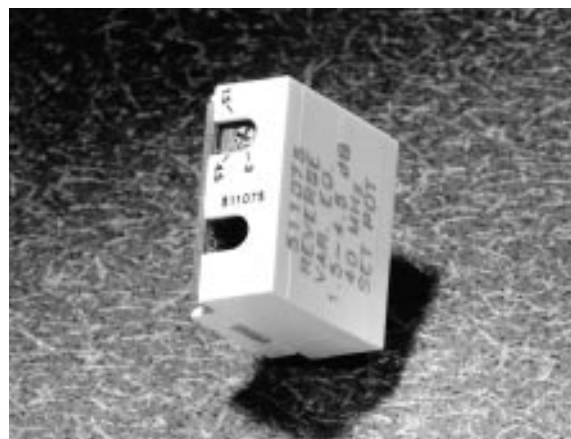


Plug-in Pads, Forward and Reverse Equalizers for Line Extender I, II, II and System Amplifier I, II, III



PLUG-IN, FIXED VALUE EQUALIZERS

22364



VARIABLE, REVERSE EQUALIZER

22367

DESCRIPTION

All Scientific-Atlanta RF amplifiers use pads to attenuate excess signal and forward/reverse equalizers to correct station tilt. Pads are available in 0.5 dB increments for finer control of input and interstage signal levels.

The number of pads and equalizers required for each product can be found in the specific product data sheets in the required accessories section.

Equalizer values are expressed in terms of cable attenuation in dB at the upper frequency. All forward equalizers are selected according to the upper frequency attenuation of the cable on the input side of the forward amplifier. Reverse equalizers are selected according to the upper frequency attenuation of the cable on the output side of the reverse amplifier.

(Ordering information for pads and equalizers is listed on page 11-118.)

PAD ORDERING INFORMATION

Value (dB)	Model No.	Part No.
0	PP-0	279500
0.5	PP-0.5	565231
1.0	PP-1	279501
1.5	PP-1.5	565232
2.0	PP-2	279502
2.5	PP-2.5	565233
3.0	PP-3	279503
3.5	PP-3.5	565234
4.0	PP-4	279504
4.5	PP-4.5	565235
5.0	PP-5	279505
5.5	PP-5.5	565236
6.0	PP-6	279506
6.5	PP-6.5	565237
7.0	PP-7	279507
7.5	PP-7.5	565238
8.0	PP-8	279508
8.5	PP-8.5	565239
9.0	PP-9	279509
9.5	PP-9.5	565240
10.0	PP-10	279510
10.5	PP-10.5	565241
11.0	PP-11	279511
11.5	PP-11.5	565242
12.0	PP-12	279512
12.5	PP-12.5	565243
13.0	PP-13	279513
13.5	PP-13.5	565244
14.0	PP-14	504151
14.5	PP-14.5	565245
15.0	PP-15	504152
15.5	PP-15.5	565246
16.0	PP-16	504153
16.5	PP-16.5	565247
17.0	PP-17	504154
17.5	PP-17.5	565248
18.0	PP-18	504155
18.5	PP-18.5	565249
19.0	PP-19	504156
19.5	PP-19.5	565250
20.0	PP-20	504157
20.5	PP-20.5	565251
75 Ohm	Termination	279524

Note: Order by model number

EQUALIZER ORDERING INFORMATION

Forward Equalizers (for all amplifiers)

High Frequency	Available Values (dB) (in 1.5 dB steps)	Ordering Number
550 MHz	0-34.5	EQ550(*)
600 MHz	0-27.0	EQ600(*)
750 MHz	0-27.0	EQ750(*)
860 MHz	0-19.5	EQ860(*)

* Specify value

Note: 0 dB equalizer is same for all amps – part # 036040

Fixed Value REVERSE Equalizers (for LEI, LEII, and SAI)

Reverse Frequency (Application)	Available Values (dB) (in 1.5 dB steps)	Ordering Number
30 MHz	0-12.0	EQ30T(*)
40 MHz	0-12.0	EQ40T(*)
50 MHz	0-12.0	EQ50T(*)
65 MHz	0-12.0	EQ65T(*)

* Specify Value

Note: 0 dB equalizer is same for all amps – part # 232217

VARIABLE AND FIXED VALUE REVERSE EQUALIZERS (FOR SA II, SA II⁺, SA III & LEIII)

Reverse Bandwidth	Equalization Range	Part Number
5-30 MHz	1.5 to 4.5 dB	538465
	4.5 to 7.5 dB	538466
	7.5 to 12 dB	538467
5-40 MHz	1.5 to 4.5 dB	511075
	4.5 to 7.5 dB	511295
	7.5 to 12 dB	511298
5-40 MHz	1.0 to 12.0 dB Fixed Values in 1.0 dB steps	EQ40S (See EQ40S table for P/N)
5-50 MHz	1.5 to 4.5 dB	538459
	4.5 to 7.5 dB	538460
	7.5 to 12 dB	538461
5-65 MHz	1.5 to 4.5 dB	537226
	4.5 to 7.5 dB	537227
	7.5 to 12 dB	537228

