

96200 – AC 2 Function & IP Transmitter

96 Series – AC Relay System (No Master)

SYSTEM PART NUMBER

96202 2 Function Receiver + 2 Function IP Transmitter

REPLACEMENT TRANSMITTER

92202TX 2 Function IP Transmitter

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Transmitter model shown - 92204TX

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 battery will need replacing soon

CURRENT DRAW

Quiescent 15 micro amps
Operating 20 milliamps

PROTECTION

Reverse polarity Protected
IP Rating 55
Registration codes Over 16 million

PERFORMANCE

Temp Range -10° C to + 40° C (13° F to + 104° F)
Range Nominal as supplied 60 metres (200 ft.) from the Receiver, when driving a momentary output without signal drop out
Transmitted power 1 mW Typical

COMPLIANCE

| | | |
|-------------|----------------------------------|--|
| EMC | Exceeds ETSI 300 220. | Compliant E11 10R-037601 |
| Modulation | FM | |
| Frequencies | 418.00 MHz F1D 433.92 MHz F1D | USA (optional UK) World wide (optional USA) |

RECEIVER SPECIFICATION

SWITCH TYPE

| | |
|------------------------|--|
| Output Switching | HF118F Miniature High Power Relay |
| Max. Switching Current | 10 amps at 250VAC |
| Max. Switching Power | 2500VA |
| Max. Switching Volts | 250 VAC Nominal |
| Min. Switching Volts | 48 VAC (below this the Safety Circuits will switch off the Receiver) |

SUPPLY VOLTS

| | |
|---------|------------|
| Nominal | 90/264 VAC |
|---------|------------|

AMPS

| | |
|-------------------|----------------------------|
| Quiescent Current | 25 mA on Standby (Not SET) |
|-------------------|----------------------------|

AERIAL

| | | |
|------------------|----------|---|
| Internal Antenna | Yes | Supplied and fitted |
| External Antenna | Optional | Receiver <u>must</u> be ordered with SMA connector (see Accessories Part 9010). |

OUTPUTS

| | |
|------------------|----|
| Master Functions | No |
| | 2 |

CONFIGURATION

| | | |
|-------------------|----------|---|
| RS232 programming | Optional | Receiver <u>must</u> be ordered with RS232 connector (see Accessories Part 9011) for programming to user requirements; interlocks, push/push latch, parallel master inhibit, timeout, channel timeout delay, master output delay etc. |
|-------------------|----------|---|

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

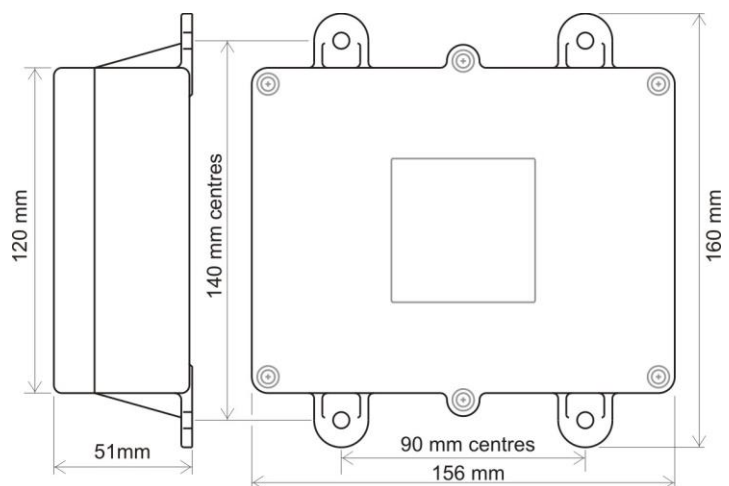
| | | |
|--------------------|----------|--|
| ESR Safety | Yes | See ESR Safety document. |
| Back EMF | Yes | Diode protected on all outputs |
| Registration codes | Yes | Over 16 million |
| STOP Connection | Optional | External Emergency STOP connector (see Accessories Part 9011). |

WIRING

| | | |
|-------------|-----|---|
| Wiring Loom | No | |
| 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 | Black PVC |
| 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

