

Installation Instructions

PICH - Picture Lift Heavy Mechanism

Design Highlights

- Range of Travel Distances
- Smooth Quiet Motion
- Option to Combine with a Motorised Bracket
- Complete Sheet Metal Cassette Ensures Simple Installation



Thank you for choosing
futureautomation

PICH - Picture Lift Heavy Mechanism



Caution
Warning



Beware of
Moving Parts



Danger
Electricity



Keep Hands
Clear

Safety Disclaimer

Important Safety Instructions

Explanation of graphical symbols

-(Electric Shock Symbol) = The lightning flash within an equilateral triangle is intended to alert you to the presence of un-insulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute an electric shock to persons

-(Caution Symbol) = The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product

-(Tools Symbols) = The tools symbol within a coloured square are intended to highlight the required tools necessary for correct and safe installation of the product. These are intended as a guide only, and it is at the installer's discretion as to which tools are used.

WARNING: RISK OF ELECTRIC SHOCK, ONLY AUTHORIZED INSTALLERS TO OPEN THE POWER CONTROL BOX.

WARNING: To reduce the risk of fire or electric shock, do not expose electrical parts to rain or moisture, unless the product has been specifically designed to do so.

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 the four times the weight of the component.

WARNING: Do not exceed the weight capacity. 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: Failure to provide adequate structural strength for this component can result in serious personal injury or damage to equipment! It is the installer's responsibility to make sure the structure to which this component is attached can support five times the combined weight of all equipment. Reinforce the structure as required before installing the component.

Warnings:

1. Read all technical instructions fully before installation and use. It is the installer's responsibility to ensure that all documentation is passed on the end user and read fully before operation.
2. Keep all documentation.
3. Heed all warnings.
4. Follow all technical specifications and instructions during installation.
5. Do not use near water unless the product has been specifically designed to do so.
6. Clean only with a dry cloth.
7. Do not defeat the purpose of the polarized or grounding type plug. A polarized plug has two blades, one wider than the other. A grounding type plug has two blades and a grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician or contact the manufacturer.
8. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where the exit from the apparatus.
9. Unplug the apparatus during lightning storms or when unused for long periods of time.
10. Only use attachments/accessories specified by the manufacturer.
11. Refer all servicing to qualified personnel. Servicing is required regularly on an annual basis, when the apparatus 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.
12. To completely disconnect the apparatus from the AC mains, disconnect the power cord plug from the AC receptacle on the power control box.
13. To prevent overheating, do not cover the apparatus. Install in accordance with the instructions.
14. UK, Ireland and Hong Kong only – The power cord is supplied with a 13A plug having an earthing pin. The apparatus is earthed and this pin is not required for safety, merely to operate the safety shutter of mains outlet.
15. No naked flames such as lit candles should be placed on the unit.
16. Observe and follow the local regulations when disposing of batteries.
17. Do not expose the unit to dripping or splashing fluids.
18. Do not place objects filled with liquid, such as vases, on the unit.
19. Do not expose the batteries to excessive heat such as sunshine, fire or the like.
20. For all mounted apparatus, the apparatus should be installed on solid wood, bricks, concrete or solid wood columns and battens.
21. Always turn off power at source before putting on or taking off parts and cleaning.
22. Do not use outdoors unless marked for outdoor use.
23. Exceeding the weight capacity can result in serious personal injury or damage to equipment.

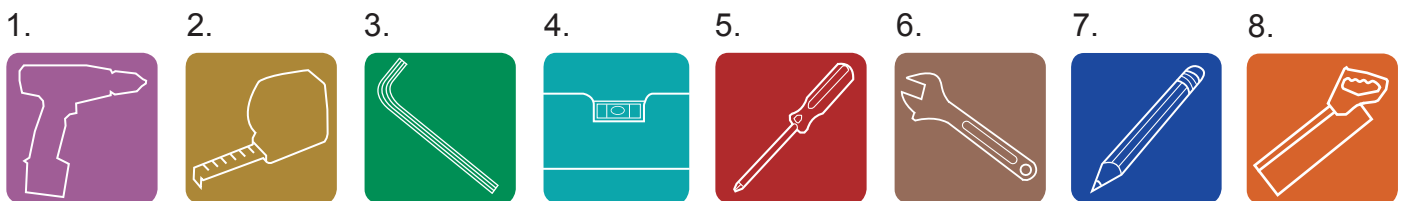
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Tool Indicator Icons



- | | | | |
|-------------------|-------------------|-------------------|-------------|
| 1. - Drill | 3. - Allen Keys | 5. - Screwdrivers | 7. - Pencil |
| 2. - Tape measure | 4. - Spirit Level | 6. - Spanners | 8. - Saw |

Product Warranty

This product carries a warranty that covers the cost of labour and spare parts incurred by any defects in materials and workmanship under normal use during a two year period from date of purchase. Support for any problems that are not hardware faults are excluded from the warranty entitlement. This warranty does not affect your statutory consumer rights.

The following is excluded from warranty service:

- Malfunctioning caused by misuse or damage, accidental or otherwise, or service modification by persons not authorised by Future Automation, or the use of any non Future Automation supplied parts;
- Any electrical, or other environmental work external to your Future Automation mechanism including power cuts, surges or lightning strikes;
- 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;
- Use of the product over the specified weight capacity;
- Any damage to products during transit that is not checked and notified as "unchecked" or "damaged" upon receipt of delivery.

