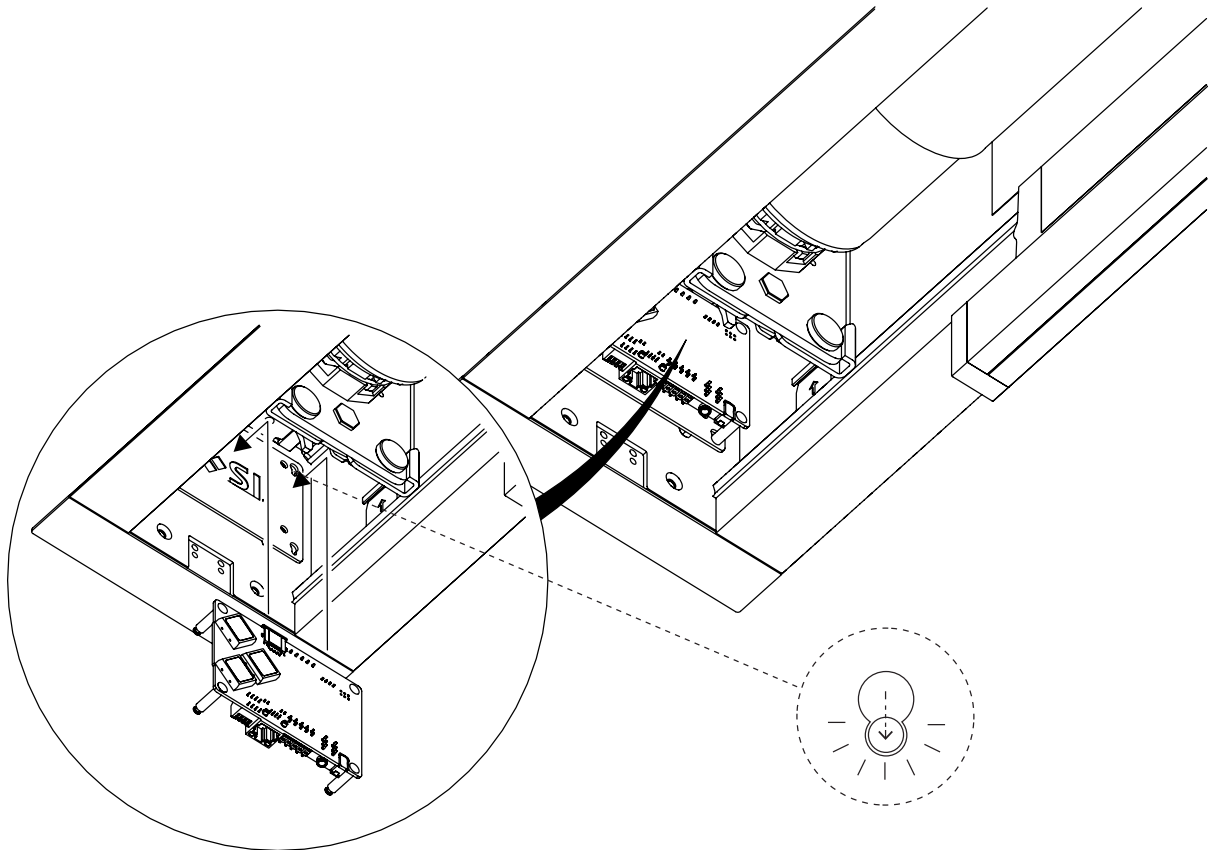
Connect Moab included in your Accessory box

Note1: Before installing/removing Moab, ensure all power is disconnected.

Note2: **For internal moab installation**, remove the enclosure using the slot on the right side just above the Din Rail feature, with a large flathead screw driver, gently pry the bottom away from the top.

1 The Moab board can be placed or removed from the internal PCB mounting plate by gently moving the entire board **up to remove** and **down to re-attach** the 4 standoffs. The reattachment will provide a tactical "click" feel and snap in place.

2 Depending on your motor configuration(110/220v or 24vDC), make the communication and power connections by following the steps on next 3 pages.

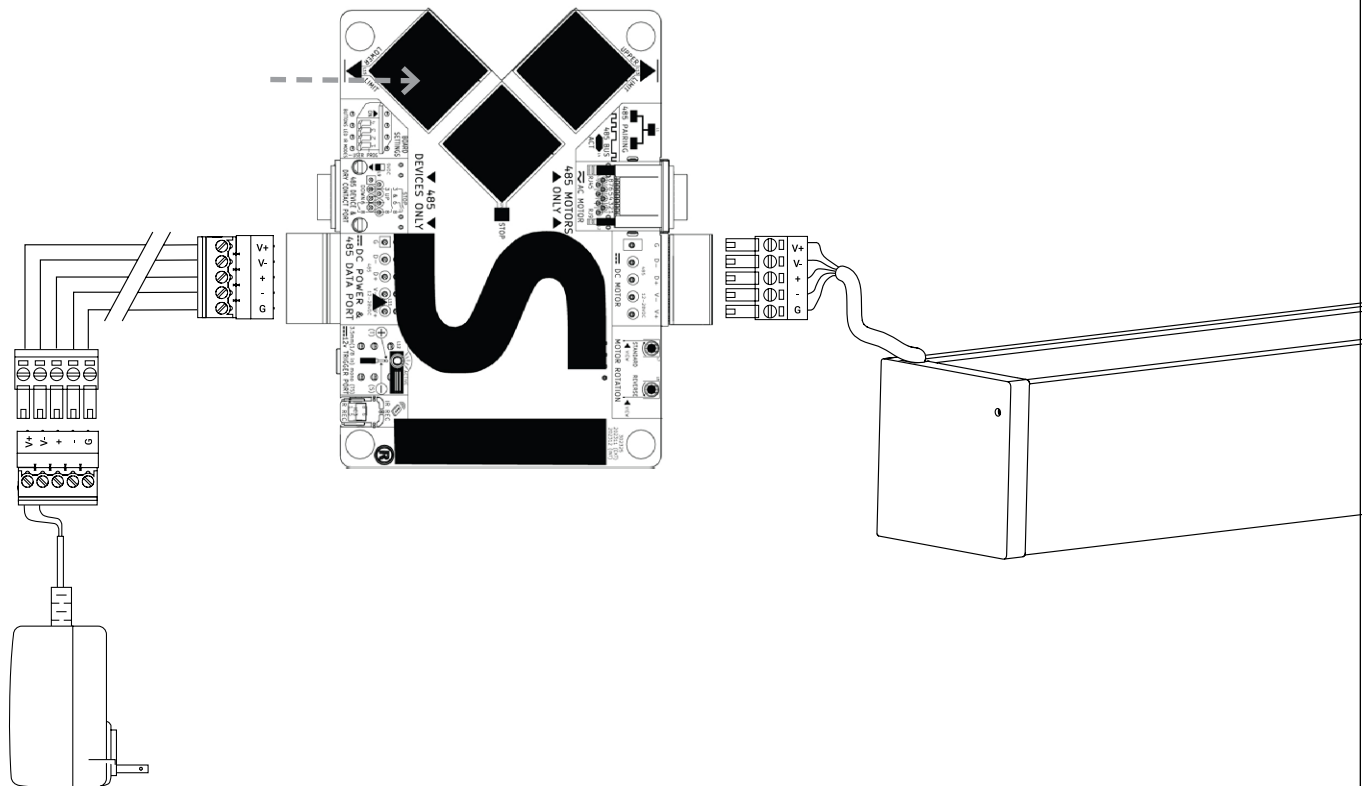


Note: Scan the QR code, for instructions on your Solo 3.

EXTERNALLY MOUNTING MOAB

1. If the screen is wired, it will include a motor control board called Moab. This control board allows for adjustments or controlling the screen. Typically, this board is located in the head end/equipment location.

