

# 2 Function + Keypad with Standard Transmitter

## 92 Series - FET System

### SYSTEM PART NUMBER

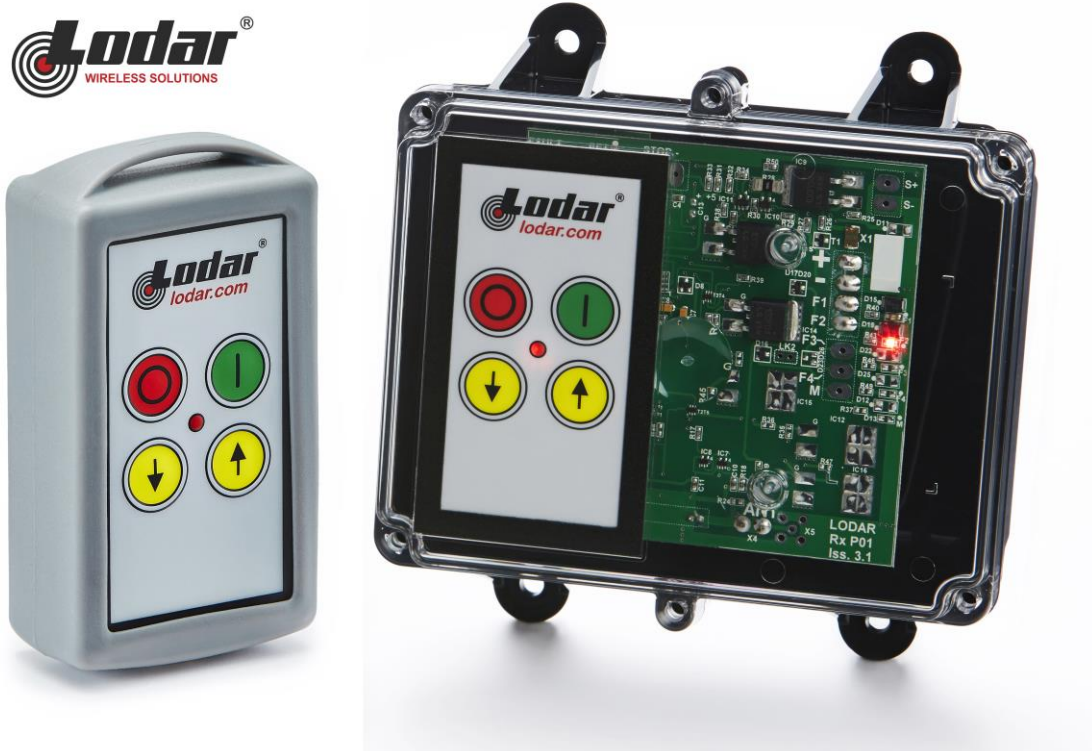
**92100K** 2 Function Receiver + Keypad + 2 Function Standard Transmitter

### REPLACEMENT TRANSMITTER

**92102TX** 2 Function Standard Transmitter

### CONTENTS

1 x Receiver + Keypad  
1 x Standard Transmitter  
1 x Lanyard  
1 x LoCover  
1 x Instructions



## STANDARD TRANSMITTER SPECIFICATION

### SWITCH

Type Tactile Dome

### BATTERY

Type 9V Alkaline Manganese (GP 1604A – JIS 6LF22 – IEC 6LF22 – Eveready 522 – Duracell MN1604)

### CURRENT DRAW

Quiescent 15 micro amps  
Operating 20 milliamps

### PROTECTION

IP Rating 55  
Registration codes Over 16 million

### PERFORMANCE

Temp Range -10° C to + 40° C (13° F to + 104° F)  
Range Nominal 60 metres (200 ft) from the Receiver, when driving a momentary output without signal drop out  
Transmitted power 1 mW Typical

