PIC Picture Lift Mechanism
Instruction Sheet

ISSUE: 005
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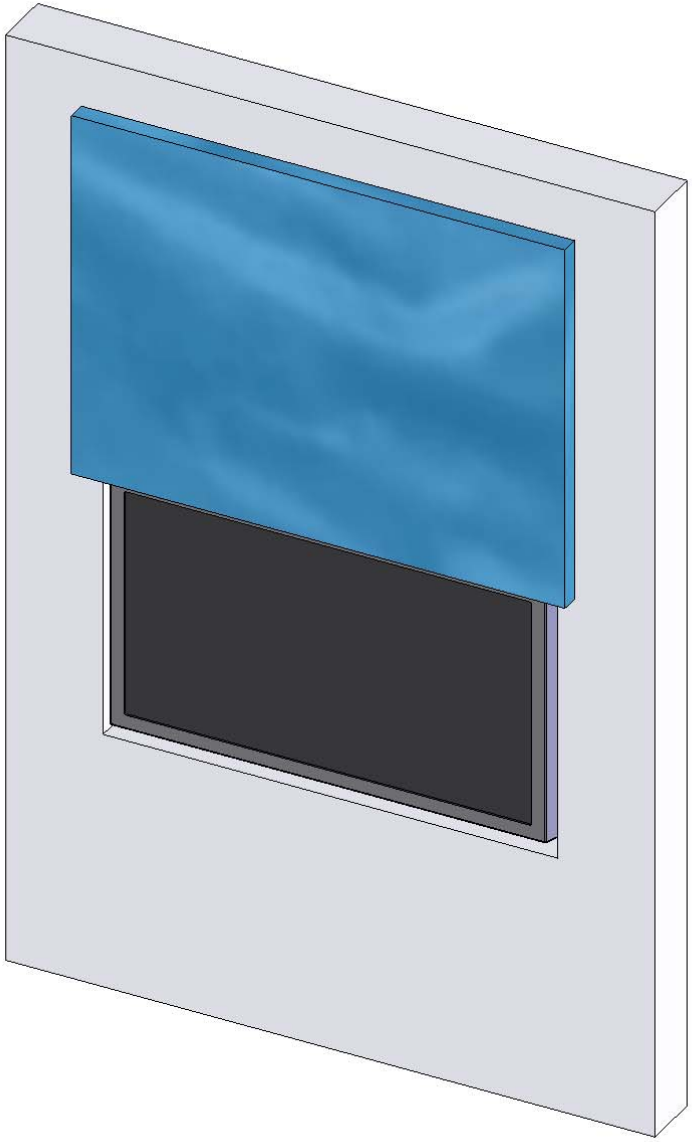


FUTUREAUTOMATION

PIC Picture Lift Mechanism Instruction Sheet

Your Pack Should Contain

1 PIC - Picture Lift Mechanism

Available in 3 standard sizes, PIC 1, PIC 2 & PIC 3.

Custom sizes also available.

Parts

Throughout the following documentation, the parts indicated left will be refered to as they are listed below:

1 Framework cross member

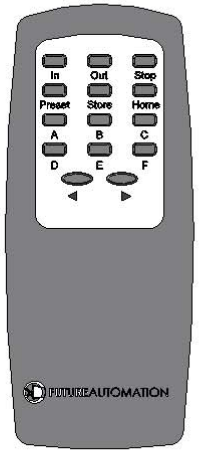
2 Uprights

3 Rollers

4 Pulleys

5 Main Tray

1 IR Remote Control



WARNING
It is the responsiblity of the installer to warn all potential end users of the dangers of interfering with mechanisms during operation

IMPORTANT
Mechanisms which lift or move weights need to be checked on a yearly basis for any damage which may result in an accident

