

DISPLAY DEVICES

EMRCM 4 Button Remote Operation

When the EMRCM is shipped, it is preinstalled on the projector lift. All control and power cables between the lift and the EMRCM portion are already connected.

When programming the lift, always have the ability to disconnect power to the lift in the event of mis-programming. Disconnecting power will stop the lift, avoiding any collisions.

Hardware Connection:

The EMRCM/Lift 4 Button Remote Control Cable is preinstalled on the lift. You must splice an additional cable to the appropriate length for your installation location of the 4 Button panel.

All connections are to the wiring block 'CN2' on the rear of the circuit board of the remote. Connect the control wires as follows:

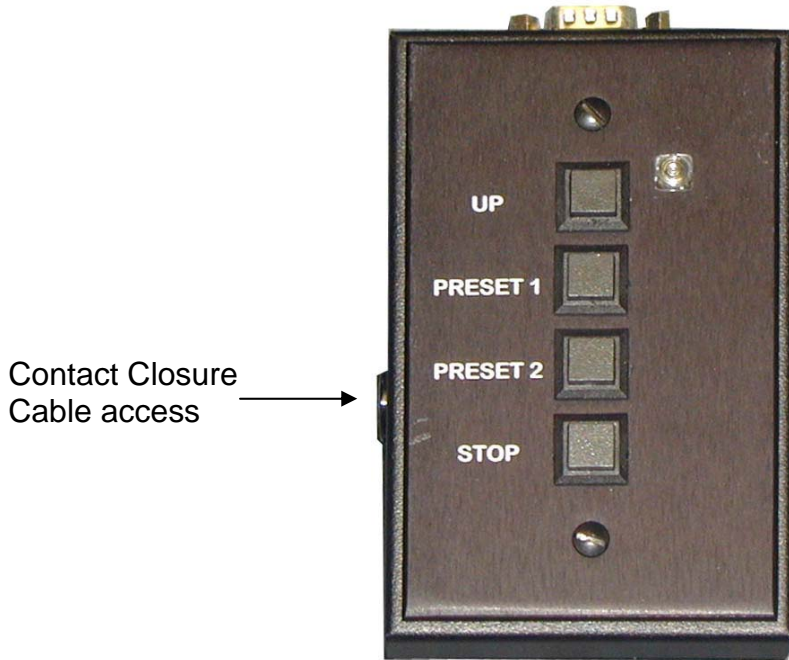
CN2	A	To communications wire A (black) from lift DB9 pin 2
	B	To communications wire B (red) from lift DB9 pin 3
	GND	To ground on communications wire (green) from lift DB9 pin5
	+12	+12v DC source from lift DB9 pin 9
	GND	Ground from +12v DC source from lift DB9 pin 8

Considerations: A one-to-one cable may be used for the DB9 extension. At minimum use a 5 conductor cable and connect the wires (black, red and green) as indicated above then use conductors 4 and 5 to carry your 12v DC power.

DISPLAY DEVICES

Operation:

The remote has four buttons on the front for 'normal operation'.



Button 1

(reacts upon release)

Button 2

(reacts upon pressing down)

Button 3

(reacts upon pressing down)

Button 4

(reacts upon pressing down)

While in automatic mode (normal operation), the buttons will:

UP Rotates projector to 'home', and then sends the lift up

Preset1 Lowers lift to show level then rotates projector to position preset #1

Preset2 Lowers lift to show level then rotates projector to position preset #2

STOP Stops all motion of EMRCM and Lift

Additionally, the **UP** button can do two other functions:

Lower to Preset2 Position (formerly maintenance position): Press and hold **UP**, press **POS1**, release **POS1**, release **UP**.

Lower to Show Level without rotation: Press and hold **UP**, press **POS2**, release **POS2**, release **UP**.