DC Wire Diagram – Initial Setup

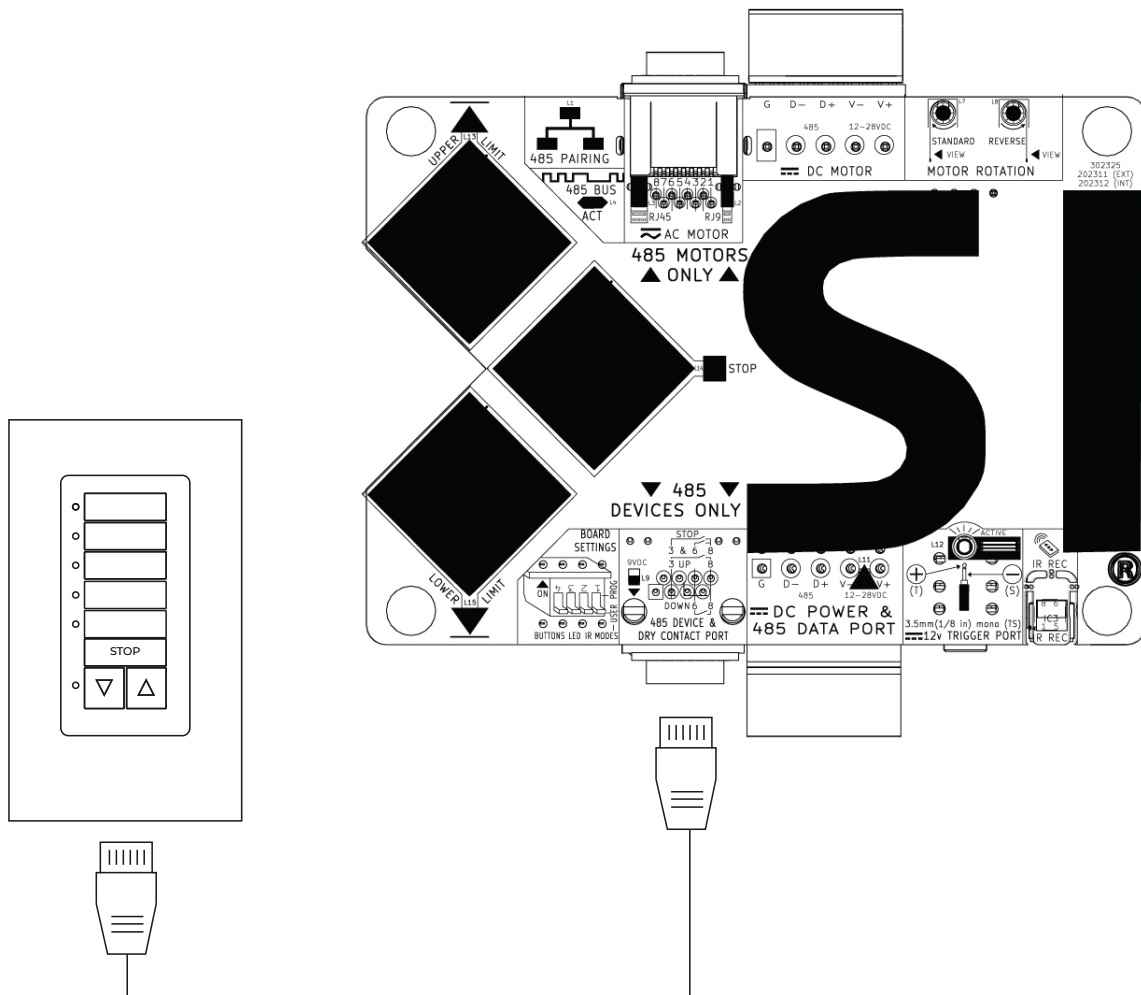


2. Once all connections are made (including power supply), upper and lower limits are already factory set. Make adjustments now, as needed, with Moab connected to the screen.

485 DEVICE CONNECTION DETAIL

485 DEVICE CONNECTIONS

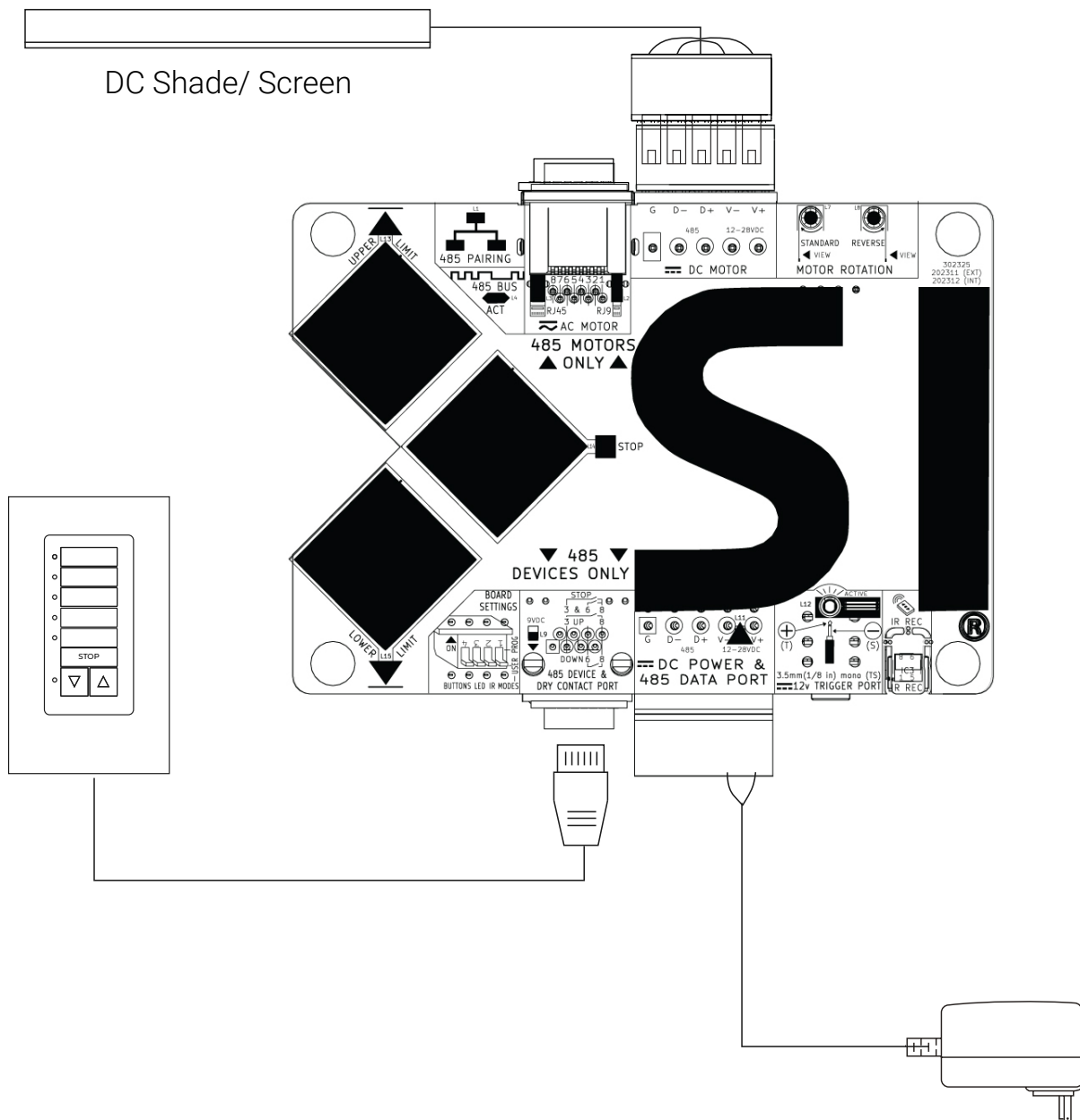
- Moab can connect with a 485 Device such as a keypad (5.53 or newer firmware) or RF Gateway.
- Can be wired up to 200' from Moab.
- From an AC motor, one device can be powered and connected.
- From a DC motor, multiple devices can be connected or, multiple devices, can be connected using 485 data hubs.
- No additional PC keypad programming is necessary.



485 DEVICE CONNECTION DETAIL

485 DEVICE WIRING

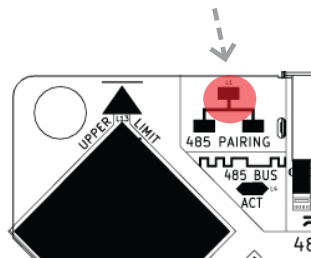
- Connect the 485 AC motor to RJ45 Motor port or connect 485 DC motor to terminal block motor port on top and DC power supply to DC power port on bottom terminal block.
- Connect 485 Device to a 485 Device port.



