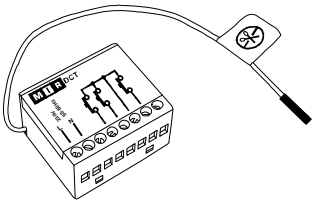
MASTER
MOTION AHEAD



433,42 MHz

USER MANUAL mod. MIR DCT

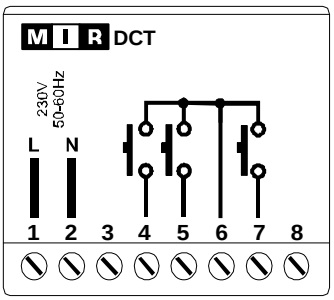
Rev. 01 del 18/07/2014

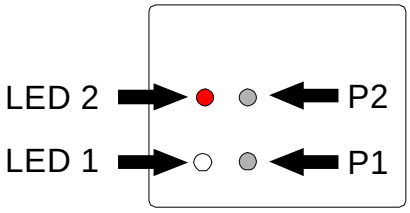
INTRO

In this instruction manual are included important information regarding way of use and safety of installation. Respect this instructions and keep them for eventual following consultations. MIR DCT is a radio transmitter suitable for controlling awnings, rollers and similar, every other use is inappropriate and prohibited.

1. TECHNICAL DATA (in reference of 20°C temperature)

- Power supply: 230 Vac, 50 Hz
- Dimensions: 45 x 33 x 25 mm
- Weight: 40 g
- inputs type: dry contacts
- Operating temperature: da –20 a +55 °C
- Protection degree: IP20
- Carrier frequency: 433.42 MHz
- Range (estimate): 100m outdoor, 20m indoor





2. NOTES ABOUT RADIO SYSTEMS

- Radio installation cannot be used where there is a high disturbing factor (for examples: near police stations, airports, banks and hospitals). However it is advisable that a technician could see the place before installing any kind of radio system in order to verify the possibility of a radio installation.
- Radio devices can be used only if any possible interference or malfunction of the transmitter or of the receiver are not a factor of risk, or if the factor of risk is cancelled by security system.
- The presence of radio devices working at the same frequency of transmission (for example alarms and earphones) could interfere with radio receiver of central unit cutting down the capacity of the transmitter and restricting the full functionality of the system.

3. WARNINGS

GENERAL SAFETY INSTRUCTIONS

- Incorrect installation can cause serious injuries.
- Keep these instructions for future maintenance work and disposal of the product.
- All the product installation, connection, programming and maintenance operations must be carried out only by a qualified and skilled technician, who must comply with laws, provisions, local regulations and the instructions given in this manual.
- The wiring must comply with current IEC standards.
- Certain applications require hold-to-run operation and can exclude the use of radio controls or require particular safety devices.
- To prevent potentially dangerous situations, check the operating condition of the roller shutter/awning regularly..

WARNINGS FOR THE INSTALLATION

- Check that the package is intact and has not been damaged in transit.
- The product is designed to be inserted inside of junction boxes. The module does not provide any protection against water and only essential protection for contact with solids.
- It is forbidden to install the module in areas not adequately protected, and near sources of heat.
- Use momentary (hold-to-run) control buttons. Do NOT use stay-put switches.
- Position the buttons within sight of the roller shutter/awning but a long way from its moving parts. Position the buttons more than 1.5 m from the floor.
- Install the product carefully, using suitable tools.
- If there are several radio appliances in the same system, they must not be less than 1.5 m apart.
- Do not install the product near metal surfaces.
- Do not modify or replace parts without the manufacturer's permission. Do not pierce or tamper the box.
- The antenna cable carries line voltage. Do not cut the antenna cable as this would be dangerous. If the antenna cable is damaged, replace the product.

WARNING FOR USE

- The product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they are supervised or given instructions on how to use the product by a person responsible for their safety.
- Before operating the roller shutter/awning, make sure there are no people or objects in the area involved in its movement. Check the automation during movement and keep people at a safe distance, until the movement ends.
- Do not allow children to play with the appliance or with the fixed control devices. Also, keep the portable control devices (remote controls) out of the reach of children.
- Do not operate the roller shutter/awning when maintenance operations are being carried out (e.g. window cleaning). If the control device is automatic, disconnect the motor from the power line.

