

RF modules need to be mounted on mounting plate.
Mount 8-way splitter on 0.5" spacers.

Weinschel step attenuator is equipped with SMA angle adapter to make it similar to alternate part. Alternate part is Trilithic RSA-3550D-SMA-S.

Cables C1 to C16 and M1 to M3 are semi-rigid RG405.
Cables require SMA connectors on both ends. Red dot marks R/A connector.

Cable S1 is 14-pin twisted-pair flat-ribbon.

Cables V1 to V3 are twisted pair and soldered to the amplifiers.
Solder 10nF across each power terminal.

Mount A1 at the inside of J1.
Mount A2 at the output of U3 going to U4.
Mount A3 at the output of U3 going to U5.
Adjust power levels by replacing A1, A2 or A3 with fixed attenuators:
Pasternack PE7161/PE7001 instead of PE9103.

To achieve 30dBm of output power the amplifiers U4 and U5 can be replaced with models BXMP1005 or A2P2130 from Spectrum Microwave and Teledyne Cougar, respectively. Fixed attenuators with nominal values of 4dB will be required at points C4 and C5. Use front panel D080711-B.

- PN8
Mounting Plate
LIGO
D080746-A
- PN9
2U chassis
LIGO
D0900142-v1
- PN10
Front Panel
LIGO
D080711-B
- PN13
Rear Panel
LIGO
D080712-B

Title RF Distribution Amplifier		
Size B	Number D080710	Revision A
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PN14
RG405 cable semi-rigid
Pasternack
PE-SR405AL-STRAIGHT

PN15
RG405 cable semi-rigid
Pasternack
PE-SR405AL-STRAIGHT

PN16
Connector SMA/RG405
Digi-Key
ACX1177-ND

PN17
Connector SMA/RG405

PN18
Connector SMA/RG405

PN19
Connector SMA/RG405

PN20
Connector SMA/RG405

PN21
Connector SMA/RG405

PN22
Connector SMA/RG405

PN23
Connector SMA/RG405

PN24
Connector SMA/RG405

PN25
Connector SMA/RG405

PN26
Connector SMA/RG405

PN27
Connector SMA/RG405

PN28
Connector SMA/RG405

PN29
Connector SMA/RG405

PN30
Connector SMA/RG405

PN31
Connector SMA/RG405

PN32
Connector SMA/RG405

PN33
Connector SMA/RG405

PN34
Connector SMA/RG405

PN35
Connector SMA/RG405

PN36
Connector SMA/RG405

PN37
Connector SMA/RG405

PN38
Connector SMA/RG405

PN43
Connector SMA/RG405

PN39
Connector SMA/RG405
Digi-Key
ACX1181-ND

PN40
Connector SMA/RG405

PN41
Connector SMA/RG405

PN42
Connector SMA/RG405

PN43
Connector SMA/RG405

PN44
Connector SMA/RG405

PN45
Connector SMA/RG405

PN46
Connector SMA/RG405

PN47
Connector SMA/RG405

PN48
Connector SMA/RG405

PN49
Connector SMA/RG405

PN50
Connector SMA/RG405

PN51
Connector SMA/RG405

PN52
Connector SMA/RG405

PN53
Connector SMA/RG405

PN54
Cable, 1 pair, shielded
Mouser
566-9501-100

V1-V3 cables

PN55
S1 Cable Assembly
Digi-Key
M3DDA-1420K-ND

E1 #4-40 3/16" flat

E2 #4-40 3/16" flat

E3 #6-32 1/4" flat

E4 #6-32 1/4" flat

E5 BNC lock washer

E6 BNC nut

E7 BNC lock washer

E8 BNC nut

E9 BNC lock washer

E10 BNC nut

H1 Handle, 3"

H2 Handle, 3"