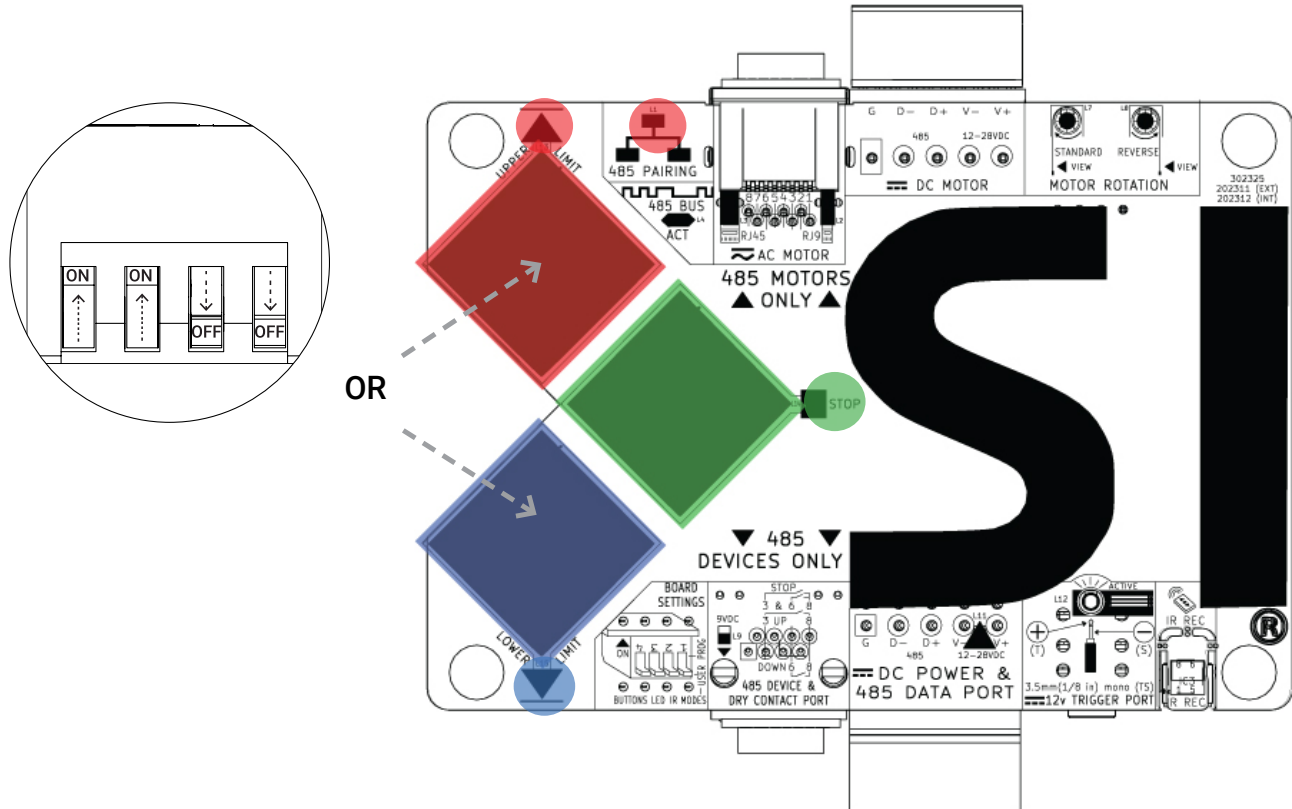
485 DEVICE AUTO DISCOVERY AND PROGRAMMING

485 DEVICE AUTO-SETUP

- Connect the 485 Device to one of the device ports.
- Ensure Programming mode is set to OFF using the board switch.
- Press and hold ONLY one of the Red or Blue buttons (not both) for more than 3 seconds until the corresponding LED starts to flash. Release the button
- The 485 PAIRING LED will begin to flash.



- It may take ten seconds or more to auto-setup your 485 devices; when complete, the 485 pairing LED will stop flashing.

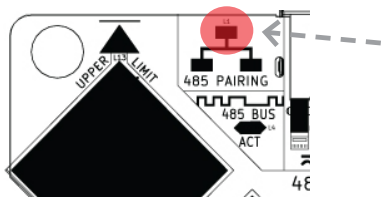


485 DEVICE AUTO DISCOVERY AND PROGRAMMING

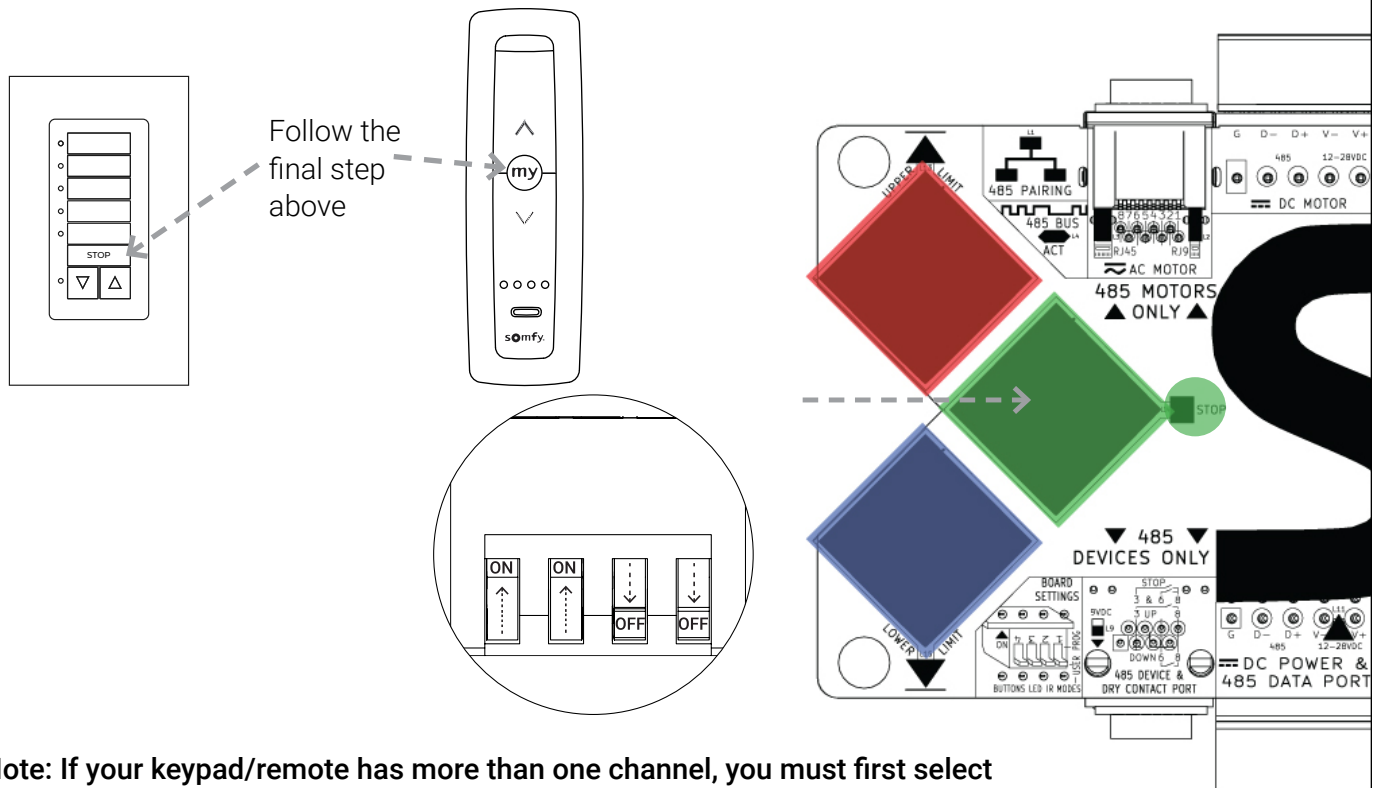
485 DEVICE CHANNEL TO MOTOR ASSIGNING

DEVICE CHANNEL TO MOTOR ASSIGNMENT

- Connect your previously configured 485 device to one of the device ports.
- Ensure Program mode is set to OFF using the board switch
- Press and hold the Green button for more than 3 seconds until the corresponding LED starts to flash. Release the button.
- The 485 PAIRING LED will begin to flash



- You will have ten seconds to push the desired keypad or RF remote STOP button to pair with this motor; the 485 pairing LED will stop flashing once paired, or after 10 seconds. Repeat these steps for each device.



