

QDAX 750 & 860

Quality Distribution Amplifier 750/860 MHz One-Way or Two-Way Models

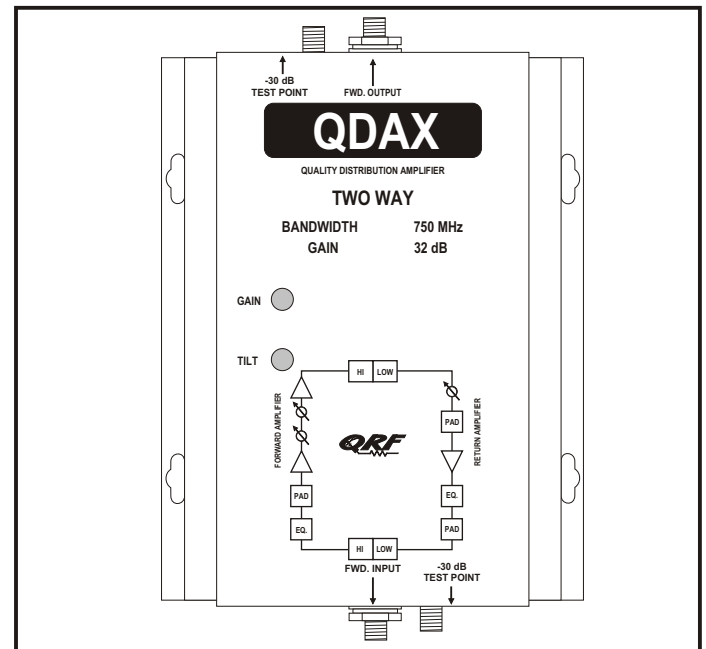
** Features **

- **Push-Pull, Power-Doubled and Quadra-Power Technology**
- **Plug-in hybrids & accessories**
- **Variable gain & tilt controls**
- **5/8" Entry fittings**
- **U.L. Approved Transformer**
- **5 to 40 MHz Return Bandwidth**

The **QDAX 750 & 860** are updated versions of QRF's standard multi-dwelling amplifier with more bandwidth. The **QDAX 750 & 860** offer one-way or two-way models for the challenges encountered in multi-dwelling applications.

QDAX 750 & 860 amplifier output options are push-pull, **power-doubled** and **quadra-powered** hybrid technology. The power-doubled versions provide 2.5 dBmV additional output level over the conventional push-pull types, while **quadra-powered models provide an additional 4.5 dBmV**. This array of technology affords the system designer a level of RF flexibility not present in more typical CATV multi-dwelling amplifiers.

Wide ranges of RF input and RF output signal levels may be accommodated with various controls and accessories. Pin diode tilt and gain controls are at the interstage location to minimize RF signal distortions. Plug-in pads and equalizers are available at the amplifier input to provide a more uniform carrier-to-noise performance at all frequencies.



The QDAX "5 to 40 MHz" two-way return path has a variable gain control with provision for a plug-in pad and equalizer. The optional return amplifier is activated by inserting a return hybrid IC. Quadra-powered amplifiers will require the **QDAXRA-23L** or **QDAXRA-16L** low current hybrid for the return amplifier. A maximum total loop gain of 55 dB is recommended for two-way amplifiers.

Mechanical design objectives for the QDAX housing were efficient thermal capability and stringent RFI shielding. The **QDAX 750** will operate safely at ambient temperatures of 120 degrees Fahrenheit and meets FCC CLI regulations.