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



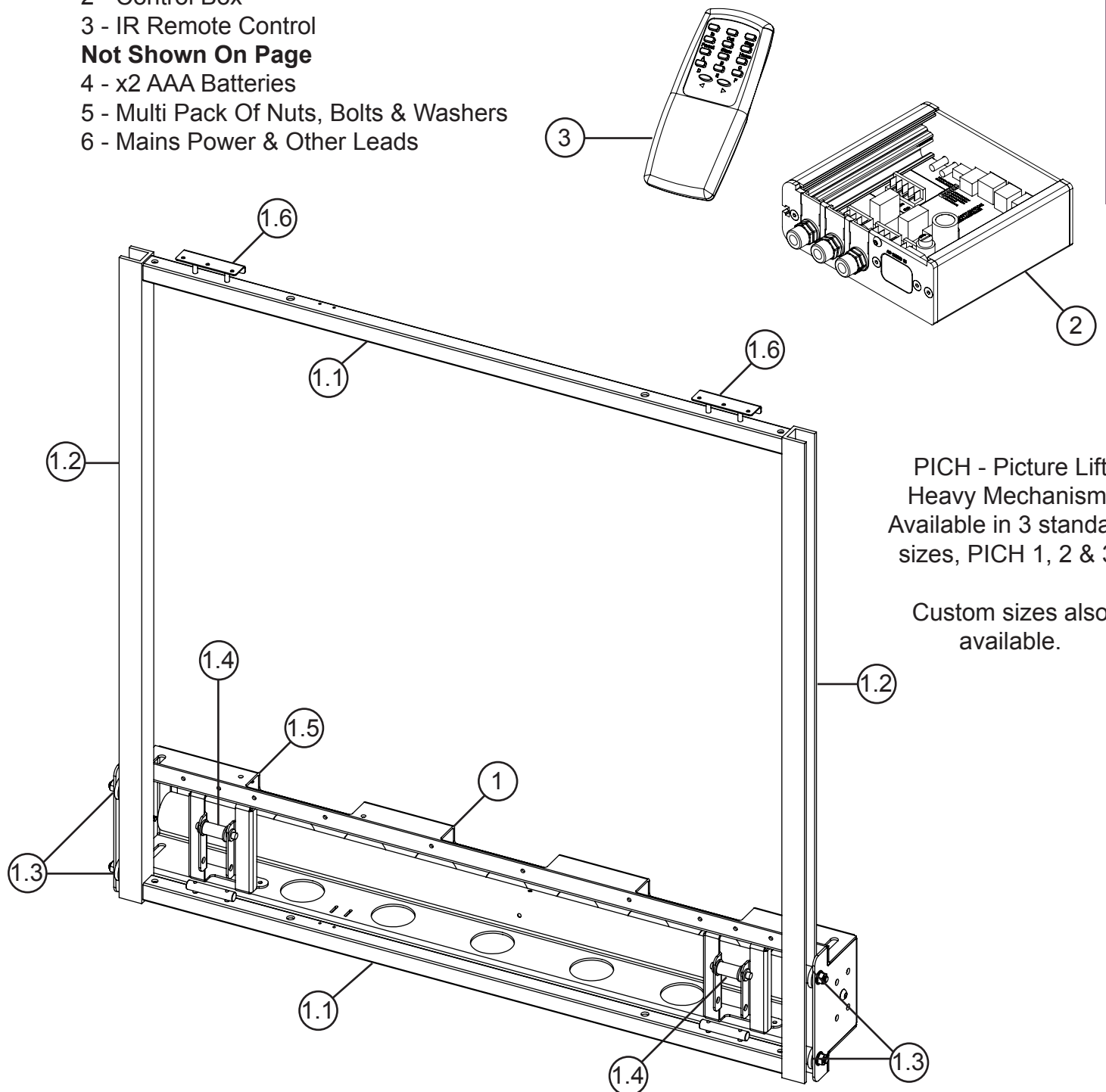
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Package Contents

- 1 - Mechanism
- 1.1 - Frame Work Cross Member
- 1.2 - Uprights
- 1.3 - Roller
- 1.4 - Pulleys
- 1.5 - Main Tray
- 1.6 - Panel Mount Plates
- 2 - Control Box
- 3 - IR Remote Control
- Not Shown On Page**
- 4 - x2 AAA Batteries
- 5 - Multi Pack Of Nuts, Bolts & Washers
- 6 - Mains Power & Other Leads

Nuts & Bolts Multipack:

Qty. 4 - M8 x 30mm Cap head bolt



PICH - Picture Lift Heavy Mechanism. Available in 3 standard sizes, PICH 1, 2 & 3.

Custom sizes also available.

PICH - Picture Lift Heavy Mechanism

Pre-testing

Before you start check, check the following:

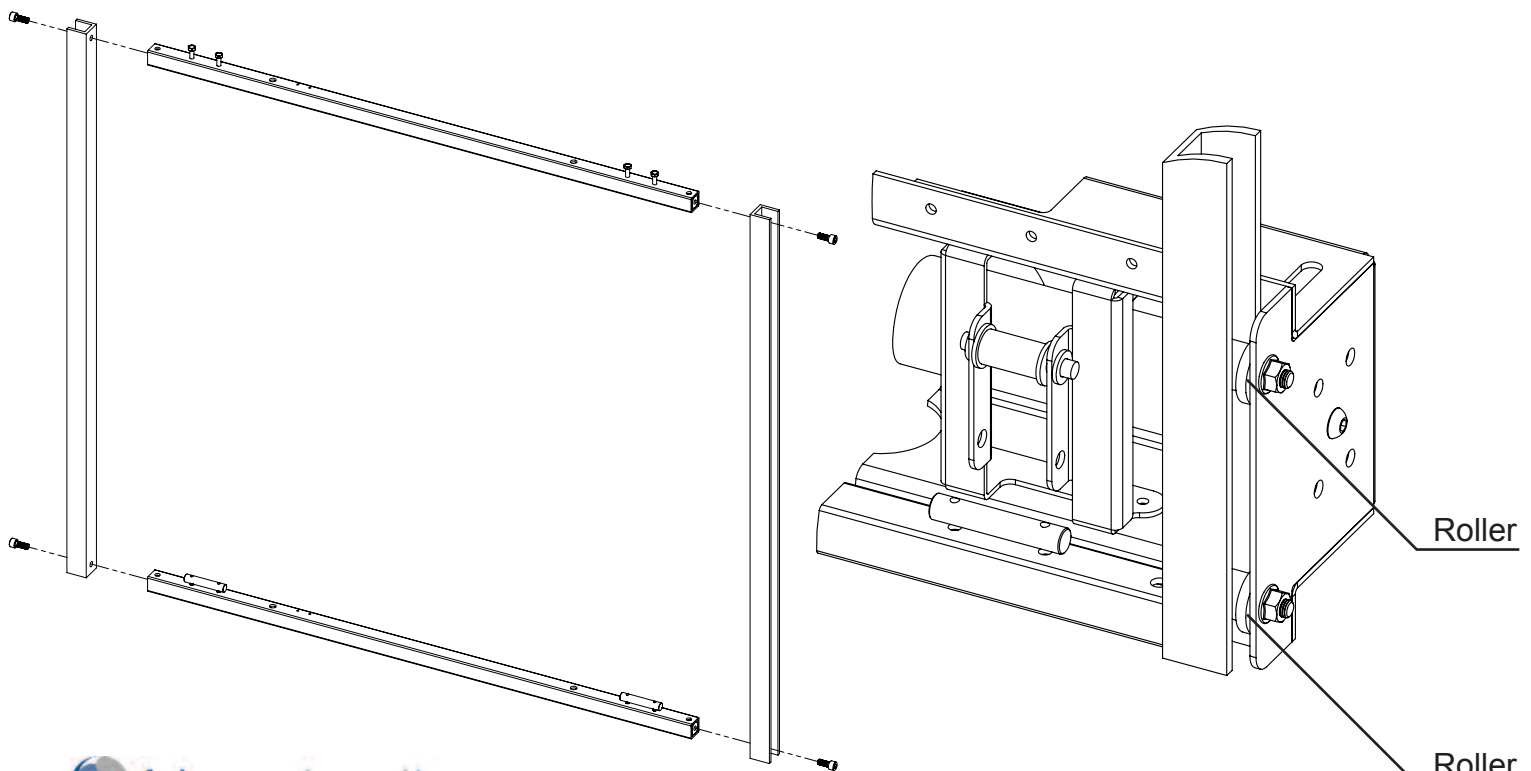
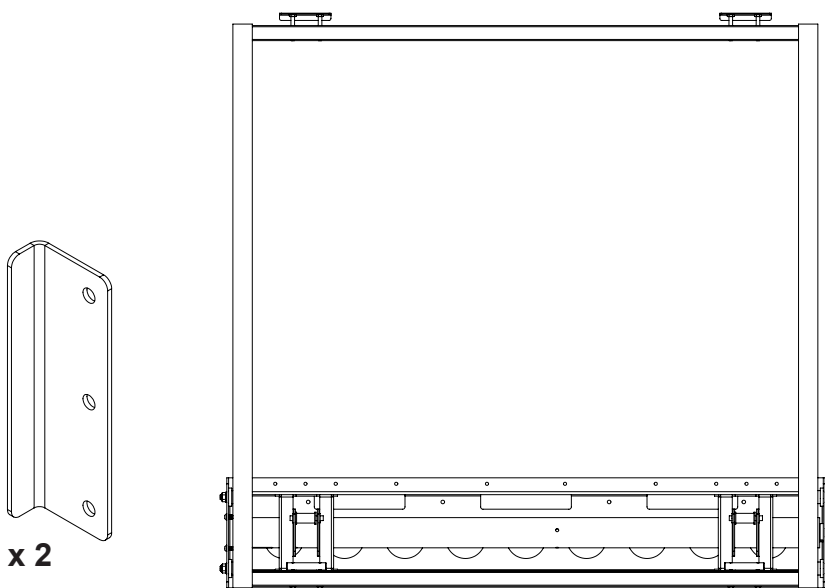
- The product is in good condition
- No damage to any parts
- Wiring is all secure