FUTUREAUTOMATION

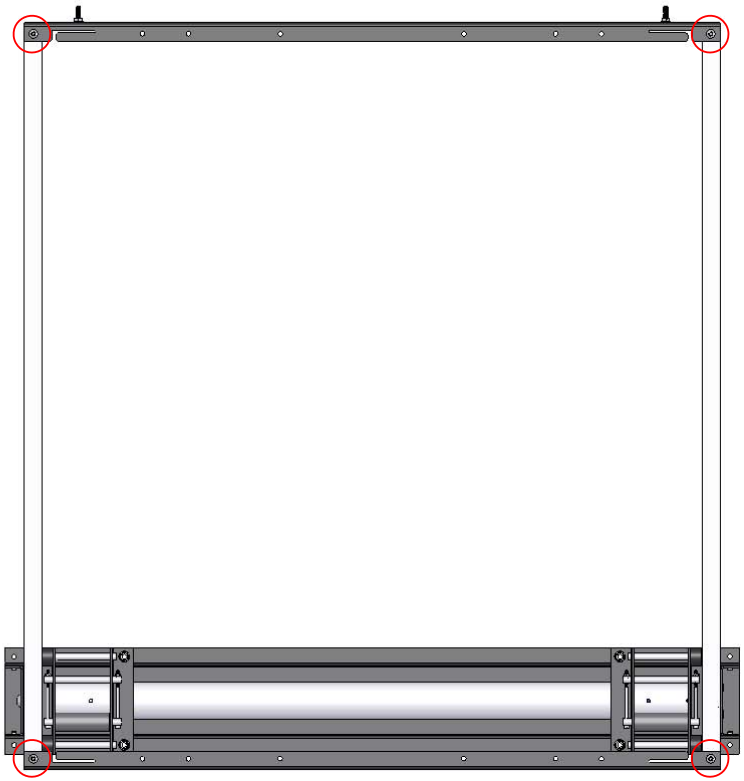
Stage 1

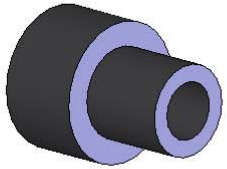
Fitting The Framework To The Mechanism

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

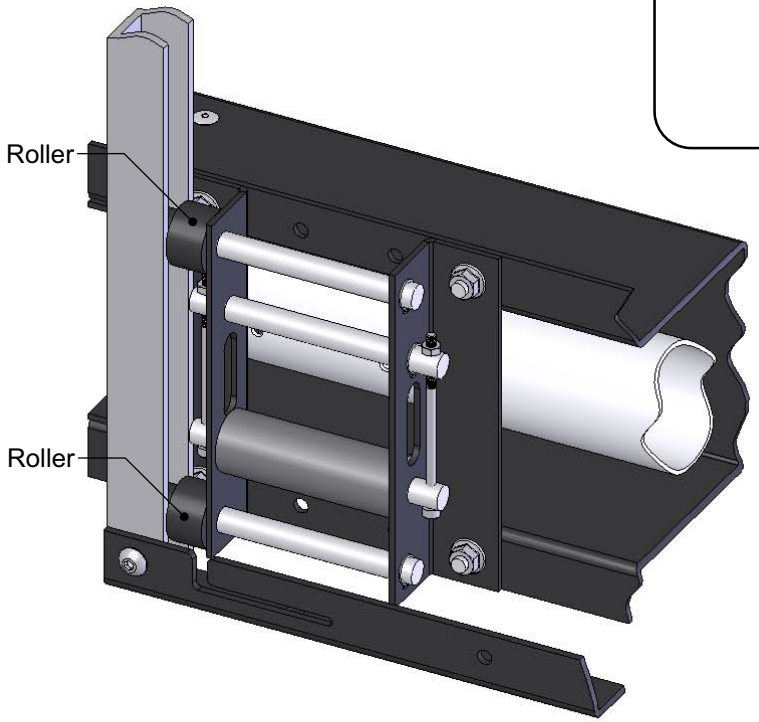
You will need to attach the two uprights and the remaining cross member.

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





x 4



Rollers

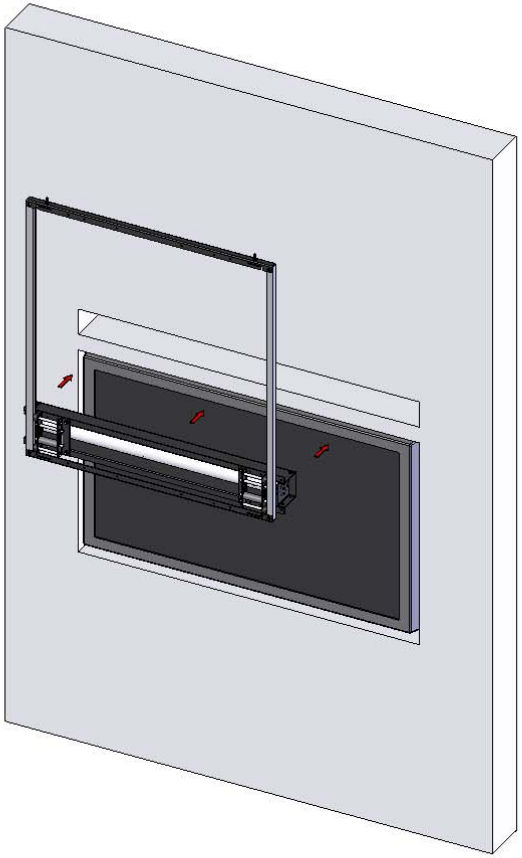
Your pack should also contain 4 small rollers which need to be placed over the outside ends of four pins. One side of the mechanism is shown, near left.