Note: If your keypad/remote has more than one channel, you must first select which channel you want to designate before pressing the STOP button.

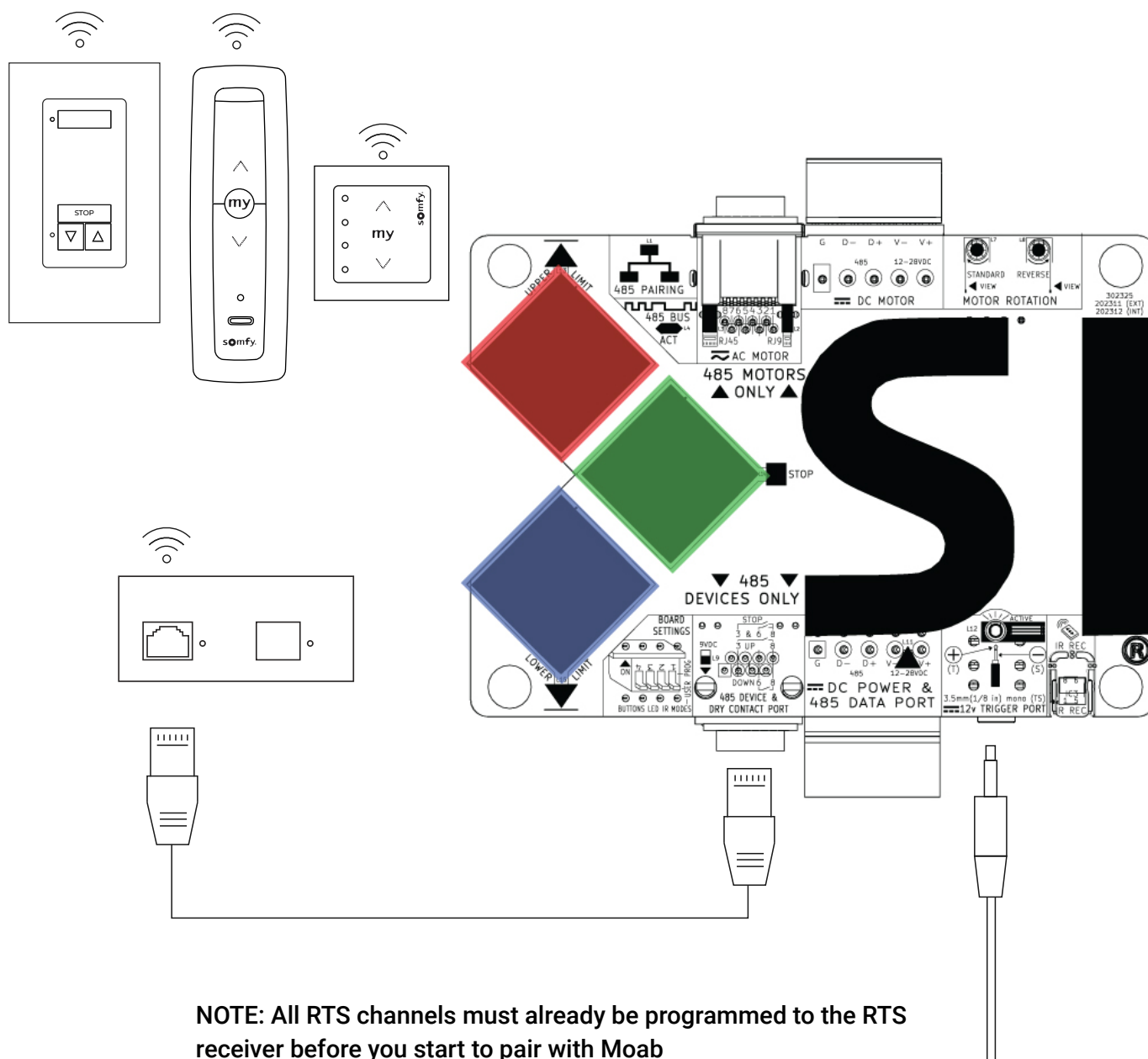
485 DEVICE AUTO DISCOVERY AND PROGRAMMING

485 DEVICE RF PROGRAMMING

RF PROGRAMMING

- RF Programming follows the same procedure as other 485 devices; see *page 31-32*.

NOTE: If your keypad/remote has more than one channel, first select which channel you want to designate before pressing the STOP button.

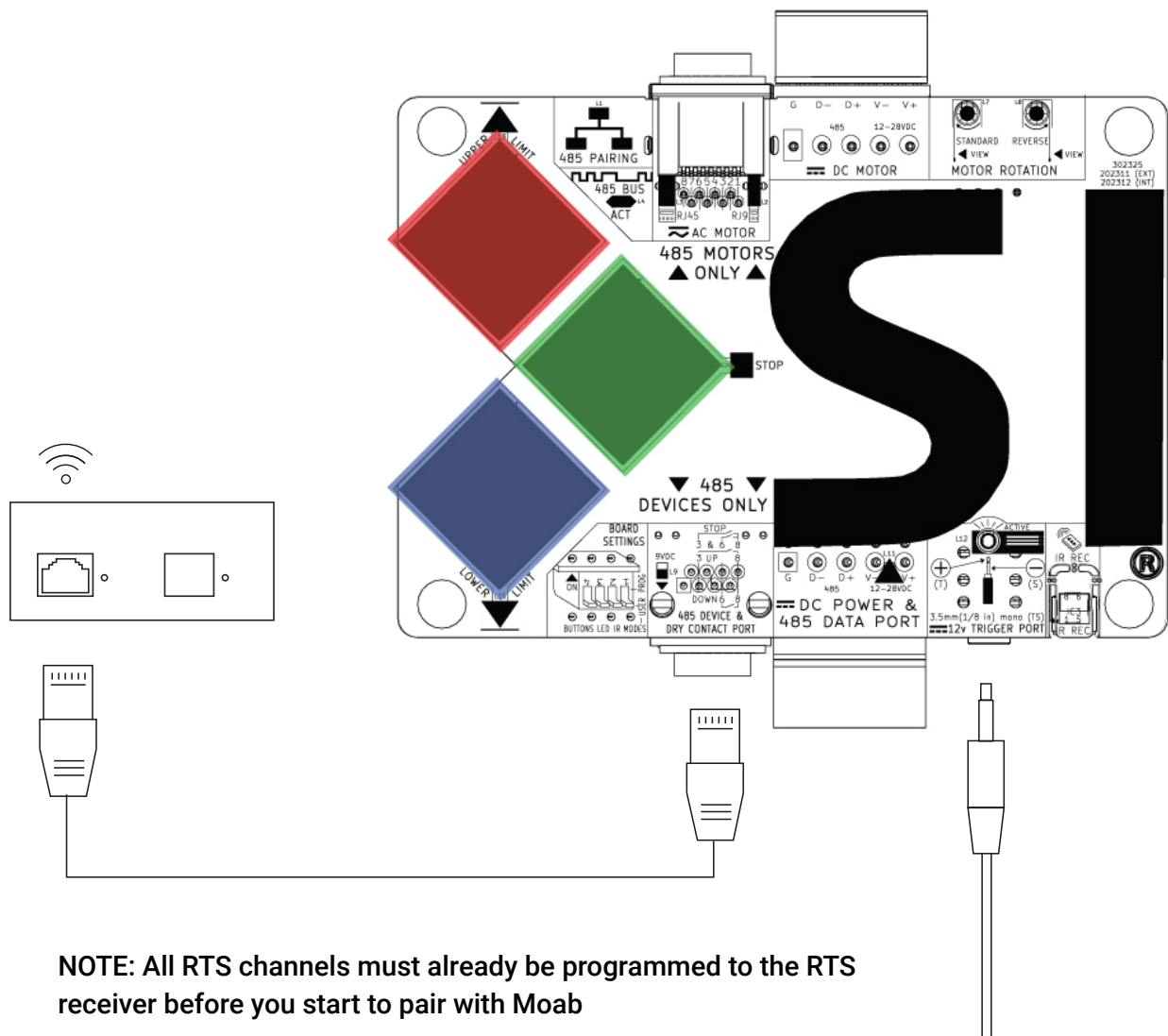


NOTE: All RTS channels must already be programmed to the RTS receiver before you start to pair with Moab