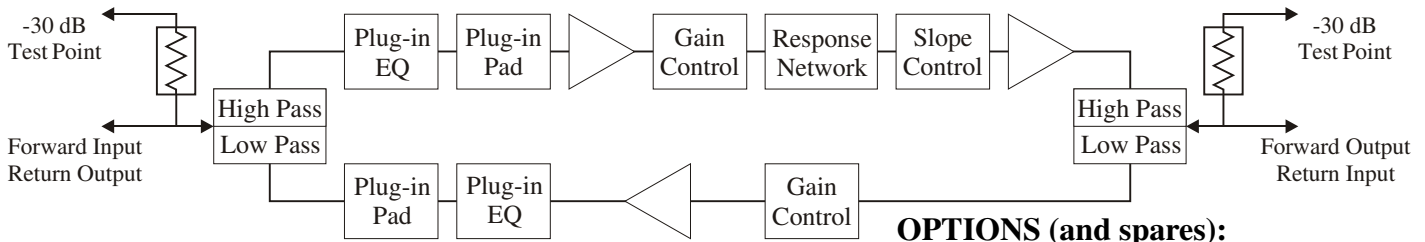
The QDAX includes an external Class II transformer. This accomplishes two objectives -- heat reduction within the RF amplifier housing and the use of a U.L. approved power transformer.

QRF continues to provide flexible and state-of-the-art technology at the lowest possible price.



QDAX 750 / 860	750 One-way			750 Two-way			860	RETURN AMP
	Push Pull	Power Double	Quadra Power	Push Pull	Power Double	Quadra Power	Power Double	
Bandwidth (MHz)	54 - 750	54 - 750	54 - 750	54 - 750	54 - 750	54 - 750	54 - 860	5 to 40
Freq. Response (dB)	± 0.5	± 0.5	± 0.5	± 0.5	± 0.5	± 0.5	± 0.5	± 1.5
Gains Available (dB)	29,33,37	31, 35	28, 32	28,32,36(43)	29,33,36	29, 32	29, 33	16, 20, (23)
Channel Loading	110	110	110	110	110	110	128	6
Return Loss (dB) worst case	14	14	14	14	14	14	14	16
Gain Cont. Range	5	5	5	5	5	5	5	6
Slope Cont. Range	5	5	3.5	5	5	3.5	5	N/A
Output Levels (dBmV)	40/35	40/35	40/35	40/35	40/35	40/35	40/35	48
Distortions:								
Cross Mod. (-dB)	67	72	76	66	71	75	72	79, (63)
Comp. Tr. Bt. (-dB)	63	68	72	62	67	71	66	N/A
Comp. 2nd Ord. (-dB)	58	62	65	58	62	65	68	72, (70**)
Noise Figure (dB)	9	9	9	10	10	10	10	8, (6)
DC Amperes @ 24 VDC	.44	.66	1.10	.44(.56)	.66	1.10	.66	.22, (.13)
Power Dissipation (Watts)*	20	27	44	20 (24)	27	44	27	8, (5)

* Power dissipation measured at 110-volt input to U.L. approved power transformer. DC amperes is load on internal voltage regulator.
 ** QDAXRA-23 specification is for discrete second order beats - not composite second order.



OPTIONS (and spares):

ORDERING INFORMATION:

QDAX 750 - 32 P 2W
 1 2 3 4

- 1 = Frequency Range: 750 MHz
- 2 = Gain: See chart above
- 3 = Technology:
 Push-Pull = dash (-)
 Power-Doubled = P
 Quadra-Power = Q
- 4 = Amplifier Configuration:
 Two-way = 2W
 One-way = Blank

Quadra-power output for 860 MHz is available on a special order basis. Call for details.

All two-way amplifiers with a forward gain of 35 dB or more require the use of QDAXRA-16 return amplifiers only.

- QDAXRA-16 16 dB Return Amplifier
- QDAXRA-16L 16 dB Return Amplifier
- QDAXRA-20 20 dB Return Amplifier
- QDAXRA-23L 23 dB Return Amplifier
- QLX 750-dB Forward EQ values from 0 to 24 dB, 2 dB steps.
- QEE 40-dB Reverse equalizer value in MHz and dB ratings.
- SXP-**. Plug-in attenuator pads, 0 to 20 dB, 1 dB steps.
- #951 120 to 26VAC power transformer, 50 VA. (Included w/QDAX)
- Dimensions: 9.125" x 7.0" x 3.562"
- Shipping Weight: 7.5 lbs.