

PowerMiser™

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PowerMiser™
Amplifier Series

50% reduction in

Power Requirements

Contact:

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Upgrade



Trunk Amplifiers

New

**PowerMiser™
Amplifier Series**

[C-COR SF-739 Mini Trunk](#)

[Magnavox/Phillips 5-8T Type Trunk Amp](#)

[Magnavox/Phillips TNA Type](#)



4CSF1039 1 GHz Mini Trunk

**2 Year
Warranty**

LOW CURRENT 460 mA with AGC

Drop In replacement for CCor SF-739

PowerMiser™

- High Gain 41 dB
- 1/2 the Current Draw of Conventional Amps
- \$8.00 per year average savings on Electric
- Low Noise Figure 8 dB
- High Output 52 dBmV
- Built in Return Amplifier
- Standard Interstage EQ's and Pads
- Plug in Diplexers for future split changes
- Uses CCor SF-739 Power Supply
- Up to 3 field switch able outputs
- Breakthrough Low Current Technology

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse	
Technology	-	-	-	GaAs	GaAs	
Bandwidth	-	MHz	-	54-1003	5-42	
Response Flatness	-	dB	-	+/-0.75	+/-0.5	
Minimum Full Gain	-	dB	1	41	17	
Operational Gain	-	dB	-	37	16	
Slope Built in	Cable Equivalent	dB	-	22	0	
AGC	+3.5 /-4.5 dB Change	dB	7	± .5 dB Change	NA	
Input Test Points	-	dB	-	-20 +/-1	-20 +/-1	
Output Test Points	-	dB	5	-20 +/-1	External on housing	
Input Return Loss	Freq	5-40 MHz	dB	2	-	16
		54-1003 MHz			16	
Output Return Loss	Freq	5-40 MHz	dB	-	16	
		54-1003 MHz		16		
Loop Isolation	-	dB	-	> 30		
DC Current Draw (max) with AGC	@24 Volts DC	mA	-	460		
Without AGC	@24 Volts DC	mA	-	430		
AC Current Draw (max) with AGC	90 VAC	mA	-	N/A		
	60 VAC			200		
	50 VAC			240		
	40 VAC			300		
Noise Figure	-	dB	-	8	4.5	

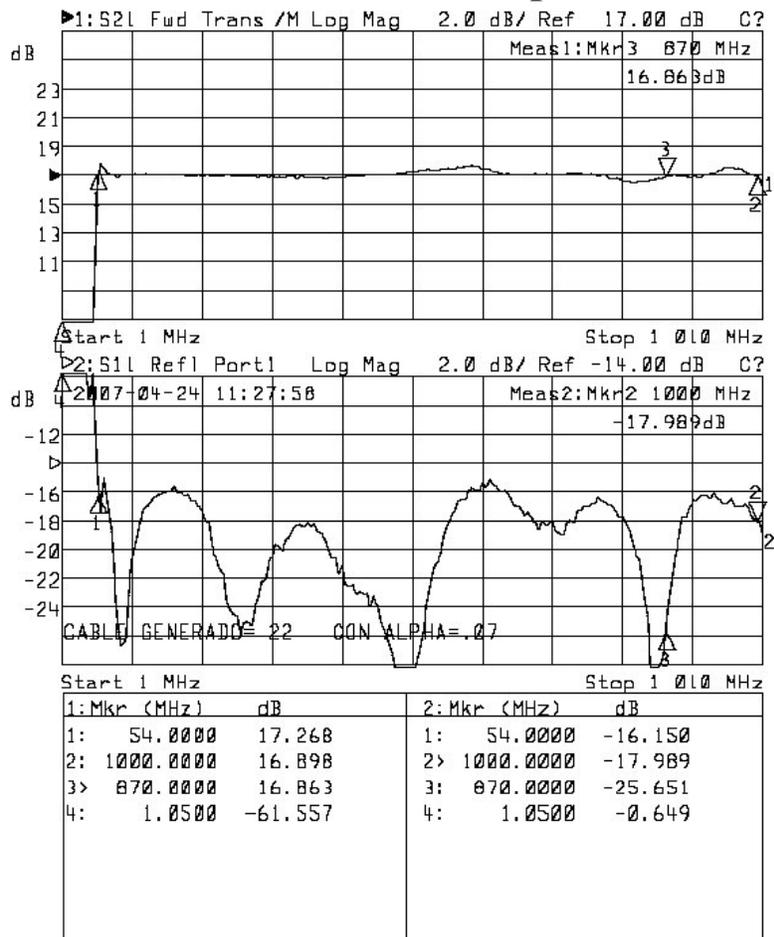
Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz	-	55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or equivalent	4 channels
Composite Triple Beat	-	dBc	-	74	86
Composite Second Order	-	dBc	-	77	86
Carrier to Noise	-	dB	-	60	74
Cross Modulation	-	dBc	-	74	84

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Notes:

1. Factory alignment with 22 dB cable equivalent, and 17 dB of flat gain. 42 dB gain version available
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equivalent noise running 6 dB down from an analog equivalent.
4. Resistive -20 dB test points on the housing
5. Reverse sweep can be inserted using the output test point of the resistive test point on the housing
6. Field configurable 1, 2 or 3 output with plug-in splitters and Directional couplers
7. BODE Control

Recorded Sweep



Available now from stock to 4 weeks



5T650BODE 650 MHz Trunk Amplifier

**2 Year
Warranty**



Drop In replacement for Magnavox/Philips 4/5/6/8T

When Operated with 4Cable's CCD it will AGC from a Digital or an Analog Channel

Operational Gain 35 dB - Low Distortion

100% New Board - Low Noise Figure 6 dB

40% Less current than a Feedforward

Interstage EQ's and Pads for maximum flexibility

GaAs FET Technology

BODE Gain control for single pilot operation

Specifications in Housing

Parameter	Test Conditions		Units	Notes	Forward
Technology	-		-	-	GaAs FET PD
Bandwidth	-		MHz	-	54-650
Response Flatness	-		dB	-	+/-0.25
Minimum Full Gain	-		dB	1	38
Operational Gain	-		dB	-	35
Slope	Cable Equivalent		dB		10
Input Return Loss	Freq	54-650 MHz	dB	2	16
Output Return Loss	Freq	54-650 MHz	dB		16
DC Current Draw (max)	-		mA	-	680
Noise Figure	-		dB	-	6

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		55/550/650
Output Levels	-	dBmV	-	32/42/44
Channel Loading	-	NTSC	3	77 + digital above 550 MHz
Composite Triple Beat	-	dBc	-	79
Composite Second Order	-	dBc	-	76
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	85

Notes:

1. Factory alignment with 10dB cable equivalent and 28 dB of flat gain.
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 77 analog channels and digital channels running 6 dB down from an analog equivalent.
4. A 5 db Interstage EQ is recommended for optimum field operation
5. 750 MHz version available on special order 1 dB higher gain and distortions will be 1 dB lower

Available now from stock to 4 weeks

Upgrade



Bridgers

New

PowerMiser™
Amplifier Series

[Magnavox/Phillips Plug in Bridger Module](#)

[Magnavox/Phillips GNA](#)

[MB 750 Upgrade to 870](#)



B650G Bridger Amplifier

**2 Year
Warranty**



Drop In replacement for Magnavox/Philips B**

Operational Gain 27 dB - Low Distortion

100% New Board - Low Noise Figure 6 dB

Plug in EQ's and Pads for maximum flexibility

GaAs FET Technology

Specifications in Housing

Parameter	Test Conditions		Units	Notes	Forward
Technology	-		-	-	GaAs FET PD
Bandwidth	-		MHz	-	54-650
Response Flatness	-		dB	-	+/-0.5
Minimum Full Gain	-		dB	1	27
Operational Gain	-		dB	-	27
Slope	-		dB	-	Fixed with plug in EQ
Input Return Loss	Freq	54-650 MHz	dB	2	16
Output Return Loss	Freq	54-650 MHz	dB	-	16
DC Current Draw (max)	-		mA	-	450
Noise Figure	-		dB	-	6

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz	-	55/550/650
Output Levels	-	dBmV	-	37/47/49
Channel Loading	-	NTSC	3	77 + digital above 550 MHz
Composite Triple Beat	-	dBc	-	75
Composite Second Order	-	dBc	-	72
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	75

Notes:

6. Factory alignment flat .
7. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
8. Distortion measurements made with 77 analog channels and digital channels running 6 dB down from an analog equivalent.
9. 750 MHz version available on special order 1 dB higher gain and distortions will be 1 dB lower

Available now from stock to 4 weeks

Upgrade



Line Extenders

New

**PowerMiser™
Amplifier Series**

[Magnavox/Phillips 6LE Type](#)

[Magnavox/Phillips 1 GHz 6LE Type PowerMiser™](#)

[CCor Type E-7 series 1 GHz PowerMiser™](#)

[BLE 750 Upgrade to 870](#)



4CLE97 750 MHz Line Extender

**2 Year
Warranty**



Drop In replacement for Magnavox/Philips 5 & 6LE

High Gain 42 dB

Low Noise Figure 6 dB

High Output 50 dBmV

Built in Return Amplifier

Standard Interstage EQ's and Pads

Plug in Diplexers for future split changes

100% New Construction with 90 Volt Power Supply

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs FET PD	Silicon
Bandwidth	-	MHz	-	54-750	5-40
Response Flatness	-	dB	-	+/-0.5	+/-0.5
Minimum Full Gain	-	dB	1	42	20/25
Operational Gain	-	dB	-	40	20
Slope Built in	Cable Equivalent	dB		10	0
Input Test Points	-	dB	-	-20 +/-0.75	-20 +/--1
Output Test Points	-	dB	4	-20 +/-0.75	External on housing
Input Return Loss	Freq	5-40 MHz	2	-	16
		54-750 MHz		16	
Output Return Loss	Freq	5-40 MHz		-	16
		54-750 MHz		16	
Loop Isolation	-	dB	-	> -30	
DC Current Draw (max)	-	mA	-	800	
AC Current Draw (max)	90 VAC	mA	-	274	
	60 VAC			398	
	50 VAC			482	
	40 VAC			624	
Noise Figure	-	dB	-	6	4.5
Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz		55/550/750	T7-T12
Output Levels	-	dBmV	-	38/48/51	36
Channel Loading	-	NTSC	3	77 + 33 digital	4 channels
Composite Triple Beat	-	dBc	-	65	86
Composite Second Order	-	dBc	-	67	86

