



Multichannel U.H.F Combining Units Type B 8145

This series of combining units is designed to enable up to four separate u.h.f television channels to be combined in one transmission line in order to be radiated by a single, wideband, antenna.

A basic unit is formed by connecting two wideband hybrids back-to-back with coaxial transmission line. Stub filters are placed in the connecting lines in such a way that the input signal to the first hybrid

is passed directly to the second hybrid, and the input signal to the second hybrid is reflected back again. Phase relationships are arranged such that the combined signals are then available at the fourth port of the second hybrid.

Different versions of the basic unit are used to combine two inputs, either two single channels, or two already combined pairs of channels.

Mechanically, the sizes of units vary according to frequency, the main variable being the length of the stub filters.

A certain amount of individual design is involved for most applications and clients are invited to send details of their individual requirements to The Marconi Company.