

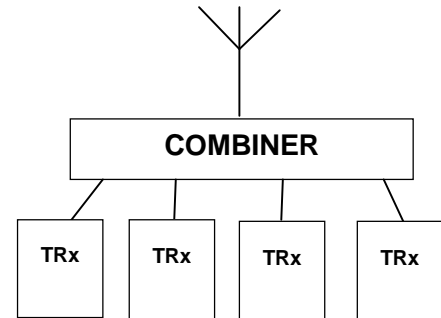
**Product Code: NC3104**

## Product Description

The BiTEA Bi-Directional combiner for fixed, mobile or portable applications allows connection of up to four radio transceivers to one aerial.

## SPECIFICATIONS

Frequency Band	380-430 MHz
Impedance	50 Ohm
Input Power	Max 5 watts per channel
TX-TX isolation	-30dB
Insertion Loss	-6.5dB
Return Loss	-26dB
Connectors	Input N type
Aerial	N type
Dimensions	250mm x 80mm x 53mm



## BENEFITS

- Only one feeder and aerial required
- Quick set up time
- Efficient low-cost solution



## APPLICATIONS

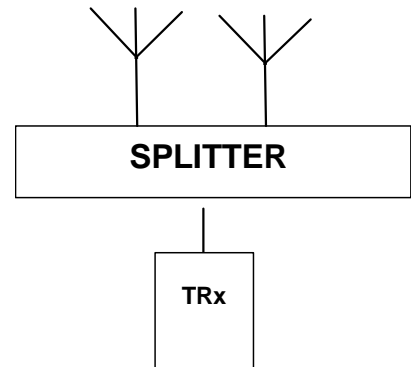
- Quick set up and cost saving for fixed and temporary command & Control communications where multiple transceivers are required.
- Up to four transceivers with only one aerial feeder, one mast and one aerial.

## POWER SPLITTER – Product Code NC3202

The BiTEA power splitter for fixed, mobile or portable applications allows connection of two aerials to one radio transceiver

## SPECIFICATIONS

Frequency Band	380-430 MHz
Impedance	50 Ohm
Input Power	Max 10 watts
Aerial - Aerial isolation	-27dB
Insertion Loss	-3dB
Return Loss	-26dB
Connectors	Transceiver N type /Aerials N type
Dimensions	90mm x 30mm x 37mm
Weight	0.2kg



## BENEFITS

Physically small and easy to set up solution.

## APPLICATIONS

Can be used on vehicles to feed front and rear antennas to one radio transceiver.

When used with Gateway radio transceivers in buildings it permits connection of one aerial to communicate with the main network outside the building in Trunk Mode (TMO) and one aerial to communicate with radio transceivers working in Direct Mode (DMO) inside the building.



## NC3104 Bi-Directional TETRA combiner

### Instructions for use

1. This combiner uses balanced hybrid couplers to connect up to four transceivers to one aerial, it relies on each port being terminated to maintain Tx to Tx isolation, if there are less than four transceivers then any unused port **MUST** be terminated with a 50 Ohm ¼ Watt RF termination. Available from BiTEA. (\* **Product Code: NC3901**)
  2. The unit is not weatherproof it is intended for internal operation and a separate cover must be used if mounted externally.
  3. The combiner may be used in any orientation.
  4. It can withstand high temperatures (+60°C) but should be kept as cool as possible.
  5. This unit has a DC Coaxial Inner to Ground resistance of approximately 17 Ohm ensure there is no DC component on the Transceiver RF output, DC will heat the internal loads and possibly detune them.
  6. As with any installation proper protection against lightning must be taken, the case of the unit should be bonded to the aerial mounting system or equipment rack either by bolting directly or by Earth bonding pigtail, if mounted in a high exposed position it is recommended that separate gas discharge lightning protectors are used.
- **Product Code: NC3901**  
Description: Type-N male dummy load terminator 0.25Watt, 50 Ohm, 0-500 MHz