

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.*

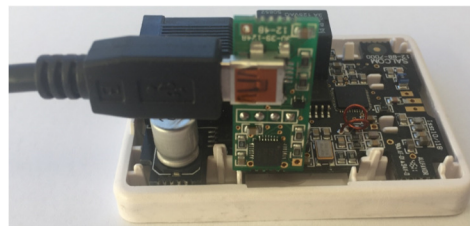


Setting any output mono-shot timer to 0000 results in the output remaining latched until a message is received to change its current state.

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  salcom designed system  
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**Technical Specification****12-88-7000 – 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	-10°C to +50°C (+14°F to +122°F)
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/products/page/12-88-7000](http://www.salcom.com/products/page/12-88-7000)

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