485 DEVICE RF CONNECTION DETAIL

RF CONNECTIONS

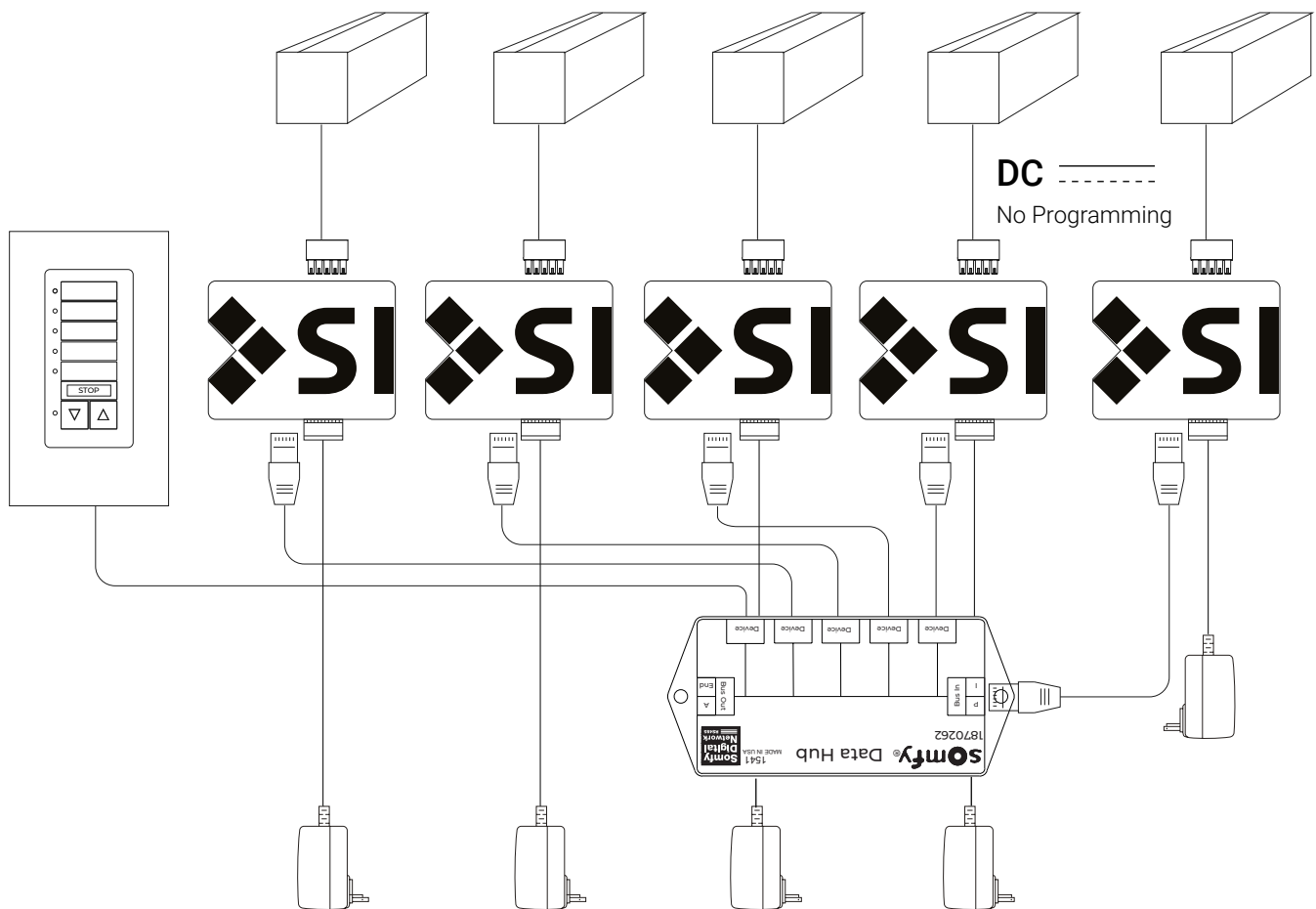
- RTS Receiver connects to bottom RJ45 Device port; Moab powers, pairs, and programs the device.
- Wireless receiver can be up to 200' away from Moab; RF remote control can be up to 65' from the receiver.
- Moab can auto-program up to 5 RTS channels one at a time.
- Compatible with RTS Keypads or hand-held remotes.



485 DEVICE RF CONNECTION DETAIL (WITH HUB)

485 CONNECTIONS – USING 485 DATA HUB

- DC Powered motor wiring (up to 5 motors per receiver) RJ45 ONLY (no RJ9).
- One 485 keypad to control all five screens (no additional programming).

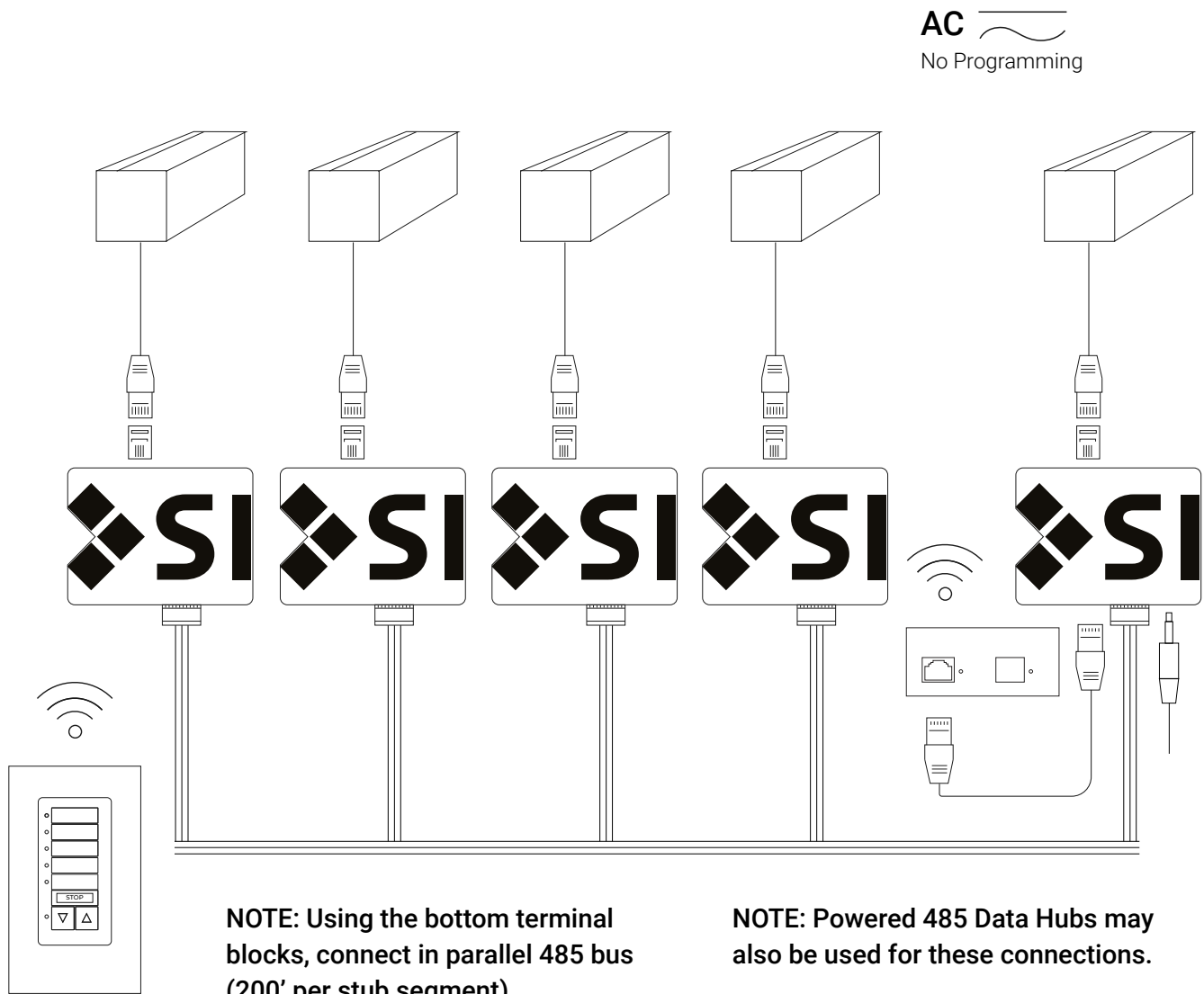


NOTE: If total wire is greater than 200' from MOAB, an in-line bus power supply must also be used.

