The radio panel can also be placed inside the blinker to further improve the radio range.

**External Radio Panel**

- **RESTORABLE FUSE 24V**
  - Important: If a temporary short circuit occurs, the fuse will restore itself after few seconds.

- **230V**
  - **FOR SLIDING GATES**
  - **CONTROL UNIT PANEL**
  - **RADIO**
  - **EXTERNAL**

- **Button A**
  - **Button B**
  - **Button C**
  - **Button D**

**Control Unit Components**

- **A** TOP LEVEL MENU BUTTON
- **B** LOWER LEVEL MENU BUTTON
- **C** BUTTON TO INCREASE OR CHANGE TO YES (SI)
- **D** BUTTON TO DECREASE OR CHANGE TO NO
- **F1** 230V FUSE 2A
- **F2** 24V FUSE (RESTORABLE) 0.6A
- **F3** 24V FUSE (RESTORABLE) 1.6A
- **DISPLAY** 7 SEGMENTS DISPLAY
- **M1** RADIO/AERIAL TERMINAL BLOCK
- **M2A/M2B** CONTROLS AND SAFETY DEVICES TERMINAL BLOCKS

**Parameters**

- **B** use button B to move to next parameter
- **C** use button C to INCREASE a numeric value or change NO to YES
- **D** use button D to DECREASE a numeric value or change YES to NO

To save changes and to ensure that they are not lost when power is removed, use button B to step through **SU** parameter, the press and hold button C until the display reverts to idle display.

**Buttons**

- **BUTTON A**
- **BUTTON B**
- **BUTTON C**
- **BUTTON D**

**Display Signals**

- **Opening**
- **Closing**
- **Delay time before automatic Closing**

**Display Functions**

- **Press & hold button C to SAVE changes**
- **Press button D to ABANDON changes**

**Standard Default Values**

- **SU**
- **P3** SOFT START
- **P8** Photocells test
- **P7** Motor test
- **P6** Deceleration on
- **P4** Pre blinking
- **P3** Automatic closing step by step
- **P2** Multi occupation

**Display Values**

- **Times**
  - Motor working time
  - Motor torque
  - Motor power during deceleration
  - Motor deceleration time
  - Delay time before automatic closing
  - Pedestrian opening time
  - Magnetic limit switch

**Button Functions**

- **Show stored codes**
- **New remote control code acquisition**
- **Remote control code acquisition with stop function**
- **Remote control code acquisition with pedestrian function**
- **Delete all remote control codes**

**Display Functions**

- **Press & hold button C to set defaults**

**Contact Information**

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PROGRAMMING THE RADIO

IMPORTANT: Before programming for the first time the radio receiver, delete all the recorded test codes. See function - 7 - at the bottom of this chapter.

DISPLAYING STORED CODES
- Press the button A repeatedly until the display shows - R - R
- Press button B until the display shows - R - R
- The display will now cycle through each stored code from 01 to 50.

TO ERASE A SINGLE STORED CODE
- Press and hold button D until the dot appears on the display (this means that the receiver is ready to store a new code) and simultaneously press button C to store the new code.

STORING NEW REMOTE CONTROL CODE
- Press the button A repeatedly until the display shows - R - R
- Press button B until the display shows - R - R
- Press and hold the remote control button until a dot appears on the display and simultaneously press button C to store the new code.

STORING NEW REMOTE CONTROL CODE with STOP function
- Press the button A repeatedly until the display shows - R - R
- Press button B until the display shows - R - R
- Press and hold the remote control button until a dot appears on the display and simultaneously press button C to store the new code.

DELETING ALL STORED CODES
- Press the button A repeatedly until the display shows - R - R
- Press button B until the display shows - R - R
- Press and hold button D until the display shows - R - R
- This indicates that all the codes have been erased.

PROGRAMMING THE Q60S W PARAMETERS

STORING NEW REMOTE CONTROL CODE
- Press and hold the remote control button until a dot appears on the display (this means that the receiver is ready to store a new code) and simultaneously press button C to store the new code.

