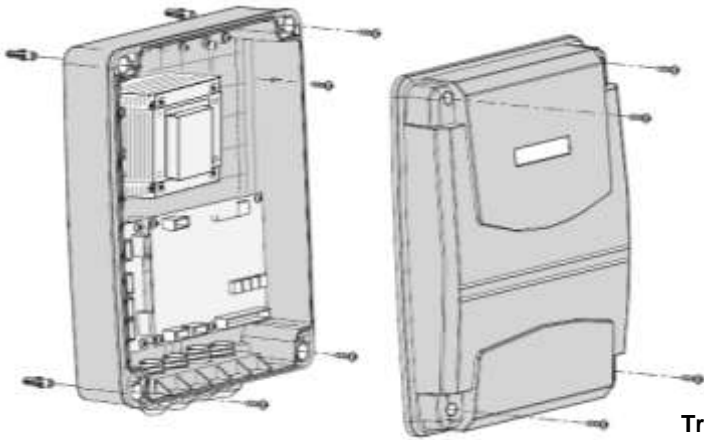


RIO-R installation manual



Double leaf
gate control
panel

Specifications

Supply	230Vac 50/60Hz @ 5A
Motors	2x 100W ACIM's
Aux supply	24Vdc @ 1A
Housing	ABS IP44, 1.8kg
Dimensions	227 x 277 x 108mm
Receiver	433MHz rolling code

- 60 rolling code remote capacity
- Auto-close 10s to 7mins
- Single or double leaf
- Soft stop, optional soft start
- Interleaf delay 0 – 9s
- 4 force settings
- Pressure sensitive reversal
- Auto run time setting

1.0 Description

RIO-R panel is for AC induction motors with limit switches. For single or double leaf gates / doors. Programming is with navigation buttons and an LCD display.

1.1 Inputs & outputs

RIO-R supports two command inputs and two safety inputs. Inputs have +5V pull ups, switching to ground. Command inputs are active low. Safety inputs are N/C normally low.

Solid state switching outputs are provided for an electric lock that operates for 1sec on opening. A solid state 24Vdc flashing light output switches at 1Hz. An accessory header is provided for powered external trigger devices such as a keypad, loop detector, exit device, or access control device.

1.2 Input functions

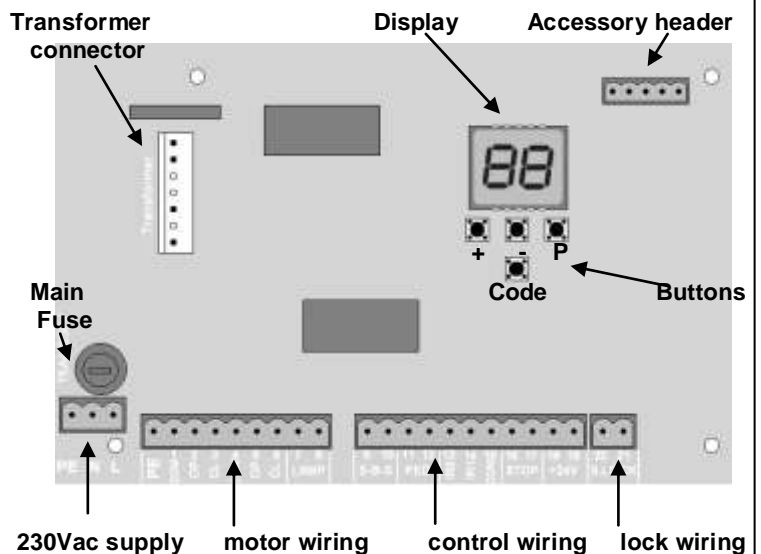
SBS input Open – stop-close-stop function. When stopped during open the gate re-closes after auto-close delay. When stopped during closing, gate waits for next command.

Ped input Same function as SBS input, but on one gate.

Safety 1 Re-opens the gate during closure. Assuming the danger is removed, the gate re-closes after normal delay. No action during opening. Delays close if active while open.

