

R.F. RECEIVER FOR MOTORS 220 VAC ART. 5157

English

Technical specifications

- Supply: 220, 240 V / 50, 60 Hz
- Current absorption: 3 W
- Out: 2 outputs with clean contacts
- Relay self-hold functions can be set with 5 different periods and impulse activation
- Built-in antenna
- 433 MHz radio frequency chip reception frequency
- Memorisation of channel number, group number and transmitter identification
- Ability of single and simultaneous control via radio
- Ability of single control via cable (optional function): CE approved construction and standards
- Dimensions [mm]: 200x40x25
- Weight [g]: 110

Note:

The button for single control must be of the type with open contacts at rest and spring return (Art. 5151 or Art. 5096 recommended). Further information and instructions for special applications can be obtained from the Technical Office or from the website www.mottura.com

Introduction

Art. 5157 is a compact radio frequency receiver, designed to perform the functions of control the Mottura 220 Vac motorised systems.

Art. 5157 can be controlled via radio:

- individually (Single control)
- simultaneously with more than one Art. 5157 or with other products in the Domotic Mottura range (Group control)
- and by cable individually using a bottom (optional configuration).

The Art. 5157 receiver uses the Mottura digital protocol for dialogue between receivers and transmitters.

This protocol has been developed by Mottura S.p.A. on the strength of experience gained from professional installations and suitable for domestic application. Its application makes it possible to use in the same room:

- more than one receiver, each controlled individually by their own transmitter
- more than one receivers, controlled simultaneously by a single transmitter

The Art. 5157 is able to dialogue with the following range of R.F transmitters.

- | | |
|--|---|
| · Art. 5141 (single channel palm-held) | · Art. 5146 (single channel wall-mounted) |
| · Art. 5142 (2 channel palm-held) | · Art. 5147 (2 channel wall-mounted) |
| · Art. 5144 (4 channel palm-held) | · Art. 5149 (4 channel wall-mounted) |
| · Art. 5131 (multi-channel palm-held) | · Art. 5140 (Autostart) |

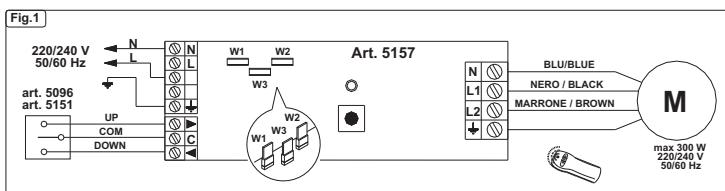
Use of one of the following transmitters means that more than one Art. 5157 receiver can be controlled individually and simultaneously via radio:

- | | |
|---------------------------------------|--------------------------------------|
| · Art. 5144 (4 channel palm-held) | · Art. 5149 (4 channel wall-mounted) |
| · Art. 5131 (multi-channel palm-held) | |

Every aspect of Art. 5157 has been designed and tested to meet CE standards.

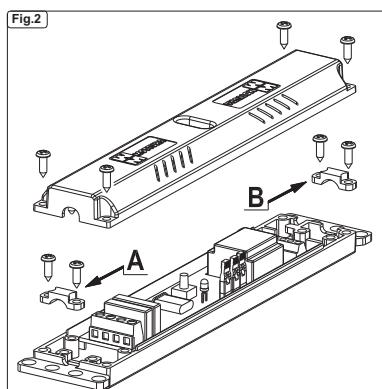
Connections

The diagram in Fig. 1 shows the connections for the 220 Vac power supply, those of the motor (with a maximum permitted power of 300) and the "Single" control (optional).



Connection

- Remove the cover (Fig. 2).
- Attach the wires to the removable connectors J1 and J2 following the wiring diagram shown in Fig. 1 or on the label inside the cover.
- Secure the wires with the cable clips "A" and "B" provided.
- Select the function required (see "Functions").
- Close the cover.
- Turn the power on. A slowly flashing LED shows that the receiver is working.
- Carry out the calibration procedure if necessary (see "Calibration").