4. ELECTRICAL CONNECTIONS

WARNINGS

- Make the connections with the power switched off.
- Check that the power line does not come from electrical circuits intended for lighting.
- A circuit breaker or residual current device must be inserted in the power line. An isolating device with overvoltage category III, namely distance between contacts of at least 3.5 mm, must be inserted in the power line.
- Use momentary (hold-to-run) control buttons. Do NOT use stay-put switches.
- The control buttons are connected to the line voltage and must therefore be properly isolated and protected.

4.2 SUPPLY

The module must be powered by tension of 230 Vac. The power supply must be apply to the terminals 1 and 2.

4.3 BUTTONS CONNECTION

Buttons (dry contacts) must be apply to the terminals 4, 5, 7, buttons common is the terminal 6. The control buttons have to be in momentary position ("hold to run" type), do not avail any switches with keep position. Many control buttons can be connected to the control unit through a parallel connection.

5. OPERATION MODES

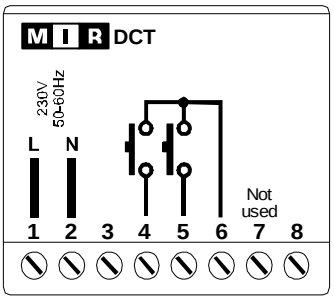
3 operating modes are selectable: Master Motion Mode (see 5.1), 2 contacts mode (see 5.2), 3 contacts mode (see 5.3). The factory setting is "Master Motion Mode". To change this setting see section 6. Regardless of the selected operating mode, during the transmission LED1 flashes to report that a transmission is in progress.

5.1 MASTER MOTION MODE

This is the factory setting. This operating mode uses only 2 contacts (4 and 5), contact 7 is not used. Closing one or more times contact 4 or contact 5 it's possible to transmit the radio codes of:

- Main commands (UP, STOP, DOWN),
- Additional commands (FOR ME, TURN L, TURN R),
- Activation and deactivation commands of "sun function" (SUN FUNCTION ON, SUN FUNCTION OFF),
- Commands to memorize specific positions (FOR ME MEMORIZE, SUN POSITION MEMORIZE).

Note:
Depending on the features of the receiver tuned with MIR DCT, it's possible that some commands are not supported by the receiver. For further information about the supported commands and how they are implemented, see the instruction manual of the receiver.



MODE 1 - MASTER MOTION MODE		
Contact	**Transmitted command**	
Contact 4 or contact 5 closed up to 0,5 seconds	STOP	(1)
Contact 4 close for more than 0,5 seconds	UP	(1)
Contact 5 close for more than 0,5 seconds	DOWN	(1)
Contact 5 briefly and quickly closed for 2 times	FOR ME	(1) (*)
Contact 4 briefly closed and then closed for long	TURN L	(3) (**)
Contact 5 briefly closed and then closed for long	TURN R	(3) (**)
Contact 4 briefly and quickly closed for 6 times	memorize SUN POSITION	(2) (*)
Contact 5 briefly and quickly closed for 6 times	memorize FOR ME	(2) (*)
Contact 4 briefly and quickly closed for 4 times	SUN FUNCTION ON	(1) (*) (***)
Contact 5 briefly and quickly closed for 4 times	SUN FUNCTION OFF	(1) (*) (***)

(1) = transmission time: about 1 second
(2) = transmission time: about 5 seconds
(3) = transmission time: until the issue of the contact (max 25 seconds)
(*) = transmission starts after about 2 seconds after the last contact closure
(**) = command available only if the "orientation commands set" is enabled (see 4.1.1)
(***) = factory setting is "off"

NOTE:
once the transmission is performed, the module waits that the contacts opens before performing other operations.

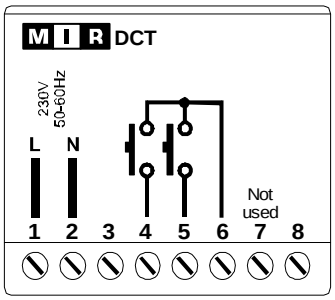
5.1.1 ORIENTATION COMMANDS SET

Additional commands TURN L and TURN R are available only if the "orientation command set" is enabled. The factory setting is "disabled". To modify this setting:

- Hold P2 until LED1 e LED2 turn on (about 5 seconds), then release P2. LED1 and LED2 turn off.
- Wait until LED2 flashes 1 time (about 3 seconds).
- Wait until LED2 flashes 2 times (about 3 seconds), then within 3 seconds press briefly P2.
- If LED1 turns on the "orientation commands set" is disabled, If LED2 turns on the "orientation commands set" is enabled.
- Press briefly P1 to change the setting. LED1 and LED2 signal the new setting.
- Wait until LED1 and LED2 turn off (about 8 seconds). The procedure is finished.