Fitting the frame work to the mechanism.

When you first receive your pack, the main framework will not be constructed.

You will need to attach the two uprights and the remaining cross member.

This is done using the four M5 x 20mm bolts provided.



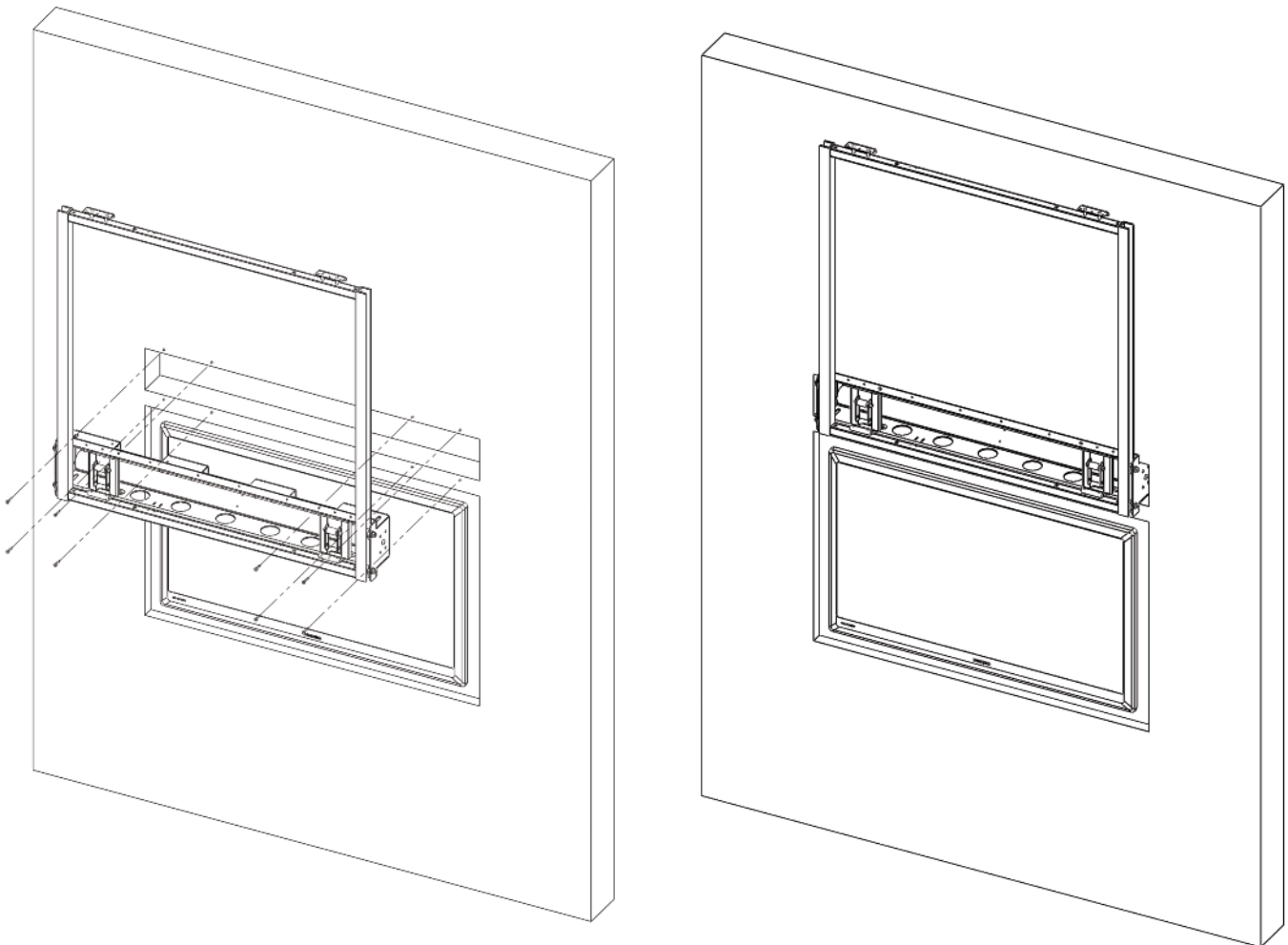
PICH - Picture Lift Heavy Mechanism



Mounting the Mechanism

Firstly, before attempting to fit the mechanism, it is most important to check that the recess is built to the requirements specified in the PICH Technical Sheets.

Insert the mechanism into the recess in the wall, try to make sure the alignment of the mechanism is symmetrical about the screen.



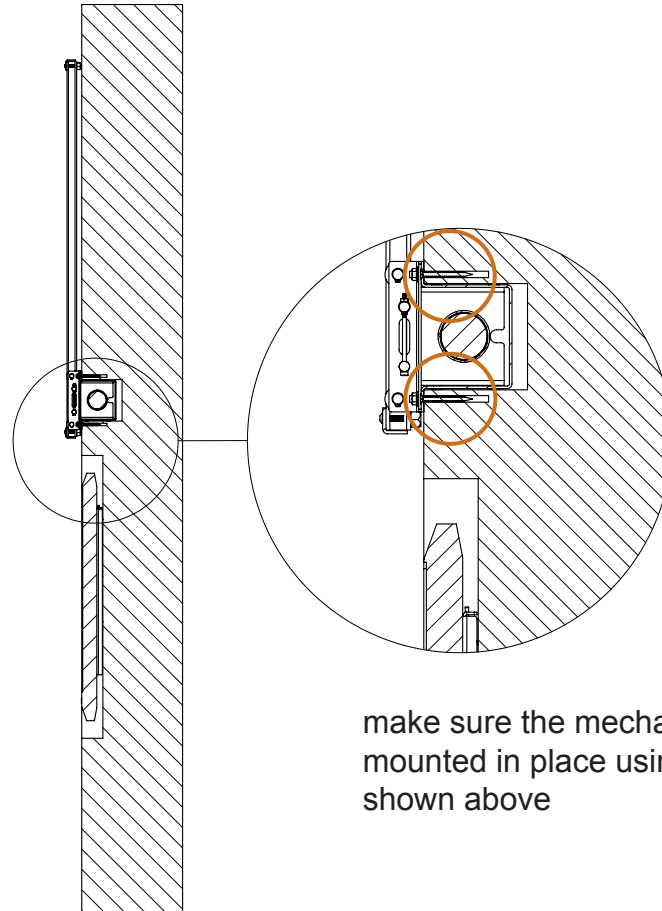
With the mechanism in place, fix through the top and bottom front edges of the mechanism. The type of fixings will depend on the type of wall the mechanism is being fixed to.

