

12/24/2005

BALUNS: 75/300 OHM MATCHING TRANSFORMERS

Manufacturer	Model	Type	Source	Measured UHF Insertion Loss	
				Typ	Max
RMS	CA-2100B	Indoor	CATV Co.	1.2	1.5 dB
SEGA	"SEGA"	Indoor	SEGA	1.2	2.2 dB
Channel Master	came w CM4228	Outdoor	CM	??	?? dB
Channel Master	Model 3075	Outdoor	outpost.com	1.7	2.2 dB
RCA	VH101	Outdoor	Home Depot	2.5	4.2 dB
Philips	PM61009	Outdoor	Lowes	3.0	4.7 dB
Radio Shack	15-1230 Goldstar	Outdoor	R-S	3.5	6.2 dB
Radio Shack	15-1140B	Outdoor	R-S	4.5	6.2 dB

Loss measured via PACE Set Top Box Diagnostic page.

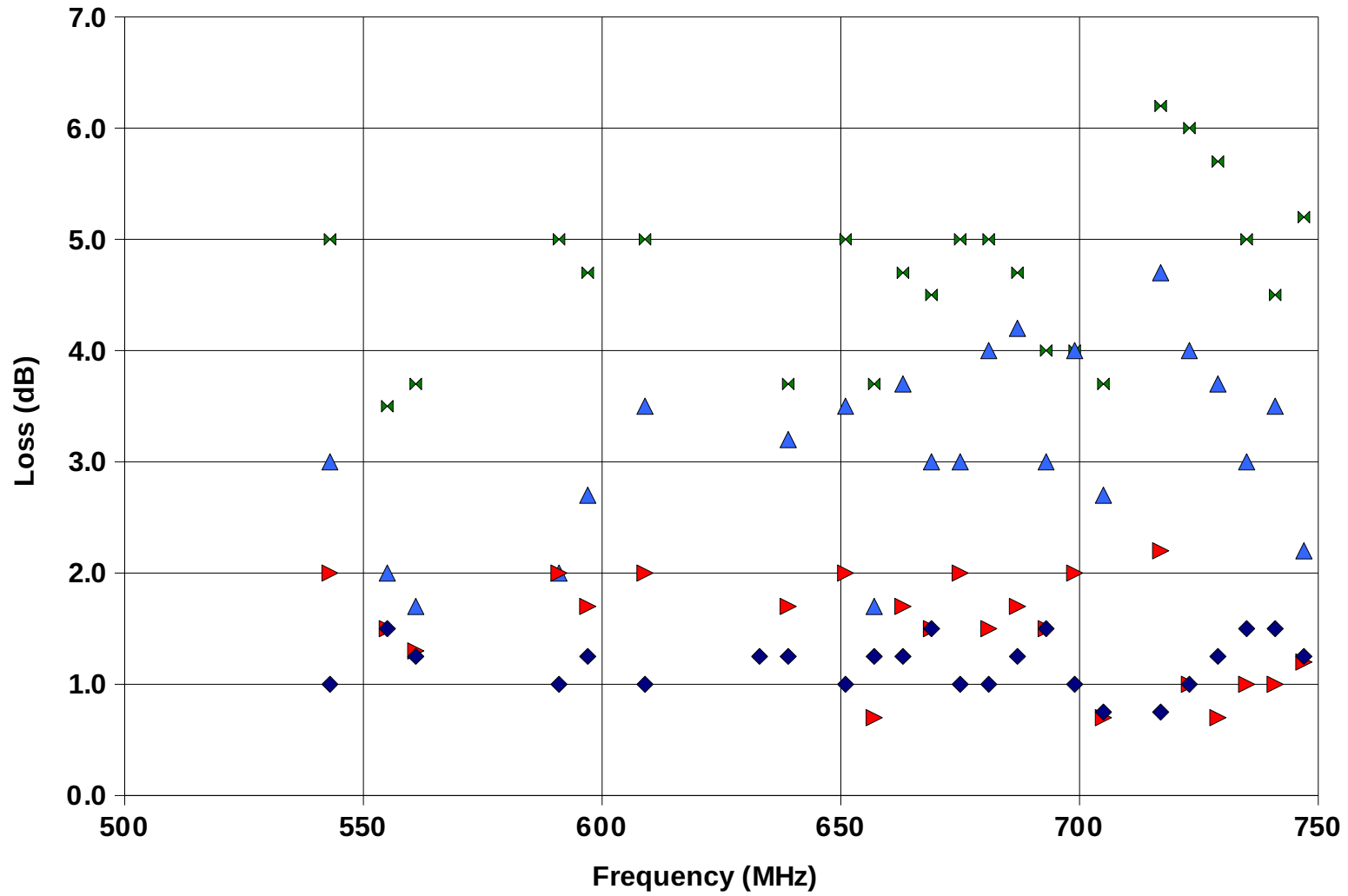
**DC Short
on Coax?**

No
No

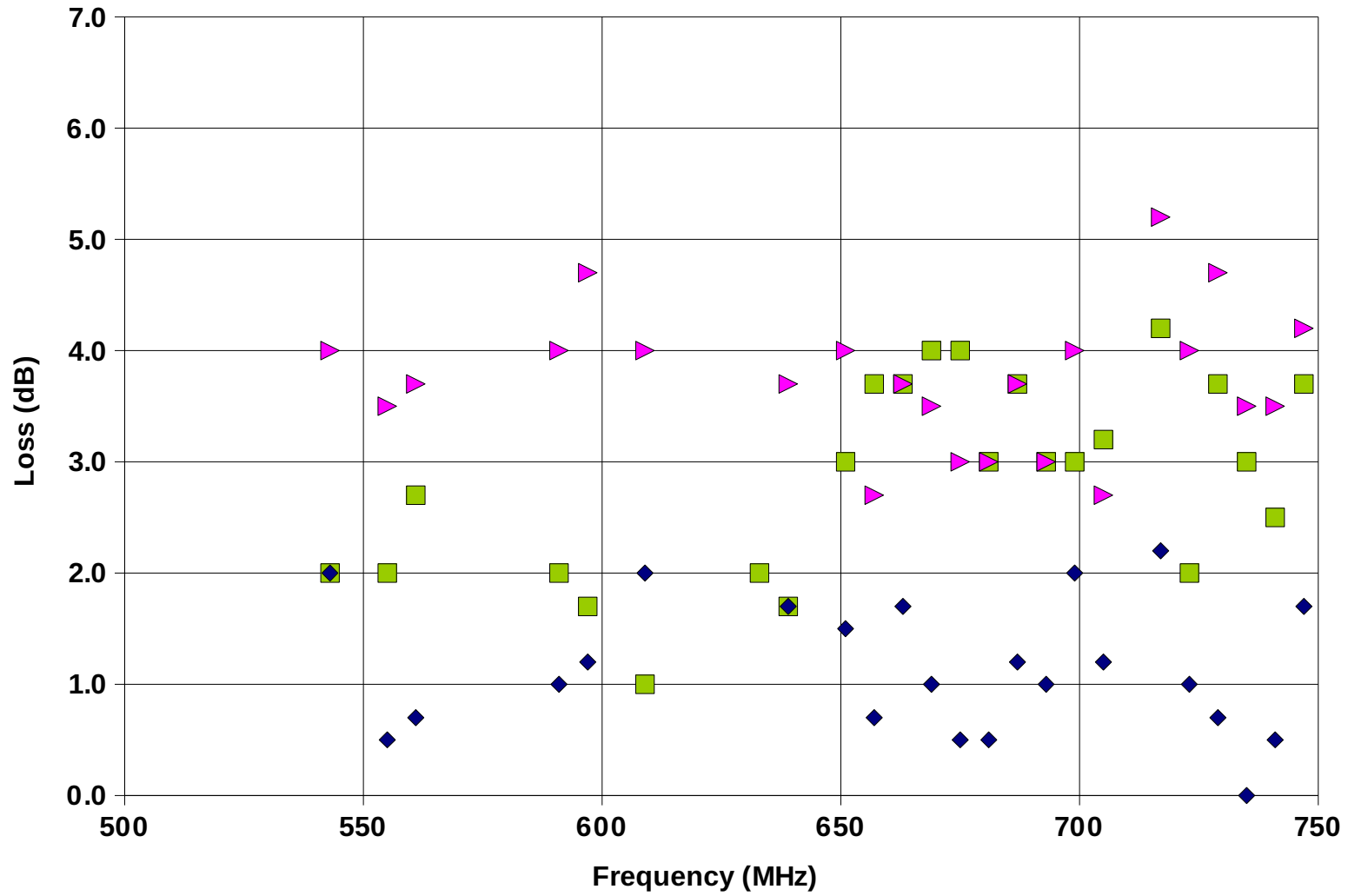
Yes
Yes???

