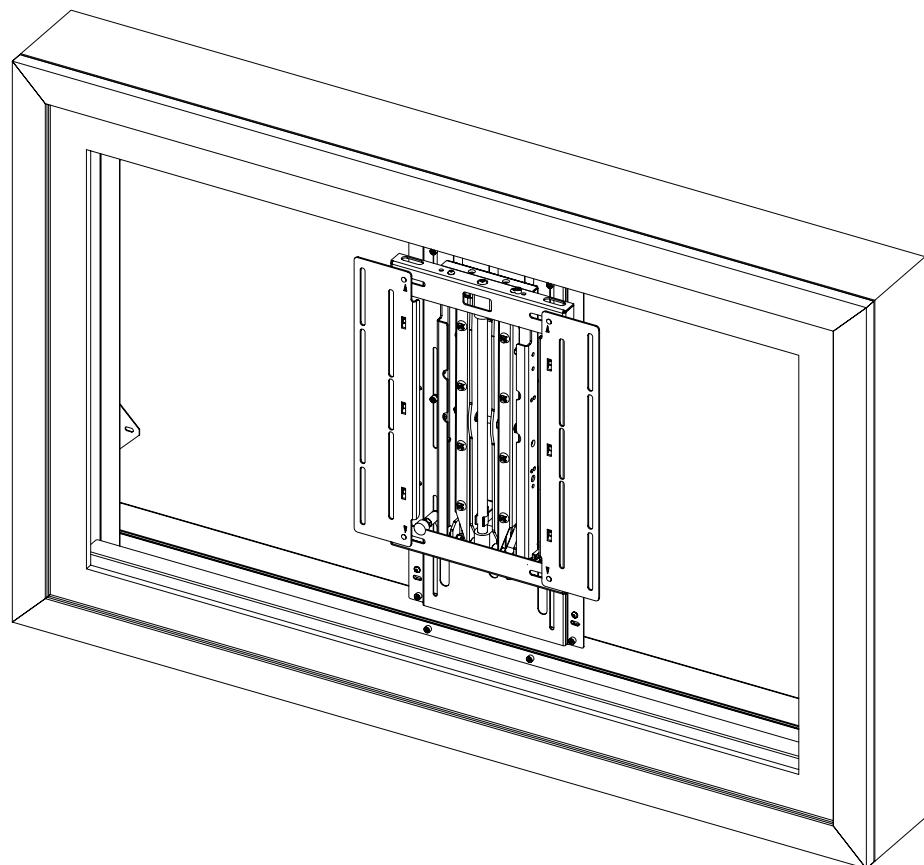




RA

ROLLING ART



INSTALLATION INSTRUCTIONS

ISSUE 001

SAFETY DISCLAIMER

IMPORTANT SAFETY INSTRUCTIONS BELOW

WARNING: Failure to provide adequate structural strengthening, prior to installation can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure the structure to which the component is affixed can support four times the weight of the component and any additional apparatus mounted to the component.

WARNING: Do not exceed the weight capacity for this product as listed below. This can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure that the total combined weight of all attached components does not exceed that of the maximum figure stated.

WARNING: Risk of death or serious injury may occur when children climb on audio and/or video equipment or furniture. A remote control or toys placed on the furnishing may encourage a child to climb on the furnishing and as a result the furnishing may tip over on to the child.

WARNING: Risk of death or serious injury may occur. Relocating audio and/or video equipment to furniture not specifically designed to support audio and/or video equipment may result in death or serious injury due to the furnishing collapsing or over turning onto a child or adult.



Only for use with equipment weighing **132LBS (60KG) OR LESS**.

Use with heavier projectors/equipment may lead to instability causing tip over or failure resulting in death or serious injury.

Suitable for Residential and Commercial Use.

ADDITIONAL WARNINGS:

1. Keep all documentation/instructions after fitting.
2. Read all technical instructions fully before installation and use. It is the installer's responsibility to ensure that all documentation is passed on to the end user and read fully before operation.
3. Do not use near water or outdoors unless the product has been specifically designed to do so.
4. Protect any cables or cords being used near this bracket from being walked on or pinched to prevent damage and risk of injury.
5. Use this product only for its intended purpose as described in the product instructions and only use attachments/ accessories specified by the manufacturer.
6. Do not operate the product if it is damaged in any way, 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. Contact the original installer/manufacturer to arrange repair or return.

WARNING - To reduce the risk of burns, fire, electric shock, or injury to persons:

1. Clean only with a dry cloth and always unplug any electrical items being used in conjunction with this product before cleaning.

Future Sound & Vision trading as Future Automation intend to make this and all documentation as accurate as possible. However, Future Automation makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without prior notice or obligation of any kind. Future Automation makes no representation of warranty, expressed or implied, regarding the information contained herein. Future Automation assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

PRODUCT WARRANTY & RISK ASSESSMENT

WARRANTY INFORMATION

WARNING - The warranty offered for this product shall be annulled if the product is used improperly or in a way that is in breach of our Terms of Service.

Future Automation provides warranty for the mechanism you purchased for the period of **24 months** from the date of purchase, provided that it isn't used for unintended purposes.

Under the warranty, Future Automation aims to either solve the issue remotely (via telephone or email support) or if the mechanism requires a part, arrange a visit to your premises by a Future Automation approved engineer or send replacement items where appropriate.

Warranty repairs will be carried out as quickly as possible, but subject to parts availability. This warranty period is respectively extended for the period of a repair.

A malfunctioning product must be cleaned and placed into suitable packaging to protect against transit damage before organising delivery to a repair workshop.

All the complaints about defects must be submitted to the vendor/installer that sold this product, rather than directly to the manufacturer.

Any part of your system that needs to be replaced during a warranty repair becomes the property of Future Automation.

The warranty does not cover the following:

- Damages resulting from improper product use or maintenance.
- Repairs carried out by unauthorized persons.
- Natural wear and tear during operation.
- Damages caused by the buyer.
- Accidental damages caused by a customer or damages caused as a result of careless attitude or usage, or damages caused by natural disasters (natural phenomena).
- Any electrical, or other environmental work external to your Future Automation mechanism including power cuts, surges etc.
- Additional items not supplied by Future Automation although they may have been supplied together by the retailer
- Any 3rd party software products controlling your mechanism
- Any transfer of ownership. Warranty is provided only to the initial purchaser.
- Compensation for loss of use of the product, and consequential loss of any kind.

A separate Safety and Servicing Information document is provided with these instructions (additional copies can be found at www.futureautomation.co.uk/safety), and this document **MUST** be filled out by the approved Future Automation Dealer who is installing the product. This Warranty Sheet must be held by the end user for the duration of the products life and will be referred to during servicing or warranty queries.

The Safety and Servicing Information document also contains two Service History Forms that must be filled in by the approved Future Automation dealer who is performing the first required yearly service of this product.

One copy of the Service History Form must be held by the customer (along with the Warranty Sheet) and a duplicate copy must be held by the approved Future Automation dealer that performed the service. Missing and/or mismatching documents may delay or invalidate warranty claims.

Additional Service History Forms can be found on the Future Automation website for further yearly services.

RISK ASSESSMENT INFORMATION

It is the installer's responsibility to perform a risk assessment of installed products. Future Automation can provide guidelines to installers/dealer about what should be included in a risk assessment, but due to the individual nuances of each location/site, Future Automation cannot provide a full list of areas to risk assess.

For full risk assessment and safety information please view our Safety and Servicing guide available at www.futureautomation.net/safety

GUIDE

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PACKAGE CONTENTS

1 - ROLLING ART UNIT

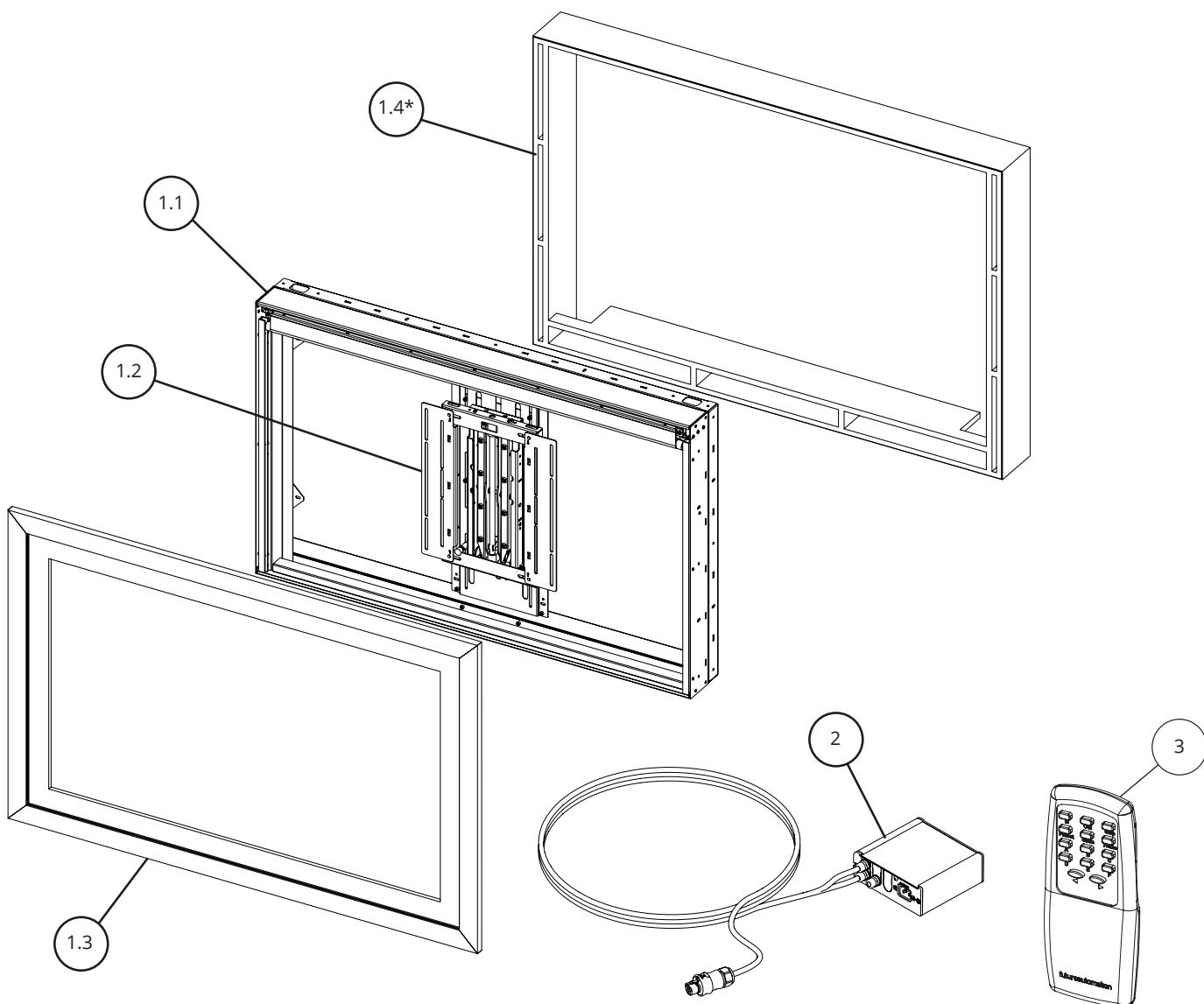
- 1.1 - MECHANISM UNIT
- 1.2 - PS40 BRACKET
- 1.3 - PICTURE FRAME
- 1.4 - ON WALL HOUSING (*NOT SUPPLIED FOR IN WALL INSTALLATION)

2 - CONTROL BOX (SIZE/STYLE MAY VARY)

3 - INFRARED (IR) REMOTE CONTROL

ITEMS NOT SHOWN ON PAGE:

- X2 AAA BATTERIES
- MAINS POWER LEAD
- INFRA-RED (IR) LEAD
- CAT5 LEAD
- SCREEN FIXINGS PACK
- EMERGENCY STOP CONNECTOR
- WALL MOUNT TEMPLATE



MECHANISM QUICK-START GUIDE

Some Future Automation mechanisms may ship with the control box disconnected to prevent damage during transit. In order to operate the mechanism, the control box will need to be reconnected, then have mains power applied along with the desired control method.

RECONNECTING THE CONTROL BOX

To reconnect the mechanism control box, follow the below steps:

1. Make sure the power is disconnected from the control box.
2. Remove the retaining screw and washer from the end of the control box to allow removal of the control box lid. (Image 1 Below).
3. Slide off the control box lid to reveal the control board inside.
4. Locate the green connector on the end of the loom leading from the lift mechanism. This plug will have a small tag attached stating the correct connecting socket on the control board (e.g. "AC1", "DC2"...) (Image 2 Below).
5. Plug the green connector into the corresponding socket on the control board. This plug is handed and will only connect correctly one way. Do NOT force the connector into the socket, this can cause serious damage to the control board and mechanism.
6. Route the wiring loom out of the end of the control box by inserting the black plastic inserts into the slots provided. (Image 3 Below).
7. Slide the control box cover back over the control board and replace the fixing screw and washer.



Image 1.

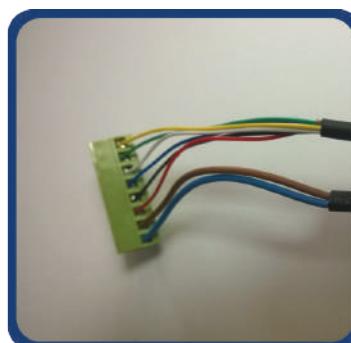


Image 2.



Image 3.



Image 4.

IMPORTANT

For the mechanism to operate, the green three way safety connector with the loop of wire attached, must also be plugged into the end of the control box. (Image 4 above). If this connector is not plugged in, a bright red LED will be visible inside control board and the Input Confirmation Input LED will be permanently illuminated.

INITIAL OPERATION

- Unpack and check all parts of the product are supplied as per package contents.
- Check fully for any signs of damage or obvious visual faults before operation.
- Remove all red cable ties before operation.
- Check all internal and external mechanism wiring is secure.



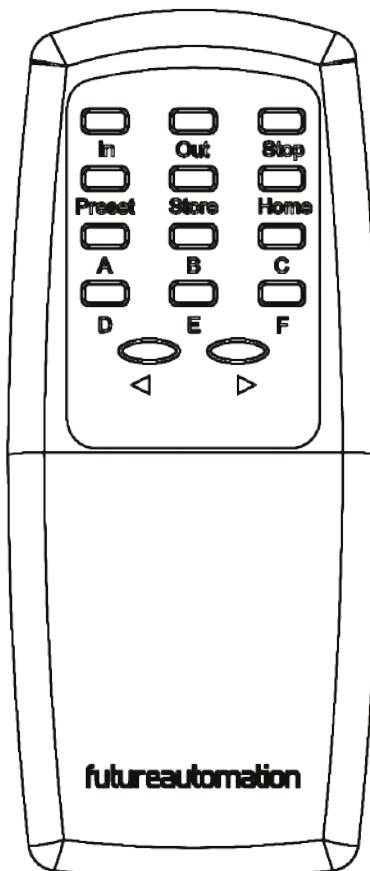
WARNING: THE RA MECHANISM DOES NOT HAVE AN ANTI-JAM CAPABILITY.
THE MOTOR DRIVE SYSTEM WILL CONTINUE TO MOVE UNTIL A LIMIT SWITCH IS CONTACTED.
KEEP HANDS AND ANY OBJECTS CLEAR OF THE MECHANISM DURING OPERATION TO REDUCE RISK OF DAMAGE OR INJURY.

Familiarise yourself with the mechanism.