485 DEVICE RF CONNECTION (USING RF GATEWAY)

RF CONNECTIONS

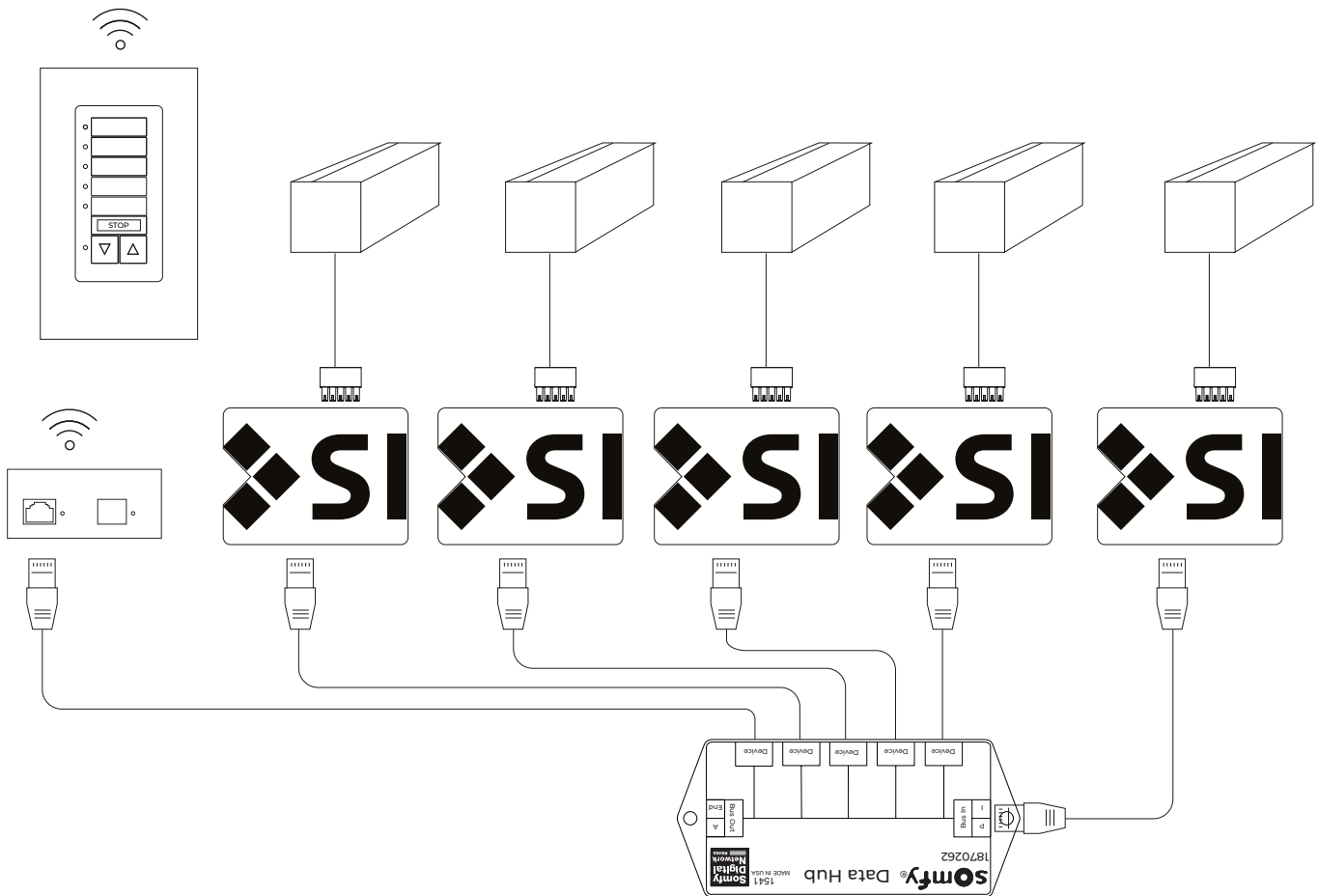
- AC Powered motor wiring (up to five motors per receiver),
- One wireless keypad to control all five motors.



485 DEVICE RF CONNECTION (USING RF GATEWAY)

RF CONNECTIONS – USING 485 DATA HUB

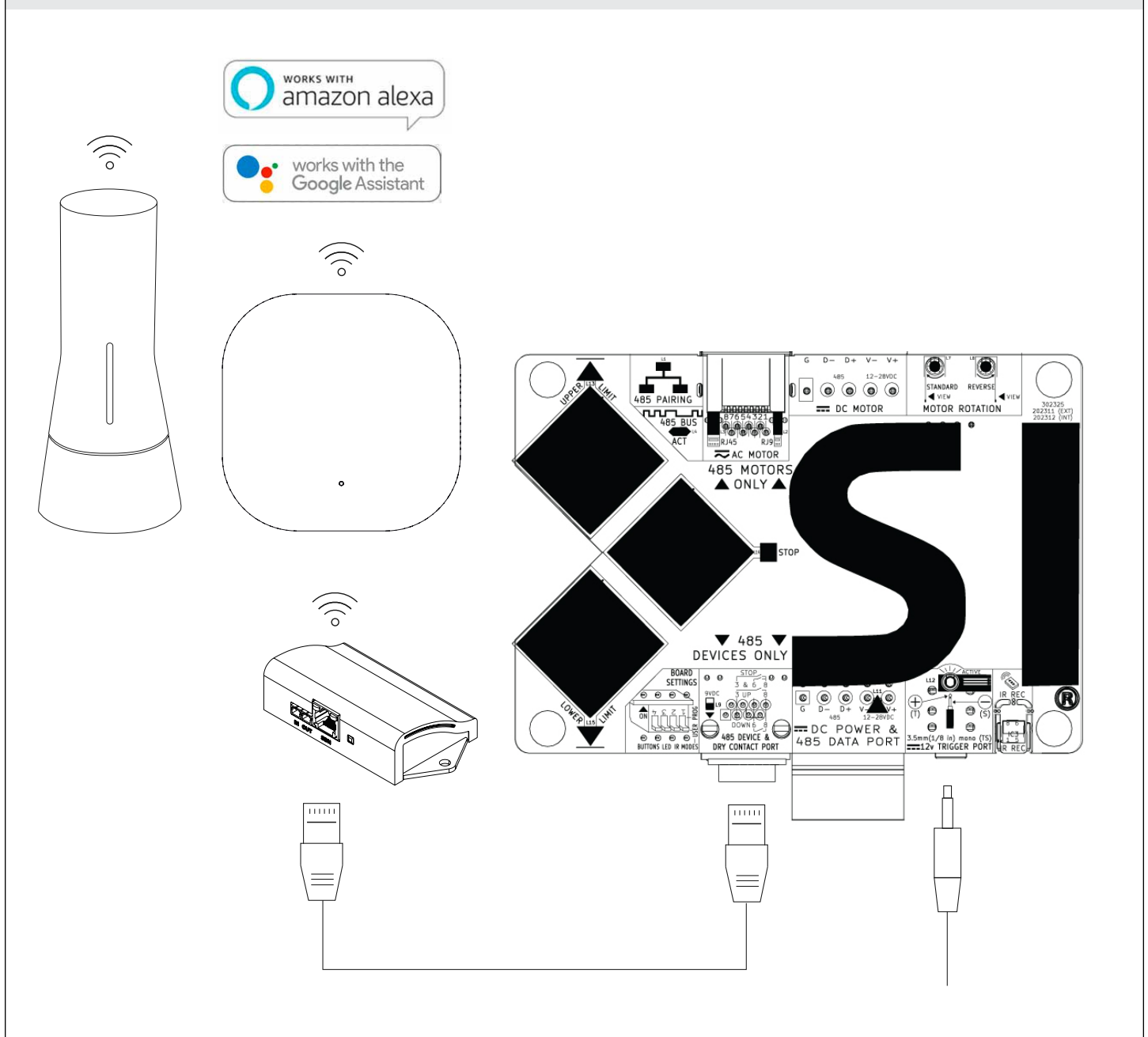
- AC Powered motor wiring (up to five motors per Receiver).
- One wireless keypad to control all five motors (hub and RTS powered by Moab).