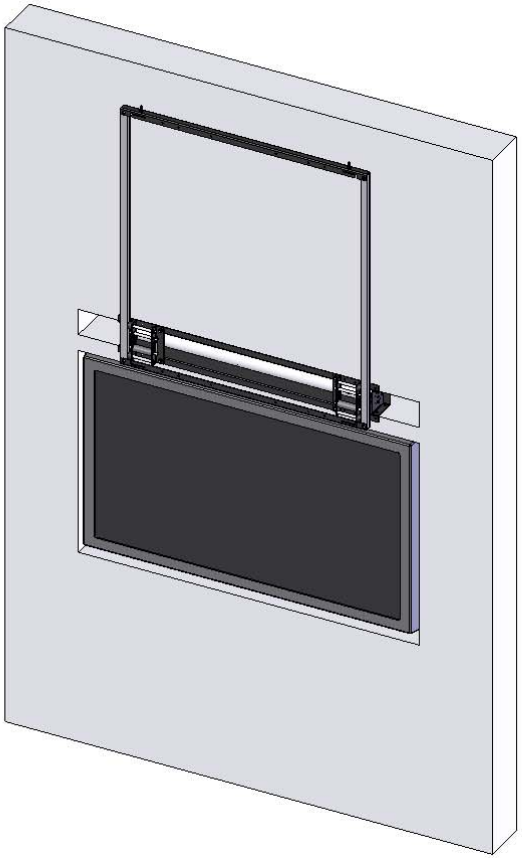
The two roller on each side should locate within the channels of the aluminium uprights

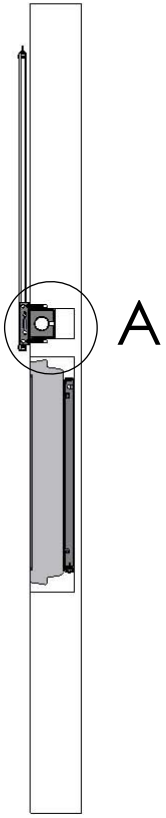
Stage 2

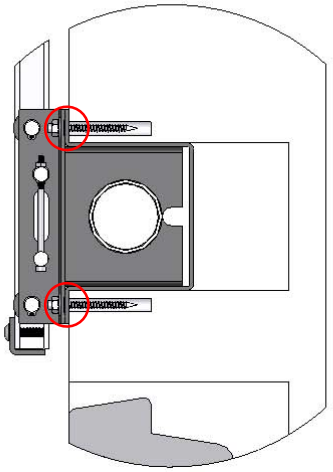
Fitting The Mechanism In The Recess

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









DETAIL A
SCALE 1 : 4

Fixing

With the mechanism in place, fix through the top and bottom front edges of the mechanism (circled below).

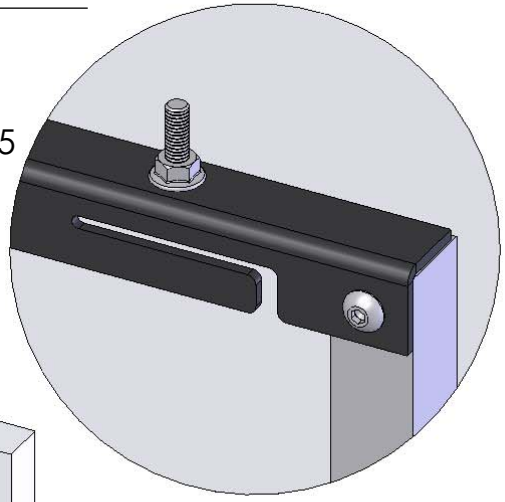
The type of fixings will depend on the type of wall the mechanism is being fixed to.

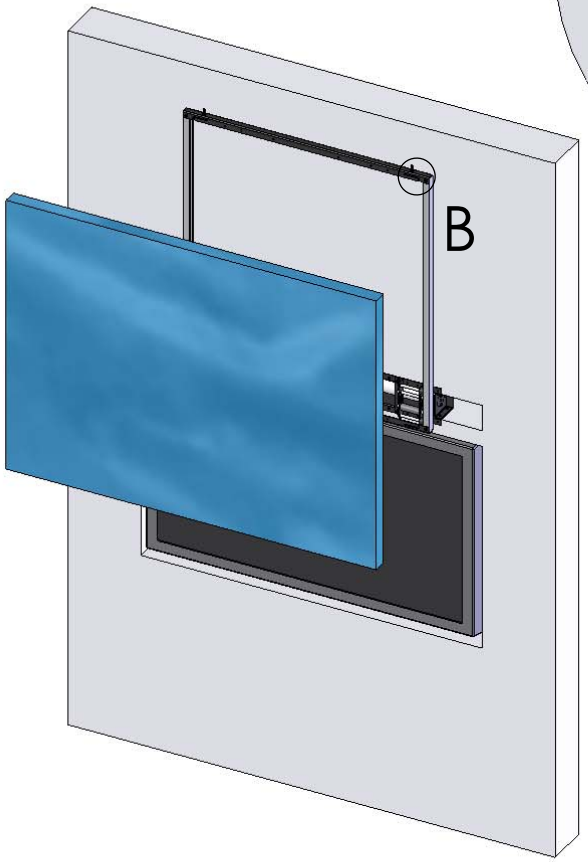
If a timber framed stud wall has been constucted, then use appropriate wood screws to fix the mechanism in place, as shown below.