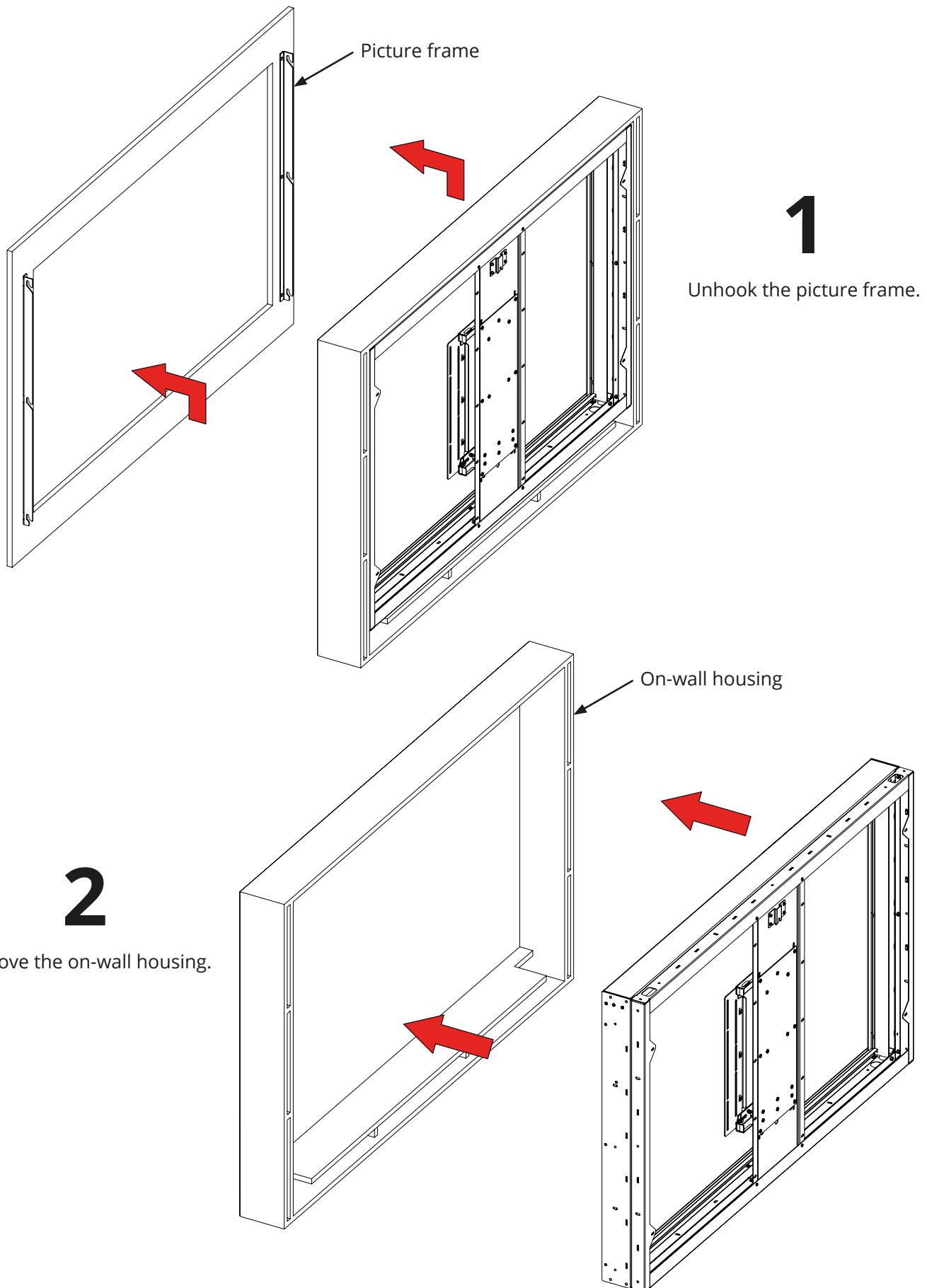
Pressing 'IN' on the IR remote will roll the canvas down.

Pressing 'OUT' will roll the canvas up.

Pressing 'STOP' will stop the mechanism at any position.

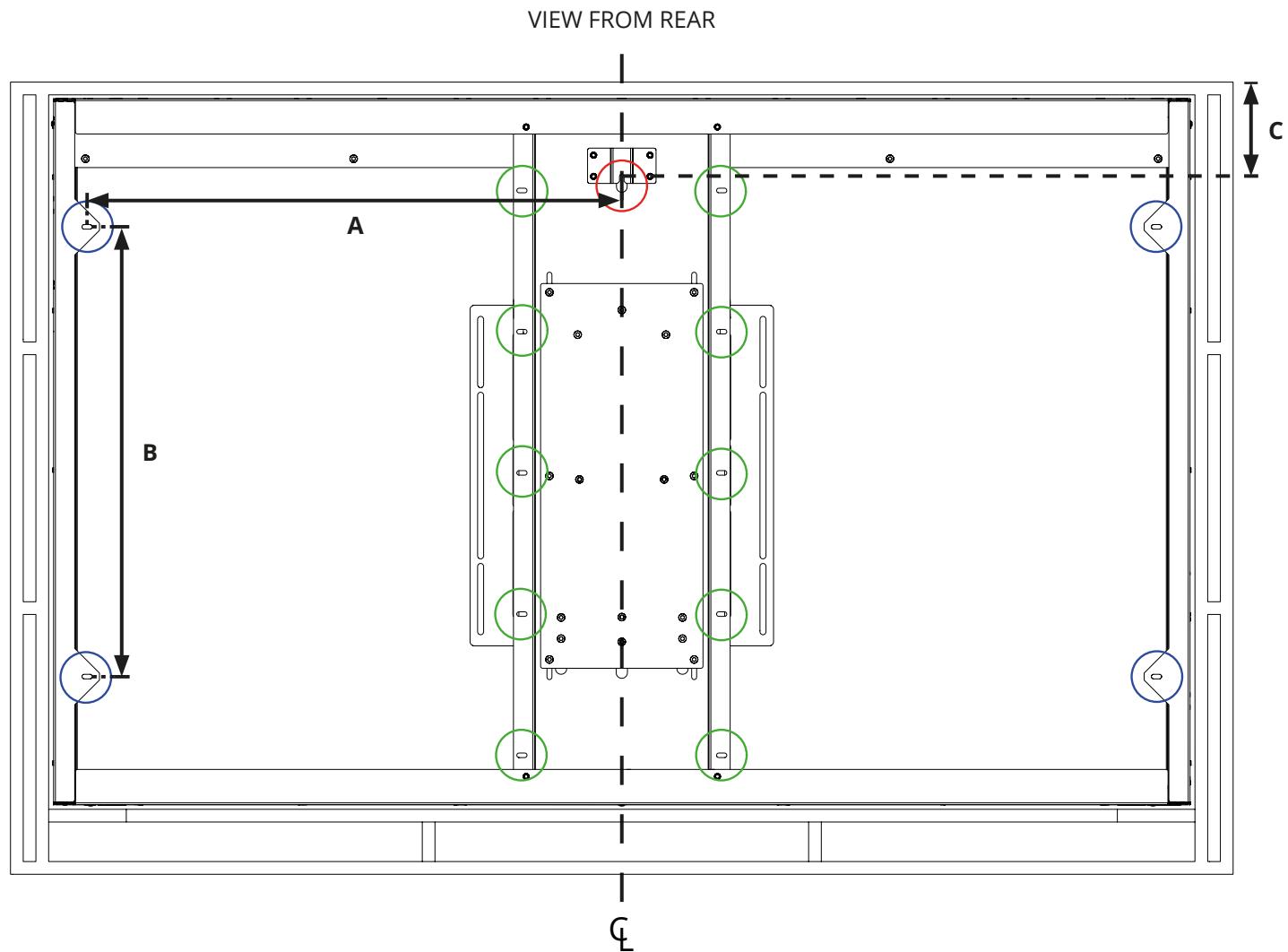


WALL MOUNTING



WALL MOUNTING CONT.

3 Use the provided wall template to mark the fastening positions shown below on the wall or recess.



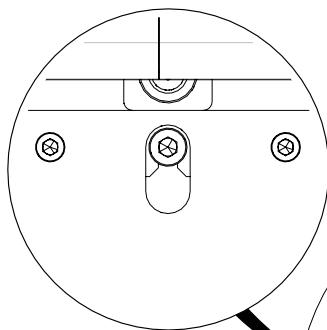
Measurements taken from centre of slots.

4

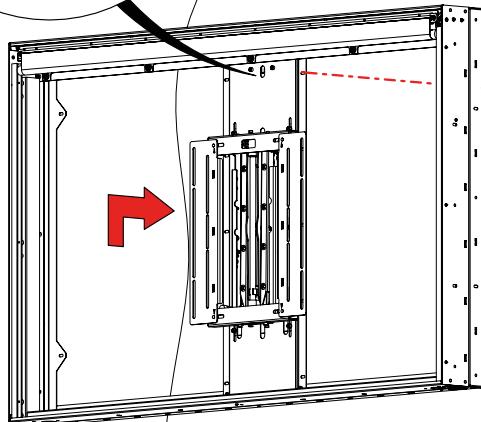
Screw in an appropriate fixing into the central fixing point on the wall as indicated by the red circle above.

| Mechanism size | Dimension | | |
|----------------|-------------------|-------------------|-----------------|
| | A | B | C |
| 5 | 648mm [25 1/2"] | 507mm [19 15/16"] | 128mm [5 1/16"] |
| 6 | 758mm [29 13/16"] | 637mm [25 1/16"] | 128mm [5 1/16"] |
| 7 | 893mm [35 3/16"] | 787mm [31"] | 128mm [5 1/16"] |

WALL MOUNTING CONT.



Ensure the mechanism is hooked over the fixing head to prevent it from falling.



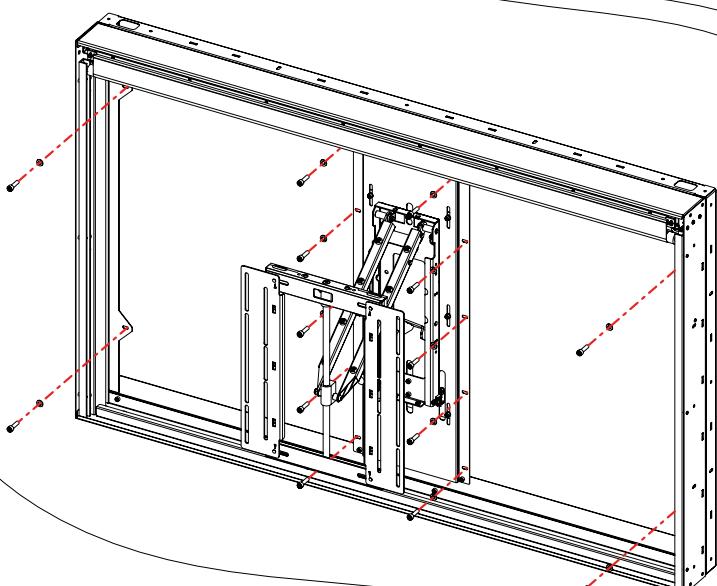
5

Hook the mechanism onto the fixing.

6

Level the mechanism and then align the rest of the holes with the marked positions and fasten the mechanism to the wall.

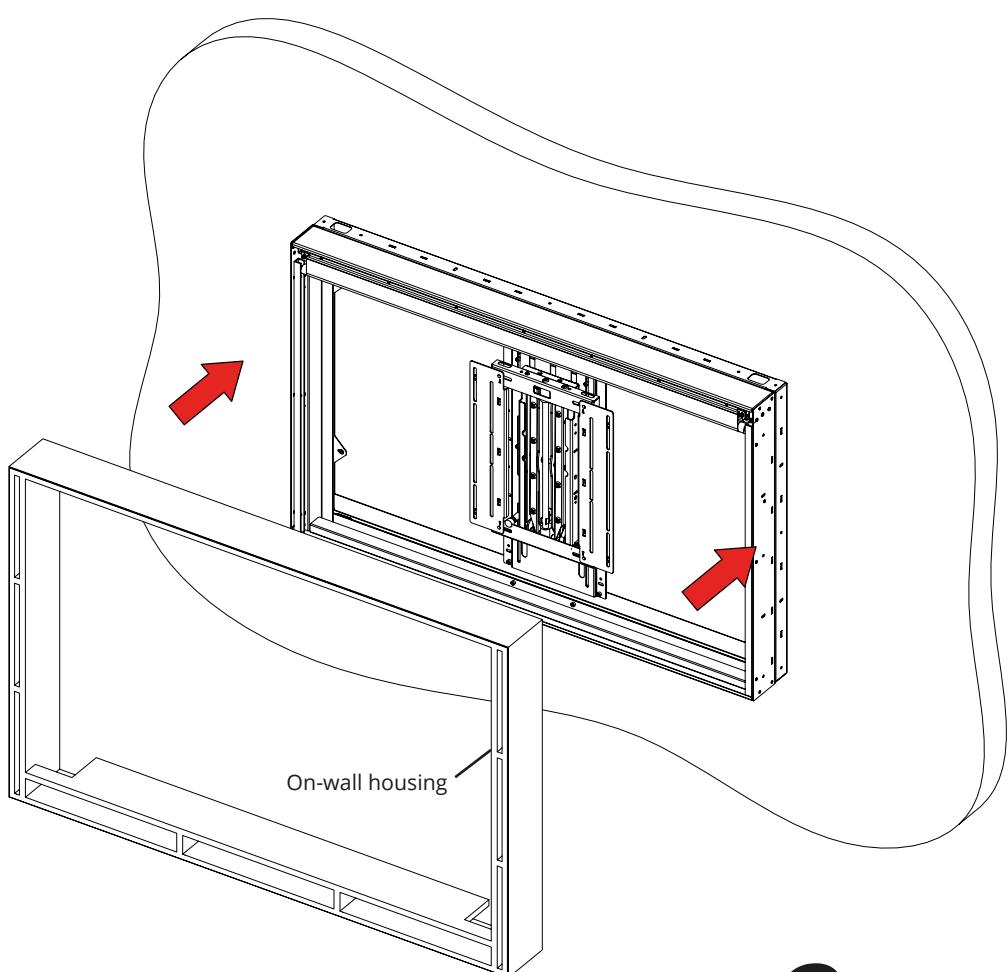
Pull out the PS bracket if necessary.



FRAME FITTING

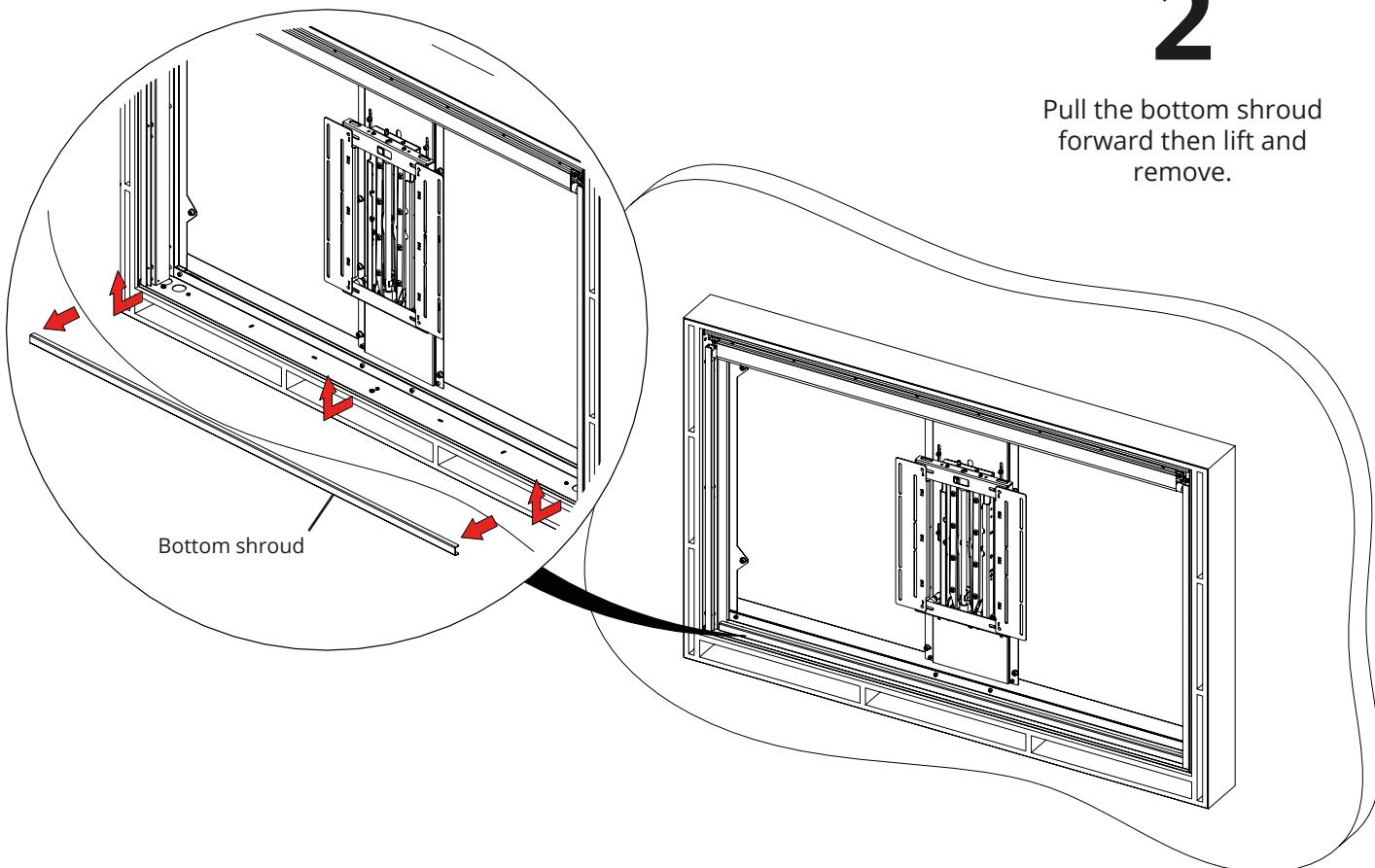
1

Slide the on-wall housing onto the mechanism.



2

Pull the bottom shroud forward then lift and remove.



FRAME FITTING CONT.

3

Pull the side shrouds in and remove.