No
No
No
No

BALUNS: 300/75 OHM TRANSFORMER LOSS



BALUNS: 300/75 OHM TRANSFORMER LOSS



LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

11/28/2004

Back-To-Back RMS Electronics Inc, Model CA2100B, 300/75 Ohm Balun, Property of Cable TV

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Single Item Loss
					No Item	With Item(s)	
FM	97	G4Tech	240		-1.0	-2.0	0.5 dB
FM	106	FDC	D611		-1.0	-2.0	0.5 dB
26	543	TNT-HD	727		-4.0	-6.0	1.0 dB
28	555	IFC	514	201	-5.0	-8.0	1.5 dB
29	561	HIST	220	244	-5.0	-7.5	1.3 dB
34	591	HBO-HD	700	744	-4.0	-6.0	1.0 dB
35	597	FUEL	414		-4.0	-6.5	1.3 dB
37	609	NOGGIN	243	602	-4.5	-6.5	1.0 dB
41	633	PAD-HD	704		-4.0	-6.5	1.3 dB
42	639	NBATV	413		-4.0	-6.5	1.3 dB
44	651	TRIO	231		-4.0	-6.0	1.0 dB
45	657	SPEED	403		-4.0	-6.5	1.3 dB
46	663	STYLE	203		-5.0	-7.5	1.3 dB
47	669	SHO-HD	702		-5.0	-8.0	1.5 dB
48	675	CSTV	415		-6.0	-8.0	1.0 dB
49	681	HBO	603		-7.0	-9.0	1.0 dB
50	687	FLIV	204		-6.5	-9.0	1.3 dB
51	693	HBOZ	608	625	-5.0	-8.0	1.5 dB
52	699	STARZ	672		-6.0	-8.0	1.0 dB
53	705	inHD1	723		-6.5	-8.0	0.8 dB
55	717	SHO-E	642		-6.5	-8.0	0.8 dB
56	723	HDNET	721		-7.0	-9.0	1.0 dB
57	729	FOX-HD	706		-7.5	-10.0	1.3 dB
58	735	ACTION	503	750	-6.5	-9.5	1.5 dB
59	741	SUND	513	643	-7.0	-10.0	1.5 dB
60	747	CBS-HD	708		-6.0	-8.5	1.3 dB

Tested two Back-To-Back Baluns and divided by two to derive single item loss shown above:
 CATV signal initially feeds 10 dB Attenuator to reduce effect of cable feed VSWR

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

11/28/2004

Back-To-Back RS 15-1230 (Goldstar) and RS 15-1140B (Silver) Matching Transformers

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Single Item Loss
					No Item	With Item(s)	
FM	97	G4Tech	240		-2.0	-3.0	0.5 dB
FM	106	FDC	D611		0.0	-1.0	0.5 dB
26	543	TNT-HD	727		-5.0	-11.0	3.0 dB
28	555	IFC	514	201	-6.5	-12.5	3.0 dB
29	561	HIST	220	244	-7.0	-12.5	2.8 dB
34	591	HBO-HD	700	744	-6.0	-13.5	3.8 dB
35	597	FUEL	414		-6.5	-14.0	3.8 dB
37	609	NOGGIN	243	602			
41	633	PAD-HD	704		n/a	-15.0	
42	639	NBATV	413				
44	651	TRIO	231		-5.0	-13.0	4.0 dB
45	657	SPEED	403				
46	663	STYLE	203				
47	669	SHO-HD	702		-7.0	-16.0	4.5 dB
48	675	CSTV	415				
49	681	HBO	603		-7.0	-17.0	5.0 dB
50	687	FLIV	204				
51	693	HBOZ	608	625			
52	699	STARZ	672		-7.0	-16.5	4.8 dB
53	705	inHD1	723				
55	717	SHO-E	642		-8.0	-16.0	4.0 dB
56	723	HDNET	721				
57	729	FOX-HD	706		-8.0	-17.0	4.5 dB
58	735	ACTION	503	750	-9.0	-18.0	4.5 dB
59	741	SUND	513	643	-9.0	-17.0	4.0 dB
60	747	CBS-HD	708		-8.0	-15.5	3.8 dB