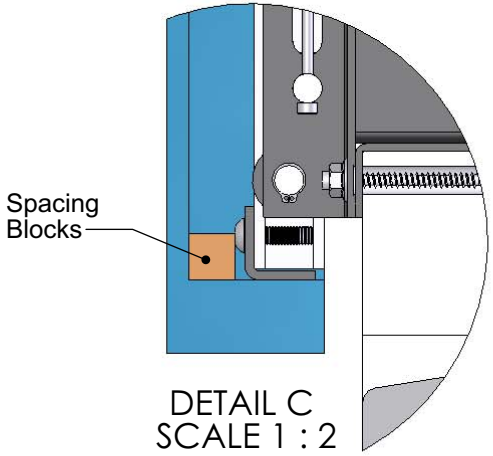
Stage 3

Fitting The Picture To The Mechanism

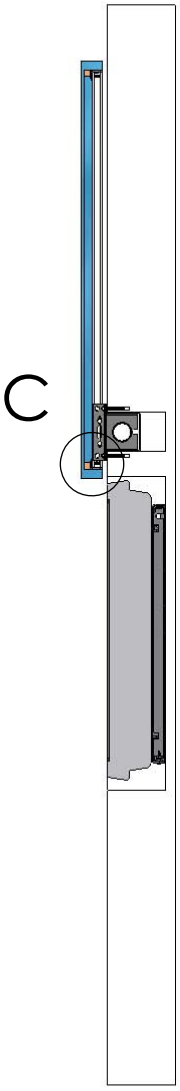
DETAIL B
SCALE 1 : 1.5







DETAIL C
SCALE 1 : 2



Fixing The Picture

Use the two bolts in the top cross member as pegs to hook the picture on to.

Drill holes in the upper inside edge of the frame of the picture that will line up with the bolts.

Then hook the picture frame on to the bolts.

Spacing The Picture Panel

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.

An example of this is shown immediate left.

