

4045 Automatic HF antenna tuner

1.5 MHz to 30 MHz frequency coverage

150 Watt (digital, voice and data)

Land mobile and marine

Memory tune (100 ms)

Internal GPS

ALE 2G/3G compatible

Mil-STD 810G

The Barrett 4045 (Black P/N BC404501) automatic antenna tuner (ATU) is designed for operation in land mobile, marine and base station installations with Barrett transceiver products.

Housed in a fully weatherproof (IP67) enclosure, the 4045 efficiently tunes long wire antennas up to a length of 20 metres, wire loop antennas or whip antennas over a frequency range of 1.5 to 30MHz. Tuning is rapid, typically less than 1.5 seconds from the first time RF is applied, either whilst the operator is talking or when the "Tune" control is activated on the transceiver.

When paired with a Barrett 4000 series HF Transceiver, the 4045 memory tune feature eliminates the need to re-tune an antenna after a channel change. When returning to a previously tuned channel, the transceiver sets the 4045 with a stored tuning result in less than 100 ms. It is fitted with an internal GPS. This internal unit can be used to provide GPS data as part of a GPS tracking network without the need to install a separate GPS, simplifying the system installation.

The 4045 is supplied as standard with a 6 metre composite RF control cable. A 10 metre RF control cable is available as an optional accessory (P/N 4019-00-05) as in an extension adapter kit (P/N BCA401914).

Designed and manufactured in Australia, the 4045 can be optionally fitted with anti-vibration mounting (P/N BC404502) making it suitable for use in vibration heavy environments.



Anti-vibration mounting

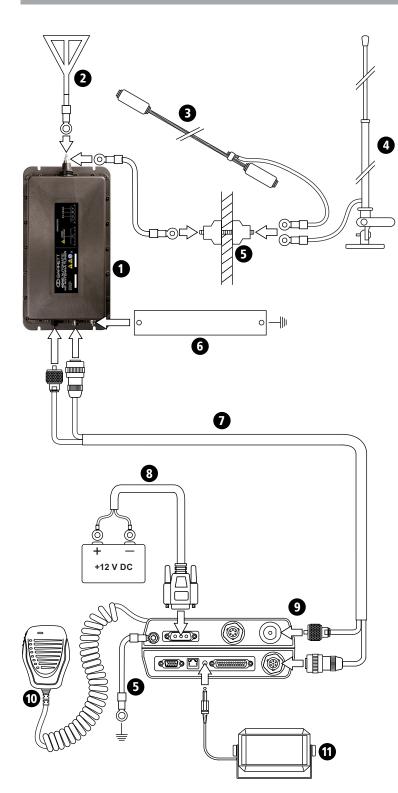






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Basic Configuration - Base Station and Marine



- Barrett 4045 Automatic antenna tuner (Black P/N BC404501)
- 2 Base station whip or long wire antenna
- 3 Marine backstay or long wire antenna
- 4 Marine whip antenna
- 5 Feed through insulator (P/N BCA91701)
- **6** Ground (Earth)
- Control cable 6 m integral coaxial/control with connectors to suit 4000 series (P/N 4019-00-02)
- 8 DC Power cable and 12 V battery
- 9 Barrett 4050 HF SDR Transceiver(rear) (P/N BC405000)
- 10 Microphone (P/N BCA40010)
- Extension speaker supplied with transceiver (P/N BCA40015)

4045 ATU - General Specifications

Frequency Range 1.5 - 30 MHz (continuous) with 10 m or

longer longwire / marine whip

1.8 - 30 MHz (continuous) 7 m or longer

ongwire

2 - 30 MHz (continuous) with 3.5m or longer longwire / whip antenna

Input Impedance50 Ω typically with <2:1 SWR</th>RF Input Power150W PEP (Digital, voice and data)Supply Voltage12-13.8 V DC (derived from transceiver)

Power consumption Tuned Typically 400mA

Tuning <800mA

Tuning time <1.5 seconds (typical)

from memory - <100 mS (typical)

Memory addresses Unlimited Ingress Protection Ip67

Protection Open circuit antenna

Short circuit antenna

High VSWR

Voltage transients

VSWR <2:1 (typical)

Construction Moulded Nylon-66 glass-filled with

powder-coated stainless-steel base

Colour Black Weight 3.2 kg

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

Head Office:

Barrett Communications Pty Ltd 47 Discovery Drive, Bibra Lake, WA, 6163 AUSTRALIA Tel: +61 8 9434 1700 information@barrettcomms.com

BUREAU VERITAS
Certification