

Dear Customer, thank you for purchasing a MASTER S.p.A. product. This guide contains all the information you will need concerning the use of this product. Read the instructions carefully and keep them for further consultation. The receiver module MIR is specially designed for the control of a tubular motor with **mechanical limit switches**. All other use beyond the field defined by MASTER S.p.A. is forbidden. This, as well as the breach of the instructions given in this guide, shall release MASTER S.p.A. from any liability and shall annul the product warranty.

Disposal	Notes on radio systems
At the end of the product life cycle, dispose of the device in compliance with local regulations. This product could contain substances that are harmful to human health and the environment: do not dispose of the product in domestic waste.	Do not use radio systems in places with strong interference (for example, near police stations, airports, banks, hospitals). It is in any case advisable to carry out a technical inspection prior to installing any radio system in order to identify possible sources of interference. Radio systems can be used where any disturbances or malfunction of the transmitter or receiver do not constitute a risk factor, or if such factor is eliminated using appropriate safety systems. The presence of radio devices working at the same transmission frequency (433.42 MHz) may interfere with the radio receiver and reduce the range of the system, limiting functionality.

Technical specifications			
Power supply:	230 Vac 50 Hz	Working temperature:	-20°C / +55°C
Contact capacity:	5A @ 250 Vac	Working time:	130 s
Dimension:	45 x 38 x 25 mm	Frequency:	433.42 Mhz
Weight:	40 gr	Memorable wind sensor:	4
		Memorable sun sensor:	1
		Range (estimated):	100m outdoor, 20m indoor
		Memorable radio code:	15 (rain sensor included)

01. WARNINGS

01.1 Warnings for safety
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 on this manual ● The electrical wiring must comply with current IEC standards ● Some applications require «hold-to-run» operations 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

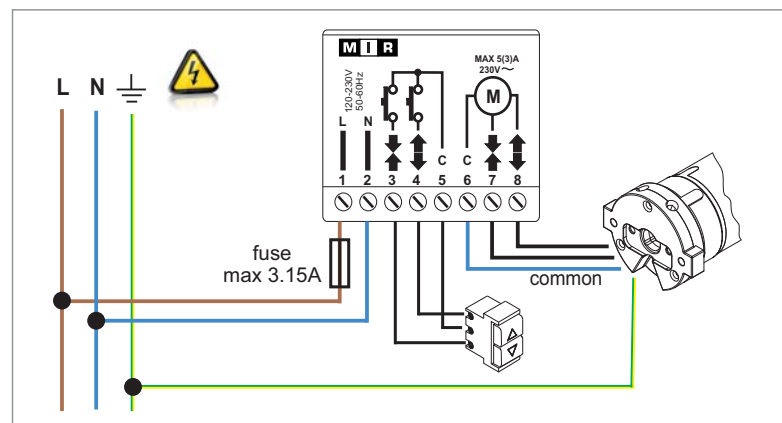
01.2 Warnings for installation
The product is designed to be inserted inside of junction boxes. The module does not provide any protection against water but only essential protection for contact with solids ● Check that the package is intact and has not suffered damages in transit ● A heavy knock and the use of unsuitable tools can cause damage ● Do not pierce or tamper with the box in any way. Do not modify or replace parts without the manufacturer's permission ● Position the buttons withing 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 ● 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 ● If there are several radio appliances in the same system, they must not be less than 1,5 m apart ● 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, near sources of heat and near metal surface ● For your safety, do not work near the winding roller while the motor is powered

01.3 Warnings for use
The product is not intended for use of 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 on the roller shutter/awning, make sure there are no people or objects in the area involved in its movement. Check the automation during the 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. Furthermore, keep the portable control devices (remote controls) out of reach of children ● Do not operate on 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

02. ELECTRICAL CONNECTIONS

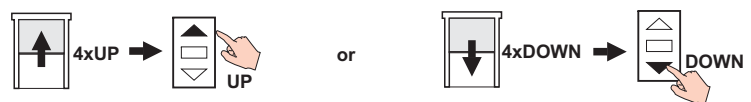
Make connections with power supply disconnected ● Check that the power supply does not depend from electrical circuits for lighting ● The supply line must be equipped with a circuit breaker. The installer must fit an isolation device (with 3,5 mm minimum opening on the contacts) upstream of the system ● The product doesn't provide any protection against overloads or short circuits. You must provide, on the supply line, an adequate protection to the load, for example a fuse of maximum value 3,15 A ● The section of the connecting cables must be proportionate to their length and to the absorption of the load, and in any case not less than 1,5 mm ● Use **momentary (hold-to-run) control buttons**. Do NOT use stay-put switches ● Command buttons are connected to the main voltage, so they must be properly insulated and protected ● You cannot connect more than one motor directly to the module. If it is necessary to connect more than one motor to the module use the appropriate expansion cards

- 02.1 Power supply**
The module can be powered at 120 Vac or 230 Vac. The supply voltage must be applied to terminals 1 and 2.
- 02.2 Connecting the motor**
The motor windings must be connected to the terminals 7 and 8, the common wire of the motor must be connected to terminal 6. **You can not connect more than one motor directly to the module.** If it is necessary to connect more than one motor to the module use the appropriate expansion cards.
- 02.3 Connecting the command buttons (optional)**
The buttons must be connected to terminals 3 and 4, the common thread of the buttons must be connected to terminal 5. **The command buttons are subject to the mains voltage and therefore must be properly insulated and protected.** You must use **momentary (hold-to-run) button**, do not use buttons with maintained position. More than one command button can be connected to the unit through a parallel connection. To make an up or down movement, press the button for at least 0.5 seconds; to stop the operation briefly press any of the buttons.