STANDARD PROGRAMMING PROCESS (Method 1)

a) Give a START signal (terminal 1 and terminal 8). After an opening movement of about 240mm, the deceleration phase will start (since the control board is pre-adjusted for an opening of 2.50 m). The motor will wait about 3 seconds and after that will start again with the closing phase.
b) Give a START signal to verify which functions and times are not suitable with the installation and take note.
c) Enter the programming phase through the buttons A and B to reach the wished parameter.
d) Use the buttons C and D to change or confirm every single parameter.
e) IMPORTANT: save the changes by selecting the parameter S and pushing the button C.

Example:
Increase the motor working time by 5 seconds

With the switch on control board, ensure that the display shows:
- Press button A until the display shows - P - R
- Press button B until the display shows - N - 1
- Wait
- Press 5 times the C until the display shows - 2 - 6
- Press button B until the display shows - S - U
- Press the button C for some seconds until the display shows - R - R
- The motor working time has been increased from 21 to 26 seconds

MULTI-USER FUNCTION (method 2)

a) Press button A (steps through the top menu) until the display shows - R - S
b) Press button B (steps through the sub-menu) until the display shows - N - N
c) Give a START signal: the leaf starts opening and the display shows - P - P and the deceleration phase begins.
d) Wait until the leaf has done the 90% of the opening cycle and then give another START signal: the display shows - R - R and the closing cycle.
e) When the opening phase has been completed (OPENING LIMIT SWITCH) and the display shows - P - P, the control board has stored the opening and deceleration times and starts calculating the "stay open" (pause) time.
f) At the reaching of the desired pause time, give another START impulse. The control board has stored the "stay open" time and the gate starts the closing cycle.
g) When the closing cycle has completely finished, till the complete closure of the gate, the control unit automatically exits from the sequential programming process and all the working times have been saved.

SELF-DIAGNOSIS DISPLAY MESSAGES

Photocell's test error
- Limit switch in opening phase
- Photocell or safety rubber edge in opening phase
- Closing phase photocell beam interrupted or wiring fault
- Both opening and closing phase photocell beam interrupted or wiring fault
- Stop pressed (or open circuit between terminal 2 & 8)
- Motor problem (wiring fault, obstruction or torque setting too low)
- Limit switch in closing phase
- Pedestrian start signal (short circuit between terminal 7 & 8)
- Start signal (short circuit between terminal 1 & 8)
- Radio fob continuously transmitting
- "time and the gate starts the installation and take note.
- closing cycle.

SPECIAL FUNCTIONS

P 3 AUTOMATIC CLOSING FUNCTION
When set to YES ("SI"):
- an impulse during the opening phase will stop the motors until another impulse is received
- an impulse during the closing phase will stop and reverse the motors
When set to NO, the step-by-step operation is active:
- 1st impulse starts the opening phase
- 2nd impulse stops the opening phase
- 3rd impulse starts the closing phase

P 2 MULTI-USER FUNCTION
when set to YES ("SI"):
The control unit will not accept any command during the opening phase
TERMINAL BLOCK CONNECTIONS

All the connections must be done without power supply.

EARTH TERMINAL BLOCK CONNECTIONS

Connect the yellow/green motors cable to earth terminal A.
Connect the yellow/green network cable to earth terminal B.

TERMINAL BLOCK 2 CONNECTIONS

1-8 Start control normally open (NA) for button, key selector, radio receiver or Timer clock connection. The Start control starts the programmed running cycle.

2-8 Stop control normally closed (NC). Emergency button. When pressed the gate stops immediately. In Opening phase and Break-time: at the first impulse the gate closes. In Closing phase: at the first impulse the gate opens.
If, temporarily, the Stop contact is not used, link terminal 2 with terminal 8.

3-8 Input of one safety photocell in closing phase. Input of safety rubber edges and of safety photocell in closing phase. Input of several safety photocells in closing phase. The receiver contacts must be connected in series. Normally closed (NC). In opening phase: does not work. In closing phase: Stop, break-time for 2 seconds, opening phase again. If, temporarily, the photocell contacts are not used, link terminal 3 with terminal 9.

3-9 Input only for safety rubber edges in closing phase. The contacts must be connected in series if there is more than one safety rubber edge. Normally closed (NC). In opening phase: does not work. In closing phase: Stop, break-time for 2 seconds, opening phase again.