Tested two Back-To-Back Baluns and divided by two to derive single item loss shown above:
 CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

12/17/2004

Radio Shack, 15-1230, Goldstar 300/75 Ohm Balun Matching Transformer, 24K Gold Plated
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	Radio Shack 15-1230 Item Loss
					No Item	With Bk-Bk			
	20	RDC	D611		46.0	46.0	(NOTE: RDC is transmitted in reverse direction)		
FM	97	G4Tech	240		1.5	0.0	1.5 dB	0.5 dB	1.0 dB
FM	106	FDC	D611		3.0	1.0	2.0 dB	0.5 dB	1.5 dB
26	543	TNT-HD	727		-3.0	-8.0	5.0 dB	1.0 dB	4.0 dB
28	555	IFC	514	201	-3.0	-8.0	5.0 dB	1.5 dB	3.5 dB
29	561	HIST	220	244	-3.0	-8.0	5.0 dB	1.3 dB	3.7 dB
34	591	HBO-HD	700	744	-2.0	-7.0	5.0 dB	1.0 dB	4.0 dB
35	597	FUEL	414		-2.0	-8.0	6.0 dB	1.3 dB	4.7 dB
37	609	NOGGIN	243	602	-2.0	-7.0	5.0 dB	1.0 dB	4.0 dB
41	633	PAD-HD	704		n/a	n/a			
42	639	NBATV	413		-2.0	-7.0	5.0 dB	1.3 dB	3.7 dB
44	651	TRIO	231		-2.0	-7.0	5.0 dB	1.0 dB	4.0 dB
45	657	SPEED	403		-3.0	-7.0	4.0 dB	1.3 dB	2.7 dB
46	663	STYLE	203		-2.0	-7.0	5.0 dB	1.3 dB	3.7 dB
47	669	SHO-HD	702		-3.0	-8.0	5.0 dB	1.5 dB	3.5 dB
48	675	CSTV	415		-4.0	-8.0	4.0 dB	1.0 dB	3.0 dB
49	681	HBO	603		-5.0	-9.0	4.0 dB	1.0 dB	3.0 dB
50	687	FLIV	204		-4.0	-9.0	5.0 dB	1.3 dB	3.7 dB
51	693	HBOZ	608	625	-3.5	-8.0	4.5 dB	1.5 dB	3.0 dB
52	699	STARZ	672		-3.0	-8.0	5.0 dB	1.0 dB	4.0 dB
53	705	inHD1	723		-4.5	-8.0	3.5 dB	0.8 dB	2.7 dB
55	717	SHO-E	642		-5.0	-11.0	6.0 dB	0.8 dB	5.2 dB
56	723	HDNET	721	722	-6.0	-11.0	5.0 dB	1.0 dB	4.0 dB
57	729	FOX-HD	706		-6.0	-12.0	6.0 dB	1.3 dB	4.7 dB
58	735	ACTION	503	750	-6.5	-11.5	5.0 dB	1.5 dB	3.5 dB
59	741	SUND	513	643	-6.0	-11.0	5.0 dB	1.5 dB	3.5 dB
60	747	CBS-HD	708		-5.0	-10.5	5.5 dB	1.3 dB	4.2 dB

lost program
lost program
lost program

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

???

NOTE: Audio/Video program was lost on 693, 699 and 705 MHz frequencies.

QAM level is normal, but no SNR calculated.

This also occurs when testing other Balun combinations....perhaps due to external EMI???

