IRC PRODUCT INFORMATION

RM PATHFINDER MOBILE RADIO

General

1. Easy Installation - Boot mount or under the seat radio with a separate control head
2. Telephone type cable interconnection between the radio and the head (up to 30m).
3. Microphone uses a telephone type cord with modular plug.
4. Microphone plugs into the control head or directly into the radio
5. Mounting scheme for control head via cellular mounting accessories
6. Variety of configuration possibilities
   a. Microphone direct into radio (multiple channel scan, default channel transmit)
   b. Control head with display - access to all features
   c. Extended Control Head with Robotic type features
7. Specification to ETSI 300-086
8. Wide-band Transmit and receive

Features

1. 200 Channels which can be split up into 1 to 10 groups (each group acts as own entity).
2. Textual Identification of Groups
3. Switching between groups
4. Channels can be identified with a textual description which is displayed on the control head.
5. Radio can be programmed and read-back using IRC PC based programming software.
6. CTCSS encode/decode per channel (can be different encode/decode tones).
7. DCS encode/decode per channel (can be different encode/decode codes).
8. Busy Channel Lock-out.
9. Programmable Time Out Timer (0 - 240 seconds)
10. Scanning - Normal Scan, ACS scan, Priority Scan and ACS priority scan.
11. User definition & control of Scanning from Control Head
12. Scanning can be forced ON/OFF via PC Programming
13. Built -in Five tone Muting, paging and answer back on own ID or group of 10 or 100.
14. Hooter / Relay output if radio is called.
15. Alarm input which can be programmed to send any one of the 100 pre-programmed internal calls.
16. ANI - Leading or Trailing. One-shot ANI is selectable for leading or trailing ANI.
17. 100 pre-defined five-tone calls each on any one of 10 tonesets, each identified with a name / textual description - can be linked to channels.
18. Five digit user defined dial call on any one of the 10 tonesets.
19. Over-the-air stun facility
20. ACS - for automatic repeater access
21. Serial Number stored internally
22. Closed user group pre-programmed SMS
23. Control of Robotic Outstation Output Pins - for remote control switching
24. Emergency Button - send up to 10 pre-programmed help calls
25. Plug in GPD (general purpose decoder) board for non-predictive decoding - for FARMCALL etc. (QD & AS1000 compatible)
26. Plug in MARNET receiver board (synthesized - plug & play)

Interfacing

1. External modulation in microphone input
2. PTT
3. Speakers 2x5W
4. Direct FM in (1Vp-p)
5. Audio out - direct FM 1Vp-p
6. Channel busy out (including option of only when correct sub-audio decoded)
7. Buffered RSSI output 0 - 5V
8. RS232 interface for programming and/or external control
9. Alarm input
10. Alarm output (to drive relay 50mA)

User Controls

Operator selectable controls from the control head

1. Volume
2. Channel
3. Scanning on/off
4. Mute level
5. Send a five-tone call from the list of 100 calls
6. Dial-in a five-tone call
7. Set scan per channel
8. ACS- automatic repeater access
9. Signal Monitor
10. Power Off
11. Nuisance channel delete
12. One of three ‘hot keys’ each programmable to either send a specific call or activate ACS
13. Emergency key - send up to 10 pre-programmed calls with one keystroke

The operator can be locked out of any of the control head functions in the programming software.

RS232 Control

Functions available over the RS232 interface port.

These are commands which can be issued by a computer to the radio.

1. Change to a specific channel
2. Change to a specific scan group
3. Set volume
4. Set mute level
5. Issue a specific five-tone call (one of 100 internal calls)
6. Issue a five-tone call sequence of up to 15 tones
7. Scanning on
8. Scanning Off

Data received from radio over RS232 interface port

1. Channel Busy/Not Busy
2. Transmitter on/off
3. Scan channel found