The Barrett 4045 (Nato green P/N 4045-00-01) 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 30 MHz. 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 retune 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 BC404501) making it suitable for use in vibration heavy environments.
Basic Configuration - PRC-4090 Mobile with composite HF whip

1. Barrett 4045 Automatic antenna tuner (P/N 4045-00-01 Nato green)
2. Military HF 2-30 MHz fibreglass whip antenna (P/N 2090-00-14) with Military HF antenna base (P/N 2090-07-15)
3. 4090 Handset cradle docking station (P/N 4090-05-03)
4. PRC-4090 HF Tactical manpack transceiver (P/N 4090-00-01)
5. Ground (Earth)
6. Control cable 6 m - integral coaxial/control with connectors to suit 4000 series (P/N 4019-00-02)
7. DC Power cable and 12 V battery (P/N 4090-03-06)

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 MHz to 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
- Tuning: <800mA
- Tuning time: Less than 1.5 seconds - typical
- Memory addresses: 1000
- Ingress Protection: To IP67 (dust and water)
- Protection: Open 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: Nato Green (paint finish)
- Weight: 3.20 kg

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