2 Function with Mini Transmitter

SYSTEM PART NUMBER

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

CONTENTS

1 x Receiver
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REPLACEMENT TRANSMITTER

90002TX - 2 Function Mini Transmitter

REPLACEMENT RECEIVER

9200RX - 2 Function Standard Receiver – No Master

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 902.025 MHz– 927.975 MHz
Channels	32
Channel Selection	Fixed Channel Hopping
Technology	Hand-held Transmitter
Temperature Range	--10° C to + 40° C (13° F to + 104° F). Use Lithium for lower temperatures
Range	45m (150ft)
Registration Codes	Over 16 million
Aerial	Internal – printed on PCB
Transmitted power	< 0.4mW Typical

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	65
Reverse Polarity Protection	Proteted

INDICATOR

Type	1 x Red LED
Off	Transmitter is OFF and in standby mode
Slow flash	Transmitter is 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

COMPLIANCE

FCC	FCC CFR 47-part 15.231 FCC CFR 47-part 15.109 433.050MHz to 434.790MHz FCC CFR 47-part 15.249 FCC CFR 47-part 15.109 902.025MHz to 927.975MHz
IC	ISED RSS-210 Issue 9 ISED RSS-GEN Issue 4 ICES-003 Issue 6. 433.050MHz to 434.790MHz ISED RSS-210 Issue 9 ISED RSS-GEN Issue 5 ICES-003 Issue 6. 902.025MHz to 927.975MHz
RoHS	Directive 2011/65/EU

RECEIVER SPECIFICATION

ELECTRICAL

Voltage Nominal	12/24V DC
Voltage Min/Max	8 to 36V DC
Switch Type	MOSFET (Positive Switching)

RF

Modulation	2-GFSK. Gaussian Frequency Shift Keying
Frequency	433.050 MHz to 434.790 MHz 902.025 MHz– 927.975 MHz
Channels	32
Channel Selection	Fixed Channel hopping
Technology	Fixed Receiver
Temperature Range	-40° C to + 70° C (-40° F to + 158° F)
Range	60m (200ft)

CURRENT CAPACITY

FET Rating	10A	
System Rating	10A	
Quiescent Current	31mA 12V/ 17mA 24V on Standby (Not SET)	
Overload Protection	10A	(Auto Shutdown)

AERIAL

Internal Antenna	Yes	Supplied and fitted
External Antenna	Optional	AC9860/ AC9861/ AC9862/ AC9863 & AC9869 – order separately

OUTPUTS

Master	No	
Function	2	Supply to Receiver is switched

CONFIGURATION

RS232 Programming to users' requirements	Yes	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	Programable (Modify through configuration)
Instant TX response	Yes	Programable (Modify through configuration)

DIAGNOSTICS

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

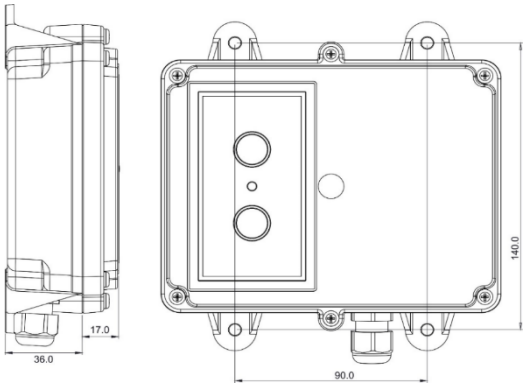
PROTECTION

Back EMF	Yes	Diode protection on all outputs
Registration codes	Yes	Over 16 million
STOP Connection	Yes	Internal Emergency Stop Connection

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 PC/FR V0 and UV stabilised
Base	Black PC V0 and UV stabilised
Breather	Gortex fitted in base
Mounting	4 external lugs
Fixings	5mm (3/16") not supplied
IP Rating	IP55

92 Series			9200RX	9202RX	9204RX
BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE					
Ident	Legend	Connection			
	+ - F1 F2	Positive, Negative, F1 and F2	S	S	S
	F3 F4 M	F3, F4, and Master		M	S
	ST -	STOP and -		S	S
	S+ S-	S+ S-		S	S
	ANT	Internal Antenna	S	S	S
	SMA	Connector (external antenna)		S	S
LK1	P	Master - Parallel		C	C
LK2	C	Master – Continuous		C	C
LK3	RS232	RS232		S	S
		3 metres 4 core	S		
		3 metres 7 core		S	S
		9801 Lo-Cover			

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

+	Positive 8-36V supply
-	Negative 0 Volts
F1 to 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	Master Selection by Jumper (Parallel)
LK2	Master Selection by Jumper (Continuous)
Factory Settings	418/915MHz configured Parallel, 433.92MHz configured Continuous
RS232	RS232 for Wired Remote and interface to access special programmes

COMPLIANCE

REG 10	EC Type-approval mark E11 037601 EC Type-approval No: e11/72/245*2009/19*7601*00
FCC	FCC CFR 47 Part 15.109 433.050MHz to 434.790MHz FCC CFR 47 Part 15.109 902.025MHz to 927.975MHz

IC	ICES-003 Issue 6. 433.050MHz to 434.790MHz ICES-003 Issue 6. 902.025MHz to 927.975MHz
CE	RED Directive ETSI EN 300 220-2 v3.2. ETSI EN 300 220-1 v3.1.1. ETSI EN 301 489-17 V3.1.1, ETSI EN 301 489-1 V2.1.1 433.050MHz to 434.790MHz
Australia/NZ	ETSI EN 300 220-2 v3.2.1 ETSI EN 301 489-1 V2.1.1 433.050MHz to 434.790MHz 915.025MHz to 927.975MHz
RoHS	Directive 2011/65/EU