Mouser
534-9109

H3 Ferrule

H4 Ferrule

Mouser
534-9121

M1 #6-32 1/4" flat

M2 #6-32 1/4" flat

M3 #6-32 1/4" flat

M4 #6-32 1/4" flat

M5 #6-32 1/4" flat

M6 #6-32 1/4" flat

McMaster-Carr
91099A205

M7 #6-32 3/8" flat

M8 #6-32 3/8" flat

M9 #6-32 3/8" flat

M10 #6-32 3/8" flat

McMaster-Carr
91099A215

E11 #4-40 3/16" flat

E12 #4-40 3/16" flat

E13 #4-40 3/16" flat

E14 #4-40 3/16" flat

E15 #4-40 3/16" flat

E16 #4-40 3/16" flat

E17 #4-40 3/16" flat

E18 #4-40 3/16" flat

E19 #4-40 3/16" flat

E20 #4-40 3/16" flat

E21 #4-40 3/16" flat

E22 #4-40 3/16" flat

E23 #4-40 3/16" flat

E24 #4-40 3/16" flat

E25 #4-40 3/16" flat

E26 #4-40 3/16" flat

E27 #4-40 3/16" flat

E28 #4-40 3/16" flat

E29 #4-40 3/16" flat

E30 #4-40 3/16" flat

E31 #4-40 3/16" flat

E32 #4-40 3/16" flat

E33 #4-40 3/16" flat

E34 #4-40 3/16" flat

E35 #4-40 3/16" flat

E36 #4-40 3/16" flat

E37 #4-40 3/16" flat

E38 #4-40 3/16" flat

E39 #4-40 3/16" flat

E40 #4-40 3/16" flat

E41 #4-40 3/16" flat

E42 #4-40 3/16" flat

E43 #4-40 3/16" flat

E44 #4-40 3/16" flat

E45 #4-40 3/16" flat

E46 #4-40 3/16" flat

E47 #4-40 3/16" flat

E48 #4-40 3/16" flat

E49 #4-40 3/16" flat

E50 #4-40 3/16" flat

E51 #4-40 3/16" flat

E52 #4-40 3/16" flat

E53 #4-40 3/16" flat

E54 #4-40 3/16" flat

Cable assembly instructions:
Hold unbend cable with connector 2 away from you.
Then, follow bend instructions.

C1:
cable: RG405
connector 1: SMA
connector 2: SMA
length =
bend right at 4.8"

C2:
cable: RG405
connector 1: SMA
connector 2: SMA
length =
bend right at

C3:
cable: RG405
connector 1: SMA
connector 2: SMA/RA
length =
bend left at

C4:
cable: RG405
connector 1: SMA
connector 2: SMA
length =
bend right at

Title RF Distribution Amplifier: Cables		
Size B	Number D080710	Revision A
Date: 5/5/2009	Sheet 2 of 3	
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H1
Spacer 0.5"
Digi-Key
8401K-ND

H2
Spacer 0.5"
Digi-Key
8401K-ND

H3
Spacer 0.5"
Digi-Key
8401K-ND

H4
Spacer 0.5"
Digi-Key
8401K-ND

H5
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H6
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H7
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H8
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H9
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H10
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H11
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H12
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H13
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H14
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H15
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H16
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H17
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H18
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H19
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H20
#2-56 flat head, 3/8"
McMaster-Carr
91771A105

H21
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H22
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H23
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H24
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H25
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H26
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H27
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H28
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H29
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H30
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H31
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H32
M2.5 flat head, 10mm
McMaster-Carr
91420A020