Side shroud

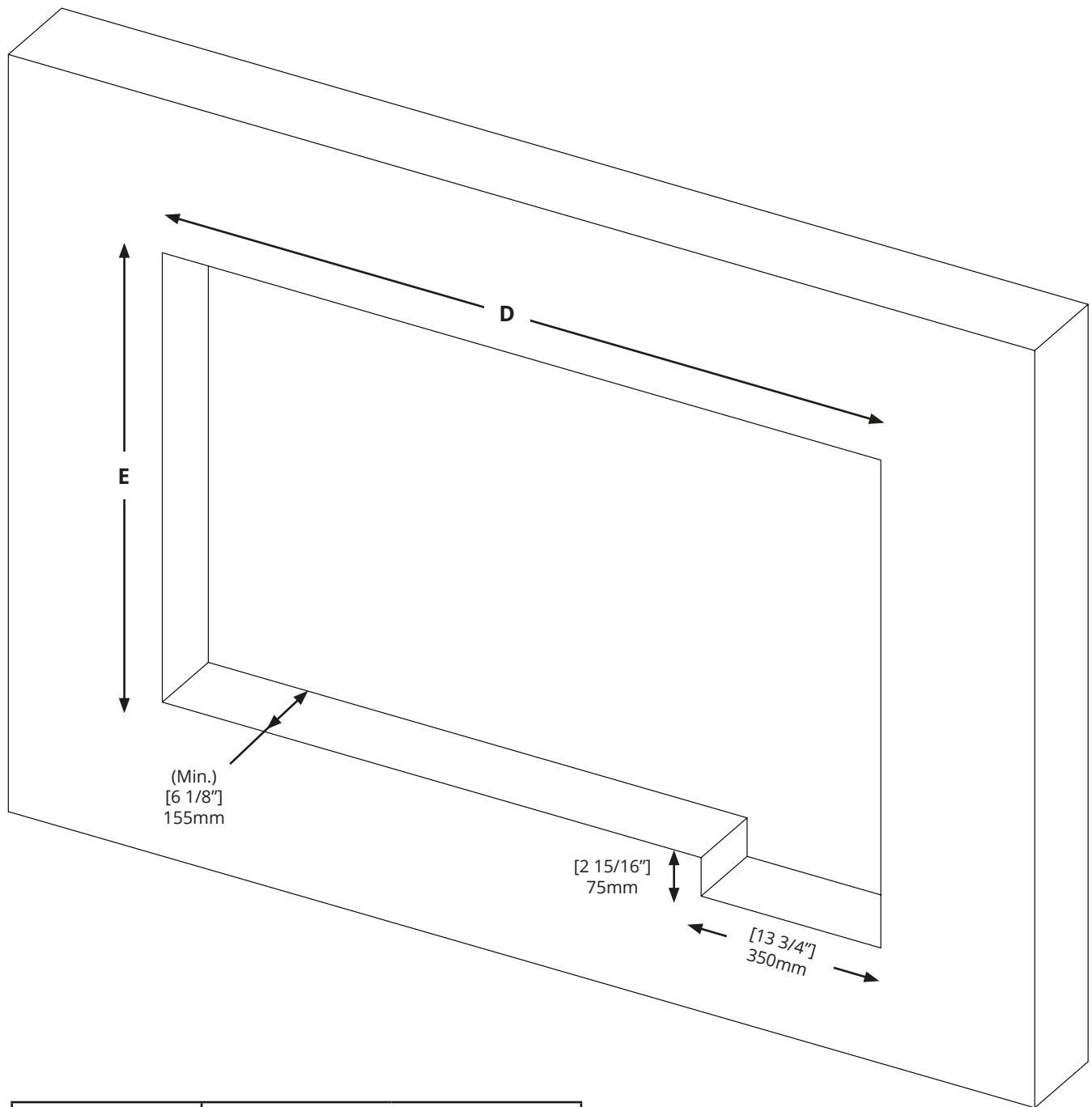
4

Screw the frame box to the mechanism using the various holes on the inside of the mechanism.

5

Install the control box in the bottom right corner of the on-wall housing.

IN-WALL MOUNTING



| Mechanism Size | Dimensions | |
|----------------|----------------------|---------------------|
| | D (Min.) | E (Min.) |
| 5 | [55 1/8"] 1400mm | [34 1/2"] 876mm |
| 6 | [63 3/4"] 1620mm | [39 5/8"] 1006mm |
| 7 | [74 7/16"] 1890mm | [45 1/2"] 1156mm |

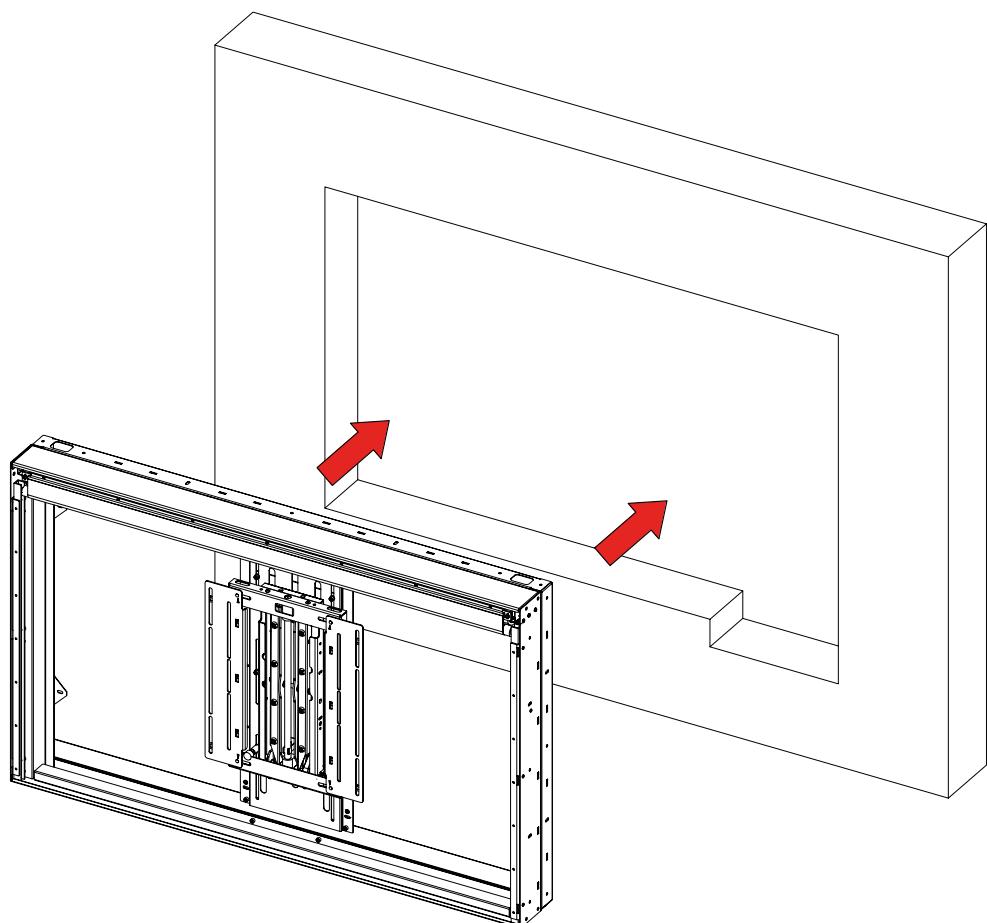
1

Create a cut-out in the wall to the dimensions shown above.

IN-WALL MOUNTING CONT.

2

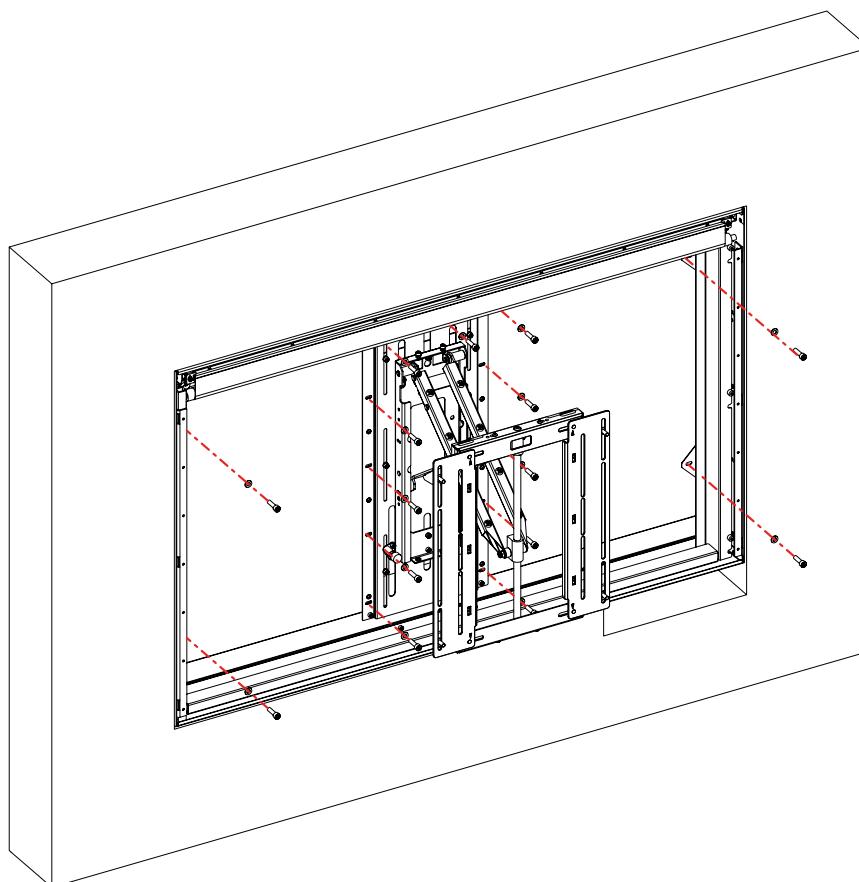
Insert the mechanism into the wall cut-out.



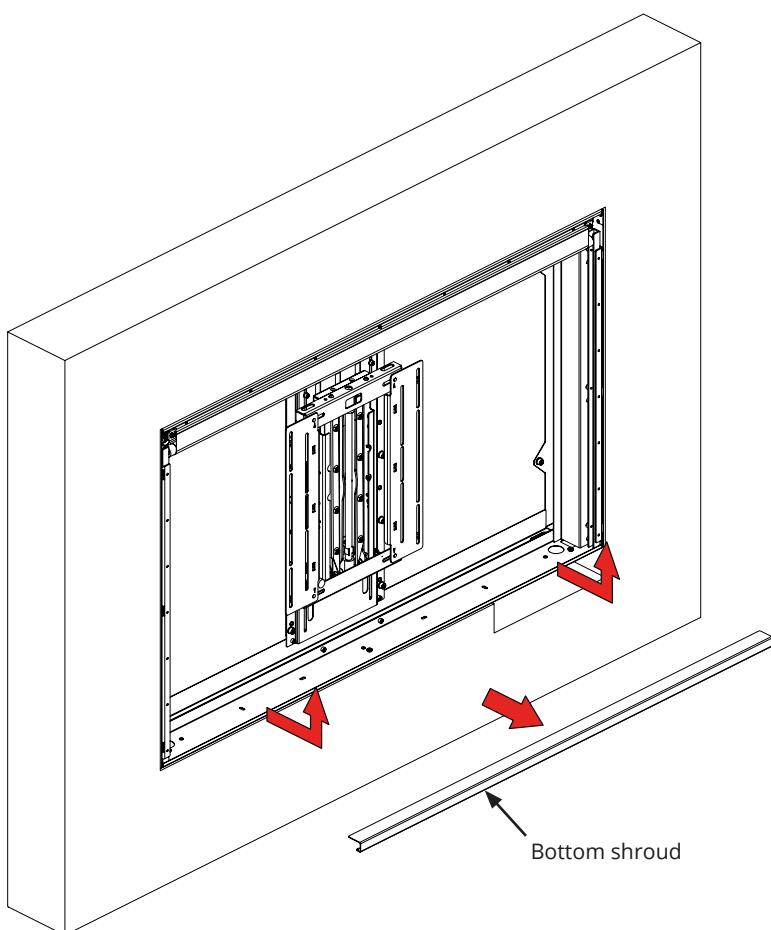
3

Level the mechanism and then align the rest of the holes with the marked positions and fasten the mechanism to the wall using the appropriate fixings.

Pull out the PS bracket if necessary.

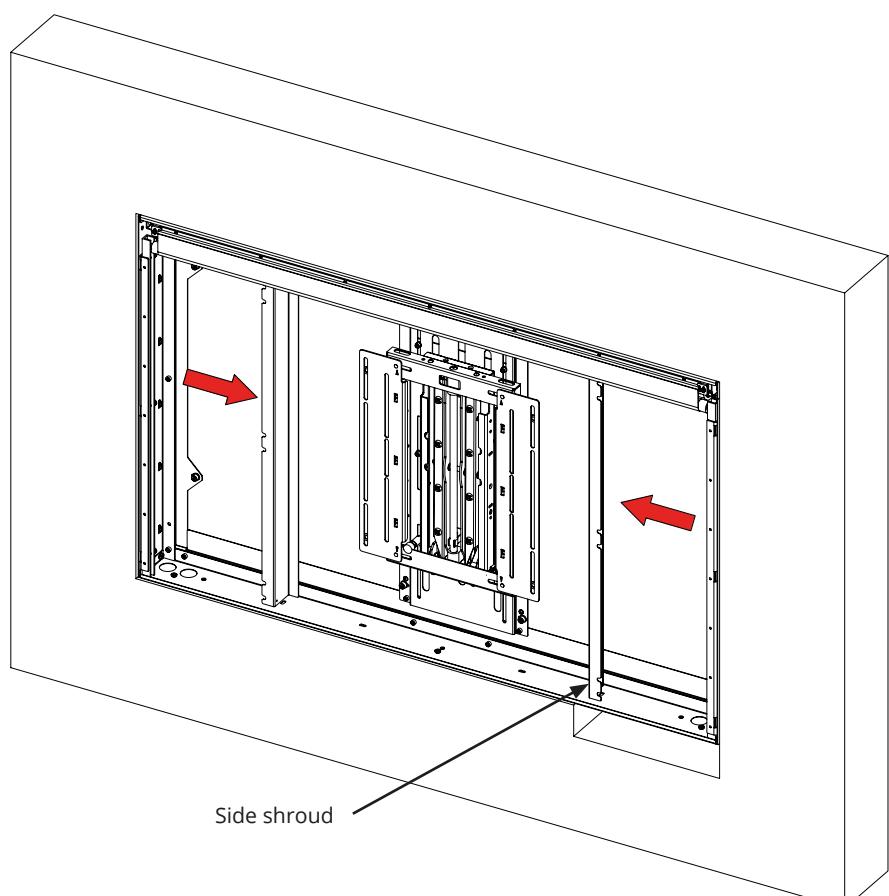


IN-WALL MOUNTING CONT.



4

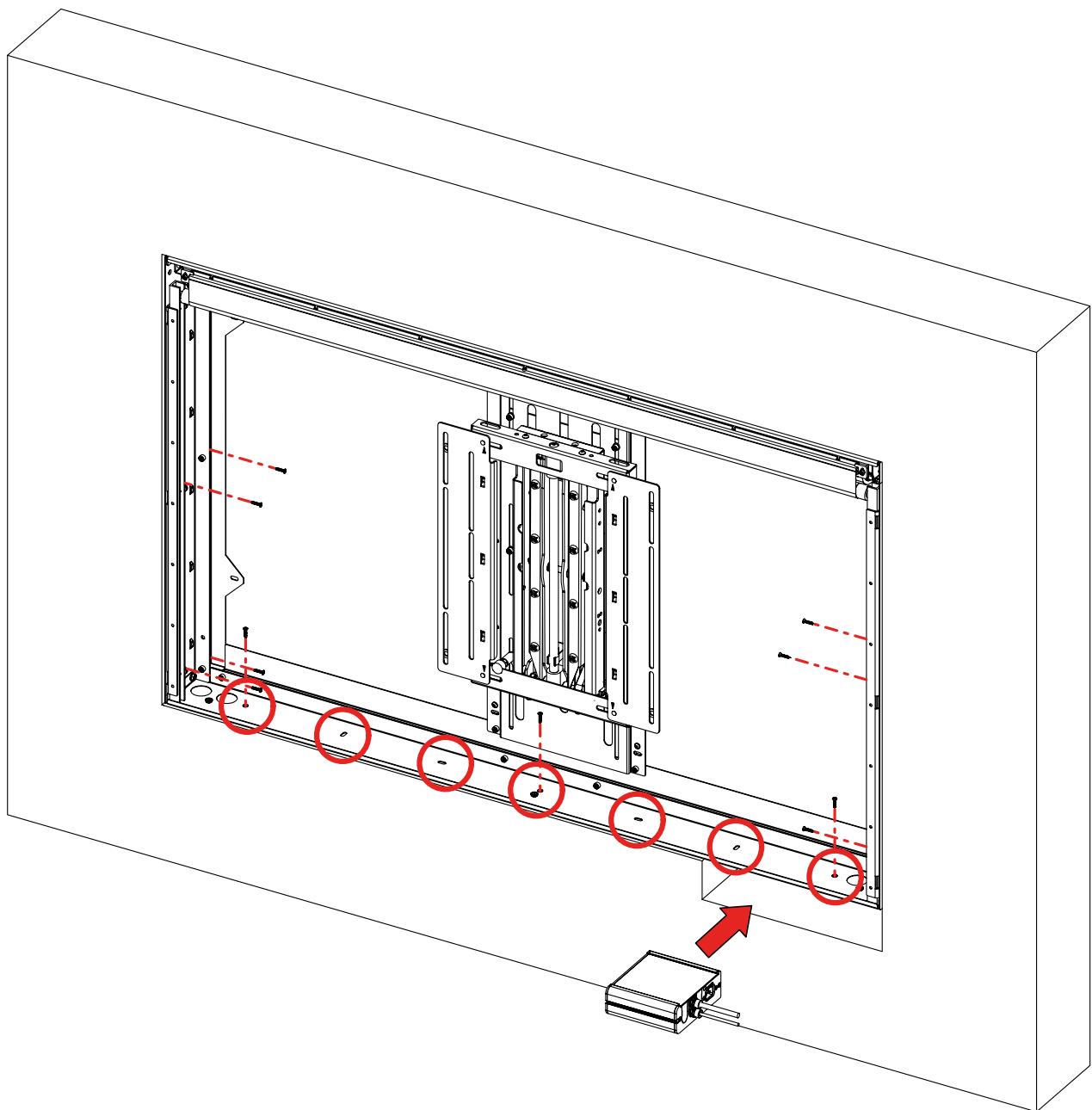
Pull the bottom shroud forward then lift and remove.