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Mounting the Mechanism

If a timber framed stud wall has been constructed, then use appropriate wood screws to fix the mechanism in place.

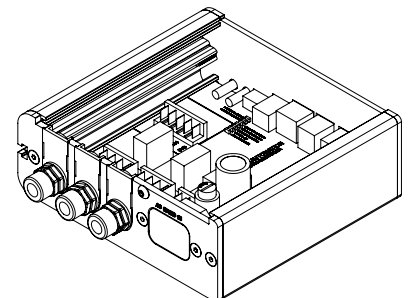


make sure the mechanism is securely mounted in place using the fixing holes shown above

Control box setup



- THE BOX MUST BE EASY TO ACCESS!
- Wire up the control box, refer to page 12 Electrical Connection
- Connect the control box to the mains power supply
- Connect the infrared remote sensor even if you are going to use switch control
- Cables can be easily extended
- There is no manual drop function, access is required for servicing

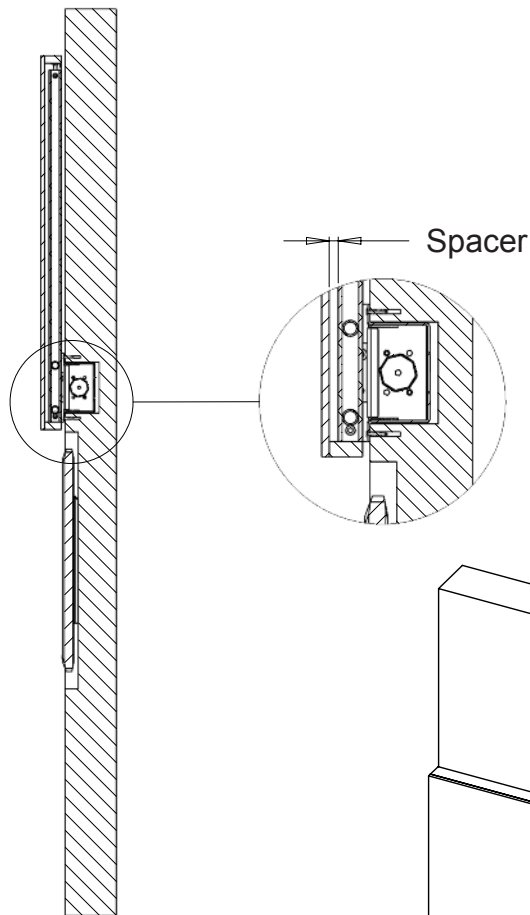


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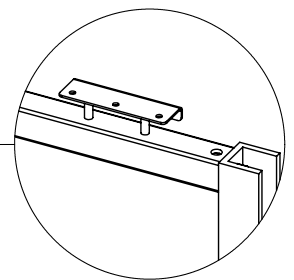
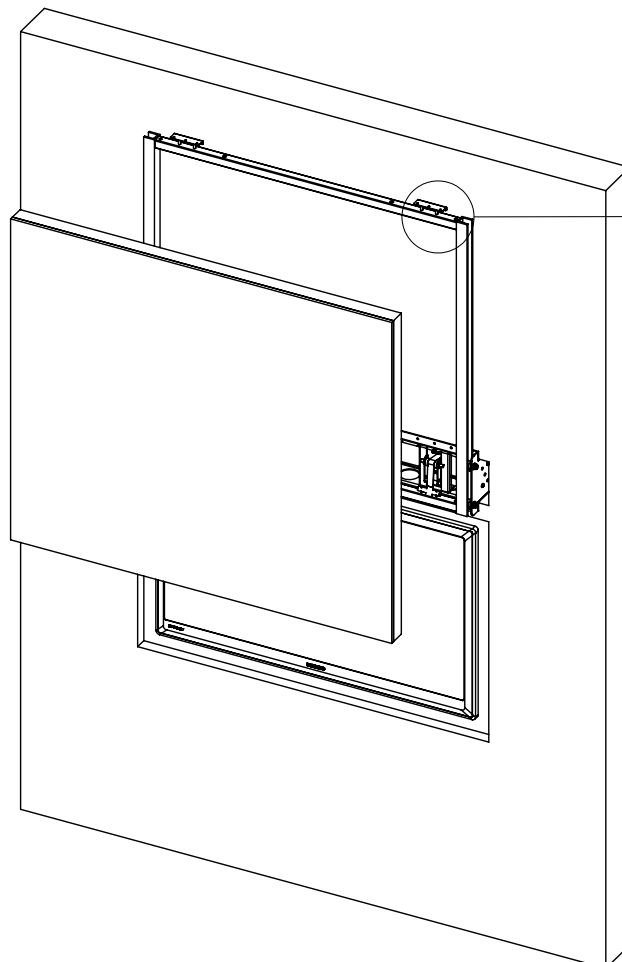


Fitting the picture to the mechanism

It may be necessary to add some sort of spacing frame to your picture panel in order for it to sit in the correct position.



Use the bolts in the top cross member to adjust the hook brackets which support the picture. Hook the picture frame over onto the brackets.