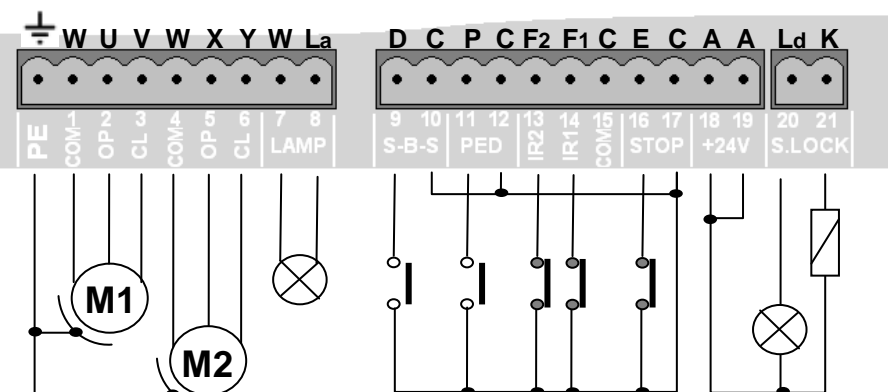
Safety 2 If activated during opening, the gate stops dead. Stays still until next command. No response while closing.

Stop During opening, stops, then re-closes after normal auto-close delay. Stops during closing.



230Vac supply motor wiring control wiring lock wiring

Motor 1	1-2-3	-	1 neutral, 2 open live, 3 close live
Motor 2	4-5-6	-	4 neutral, 5 open live, 6 close live
AC lamp	7-8	-	7 neutral, 8 lamp live during motion
Open button	9-10	-	9 input, 10 com (-ve)
Pedestrian	11-12	-	11 input, 12 com (-ve)
Safety 2	13-15	-	11 input, 12 com (-ve)
Safety 1	14-15	-	11 input, 12 com (-ve)
Stop button	16-17	-	16 input, 17 com (-ve)
DC lamp	18-20	-	18 (+24v), 20 switch to gnd
DC lock	19-21	-	19 (+24v), 21 switch to gnd



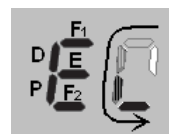
Wiring assumes motors include capacitors & limit switches

DC lamp does not need a flasher

Display

In normal running, the left digit shows the state of inputs. Black is active. You should have three black horizontal bars.

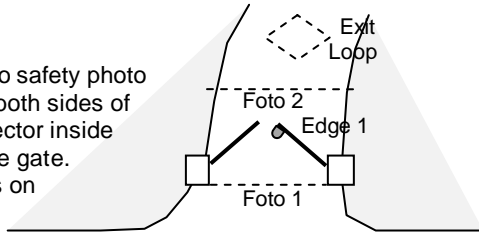
- F1 = IR1
- E = Stop
- F2 = IR2
- D = Door
- P = Ped



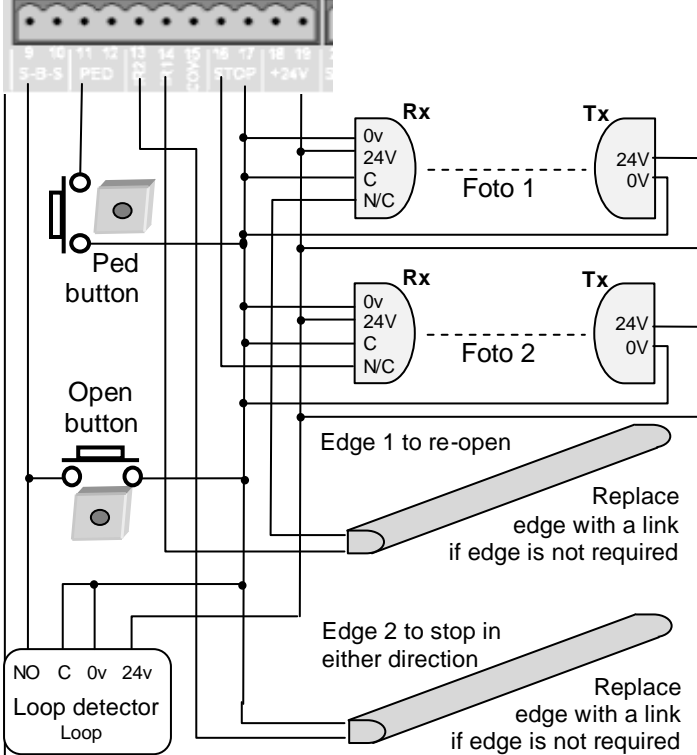
Right digit segments rotate anti-clockwise during normal running. Both digits show alpha numeric digits during programming.