H33
M2.5 washer
McMaster-Carr
93475A196

H34
M2.5 washer
McMaster-Carr
93475A196

H35
M2.5 washer
McMaster-Carr
93475A196

H36
M2.5 washer
McMaster-Carr
93475A196

H37
M2.5 washer
McMaster-Carr
93475A196

H38
M2.5 washer
McMaster-Carr
93475A196

H39
M2.5 washer
McMaster-Carr
93475A196

H40
M2.5 washer
McMaster-Carr
93475A196

H41
M2.5 washer
McMaster-Carr
93475A196

H42
M2.5 washer
McMaster-Carr
93475A196

H43
M2.5 washer
McMaster-Carr
93475A196

H44
M2.5 washer
McMaster-Carr
93475A196

H45
M2.5 lock washer
McMaster-Carr
93925A220

H46
M2.5 lock washer
McMaster-Carr
93925A220

H47
M2.5 lock washer
McMaster-Carr
93925A220

H48
M2.5 lock washer
McMaster-Carr
93925A220

H49
M2.5 lock washer
McMaster-Carr
93925A220

H50
M2.5 lock washer
McMaster-Carr
93925A220

H51
M2.5 lock washer
McMaster-Carr
93925A220

H52
M2.5 lock washer
McMaster-Carr
93925A220

H53
M2.5 lock washer
McMaster-Carr
93925A220

H54
M2.5 lock washer
McMaster-Carr
93925A220

H55
M2.5 lock washer
McMaster-Carr
93925A220

H56
M2.5 lock washer
McMaster-Carr
93925A220

H57
M2.5 nut
McMaster-Carr
90591A113

H58
M2.5 nut
McMaster-Carr
90591A113

H59
M2.5 nut
McMaster-Carr
90591A113

H60
M2.5 nut
McMaster-Carr
90591A113

H61
M2.5 nut
McMaster-Carr
90591A113

H62
M2.5 nut
McMaster-Carr
90591A113

H63
M2.5 nut
McMaster-Carr
90591A113

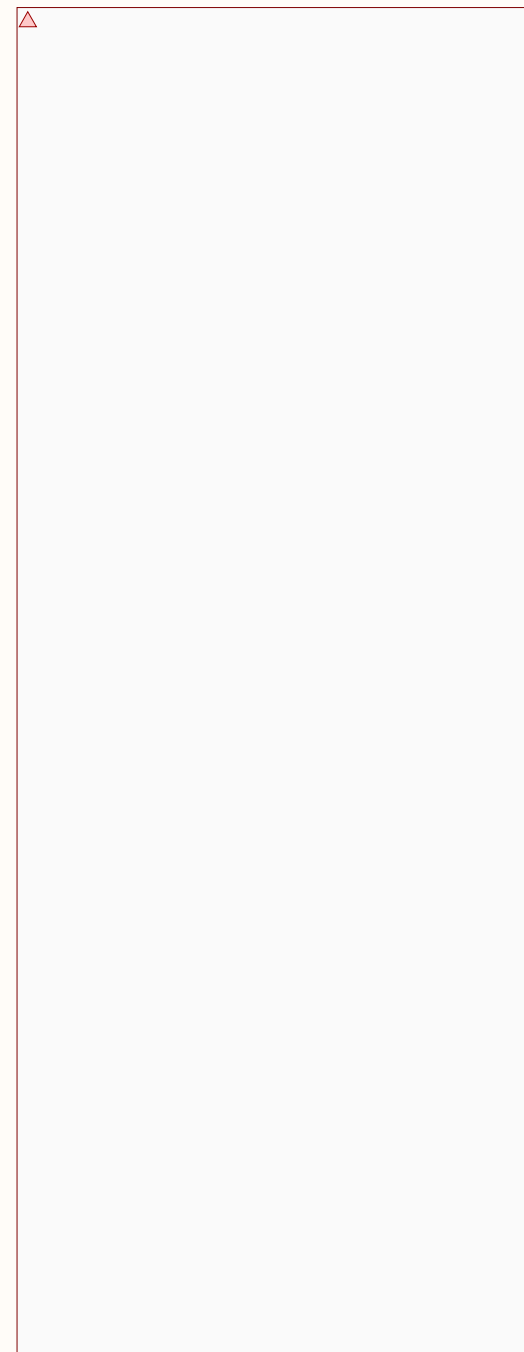
H64
M2.5 nut
McMaster-Carr
90591A113

H65
M2.5 nut
McMaster-Carr
90591A113

H66
M2.5 nut
McMaster-Carr
90591A113

H67
M2.5 nut
McMaster-Carr
90591A113

H68
M2.5 nut
McMaster-Carr
90591A113



H69
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H70
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H71
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H72
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H73
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H74
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H75
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H76
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H77
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H78
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H79
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H80
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H81
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H82
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H83
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H84
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H85
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H86
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H87
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H88
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

H89
#6-32 pan, lock washer, 5/16"
McMaster-Carr
96909A445

Title			RF Distribution Amplifier: Hardware		
Size	Number			Revision	
B	D080710			A	
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