5

Pull the side shrouds in and remove.

IN-WALL MOUNTING CONT.

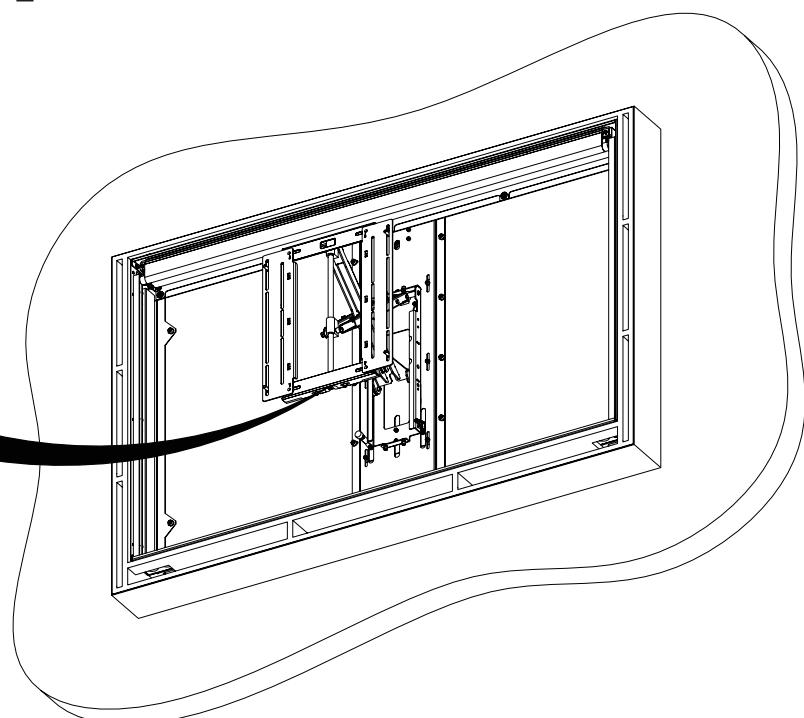
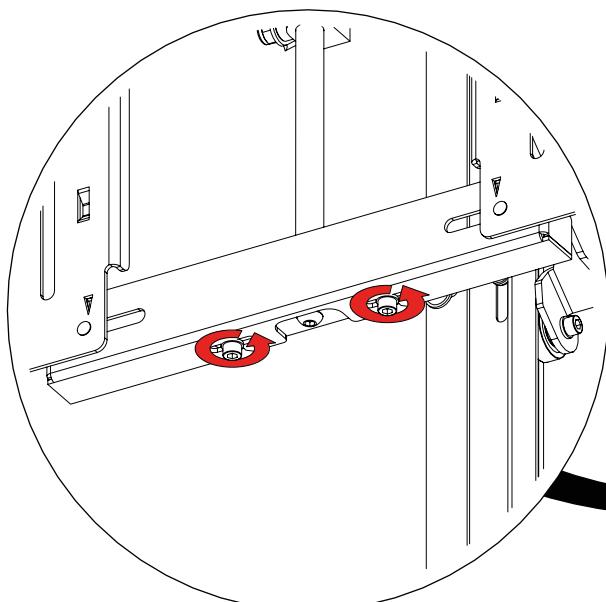


6 Insert the control box in the cut-out. Fix the mechanism to the recess using the mount holes along the perimeter faces.

SCREEN FITTING

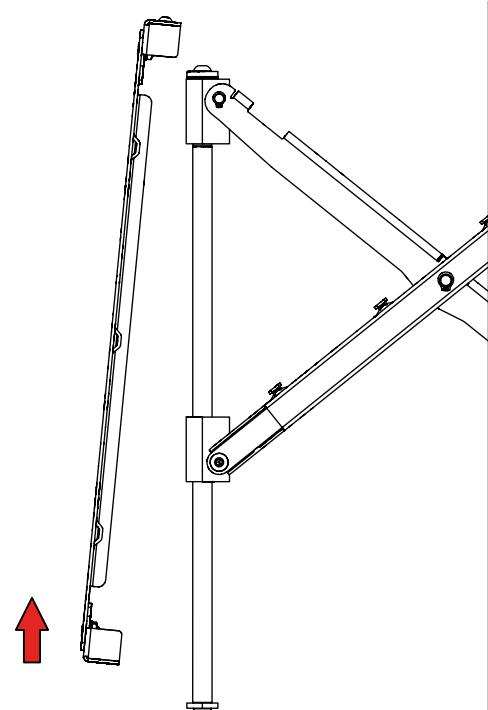
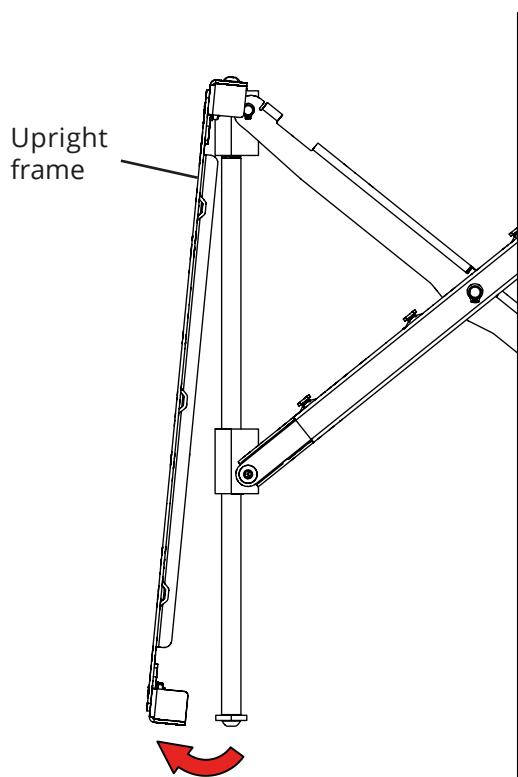
1

Pull out the PS bracket and loosen the bolts underneath.



2

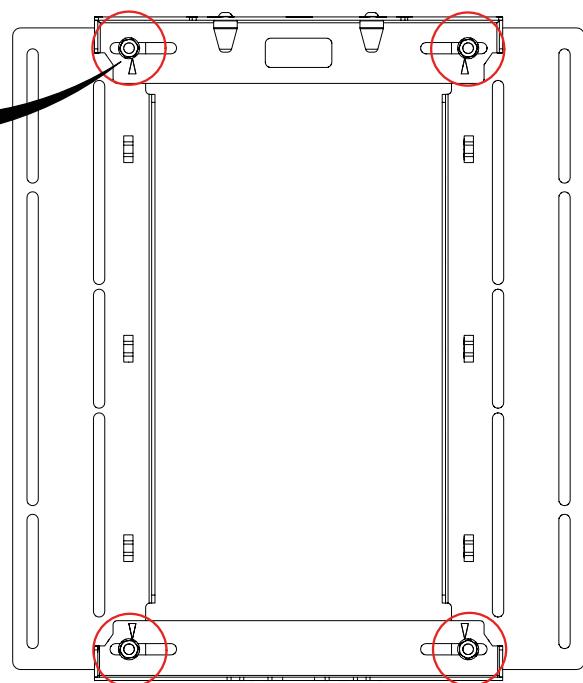
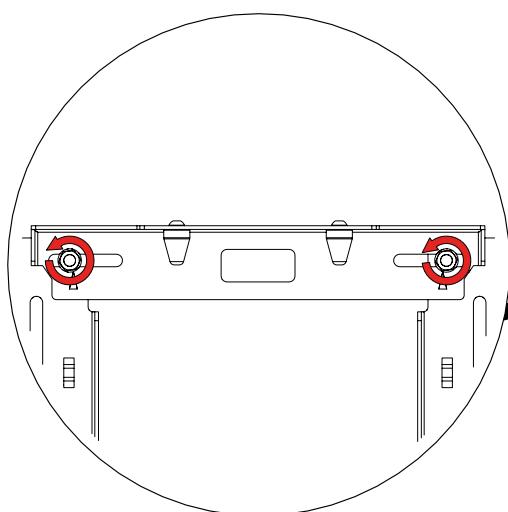
Tilt and unhook the upright frame.



SCREEN FITTING CONT.

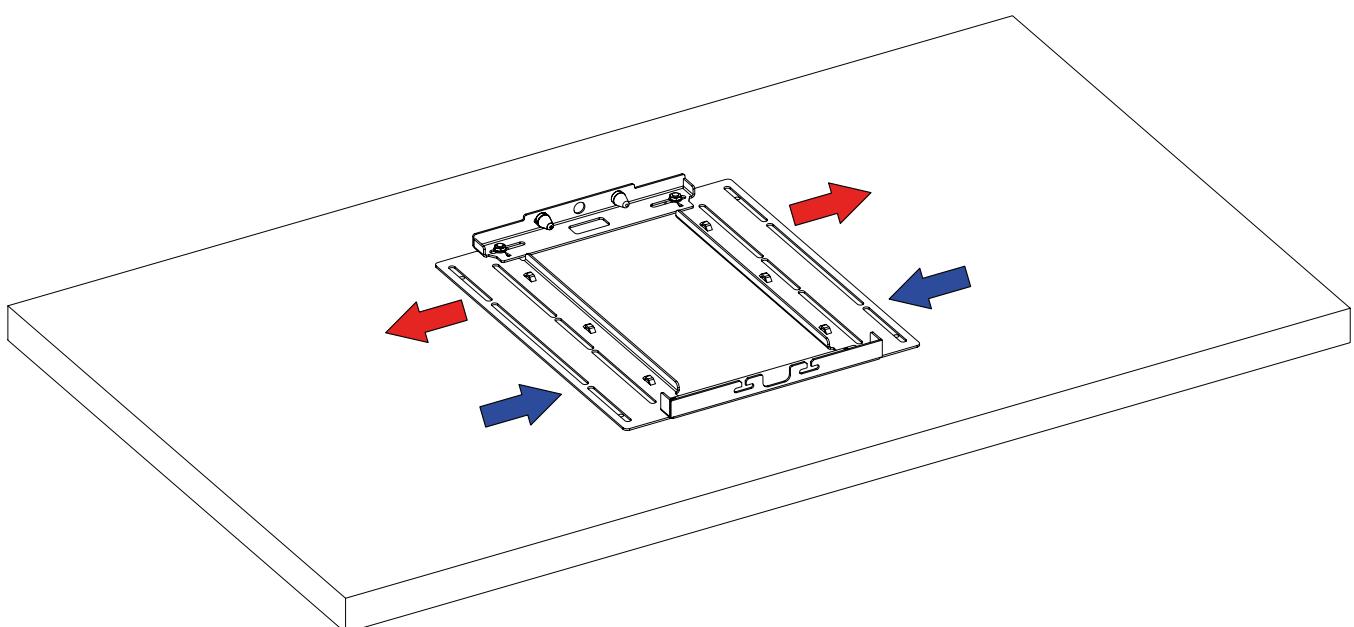
3

Loosen the four nuts on the top and bottom of the upright frame.

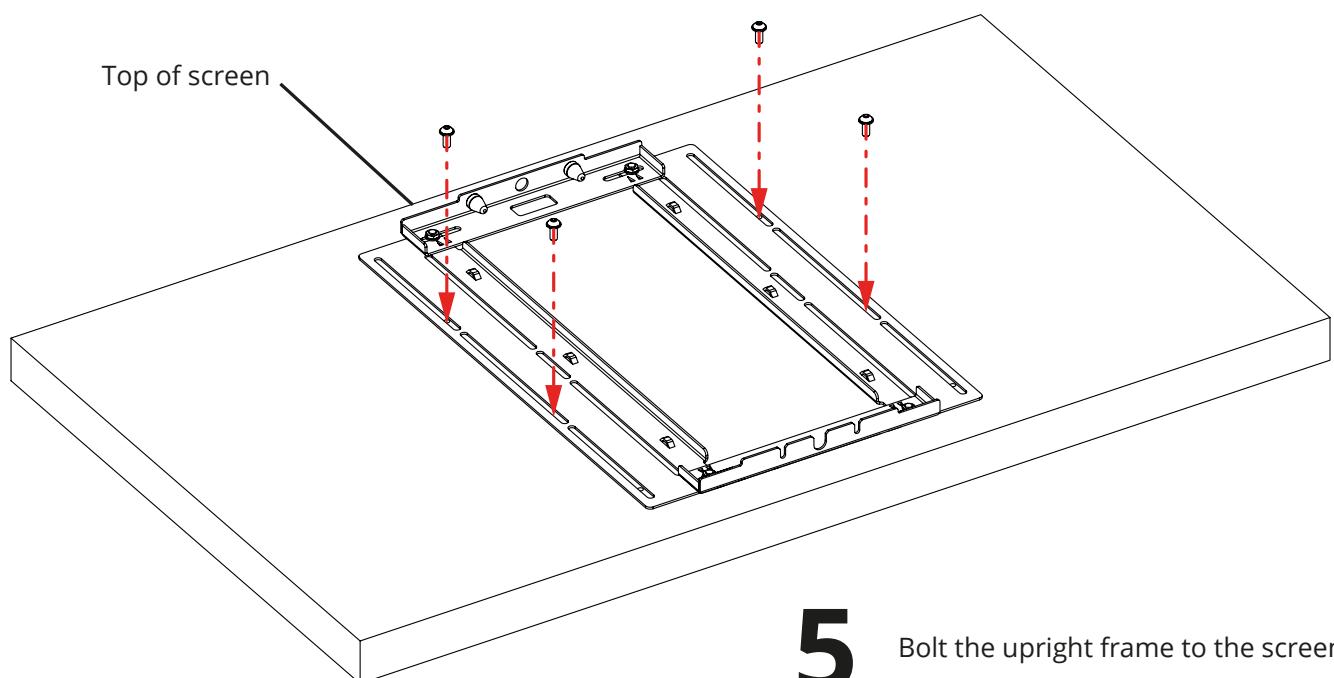


4

Lay the upright frame on the screen and adjust it to match the screen VESA pattern. Retighten all four nuts.



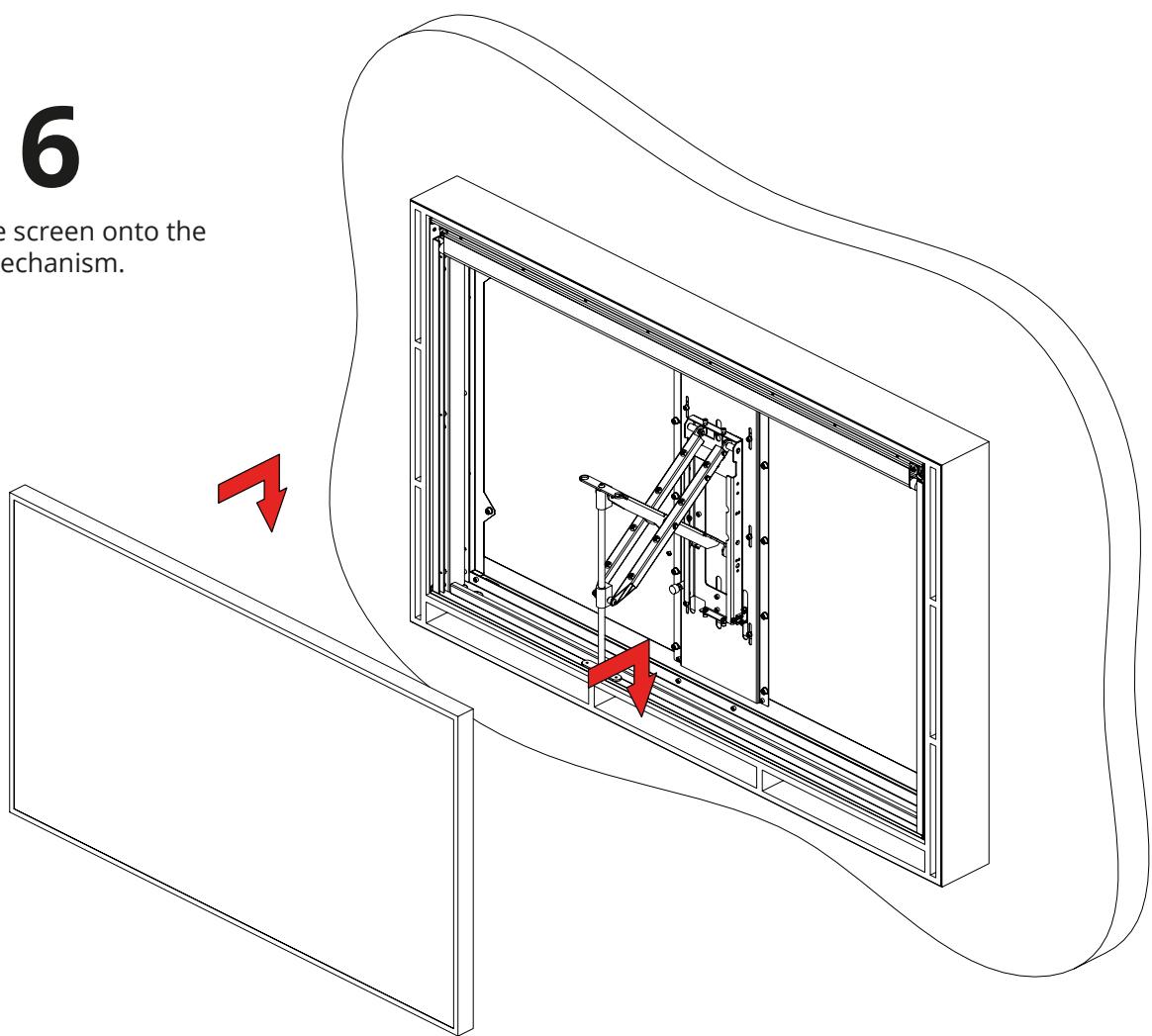
SCREEN FITTING CONT.