Wiring examples

Scheme shows two safety photo beams protecting both sides of a gate. A loop detector inside is wired to open the gate. One safety edge is on the tip of one gate.



D C P C F₂ F₁ C E C A A



Programming remotes

To start programming, the icon must be displayed.

Adding - Press **Code** button until shows.



Now press the new remote within 2 secs. Use the button that you wish to open the gate. The display will show the location number. If it has already been saved, it will show the same number. If '60' shows the memory is full.



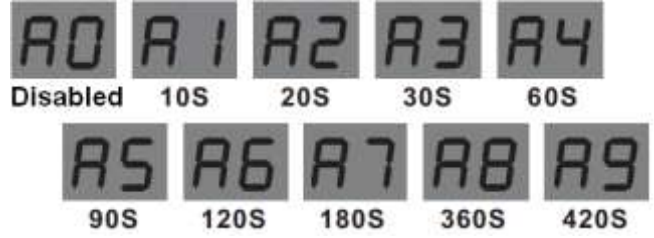
Deleting - Press and hold the **Code** for 10 secs. Double **F**'s start flashing, then change to one **F** flashing then the display reverts to the standby icon. All remotes in the memory are now deleted.



Programming

Press **P** to start programming. Parameter will show first. Either programme in the given order, or keep pressing **P** until the right parameter shows. Use **+** & **-** to set.

A - Auto-close delay. Disabled on A0. Presets A1 to A9.



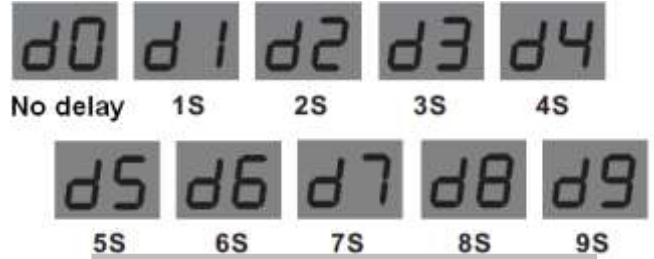
B - Select number of motors.



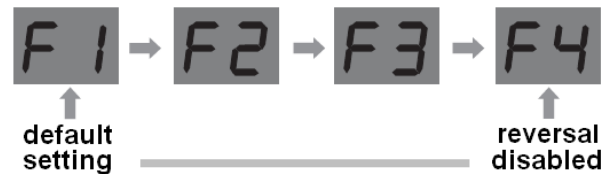
C - Enable soft stop function – Slows for last 2 secs of run



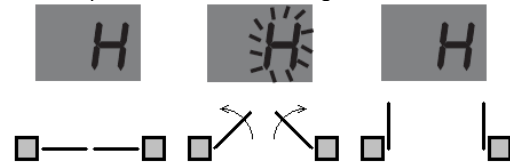
D - Interleaf delay – d0 is no delay, up to d9 gives 9secs



F - Force setting, from F1 (default) to F4 (no PSR).



H - Dynamic setting. Manually Close the gates. Press **+** to start. The **H** flashes while opening. When close limit is found, press **P** to save setting. Use remote to re-close.



Safety warnings



Automatic gates can be hazardous. It is the operators responsibility of an automatic gate to be aware of, and provide adequate warning of hazards. All users should be given a hazard awareness briefing and user training for the automatic gate.

This manual is written for automation engineers aware of the construction and accident prevention rules in force. Only qualified persons may do installation or maintenance work on this installation. Keep the gate in good working order with regular checks on the safety devices fitted.

Operators should ensure people are clear of the gate during operation. Children must not be allowed to play on or near the gate, or be allowed to operate the gate. We recommended signs both sides of the gate to warning of risk of injury to pedestrians. Do not permit public access to the gate area.