4-8 Input for safety photocells in opening phase (for sliding gate). Normally closed (NC). In opening phase: Stops and changes direction for 3 seconds In closing phase: does not work.
If you also want to connect the safety rubber edges, you must connect in series their contacts with the photocell ones. If, temporarily, the photocell contacts are not used, link terminal 4 with terminal 9.

4-9 Input safety rubber edges in opening phase (for sliding gate). Normally closed (NC). In opening phase: Stops and changes direction for 3 seconds In closing phase: does not work. Using more than one safety rubber edges, the contacts must be connected in series.

5-8 Limit switch input in closing phase.

6-8 Limit switch input in opening phase.

7-8 Pedestrian start input. Normally open (NA). Only one leaf start to open.

8-10 Output for photocell receiver power supply. Output for extra 24V dc accessories power supply. With all Standard accessories included 100 mA are still available for extra accessories.

9-10 Output for photocell transmitter power supply.

11-12 Blinker intermittent output. 24V 20W max.

TERMINAL BLOCK 3 CONNECTIONS

13-14-15 Motor M1- output. The motor is assembled to be fixed on the right side of the gate (looking from inside). If you need to fix it on the left side of the gate and the motor has electromechanical limit switch system, you have to swap motor wires 13 with 15 and limit switch wires 5 with 6. Capacitor between plugs 13 and 15.
If you need to fix it on the left side of the gate and the motor has magnetic limit switch system, you have to swap motor wires 13 with 15 and keep unchanged the limit switch wires. PLEASE PAY ATTENTION TO REVERSE THE MAGNET SUPPORTS. Capacitor between plugs 13 and 15.

TERMINAL BLOCK 4 CONNECTIONS

19-20 Power input 230-240 Vac - 50/60 Hz. (19=Neutral, 20=Phase)
1 START
Terminal Block 2

2 PEDESTRIAN START
Terminal Block 2

3 PERMANENT START COMMAND WITH TIMER
Terminal Block 2

4 EMERGENCY STOP BUTTON
Terminal Block 2

5 MOTOR AND LIMIT SWITCH ELECTROMECHANICAL
Terminal Block 2

N.B.: Link terminals 2 and 8 if an emergency STOP button is NOT USED
Terminal Block 2

WIRING SCHEME FOR THE Q60S CONTROL UNIT

1 START
Terminal Block 2

2 PEDESTRIAN START
Terminal Block 2

3 PERMANENT START COMMAND WITH TIMER
Terminal Block 2

4 EMERGENCY STOP BUTTON
Terminal Block 2

5 MOTOR AND LIMIT SWITCH ELECTROMECHANICAL
Terminal Block 2

IF IT IS MOUNTED ON THE LEFT-HAND SIDE (inside view)
TO INVERT WIRE 13 WITH WIRE 15 END WIRE 5 WITH WIRE 6
Terminal Block 2
WIRING SCHEME FOR MOTOR ON THE LEFT SIDE AND GATE CLOSING RIGHT

MOTOR WIRING

TERMINAL BLOCK 2

TERMINAL BLOCK 3

MAGNETIC LIMIT SWITCHES FIXING

LOW bracket for magnetic limit on the LEFT SIDE of the gate (closing function)

HIGH bracket for magnetic limit on the RIGHT SIDE of the gate (opening function)

MOTOR AND LIMIT SWITCH WIRING IN CASE OF USE WITH ROAD BARRIER

TERMINAL BLOCK 2

TERMINAL BLOCK 3

N.B.: TO REVERSE THE OPENING SIDE PLEASE SEE THE BARRIER INSTRUCTION MANUAL

CONNECTING PHOTOCELL IN CLOSING PHASE

PHOTOCELLS CONNECTIONS

8 = Power supply + PHOTO RX
9 = Power supply + PHOTO TX
10 = Power supply - COM. PHOTO TX/RX
3 - 8 = Connections photocells

3 - 9: Link terminals 3 and 9 if the photocells are not used in the closing phase.

CONNECTING PHOTOCELL IN OPENING PHASE

PHOTOCELLS CONNECTIONS

8 = Power supply + PHOTO RX
9 = Power supply + PHOTO TX
10 = Power supply - COM. PHOTO TX/RX
4 - 8 = Connections photocells

4 - 9: Link terminals 4 and 9 if the photocells are not used in the opening phase.