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

12/17/2004

Radio Shack, 15-1140B, Indoor/Outdoor Matching Transformer, 300/75 Ohm, (Silver)
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	Radio Shack 15-1140B (Silver) Item Loss	
					No Item	With Bk-Bk				
	20	RDC	D611			46.0	46.0	(NOTE: RDC is transmitted in reverse direction)		
FM	97	G4Tech	240			1.5	1.0	0.5 dB	0.5 dB	0.0 dB
FM	106	FDC	D611			3.0	1.0	2.0 dB	0.5 dB	1.5 dB
26	543	TNT-HD	727			-2.0	-8.0	6.0 dB	1.0 dB	5.0 dB
28	555	IFC	514	201		-3.0	-8.0	5.0 dB	1.5 dB	3.5 dB
29	561	HIST	220	244		-3.0	-8.0	5.0 dB	1.3 dB	3.7 dB
34	591	HBO-HD	700	744		-2.0	-8.0	6.0 dB	1.0 dB	5.0 dB
35	597	FUEL	414			-2.0	-8.0	6.0 dB	1.3 dB	4.7 dB
37	609	NOGGIN	243	602		-2.0	-8.0	6.0 dB	1.0 dB	5.0 dB
41	633	PAD-HD	704			n/a	n/a			
42	639	NBATV	413			-2.0	-7.0	5.0 dB	1.3 dB	3.7 dB
44	651	TRIO	231			-2.0	-8.0	6.0 dB	1.0 dB	5.0 dB
45	657	SPEED	403			-3.0	-8.0	5.0 dB	1.3 dB	3.7 dB
46	663	STYLE	203			-2.0	-8.0	6.0 dB	1.3 dB	4.7 dB
47	669	SHO-HD	702			-3.0	-9.0	6.0 dB	1.5 dB	4.5 dB
48	675	CSTV	415			-4.0	-10.0	6.0 dB	1.0 dB	5.0 dB
49	681	HBO	603			-5.0	-11.0	6.0 dB	1.0 dB	5.0 dB
50	687	FLIV	204			-4.0	-10.0	6.0 dB	1.3 dB	4.7 dB
51	693	HBOZ	608	625		-3.5	-9.0	5.5 dB	1.5 dB	4.0 dB
52	699	STARZ	672			-3.0	-8.0	5.0 dB	1.0 dB	4.0 dB
53	705	inHD1	723			-4.5	-9.0	4.5 dB	0.8 dB	3.7 dB
55	717	SHO-E	642			-5.0	-12.0	7.0 dB	0.8 dB	6.2 dB
56	723	HDNET	721	722		-6.0	-13.0	7.0 dB	1.0 dB	6.0 dB
57	729	FOX-HD	706			-6.0	-13.0	7.0 dB	1.3 dB	5.7 dB
58	735	ACTION	503	750		-6.5	-13.0	6.5 dB	1.5 dB	5.0 dB
59	741	SUND	513	643		-6.0	-12.0	6.0 dB	1.5 dB	4.5 dB
60	747	CBS-HD	708			-5.0	-11.5	6.5 dB	1.3 dB	5.2 dB

intermittent
intermittent
lost program

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

???

NOTE: Audio/Video program was lost on 723 & intermittent on 693 + 699 MHz freqs.
QAM level is normal, but no SNR calculated.

This also occurs when testing other Balun combinations....perhaps due to external EMI???

