

LOW POWER TV TRANSMITTER COMBINER CONSTANT IMPEDANCE DESIGN

TCTV-B Series

- **Visual power up to 10 KW PS**
- **Dual Directional Couplers**
- **Low Group Delay**
- **Good Return Loss**
- **Standard and Dual Sound**

Fiplex' broadcast line of "Low Power UHF TV Transmitter Combiners" are branching devices used to combine two TV channel on a single antenna port.

Additional channels can be added, by using a similar combiner unit in series with the first one.

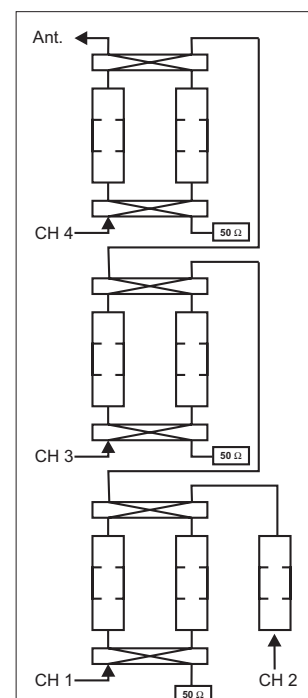
The bandwidth and group delay fulfill the FCC and CCIR requirements.

TCTV-B series utilize carefully designed 3 dB hybrids that provide broadband response and low incidental Insertion Loss.

Band Pass are high Q combine cavities, that shows a very good thermal stability and low Insertion Loss.

A dual directional coupler can be also supplied as an option to measure direct and reflected signal to and from antenna. This directional coupler provides with dc voltage for direct signal and another dc voltage for the reflected one.

Mounting Frame is provided with thermal converted paint. Standard color is Ral 7032. Other colors are available upon request.



4 channels TV combiner
Constant Impedance design

ELECTRICAL SPECIFICATIONS FOR COMBINING UNIT	
Frequency	470 – 806 MHz
Max. Power	See table below
Insertion Loss, Pass Channel	0.20 to 0.50 dB max.
Insertion Loss, Reflected Channel	0.10 to 0.25 dB max.
Isolation Pass to Reflected	30 dB min.
Isolation Reflected to Pass	40 dB min.
Impedance	50 Ohms
Connectors	See table below
Return Loss	25 dB min (VSWR 1.1:1)

UHF CHANNELS			
Frequency range Model Designation Power, per ch, P.S. Connector Wide Input Connector Narrow Input Connector Antenna	470 – 566 TCTVxxU1B0-B 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6	566 – 698 TCTVxxU2B0-B 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6	698 – 806 TCTVxxU3B0-B 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6
Frequency range Model Designation Wide Power, P.S. Connector Wide Input Connector Narrow Input Connector Antenna	470 – 566 TCTVxxU1C0-B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8	566 – 698 TCTVxxU2C0-B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8	698 – 806 TCTVxxU3C0-B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8
Frequency range Model Designation Wide Power, P.S. Connector Wide Input Connector Narrow Input Connector Antenna	470 – 566 TCTVxxU1D0-B 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8	566 – 698 TCTVxxU2D0-B 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8	698 – 806 TCTVxxU3D0-B 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8
Frequency range Model Designation Wide Power, P.S. Connector Wide Input Connector Narrow Input Connector Antenna	470 – 566 TCTVxxU1E0-B 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8	566 – 698 TCTVxxU2E0-B 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8	698 – 806 TCTVxxU3E0-B 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8