

# 6 Function + Keypad with IP Transmitter – Narrow Band

## 93 Series - FET System

### SYSTEM PART NUMBER

**93206K** 6 Function Receiver + Keypad with Master + 6 Function IP Narrow Band Transmitter

### REPLACEMENT TRANSMITTERS

**93206TX** 6 Function IP Narrow Band Transmitter



### CONTENTS

1 x Receiver + Keypad  
1 x IP Transmitter  
1 x Lanyard  
1 x LoCover  
1 x Instructions

### 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 300 metres (1000 ft) from the Receiver, when driving a momentary output without signal drop out  
Transmitted power 10mW Typical

#### COMPLIANCE

EMC 2004/104/EEC Exceeds ETSI 300 220 Compliant E11 10R-037601  
Modulation FM  
Frequencies 434 MHz Band, 15 Frequencies

## 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                                 6  
 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

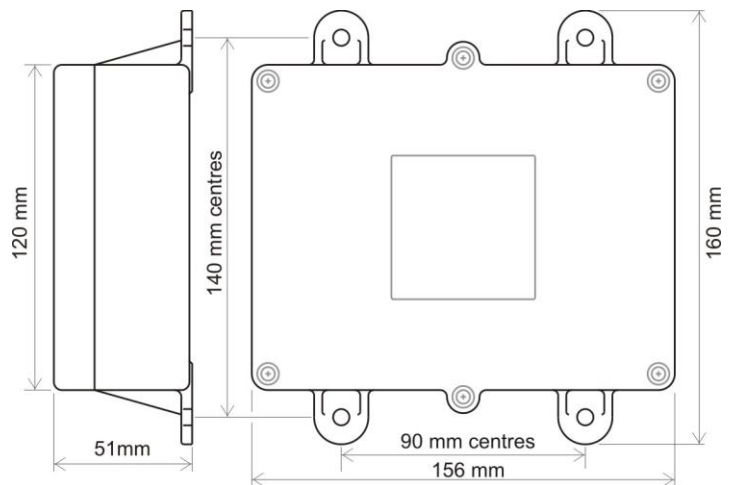
ESR Safety                                 Yes      See ESR Safety document.  
 Back EMF                                 Yes      Diode protected on all outputs  
 Registration codes                      Over 16 million  
 STOP Connection                        Yes      Internal Emergency Stop Connection

### WIRING

Wiring Loom                                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                                  Performs to IP67 standard  
     (0.5 metre water for 1 hour)



### ACCESSORIES

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

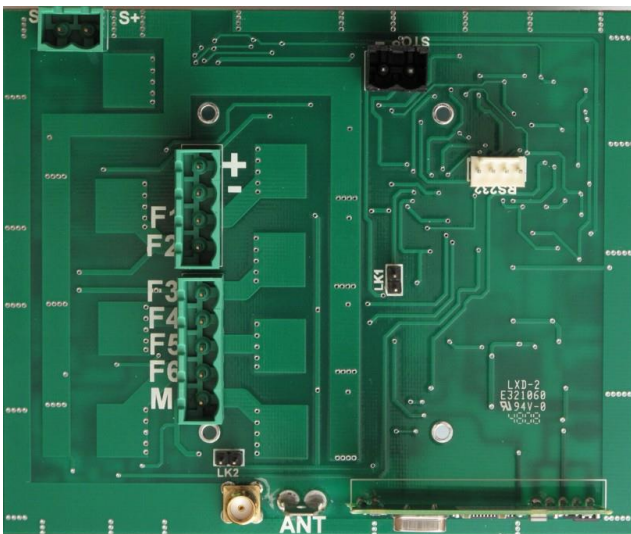
93 Series			93 2 06	93 2 07
BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE				
Ident	Legend	Connection		
	+ - F1 F2	Positive, Negative, F1 and F2	S	S
	F3 F4 F5 F6 M	F3, F4, F5, F6 and Master	S	S
	ST -	STOP and -	S	S
	S+ S-	S+ S-	S	S
	ANT	Internal Antenna	S	S
X5		SMA Connector (external antenna)	S	S
LK1	P	Master - Parallel	C	F7
LK2	C	Master – Continuous	C	
LK3	RS232	RS232	S	S
		3 metres 2 core	S	S
		3 metres 7 core	S	S

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

- + Positive 12/24 Volt supply
- Negative 0 Volts
- F1, F2, F3, F4, F5 & F6 Outputs to F1 through F6
- 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

### PCB – Not to scale

Connector Side



Component Side

