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.
Basic Configuration - Base Station and Marine

1. 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)
7. 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)
11. 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 / whip antenna
  1.8 - 30 MHz (continuous) 7 m or longer longwire / whip antenna
  2 - 30 MHz (continuous) with 3.5m or longer longwire / whip antenna
- **Input Impedance:** 50 ohms
- **Power Rating:** 150W PEP (Digital, voice and data)
- **DC input requirements:** 12-13.8 V DC (derived from transceiver)
- **Power consumption:** Tuned Typically 400mA
  <800mA
- **Tuning time:** Less than 1.5 seconds - typical from memory - Less than 100 mS typical
- **Memory addresses:** 1000
- **Ingress Protection:** To IP67 (dust and water)
- **Protection:** Open circuit antenna
  Short circuit antenna
  High VSWR
  Voltage transients
- **VSWR:** Typically less than 2:1
- **Case 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 notice or obligation.