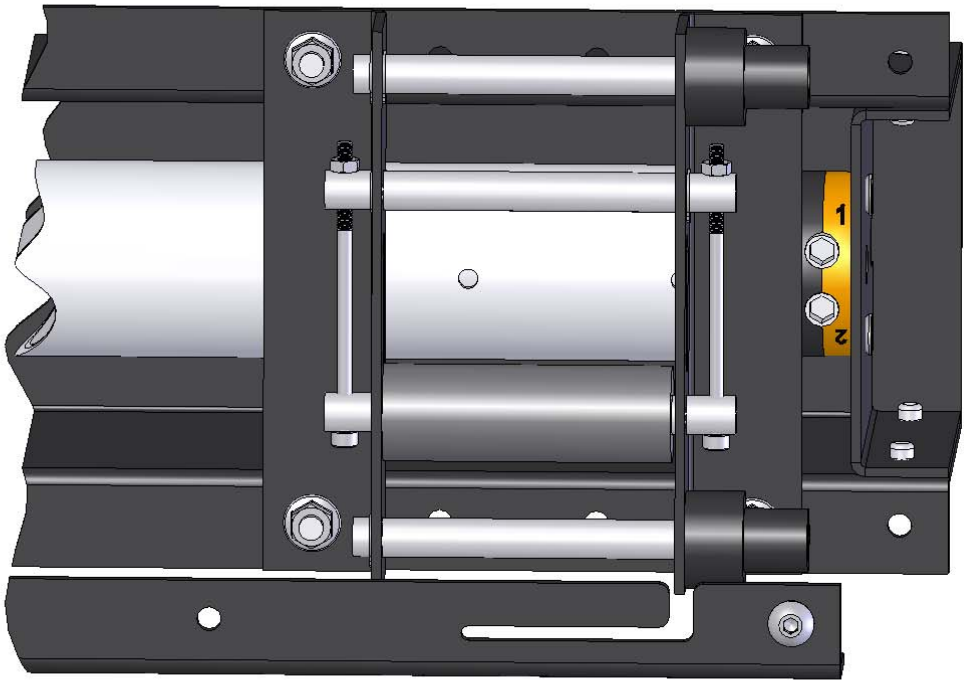
Stage 4

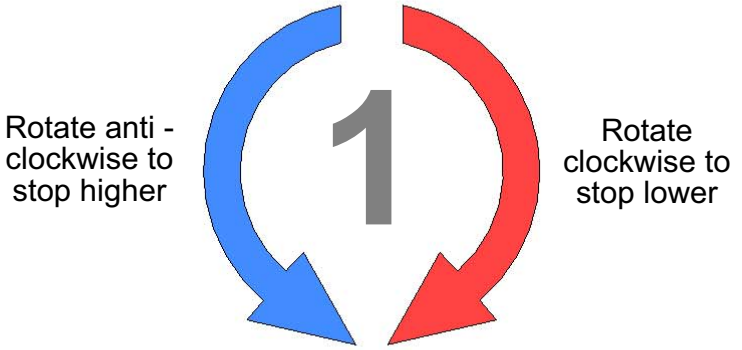
Adjusting The Stop Positions

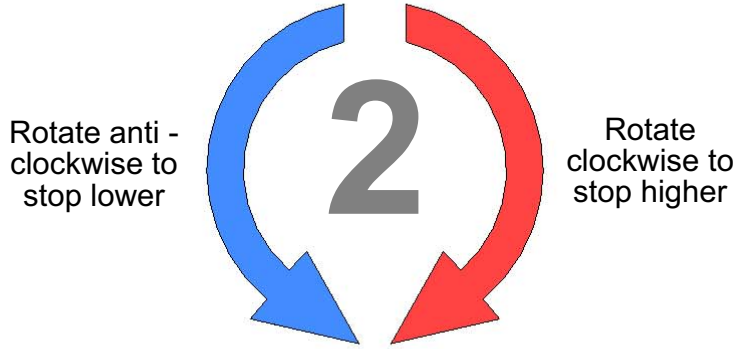
The view below is one where the right hand upright has been removed, although it is not necessary to remove the upright in order to gain access to the controls, as long as you use a very thin flat head screwdriver.

If removed, the two adjusters will become visible, as shown below.

Adjuster 1, the top one, adjusts the TOP stop position.
Adjuster 2, the bottom one, adjusts the BOTTOM stop position.

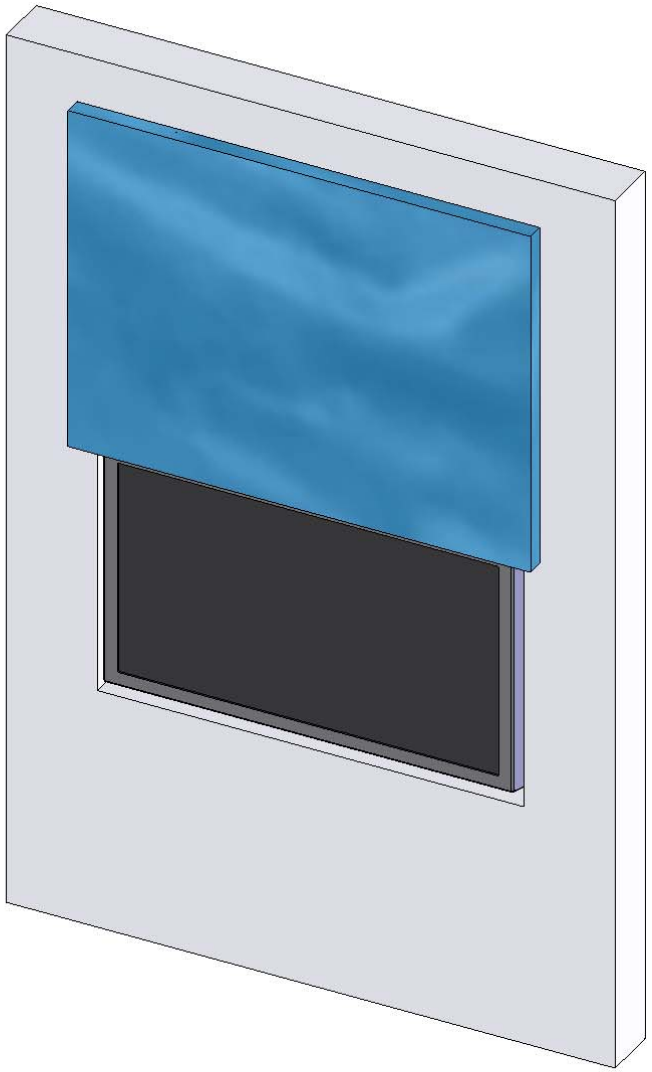


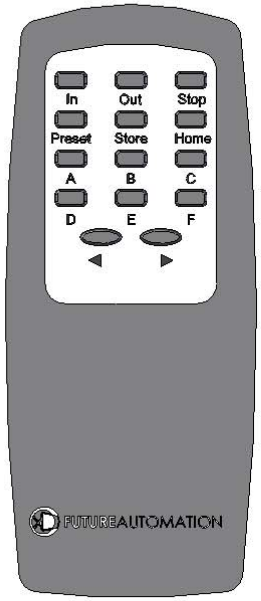




Stage 5

Controlling The Mechanism





Remote Controls

The supplied IR remote performs the following functions:

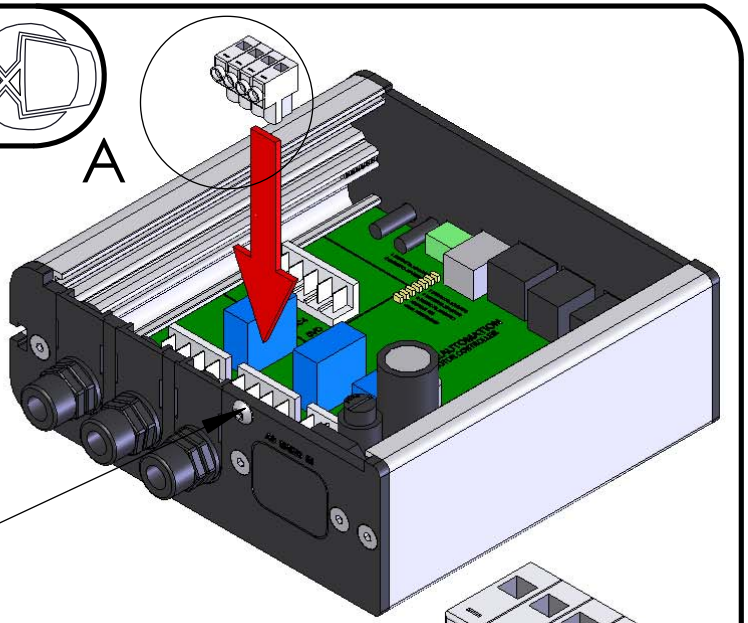
OUT: Reveal Screen

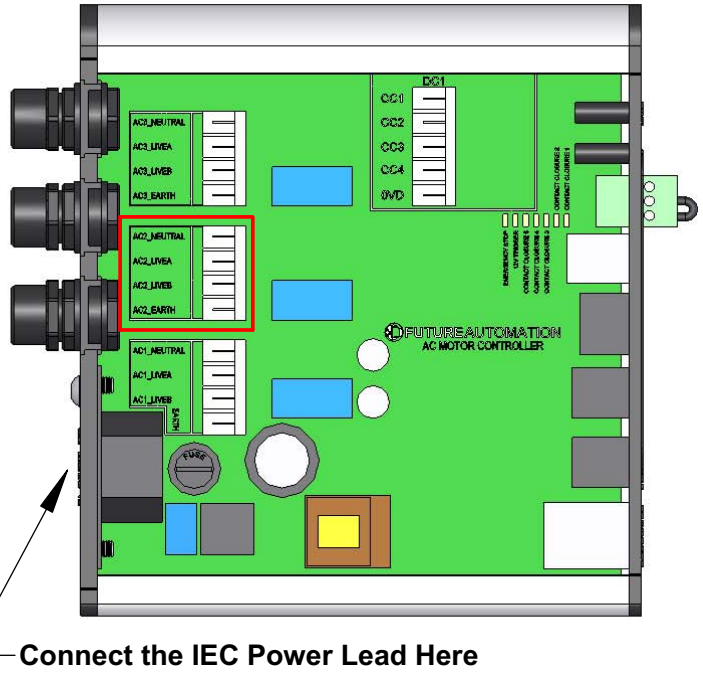
IN: Hide Screen

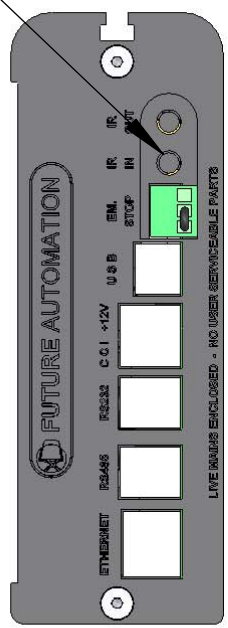
STOP: Stop

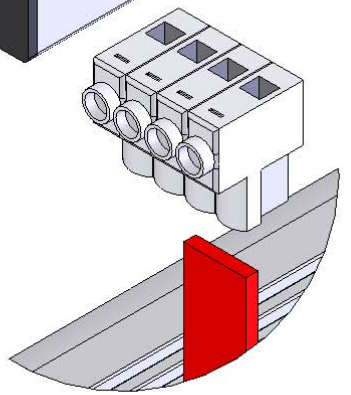
Electrical Connections

The PIC mechanism must be connected to the AC2 connection block.