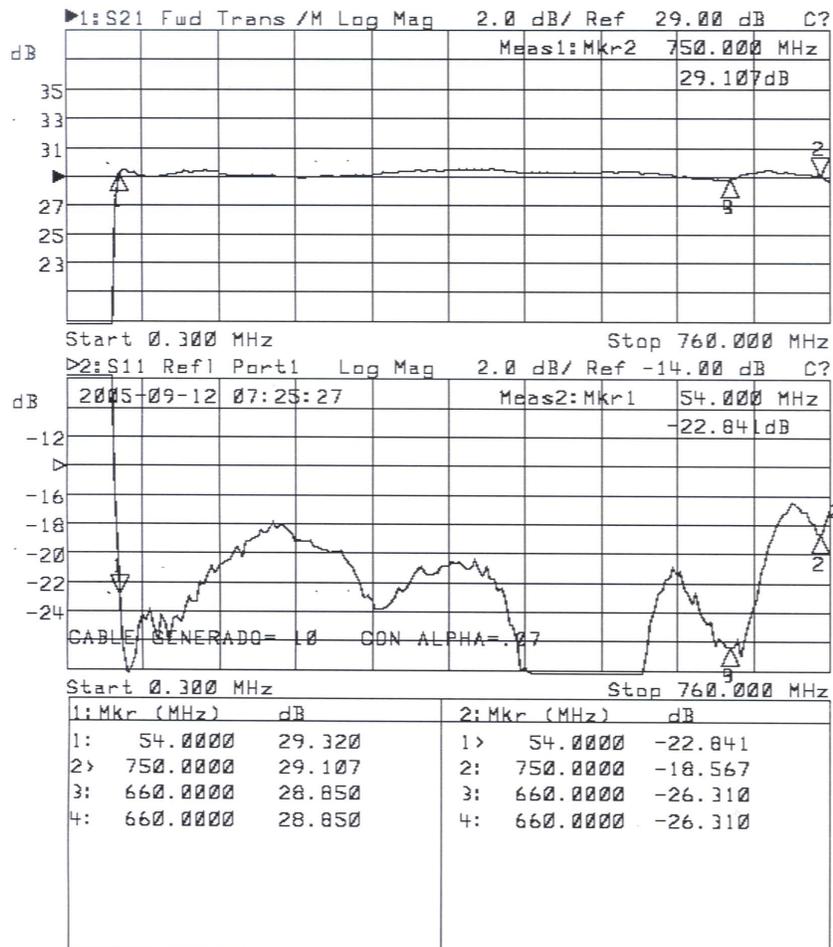
Carrier to Noise		dB	-	60	74
Cross Modulation		dBc	-	69	84

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Notes:

1. Factory alignment with 10dB cable equivalent, 3 dB of Interstage pad and 29 dB of flat gain. Reverse gain dependant on reverse hybrid selection normal is 25 dB.
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 77 analog channels and 33 digital channels running 6 dB down from an analog equivalent.
4. Resistive -20 dB test points on the housing
5. Reverse sweep can be inserted using the output test point or the restive test point on the housing

4CLE97 Sweep and Input Return Loss



Available now from stock to 4 weeks



4CLE1000L 1 GHz Line Extender

**2 Year
Warranty**

LOW CURRENT 410 mA



Drop In replacement for Magnavox/Philips 5 & 6LE

PowerMiser™

- High Gain 39 dB
- 1/2 the Current Draw of Conventional Amps
- \$8.00 per year average savings on Electric
- Low Noise Figure 10 dB
- High Output 50 dBmV
- Built in Return Amplifier
- Standard Interstage EQ's and Pads
- Plug in Diplexers for future split changes
- 100% New Construction with 90 Volt Power Supply
- Breakthrough Low Current Technology

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs	GaAs
Bandwidth	-	MHz	-	54-1003	5-40
Response Flatness	-	dB	-	+/-0.75	+/-0.5
Minimum Full Gain	-	dB	1	39*	20
Operational Gain	-	dB	-	38	19
Slope Built in	Cable Equivalent	dB	-	22	0
Input Test Points	-	dB	-	-20 +/-1	-20 +/-1
Output Test Points	-	dB	4	-20 +/-1	External on housing
Input Return Loss	Freq	5-40 MHz	2	-	16
		54-1003 MHz		16	
Output Return Loss	Freq	5-40 MHz		-	16
		54-1003 MHz		16	
Loop Isolation	-	dB	-	> 30	
DC Current Draw (max)	@24 Volts DC	mA	-	410	
AC Current Draw (max)	90 VAC	mA	-	160	
	60 VAC			200	
	50 VAC			230	
	40 VAC			290	
Noise Figure	-	dB	-	7	4.5
Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz	-	55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or equalivlent	4 channels

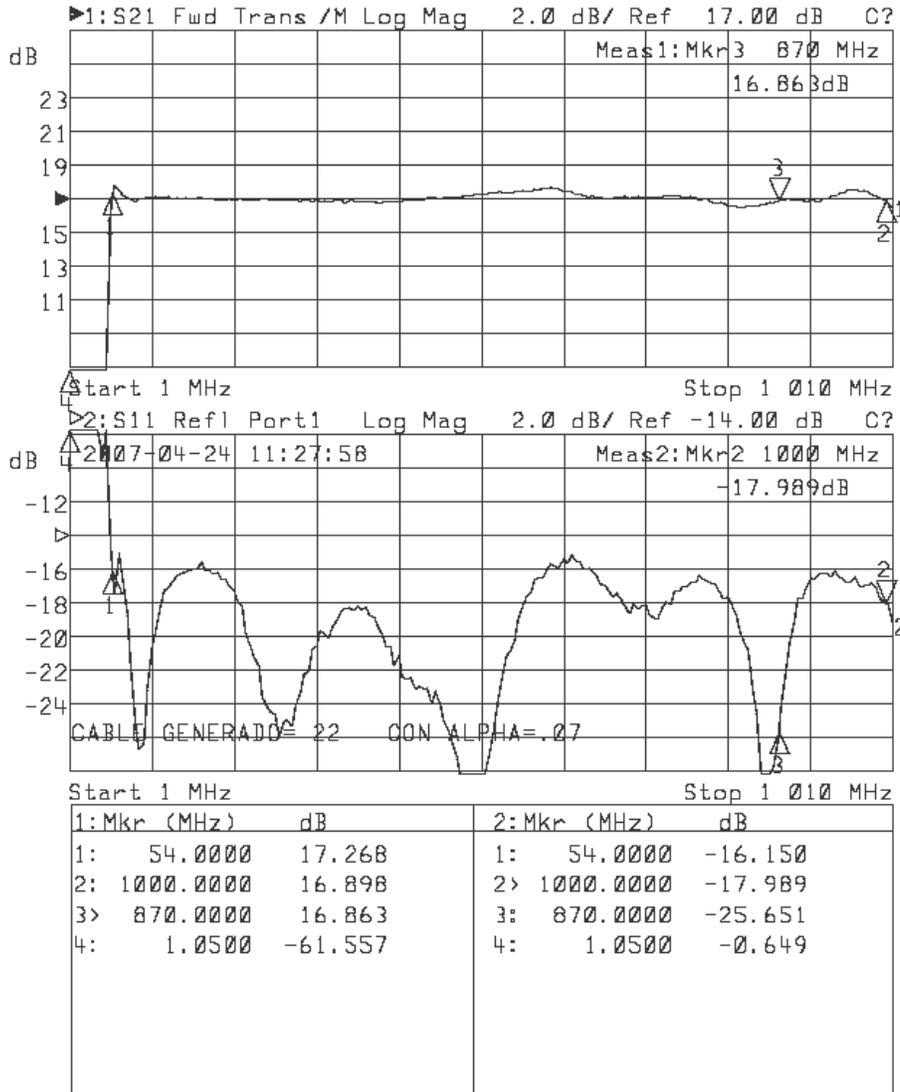
Composite Triple Beat	-	dBc	-	74	86
Composite Second Order		dBc	-	77	86
Carrier to Noise		dB	-	60	74
Cross Modulation		dBc	-	74	84

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Notes:

10. Factory alignment with 22 dB cable equivalent, and 17 dB of flat gain. 42 dB gain version available
11. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
12. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivlent noise running 6 dB down from an analog equivalent.
13. Resistive -20 dB test points on the housing
14. Reverse sweep can be inserted using the output test point of the restive test point on the housing

Recorded Sweep



Available now from stock to 4 weeks



4CE10XXL 1 GHz Line Extender

**2 Year
Warranty**

LOW CURRENT 410 mA

Drop In replacement for CCor E-7 series and SF-739

PowerMiser™

- High Gain 40 dB
- ½ the Current Draw of Conventional Amps
- \$8.00 per year average savings on Electric
- Low Noise Figure 10 dB
- High Output 52 dBmV
- Built in Return Amplifier
- Standard Interstage EQ's and Pads
- Plug in Diplexers for future split changes
- 100% New Construction with 90 Volt Power Supply
- Breakthrough Low Current Technology