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

12/17/2004

Channel Master Model 3025 Outdoor Matching Transformer
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	Channel Master Model 3075 Item Loss		
					No Item	With Bk-Bk					
	20	RDC	D611			46.0	46.0	(NOTE: RDC is transmitted in reverse direction)			
FM	97	G4Tech	240			1.5	0.0	1.5 dB	0.5 dB	1.0 dB	
FM	106	FDC	D611			3.0	1.0	2.0 dB	0.5 dB	1.5 dB	
26	543	TNT-HD	727			-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
28	555	IFC	514	201		-3.0	-6.0	3.0 dB	1.5 dB	1.5 dB	
29	561	HIST	220	244		-3.0	-5.6	2.6 dB	1.3 dB	1.3 dB	
34	591	HBO-HD	700	744		-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
35	597	FUEL	414			-2.0	-5.0	3.0 dB	1.3 dB	1.7 dB	
37	609	NOGGIN	243	602		-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
41	633	PAD-HD	704			n/a	n/a				
42	639	NBATV	413			-2.0	-5.0	3.0 dB	1.3 dB	1.7 dB	
44	651	TRIO	231			-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
45	657	SPEED	403			-3.0	-5.0	2.0 dB	1.3 dB	0.7 dB	
46	663	STYLE	203			-2.0	-5.0	3.0 dB	1.3 dB	1.7 dB	
47	669	SHO-HD	702			-3.0	-6.0	3.0 dB	1.5 dB	1.5 dB	
48	675	CSTV	415			-4.0	-7.0	3.0 dB	1.0 dB	2.0 dB	
49	681	HBO	603			-5.0	-7.5	2.5 dB	1.0 dB	1.5 dB	
50	687	FLIV	204			-4.0	-7.0	3.0 dB	1.3 dB	1.7 dB	
51	693	HBOZ	608	625		-3.5	-6.5	3.0 dB	1.5 dB	1.5 dB	intermittent
52	699	STARZ	672			-3.0	-6.0	3.0 dB	1.0 dB	2.0 dB	
53	705	inHD1	723			-4.5	-6.0	1.5 dB	0.8 dB	0.7 dB	
55	717	SHO-E	642			-5.0	-8.0	3.0 dB	0.8 dB	2.2 dB	
56	723	HDNET	721	722		-6.0	-8.0	2.0 dB	1.0 dB	1.0 dB	lost program
57	729	FOX-HD	706			-6.0	-8.0	2.0 dB	1.3 dB	0.7 dB	
58	735	ACTION	503	750		-6.5	-9.0	2.5 dB	1.5 dB	1.0 dB	
59	741	SUND	513	643		-6.0	-8.5	2.5 dB	1.5 dB	1.0 dB	
60	747	CBS-HD	708			-5.0	-7.5	2.5 dB	1.3 dB	1.2 dB	

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

???

NOTE: Audio/Video program was lost on 723 and intermittent on 693 MHz frequencies.
QAM level is normal, but no SNR calculated.

This also occurs when testing other Balun combinations....perhaps due to external EMI???

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

12/17/2004

Philips/Magnavox Model PM61009 Outdoor Matching Transformer
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	Philips/Magnavox Model PM61009 Item Loss
					No Item	With Bk-Bk			
	20	RDC	D611		46.0	46.0	(NOTE: RDC is transmitted in reverse direction)		
FM	97	G4Tech	240		1.5	0.0	1.5 dB	0.5 dB	1.0 dB
FM	106	FDC	D611		3.0	1.0	2.0 dB	0.5 dB	1.5 dB
26	543	TNT-HD	727		-2.0	-6.0	4.0 dB	1.0 dB	3.0 dB
28	555	IFC	514	201	-3.0	-6.5	3.5 dB	1.5 dB	2.0 dB
29	561	HIST	220	244	-3.0	-6.0	3.0 dB	1.3 dB	1.7 dB
34	591	HBO-HD	700	744	-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB
35	597	FUEL	414		-2.0	-6.0	4.0 dB	1.3 dB	2.7 dB
37	609	NOGGIN	243	602	-2.0	-6.5	4.5 dB	1.0 dB	3.5 dB
41	633	PAD-HD	704		n/a	n/a			
42	639	NBATV	413		-2.0	-6.5	4.5 dB	1.3 dB	3.2 dB
44	651	TRIO	231		-2.0	-6.5	4.5 dB	1.0 dB	3.5 dB
45	657	SPEED	403		-3.0	-6.0	3.0 dB	1.3 dB	1.7 dB
46	663	STYLE	203		-2.0	-7.0	5.0 dB	1.3 dB	3.7 dB
47	669	SHO-HD	702		-3.0	-7.5	4.5 dB	1.5 dB	3.0 dB
48	675	CSTV	415		-4.0	-8.0	4.0 dB	1.0 dB	3.0 dB
49	681	HBO	603		-5.0	-10.0	5.0 dB	1.0 dB	4.0 dB
50	687	FLIV	204		-4.0	-9.5	5.5 dB	1.3 dB	4.2 dB
51	693	HBOZ	608	625	-3.5	-8.0	4.5 dB	1.5 dB	3.0 dB
52	699	STARZ	672		-3.0	-8.0	5.0 dB	1.0 dB	4.0 dB
53	705	inHD1	723		-4.5	-8.0	3.5 dB	0.8 dB	2.7 dB
55	717	SHO-E	642		-5.0	-10.5	5.5 dB	0.8 dB	4.7 dB
56	723	HDNET	721	722	-6.0	-11.0	5.0 dB	1.0 dB	4.0 dB
57	729	FOX-HD	706		-6.0	-11.0	5.0 dB	1.3 dB	3.7 dB
58	735	ACTION	503	750	-6.5	-11.0	4.5 dB	1.5 dB	3.0 dB
59	741	SUND	513	643	-6.0	-11.0	5.0 dB	1.5 dB	3.5 dB
60	747	CBS-HD	708		-5.0	-8.5	3.5 dB	1.3 dB	2.2 dB