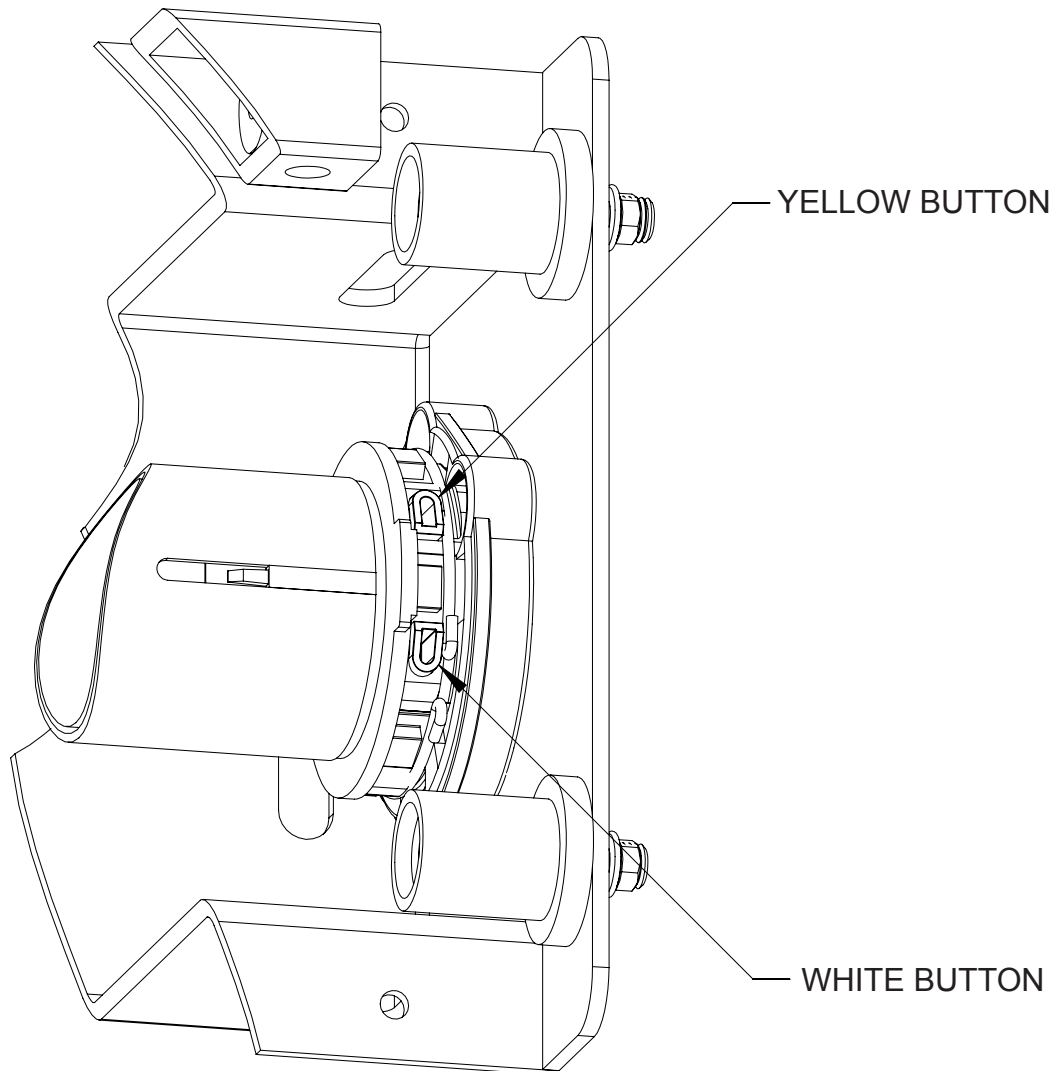
You can alter the bolt heights to adjust the level of the picture

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Adjusting the stop position

The view below is one where the left hand upright has been removed, although it is not necessary to remove the upright in order to gain access to the controls. If removed, the two switches will become visible, as shown below.



To adjust the top and bottom limits of the mechanism, start by making sure that both the WHITE and YELLOW buttons are fully depressed.

Press IN on the remote control so the mechanism lowers. When the desired position is reached hit STOP on the remote control. Then press the YELLOW button so that it pops out, this sets the down limit position.

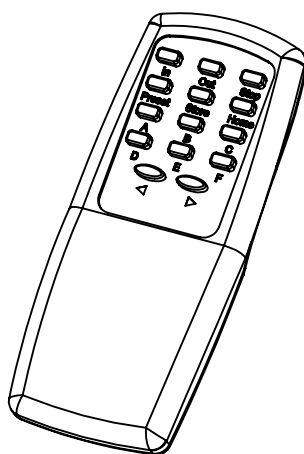
Carry out the same procedure with the WHITE button when raising the mechanism to set the upper limit position, labeled OUT on the remote control.

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Final Checks

Make sure the mechanism is fixed securely and safely and nothing is in the path of the pictures movement



Controlling the mechanism

The supplied IR remote performs the following functions:

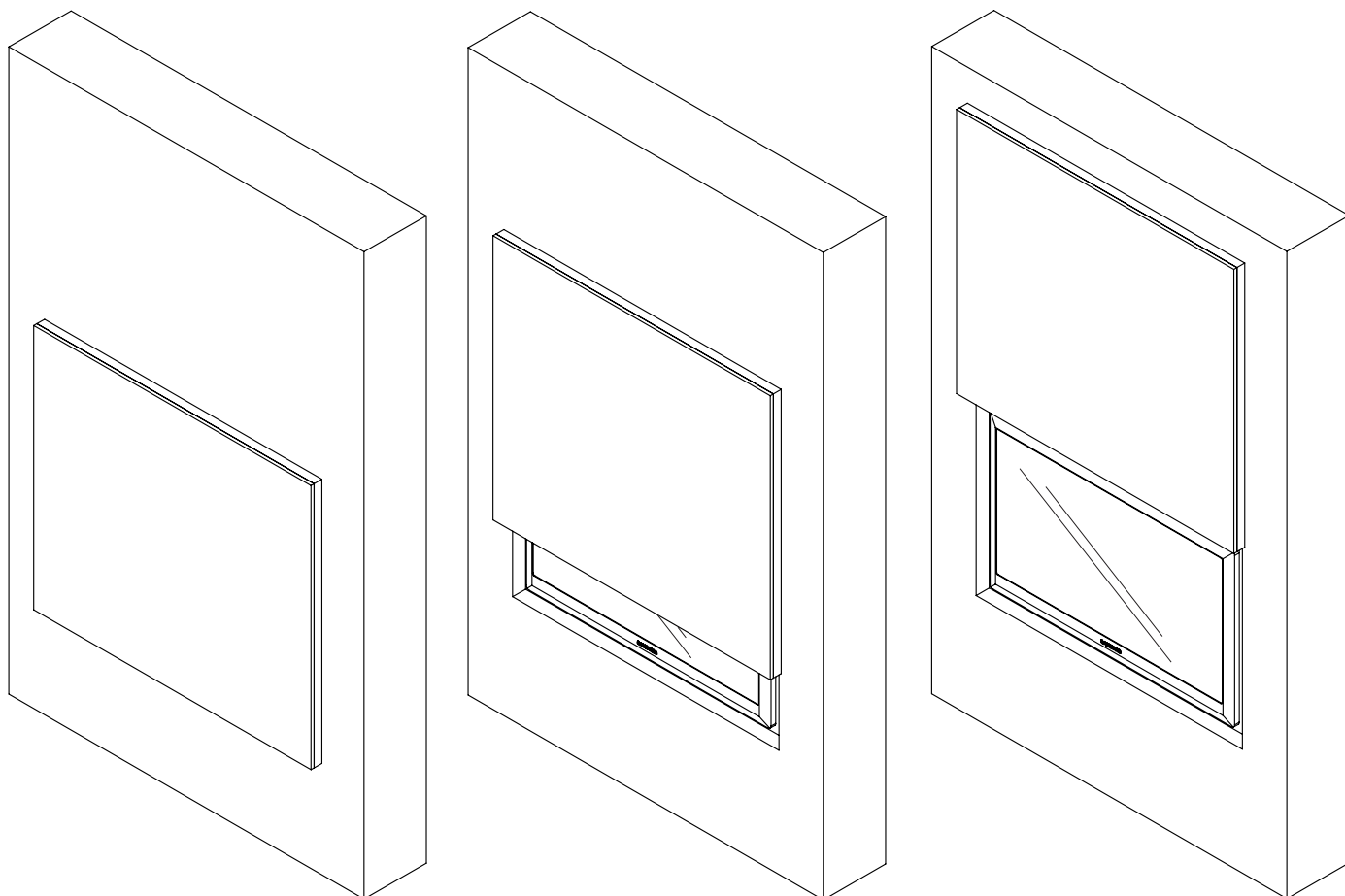
OUT: Reveal Screen

IN: Hide Screen

STOP: Stop

Press any button while in motion will stop the mechanism

Mechanism Movement

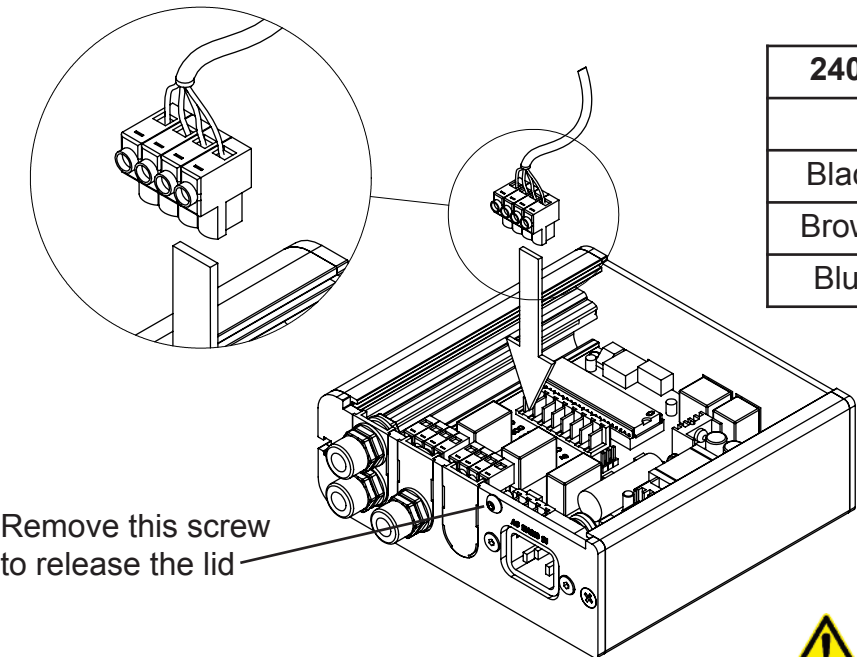
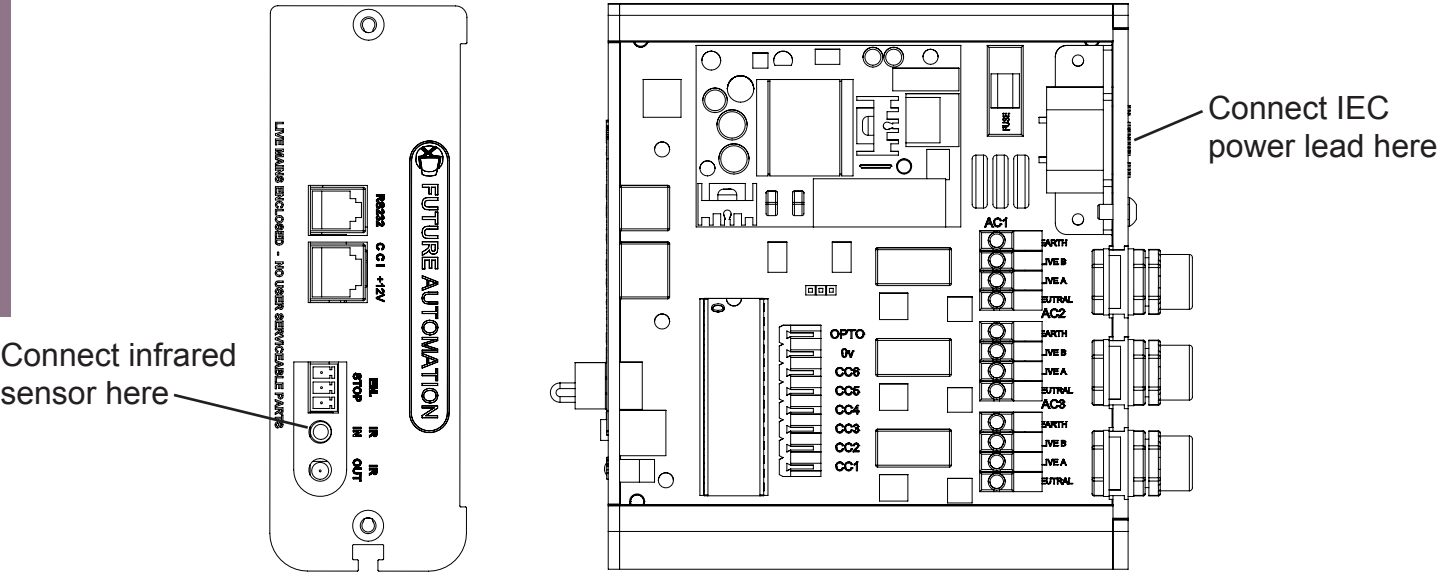


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Connections

The mechanism must be connected to AC2.



240v	AC2 Connection	110v
	Earth	Green
Black	Live B	Black
Brown	Live A	Red
Blue	Neutral	White



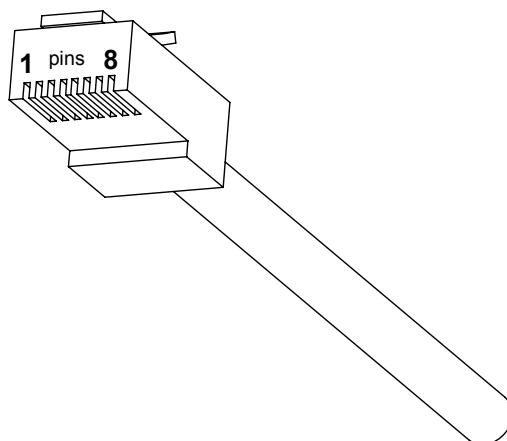
Ensure the plug is connected correctly and secure

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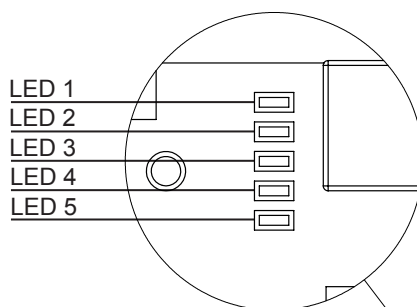


Contact Closure

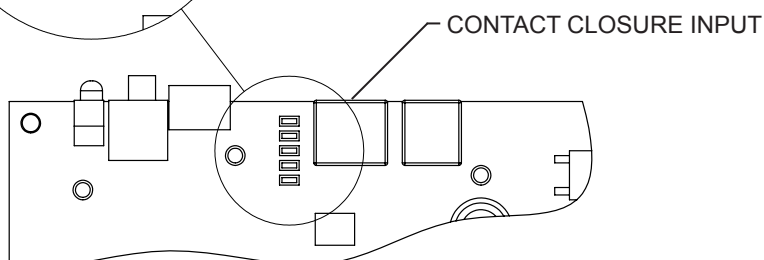
- Use an RJ45 connector in the CCI socket on the control box to operate via contact closure



PIN	DESCRIPTION	ACTION	WIRE / CABLE		CONTACT CLOSURE LED INDICATOR
			568A	568B	
1	12V SUPPLY	12V SUPPLY - CURRENT LIMITED	W/G	W/O	
2	12V LATCH	When 12V attached, device will go OUT. When 12V removed, device will go IN.	G	O	
3	GROUND	GROUND	W/O	W/G	
4		PIN 4 NOT USED	BL	BL	
5	DEVICE LATCH	Short to GROUND (pin 3), device will go OUT, remove short device will go IN.	W/BL	W/BL	LED 4
6	DEVICE STOP	Momentary short to GROUND (pin 3), stops device in current position.	O	G	LED 3
7	DEVICE OUT	Momentary short to GROUND (pin 3), makes device go OUT.	W/BR	W/BR	LED 2
8	DEVICE IN	Momentary short to GROUND (pin 3), makes device go IN.	BR	BR	LED 1



NOTE:
Earlier versions of the control board may not have these contact closure LED indicators.