5.2 2 CONTACTS MODE

This operating mode uses only 2 contacts (4 and 5), contact 7 is not used. The module is able to transmit only the main commands (UP, STOP, DOWN). The transmission time is about 1 second.

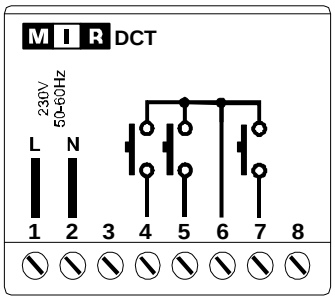


MODE 2 - 2 CONTACTS MODE	
Contact	**Transmitted command**
Contact 4 closed	UP
Contact 5 closed	DOWN
Contacts 4 e 5 both closed	STOP

NOTE: once the transmission is performed, the module waits that the contact opens before performing other operations.

5.3 3 CONTACTS MODE

This operating mode uses 3 contacts (4, 5, 7). The module is able to transmit only the main commands (UP, STOP, DOWN). The transmission time is about 1 second.



MODE 3 - 3 CONTACTS MODE	
Contact	**Transmitted command**
Contact 4 closed	UP
Contact 5 closed	DOWN
Contact 7 closed	STOP

NOTE: once the transmission is performed, the module waits that the contact opens before performing other operations.

6. SELECT THE OPERATING MODE

The operating mode set from factory is “Master Motion Mode”. To change this setting:

- Hold P2 until LED1 e LED2 turn on (about 5 seconds), then release the P2. LED1 and LED2 turn off.
- Wait until LED2 flashes 1 time (about 3 seconds), then within 3 seconds press briefly P2.
- LED1 flashes a number of times equal to the current setting (see Tab. 01).
- Within 8 seconds, press briefly P1 a number of times equal to the desired operating mode (see Tab. 01).
- Wait. After about 8 seconds LED1 flashes a number of times equal to the new setting (see Tab. 01).

MODE SETTING	
Flashes	Operating mode
1	Master Motion Mode
2	2 contacts mode
3	3 contacts mode

7. MEMORIZE/DELETE MIR DCT

- Bring the receiver in which to memorize/delete DCT MIR in “transmitters programming menu” (for more details see the instruction manual of the receiver).
- Within 8 seconds, hold P1 until LED1 flashes (about 1 second), then release P1.

NOTE: In most of receivers the procedure to enter in “transmitters programming menu” is:

- Hold PROG of an already memorized transmitter for about 5 seconds.

8. TRANSMIT THE RADIO CODE“PROGRAM”

Radio code PROGRAM is a special code which opens the memory of the receiver tuned with DCT MIR to memorize a new transmitter in memory or to delete a transmitter from memory. Send the radio code PROGRAM is equal to hold the button PROG of an ARCO, VISIO or other compatible transmitters. For further information see the instruction manual of the receiver tuned with DCT MIR.
To send the radio code PROGRAM:

- Hold P2 until LED1 e LED2 turn on (about 5 seconds), then relase the P2. LED1 and LED2 turn off.
- Wait until LED2 flashes 1 time (about 3 seconds).
- Wait until LED2 flashes 2 times (about 3 seconds).
- Wait until LED2 flashes 3 times (about 3 seconds), then within 3 seconds press briefly P2.
- The module transmits the radio code PROGRAM for about 5 seconds.

9. EXPIRED

At the end of the cycle of the product, dispose as provided by local regulation. This product can be contain polluting substance for the environment and dangerous for health, is forbidden dispose the product with the domestic waste.

- *All products and technical specifications given in this document are subject to variation without notice.*
- *Unless previously and specifically authorised by the manufacturer, the device must be used exclusively with transmitters produced by the same manufacturer.*
- *The manufacturer shall not be liable for damage resulting from improper, incorrect or unreasonable use.*
- *MASTER S.p.A. declares that the device complies with the fundamental requirements and other provisions of Directive 1999/5/EC.*
- *The declaration of conformity can be downloaded from the website http://www.mastermotion.eu/en-US/download in the Product Conformity section.*

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