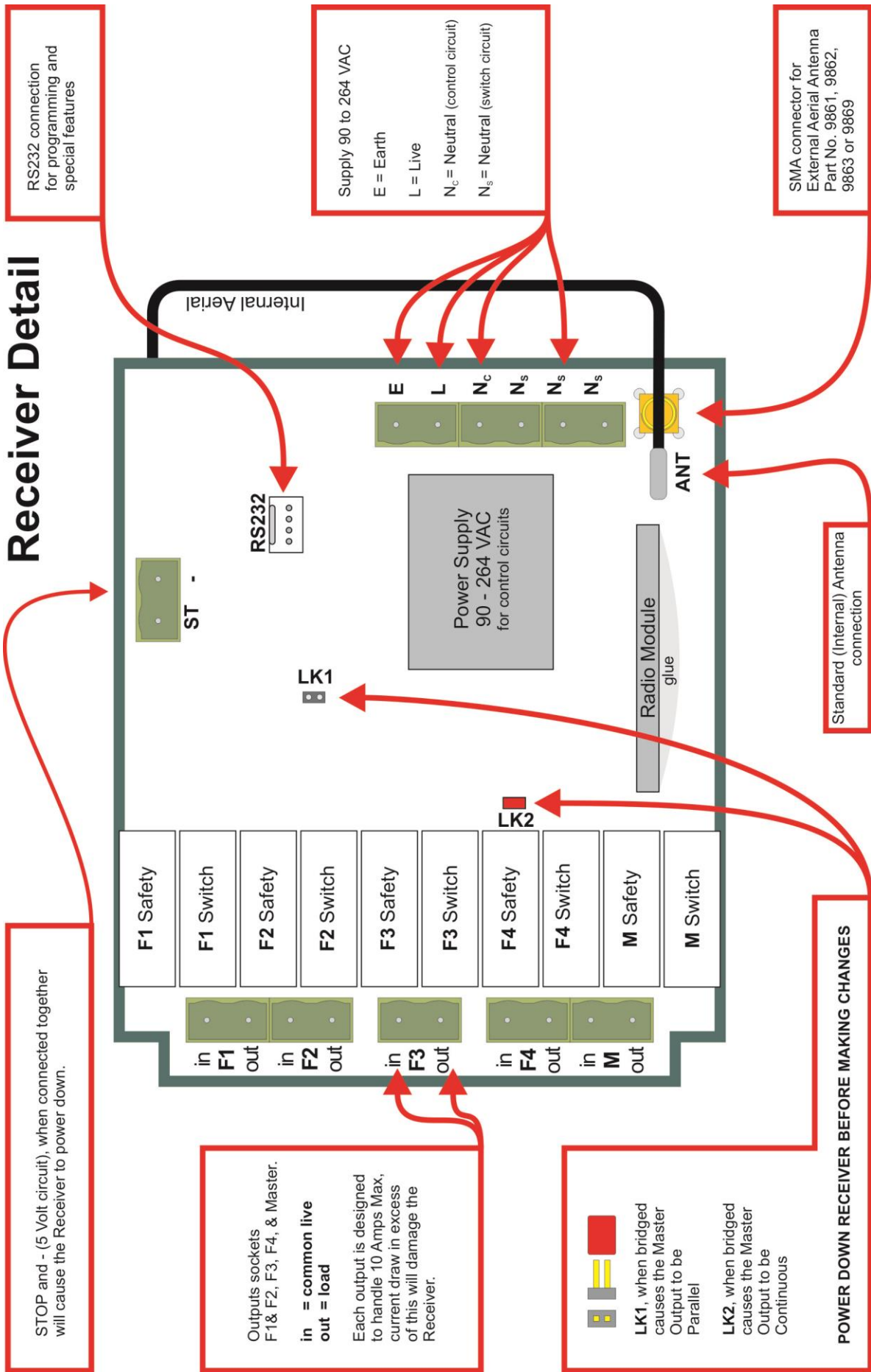
| | |
|---------------------------|---|
| 9861, 9862, 9863 and 9869 | External Antenna with cable. |
| 9010 | SMA Connector, for external aerial |
| 9011 | ST, S+ & S- connector and RS232 connector |

| 96 Series | | | 96000 | 96002 | 96004 | 96200 | 96202 | 96204 |
|--|---------|--------------------------------|-------|-------|-------|-------|-------|-------|
| BUILD SPECIFICATION TABLE FOR MODELS IN THIS RANGE | | | | | | | | |
| Ident | Legend | Connection | | | | | | |
| | E | Earth | S | S | S | S | S | S |
| | L | Live | S | S | S | S | S | S |
| | N | Neutral | S | S | S | S | S | S |
| | F1 & F2 | Outputs to F1 & F2 (IN & OUT) | S | S | S | S | S | S |
| | F3 & F4 | Outputs to F3 & F4 (IN & OUT) | | | S | | | S |
| | M | Master Output | | S | S | | S | S |
| | S- | Stop Circuit (5 Volts DC) | | S | S | S | S | S |
| | ANT | Internal Antenna | S | S | S | S | S | S |
| | SMA | Connector for External Antenna | | S | S | | S | S |
| | LK1 | Master Parallel | | C | C | | C | C |
| | LK2 | Master Continuous | | C | C | | C | C |
| | RS232 | RS232 | | S | S | | S | S |

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

| | |
|------------------|---|
| E | Earth |
| - | Live 90-264 VAC |
| F1, F2, F3, F4 | Outputs F1 to F4 |
| M | Master Output |
| ST | STOP - grounding shuts down the Receiver |
| ANT | Blade Connector for Internal Antenna |
| SMA | Aerial Connection for 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 |
| RS232 | RS232 for interface with other RS232 modules and special programming |

Receiver Detail



STOP and - (5 Volt circuit), when connected together will cause the Receiver to power down.

Outputs sockets F1 & F2, F3, F4, & Master.
in = common live
out = load
 Each output is designed to handle 10 Amps Max, current draw in excess of this will damage the Receiver.

LK1, when bridged causes the Master Output to be Parallel
LK2, when bridged causes the Master Output to be Continuous
POWER DOWN RECEIVER BEFORE MAKING CHANGES

RS232 connection for programming and special features

Supply 90 to 264 VAC
 E = Earth
 L = Live
 N_c = Neutral (control circuit)
 N_s = Neutral (switch circuit)

SMA connector for External Aerial Antenna Part No. 9861, 9862, 9863 or 9869

Standard (Internal) Antenna connection