Note: Order by part number

FIXED VALUE REVERSE EQUALIZERS – INSERTION LOSS

EQ30T(*)	Equalizer Values (dB)							
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0
5	1.9	2.8	3.7	4.6	5.5	6.4	7.3	8.2
10	1.7	2.3	2.9	3.6	4.2	4.9	5.5	6.2
15	1.5	1.9	2.4	2.8	3.2	3.7	4.1	4.6
20	1.3	1.6	1.9	2.1	2.4	2.7	3.0	3.3
25	1.1	1.3	1.4	1.5	1.7	1.8	1.9	2.1
30	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 5-30	0.9	1.8	2.7	3.6	4.5	5.4	6.3	7.2
Part Number	234481	234482	136560	136561	136562	136563	136564	136565

EQ40T(*)	Equalizer Values (dB)							
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0
5	2.0	3.0	4.0	4.9	5.9	6.9	7.9	8.9
10	1.8	2.5	3.3	4.1	4.8	5.6	6.4	7.1
15	1.6	2.2	2.8	3.4	4.0	4.6	5.2	5.8
20	1.5	1.9	2.4	2.8	3.3	3.7	4.2	4.6
25	1.3	1.7	2.0	2.3	2.6	2.9	3.3	3.6
30	1.2	1.4	1.6	1.8	2.0	2.2	2.5	2.7
35	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
40	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 5-40	1.0	2.0	3.0	3.9	4.9	5.9	6.9	7.9
Part Number	511300	511301	511302	511303	511304	511305	511306	511307

EQ50T(*)	Equalizer Values (dB)							
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0
5	2.0	3.1	4.1	5.2	6.2	7.2	8.3	9.3
10	1.8	2.7	3.5	4.4	5.2	6.1	6.9	7.8
15	1.7	2.4	3.1	3.8	4.5	5.2	5.9	6.5
20	1.6	2.1	2.7	3.3	3.8	4.4	5.0	5.5
25	1.5	1.9	2.4	2.8	3.3	3.7	4.2	4.6
30	1.4	1.7	2.1	2.4	2.7	3.1	3.4	3.8
35	1.3	1.5	1.8	2.0	2.3	2.5	2.8	3.0
40	1.2	1.3	1.5	1.7	1.8	2.0	2.2	2.3
45	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.6
50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 5-50	1.0	2.1	3.1	4.2	5.2	6.2	7.3	8.3
Part Number	463643	463612	463613	463614	463615	463616	463617	463618

EQ65T(*)	Equalizer Values (dB)							
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0
5	2.1	3.2	4.3	5.4	6.5	7.6	8.7	9.8
10	1.9	2.9	3.8	4.7	5.6	6.6	7.5	8.4
15	1.8	2.6	3.4	4.2	5.0	5.8	6.6	7.4
20	1.7	2.4	3.1	3.7	4.4	5.1	5.8	6.5
25	1.6	2.2	2.8	3.3	3.9	4.5	5.1	5.7
30	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
35	1.4	1.8	2.2	2.7	3.1	3.5	3.9	4.3
40	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7
45	1.3	1.5	1.8	2.0	2.3	2.6	2.8	3.1
50	1.2	1.4	1.6	1.8	2.0	2.2	2.3	2.5
55	1.1	1.3	1.4	1.5	1.6	1.8	1.9	2.0
60	1.1	1.1	1.2	1.3	1.3	1.4	1.4	1.5
65	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 5-65	1.1	2.2	3.3	4.4	5.5	6.6	7.7	8.8
Part Number	545899	545900	545901	545902	545903	545904	545905	545906

Note: Figures shown are typical loss values to be used for design purposes. Measurements on individual equalizers may differ slightly from these values. The form factor for the “T” series reverse equalizers are “ice cube” style with three pins in a triangular pattern.