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs	GaAs
Bandwidth	-	MHz	-	54-1003	5-40
Response Flatness	-	dB	-	+/-0.75	+/-0.5
Minimum Full Gain	-	dB	1	41	20
Operational Gain	-	dB	-	36	19
Slope Built in	Cable Equivalent	dB	-	22	0
AGC	± 3 Change	dB	7	± .5 Change	NA
Input Test Points	-	dB	-	-20 +/-1	-20 +/-1
Output Test Points	-	dB	5	-20 +/-1	External on housing
Input Return Loss	Freq	5-40 MHz	2	-	16
		54-1003 MHz		16	
Output Return Loss	Freq	5-40 MHz		-	16
		54-1003 MHz		16	
Loop Isolation	-	dB	-	> 30	
DC Current Draw (max)	@24 Volts DC	mA	-	435	
AC Current Draw (max)	90 VAC	mA	-	170	
	60 VAC			210	
	50 VAC			245	
	40 VAC			307	
Noise Figure	-	dB	-	7	4.5
Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz	-	55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or	4 channels

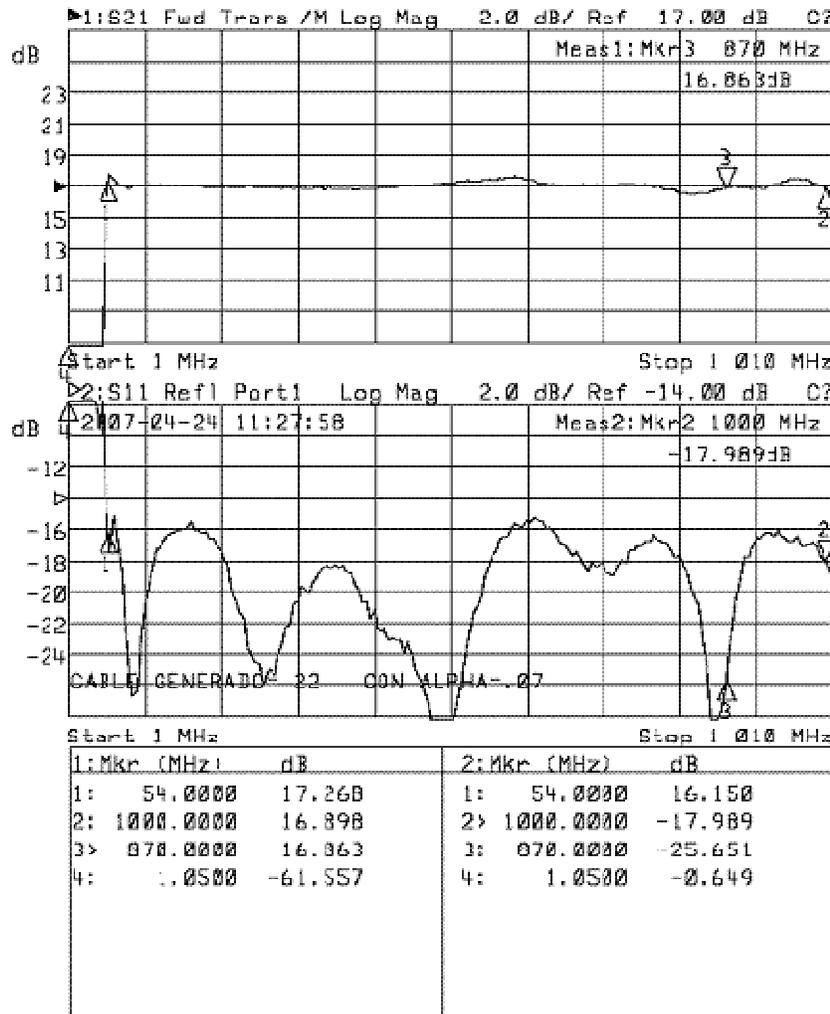
				equalivalent	
Composite Triple Beat	-	dBc	-	74	86
Composite Second Order		dBc	-	77	86
Carrier to Noise		dB	-	60	74
Cross Modulation		dBc	-	74	84

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Notes:

1. Factory alignment with 22 dB cable equivalent, and 17 dB of flat gain. 42 dB gain version available
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivalent noise running 6 dB down from an analog equivalent.
4. Resistive -20 dB test points on the housing
5. Reverse sweep can be inserted using the output test point of the restive test point on the housing
6. Available in a field configurable 1, 2 or 3 output with plug-in splitters and Directional couplers
7. BODE Control

Recorded Sweep



Available now from stock to 4 weeks

Upgrade

PowerMiser™

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Amplifier Series



Return Lasers

[Antec Type Return Laser Transmitter](#)

[SX Type Return Laser](#)

[RT-2/RT5 Type Return Lasers](#)

[CCor 669-07 Return Laser](#)

[GI AM MB RPT](#)

[Magnavox 7-OR Return Laser](#)

[Rack Mount Return Laser](#)



ANTEC GD TYPE RETURN LASER

**2 Year
Warranty**



**1310 or 1550 return laser
for Antec Nodes**

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward
Operational bandwidth	5 to 200	MHz		
OMI	8	%	-	
Laser Type	Uncooled FP		1	
Optical Wavelength	1310	nm	2	
Optical Power	2	mW		
Optical TP	1V/mW			

Notes:

- 1. DFB Laser diode available**
- 2. 1550 nm Laser diode available**

Available now from stock to 4 weeks



GI SX RETURN LASER

2 Year
Warranty



1310 or 1550 return laser
for GI SX Nodes

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	
Operational bandwidth	5 to 200	MHz			
OMI	8	%	-		
Laser Type	Uncooled FP		1		
Optical Wavelength	1310	nm	2		
Optical Power	2	mW			
Optical TP	1V/mW				

Notes:

1. DFB Laser diode available
2. 1550 nm Laser diode available

Available now from stock to 4 weeks



RT-2/RT-5 Return Laser

**2 Year
Warranty**



**1310 or 1550 return laser
for SA 6920 Nodes**

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward
Operational bandwidth	5 to 200	MHz		
OMI	8	%	-	
Laser Type	Uncooled FP		1	
Optical Wavelength	1310	nm	2	
Optical Power	2	mW		
Optical TP	1V/mW			

Notes:

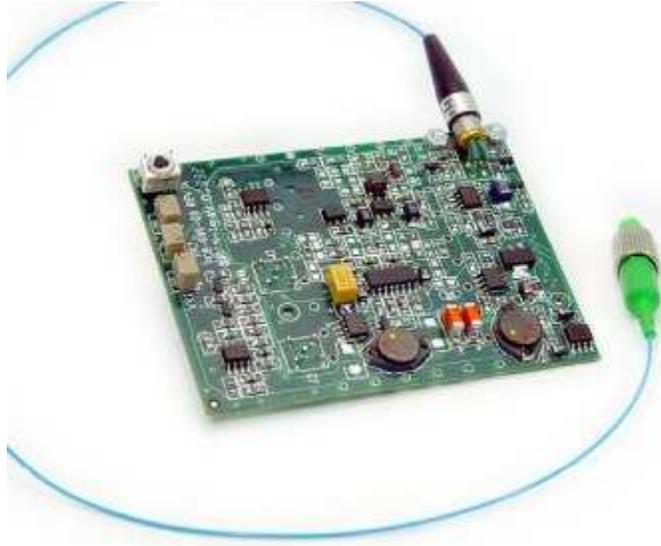
1. DFB Laser diode available
2. 1550 nm Laser diode available

Available now from stock to 4 weeks



CCor 699-07 Return Transmitter

**2 Year
Warranty**



**1310 or 1550 return laser
for CCor Nodes**

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	
Operational bandwidth	5 to 200	MHz			
OMI	8	%	-		
Laser Type	Uncooled FP		1		
Optical Wavelength	1310	nm	2		
Optical Power	2	mW			
Optical TP	N/A				

Notes:

1. DFB Laser diode available
2. 1550 nm Laser diode available

Available now from stock to 4 weeks



AM MB RPT Return Laser

**2 Year
Warranty**



1310 or 1550 return laser for GI MB and BTN Nodes

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward
Operational bandwidth	5 to 200	MHz		
OMI	8	%	-	
Laser Type	Uncooled FP		1	
Optical Wavelength	1310	nm	2	
Optical Power	2	mW		
Optical TP	1V/mW			

Notes:

- 1. DFB Laser diode available**
- 2. 1550 nm Laser diode available**

Available now from stock to 4 weeks



**2 Year
Warranty**

7-OR Return Transmitter



**Return Laser for Magnavox Diamond Series
available in FP 1310 and DFB 1310 and 1550**

Specifications in Housing

Parameter	Test Conditions	Units	Notes		
Operational Bandwidth	5-200	MHz			
OMI	8	%	-		
Laser Type	Uncooled FP or DFB		1		
Optical Wavelength	1310 or 1550	nm			
Optical Power	2	mW			
Optical TP	1V/mW				
RF Test Point	-20	dB	2		
RF Input	18	dB			

Notes:

- 1** **1310 FP or 1310 or 1550 DFB Laser**
 - a.** **Add \$125.00 for DFB laser Diode**
- 2** **RF test in on the input prior to the RF amplifier**

Available now from stock to 3 weeks

Upgrade



RETURN AMPS

PowerMiser™

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Amplifier Series

[CCor 1040003-02 Type Return Amp](#)

[GI JLX-SS Type return Amp](#)

[GI SX Type Return Amp](#)

[SA Type Return Amp w/PowerMiser™](#)

[Magnavox/Phillips 4LER/5LER](#)

[Magnavox/Phillips 5RT](#)

[Magnavox/Phillips 5RTC](#)

[SADA Reverse Amps](#)

[Triple Crown](#)

[ANTEC P7RD](#)



CCor 109003-024C Return Amp

**2 Year
Warranty**



Drop In replacement CCor 109003-02 Return Amp

On board alignment controls

Available with Switch 109003-02A4C

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	Silicon
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	22
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		120
Noise Figure	-	dB		5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		T7-T12
Output Levels				
Channel Loading	-	NTSC	-	6
Composite Triple Beat	-	dBc	-	77
Composite Second Order		dBc	-	77
Carrier to Noise		dB	-	65
Cross Modulation		dBc	-	64

Notes:

1.0 All return loss measurements made with #18 gauge wire in the Pad location

Available now from stock to 2 weeks



JLX-SS Return Amp

**2 Year
Warranty**



**Drop In replacement
for JLX-SS Return
Amp**

**On board alignment
controls**

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	Silicon
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	22
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		120
Noise Figure	-	dB		5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		T7- T12
Channel Loading	-	NTSC	-	6
Output Level		dB		48
Composite Triple Beat	-	dBc	-	77
Composite Second Order		dBc	-	77
Carrier to Noise		dB	-	65
Cross Modulation		dBc	-	64

Notes:

1. All return loss measurements made with #18 gauge wire in the Pad location

Available now from stock to 2 weeks



GI SX Return Amp

**2 Year
Warranty**



**Drop In replacement for
GI SX Return Amp**

Two Gains available

22 dB

28 dB

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	Silicon
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	22
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		120
Noise Figure	-	dB		5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		T7-T12
Channel Loading	-	NTSC	-	6
Output Level		dB		48
Composite Triple Beat	-	dBc	-	77
Composite Second Order		dBc	-	77
Carrier to Noise		dB	-	65
Cross Modulation		dBc	-	64

Notes:

1. GI SX Bridger Gate switch or Bridger Gate amplifier also available

Available now from stock to 2 weeks



SA Type Return Amp

w/PowerMiser™

**2 Year
Warranty**



Drop In replacement Return Amp for SA System Amps

On board alignment controls

w/PowerMiser™

70 mA Total Current

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	GaAs
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	19
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		70
Noise Figure	-	dB		3.5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		T7-T12
Channel Loading	-	NTSC	-	6
Output Level	-	dB		48
Composite Triple Beat	-	dBc	-	77
Composite Second Order	-	dBc	-	77
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	64

Notes:

- All return loss measurements made with #18 gauge wire in the Pad location

Available now from stock to 2 weeks

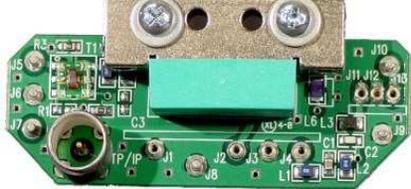


Mag/Philips 4LER/5LER





4LER



5LER

[Download pdf spec sheet](#)

Ordering Information		
OEM Number	4 Cable #	Description
N/A	4LER90IP4CM	Philips Compatible Rev Module 5-40, 24 dB Gain Discrete Injection Point
PB4-LER90-40/24	4LER904CM	Philips Compatible Rev Module 5-40, 24 dB Gain Discrete
PB4-LER90-33/21	4LER90334CM	Philips Compatible Rev Module 5-33, 21 dB Gain Discrete
PB5-LER9133/H-IP	5LER9133HIP4CM	Philips Compatible Rev Module 5-33, 24 dB Gain Hybrid Injection Point
PB5-LER9140/H-IP	5LER9140HIP4CM	Philips Compatible Rev Module 5-40, 24 dB Gain Hybrid Injection Point
PB5-LER9165/H-IP	5LER9165HIP4CM	Philips Compatible Rev Module 5-65, 24 dB Gain Hybrid Injection Point
PB5-LER9133/H-TP	5LER9133HTP4CM	Philips Compatible Rev Module 5-33, 24 dB Gain Hybrid Test Point
PB5-LER9140/H-TP	5LER9140HTP4CM	Philips Compatible Rev Module 5-40, 24 dB Gain Hybrid Test Point
PB5-LER9165/H-TP	5LER9165HTP4CM	Philips Compatible Rev Module 5-65, 24 dB Gain Hybrid Test Point

Available now from stock to 2 weeks



5RT-4C Return Amplifier

**2 Year
Warranty**



Drop In replacement for Magnavox/Philips 5RT

Output Pad for optimum Level Control

Low Noise Figure 3 dB

Also Available with plug in EQ's and Pads 5RTP-4C

Specifications in Housing

Parameter	Test Conditions		Units	Notes	Trunk	Bridger
Technology	-		-	-	Silicon	
Bandwidth	-		MHz	-	5-42	
Response Flatness	-		dB	-	+/-0.5	
Minimum Full Gain	-		dB	1	16	24
Tilt Control Range	-		dB		5	
Gain Control Range	-		dB		10	
Input Return Loss	Freq	5-42 MHz	dB	2	16	16
Output Return Loss	Freq	5-42 MHz	dB		16	
DC Current Draw (max)	-		mA	-	120	
Noise Figure	-		dB	-	6	3

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		
Output Levels	-	dBmV	3	35
Channel Loading	-	NTSC	-	4
Composite Triple Beat	-	dBc	-	75
Composite Second Order	-	dBc	-	75
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	74

Notes:

1. With 7S-1A Link
2. All return loss measurements made with #18 gauge wire on the Bridger input and a 10 dB pad in the output.
3. Distortion measurements made with a 10 dB pad in the bridger input and a 0 dB in the output.

Available now from stock to 2 weeks



5RTC-4C Return Amplifier

**2 Year
Warranty**



**Drop In replacement for
Magnavox/Philips 5RTC**

Temperature Compensation

Output Pad for optimum Level Control

Low Noise Figure 3 dB

Specifications in Housing

Parameter	Test Conditions		Units	Notes	Trunk	Bridger
Technology			-	-	Silicon	
Bandwidth			MHz	-	5-42	
Response Flatness			dB	-	+/-0.5	
Minimum Full Gain			dB	1	14	22
Tilt Control Range			dB		5	
Gain Control Range			dB		10	
Input Return Loss	Freq	5-42 MHz	dB	2	16	16
Output Return Loss	Freq	5-42 MHz	dB		16	
DC Current Draw (max)			mA	-	120	
Noise Figure			dB	-	6	3

Distortion Measurements @ rated loading

Reference Frequencies		MHz		
Output Levels		dBmV	-	35
Channel Loading		NTSC	-	4
Composite Triple Beat		dBc	-	75
Composite Second Order		dBc	-	75
Carrier to Noise		dB	-	65
Cross Modulation		dBc	-	74

Notes:

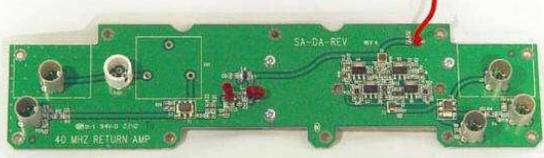
1. With 7S-1A Link
2. All return loss measurements made with #18 gauge wire on the Bridger input and a 10 dB pad in the output.
3. Distortion measurements made with a 10 dB pad in the bridger input and a 0 dB in the output.

Available now from stock to 4 weeks



SADA Type Return Amp

2 Year
Warranty



Drop In replacement Return Amp for SA Distribution Amps

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	GaAs
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	19
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		150
Noise Figure	-	dB		3.5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz	-	T7-T12
Channel Loading	-	NTSC	-	6
Output Level	-	dB	-	48
Composite Triple Beat	-	dBc	-	77
Composite Second Order	-	dBc	-	77
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	64

Notes:

1. All return loss measurements made with #18 gauge wire in the Pad location

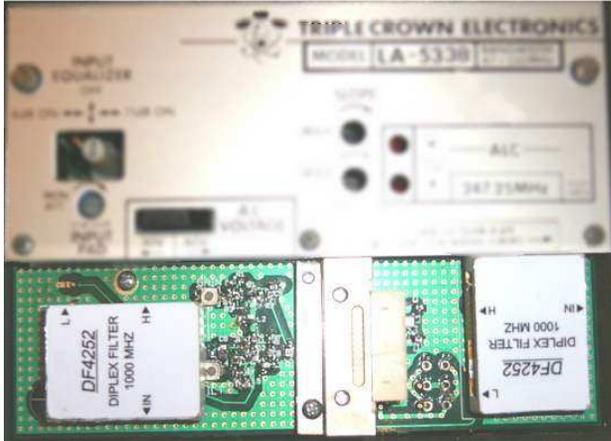
Available now from stock to 2 weeks



LA 5328 Return Amplifier

**2 Year
Warranty**

Drop In replacement Triple
Crown Return Amp



Aftermarket return Amplifier using the latest in hybrid technology for superior distortions and reliability. Plug in Diplexers allow for future changes in frequency splits for maximum flexibility

Specifications in Housing

Parameter	Test Conditions		Units	Notes	
Technology	-		-	-	Silicon
Bandwidth	-		MHz	-	5-42
Response Flatness	-		dB	-	+/-0.5
Minimum Full Gain	-		dB	1	20
Tilt Control Range	-		dB		10
Gain Control Range	-		dB		10
Input Return Loss	Freq	5-42 MHz	dB	2	16
Output Return Loss	Freq	5-42 MHz	dB		16
DC Current Draw (max)	-		mA	-	120
Noise Figure	-		dB	-	5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz			T7-T12
Output Levels	-	dBmV	-		48
Channel Loading	-	NTSC	-		6
Composite Triple Beat	-	dBc	-		77
Composite Second Order	-	dBc	-		77
Carrier to Noise	-	dB	-		65
Cross Modulation	-	dBc	-		64

Available now from stock to 4 weeks



ANTEC P7RD-40 Return Amp

**2 Year
Warranty**



**Drop In replacement
for ANTEC Return
Amp P7RD-40**

Two Gains available

Specifications in Housing

Parameter	Test Conditions	Units	Notes	
Technology	-	-	-	Silicon
Bandwidth	-	MHz	-	5-42
Response Flatness	-	dB	-	+/-0.5
Minimum Full Gain	-	dB	1	22
Input Return Loss	Freq	dB		16
Output Return Loss	Freq	dB		16
DC Current Draw (max)	-	mA		130
Noise Figure	-	dB		5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz		T7-T12
Channel Loading	-	NTSC	-	6
Output Level	-	dB		48
Composite Triple Beat	-	dBc	-	77
Composite Second Order	-	dBc	-	77
Carrier to Noise	-	dB	-	65
Cross Modulation	-	dBc	-	64

