



- Fully automatic telephone interconnect
- Enables HF radio network stations to become part of the international telephone network
- Can call up to 98 programmable preset telephone numbers
- Independent of all other communications' networks
- Comprehensive call logging for charging purposes and remote supervision by a dial up computer link

The Barrett 2060 is a fully automatic telephone interconnect, which enables high frequency radio network stations to become part of the international telephone network. HF stations can direct dial any telephone number on the international telephone network. Additionally stations can call up to 98 programmable pre-set telephone numbers stored in the 2060 telephone interconnect. Telephone subscribers on the international telephone network can dial into the 2060 interconnect and call any station on the HF network.

The Barrett 2060 interconnect also supports MIL-STD 188-141B ALE allowing ALE networks to have fully automatic access to the telephone network.

The Barrett 2060 interconnect provides full network management facilities including variable access levels for HF stations calling the telephone network, comprehensive call logging for charging purposes and remote supervision by a dial up computer link.

#### Multilingual

Recordable voice messages allows system greetings and instructions to be in any language, stored in non-volatile Flash RAM.

## Learn function for non-standard call progress tones

Should the selectable standard international telephone call progress tones not operate in certain countries, the 2060 can record, learn and store these non-standard call progress tones on site.

## Periodic beacons

When not handling traffic, if enabled, periodic beacons are sent on all channels at regular intervals. This allows the HF users to evaluate the best channel to use with the 2060 base station.

## Remote parameters

Using a PC loaded with Barrett 2060 remote software, parameters, access levels and call logging information can be downloaded via the telephone network. This allows the 2060's to be installed at remote locations and be controlled from a central point.

## Large log capacity

Up to 4096 log entries of system activity can be stored in the 2060 before a download is required.

## MIL-STD 188-141B, FED STD 1045 ALE

ALE simplifies the operation of the system as the HF network user need only enter the 2060 address and a telephone number required and the telephone caller has only to enter the mobile number required. The ALE system establishes the link between the two.

## Call charging

Call charging information is stored in the 2060 and can either be based on call duration or information provided by 12 to 16 kHz or 50 Hz metering pulses. (Note:- The Telco providing the line connected to the 2060 must be requested to provide these metering pulses).

## **DTMF** or Decadic dialling

To allow operation of the  $\tilde{2}060$  on older exchanges Decadic dialling as well as DTMF can be selected.

## Access levels and barring for individual users

Stations within the HF network can be allocated individual access levels in relation to the telephone network, i.e. local calls only, full ISD call access, specific number barring or complete barring.





#### **DSP** noise reduction

A DSP (digital signal processor) noise reduction system provides clearer reception from the HF network can be toggled on or off by the telephone caller.

#### Manual/Automatic VOX

Should telephone connection be of such poor quality that the automatic VOX becomes unstable, the telephone caller can switch to manual VOX on their telephone to change the 2060 from transmit to receive.

## 2060 system parameters by voice annunciation

The telephone caller can request the frequency of the currently selected channel in kHz on their telephone keypad. The keypad can also by used to will provide the software version, PA temperature, supply voltage during transmit and the percentage of billing storage used from the 2060 and its associated 2050.

## **Emergency Selcalls**

While scanning, all types of emergency calls received will be annunciated both audibly and visually on the associated 2050 transceiver (if a front panel is fitted).

## 98 stored telephone numbers

98 pre-programmed telephone numbers stored in the 2060 can be accessed by HF manpacks, vehicles or base stations that only have Selcall and not the full dial Telcall option fitted.



Barrett 2060 HF Telephone interconnect rear panel

## **General specifications**

**Standards** Exceeds/complies with Australian/

New Zealand standard

AS/NZS 609501:2003 - AMPT 1:2008

AS/ACIF 5002:2005 - AS/ACIF

5004:2006

Power input 13.8 V DC (11 V to 15 V), > 400 mA

Scanning capacity 30 channels maximum Operating temperature 0°C to 50°C

**Dialling modes** DTMF of Decadic Dialled number 16 digit maximum

Transceiver control RS-232, 9600bd. Barrett control

600 ohm balanced 0 dBm audio Transceiver Tx, Rx levels adjustable by menu option

**Transceiver PTT output** Open collector to ground Frequency response 300 to 2800 Hz ± 2 dB

**Hybrid system** DSP based continuously balancing

Adaption speed less than 0.5 seconds Ultimate balance better than

40 dB

Phone line levels Input from line -9 dBm

-9 dBm Output to line Impedance 600

Approx 16 dB below phone line level **VOX** sensitivity

i.e. 25 dBm

Phone line connector **RJ-45** 

Remote supervisory Via on-board modem -V.34bis control

(33.6 kbs)

Standard 2 wire automatic exchange Telecom line preferably with line reversal "B" party

off hook" and "on hook" If call charging required - 12 to 16 kHz or

50 Hz metering pulses

Will respond to standard call progress Call progress tones tones, selectable by country. Has a

learn function for non-standard tones 85mm (w) x 270mm (d) x 70mm (h)

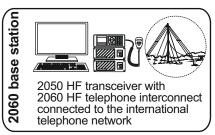
(2000 series standard enclosure) Weight

1.4 kg

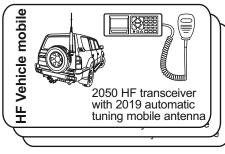
Specifications are typical. Equipment descriptions and specifications are subject to change without notice or obligation.

## Typical 2060 HF telephone interconnect network example

# HF radio link 0 to 3000 plus km









2060 HF telephone interconnect dials telephone number



Telephone subscribers on the international telephone network can dial into the 2060 interconnect and call any HF radio station in the network

#### **Head Office:**

**Dimensions** 

Barrett Communications Pty Ltd 47 Discovery Drive, Bibra Lake, WA, 6163 AUSTRALIA

+61 8 9434 1700 Fax: +61 8 9418 6757

Email: information@barrettcommunications.com.au

