



QDAXF 750 & 870 Distribution Amplifier:

Features:

- ▶ 750-870 MHz, 1-way or 2-way models
- ▶ Available in power-doubled & quadra-power RF output hybrid technology
- ▶ Power-doubled versions provide 2.5 dBmV additional output level over conventional push-pull types
- ▶ Quadra-power models provide 4.5 dBmV additional output level over conventional push-pull types
- ▶ Plug-in hybrids & accessories allows the accommodation of wide ranges of RF input and RF output signal levels
- ▶ Interstage EQ & pads set levels
- ▶ Fixed EQ & pad sockets at interstage provide slope range far beyond normal slope & gain circuits
- ▶ Using QAIE fixed EQ at the intersatge location allows slopes that reach 10-12 dB or more
- ▶ Plug-in pads & EQs used at amplifier input provide more uniform carrier-to-noise performance at all frequencies
- ▶ 5-40 MHz return bandwidth
- ▶ Reverse sweep insertion port
- ▶ Optional return amplifier activated by inserting return hybrid IC
- ▶ Quadra-powered amplifiers require QDAXRA-23L or QDAXRA-16L low current hybrid for the return amplifier
- ▶ Maximum total loop gain of 55 dB recommended for 2-way amplifiers
- ▶ Housing provides efficient thermal capability & stringent RFI shielding
- ▶ Operates safely at ambient temperatures of +120°F (+48°C)
- ▶ Meets FCC CLI regulations
- ▶ Includes external Class II UL approved power transformer



QDAXF Specifications

SPECIFICATIONS	750 2-WAY		870 2-WAY		RETURN AMPLIFIERS		
	Power-Doubled	Quadra-Power	Power-Doubled	Quadra-Power	Standard Push-Pull	Low Current Push-Pull	
BANDWIDTH (MHz)	54 to 750	54 to 750	54 to 870	54 to 870	5 to 40	5 to 40	
FREQUENCY RESPONSE	+/- 0.5 dB	+/- 0.5 dB	+/- 0.5 dB	+/- 0.5 dB	+/- 1.5 dB	+/- 1.5 dB	
GAINS AVAILABLE (dB)	(30,32),36,39	15,(30),34,37	(30,32),36,39	15,(30),34,37	16, 20	16, 23	
CHANNEL LOADING	110	110	128	128	6	6	
RETURN LOSS (Worst Case)	14 dB	14 dB	14 dB	14 dB	16 dB	16 dB	
GAIN CONTROL RANGE	PAD	PAD	PAD	PAD	6	6	
SLOPE CONTROL RANGE	EQ	EQ	EQ	EQ	n/a	n/a	
OUTPUT LEVELS (dBmV)	44 / 34	44 / 34	44 / 34	44 / 34	48	48	
DISTORTIONS	CROSS MOD. (-dB)	(71), 71	77, (71), 71	(68), 69	74, (72), 72	79	63
	COMP. TR. BT. (-dB)	(68),68	73,(71),71	(63),63	68,(66),66	n/a	n/a
	COMP. 2nd ORD. (-dB)	(71),71	74,(72),72	(67),67	70,(69),69	72	70 ⁽²⁾
NOISE FIGURE (dB)	(8),6	10,(8),6	(8.6),7	11,(8.6),7	8	6	
DC AMPERES @ 24 VDC	.66	1.10	.66	1.10	.22	.13	
POWER DISSIPATION (Watts) ⁽¹⁾	27	44	27	44	8	5	

NOTES:

- (1) Power dissipation measured at 120-volt input to UL approved power transformer. DC amperes is internal voltage regulator load.
- (2) QDAXRA-23 specification is for discrete second order beats - not composite second order.

QDAXF 750 & 870 Distribution Amplifier:

Ordering Information

Example Part Number: QDAXF750 - 32 P 2W	
	1 2 3 4
1: Frequency:	750 = 750 MHz 870 = 870 MHz
2: Gain:	(See Specifications Table)
3: Output Technology:	P = Power-Doubled Q = Quadra-Power
4: Amplifier Configuration:	2W = 2-Way Blank = 1-Way
Part Number	Description
Options & Spares	
QDAXRA-16	16 dB Return Amplifier
QDAXRA-16L	16 dB Return Amplifier
QDAXRA-20	20 dB Return Amplifier
QDAXRA-23L	23 dB Return Amplifier
QAE 750-dB	Forward EQ Values from 0-24 dB in 1.5 dB steps
QAE 870-dB	Forward EQ Values from 0-24 dB in 1.5 dB steps
QAIE 750-dB	Interstage EQ Value, Factory Selected for Slope
QAIE-870-dB	Interstage EQ Value, Factory Selected for Slope
QER 40-dB	Reverse EQ Value in MHz and dB ratings
SXP-TY-**	Plug-in Attenuator Pads, ** = 0-20 dB in 1 dB steps
#951	120 Volts to 26 Volts, 60 Hz AC Power Transformer, 50 VA Rating
<p>#951 Transformer</p>	
Shipping Weight	7.5 lbs (3.40 kg)
Dimensions	9.125"H x 7.0"W x 3.562"D (23.18H x 17.78W x 9.05D cm)
NOTES:	
All 2-way amplifiers with a forward gain of 35 dB or more require the use of QDAXRA-16 return amplifiers only.	
Quadra-powered amplifiers must use QDAXRA-**L return amplifiers only.	

Functional Schematic

