

# **2060 Specifications**

# **General Specifications**

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

Scanning capacity 30 channels maximum

Operating temperature 0 to 50°C

DTMF of Decadic **Dialling modes** 

Dialled number 16 digit maximum

RS-232, 9600bd. Barrett Transceiver control

control syntax

Transceiver Tx, Rx audio levels

600 Ohm balanced 0dBm adjustable by menu option

Transceiver PTT output Open collector to ground

Frequency response 300 to 2800 Hz ±2dB

DSP based continuously Hybrid system

balancing

Adaption speed less than 0.5 seconds

Ultimate balance better than

40dB

Input from line -9dBm Output to line -9dBm 600 Ohm

VOX sensitivity Approx 16dB below phone line level

i.e. 25dBm

Phone line connector RJ-45

Remote supervisory

Phone line levels

Via on-board modem -V.34bis

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

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

or 50 Hz metering pulses

Call progress tones

Will respond to standard call progress tones, selectable by country. Has a learn function for non-

standard tones

**Dimensions** 85mm W x 270mm D x 70mm H

(2000 series standard enclosure)

Weight 1.4 kg

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# BARRETT COMMUNICATIONS 2000 SERIES



# 2060 HF SSB Telephone Interconnect

The Barrett 2060, a fully automatic telephone interconnect, enables high frequency radio network stations to become part of the international telephone network.

HF stations fitted with a "Telcall" facility, based on selective call format CCIR 493, can direct dial any telephone number on the international telephone network. Stations equipped with standard selective call systems, again based on CCIR 493, 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 now 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.



#### **Features**

#### Easy to use menu system

Based on the 2050 transceiver's user interface the 2060 is intuitive and easy to program and operate either through front panel menus or via the PC based programming

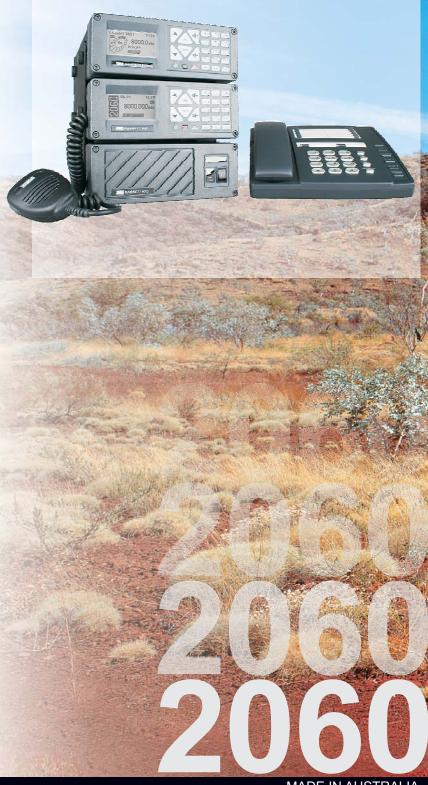
#### Voice security

To provide medium or high level voice encryption for on air message privacy, Secure Call or Frequency Hopping can be used. Each HF station on the HF network is assigned a specific security code in the case of Secure Call or encryption key based on a combination of a fixed pre-fix and the Selcall ID in the case of frequency hopping. This enables privacy between HF users on the system.

(Note:- An Australian Government Individual Export Permit is required for the frequency hopping option)

### DSP based VOX system

The VOX (Voice Operated Transmit signal that keys the HF transceiver) is derived from the telephone user's voice using a sophisticated DSP based hybrid providing typically 43dB









# 2060 HF SSB Telephone Interconnect

#### Multilingual

Recordable voice messages allows systems 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.

### Large log capacity

4096 log entries of system activity are stored in the 2060 before a download is required.

#### 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

Editing and logged call information download via the telephone network. 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 2060's to be installed at remote locations and be controlled from a central point.

#### 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 stored in the 2060 can either be based on call duration or information provided by 12/16 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 2060 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

DSP noise reduction system that provides clearer reception from the HF network can be toggled on or off by the telephone caller by keying 55 on their telephone.

### 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 by keying 88 on their telephone and use the hash key 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 by keying 77 on their telephone keypad.

Keying 55 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.

# Full base station operation features when operated in manual mode

When operated in manual mode the 2060 provides a full manual control of the associated 2050 transceiver.

#### **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 mobiles or base stations that only have Selcall and not the full dial Telcall option fitted.



