2 Function + Keypad with Mini Transmitter

SYSTEM PART NUMBER

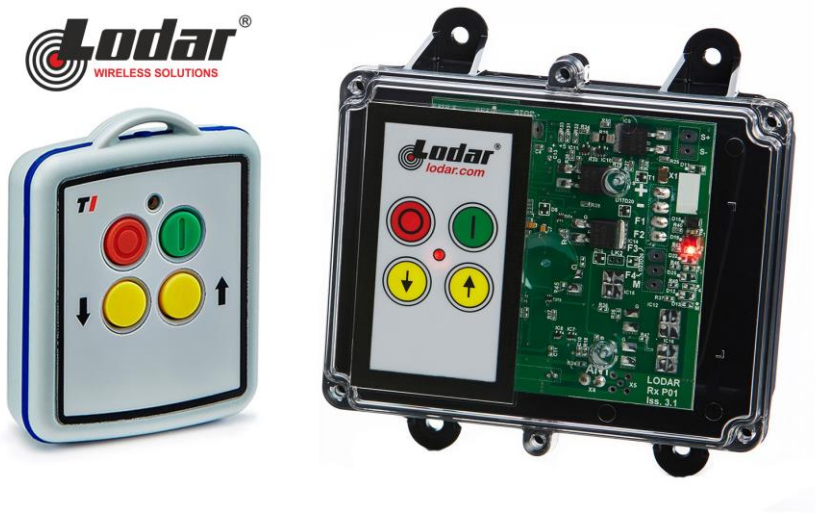
92000K 2 Function Receiver + Keypad + 2 Function Mini Transmitter. No Master

REPLACEMENT TRANSMITTER

9TX002 2 Function Mini Transmitter – with legacy software

CONTENTS

1 x Receiver + Keypad
1 x Mini Transmitter
1 x Lanyard
1 x Instructions



TRANSMITTER SPECIFICATION

ENCLOSURE

Material	ABS
Switch Type	Silicone Rubber keypad with carbon pill
Functions	2
Identification	Subsurface printed transmitter label

RF

Modulation	2-GFSK. Gaussian Frequency Shift Keying
Frequency	433.050 MHz to 434.790 MHz
Channels	1
Channel Selection	Fixed
Technology	Hand-held Transmitter
Temperature Range	-10° C to + 40° C (13° F to + 104° F)
Range	45m (150ft)
Registration Codes	Over 16 million
Aerial	Internal – printed on PCB

POWER

Batteries	2 x AAA – 3 volts.
Quiescent Current	5µA
Current Standby (SET)	2mA
Current Transmitting	30mA
RF Radiated Power	0dBm

SAFETY & PROTECTION

IP Rating	67
Reverse Polarity Protection	Yes – MOSFET

INFORMATION

Transmit Indication	LED on when TX operated
Fault Codes	LED flashes fault code
Low Battery	LED flashes when TX operated
Legacy Software	Software update to work with 9 Series

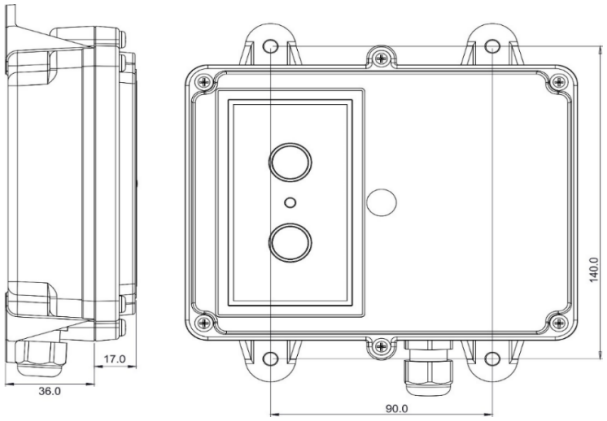
COMPLIANCE

See compliance documentation

RECEIVER SPECIFICATION

KEYPAD	Works independently from the Transmitter	
Back up Control	Security coding available as an option	
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	No	
Function	2	
CONFIGURATION		
RS232 Programming	Yes	Not all models, see Build Specification Table. For programming interlocks, push/push latch, to user's requirements 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	Yes	Over 16 million
STOP Connection	Yes	Internal Emergency Stop Connection. Not all models, see Build Specification Table.
WIRING		
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	IP66

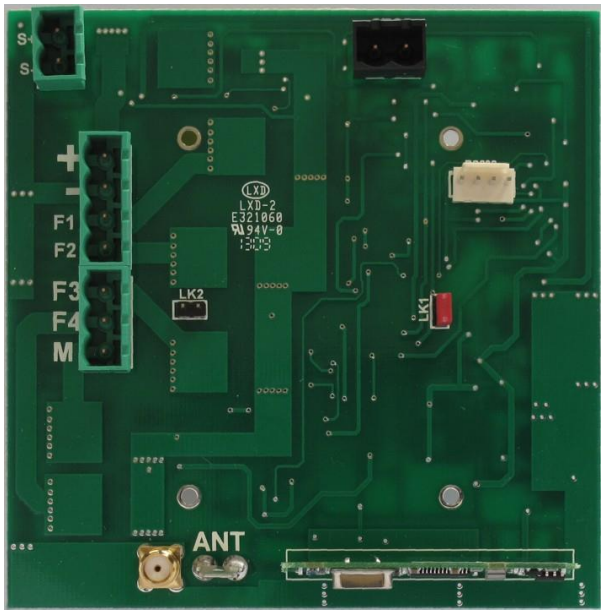
92 Series BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE			92000K	92002	92004	92100	92102	92104
Ident	Legend	Connection						
	+ - F1 F2	Positive, Negative, F1 and F2	S	S	S	S	S	S
	F3 F4 M	F3, F4, and Master		M	S		M	S
	ST -	STOP and -		S	S		S	S
	S+ S-	S+ S-		S	S		S	S
	ANT	Internal Antenna	S	S	S	S	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 4 Function

Connector Side



Component Side