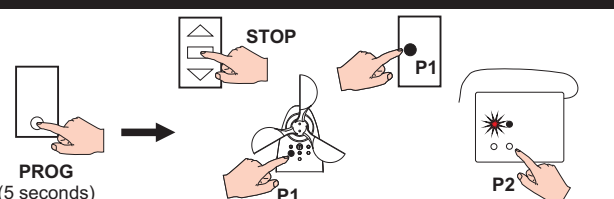
03. FIRST INSTALLATION

- 01. Give power supply to the device. The motor performs four short movements.
- 02. Within 15 seconds:
If the movements are upward, press UP of transmitter.
If the movements are downward, press DOWN of transmitter.
- 03. The motor makes a brief upward movement.



04. MEMORIZATION/DELETION OF A RADIO DEVICE

- 01. Bring the motor in an intermediate position.
- 02. Press PROG of an already memorized transmitter for 5 s. The motor performs 2 upward movements.
- 03. Within 15 seconds, to memorize/delete:
a transmitter: press STOP of transmitter you want memorize/delete
a sensor: press «1» of sensor you want memorize/delete
a rain sensor: press «2» of rain sensor you want memorize/delete
- 04. 1 upward movement: device memorized!!
1 downward movement: device deleted!!
2 downward movement: error!!



NOTES: point 03. in battery powered sensors may be necessary to keep the button pressed up to 10 seconds.
point 04. is reported "error" if the radio code is not received in time, if the receiver's memory is full, if you try to delete the only memorized transmitter, if you try to memorize more than 1 sun sensor or more than 4 wind sensor

05. SUN, WIND, RAIN SENSOR

The sensors generate automatic manoeuvres without notice that can be dangerous. The installer must to inform the end-user and possibly integrate the installation with adequate security systems. In some situations (eg power loss of motor or sensor, motor failure or sensor, radio noise ...) it is possible that the command imparted by the sensor is not detected by the motor. The sensor must therefore not be understood as a safety device which ensures the integrity of the roller in every condition, but a means to reduce the possibility that the shutter being damaged by adverse weather conditions.

05.1 COMPATIBLE SENSORS

Use sensors series BLAST or BLAST BT or SHAKE (wind sensor), VEGA and VEGABT (sun / wind sensor), THANK YOU (sun sensor), X11 (rain sensor) associated at module AT12. When the sensor detects the presence of wind, the "wind alarm" command is sent: the tuned motors move upward and manual controls are disabled until the end of the alarm. When the sensor detects the presence of the sun, the "presence of sun" command is sent: the tuned motors move downward. When the sensor detects the absence of the sun, the "absence of sun" command is sent: the tuned motors move upward. When the sensor detects the presence of rain, the "presence of rain" command is sent: the tuned motors move up or down, depending on the settings of rain sensor. Each device can store up to 4 sensors wind, only one sun sensor. For more information, consult the manual of sensors.

05.2 TEST RADIO

As soon as the module stores a wind sensor, a communication control is automatically activated between the sensor and the device. If the communication is lost for more than 60 minutes, the motor performs an upward movement to protect the blind. This automatic manoeuvre is performed every 60 minutes until the reactivation of the radio communication. The factory recommends to keep the "test radio" active in order to identify in good time any malfunction of the radio sensor or of the radio communication. To modify this function:

ARCO	FLUTE, KUADRO, KORT	VISIO	Other transmitters...
01. Bring the motor in an intermediate position 02. Press MENU for about 5 sec, until «rS» appears on display 03. Press 1 time PREV / 7 times NEXT. «17» appears on display 04. Press STOP. The motor signals: 1 up = active, 1 down = inactive 05. To deactivate: press PREV To activate: press NEXT 06. Press STOP. The motor signals: 1 up = active, 1 down = inactive	01. Bring the motor in an intermediate position 02. Holding down STOP, press PROG for about 1 sec, until LEDs light 03. Press 1 time UP / 7 times DOWN. 04. Press STOP. The motor signals: 1 up = active, 1 down = inactive 05. To deactivate: press DOWN To activate: press UP 06. Press STOP. The motor signals: 1 up = active, 1 down = inactive	01. Bring the motor in an intermediate position 02. Press MENU, «Menu rx» appears on display 03. Press 1 time PREV / 7 times NEXT. «17» appears on display 04. Press STOP. The motor signals: 1 up = active, 1 down = inactive 05. To deactivate: press DOWN To activate: press DOWN 06. Press STOP. The motor signals: 1 up = active, 1 down = inactive	See the User manual of the transmitter at section: «RECEIVER MENU - Function 17 - Test radio»

