LINE AND DISTRIBUTION CATV AMPLIFIERS

«TAL-800» — Configurable Line and Distribution Amplifiers (cont'd)

TECHNICAL DATA

				TAL-883	TAL-884	TAL-886	TAL-893	TAL-894	TAL-896
Model									
Reference				3948	3949	3950	3975	3973	3974
Technology				GaAsFET	GaAsFET	GaAsFET	GaAsFET	GaAsFET	GaAsFET
Powering mode				Line	Line	Line	Mains	Mains	Mains
Bandwidth — Forward way			MHz	47 — 862	54 — 862	86 — 862	47 — 862	54 — 862	86 — 862
Bandwidth — Reverse way			MHz	5 — 30	5 — 42	5 — 66	5 — 30	5 — 42	5 — 66
Forward way	Input bypass		dB	**-2.7** (if tap is implemented) ,, **-4.5** (if splitter is implemented)					
	Response flatness		dB	± **0.75**					
	Nominal gain without input bypass	configuration: 1 output	dB	**27** [**37** if preamplification is implemented]					
		configuration: 2 symmetrical outputs		(2x) **22.5** [(2x) **32.5** if preamplification is implemented]					
		configuration: 2 asymmetrical outputs		**26** and **16** [**36** and **26** if preamplification is implemented]					
	Nominal gain with input bypass -2.7 dB	configuration: 1 output	dB	**16** [**26** if preamplification is implemented]					
		configuration: 2 symmetrical outputs		(2x) **11.5** [(2x) **21.5** if preamplification is implemented]					
		configuration: 2 asymmetrical outputs		**15** y **5** [**25** and **15** if preamplification is implemented]					
	Nominal gain with input bypass -4.5 dB	configuration: 1 output	dB	**22.5** [**32.5** if preamplification is implemented]					
		configuration: 2 symmetrical outputs		(2x) **18** [(2x) **28** if preamplification is implemented]					
		configuration: 2 asymmetrical outputs		**21.5** and **11.5** [**31.5** and **21.5** if preamplification is implemented]					
	Gain drift (-20° to +50° C; 20° C ref.)		dB	± **0.75**					
	Input attenuation	without preamplification implemented	dB	**0**, **3**, **6**, **9**, **12** or **15** (4 cells of 0, 3, 6 and 9 dB)					
		with preamplification implemented		**0**, **3**, or **6** (3 cells of 0, 3, and 6 dB)					
	Interstage attenuation		dB	**0** to **8**					
	Input equalization		dB	**-6** to **18** (3 cells of -6, -3 and 0 dB, and 1 variable equalizer of 0-18 dB)					
	Sloped response		dB	**0**, **6** or **12** (3 cells of 0, 6 and 12 dB)					
	Output level (-60dB IMD3, DIN 45004B)		dBµV	≥ **124** (1 output) ,, ≥ (2x) **119.5** (2 symmetrical outputs) ,, ≥ **123** and **113** (2 asymmetrical outputs)					
	Output level (-60dB IMD2, EN 50083-3)		dBµV	≥ **115** (1 output) ,, ≥ (2x) **110.5** (2 symmetrical outputs) ,, ≥ **114** and **104** (2 asymmetrical outputs)					
	Output level (-60dB CTB, 42 channels, EN 50083-3)		dBµV	≥ **110** (1 output) ,, ≥ (2x) **105.5** (2 symmetrical outputs) ,, ≥ **109** and **99** (2 asymmetrical outputs)					
	Output level (-60dB CSO, 42 channels, EN 50083-3)		dBµV	≥ **114** (1 output) ,, ≥ (2x) **109.5** (2 symmetrical outputs) ,, ≥ **113** and **103** (2 asymmetrical outputs)					
	Noise figure		dB	≤ **7**					
	Input/output impedance		Ω	**75**					
	Input/output return loss		dB	> **14**					
	Input test (on internal F port)		dB	**-30** ±1					
	Output-1 test		dB	**-19** ±1					
	Automatic Level and Slope Control (ALSC)			Specificationss are related with the insertion of an ALSC circuit card.					
Reverse way	Response flatness		dB	± **0.5**					
	Nominal gain		dB	**26**					
	Gain drift (- 20° to +50° C; 20° C ref.)		dB	± **0.5**					
	Input attenuation		dB	**0** to **18**					
	Interstage attenuation		dB	**0** or **6** (2 cells of 0 and 6 dB)					
	Input equalization		dB	**0** to **16**					
	Output level (-60dB IMD3, DIN 45004 B)		dBµV	**118** (without input bypass)					
	Output level (-60dB IMD2, EN 50083-3)		dBµV	**106** (without input bypass)					
	Noise figure		dB	≤ **7**					
	Input/output impedance		Ω	**75**					
	Input/output return loss		dB	≥ **16**					
	Output test (on internal F port)	without input bypass	dB	**-30** ±1					
		with input bypass -2.7 dB		**-18** ±1					
		with input bypass -4.5 dB		**-25.5** ±1					

(cont.)

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«TAL-800» — Configurable Line and Distribution Amplifiers (cont'd)

TECHNICAL DATA (cont'd)

General	Powering voltage	VAC	**24** - **90** (line powered models) / **100 - 264** (mains powered models *)
	Consumption	W	**21**
	Maximum AC/DC through current	A	**7**
	Hum modulation, @ 7A	dB	< **-70**
	Screening factor	dB	> **80**
	Operating temperature range	°C	**-10** to **+55**
	Aluminium watertight housing		**IP67**
	Dimensions	mm	**215** x **215** x **80**
	Packed weight	kg	**2.1**

* Mains lead NOT INCLUDED. The lead to be used will have to be a two-conductor, round, diameter 5 to 7 mm lead, with appropriate plug on one end and free conductors on the other, these to be connected to an internal screw terminal within the amplifier. Compression gland supplied.

BLOCK DIAGRAMS