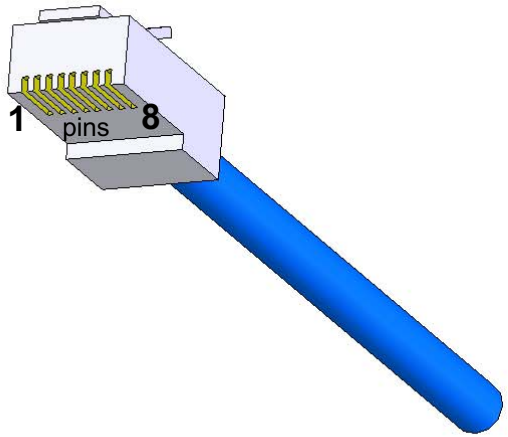


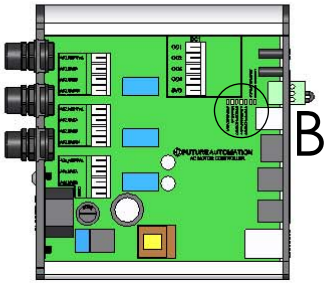
DETAIL A
SCALE 1.2 : 1

It is VERY important that when all of the electrical connections are made, the connector blocks are connected in the way shown above, with all the wires coming directly out the top of the connector blocks.

Contact Closure

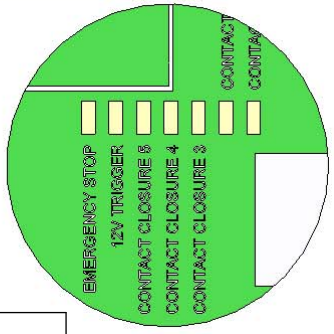
Use an RJ45 connector in the CC1 socket on the control box to operate via contact closure.





There are a number of LEDs which will light up when the corresponding contact closure connections are shorted together.

A red LED will light up when the emergency stop link is removed.



DETAIL B
SCALE 1.5 : 1

PIN	568 A	568 B	DESCRIPTION	ACTION
1	W/G	W/O	12V SUPPLY CURRENT LIMITED	
2	G	O	12V TRIGGER	When 12V is attached, device will go OUT. When 12V is removed, device will go IN.
3	W/O	W/G	GROUND	
4	BL	BL	DEVICE TOGGLE	Momentary short to ground will switch the device between states of IN / OUT. CC5
5	W/BL	W/BL	DEVICE IN LATCHED	When shorted to ground, device will go OUT. When short removed, device will go IN. CC4
6	O	G	DEVICE STOP	When shorted to ground, stops device in current position. CC3
7	W/BR	W/BR	DEVICE IN	Momentary short to ground will make device go IN. CC2
8	BR	BR	DEVICE OUT	Momentary short to ground will make device go OUT. CC1

RS232

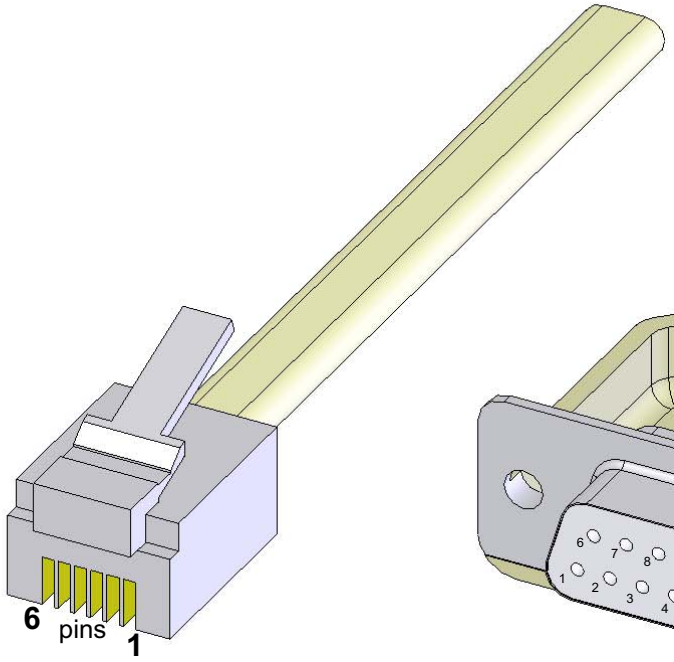
Use an RJ11 connector in the socket marked RS232 on the control box to operate using RS232.