485 DEVICE RF CONNECTION (USING RF GATEWAY)

RF CONNECTIONS

- ZBDMI (coming soon) may also be connected to Moab via the bottom RJ45.
- Device port and Moab powers the unit.
- This allows full two-way control from the TaHoma iOS or Android app and other third party devices such as Alexa, Google Assistant, and josh.ai.
- No programming needed; scan the QR code on back of ZBDMI with the TaHoma app and you are ready to name your screen and control it.

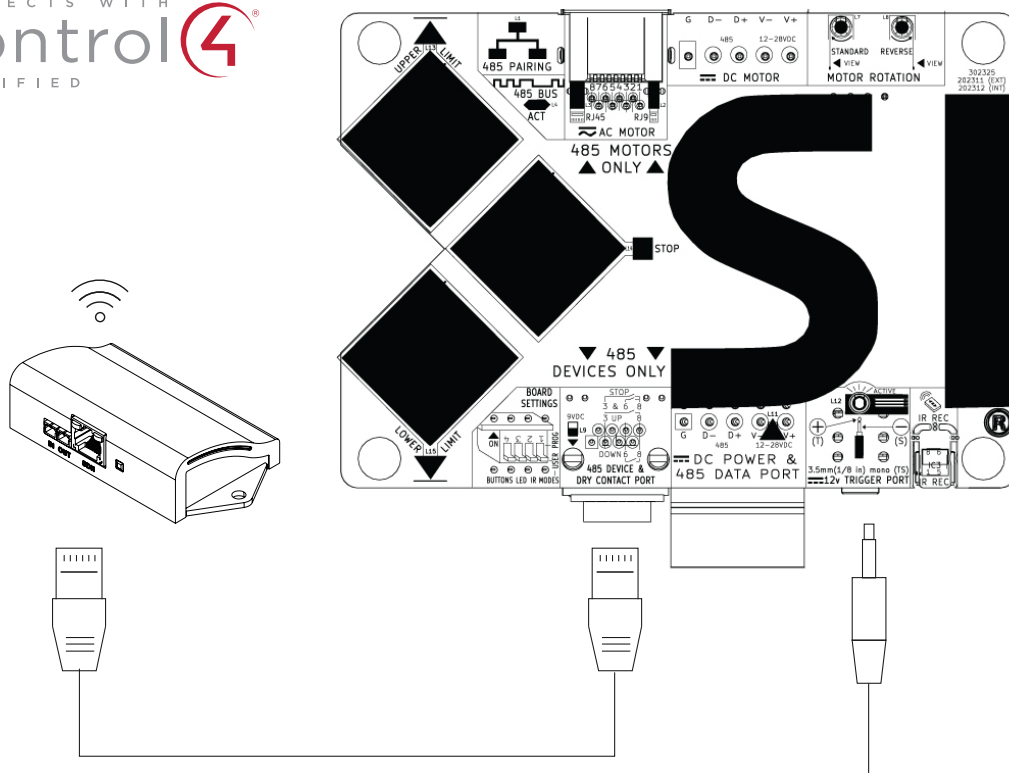


485 DEVICE RF CONNECTION (WITH C4ZIGBEE)

RF CONNECTIONS

- C4 Zigbee may also be connected to Moab via the bottom RJ45. Device port and Moab powers the unit.
- This allows full native two-way control from Control4.
- No additional gateway needed; open the Zigbee Discovery in the Control4 Composer and you are ready to name and control your screen from any C4 device.