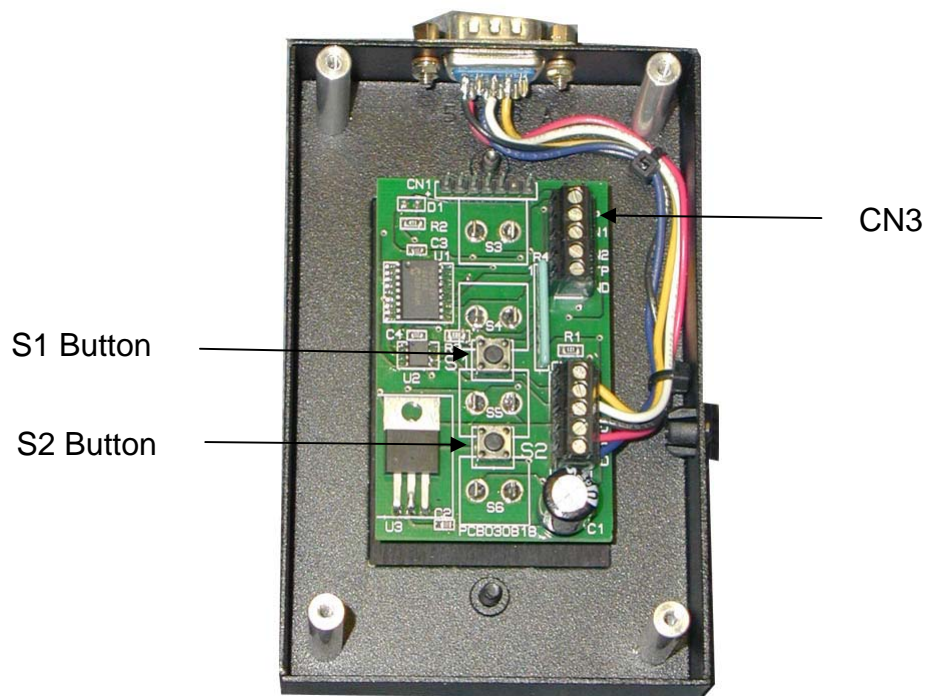
DISPLAY DEVICES

Note: If you have an automated show control system, the lift can be operated by momentary relay closure.

Basically the relay closures replace the buttons on the handheld remote. You will need to wire your contacts to the circuit board on the reverse side of the remote.

Pin Block CN3:

Pin1	UP
Pin 2	Preset 1
Pin 3	Preset 2
Pin 4	STOP
Pin 5	Common Ground



DISPLAY DEVICES

Programming Preset Positions

CAUTION!! When programming the lift you can cause damage due to collision! DO NOT ROTATE WHEN THE LIFT IS RETRACTED IN THE CEILING! BE EXTREMELY CAREFUL!

On the back of the remote's circuit board, there are two small push buttons labeled S1 and S2. In combination with the front buttons they will perform special functions. When using these buttons, **it is important to always press S1 or S2 or both, and hold them, before pressing the buttons on front. Always hold S1 or S2 until the buttons on front are released.** As an example, to start manual mode, press and hold S1, press **UP**, release **UP**, and release S1, in this exact order.

<i>FUNCTION</i>	<i>PRESS</i>	<i>THEN</i>	<i>PRESS</i>
Start Manual Mode	S1		UP
Rotate Left	S2		POS1
Rotate Right	S2		POS2
End Manual Mode	S2		UP
Lift Down	S1		STOP
Lift Preset 2 Level	S1		POS1
Set Preset 2 Level	S1		POS2
Communication Query	S2		STOP
Set Lift Down Level	S1 & S2		UP
Set Rotate Position Preset #1	S1 & S2		POS1
Set Rotate Position Preset #2	S1 & S2		POS2
Set Rotate Home	S1 & S2		STOP

Rotate Left, Rotate Right, and all Set functions will only work in Manual Mode.

BE SURE TO EXIT MANUAL MODE AFTER PROGRAMMING LIFT!

BE EXTREMELY CAREFUL IF YOU CHANGE THE ROTATIONAL HOME POSITION. LIFT DAMAGE WILL OCCUR DUE TO COLLISION IF THIS IS NOT SET CORRECTLY!

To check if THE remote is communicating with lift, send Communication Query command. If communications is good, the LED will blink for two seconds.