lost program

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

???

NOTE: Audio/Video program was lost on 723 frequency.

QAM level is normal, but no SNR calculated.

This also occurs when testing other Balun combinations....perhaps due to external EMI???

RCA VH101, Outdoor Matching Transformer
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	RCA Model VH101 Item Loss
					No Item	With Bk-Bk			
	20	RDC	D611		52.0	52.0	(NOTE: RDC is transmitted in reverse direction)		
FM	97	G4Tech	240		-3.0	-4.0	1.0 dB	0.5 dB	0.5 dB
FM	106	FDC	D611		0.0	-2.0	2.0 dB	0.5 dB	1.5 dB
26	543	TNT-HD	727		-5.0	-8.0	3.0 dB	1.0 dB	2.0 dB
28	555	IFC	514	201	-7.0	-10.5	3.5 dB	1.5 dB	2.0 dB
29	561	HIST	220	244	-6.0	-10.0	4.0 dB	1.3 dB	2.7 dB
34	591	HBO-HD	700	744	-5.0	-8.0	3.0 dB	1.0 dB	2.0 dB
35	597	FUEL	414		-5.0	-8.0	3.0 dB	1.3 dB	1.7 dB
37	609	NOGGIN	243	602	-6.0	-8.0	2.0 dB	1.0 dB	1.0 dB
41	633	PAD-HD	704		-4.0	-8.0	4.0 dB	2.0 dB	2.0 dB
42	639	NBATV	413		-5.0	-8.0	3.0 dB	1.3 dB	1.7 dB
44	651	TRIO	231		-5.0	-9.0	4.0 dB	1.0 dB	3.0 dB
45	657	SPEED	403		-5.0	-10.0	5.0 dB	1.3 dB	3.7 dB
46	663	STYLE	203		-6.0	-11.0	5.0 dB	1.3 dB	3.7 dB
47	669	SHO-HD	702		-6.0	-11.5	5.5 dB	1.5 dB	4.0 dB
48	675	CSTV	415		-7.0	-12.0	5.0 dB	1.0 dB	4.0 dB
49	681	HBO	603		-8.0	-12.0	4.0 dB	1.0 dB	3.0 dB
50	687	FLIV	204		-7.0	-12.0	5.0 dB	1.3 dB	3.7 dB
51	693	HBOZ	608	625	-6.5	-11.0	4.5 dB	1.5 dB	3.0 dB lost program
52	699	STARZ	672		-7.0	-11.0	4.0 dB	1.0 dB	3.0 dB lost program
53	705	inHD1	723		-8.0	-12.0	4.0 dB	0.8 dB	3.2 dB lost program
55	717	SHO-E	642		-8.0	-13.0	5.0 dB	0.8 dB	4.2 dB
56	723	HDNET	721	722	-11.0	-14.0	3.0 dB	1.0 dB	2.0 dB
57	729	FOX-HD	706		-9.0	-14.0	5.0 dB	1.3 dB	3.7 dB
58	735	ACTION	503	750	-9.5	-14.0	4.5 dB	1.5 dB	3.0 dB
59	741	SUND	513	643	-10.0	-14.0	4.0 dB	1.5 dB	2.5 dB
60	747	CBS-HD	708		-8.0	-13.0	5.0 dB	1.3 dB	3.7 dB

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "10 DB" Attenuator to reduce effect of cable feed VSWR

NOTE: Audio/Video program was lost on 693, 699 and 705 MHz frequencies.