5 Bolt the upright frame to the screen.

6

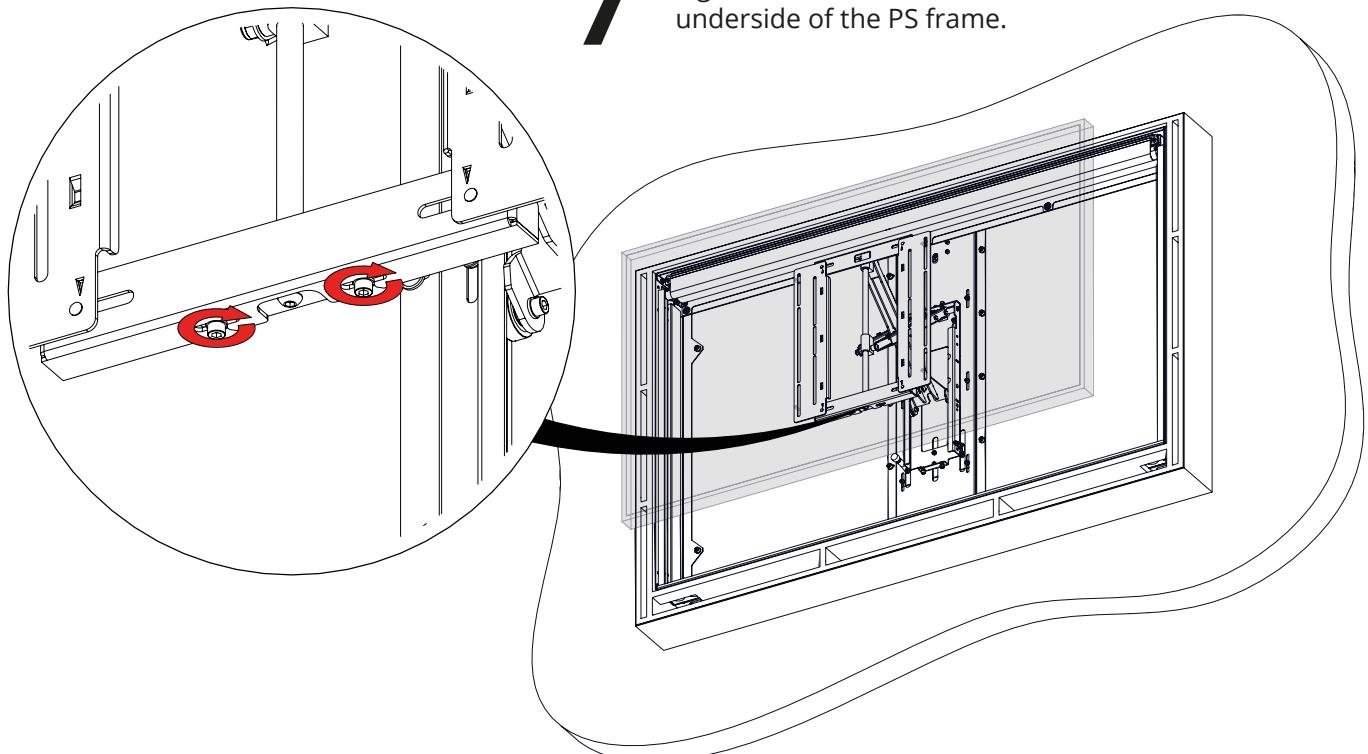
Hook the screen onto the mechanism.



SCREEN FITTING CONT.

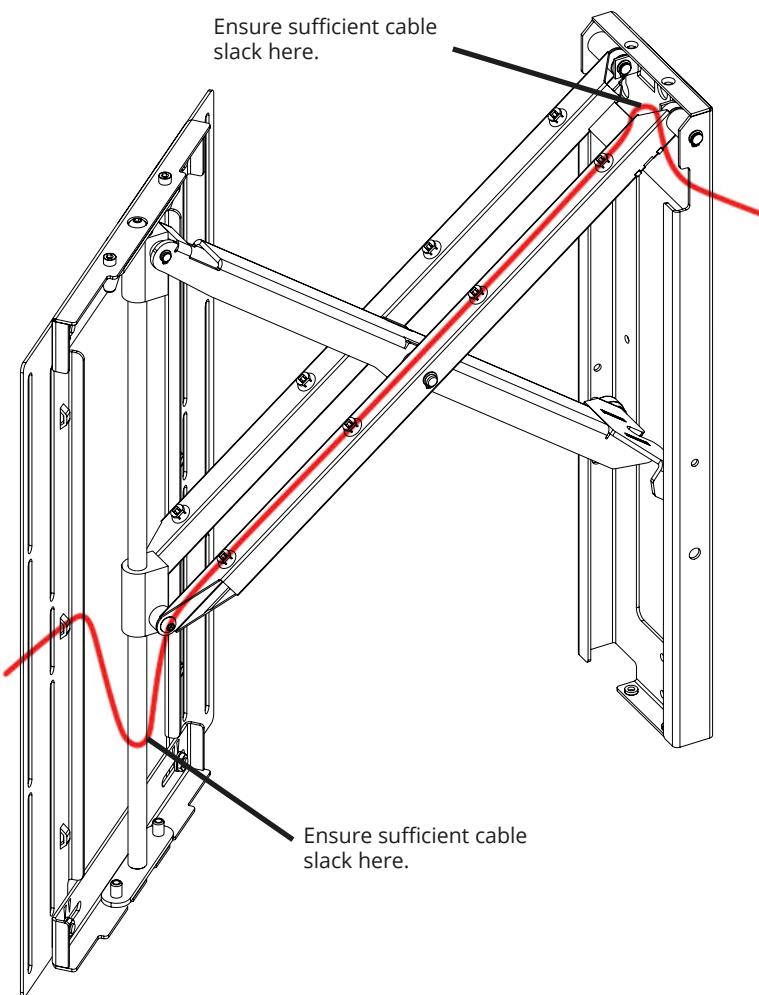
7

Tighten the bolts on the underside of the PS frame.



8

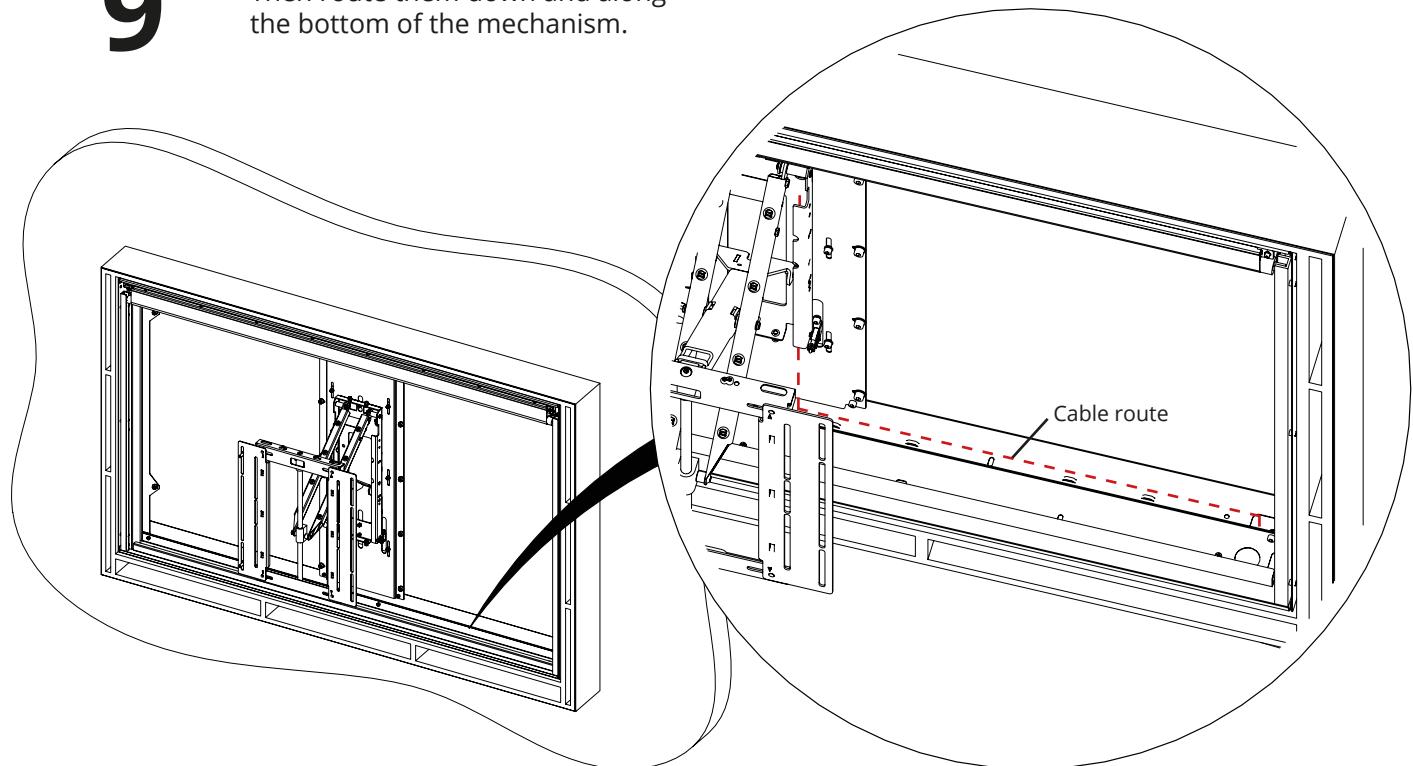
Route the cables along the arms of the PS bracket.



SCREEN FITTING CONT.

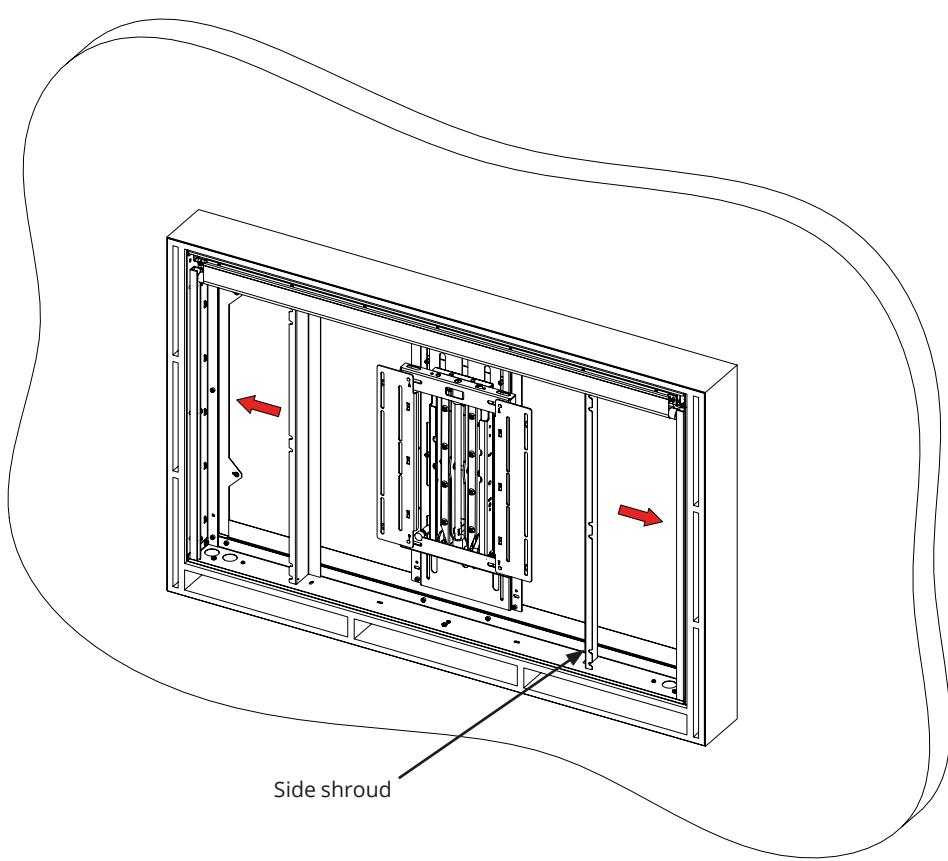
9

Then route them down and along the bottom of the mechanism.



10

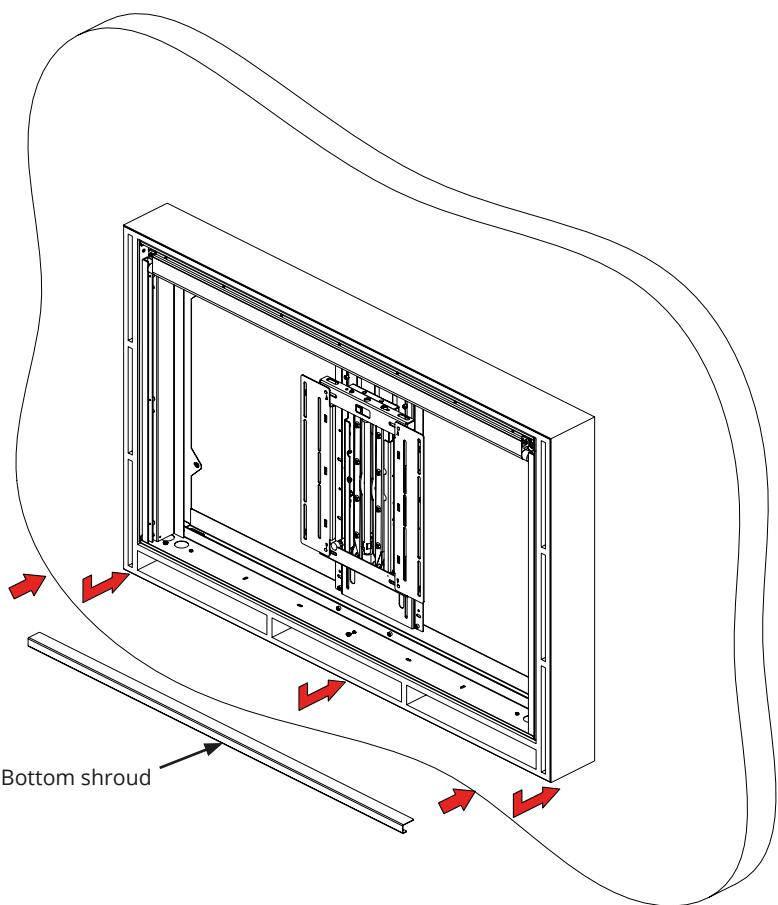
Reattach the side shrouds.
Pull out and swivel the screen if necessary.



SCREEN FITTING CONT.

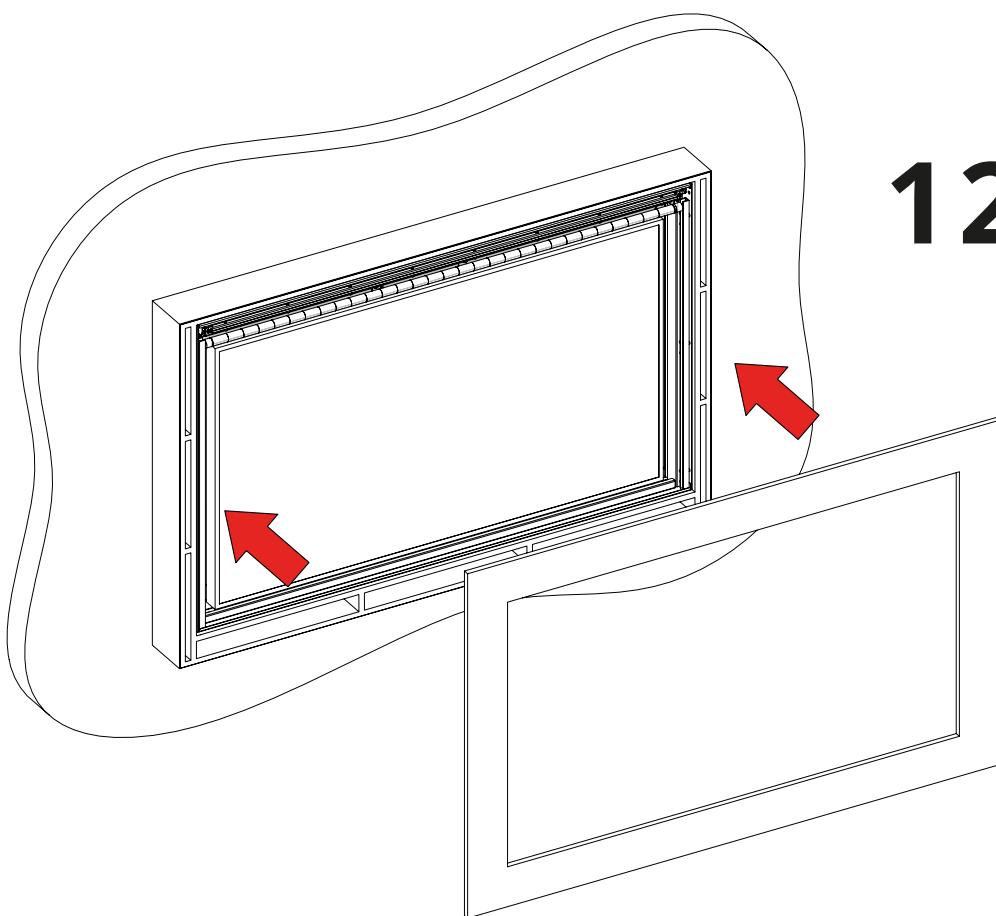
11

Reattach the bottom shroud.
Pull out and swivel the
screen if necessary.