Notes:

Available now from stock to 2 weeks

Upgrade



AGC's

Works with a Digital or Analog Channel

New



**PowerMiser™
Amplifier Series**

[GI ACB](#) QAM

[GI ADU](#) QAM

[Mag AGC for Digital Channels](#)

SA Type AGC (Coming Soon)

4Cable TV has been shipping QAM capable AGC units for over 3 Years



**2 Year
Warranty**

GI ADU AGC Module

Works on both analog and digital channels



**Drop In replacement
for GI/Motorola ADU
AGC Module**

Helical Band Pass Filter

**499.25 MHz analog can
be retuned in the field
for 507 MHz digital**

AGC Action ± 0.5 dB out put change for ± 3 dB input change

Advanced Detector is a Temperature compensated Schottky diode IC

499.25 is Normal other frequencies available on special order

Notes:

Available now from stock to 2 weeks



**2 Year
Warranty**

GI ADU AGC Module

Works on both analog and digital channels

QAM Available



**Drop In replacement
for GI/Motorola ADU
AGC Module**

Helical Band Pass Filter

**499.25 MHz analog can
be retuned in the field
for 507 MHz digital**

AGC Action ± 5 dB out put change for ± 3 dB input change

Advanced Detector is a Temperature compensated Schottky diode IC

499.25 is Normal other frequencies available on special order

Notes:

Available now from stock to 2 weeks



CCD*** Digital Control Module

**2 Year
Warranty**



**Works with 5T650BODE Trunk Amp for BODE
Operation from Single Pilot**

Works with a Digital or Analog Channel

First Operational Digital Keyed AGC

Helical Filters

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward
Modulation	-	-	1	Analog or Digital
Frequency	-	MHz	-	As Ordered
Pilot Levels	-	dB	-	
Analog	At CCD input Pilot 505.25	dBmV	2	18
Digital	Pilot at 507 MHz	dBmV	3	12
Recovery Performance	± 3	dB		
Constant Temperature		dB		± 0.75
-40 F to +140 F		dB		± 1
DC Current Draw (max)	-	mA	-	80

Notes:

- 15. Digital levels are assumed to be 6 dB down from Analog
- 16. All units are aligned for operation with an Analog channel with a 3 dB pad in the unit..
- 17. For operation with a digital channel the 3 dB pad must be replaced with a 0 dB pad.

Available now from stock to 4 weeks



Diplexers

[GI/Motorola type Diplexer](#)

[C-COR Diplexer](#)

[C-COR Diplexer 162198-01](#)

[C-COR BA Diplex Filter](#)



GI/Motorola Type Diplex Filter

**2 Year
Warranty**



GI/Motorola Type Diplex Filter

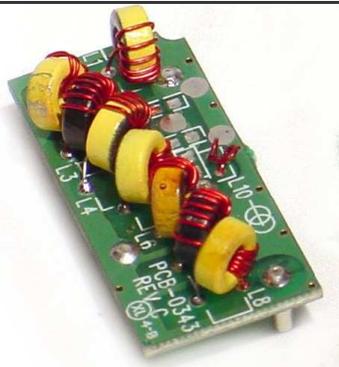
DF-1-SS/404CM

Available now from stock to 2 weeks



CCor Type Diplex Filter

2 Year Warranty



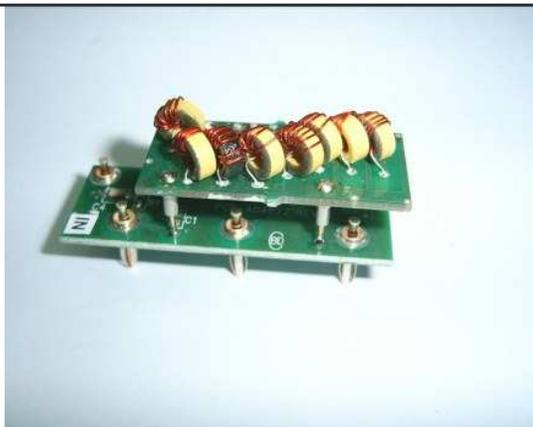
CCor Type Diplex Filter
162198-01/404CM

Available now from stock to 2 weeks



CCor Type Diplex Filter

2 Year Warranty



CCor Type Diplex Filter
162181-02/404CM

162181-024CM

COR Type output diplexer 5-40MHz for FT

162181-02A4CM

COR Type input diplexer 5-40MHz for FT with ch 2 peaker

Available now from stock to 2 weeks



CCor Type BA Diplex Filter

2 Year
Warranty



CCor Type BA Diplex Filter Splitter 162073-0X/404CM

162073-02/404CM	COR Type BA Diplexer Filter output Jumper 5-40MHz 1W for FT
162073-03/404CM	COR Type BA Diplexer Filter output DC-8 5-40MHz DC-8 for FT
162074-02/404CM	COR Type BA Diplexer Filter output Splitter 5-40MHz 2-W for FT

Available now from stock to 2 weeks

Upgrade



PowerMiser™
Amplifier Series



EQ's

[GI Type Forward EQ's](#)

[CCor Type Forward EQ's](#)

[SA Gainmaker Forward EQ's](#)

[SA "Ice Cube Type Forward EQ's](#)

[Magnavox/Philips Type Forward EQ's](#)

[CCor Type Reverse EQ's](#)

[GI Type Reverse EQ's](#)

[SA Gainmaker Type Reverse EQ's](#)

[SA "Ice Cube" Reverse EQ's](#)

[Magnavox/Philips Type Reverse EQ's](#)

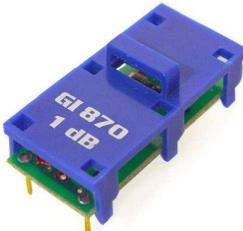


650 EQ's

We have 650 EQ's for GI, Magnavox, CCor and SA

Call for information and specs

GI Type EQ's



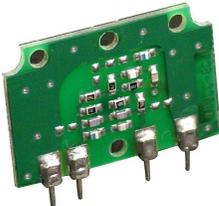
GI/Motorola Type Equalizers

Used in Jerrold, GI, Motorola and 4Cable TV Amplifiers

550, 650, 750, 870 and 1 GHz

0 dB
2 dB
4 dB
6 dB
8 dB
14 dB
16 dB
18 dB
20 dB
22 dB
24 dB
26 dB
28 dB
30 dB

CCor Type EQ's



CCor Type Equalizers

Used in CCor and 4Cable TV Amplifiers

550, 650, 750, 870 and 1 GHz

Value

0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB
10 dB
11 dB
12 dB
13 dB
15 dB
16 dB
17 dB
18 dB
19 dB
20 dB
22 dB

SA Gainmaker Type EQ's



SA Type Forward Equalizers

Used in SA and 4Cable TV

Amplifiers

750, 870 and 1 GHz

Value

0 dB
1.5 dB
3 dB
4.5 dB
6 dB
7.5 dB
9 dB
10.5 dB
13 dB
15.5 dB
17 dB
18.5 dB
20 dB
21.5 dB
23 dB
24.5 dB
27 dB
28.5 dB
30 dB

SA "Ice Cube" Type EQ's



SA "Ice Cube" Type Equalizers

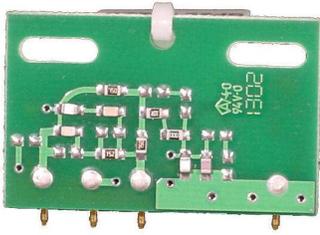
Used in SA Amplifiers

550, 650 and 750

Value

0 dB
1.5 dB
3 dB
4.5 dB
6 dB
7.5 dB
9 dB
10.5 dB
12 dB
13.5 dB
15 dB
16.5 dB
18 dB
19.5 dB
21 dB
22.5 dB
24 dB
26.5
28

Magnavox/Philips Forward Type EQ's



Magnavox/Philips Forward Type Equalizers

Used in Magnavox, Philips and 4Cable TV Amplifiers

550, 650, 750, 870 and 1 GHz

Value

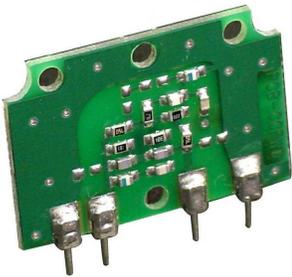
0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB
10 dB
11 dB
12 dB
13 dB
15 dB
16 dB
17 dB
18 dB
19 dB
20 dB
22 dB
23 dB
24 dB
25 dB
26 dB

CCor Type Reverse EQ's

CCor Type Reverse Equalizers

Used in CCor and 4Cable TV Amplifiers

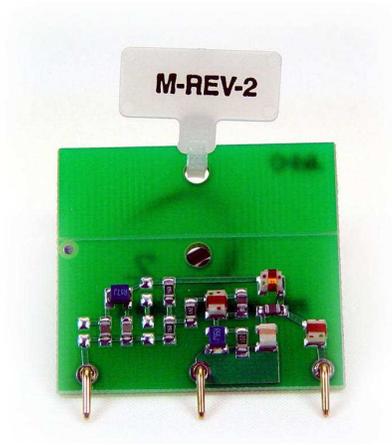
42 MHz



Value

0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB

GI Type Reverse EQ's



GI Type Reverse Equalizers
Used in CCor and 4Cable TV Amplifiers

42 MHz

Value

0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB
10 dB
11 dB
12 dB

SA Gainmaker Type Reverse EQ's



SA Gainmaker Type Reverse Equalizers

Used in SA Gainmaker Amplifiers

42 MHz

Value

0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB
10 dB
11 dB
12 dB

SA Reverse Type EQ's



SA

Type Reverse Equalizers

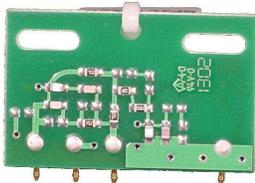
Used in SA & 4Cable Amplifiers

42 Fixed and Variable and 30 MHz

Value

0 dB
1.5 dB
3 dB
4.5 dB
6 dB
7.5 dB
9 dB
10.5 dB
12 dB
13.5 dB
15 dB
Variable
1.5-4.5
4.5-7.5
7.5-12

