

LOW POWER UHF TV DIPLEXER

FDVxxU 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 Diplexers" are branching devices used to combine the visual and sound transmitters of a single TV channel, on a single antenna port.

The bandwidth and group delay fulfill the FCC and CCIR requirements. FDV-Series utilize carefully designed 3 dB hybrids that provide broad band response and low incidental loss.

Reject cavities are high Q coaxial cavities, with INVAR tuning rods to feature a very good thermal stability and low incidental Insertion Loss.

This FDV-Series of UHF TV Diplexer can be supplied with dual reject cavities for "dual sound transmitter" applications.

Reject cavities are used to cancel intermodulation of video and color carrier (Fv - 3.58MHz) and can be supplied as an option upon request.

Finally, a dual directional coupler can be also supplied to measure direct and reflected signal to and from antenna. This directional coupler provides with a dc voltage for direct signal and another dc voltage for the reflected one.

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



Low Power TV Diplexer

ELECTRICAL SPECIFICATIONS	
Frequency	470 – 806 MHz
Max. Power	See table below
Insertion Loss, Visual Carrier	0.20 dB max.
Insertion Loss, Aural Carrier	0.80 dB max.
Isolation Visual to Aural	30 dB min.
Isolation Aural to Visual	30 dB min.
Impedance	50 Ohms
Connectors	See table below
Return Loss	25 dB min (VSWR 1.1:1)

UHF CANNELS			
Frequency range Model Designation Visual Power, P.S. Dimentions Connector Visual Input Connector Aural Input Connector Antenna	470 – 566 FDVxxU1A 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6	566 – 698 FDVxxU2A 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6	698 – 806 FDVxxU3A 300 W N(f) ; DIN 71/6 N(f) ; DIN 71/6 N(f) ; DIN 71/6
Frequency range Model Designation Visual Power, P.S. Dimentions Connector Visual Input Connector Aural Input Connector Antenna	470 – 566 FDVxxU1B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8	470 – 566 FDVxxU2B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8	470 – 566 FDVxxU3B 1 KW EIA7/8 N(f) ; DIN 71/6 EIA7/8
Frequency range Model Designation Visual Power, P.S. Dimentions Connector Visual Input Connector Aural Input Connector Antenna	470 – 566 FDVxxU1C 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8	470 – 566 FDVxxU2C 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8	470 – 566 FDVxxU3C 5 KW EIA 1 5/8 EIA 1 5/8 EIA 1 5/8
Frequency range Model Designation Visual Power, P.S. Dimentions Connector Visual Input Connector Aural Input Connector Antenna	470 – 566 FDVxxU1D 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8	470 – 566 FDVxxU2D 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8	470 – 566 FDVxxU3D 10 KW EIA 3 1/8 EIA 3 1/8 EIA 3 1/8