DETAILS

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

PROTOCOL

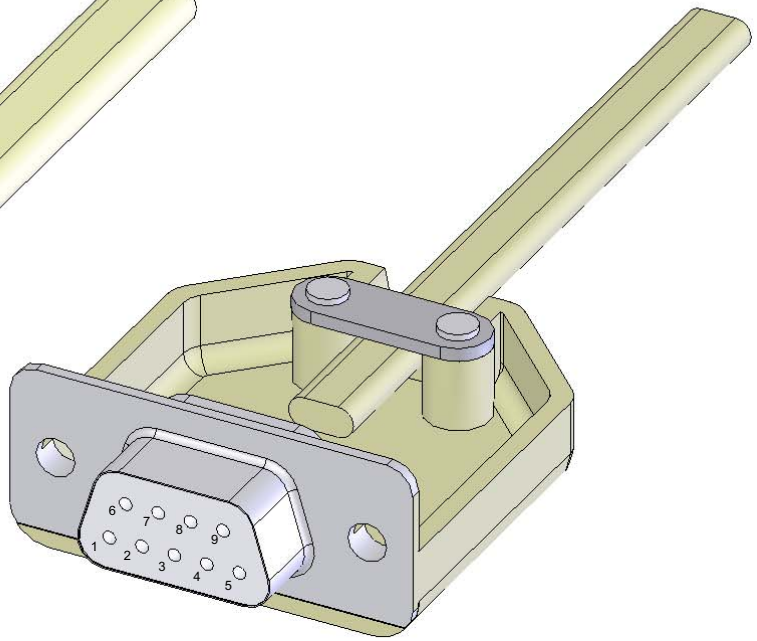
ASCI
fa in, = Device IN
fa out, = Device OUT
fa stop, = Device STOP



PIN 1: IN

PIN 6: OUT

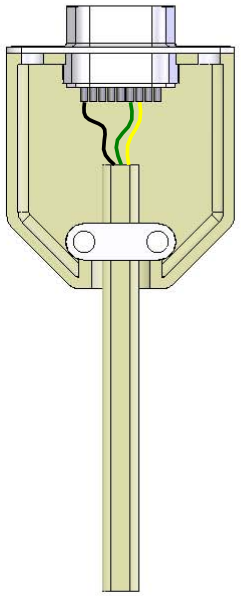
PIN 3&4: GROUND



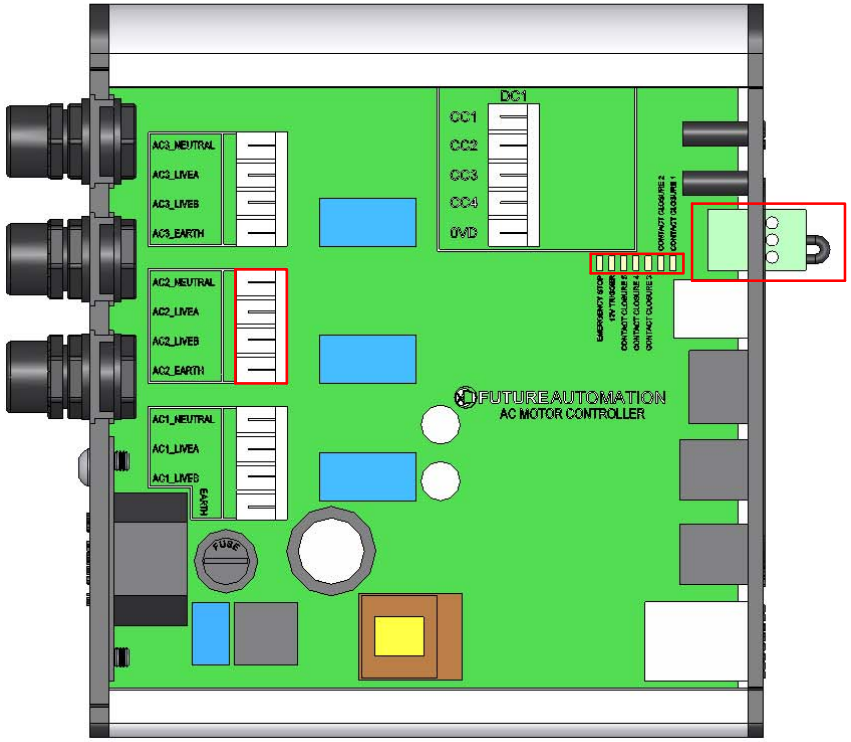
PIN 2: IN

PIN 3: OUT

PIN 5: GROUND



Operation Details



Contact Closure LEDs
To show the contact closure operation is working correctly. LEDs are on when connections are shorted together.

EMERGENCY STOP
This connection will stop all functions of the mechanism once broken / removed. Red LED will also be on.

AC2
Gives an ouput of 240V(or 110V) to control the Picture Lift motor.

Outputs stay live for 60 seconds after the OUT or IN fuctions are selected.