Magnavox/Philips Type Reverse EQ's



Magnavox/Philips Type Reverse Equalizers

Used in Magnavox/Philips & 4Cable Amplifiers

42 MHz

Value

0 dB
1 dB
2 dB
3 dB
4 dB
5 dB
6 dB
7 dB
8 dB
9 dB

Upgrade



PowerMiser™
Amplifier Series



NODES

New

[4CMN1000L Single output Mini Node](#)

[4C739N1GLC1 Single Hybrid 3 output Node](#)

[4C739N1GLC2 Dual Hybrid 3 output Node](#)

[4C739N1GLC3 Triple Hybrid 3 output Node](#)



4CMN1000L 1 GHz NODE

2 Year
Warranty

LOW CURRENT 550 mA



Starting at \$399.00

PowerMiser™

- Fits in Magnavox/Philips 9H Housing
- Low Current Draw
- Higher Reliability due to Lower Heat
- High Output 52 dBmV
- 1310 FP or DFB or 1550 DFB Laser
- Standard Antec LEQ type Linear EQ's and JXP Pads
- Plug in Diplexer for future split changes
- 100% New Construction with 90 Volt Power Supply
- Breakthrough Low Current Technology

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs	GaAs
Bandwidth	-	MHz	-	54-1003	5-40
Optical wavelength	-	nm	1	1290-1600	1310
Response Flatness	-	dB	-	+/-0.5	+/-0.5
Minimum Full Output	-4 dBm light input	dBmV	5	52 dB @ 1 GHz	N/A
Input Test Points	-	dB	-	N/A	-20 +/-1
Output Test Points	-	dB	4	-20 +/-1	N/A
Output Return Loss	Freq	5-40 MHz	dB	-	16
		54-1003 MHz		16	
Minimum Light Input	-	dBm	-	-5	
Minimum Light Output	-	mW	2		
DC Current Draw (max)	@24 Volts DC	mA	-	550	
AC Current Draw (max)	90 VAC	mA	-	200	
	60 VAC			268	
	50 VAC			308	
	40 VAC			390	
Noise Figure	-	dB	-	N/A	4.5

Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz		55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or equalivalent	4 channels
Composite Triple Beat	-	dBc	-	70	>50
Composite Second Order		dBc	-	71	>50
Carrier to Noise		dB	-	52	43
Cross Modulation		dBc	-	73	

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Notes:

- Standard is no return laser, options include FP or DFB 1310 and DFB 1550
- All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
- Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivalent noise running 6 dB down from an analog equivalent.
- Onboard forward and reverse directional coupler test points
- 4 dBm light input will give you a minimum of 48 dB C/N

Options:

	option H	Housing	
			<i>add \$100.00</i>
<i>\$100.00</i>	option 000	FP Return Laser 1310 nm	<i>add</i>
<i>\$250.00</i>	option 001	DFB Return Laser 1310 nm	<i>add</i>
<i>\$250.00</i>	option 002	DFB Return Laser 1550 nm	<i>add</i>
	option 003	1550/1310 WDM installed	<i>add \$100.00</i>
<i>\$100.00</i>	option 004	Auto Power Down (Mute)	<i>add</i>

Available now from stock to 4 week



4C739N1GLC1 1 GHz NODE

2 Year
Warranty

Single Output Hybrid

LOW CURRENT 550 mA



Starting at \$499.00

PowerMiser™

- Fits in C-Cor 4Output Housing
- Low Current Draw
- Higher Reliability due to Lower Heat
- High Output 52 dBmV @ 1GHz
- 1310 FP or DFB or 1550 DFB Laser
- Standard Antec LEQ type Linear EQ's and C-Cor Pads
- Plug in Diplexer for future split changes
- Breakthrough Low Current Technology
- Plug in splitters for 3 outputs, 1Hi(-3.5dB) and 2 Low(-7dB)

Specifications in Housing

Parameter	Test Conditions		Units	Notes	Forward	Reverse
Technology	-		-	-	GaAs	GaAs
Bandwidth	-		MHz	-	54-1003	5-40
Optical wavelength	-		nm	1	1290-1600	1310
Response Flatness	-		dB	-	+/-0.5	+/-0.5
Minimum Full Output	-4 dBm light input		dBmV	5	52 dB @ 1 GHz	N/A
Input Test Points	-		dB	-	N/A	-20 +/-1
Output Test Points	-		dB	4	-20 +/-1	N/A
Output Return Loss	Freq	5-40 MHz	dB		-	16
		54-1003 MHz			16	
Minimum Light Input	-		dBm		-5	
Minimum Light Output	-		mW		2	
	-					
DC Current Draw (max)	@24 Volts DC		mA	-	550	
AC Current Draw (max)	90 VAC		mA	-	200	
	60 VAC				268	
	50 VAC				308	
	40 VAC				390	
Noise Figure	-		dB	-	N/A	4.5

Distortion Measurements @ rated loading

Reference Frequencies	-	MHz	-	55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or equalivlent	4 channels
Composite Triple Beat	-	dBc	-	70	>80
Composite Second Order	-	dBc	-	71	>80
Carrier to Noise	-	dB	6	52	43
Cross Modulation	-	dBc	-	73	>80

www.4cable.tv

Notes:

1. Standard is no return laser, options include FP or DFB 1310 and DFB 1550
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivlent noise running 6 dB down from an analog equivalent.
4. Onboard forward and reverse directional coupler test points
5. -4 dBm light input will give you a minimum of 48 dB C/N
6. -1dBm light input

Options:

option H	Housing	<i>add \$150.00</i>
option 000	FP Return Laser 1310 nm	<i>add \$100.00</i>
option 001	DFB Return Laser 1310 nm	<i>add \$250.0</i>
option 002	DFB Return Laser 1550 nm	<i>add \$250.0</i>
option 003	1550/1310 WDM installed	<i>add \$100.00</i>
option 004	Auto Power Down (Mute)	<i>add \$100.00</i>

Available now from stock to 4 weeks

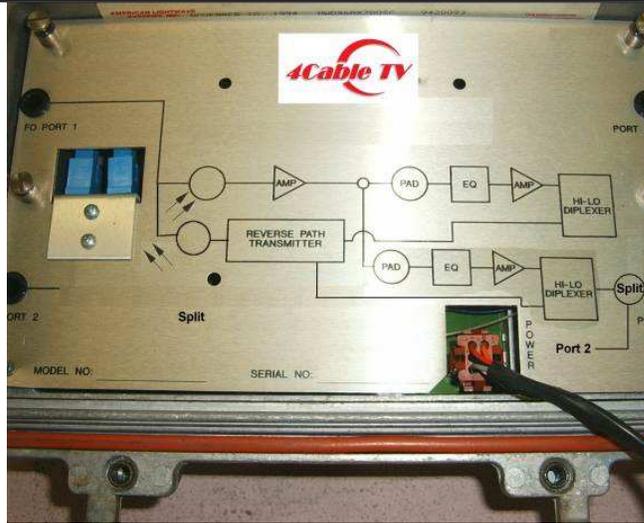


4C739N1GLC2 1 GHz NODE

2 Year
Warranty

Dual Output Hybrid

LOW CURRENT 830 mA @ 24 Vdc



Starting at \$599.00

PowerMiser™

- Fits in C-Cor 4Output Housing
- Low Current Draw
- Higher Reliability due to Lower Heat
- High Output 54 dBmV @ 1GHz
- 1310 FP or DFB or 1550 DFB Laser
- Standard Antec LEQ type Linear EQ's and C-Cor Pads
- Plug in Diplexer for future split changes
- Breakthrough Low Current Technology
- Dual output Hybrids for higher output
- Plug in splitter for outputs 3 and 4

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs	GaAs
Bandwidth	-	MHz	-	54-1003	5-40
Optical wavelength	-	nm	1	1290-1600	1310
Response Flatness	-	dB	-	+/-0.5	+/-0.5
Minimum Full Output	-2 dBm light input	dBmV	5	54 dB @ 1 GHz	N/A
Input Test Points	-	dB	-	N/A	-20 +/-1
Output Test Points	-	dB	4	-20 +/-1	N/A
Output Return Loss	Freq	5-40 MHz	dB	-	16
		54-1003 MHz		16	
Minimum Light Input	-	dBm	-	-5	-
Minimum Light Output	-	mW	-	2	-
DC Current Draw (max)	@24 Volts DC	mA	-	830	-
AC Current Draw (max)	90 VAC	mA	-	290	-
	60 VAC			425	-
	50 VAC			470	-
	40 VAC			650	-

Noise Figure		dB	-	N/A	4.5
Distortion Measurements @ rated loading					
Reference Frequencies		MHz		55/550/870/1GHz	T7-T12
Output Levels		dBmV	-	35/44/49.5/52	36
Channel Loading		NTSC	3	79 + 450 MHz digital or equalivalent	4 channels
Composite Triple Beat		dBc	-	70	>80
Composite Second Order		dBc	-	71	>80
Carrier to Noise		dB	5	52	43
Cross Modulation		dBc	-	73	>80

www.4cable.tv

Notes:

1. Standard is no return laser, options include FP or DFB 1310 and DFB 1550
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivalent noise running 6 dB down from an analog equivalent.
4. Onboard forward and reverse directional coupler test points
5. -1dBm light input

Options:

	option H	Housing	add \$150.00
\$100.00	option 000	FP Return Laser 1310 nm	add
\$250.00	option 001	DFB Return Laser 1310 nm	add
\$250.00	option 002	DFB Return Laser 1550 nm	add
	option 003	1550/1310 WDM installed	add \$100.00
\$100.00	option 004	Auto Power Down (Mute)	add