05.3 HOW TO ACTIVATE/DEACTIVATE THE «SUN FUNCTION»

ARCO	FLUTE, KUADRO, KORT	VISIO	Others transmitters..
01. Press SUN for about 2 seconds. (*)	01. Press together STOP/UP for about 2s. (*)	01. Press together STOP/UP for about 2s. (*)	(*)

(*) The motor signals the change with a quick movement up / down. For more information, consult the transmitter manual at section "sun / automatic lowering" function

06. TILTING FUNCTION

This feature can be useful for example in the handling of venetian blinds. Enabling this feature you can move the motor in small steps (tilting), allowing the orientation of the slats using the command buttons or using the transmitter. You can set the duration of the movements of orientation (see table). The factory sets the function at 1 (000 msec = inactive).

N° of movements	1	2	3	4	5
Setting (ms)	OFF	050	100	150	200

06.1 HOW TO SET THE TILTING FUNCTION

ARCO	FLUTE, KUADRO, KORT	VISIO	Other transmitters...
01. Bring the motor in an intermediate position 02. Press MENU for about 5 sec, until «rS» appears on display 03. Press 1 time PREV / 2 times NEXT. «12» appears on display 04. Press STOP. The motor signals the current value (1 to 5 movements) 05. Press NEXT the number of times equal to the desired setting (1 to 5) 06. Press STOP. The motor signals the new value (1 to 5 movements)	01. Bring the motor in an intermediate position 02. Holding down STOP, press PROG for about 1 sec, until LEDs light 03. Press 1 time UP / 2 times DOWN. 04. Press STOP. The motor signals the current value (1 to 5 movements) 05. Press DOWN the number of times equal to the desired setting (1 to 5) 06. Press STOP. The motor signals the new value (1 to 5 movements)	01. Bring the motor in an intermediate position 02. Press MENU, «Menu rx» appears on display 03. Press 1 time PREV / 2 times NEXT. «12» appears on display 04. Press STOP. The motor signals the current value (1 to 5 movements) 05. Press UP the number of times equal to the desired setting (1 to 5) 06. Press STOP. The motor signals the new value (1 to 5 movements)	See the User manual of the transmitter at section: «RECEIVER MENU - Function 12 - Orientation»

06.2 HOW TO COMMAND THE TILTING

Command buttons	ARCO	FLUTE, KUADRO, KORT, VISIO	Others transmitters..
Press a button (less than 0.5 sec), then press it again and hold it until you reach the desired orientation.	Use the dedicated buttons LEFT and RIGHT orientation.	Press STOP quickly twice and hold down UP or DOWN.	See the User manual of your transmitter

07. RESET

WARNING: This procedure restores the factory settings of the device. This procedure must be carried out by qualified technical personnel. Once the "reset" is performed, the technician must install this device again (following the procedure on section 03. FIRST INSTALLATION) and verify proper operation.

07.1 USING TRANSMITTER

ARCO	FLUTE, KUADRO, KORT	VISIO	Other transmitters
01. Bring the motor in an intermediate position. 02. Press MENU for about 5 sec, until «rS» appears on display 03. Press 2 time PREV / 9 times NEXT. «29» appears on display 04. Press STOP. The display flashes, the motor performs some movement 05. Press together PREV and NEXT for about 2 seconds until the motor indicates that the reset was performed (1 moving up / down). 06. Reinstall the motor (see section 6).	01. Bring the motor in an intermediate position. 02. Holding down STOP, press PROG for about 1 sec, until LEDs light 03. Press 2 time UP / 9 times DOWN. 04. Press STOP. The LEDs flash, the motor performs some movement 05. Press together UP and DOWN for about 2 seconds until the motor indicates that the reset was performed (1 moving up / down). 06. Reinstall the motor (see section 6).	01. Bring the motor in an intermediate position. 02. Press MENU, «Menu rx» appears on display 03. Press 2 time PREV / 9 times NEXT. «29» appears on display 04. Press STOP. The display flashes, the motor performs some movement 05. Press together PREV and NEXT for about 2 seconds until the motor indicates that the reset was performed (1 moving up / down). 06. Reinstall the motor (see section 6).	See the User manual of the transmitter at section: «RECEIVER MENU - Function 29 - Receiver reset»

07.2 USING COMMAND BUTTONS

- 01. If possible, bring the motor to the intermediate position.
- 02. Disconnect the power supply.
- 03. Connect as on the diagram.
- 04. Connect the power supply. Wait 30 seconds, the motor makes a signal.
- 05. Disconnect the power supply.
- 06. Restore the connections (see diagram on section 2).
- 07. Reinstall the module (see section 3).

