



QCIA Isolation Amplifier:

Features:

- ▶ Wall mount style amplifier with high isolation output insertion point for local insertion
- ▶ Input signals from combined master channel line up are coupled through an optional pad & EQ if needed & amplified by a single hybrid gain stage
- ▶ Reverse isolation of the hybrid combined with directional isolation of 15 dB coupler can provide 60 dB of signal isolation
- ▶ Prevents signal feedback that can cause co-channel interference allowing clear local access channels, customized advertising insertion channels, RF modems & telco signals to be sent to targeted franchise areas
- ▶ External Class II UL approved power transformer included

QCIA Specifications

SPECIFICATIONS		870 MHz	1000 MHz
GAIN (dB)		19, 23	19, 23
RESPONSE		+/- 0.5 dB	
CHANNEL LOADING		128	
GAIN CONTROL RANGE (dB)		PAD	
SLOPE CONTROL RANGE (dB)		EQ	
RETURN LOSS		15 dB	
NOISE FIGURE		9.0 dB	
INSERTION TO OUTPUT PORT ISOLATION		15 dB	
INSERTION TO INPUT PORT ISOLATION		60 dB	
OUTPUT LEVEL (dBmV)		+30 Flat	
TECHNOLOGY		GaAs GP	
DISTORTIONS	CROSS MOD. (-dB)	87	
	COMP. TR. BT. (-dB)	82	
	COMP. 2nd ORD. (-dB)	70	
POWER DISSIPATION @ 120 VAC (Watts)		18	



QCIA (front view)

Functional Schematics

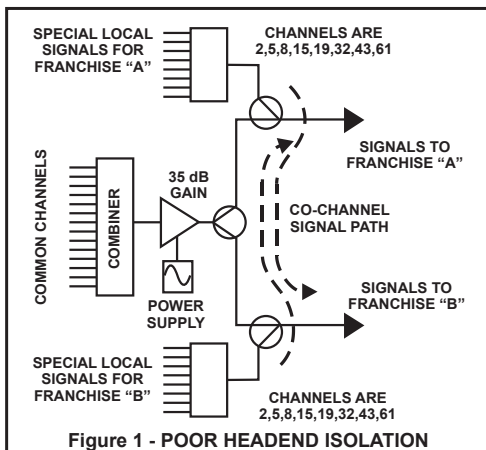


Figure 1 - POOR HEADEND ISOLATION

If your headend is wired similar to the one on the left, you may need QCIA to help eliminate the crosstalk paths shown via the splitter in the common signal path.

For drawing simplicity, only two separate signal paths are shown. In a system with RF modems and telephony this splitting process could go down to the node level or very small groups of nodes.

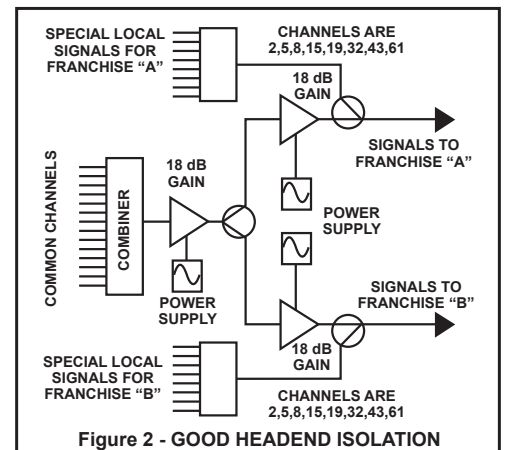
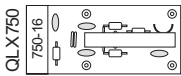

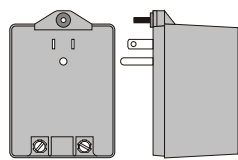


Figure 2 - GOOD HEADEND ISOLATION

QCIA Isolation Amplifier:

Ordering Information

Example Part Number: QCIA870 - 19 GP	
$\frac{\quad}{1 \quad 2 \quad 3}$	
1: Frequency Range: 870 = 870 MHz 1000 = 1 GHz	
2: Gain (See Specifications Table)	
3: Output Technology: GP = Gallium Arsenide (GaAs) Power-Doubled	
Part Number	Description
Options & Spares	
QLX 550-(dB)	Forward EQ values from 0-24 dB in 2 dB steps
QLX 750-(dB)	
QLX 860-(dB)	
	
SXP-**	Plug-in Attenuator Pads, ** = 0-20 dB in 1 dB steps
SXP Pads 	
#951	120 to 26 VAC, 60 Hz AC Power Transformer, 50 VA Rating
#951 Transformer 	
Shipping Weight	4 lbs (1.81 kg)
Dimensions	8.25"H x 5.0"W x 2.26"D (20.96H x 12.7W x 5.74D cm)

Specifications subject to change without notice.