Available now from stock to 4 weeks

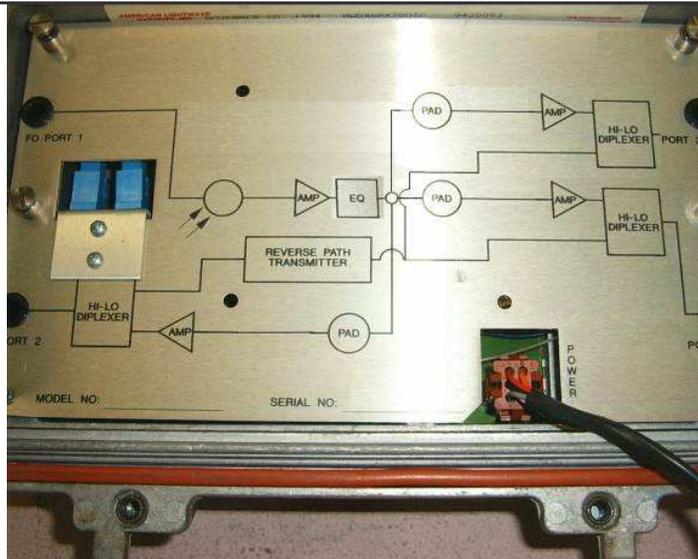


4C739N1GLC3 1 GHz NODE

2 Year
Warranty

Dual Output Hybrid

LOW CURRENT 1000 mA @ 24 Vdc



Starting at \$699.00

PowerMiser™

- Fits in C-Cor 4Output Housing
- Low Current Draw
- Higher Reliability due to Lower Heat
- High Output 52 dBmV @ 1GHz
- 1310 FP or DFB or 1550 DFB Laser
- Standard Antec LEQ type Linear EQ's and C-Cor Pads
- Plug in Diplexer for future split changes
- Breakthrough Low Current Technology
- Dual output Hybrids for higher output Full 52 dB output on port 2
- Full 52 dB output on port 2,3 and 4

Specifications in Housing

Parameter	Test Conditions	Units	Notes	Forward	Reverse
Technology	-	-	-	GaAs	GaAs
Bandwidth	-	MHz	-	54-1003	5-40
Optical wavelength	-	nm	1	1290-1600	1310
Response Flatness	-	dB	-	+/-0.5	+/-0.5
Minimum Full Output	-2 dBm light input	dBmV	5	52 dB @ 1 GHz	N/A
Input Test Points	-	dB	-	N/A	-20 +/-1
Output Test Points	-	dB	4	-20 +/-1	N/A
Output Return Loss	Freq	5-40 MHz	dB	-	16
		54-1003 MHz		16	
Minimum Light Input	-	dBm	-	-5	-
Minimum Light Output	-	mW	-	2	-
DC Current Draw (max)	@24 Volts DC	mA	-	830	-
AC Current Draw (max)	90 VAC	mA	-	290	-
	60 VAC			425	-
	50 VAC			470	-
	40 VAC			650	-
Noise Figure	-	dB	-	N/A	4.5

Distortion Measurements @ rated loading					
Reference Frequencies	-	MHz		55/550/870/1GHz	T7-T12
Output Levels	-	dBmV	-	35/44/49.5/52	36
Channel Loading	-	NTSC	3	79 + 450 MHz digital or equalivlent	4 channels
Composite Triple Beat	-	dBc	-	70	>80
Composite Second Order		dBc	-	71	>80
Carrier to Noise		dB	5	52	43
Cross Modulation		dBc	-	73	>80

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Notes:

1. Standard is no return laser, options include FP or DFB 1310 and DFB 1550
2. All return loss measurements made with 0 dB pads and a #18 gauge wire jumpers in place of the equalizers.
3. Distortion measurements made with 79 analog channels and 450 MHz digital channels or equalivlent noise running 6 dB down from an analog equivalent.
4. Onboard forward and reverse directional coupler test points
5. -1dBm light input

Options:

	option H	Housing	
			<i>add \$150.00</i>
<i>\$100.00</i>	option 000	FP Return Laser 1310 nm	<i>add</i>
<i>\$250.00</i>	option 001	DFB Return Laser 1310 nm	<i>add</i>
<i>\$250.00</i>	option 002	DFB Return Laser 1550 nm	<i>add</i>
	option 003	1550/1310 WDM installed	<i>add \$100.00</i>
<i>\$100.00</i>	option 004	Auto Power Down (Mute)	<i>add</i>

Available now from stock to 4 weeks



PowerMiser™

Magnavox all will be 1 GHZ						
TYPE	GAIN	NORMAL		PowerMiser		ESTIMATE
		CURRENT	DISTORTION	CURRENT	DISTORTION	Date Available
LE	40	870 mA	77/75/72	430 mA	77/74/74	Available Now
Trunk Amp TNA	38/48	1.7 A	76/77/74*66/71/64	950 mA	78/80/74*74/78/72	02/01/08
Bridger GNA	48	1.7 A	66/71/64	900 mA	74/78/72	02/01/08

- Distortions for the PowerMiser series amps: 79 NCTA channels with broadband noise simulating digital QAM channels from 550 MHz to 1003 MHz, levels 6 dB below analog carriers;
- All distortions above are in the format CTB/CSO/XM;
- All AGC's usable both on analog or QAM channels

Scientific Atlanta (SA) all but SlimLine will be 1 GHZ SlimLine will be 750 MHz						
TYPE	GAIN	NORMAL		PowerMiser™		ESTIMATE
		CURRENT	DISTORTION	CURRENT	DISTORTION	Date Available
Line Extender	40	880 mA	81/76/76	430 mA	77/74/74	01/01/08
Un-Balanced Triple	44/34	1.64	63/74/60	700 mA	74/78/72	01/01/08
High Gain Dual	44	1.64	63/74/60	700 mA	74/78/72	01/01/08
Low Gain Dual	34	1.64	63/74/60	700 mA	74/78/72	01/01/08
“SlimLine”	39/44	1.7 A	76/77/74*66/71/64	950 mA	78/80/74*74/78/70	06/01/08

- Distortions for the PowerMiser series amps: 79 NCTA channels with broadband noise simulating digital QAM channels from 550 MHz to 1003 MHz, levels 6 dB below analog carriers;
- All distortions above are in the format CTB/CSO/XM;
- All AGC's usable both on analog or QAM channels

Motorola (GI) all will be 1 GHZ						
TYPE	GAIN	NORMAL		PowerMiser™		ESTIMATE
		CURRENT	DISTORTION	CURRENT	DISTORTION	Date Available
Line Extender	40	925 mA	76/70/71	430 mA	77/74/74	03/01/08
MB	46	1.61	76/71/68	750 mA	74/78/72	03/01/08
BT	46	2.545 A	75/71/66	1.4 A	74/78/72	03/01/08

- Distortions for the PowerMiser series amps: 79 NCTA channels with broadband noise simulating digital QAM channels from 550 MHz to 1003 MHz, levels 6 dB below analog carriers;
- All distortions above are in the format CTB/CSO/XM;
- All AGC's usable both on analog or QAM channels

CCor all will be 1 GHZ						
TYPE	GAIN	NORMAL		PowerMiser™		ESTIMATE
		CURRENT	DISTORTION	CURRENT	DISTORTION	Date Available
LE FlexMax	40	870 mA	77/75/72	430 mA	77/74/74	09/01/07
LE E-7 Series	40	870 mA	77/75/72	430 mA	77/74/74	Available Now
SF-739	40	930	62/64/74	460	77/78/74	Available Now
Trunk Amp	38/48	1.955 A	84/79/76*75/73/67	950 mA	88/85/80*74/78/70	03/01/08
Bridger	48	1.65 A	75/73/67	900 mA	74/78/72	03/01/08

- Distortions for the PowerMiser series amps: 79 NCTA channels with broadband noise simulating digital QAM channels from 550 MHz to 1003 MHz, levels 6 dB below analog carriers;
- All distortions above are in the format CTB/CSO/XM;
- All AGC's usable both on analog or QAM channels



1550 Fiber Transmitter

1550 nm External Modulation



**4CHT8500AC (40~1GHz) 4CHT8500A 40~870 MHz)
1550nm External Modulation CATV Optic Transmitter**

Product Description

Using External Modulation technology generates a high quality low laser chirp, low dispersion distortion signal . Our External Modulator has excellent CSO and adjustable SBS. It can be followed by a EDFA amplifier for large area coverage.

Product Features

- Low laser chirp, low dispersion distortion,
- Optimized control technology, offers excellent CNR, CTB, CSO & SBS index
- Flexibility: Original SBS critical value 13, 16, 18 adjustable, it can be adjusted for different network, OMI adjustable, AGC mode is optional
- Reliability: build-in double power supplies, switch automatically. • Laser Diode case temperature is controlled automatically.
- High quality: Optic Modulation Identity (OMI) display
- Advanced network management function (each unit has separate IP address)

Model	Output Power (dBm)	SBS (dBm)	System index(59 channels PAL-D)			
			CNR1	CNR2	CTB	CSO
HT8527A	Dual fiber output ≥ 7	≥ 53	≥ 52	≤ 65	≤ 65	

Test condition: 59 channels PAL-D, 16dBm EDFA, 65km fiber. 0dBm



EDFA

Rack Mount

1550 nm

Our EDFA's are used at the Naval Research Lab and at Chapman University's Advanced Physics Laboratory



Model	Power	Price
4CHA5113	≥13(20mw)	\$1300
4CHA5114	≥14(25mw)	\$1400
4CHA5115	≥15(32mw)	\$1500
4CHA5116	≥16(40mw)	\$1600
4CHA5117	≥17(50mw)	\$1700
4CHA5118	≥18(63mw)	\$1800
4CHA5119	≥19(80mw)	\$1900
4CHA5120	≥20(100mw)	\$2000
4CHA5121	≥21(125mw)	CALL
4CHA5122	≥22(160mw)	CALL
4CHA5123	≥23(200mw)	CALL
4CHA5124	≥24(250mw)	CALL
4CHA5125	≥25(320mw)	CALL
4CHA5126	≥26(400mw)	CALL

For Low Power Input ADD \$200.00

Deposit Required

4CHA5100-4(ONA-1550-4)

1550nm CATV EDFA

Product Description

4Cable's EDFA works with single wavelength in a CATV system. In order to avoid distortion, the operation wavelength of External Modulation Optic Transmitter is usually 1555±5nm. Our EDFA's features low NF, large saturated output power.

