

# 4 Function with Mini Transmitter

## SYSTEM PART NUMBER

**92004**

4 Function Receiver with Master + 4 Function Mini Transmitter

## CONTENTS

1 x Receiver  
 1 x Mini Transmitter  
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## REPLACEMENT TRANSMITTER

**90004TX** - 2 Function Mini Transmitter

## REPLACEMENT RECEIVER

**9204RX** - 2 Function Standard

## TRANSMITTER SPECIFICATION

### ENCLOSURE

Material ABS  
 Switch Type Silicone Rubber keypad with carbon pill  
 Functions 4  
 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	Yes	
Function	4	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.
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### 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.
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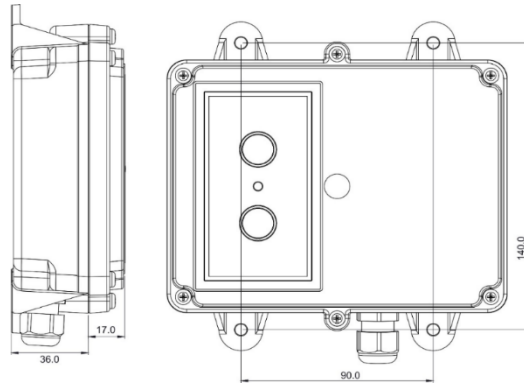
### PROTECTION

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	Yes	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

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

<b>92 Series</b>			<b>9200RX</b>	<b>9202RX</b>	<b>9204RX</b>
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