

# Type BRX 1500MC

## Broadband 150 KHz to 1500 MHz mobile receiving antenna system

The BRX1500MC is a wideband receive antenna for radio signals from LF through to the UHF bands, designed for mobile reception purposes.

The antenna comprises an array of three separate elements. Output is provided in the three ranges via three separate 50Ω coaxial outputs: the LF/MF/HF band, and the mid VHF band through to the upper VHF and UHF band. Active elements are utilised for the lowest frequency range. A suitable ground plane is required for operation up to 100 MHz. In mobile applications this may be provided by the vehicle body or the deck of the ship. Above 100 MHz the antenna functions as a centre fed elevated vertical dipole and is ground independent.

The elements, housed with a GRP shroud, sit on a base of marine grade aluminium. An anti-vibration stainless steel spring base is available to ensure correct movement of the antenna when fitted to vehicles. Mounting is achieved via an M12 bolt. The system is supplied with comprehensive assembly instructions.

The principle of operation is that of a wideband system comprising three separate antennas within a single structure. Each antenna is arranged as follows:

0.150 to 30 MHz	An active monopole fed via a broadband matching transformer and operating against ground
30 to 100 MHz	A dual element monopole
100 to 1500 MHz	A multi element vertical dipole.

Three 50Ω (nominal) coaxial outputs are provided for the receiver. A 3 metre twin lead is supplied for the 12 volt DC input for the LF/MF/HF section.

Standard colour is black (other colours to order).

## Specifications

<b>Frequency Range</b>	0.150 to 1500 MHz in 3 ranges
<b>Bands</b>	0.15-30 MHz, 30-100 MHz; and 100-1500 MHz
<b>Impedance (output)</b>	50Ω (nominal)
<b>Connection</b>	Via 3 separate fly leads with BNC type coaxial connector at base plus a twin 12V DC lead input
<b>Polarisation</b>	Vertical Linear
<b>Pattern</b>	Azimuth: omnidirectional; Elevation: 0.150-30 MHz and 30-100 MHz similar to 1/4 wave monopole; 100-1500 MHz similar to 1/2 wave monopole
<b>Overall Length</b>	2.3m (7.5ft)
<b>Power Supply</b>	12V DC required for LF/MF/HF section
<b>Base</b>	Marine grade aluminium base; stainless steel spring mount with M12 internal thread taking M12 bolt (option)
<b>Packed Weight</b>	5kg (11lbs)

