

Lutron Integration FAQs MTRF-DCIM-1C

Q: What is it?

A: It's a Dry Contact (aka hardwired) Relay Module that allows smart home systems such as Lutron to control third party motors such as compatible R-TEC Automation motors.

Q: What does it do?

A: It allows individual control of a single motor or a group of motors from a single Relay Module or individual control of multiple motors from multiple Relay Modules.

Q: What Lutron smart home systems are compatible?

A: Radio RA and Grafik Eye QS

Q: How does it work?

A: The Relay Module is hard wired to the Lutron control wire which is usually located at each window. The wire provides low voltage power to the device as well as Open/Stop/Close control. The commands are wirelessly transmitted from the Relay Module to the motor or motors.

When a single Relay Module is controlling multiple motors, the motors cannot be adjusted individually unless using a handheld remote control.

It is highly recommended that a qualified integrater who is experienced with Lutron smart home systems set up the relay module or modules. This is not something that a typical installer would know how to do.



Lutron Integration



Dry Contact Transmitter for ARC motors

FEATURES

- Interface between third party smart home systems and ARC motors
- Three contact inputs Up, Down & Stop
- Wireless control of ARC motors
- Roller mode and Step mode for venetian motors
- Group Motor Control

DIMENSIONS

• 12V or 24V power source compatible

TECHNOLOGIES







433 MHZ BI-DIRECTIONAL

GROUP CONTROL DRY CONTACT



SPECIFICATIONS

12V Power Input Voltage	8V ~ 16V	Transmission Distance	up to 200m (open space)
24V Power Input Voltage	16V ~ 26V		up to 656' (open space)
Transmitting Power	10 milliwatt	Temp Working Range	-10°C ~ 50°C
Radio Frequency	433.92 MHz		14°F ~ 122°F
Dry Contact Duration	>0.25 seconds		

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Lutron Integration Support Quick Start Guide



DRY CONTACT TRANSMITTER FOR ARC MOTORS

The ARC Dry Contact Input Module enables most common mechanical switches or automation system relays to control ARC motorized shades. It functions as a single channel transmitter and accepts dry contact input. Once a motor or group of motors are paired to the transmitter, it converts the dry contact inputs and sends ARC radio commands to trigger those motors to move upward/downward/stop. Motor "Favorite" Positions can also be activated.

OVERVIEW:

- Interface between third party smart home systems and ARC motors .
- Three dry contact inputs (Open / Close / Stop) •
- ARC Wireless signal output .
- ARC motor communication protocol
- Group Motor Control •
- Four switch modes
- 12V or 24V power source compatible .

HARDWARE INSTALLATION:

- Install all shades/blinds/motors at desired locations.
- Pair each shade with the ARC Remote Control on an individual channel. •
- Set each motors the limits as required for each shade.
- Power input on the Dry Contact Module can be either +12V or +24V (as descried in the programming instruction manual). •
- Pair all shades with the Dry Contact Module using the P1 button on the motorhead or P2 button on Remote Control.
- Install the Dry Contact Module on to the contact closure output(s) of the Lutron System being used (Up/Down/ Stop and Common Terminals).
- Change the Mode Operation on Dry Contact Module if is required.
- Test the communication between the Shades and the Lutron System pressing and releasing the "Set" button.

Part Number: MTRF-DCIM-1C

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NOTE: Only one positive power point, +12V or +24V, is needed.



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DRY CONTACT INPUT TRANSMITTER FUNCTIONALITY:

The Dry Contact Input Module provides 4 different setting modes that can be used to work with RADIO RA, GRAFIK EYE Lutron Systems, a well as CCO connections on many other systems. It is important to highlight that two of these options will be effortless from the integration standpoint because they only need two output relays.

For instance, using the "**SEQUENCE SWITCH MODE**" (check the DCIM module instructions on <u>Rollease Acmeda website</u>) the stop commands can be achieved using a simultaneous momentary closure of the up and down contact if desired. Which means that each shade or group of shades would require only 2 output relays, to allow the discreet "UP", "DOWN" and "STOP" control.

Optionally, the transmitter has a "**MECHANICAL SWITCH MODE**" where the solution is only to be used for one shade, linked to a specific control button, our device also allows for "sequencing" control. This will allow a user within a line of sight of the shade to operate the shade in a "UP-STOP or "DOWN-STOP" manner. This is only suitable for locations where the button on the switch is within sight of the shade being controlled, (Such as a Bathroom or Kitchen window). This solution does NOT allow an automated solution where a known action will cause a specific action such as up, since the travel direction is dependent on the last action performed.

RADIO RA SYSTEM FUNCTIONALITY:

The Lutron VCRX can be programmed so that lights, garage doors, etc. can be activated by the VCTX buttons remotely or by contact closure inputs. The VCRX input contact closures can be configured to accept maintained or momentary contact closures. Each DCIM transmitter can control one individual shade or a group of shades at the same time, which means if you have 2 or more shades, all of them will move together using the up/ down and stop commands. If you want control shades individually, you need to have one dry contact transmitter and VCTX Controller per shade.

Maintained (toggle action)





GRAFIK EYE FUNCTIONALITY:

The Lutron QSE-IO Control Interface provides integration with third-party equipment requiring contact closure inputs (CCIs) or contact closure outputs (CCOs). One QSE-IO Control Interface provides five CCIs and five dry CCOs. The QSE-IO Control Interface provides both normally open (NO) and normally closed (NC) contacts for outputs. Each DCIM transmitter can operate one individual shade or group of shades at the same time, which means if you have 2 or more shades, all of them will move together using the up/ down and stop commands. If you want control shades individually, you need to have one DCIM transmitter and one QSE-IO CCO Connection per shade.





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FREQUENTLY ASKED QUESTIONS

Q. Motor is not responding.

A. Ensure DCIM transmitter is positioned away from metal objects and that the antenna on motors are kept straight and away from metal.

Q. Cannot set limits on a single motor (multiple motors respond).

A. Use an ARC remote to individually adjust motor limits or Use P1 motor button to set other motors in the group into "Sleep" mode.

Q. Motor will not go down after setting the top limit.

A. Reset the motor and begin programming sequence again. Remember that upper limit is to be set using the up and stop and the down limit is set using the down and stop.

Q. The Dry Contact Transmitter is not sending the proper commands to the shade?

A. Ensure Dry Contact switch is powered, confirmed through LED flashing indicating switch mode type.

SUPPORT RESOUCES:

For further assistance, contact your retailer,