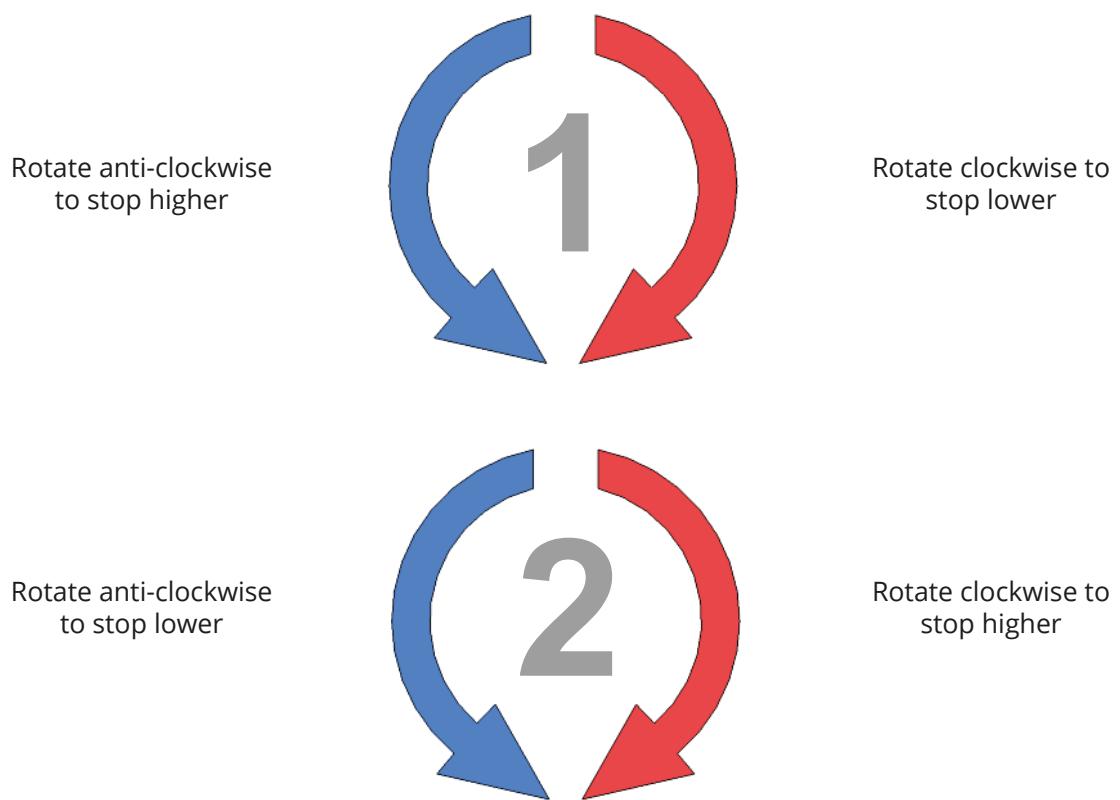
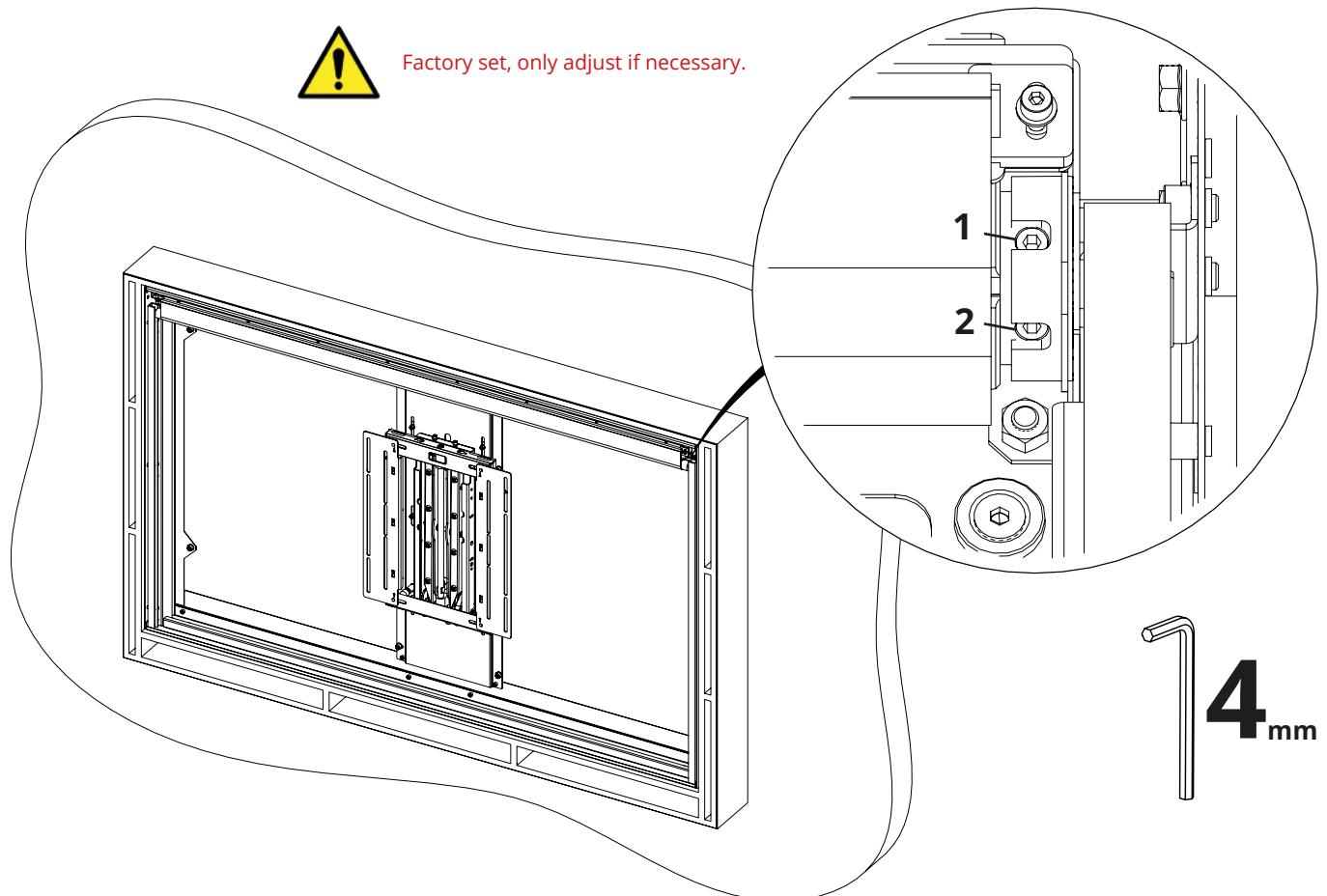


12

Hook the picture frame
onto the mechanism and
check alignment.



MOTOR ADJUSTMENTS

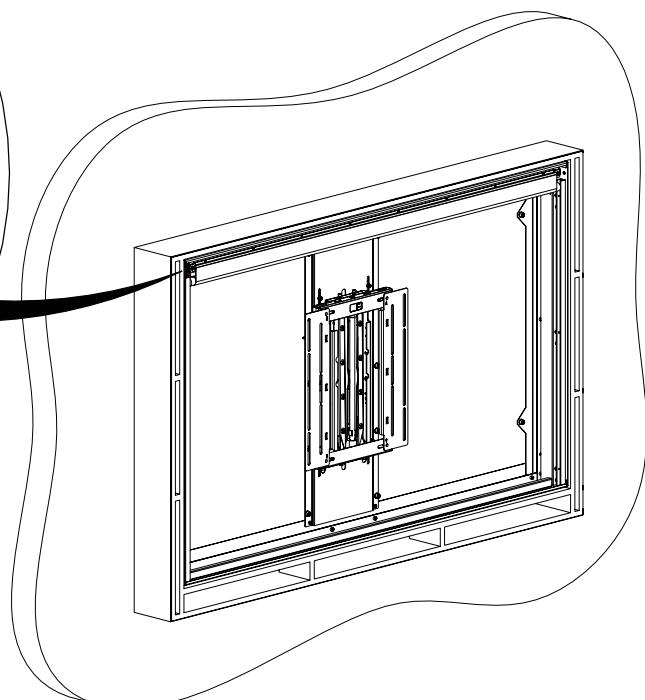
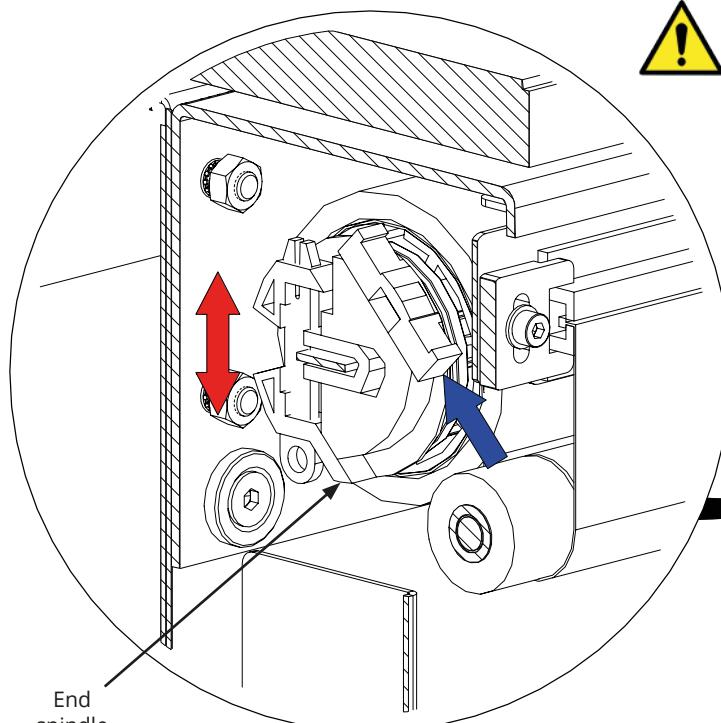


CANVAS TIILT ADJUSTMENT

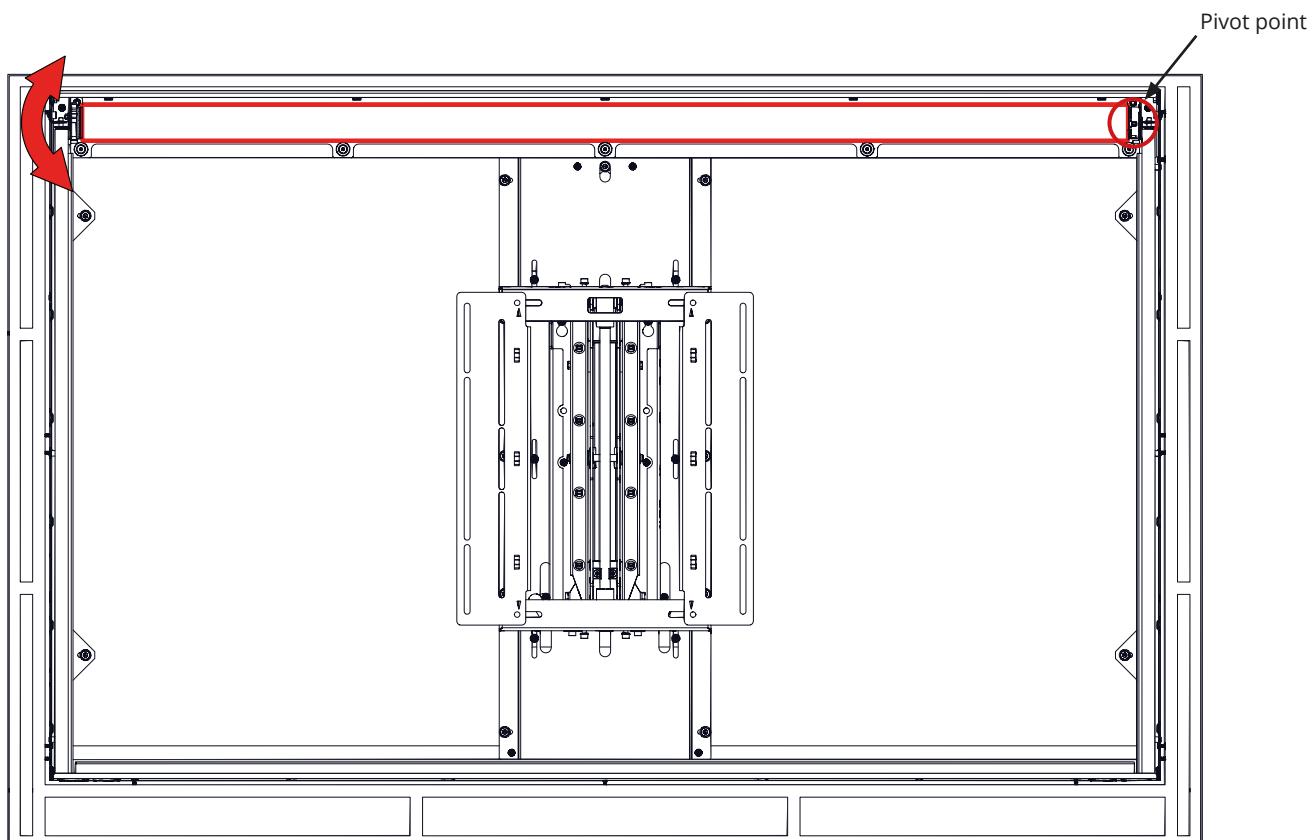
4
mm



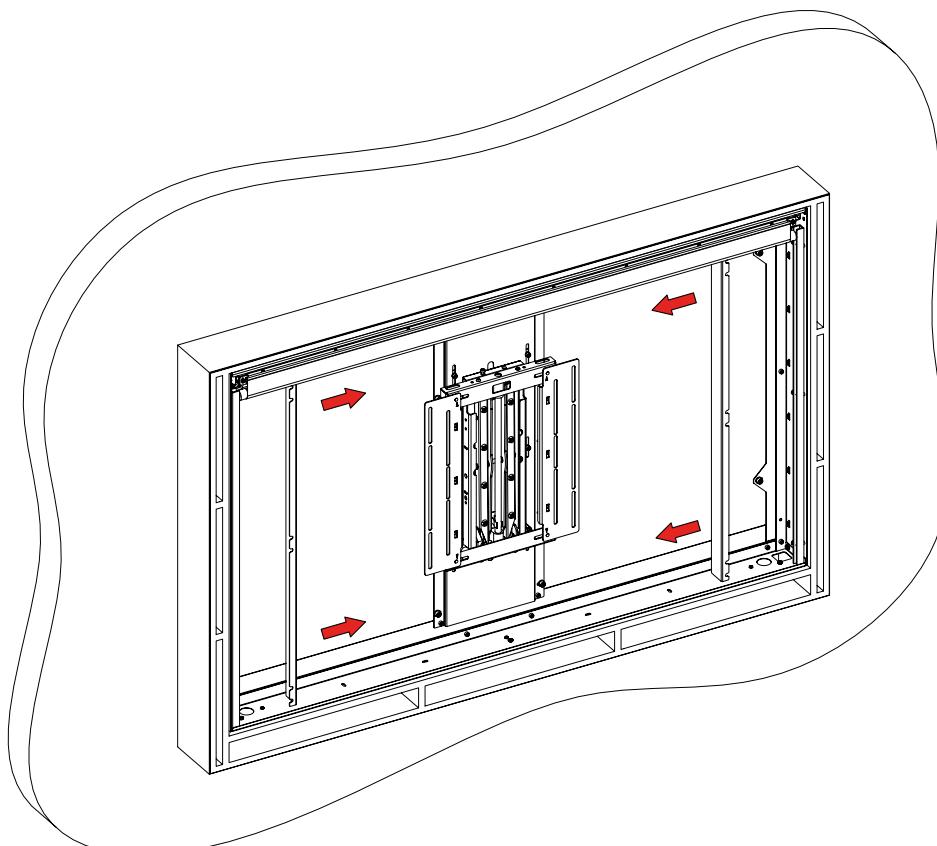
Factory set, only adjust if necessary.