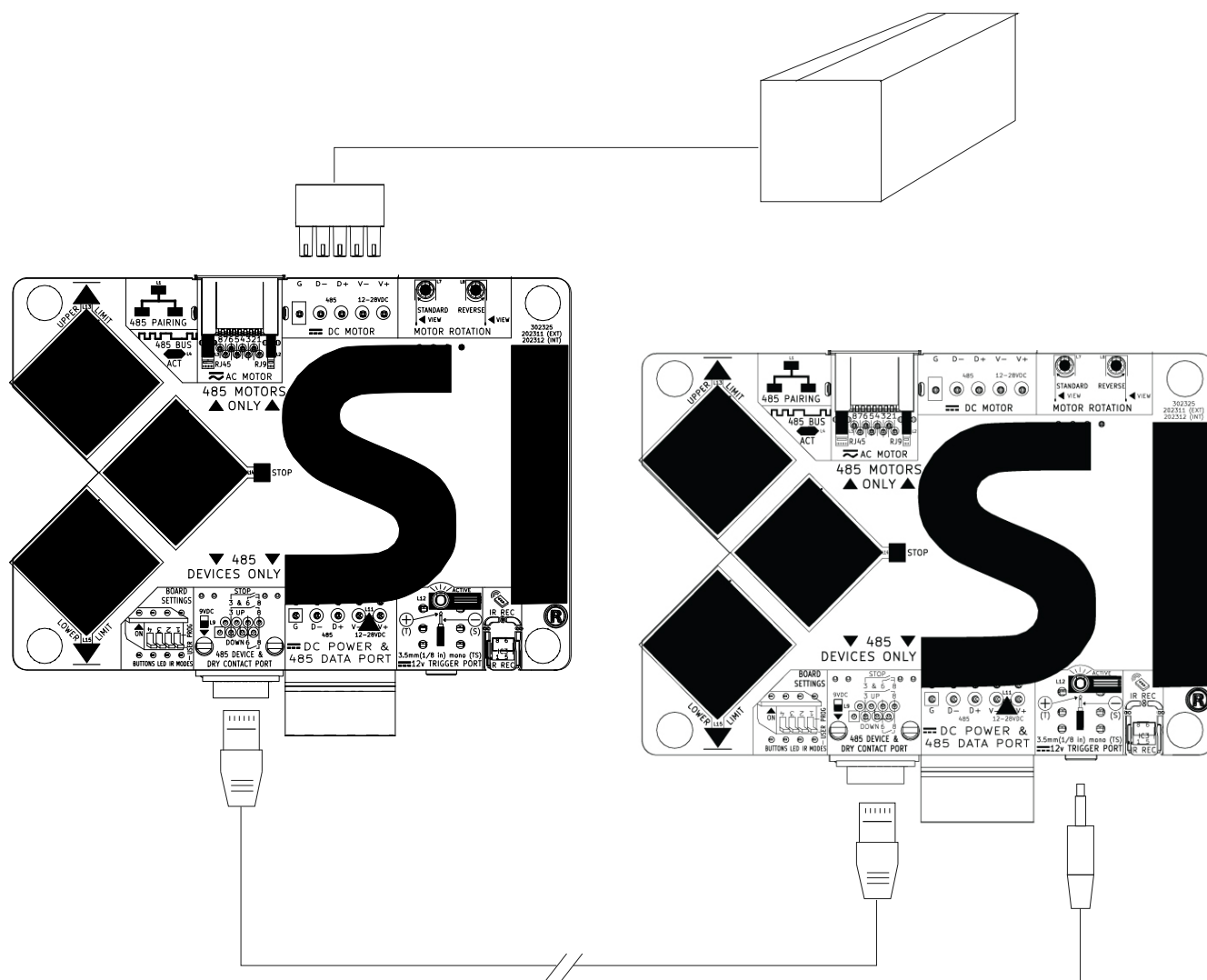
CONNECTS WITH
Control4
CERTIFIED



MOAB TO MOAB CONNECTION DETAIL

MOAB with MOAB

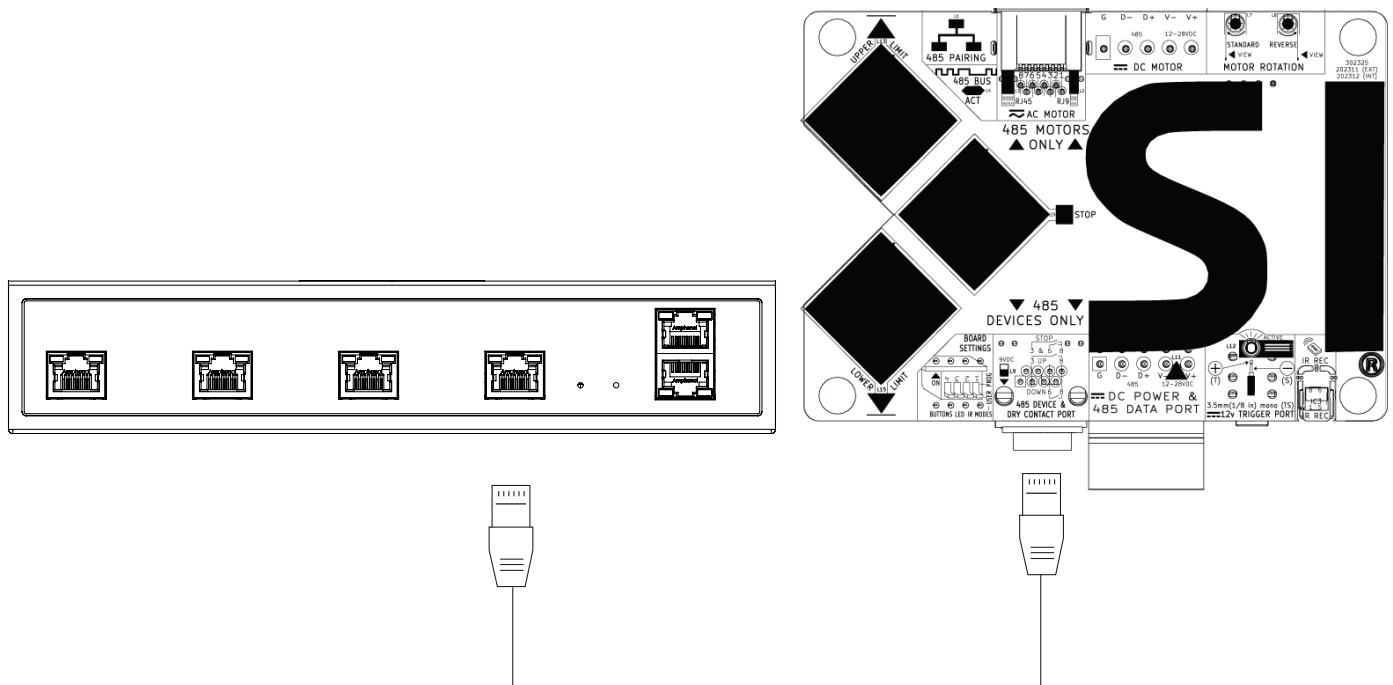
- Moab may also work in a stand-alone mode with another paired Moab to allow controls to be extended to another location.
- Functions that can work remotely are as follows:
 - IR Control
 - Button Presses
 - Dry Contact Closures
 - 12v -Trigger



MOAB TO TRO.Y CONNECTION DETAIL

MOAB with TRO.Y

- Moab can also work in a stand-alone mode with another paired Moab to allow extension of controls to another location.
- This includes any RTS or Zigbee motor.
- Functions that can work remotely are as follows
 - IR Control
 - Button Presses
 - Dry Contact Closures
 - 12v -Trigger



SI 485 SIMPLE PROTOCOL

SI MOAB API (MOAB THEN TRANSLATES TO MOTOR)

- Allows users to quickly “copy-and-paste” commands using the included node ID of the screen.
 - No string calculators, inverted bits, HEX converters or checksum calculations.
 - Simple cut/paste format for serial commands ??????=included motor node ID
 - “0x55 0xF9 0x0A 0x?? 0x?? 0x??” SCREEN UP
 - “0x55 0xF9 0x05 0x?? 0x?? 0x??” SCREEN DOWN
 - “0x55 0xF9 0xA0 0x?? 0x?? 0x??” SCREEN STOP
 - Additional programming broadcast commands using FFFFFFFF.
 - If Moab has no paired motor, any command will be sent out broadcast.

MOAB FAQs

- Moab has two Motor connection ports, can I connect two motors to Moab?
 - No, Moab is designed to control a single motor.
- What kind of 485 commands does Moab send? Does it send broadcast 485 commands like FONTUS, DecoSET, and the 0–10V interface does?
 - Moab only uses broadcast commands to “Pair the Motor.” Once the motor is paired, Moab sends discrete unicast-type commands directly to the motor node ID.
- If I have more than one motor in my project, can I have more than one Moab connected on the same 485-bus segment, or use one of the SI 485 data hubs such as JANUS or SUITE XVI?
 - You may have as many Moabs on the same 485-bus segment, and use any of the SI data hubs once a motor is paired to each Moab. When initially pairing a motor, the Moab must be only connected to that motor. After the pairing, it can be connected to other devices.
- Does Moab allow a 485 motor to work with an RF remote control or wireless keypad?
 - Yes, connect an RTS-to-485 to the bottom RJ45 485 port (Moab provides the power to the wireless receiver).
- Does Moab need to be repaired with the motor after a power disruption?
 - No, Moab stores the motor ID in its nonvolatile memory.
- Can I repair another motor to Moab?
 - Yes, connect the new motor, switch the board settings to PROG MODE, and HOLD the green stop button until the green led comes on. The new motor is now paired.
- Can I use Moab with an RTS motor?
 - Yes, using a connected TRO.Y.
- Can I use Moab with a Zigbee motor?
 - Yes, using a connected TRO.Y..

MOAB TROUBLESHOOTING

| Problem | Solution |
|---|---|
| No LEDs on Moab | <ul style="list-style-type: none"> - Check the LED ON/OFF from the Moab board Settings switch. - If using an AC motor, check the AC motor connection, the AC motor has AC power applied, and that all four conductors from the AC motor are connected to one of the top Moab 485 motor ports. - If using a DC motor, check the remote DC power connection on the Moab bottom terminal block DC power port. |
| Cannot pair a motor with Moab | <ul style="list-style-type: none"> - Check the motor connects and that all four conductors are present on one of the Moab top motor ports. If an AC motor is used, check the AC power; if a DC motor is used, check the remote DC power supply and the connection to the bottom Moab terminal block port. Check and ensure all five conductors are connected to the top Moab DC motor connection port. - Check if you have more than one motor connected to Moab |
| My IR is not working with Moab | <ul style="list-style-type: none"> - Check batteries in the IR remote. - Check the IR mode switch is set to ON in the Moab board settings - Slide Moab out from the screen and check the bottom two IR connections are in place on the bottom of the Moab board. |
| Cannot adjust the limits on my screen | Check the PROG mode switch is set to ON in the Moab board settings. |
| The Moab LED for motor rotation is not on; how can I tell which motor rotation is set on the 485-motor? | Check the LED mode is set to ON in the Moab board settings. |
| My customer is complaining that the LEDs are on and shining down the screen material from the Moab board, how can I turn the LED's off? | Change the LED mode to OFF in the Moab board settings. |
| The buttons do not seem to work to bring my screen down. | Check the BUTTONS mode is set to ON in the Moab board settings. |
| 12v Trigger is not controlling my screen | Check that your 12v trigger source has provided 7-12vdc on the cable, and that the 3.5mm TS cable is fully inserted into Moab. Remove Moab case, or trim down connector if needed. |
| Cannot discover RTS receiver (LED stays on after pairing with Moab or cant pair). | Ensure at least one RTS device has been paired to the RTS receiver before attempting to pair with Moab, and or if you have already programmed and paired an RTS receiver with Moab previously, please use the USER-MODE-MOAB FACTORY RESET command found on page 15, make sure you are in the user mode. Once complete switch to Programming mode and unplug the RTS receiver, and re-pair the motor again as shown on page 19, then switch back to user mode and plug the RTS receiver back and re-pair again with red or blue button in user mode as shown on Page 14. When the RTS receiver LED turns off after pairing, you are ready to control the motor with the RTS device. |

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