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RS232

- Use an RJ25 connector in the socket marked RS232 on the control box to operate using RS232

Details

Baud rate: 9600
Stop bit: 1
Parity: None
Databits: 8

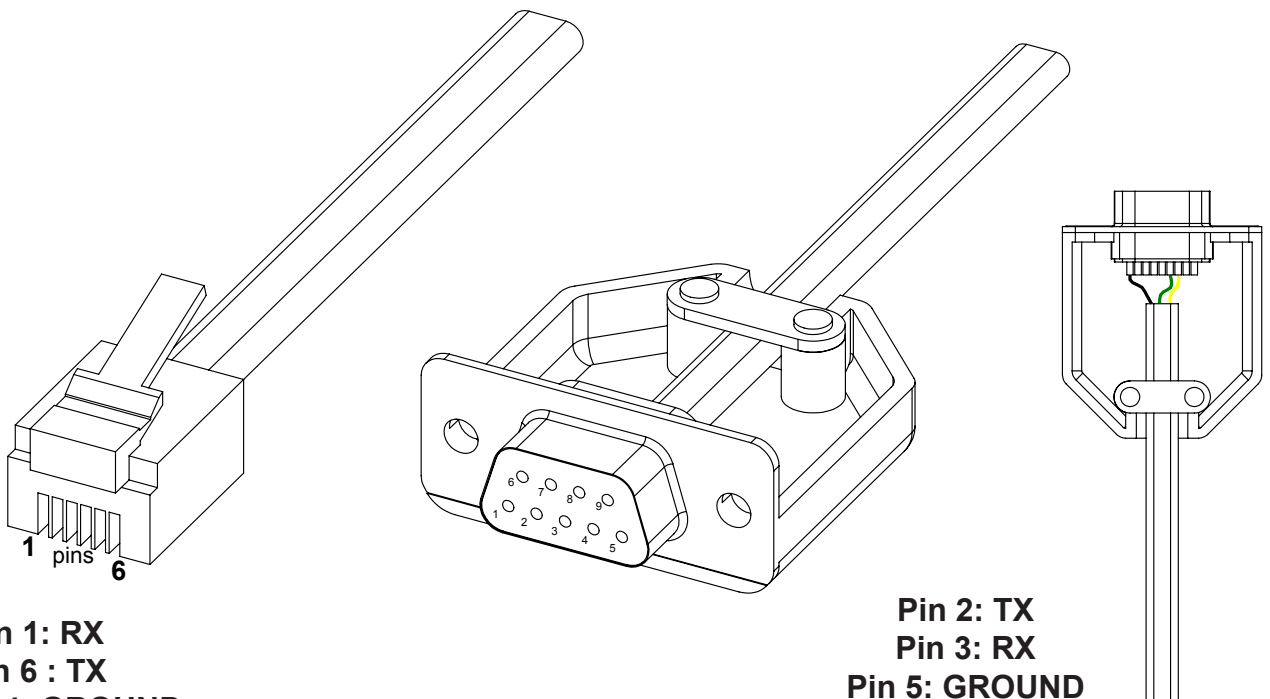
RJ25		9 PIN D
PIN 1: RX	TO	PIN 2: TX
PIN 6: TX	TO	PIN 3: RX
PIN 3: GROUND	TO	PIN 5: GROUND
PIN 4: GROUND	TO	PIN 5: GROUND



IMPORTANT

Ensure protocol is entered exactly as written, including Carriage Return (Enter / ASCII 13).

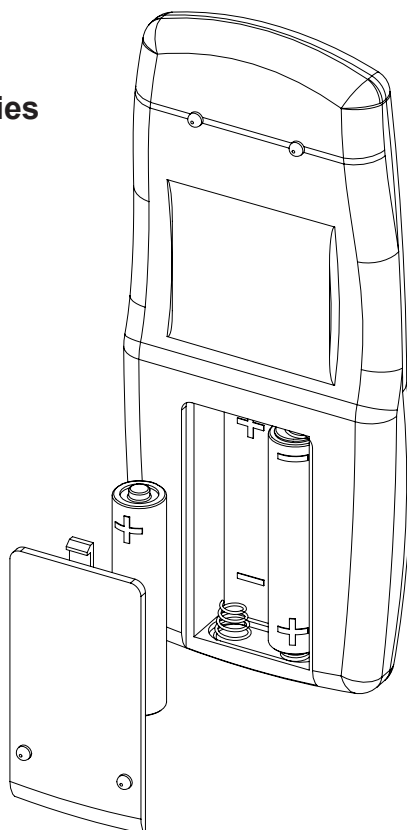
Protocol	Action
fa_in Carriage Return (Enter ↵)	Device IN
fa_out Carriage Return (Enter ↵)	Device OUT
fa_stop Carriage Return (Enter ↵)	Device STOP (At any position)



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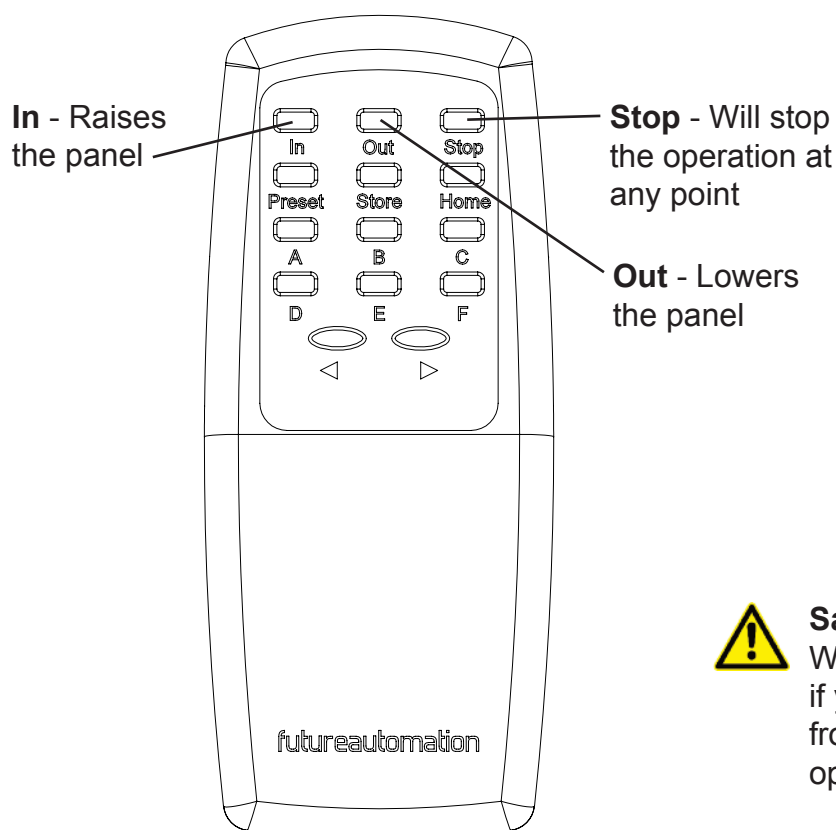
Replacing batteries



Future Automation IR Remote

Controller needs x2 AAA batteries which are provided within the packaging

Operation Buttons



Safety Note

When the mechanism is moving if you press any button apart from IN and OUT it will stop the operation.