Insert a 4mm allen key into the end spindle as indicated by the blue arrow shown above. Rotate to tilt the motor and canvas to the desired level.



CANVAS HEIGHT & LEVEL ADJUSTMENT

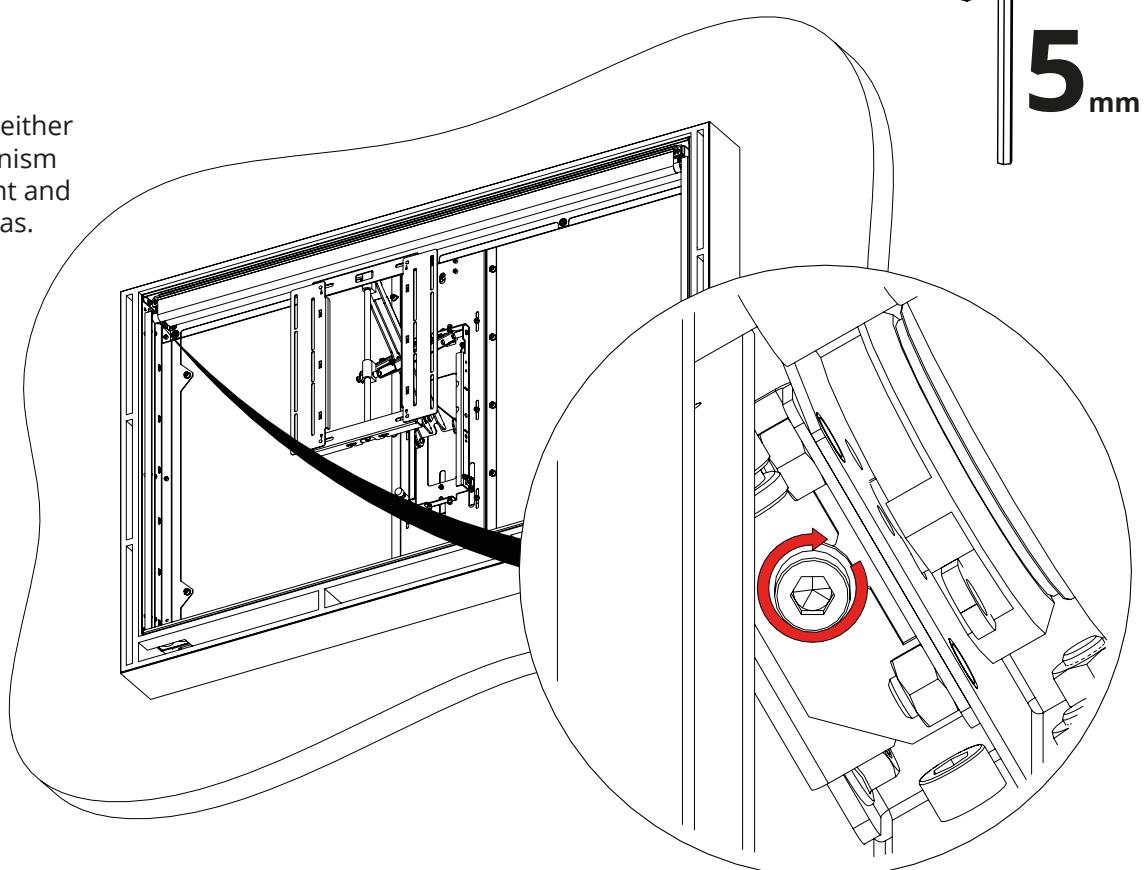


1

Remove both side shrouds.

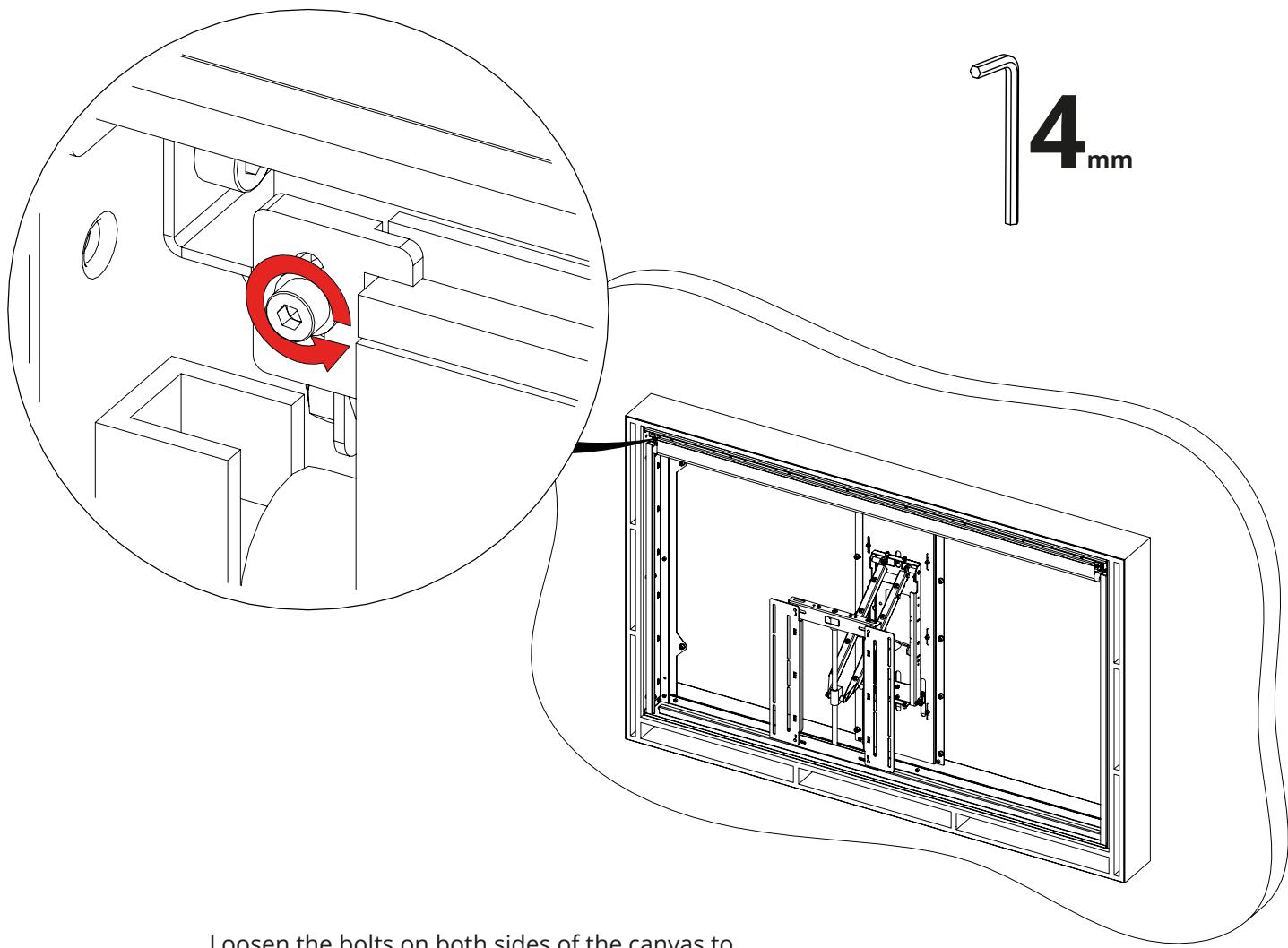
2

Adjust the bolts on either side of the mechanism to change the height and level of the canvas.



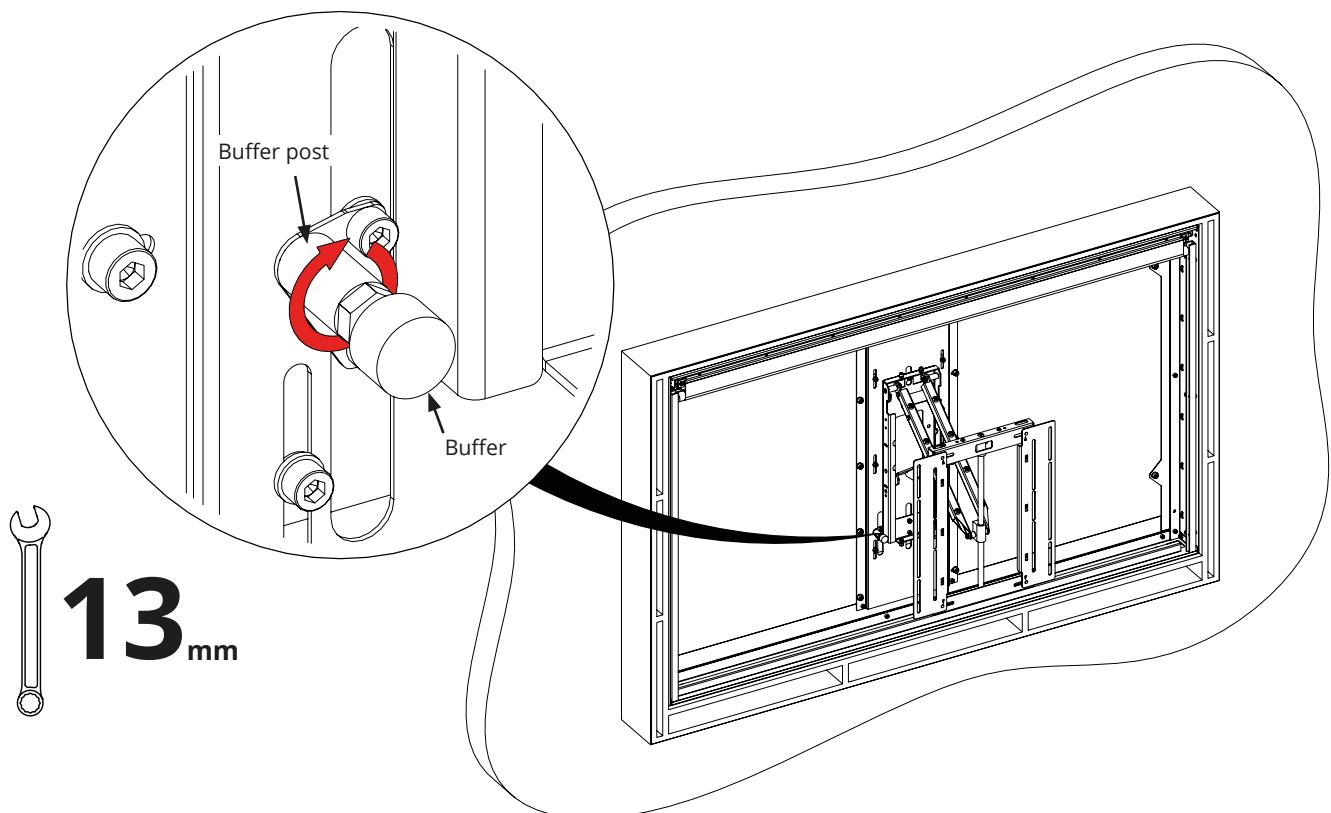
5 mm

CANVAS TENSION ADJUSTMENT

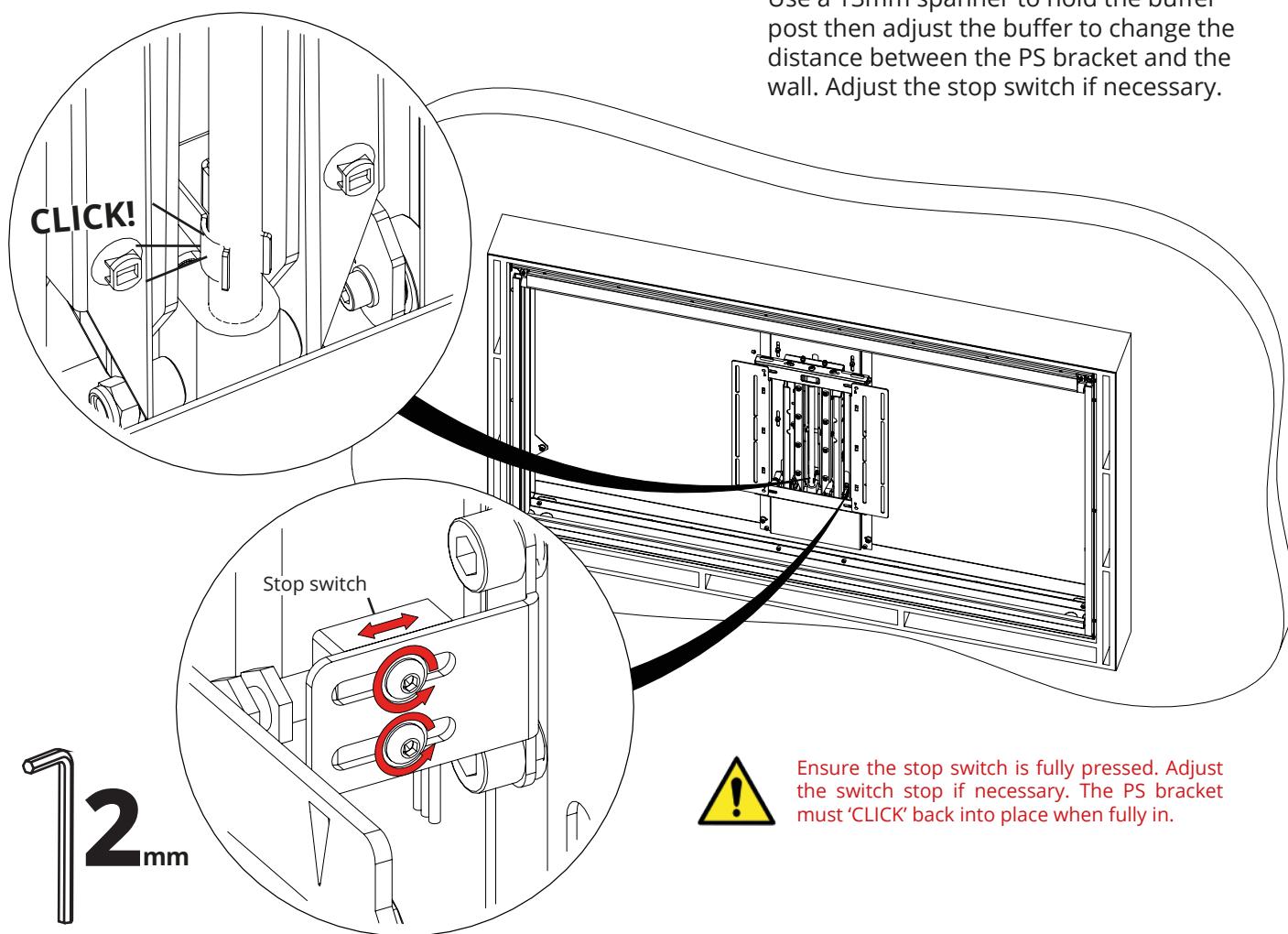


Loosen the bolts on both sides of the canvas to adjust its height, level and tension. Retighten bolts to secure the canvas in place.