### COMPLIANCE

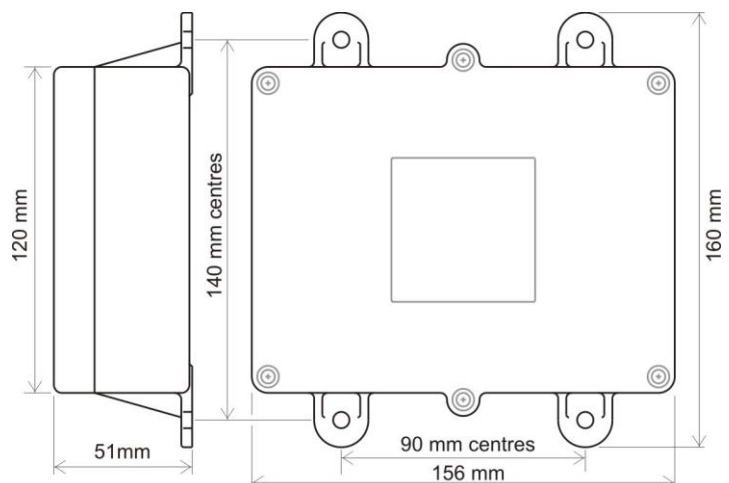
EMC Exceeds ETSI 300 220. Compliant E11 10R-037601  
Modulation FM  
Frequencies 418.00 MHz F1D USA (optional UK)  
433.92 MHz F1D World wide (optional USA)

## RECEIVER SPECIFICATION

|  |          |   |
|--|----------|---|
| <b>KEYPAD</b>                            |          | Works independently from the Transmitter  |
| Back up Control                          |          | Security coding available as an option  |
| <b>SWITCH TYPE</b>                       |          |   |
| Output Switching                         |          | MOS Field Effect Transistor (P Channel Power MOSFET)  |
| <b>SUPPLY VOLTS</b>                      |          |   |
| Nominal                                  |          | 12/24 Volts DC  |
| Absolute Maximum                         |          | 40 Volts DC   |
| Minimum                                  |          | 8 Volts DC  |
| Output Switch Supply                     |          | Internal 12/24 Volts  |
| <b>AMPS</b>                              |          |   |
| FET Rating                               |          | 15 Amps   |
| System Rating                            |          | 15 Amps   |
| Quiescent Current                        |          | 25 mA on Standby (Not SET)  |
| Overload Protection                      |          | 15 Amps (Auto Shutdown)   |
| <b>AERIAL</b>                            |          |   |
| Internal Antenna                         | Yes      | Supplied and fitted   |
| External Antenna                         | Optional | See Accessories.  |
| <b>OUTPUTS</b>                           |          |   |
| Master Function                          | No       |   |
| Master (Secondary)                       | 1        | Continuous. Not all models, see Build Specification Table.  |
| <b>CONFIGURATION</b>                     |          |   |
| RS232 Programming to users' requirements | Yes      | Not all models, see Build Specification Table. For programming interlocks, push/push latch, parallel master inhibit, timeout, channel timeout delay, master on delay, radio button de-latching and output allocation. |
| <b>PERFORMANCE</b>                       |          |   |
| Simultaneous Outputs                     | Yes      | With horizontal interlocks (Interlocks are programmable – see CONFIGURATION above)  |
| Instant TX response                      | Yes      | No perceivable delay between TX operation and RX action   |
| <b>DIAGNOSTICS</b>                       |          |   |
| LED's                                    | Yes      | Confirm 5 Volts, SET, Fault and all Outputs.  |
| <b>PROTECTION</b>                        |          |   |
| ESR Safety                               | Yes      | See ESR Safety document.  |
| Back EMF                                 | Yes      | Diode protected on all outputs  |
| Registration codes                       | Yes      | Over 16 million   |
| STOP Connection                          | Yes      | Internal Emergency Stop Connection. Not all models, see Build Specification Table.  |
| <b>WIRING</b>                            |          |   |
| Wiring Loom                              | Yes      | 3 metres (10ft) supplied and fitted   |
| Cable Gland                              | Yes      | Supplied and fitted   |
| Connections                              |          | Screw terminal into plug and socket on PCB, for easy "swap out"   |