PICH - Picture Lift Heavy Mechanism



PICH Picture Lift Heavy Mechanism - Trouble shooting guide

Having problems? - Check the following:

1. Are all the connections correct?
2. Is the mechanism being operated correctly?

If the mechanism does not operate correctly, check the items listed in the table below. Should the problem persist, there may be a malfunction. If this is the case, disconnect the mains power immediately and contact your installer

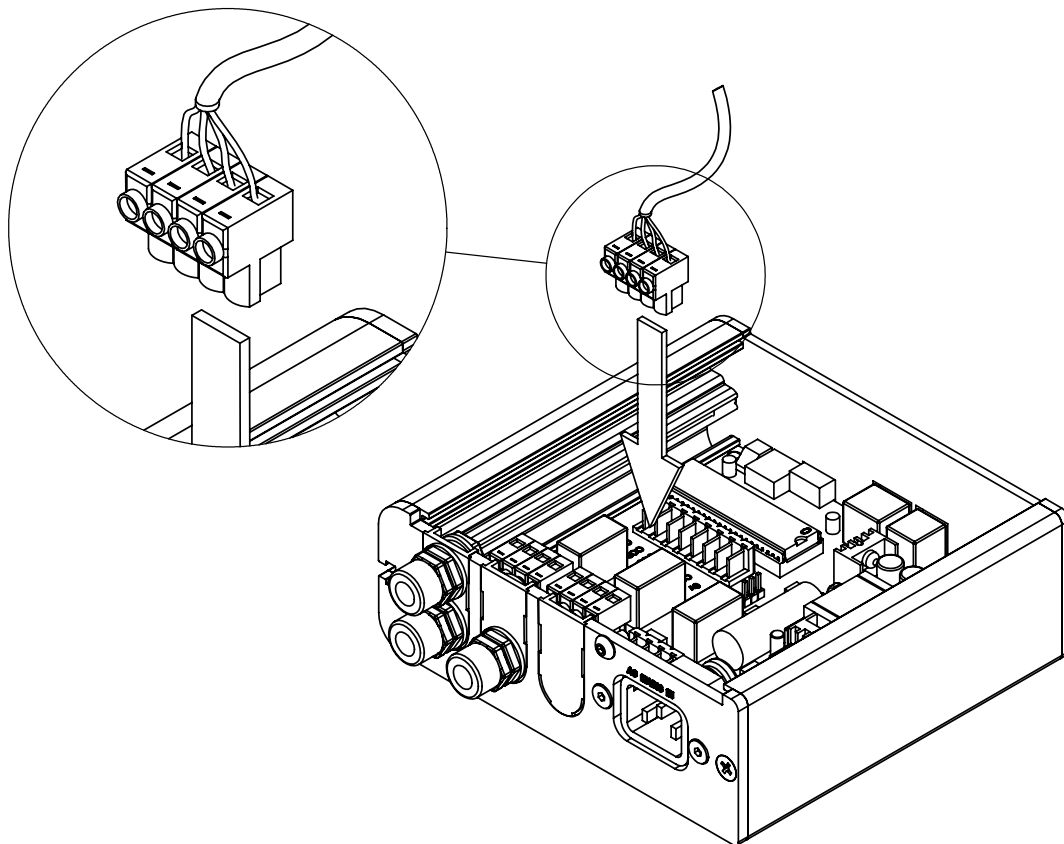
Symptom	Cause	Remedy	Page
Lift not working	Remote control or batteries faulty	Replace batteries or remote	14
	Motor end stops incorrectly set	Adjust end stop	9
Contact closure not working	Incorrect pin configuration	Terminate 8-pin RJ45 to 568/b pin configuration	12
	Faulty wiring	Replace connector or cable	13
	Faulty control box	Test contact closure on control box	13
RS232 not working	Incorrect settings	Refer to instructions	14
	Incorrect pin configuration	Terminate 6-pin RJ11 to configuration supplied	13
	ASC11 protocol error	Amend Protocol	13
Lift not level	Cables over lapping/damaged	re-seat cables	11

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Test motor operation

If the lift is not working, you can test the motor directly. To do so, you will need to locate and open the control box.



CAUTION. Apply mains voltage taking all necessary grounding precautions.

Use live (brown) and switch live (black) to change direction of motor. If the motor works, contact manufacture to replace control box.

PICH - Picture Lift Heavy Mechanism



A general technical overview of the PICH 1, 2 & 3 picture lift heavy mechanism.

	PICH 1	PICH 2	PICH 3
Product Dimensions (W,D,H)	1000x100x800mm [39.4x3.9x31.5"]	1000x100x900mm [39.4x3.9x35.4"]	1000x100x1000mm [39.4x3.9x39.4"]
Weight (Kg)	11Kg [24.3lb]	11.2Kg [24.7lb]	11.4Kg [25.1lb]
Power Consumption	110W	110W	110W
Power Consumption On Standby	3W	3W	3W
Lifting Capacity (Kg)	35Kg [77.2lb]	35Kg [77.2lb]	35Kg [77.2lb]
Standard Colour	BLACK	BLACK	BLACK
Picture Movement	710mm [28"]	860mm [33.9"]	1010mm [39.8"]
Control	IR Remote, RS232 & Contact Closure	IR Remote, RS232 & Contact Closure	IR Remote, RS232 & Contact Closure
Power Supply	240V or 110V	240V or 110V	240V or 110V
Control Of 3rd Party Product	Yes	Yes	Yes
Output Power Supply	12V - 240V	12V - 240V	12V - 240V
Control Box Size (W,D,H)	150x150x52mm [5.9x5.9x2"]	150x150x52mm [5.9x5.9x2"]	150x150x52mm [5.9x5.9x2"]
Shipping Details			
	Dimensions (W,D,H) 1100x300x200mm [43.3x11.8x7.9"]	Dimensions (W,D,H) 1100x300x200mm [43.3x11.8x7.9"]	Dimensions (W,D,H) 1100x300x200mm [43.3x11.8x7.9"]
	Weight (Kg) 12Kg [26.5lb]	Weight (Kg) 12.2Kg [26.9lb]	Weight (Kg) 12.4Kg [27.3lb]

PICH - Picture Lift Heavy Mechanism



Notes...



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