MODEL EQ40S(*) REVERSE FIXED VALUE EQUALIZER – INSERTION LOSS

EQ40S(*)	Equalizer Values (dB)											
Frequency (MHz)	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0
5	1.7	2.3	3.0	3.6	4.3	4.9	5.6	6.2	6.9	7.5	8.2	8.9
10	1.5	2.0	2.5	3.0	3.5	4.1	4.6	5.1	5.6	6.1	6.6	7.1
15	1.4	1.8	2.2	2.6	3.0	3.4	3.8	4.2	4.6	5.0	5.4	5.8
20	1.3	1.6	1.9	2.2	2.5	2.8	3.1	3.4	3.7	4.0	4.3	4.6
25	1.2	1.4	1.6	1.9	2.1	2.3	2.5	2.7	2.9	3.2	3.4	3.6
30	1.1	1.3	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.4	2.5	2.7
35	1.1	1.1	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8
40	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 5-40	0.7	1.3	2.0	2.6	3.3	3.9	4.6	5.2	5.9	6.5	7.2	7.9
Part Number	545107	545108	545109	545110	545111	545112	545113	545114	545115	545116	545117	545118

Note: Figures shown are typical loss values to be used for design purposes. Measurements on individual equalizers may differ slightly from these values. The EQ40S form factor is “upright” style with three pins in a straight pattern.

MODEL EQ550(*) FORWARD EQUALIZER – INSERTION LOSS

EQ550(*)	Equalizer Values (dB)											
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.5	18.0
46	2.3	3.4	4.5	5.6	6.7	7.8	8.9	10.0	11.1	12.2	13.3	14.4
51	2.3	3.4	4.5	5.5	6.6	7.7	8.8	9.9	11.0	12.0	13.1	14.2
70	2.2	3.2	4.2	5.2	6.2	7.2	8.2	9.3	10.3	11.3	12.3	13.3
88	2.1	3.1	4.0	5.0	5.9	6.9	7.8	8.7	9.7	10.6	11.6	12.5
186	1.9	2.5	3.2	3.9	4.6	5.2	5.9	6.6	7.2	7.9	8.6	9.3
222	1.8	2.4	3.0	3.6	4.1	4.7	5.3	5.9	6.5	7.1	7.7	8.3
450	1.4	1.5	1.7	1.8	2.0	2.2	2.3	2.5	2.6	2.8	3.0	3.1
550	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-550	1.3	2.4	3.5	4.6	5.7	6.8	7.9	9.0	10.1	11.2	12.3	13.4
Part Number	375132	375133	375134	375135	375136	375137	375138	375139	375140	375141	375142	375143

EQ550(*) cont	Equalizer Values (dB)										
Frequency (MHz)	19.5	21.0	22.5	24.0	25.5	27.0	28.5	30.0	31.5	33.0	34.5
46	15.5	16.6	17.7	18.8	20.0	21.0	22.2	23.3	24.5	25.6	26.7
51	15.3	16.4	17.5	18.6	19.7	20.7	21.8	22.9	24.1	25.2	26.3
70	14.4	15.3	16.3	17.3	18.3	19.3	20.3	21.3	22.4	23.4	24.4
88	13.5	14.4	15.3	16.3	17.3	18.2	19.1	20.1	21.1	22.0	23.0
186	9.9	10.6	11.3	11.9	12.6	13.3	14.0	14.6	15.4	16.1	16.7
222	8.9	9.4	10.0	10.6	11.2	11.8	12.4	13.0	13.7	14.3	14.8
450	3.3	3.4	3.6	3.7	3.9	4.1	4.2	4.4	4.6	4.8	5.0
550	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-550	14.5	15.6	16.7	17.8	19.0	20.0	21.2	22.3	23.5	24.6	25.7
Part Number	375144	375145	375146	375147	375148	375149	375150	375151	375152	375153	375154

Note: Figures shown are typical loss values to be used for design purposes. Measurements on individual equalizers may differ slightly from these values. The EQ550 form factor is an “ice cube” style with three pins in a triangular pattern.

ORDERING INFORMATION FOR MODEL EQ550

Order Model EQ550-* (* denotes equalizer value); specify value.

MODEL EQ600(*) FORWARD EQUALIZER – INSERTION LOSS

EQ600(*)	Equalizer Values (dB)								
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5
46	2.1	3.2	4.4	5.5	6.6	7.7	8.9	10.0	11.1
70	2.0	3.1	4.1	5.1	6.2	7.2	8.2	9.2	10.3
88	2.0	3.0	4.0	4.9	5.9	6.8	7.8	8.8	9.7
186	1.7	2.4	3.1	3.8	4.6	5.3	6.0	6.7	7.4
222	1.6	2.3	2.9	3.5	4.2	4.8	5.4	6.1	6.7
550	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.6
600	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-600	1.1	2.2	3.4	4.5	5.6	6.7	7.9	9.0	10.1
Part Number	463680	463681	463682	463683	463677	463474	463684	463685	463686

EQ600(*) cont	Equalizer Values (dB)								
Frequency (MHz)	15.0	16.5	18.0	19.5	21.0	22.5	24.0	25.5	27.0
46	12.2	13.3	14.5	15.6	16.7	17.8	19.0	20.1	21.2
70	11.3	12.3	13.4	14.4	15.4	16.4	17.5	18.5	19.5
88	10.7	11.7	12.6	13.6	14.6	15.5	16.5	17.5	18.5
186	8.1	8.8	9.5	10.2	11.0	11.7	12.4	13.1	13.8
222	7.3	8.0	8.6	9.2	9.9	10.5	11.1	11.8	12.4
550	1.7	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.3
600	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-600	11.2	12.3	13.5	14.6	15.7	16.8	18.0	19.1	20.2
Part Number	463687	463688	463689	463690	463691	463692	540255	540256	540257