Specifications

Performance		Index			Supplement	
		Min	Typ	Max		
Optic feature	Operation Wavelength (λ)	(nm)	1540		1560	
	Input power	(dBm)	-10	3		
	Total output power	(dBm)	13		30	
	Each port output power	(dBm)	10		22	
	Number of output port		1		8	
	Difference of each output power	(dB)	-0.5		+0.5	
	Noise figure	(dB)	4.5		6.5	Pin: 0dBm
	System CNR deterioration	(dB)			1.0	Pin: 6dBm
	Polarization dependence gain	(dB)			0.4	
	Polarization mode dispersion	(ps)			0.4	
	Pump power leakage	(dBm)			-40	
	Echo loss	(dB)	50			
Connectors		SC/APC				
General feature	Network management		RJ45,R232		Support I.E. & SNMP	
	Power supply	(V)	90~265 Vac		Option -48VDC	
	Power	(W)	≤ 50			
	Working Temp.	($^{\circ}$ C)	-5~65 $^{\circ}$ C		automatic temp. control	
	Storage Temp.	($^{\circ}$ C)	-40~85 $^{\circ}$ C			
	Work relative humidity	(%)	5~95%			
	Size	(")	19 \times 10 \times 1.75		(W) \times (D) \times (H)	
Model	Output Power (dBm)	Input Power (dBm)		Noise figure (dB)		
		Input range	Typical			
4CHA5113	$\geq 13(20\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5114	$\geq 14(25\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5115	$\geq 15(32\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5116	$\geq 16(40\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5117	$\geq 17(50\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5118	$\geq 18(63\text{mw})$	0~+10	>+3dBm	<4.5		
4CHA5119	$\geq 19(80\text{mw})$	0~+10	>+3dBm	<5.0		
4CHA5120	$\geq 20(100\text{mw})$	0~+10	>+3dBm	<5.0		

4CHA5121	$\geq 21(125\text{mw})$	0~+10	>+3dBm	<5.0
4CHA5122	$\geq 22(160\text{mw})$	0~+10	>+3dBm	<5.0
4CHA5123	$\geq 23(200\text{mw})$	0~+10	>+3dBm	<5.5
4CHA5124	$\geq 24(250\text{mw})$	0~+10	>+3dBm	<5.5
4CHA5125	$\geq 25(320\text{mw})$	0~+10	>+3dBm	<5.5
4CHA5126	$\geq 26(400\text{mw})$	0~+10	>+3dBm	<5.5



**2 Year
Warranty**

RFoG Extender

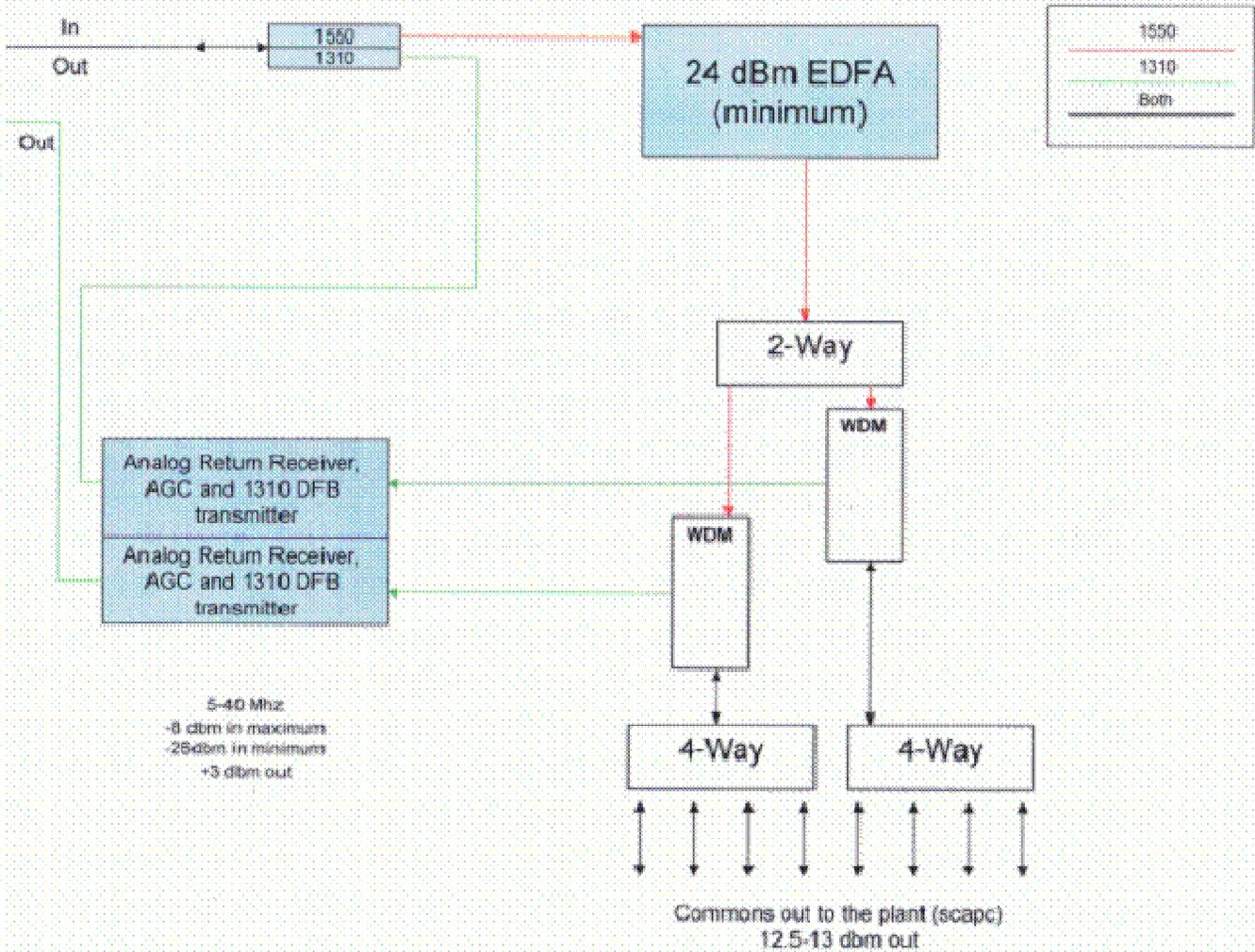
Outdoor Mounted EDFA with Return Receiver and Transmitter

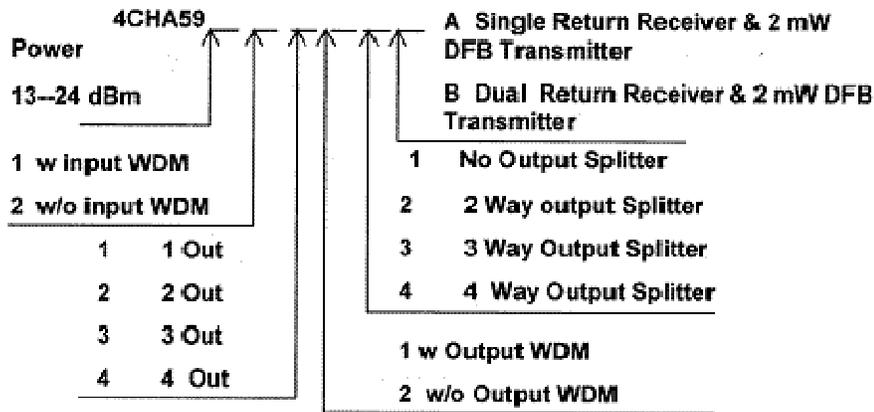
Extend the Reach of your RFoG system

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Notes:

1. The LCD readout for the EDFA operational parameters only works above 0° C
2. The red alarm light will turn on at -28 dBm. It will return to Green after the level has increased to -26 dBm. There is approximately a 3 second delay to enable capture of the bursting nature of the incoming light. If there is no data transmitted in over 3 seconds the red light will come on.





Available now from stock to 4 weeks

Contact:



843-347-4933

1256 Highway 501 Business
Conway SC 29526

www.4cable.tv

sales@4cable.tv



**2 Year
Warranty**

4CRTR Rack Mount Return Receiver

Single or Dual RFoG Receivers



- Only 2 RU of Rack Space
- With Dual Units 24 Receivers in 2 RU
- Single Units 12 Receivers in 2 RU
- Usable down to -26 dBm
- Designed for RFoG
- Dual Power Supply Option
- Dual Units uses Digital Potentiometers
- Designed for RFoG low input levels

Specifications

Para Parameter	Test Conditions	Units	Notes	Forward	
Tech Technology	-	-	-	GaAs	
Band Bandwidth	-	MHz	-	5-200	
Optic Wavelength	-	nm	1	1290-1600	
Resp Response	With respect to Gain Slope	dB	-	+/-0.5	
Mini Minimum Output	-27 dBm light input 1310 nm	dBmV		10 dBmV	
Slop Slope	-	dB	-	±1	
Outp Out Test Points	-	dB	4	-20 ±1	
Out Output RTL	Freq 5-200MHz	dB		16	
Mim Minimum Light In	30 dB C/N	dBm		-26	

Single Receiver	4CRT	\$299.00
Dual Receiver	4CRT-2	\$550.00
Rack	4CRAC-2U	\$ 75.00
Power Supply	4CRSMPS12	\$100.00