

# 18-20 Function Receiver

## RECEIVER PART NUMBER

**9220RX**      18-20 Function Receiver, with Master

<u>CONTENTS</u>
1 x Receiver
1 x Instructions



**Compatible Transmitter**  
IP                      92220TX

## 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 + 80° C (-40° F to + 176° 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                      Parallel or Continuous  
Function                                    20                      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.

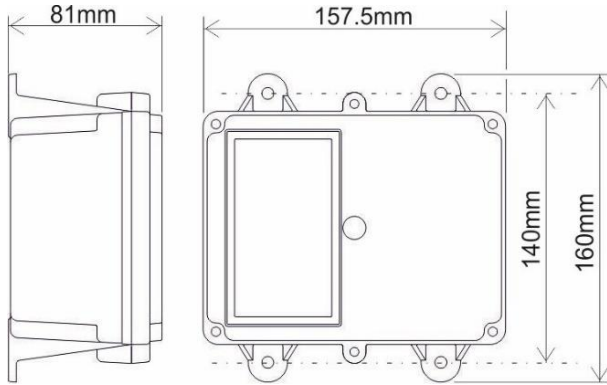
**PROTECTION**

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

**WIRING**

Wiring Loom	No	Upon Request
Cable Gland Connections	Yes	Supplied (Not fitted) Screw terminal into plug and socket on PCB, for easy “swap out”

**ENCLOSURE**



Weight	0.5 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			9210RX
BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE			
Ident	Legend	Connection	
	+ -	Positive, Negative,	S
	M, F1, F2, F3	Master F1, F2 and F3	S
	F4, F5, F6, F7	F4, F5, F6 & F7	S
	F8, F9 & F10	F8, F9 & F10	S
	F11, F12, F13 & F14	F11, F12, F13 & F14	S
	F15 & F16	F15 & F16	S
	F17, F18, F19 & F20	F17, F18, F19 & F20	S
	S+, S-	Safety Solenoid S+ and S-	S
	STOP, 0V	STOP connections	S
X4	ANT	Internal Antenna	S
X5		SMA (external antenna)	S
LK1	LK1	Master - Parallel	C
LK2	LK2	Master - Continuous	C
	RS232	RS232	S

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

+	Positive 8-36V supply
-	Negative 0 Volts
F1 to F10	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 (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