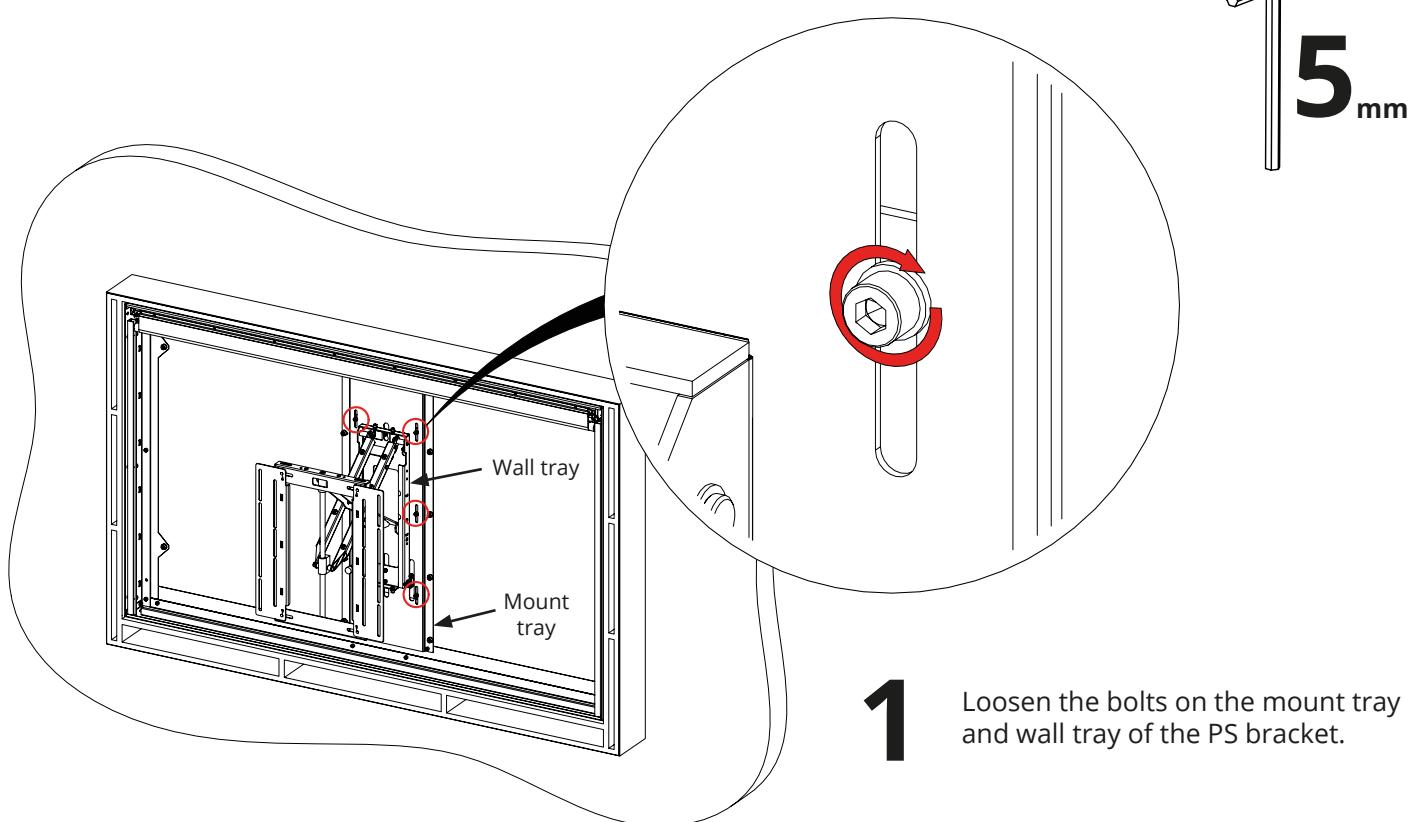
PS BRACKET BUFFER ADJUSTMENT



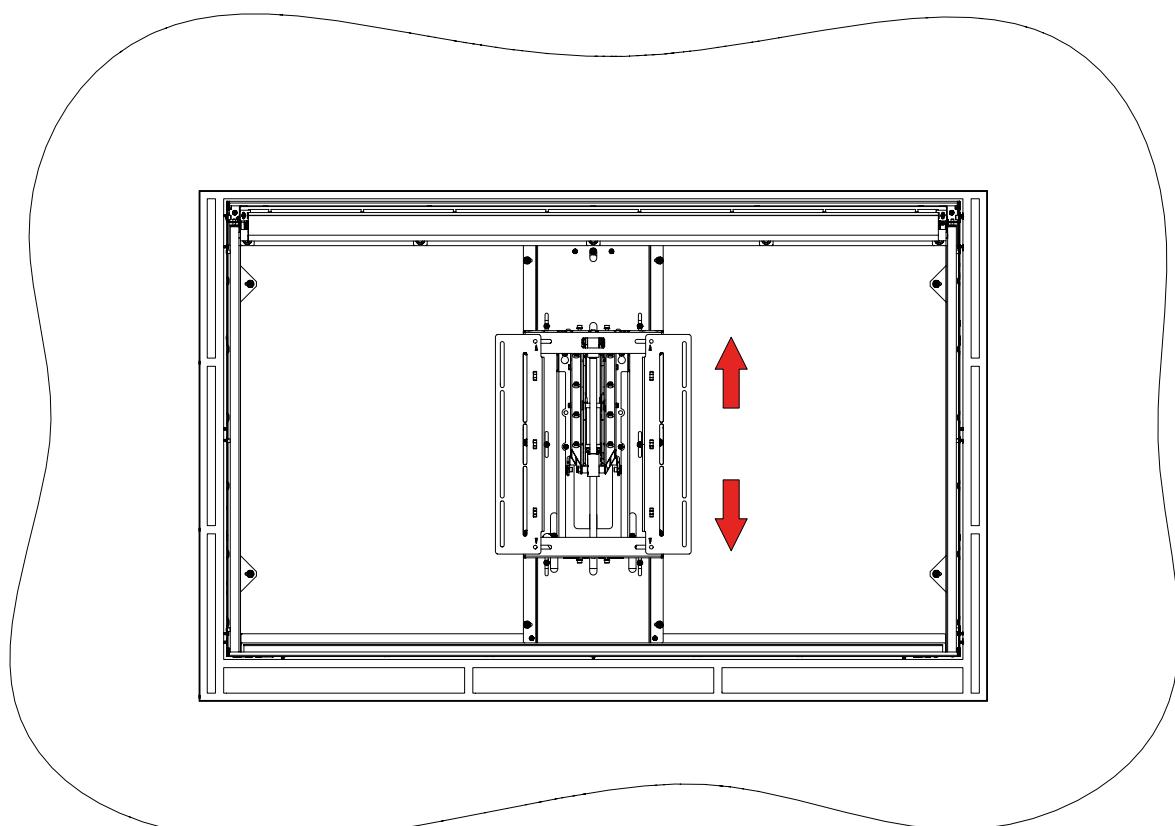
Use a 13mm spanner to hold the buffer post then adjust the buffer to change the distance between the PS bracket and the wall. Adjust the stop switch if necessary.



PS BRACKET HEIGHT ADJUSTMENT



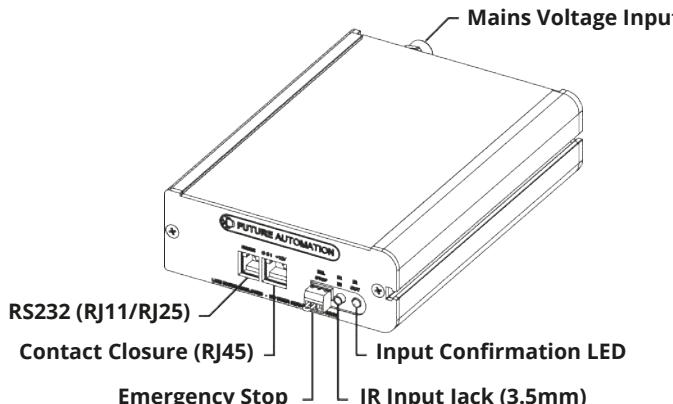
2 Shift the PS bracket to the desired location and then retighten all bolts.



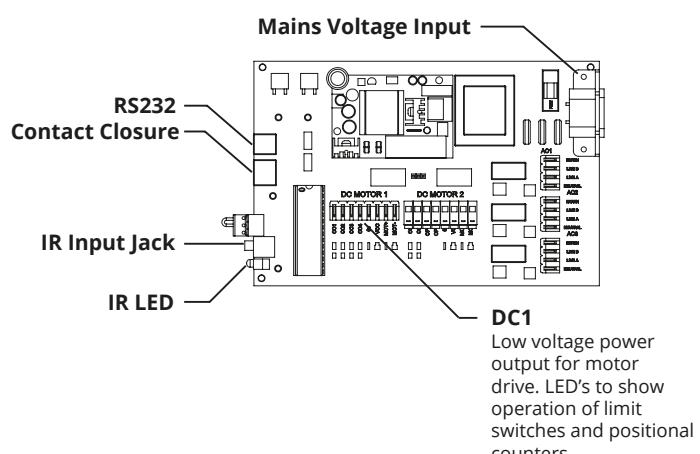
GENERAL CONTROL

This mechanism has multiple standard control methods, each of which requires a different input method to the control box. For ease, the input sockets on the control board are labelled below.
(Control box size and style may vary to image shown)

CONTROL BOX INPUTS



OPERATION DETAILS



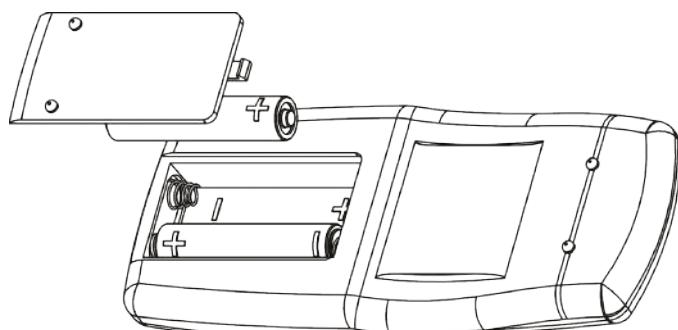
MECHANISM EMERGENCY STOP CONNECTOR

This mechanism features an Emergency Stop Connector, which MUST be plugged into the control box in the connector labelled above for the mechanism to operate. If this connector is not plugged in, the Input Confirmation LED will be permanently lit. As per the red plastic tag attached to the Emergency Stop Connector (and shown below), the small loop of wire in this connector is designed to be replaced by a third party safety mechanism.



REPLACING MECHANISM BATTERIES

The standard Future Automation Infrared (IR) remote control requires x2 AAA batteries to operate. These are provided with the mechanism in the Accessories Pack. These batteries can be replaced as per the image below.



INFRARED (IR)

This mechanism can be controlled via the supplied 14 button Infrared (IR) Remote Control, paired with the supplied Infrared (IR) lead and sensor.

The mechanism's functions can be controlled by plugging the Infrared (IR) lead and sensor into the 3.5mm IR Input Jack shown on the General Mechanism Control page.

Confirmation of Infrared (IR) input will be shown by a single flash of the large green LED located on the end of the control box.

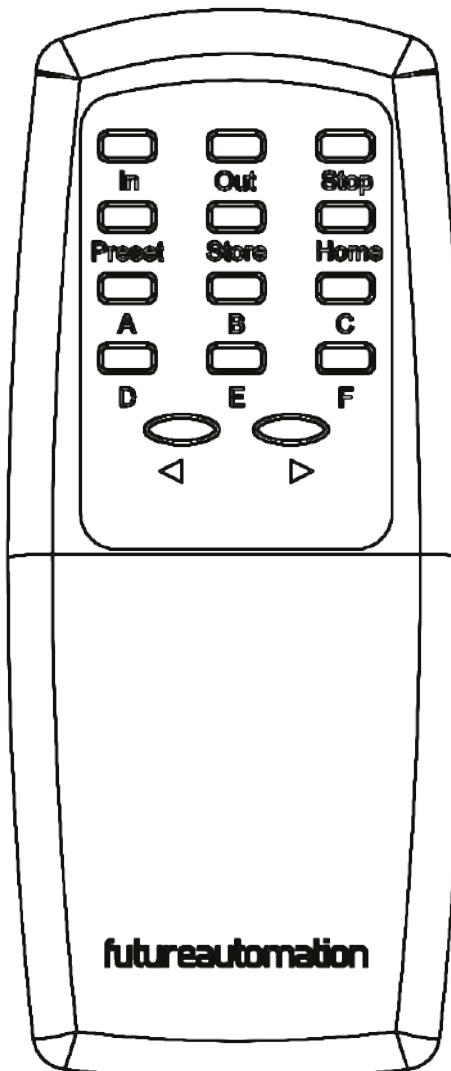
As Infrared (IR) control works via line of site, the Infrared (IR) sensor must be directly viewable from the location the remote control is being used from.

Infrared (IR) Remote Control Button Layout

IN - Rolls the canvas down.

OUT - Rolls the canvas up.

STOP - Will stop the operation of the mechanism at ANY position.



IMPORTANT

Only buttons indicated above are functional with the product. Any other button press will STOP the mechanism.

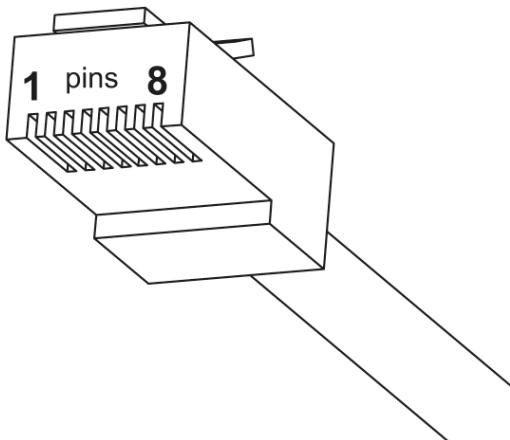
CONTACT CLOSURE

This Mechanism can be controlled via Contact Closure, utilising the 8 Pin RJ45 Connector attached to a length of CAT5 (Type 568A or 568B) cable.

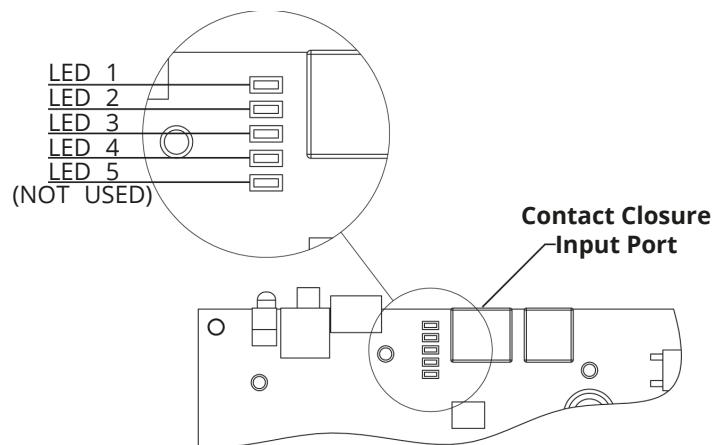
The mechanism's functions can be controlled by plugging this into the RJ45 port on the mechanism control board, then shorting pins 1-8 on this connector as shown in the Contact Closure Input Table below.

Confirmation of Contact Closure input will be shown by a single flash of the large green LED located on the end of the control box, as well as illumination of the corresponding Contact Closure LED on the printed circuit board as shown below.

RJ45 Pin Layout



Contact Closure LED Layout



Contact Closure Input Table

| PIN | DESCRIPTION | ACTION |
|-----|--------------|---|
| 1 | 12V SUPPLY | 12V SUPPLY - CURRENT LIMITED |
| 2 | 12V LATCH | WHEN 12V ATTACHED, DEVICE WILL GO OUT TO PRESET POSITION. WHEN 12V REMOVED, DEVICE WILL GO IN. |
| 3 | GROUND | GROUND |
| 4 | | |
| 5 | DEVICE LATCH | SHORT TO GROUND (PIN 3), DEVICE WILL GO OUT TO PRESET POSITION, REMOVE SHORT DEVICE WILL GO IN. |
| 6 | DEVICE STOP | MOMENTARY SHORT TO GROUND (PIN 3), STOPS DEVICE IN CURRENT POSITION. |
| 7 | DEVICE OUT | MOMENTARY SHORT TO GROUND (PIN 3), MAKES DEVICE GO OUT. |
| 8 | DEVICE IN | MOMENTARY SHORT TO GROUND (PIN 3), MAKES DEVICE GO IN. |

| WIRE/CABLE TYPE | | LED INDICATOR |
|-----------------|------|---------------|
| 568A | 568B | |
| W G | W O | |
| G | O | |
| W O | W G | |
| B | B | |
| W B | W B | LED 4 |
| O | G | LED 3 |
| W BR | W BR | LED 2 |
| BR | BR | LED 1 |

RS232 CONTROL

This Mechanism can be controlled via RS232, utilising a 6 Pin RJ11/RJ25 connector OR 9 Pin Serial connector attached to a length of 6 core cable.

The mechanism's functions can be controlled by plugging this into the RJ11/RJ25 port on the mechanism control box, then inputting the RS232 commands shown in the RS232 Input Table below.

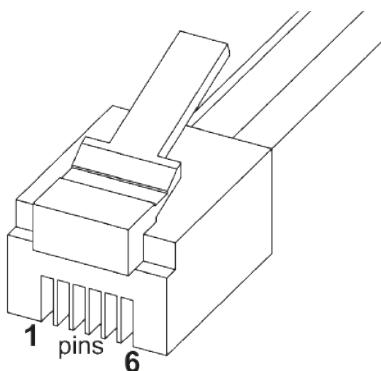
Confirmation of Contact Closure input will be shown by a single flash of the large green LED located on the end of the control box.

RJ11/RJ25 PIN LAYOUT

PIN 1: TX

PIN 6: RX

PIN 3 & 4: GROUND

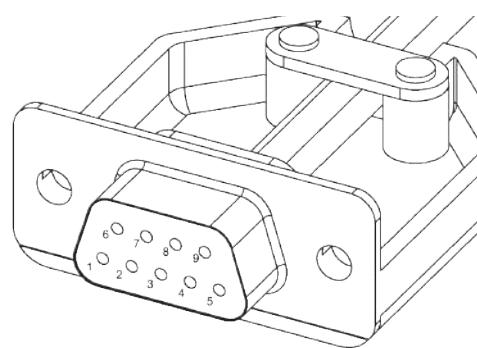


SERIAL PIN LAYOUT

PIN 2: RX

PIN 3: TX

PIN 5: GROUND



RS232 PROGRAMMING DETAILS

Baud Rate: 9600

Stop Bit: 1

Parity: None

Databits: 8

| RJ11/RJ25 | Func. | 9 PIN Serial | Colour |
|-----------|--------|--------------|--------|
| PIN 1 | TX-RX | PIN 2 | Blue |
| PIN 3 | GROUND | PIN 5 | Green |
| PIN 4 | GROUND | PIN 5 | Red |
| PIN 6 | RX-TX | PIN 3 | White |

RS232 INPUT TABLE

IMPORTANT - Ensure all protocols are entered exactly as written below, including Carriage Return (ENTER / ASCII 13)

| Protocol | Action |
|--|-------------------------------|
| fa_in Carriage Return (Enter / ASCII 13) | Device IN |
| fa_out Carriage Return (Enter / ASCII 13) | Device OUT |
| fa_stop Carriage Return (Enter / ASCII 13) | Device STOP (At any position) |

NOTES



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