MODEL EQ750(*) FORWARD EQUALIZER – INSERTION LOSS

EQ750(*)	Equalizer Values (dB)								
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5
46	2.2	3.3	4.5	5.7	6.8	8.0	9.2	10.3	11.5
51	2.2	3.3	4.5	5.6	6.8	7.9	9.1	10.2	11.4
70	2.1	3.2	4.3	5.3	6.4	7.5	8.6	9.7	10.8
88	2.0	3.1	4.1	5.1	6.2	7.2	8.2	9.3	10.3
186	1.8	2.6	3.4	4.2	5.0	5.8	6.6	7.4	8.2
222	1.7	2.5	3.2	3.9	4.7	5.4	6.1	6.9	7.6
550	1.2	1.5	1.7	2.0	2.2	2.4	2.7	2.9	3.2
600	1.2	1.4	1.5	1.7	1.9	2.1	2.2	2.4	2.6
750	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-750	1.2	2.3	3.5	4.7	5.8	7.0	8.2	9.3	10.5
Part Number	501220	501221	501222	501223	501224	501225	501226	501227	501228

EQ750(*) cont	Equalizer Values (dB)								
Frequency (MHz)	15.0	16.5	18.0	19.5	21.0	22.5	24.0	25.5	27.0
46	12.7	13.8	15.0	16.2	17.3	18.5	19.7	20.8	22.0
51	12.5	13.7	14.8	16.0	17.1	18.3	19.4	20.6	21.7
70	11.9	12.9	14.0	15.1	16.2	17.3	18.4	19.5	20.5
88	11.3	12.4	13.4	14.4	15.5	16.5	17.5	18.6	19.6
186	9.0	9.9	10.7	11.5	12.3	13.1	13.9	14.7	15.5
222	8.4	9.1	9.8	10.6	11.3	12.0	12.8	13.5	14.2
550	3.4	3.7	3.9	4.1	4.4	4.6	4.9	5.1	5.3
600	2.8	3.0	3.1	3.3	3.5	3.7	3.8	4.0	4.2
750	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 46-750	11.7	12.8	14.0	15.2	16.3	17.5	18.7	19.8	21.0
Part Number	501229	501230	501231	501232	501233	501234	540016	540017	540018

Notes for both EQ600 AND EQ750: Figures shown are typical loss values to be used for design purposes. Measurements on individual equalizers may differ slightly from these values. The EQ750 form factor is an “ice cube” style with three pins in a triangular pattern.

ORDERING INFORMATION FOR MODELS EQ600 AND EQ750

Order Model EQ600-* or Model EQ750-* (* denotes equalizer value); specify value.

Plug-in Pads, Forward and Reverse Equalizers for Line Extender I, II, II and System Amplifier I, II, III

MODEL EQ860(*) FORWARD EQUALIZER – INSERTION LOSS

EQ860(*)	Equalizer Values (dB)						
Frequency (MHz)	1.5	3.0	4.5	6.0	7.5	9.0	10.5
70	2.1	3.2	4.3	5.4	6.5	7.6	8.7
550	1.3	1.7	2.0	2.3	2.7	3.0	3.3
600	1.3	1.6	1.8	2.1	2.4	2.7	2.9
750	1.1	1.2	1.3	1.5	1.6	1.7	1.8
860	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 70-860	1.1	2.2	3.3	4.4	5.5	6.6	7.7
Part Number	542530	542531	542532	542533	542534	542535	542536

EQ860(*) cont	Equalizer Values (dB)					
Frequency (MHz)	12.0	13.5	15.0	16.5	18.0	19.5
70	9.8	10.9	12.0	13.1	14.2	15.3
550	3.7	4.0	4.4	4.7	5.0	5.4
600	3.2	3.5	3.8	4.0	4.3	4.6
750	1.9	2.0	2.1	2.2	2.4	2.5
860	1.0	1.0	1.0	1.0	1.0	1.0
Tilt 70-860	8.8	9.9	11.0	12.1	13.2	14.3
Part Number	542537	542538	542539	561909	561910	561911

Note: Figures shown are typical loss values to be used for design purposes. Measurements on individual equalizers may differ slightly from these values. The EQ860 form factor is an “ice cube” style with three pins in a triangular pattern.

ORDERING INFORMATION FOR MODEL EQ860

Order Model EQ860-* (* denotes equalizer value); specify value.



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