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QAM level is normal, but no SNR calculated.

This also occurs when testing other Balun combinations....perhaps due to external EMI???

LOSS IN COMPONENTS: USING PACE STB & TWC-SD FREQS

12/17/2004

SEGA UHF/VHF Matching Transformer, 3055, Taiwan, (Indoor Type)
after subtract loss for RMS Electronics Inc, Model CA2100B

UHF Chan	Freq MHz	Program	CATV Chan	ALT Chan	Signal Level		Bk-Bk Loss	RMS-RMS Item Loss	SEGA Model 3055 Item Loss		
					No Item	With Bk-Bk					
	20	RDC	D611			46.0	46.0	(NOTE: RDC is transmitted in reverse direction)			
FM	97	G4Tech	240			1.5	0.0	1.5 dB	0.5 dB	1.0 dB	
FM	106	FDC	D611			3.0	1.0	2.0 dB	0.5 dB	1.5 dB	
26	543	TNT-HD	727			-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
28	555	IFC	514	201		-3.0	-5.0	2.0 dB	1.5 dB	0.5 dB	
29	561	HIST	220	244		-3.0	-5.0	2.0 dB	1.3 dB	0.7 dB	
34	591	HBO-HD	700	744		-2.0	-4.0	2.0 dB	1.0 dB	1.0 dB	
35	597	FUEL	414			-2.0	-4.5	2.5 dB	1.3 dB	1.2 dB	
37	609	NOGGIN	243	602		-2.0	-5.0	3.0 dB	1.0 dB	2.0 dB	
41	633	PAD-HD	704			n/a	n/a				
42	639	NBATV	413			-2.0	-5.0	3.0 dB	1.3 dB	1.7 dB	
44	651	TRIO	231			-2.0	-4.5	2.5 dB	1.0 dB	1.5 dB	
45	657	SPEED	403			-3.0	-5.0	2.0 dB	1.3 dB	0.7 dB	
46	663	STYLE	203			-2.0	-5.0	3.0 dB	1.3 dB	1.7 dB	
47	669	SHO-HD	702			-3.0	-5.5	2.5 dB	1.5 dB	1.0 dB	
48	675	CSTV	415			-4.0	-5.5	1.5 dB	1.0 dB	0.5 dB	
49	681	HBO	603			-5.0	-6.5	1.5 dB	1.0 dB	0.5 dB	
50	687	FLIV	204			-4.0	-6.5	2.5 dB	1.3 dB	1.2 dB	
51	693	HBOZ	608	625		-3.5	-6.0	2.5 dB	1.5 dB	1.0 dB	lost program
52	699	STARZ	672			-3.0	-6.0	3.0 dB	1.0 dB	2.0 dB	
53	705	inHD1	723			-4.5	-6.5	2.0 dB	0.8 dB	1.2 dB	lost program
55	717	SHO-E	642			-5.0	-8.0	3.0 dB	0.8 dB	2.2 dB	
56	723	HDNET	721	722		-6.0	-8.0	2.0 dB	1.0 dB	1.0 dB	
57	729	FOX-HD	706			-6.0	-8.0	2.0 dB	1.3 dB	0.7 dB	
58	735	ACTION	503	750		-6.5	-8.0	1.5 dB	1.5 dB	0.0 dB	
59	741	SUND	513	643		-6.0	-8.0	2.0 dB	1.5 dB	0.5 dB	
60	747	CBS-HD	708			-5.0	-8.0	3.0 dB	1.3 dB	1.7 dB	

Tested two Back-To-Back Baluns, subtracted RMS loss to determine RS loss shown above
CATV signal initially feeds "6 DB" Attenuator to reduce effect of cable feed VSWR

NOTE: Audio/Video program was lost on 693 and 705 MHz frequencies.

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