

10 Function with IP Transmitter

92 Series – FET System

SYSTEM PART NUMBER

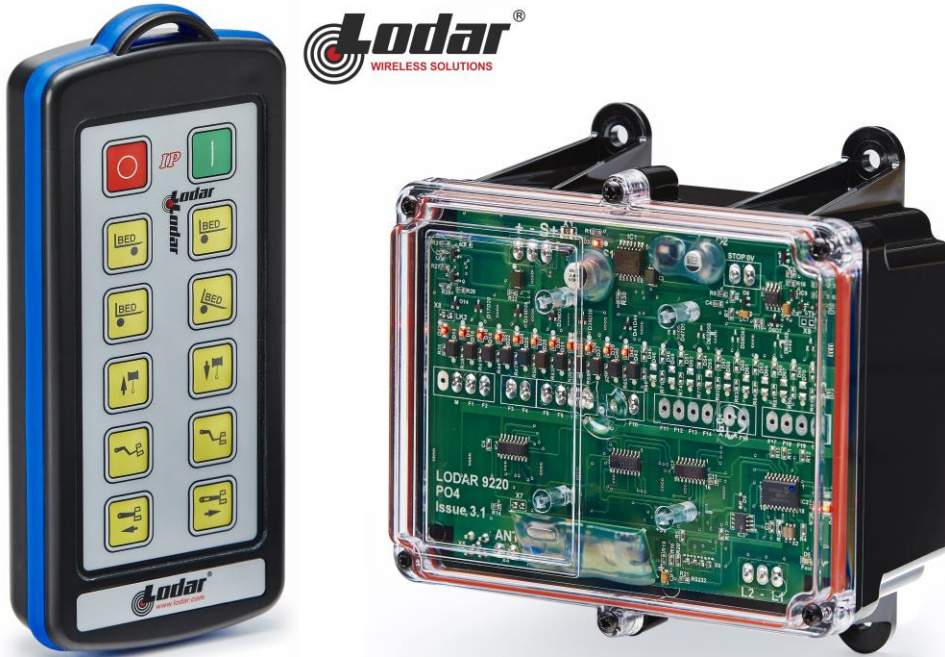
92210 10 Function Receiver with Master + 10 Function IP Transmitter

REPLACEMENT TRANSMITTER

92210TX 10 Function IP Transmitter

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IP TRANSMITTER SPECIFICATION

SWITCH - Type Tactile Dome on PCB Keypad

BATTERY - Type 4 x AAA Alkaline Manganese in holder (6 Volts)

INDICATOR

Type 1 x Red LED
Off Transmitter OFF (The STOP Button has been pressed and released)
Slow flash Transmitter ON and ready for use (The SET Button has been pressed and released)
On Transmitting (A STOP, SET or Function Button is being pressed)
Fast flash Transmitting – Indication that the battery will need replacing soon

CURRENT DRAW

Quiescent 15 micro amps
Operating 25 milliamps

PROTECTION

Reverse polarity Protected
IP Rating 67
Registration codes Over 16 million

PERFORMANCE

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

COMPLIANCE

EMC 2004/104/EEC 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

SWITCH TYPE

Output Switching MOS Field Effect Transistor (P Channel Power MOSFET)

SUPPLY VOLTS

Nominal 12/24 Volts DC
 Absolute Maximum 40 Volts DC
 Minimum 8 Volts DC
 Output Switch Supply Internal 12/24 Volts

AMPS

FET Rating 15 Amps
 System Rating 15 Amps
 Quiescent Current 25 mA on Standby (Not SET)
 Overload Protection 15 Amps (Auto Shutdown)

AERIAL

Internal Antenna Yes Supplied and fitted
 External Antenna Optional See Accessories.

OUTPUTS

Master 1 Can be Parallel or Continuous
 Function 10
 Master (Secondary) 1 Continuous

CONFIGURATION

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.

PERFORMANCE

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

DIAGNOSTICS

LED's Yes Confirm 5 Volts, SET, Fault and all Outputs.

PROTECTION

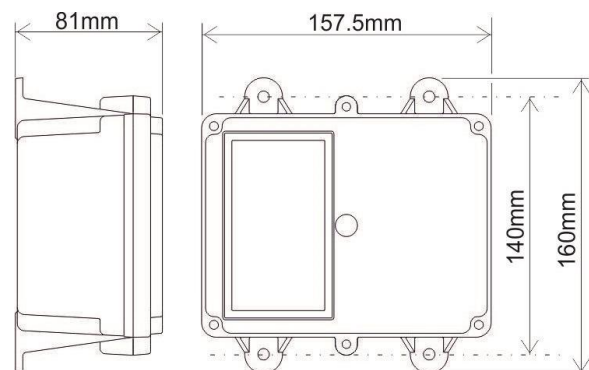
ESR Safety Yes See ESR Safety document.
 Back EMF Yes Diode protected on all outputs
 Registration codes Over 16 million
 STOP Connection Yes Internal Emergency Stop Connection

WIRING

Wiring Loom No Can be supplied as an option
 Cable Gland Yes Supplied – fitted by customer
 Connections Screw terminal into plug and socket on PCB, for easy "swap out"

ENCLOSURE

Weight 0.5 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)



92 Series			92 2 10	92 2 16	92 2 20
BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE					
Ident	Legend	Connection			
	+ -	Positive, Negative,	S	S	S
	M, F1, F2, F3	Master F1, F2 and F3	S	S	S
	F4, F5, F6, F7	F4, F5, F6 & F7	S	S	S
	F8, F9 & F10	F8, F9 & F10	S	S	S
	F11, F12, F13, F14	F11, F12, F13 & F14		S	S
	F15, F16	F15 & F16		S	S
	F17, F18, F19, F20	F17, F18, F19 and F20			S
	S+, S-	Safety Solenoid S+ and S-	S	S	S
	STOP, 0Volts	STOP connections	S	S	S
	ANT	Internal Antenna	S	S	S
		SMA (external antenna)	S	S	S
LK1	LK1	Master - Parallel	C	C	C
LK2	LK2	Master - Continuous	C	C	C
	RS232	RS232	S	S	S
		9863 Antenna with 3 metre cable	S	S	S

S = Standard. C = Customer configured (see "Factory Settings").

+	Positive 12/24 Volt supply
-	Negative 0 Volts
F1 to F20	Outputs to F1 through F20
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	Master Selection by Jumper (BA = Continuous & AC = Parallel)
LK2	Connected when using Parallel Master, connects safety circuits
Factory Settings	418MHz configured Parallel, 433.92MHz configured Continuous
RS232	RS232 for Wired Remote and interface to access special programmes

RECEIVER PCB – Component Side

This is viewable through the clear lid of the Receiver.

LED's are visible for confirmation that the system is operating correctly.

These are: -

+5V	Power Supply OK
SET	Receiver operational
Fault	Flashes for 20 seconds At "power up" Tx coding window open
Fault	ON = Current overload
LED's F1 to F20 and M	ON when there is an output