The 12-88 is a high sensitivity, VHF/UHF paging receiver which is able to control 3 outputs (one relay and two as open collector). It operates over the two frequency ranges, VHF 148Mhz to 165MHz (model 12-88-7150) and UHF 440Mhz to 470MHz (model 12-88-7450). The 12-88-7000 decodes 512 or 1200 baud, alphanumeric or numeric Salcom control protocol messages.



12-88-7000 Output Control Paging Receiver

WHAT CAN I DO WITH THE 12-88?

The 12-88 can be used to.....

- Control equipment by turning the on-board relay on or off upon receipt of a control command.
- Control low current equipment or external relays by switching the open collector outputs independently upon receipt of an appropriate control command.
- Send the commands to a PC via the serial output of the paging receiver for remote serial control applications.

The 12-88 is a cost effective remote switching solution which is simple to install and can be configured using any serial terminal program.

A 12-48 USB or 12-47 serial programming adaptor is required to configure any unit parameters.

To control the outputs a message must be received that matches the unit ID with a suitable control code sequence (Salcom relay control protocol). The received message must also be the expected baud rate and format. The 12-88 will also respond to a group unit ID of "00".

A mono-shot timer can be set to between 0.1 seconds to 6553 seconds for each output allowing the output to open automatically after being closed.

Connecting the 12-48 USB programming adaptor to the 12-88

Note: Remove the header plug, as shown in the right hand picture.



Setting any output mono-shot timer to 0000 results in the output remaining latched until a message is received to change its current state.

If configured to do so, each output state will be stored and restored to the last set state on power up.

The 12-88 can be configured to respond to up to 4 different cap (RIC) codes.

Decoded messages are also sent to the programming connector (serial port). These contain the message payload only, making the output suitable for remote serial control applications.



Designed in New Zealand A SOIC M designed system

Sea, Air & Land Communications Ltd (Salcom) 10 Vanadium Place, Addington, Christchurch 8024 Tel: +64 (0)3 379 2298 E: sales@salcom.com

| 12 | Technical Specification -88-7000 – VHF / UHF Single Relay Output Receiver |
|---------------------------|---|
| Frequency Range | 148-165MHz - VHF (Model No. 12-88-7150) 440-470MHz - UHF (Model No. 12-88-7450) |
| Frequency Selection | User configurable |
| Power Supply | +13.8V typical (11 to 15 VDC range) |
| Power Consumption | Receive: 25mA Relay: 18mA when energised |
| Modulation | FSK with NRZ data |
| Receiver Sensitivity | Approx -124 dBm |
| Receive Bandwidth | 6.25KHz (minimum) |
| Baud Rates | 512, 1200 |
| Paging Protocol | POCSAG |
| Configuration Application | Salcom Configuration Tool |
| Programming Cable | 12-47-0000 (Board header to DB9) Can be used with a USB to RS232 DB9 Serial Adapter Cable 12-48-0000 (Board header to mini USB) |
| Serial Port | 9600 , N, 8, 1; RS232 |
| Discrete Outputs | 1 Relay Contact (1A @ 24VDc); 2 Open Collector (80mA max) Note: Not suitable for 240VAC Connections |
| Connectors | Outputs Connection = RJ45 (8C) |
| RF Connector | Internal aerial |
| Environmental Protection | Not suitable for outdoor use and should be protected from adverse environmental conditions |
| Operating Temperature | -10ºC to +50ºC (+14ºF to +122ºF) |
| Weight | 30g |
| Enclosure Dimensions | 66mm x 50mm x 26mm (WxDxH) |
| Enclosure Material | Plastic |
| Colour | White |

Programming software available for free download at: www.salcom.com

Support: Tel: +64 (0)3 379 2298