## ENCLOSURE

|           |  |
|-----------|--|
| Weight    | 0.3 lbs (335gms)                                       |
| Lid       | Clear PVC - to view LEDs                               |
| Base      | Black PVC  |
| Breather  | Gortex fitted in base                                  |
| Mounting  | 4 external lugs  |
| Fixings   | 5mm (3/16") not supplied                               |
| IP Rating | Performs to IP67 standard (0.5 metre water for 1 hour) |



**ACCESSORIES** 9861, 9862, 9863 and 9869 – External Antenna with cable.

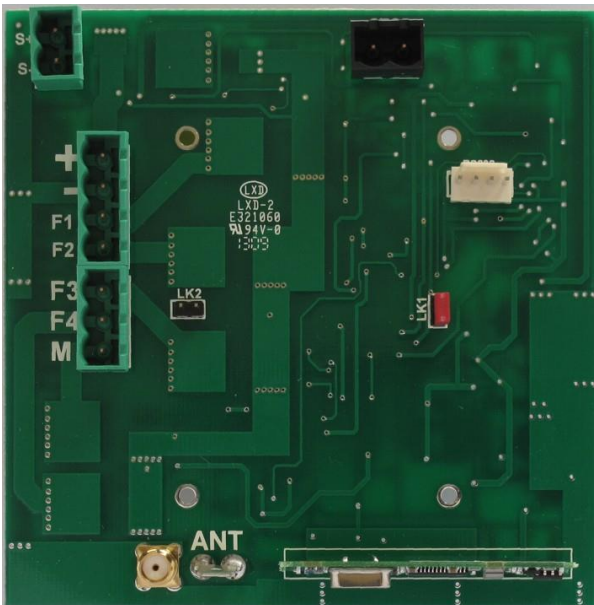
| 92 Series  |           |                               | 92 0 00 | 92 0 02 | 92 0 04 | 92 1 00 | 92 1 02 | 92 1 04 |
|--|-----------|-------------------------------|---------|---------|---------|---------|---------|---------|
| BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE |           |                               |         |         |         |         |         |         |
| Ident  | Legend    | Connection                    |         |         |         |         |         |         |
|  | + - F1 F2 | Positive, Negative, F1 and F2 | S       | S       | S       | S       | S       | S       |
|  | F3 F4 M   | F3, F4, and Master            |         | M       | S       |         | M       | S       |
|  | ST -      | STOP and -                    |         | S       | S       |         | S       | S       |
|  | S+ S-     | S+ S-                         |         | S       | S       |         | S       | S       |
|  | ANT       | Internal Antenna              | S       | S       | S       | S       | S       | S       |
|  | SMA       | Connector (external antenna)  |         | S       | S       |         | S       | S       |
| LK1  | P         | Master - Parallel             |         | C       | C       |         | C       | C       |
| LK2  | C         | Master – Continuous           |         | C       | C       |         | C       | C       |
| LK3  | RS232     | RS232                         |         | S       | S       |         | S       | S       |
|  |           | 3 metres 4 core               | S       |         |         | S       |         |         |
|  |           | 3 metres 7 core               |         | S       | S       |         | S       | S       |
|  |           | 9801 Lo-Cover                 |         |         |         | S       | S       | S       |

S = Standard. M = Standard but Master only connected. C = Customer configured (see “Factory Settings”).

- + Positive 12/24 Volt supply
- Negative 0 Volts
- F1, F2, F3 & F4 Outputs to F1 through F4
- M Master Output
  
- STOP - STOP, when grounded shuts down the Receiver
- S+ S- Master Secondary for Safety solenoid connections etc.
- ANT Blade connector for internal antenna
- SMA Aerial connection for optional external antenna (internal antenna must be removed)
  
- LK1 Jumper fitted to this link for continuous Master
- LK2 Jumper fitted to this link for parallel Master
- Factory Settings 418MHz configured Parallel, 433.92MHz configured Continuous
- LK3 RS232 for interface to access special programmes  
Also for connection to RS232 modules

### Photo of PCB

Connector Side



Component Side

