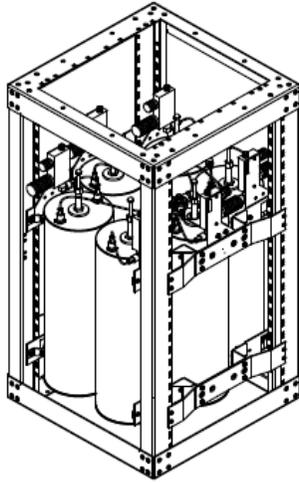


DB4348-Series Transmit Cavity Combiner (148-174 MHz)

Single 8-Inch Cavity/Channel, 2 to 6 Channels

For use when channel spacing is below 100 kHz

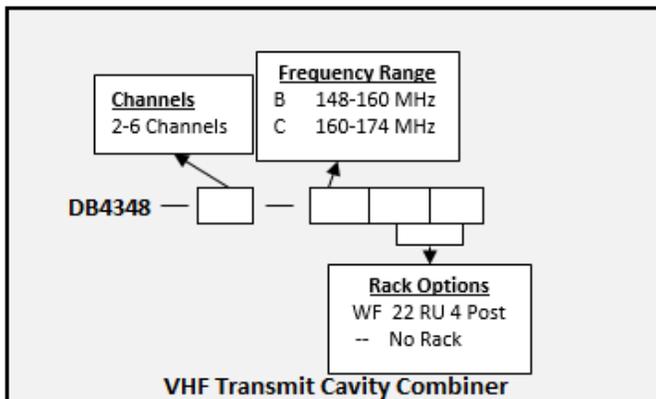


Front view of DS4348-Series Combiner with Dual Isolators; 6-Channel "With Rack" Model Shown (22RU 4-post rack)

Features and Benefits of Combiner

- ❖ Eight-inch cavities provide for close 75 kHz channel spacing, low insertion loss, and high performance in a time-proven design.
- ❖ Dual junction transmitter isolators provide high TX-TX isolation and prevention of intermodulation.
- ❖ "With Rack" option includes factory assembly into four-post 19" x 22 RU equipment rack with cavity mount brackets. For "No rack" orders, please order accessory cavity mount brackets separately.

Ordering Information



Specifications

Electrical Specifications	
Frequency Range	See Ordering Information
TX Frequency Separation	75 kHz Minimum 50 kHz with 100W Load Kits
Number of TX Channels	2-6
Channel Power Maximum	125 W
Isolation TX to TX ANT to TX	>60 dB >50 dB
Isolation at Transmit Frequencies	>25 dB at 1.5 MHz Offset >40 dB at 5.0 MHz Offset
Insertion Loss	See Insertion Loss Table
Return Loss	>19 dB
Mechanical Specifications	
Construction/Finish	Aluminum 8" Cavities Chem Film and Paint Black
Mounting Brackets	AL Clear Chem Film
Input Connectors	N- Female
Output Connector	N-Female Standard See DB4368PIM for 7/16DIN F
Mounting	EIA 19-inch rack
Temperature Range	-30° C to +60° C
Dimensions	
Width	19.0 in
Depth	12.5 in

Height & Weight

No. of Channels	Weights	
	Net Wt -- Lbs	Ship Wt -- Lbs
2	54	64
3	67	77
4	80	90
5	96	106
6	110	120

Insertion Loss

No. of Channels	Frequency Separation -- KHz			
	75-100	100-150	150-200	>200
2	3.6	3.2	2.9	2.7
3	4.1	3.5	3.1	2.9
4	4.5	3.8	3.3	3.0
5	4.8	4.1	3.5	3.2
6	5.1	4.3	3.6	3.3

With DB4348LDKT on channels closer than 75 kHz

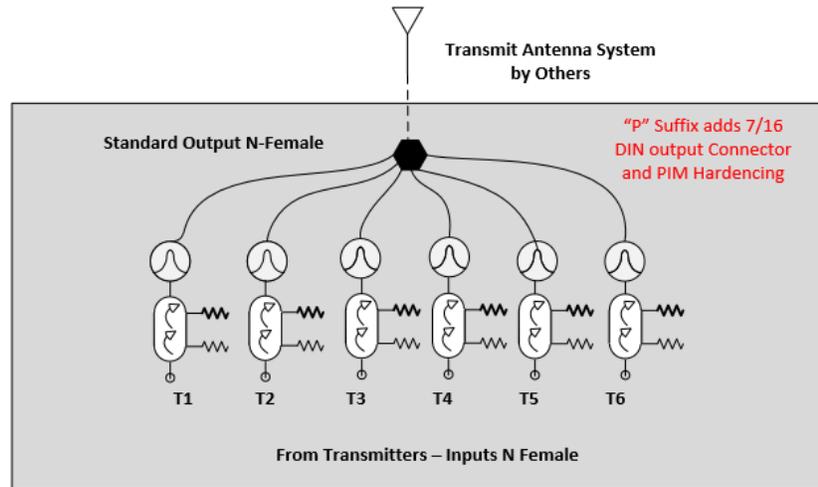
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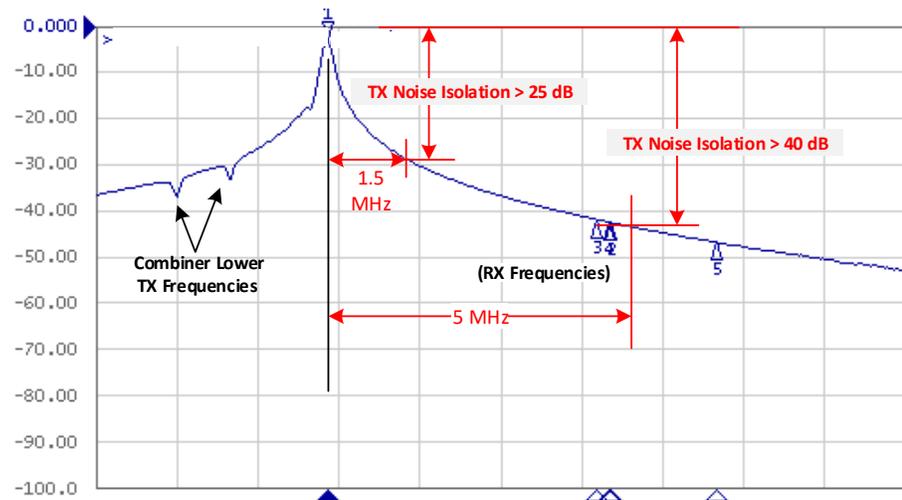


Schematic and Typical Application (6-Channel model shown)



Typical Cavity Performance

TX Noise Isolation at RX Frequencies



Available Accessories

Available accessories are available for factory or field installation. Contact tech@dbSpectra.com for design assistance.

DB4348LDKT 100 Watt Load Kit

Order to replace or upgrade existing isolator load to accommodate transmit frequency spacing 50-100 kHz. If ordered with original combiner purchase, dbSpectra will install on combiner during staging and tuning process.



DB4348-FRMT [used only to repackage DB4348-5 or -6 combiner into 22RU rack]

Kit contains two 24" length special brackets used to unitize three 8" VHF cavities together for mounting side by side inside of cabinet or 4-post rack (min depth 20"). Kit includes all mounting hardware.

DB4348-MOFRMT [used only to repackage DB4348-5 or -6 combiner into 22RU rack]

Kit contains two 19" EIA panel-mount brackets that mate with DB4348FRMT kit above to mount one three x 8-inch VHF cavities assembly to cabinet EIA rack mounting rail. Kit includes all mounting hardware.