Safety rules

- Connecting the receiver to the 220 V power supply, to the motor and to the external controls (if present) should only be carried out by a qualified technician.
- With the exception of calibrating the radio, it is forbidden to work on the receiver while it is being supplied with power. Before any work commences the receiver must be disconnected from the electrical power supply, in order to isolate it, for as long as the work takes to complete.
- Art. 5157 is supplied in a special Mottura container. The container must hold only the receiver and the wires necessary for its connections.
- It is forbidden to install the receiver without the core hatch seal or to make holes big enough to allow foreign bodies to pass through.



Functions

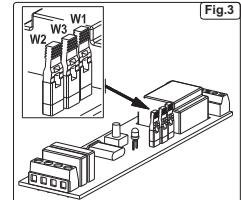
By means of the three removable jumpers W1, W2 and W3 on the receiver itself (Fig. 3), the following functions can be set:

Self-hold relay function.

When the command arrives the receiver activates the motor for a given period.

It should be remembered that:

- too short it will not allow the systems to open or close fully.
- too long a relay self-hold time could mean that the opposite control to the one just carried out has to be pressed twice, if we wish to reverse the action despite the stroke already having ended but while power is still being supplied to the motor.



Different relay self-hold times can be selected (30, 60, 90, 120, 240 sec) according to requirements (size of the system). The motor usually stops when the end of travel position has been reached, but this can also be done by pressing "Stop" (except with Art. 5096 type buttons) or using the opposite control to the one currently in progress.

Impulse functions – Veniwood.

The receiver supplies the motor with power by impulse when commands of less than 2 sec. are received (direction). On receiving a command lasting for more than 2 sec. the receiver first supplies the motor with power by impulse and then continuously for a period of roughly 1 min. (opening/closing).

The LED signals that the command is in operation. It remains on until the relay self-hold time has elapsed, when the "Stop" command arrives or a command opposite to the one currently in progress is given.

The table below shows the various combinations of the removable jumpers W1, W2 and W3 and their relevant functions.

	RELAY SELF-HOLD 30 SEC		RELAY SELF-HOLD 60 SEC		RELAY SELF-HOLD 90 SEC
	RELAY SELF-HOLD 120 SEC		RELAY SELF-HOLD 240 SEC		IMPULSE / VENIWOOD

Calibration and settings

Channel number nC – Group number nG – Personal number nP

The Mottura digital protocol is a language that allows dialogue between receivers and transmitters. It works on a series of parameters (see table) whose combinations allow the following to be used in the same room:

- more than one receiver, each controlled individually by their own transmitter
- more than one receivers, controlled simultaneously by a single transmitter

PARAMETRI	DESCRIZIONE	CARATTERISTICHE
nC	Channel Number	Identifies the receiver. Used when several receivers are controlled individually
nG	Group Number	Identifies a second channel number used to control several receivers simultaneously
nP	Personal Number	Used to prevent a receiver from being controlled by other transmitters

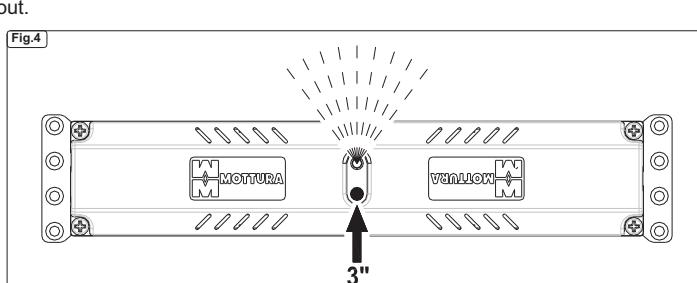
The transmitter and receiver factory settings allow them to be used immediately.

The calibration procedure must in any case be carried out if:

- the receiver does not pick up the command sent by the transmitter
- the receiver's factory settings need to be changed
- a complex installation is being made, involving several receivers

The parameters are memorised inside the receiver by means of the following calibration procedure:

- Press the button highlighted for 3 seconds (Fig. 4). A fast flashing LED shows that the calibration mode has been entered.
- Refer to the technical manual for the transmitter used.
- The end of the procedure is signalled by two flashes and the LED then going out.



N.B.:

The calibration procedure must be completed within 5 minutes of pressing the calibration button.

The calibration procedure must be carried out only with the receiver fitted inside the Mottura container or in the flush mounted box.