



Open mounting holes of all RF modules to #6 clearance holes (0.144"). Then, use #4 screws and insulating shoulder washers as well as a thermal pad to isolate the RF modules from the front panel.

Mount second splitter on top of ZFDC-20-5B-S coupler with 3/4" standoffs. Use insulating shoulder washers and nylon nuts.

Remove -15V regulator from power board. Mount power board with 1/4" standoffs. Mount voltage regulator with insulator and insulating shoulder washer. Check for shorts.

Cables C1 to C8 are flexible semi-rigid RG405. Cables require SMA connectors on both ends.

Cables V1-V3 are twisted pair, soldered on one side and crimped to a Molex connector on the other. Solder 10nF across amplifier power terminal. V3 terminates at the power connector.

PN1 Connector SMA Digi-Key ACX1177-ND	PN6 Connector SMA, R/A Digi-Key ACX1181-ND	PN11 RG405 cable semi-rigid Newark 99F6456	
PN2 Connector SMA	PN7 Conn. SMA, R/A	PN12Conn. SMA, R/A	PN16Conn. SMA, R/A
PN3 Connector SMA	PN8 Conn. SMA, R/A	PN13Conn. SMA, R/A	PN17Conn. SMA, R/A
PN4 Connector SMA	PN9 Conn. SMA, R/A	PN14Conn. SMA, R/A	PN18 Cable, 1 pair, shielded Mouser 566-9501-100
PN5 Connector SMA	PN10Conn. SMA, R/A	PN15Conn. SMA, R/A	

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RF TTFSS Pre Amplifier		
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Delrin inserts

M1 #4-40 1/4" flat
 M2 #4-40 1/4" flat
 M3 #4-40 1/4" flat
 M4 #4-40 1/4" flat
 McMaster-Carr 91099A155
 M5 #4 nut
 M6 #4 nut
 M7 #4 nut
 M8 #4 nut
 McMaster-Carr 90480A005
 M9 #4 lock washer
 M10 #4 lock washer
 M11 #4 lock washer
 M12 #4 lock washer
 McMaster-Carr 91113A005
 PN19
 Delrin N insert

M13 #4-40 1/4" flat
 M14 #4-40 1/4" flat
 M15 #4-40 1/4" flat
 M16 #4-40 1/4" flat
 McMaster-Carr 91099A155
 M17 #4 nut
 M18 #4 nut
 M19 #4 nut
 M20 #4 nut
 McMaster-Carr 90480A005
 M21 #4 lock washer
 M22 #4 lock washer
 M23 #4 lock washer
 M24 #4 lock washer
 McMaster-Carr 91113A005
 PN20
 Delrin N insert

M25 #4-40 1/4" flat
 M26 #4-40 1/4" flat
 M27 #4-40 1/4" flat
 M28 #4-40 1/4" flat
 McMaster-Carr 91099A155
 M29 #4 nut
 M30 #4 nut
 M31 #4 nut
 M32 #4 nut
 McMaster-Carr 90480A005
 M33 #4 lock washer
 M34 #4 lock washer
 M35 #4 lock washer
 M36 #4 lock washer
 McMaster-Carr 91113A005
 PN21
 Delrin N insert

M37 #4-40 1/4" flat
 M38 #4-40 1/4" flat
 M39 #4-40 1/4" flat
 M40 #4-40 1/4" flat
 McMaster-Carr 91099A155
 M41 #4 nut
 M42 #4 nut
 M43 #4 nut
 M44 #4 nut
 McMaster-Carr 90480A005
 M45 #4 lock washer
 M46 #4 lock washer
 M47 #4 lock washer
 M48 #4 lock washer
 McMaster-Carr 91113A005
 PN22
 Delrin N insert

M49 #4-40 1/4" flat
 M50 #4-40 1/4" flat
 M51 #4-40 1/4" flat
 M52 #4-40 1/4" flat
 McMaster-Carr 91099A155
 M53 #4 nut
 M54 #4 nut
 M55 #4 nut
 M56 #4 nut
 McMaster-Carr 90480A005
 M57 #4 lock washer
 M58 #4 lock washer
 M59 #4 lock washer
 M60 #4 lock washer
 McMaster-Carr 91113A005
 PN23
 Delrin N insert
 LIGO
 D1700019-v1

Front Panel

H53 Handle, 3"
 H54 Handle, 3"
 Mouser 534-9109
 H55 Ferrule
 H56 Ferrule
 H57 Ferrule
 H58 Ferrule
 Mouser 534-9121
 H59 #6-32 3/8" flat
 H60 #6-32 3/8" flat
 H61 #6-32 3/8" flat
 H62 #6-32 3/8" flat
 McMaster-Carr 91099A215
 PN25
 Front Panel
 LIGO
 D1700325-v2

Power

PN26
 Power pin, AWG 16-20
 PN27
 Power pin, AWG 16-20
 Digi-Key 626-1140-ND
 PN28
 Power socket, AWG 16-20
 Digi-Key 626-1144-ND
 PN29
 D-sub shell, 3W3C
 Digi-Key 626-1098-ND
 PN30
 Jack screw
 Newark 80K5431
 PN31
 Molex 4-pin
 Digi-Key WM2102-ND
 PN32 Molex contact
 PN33
 Molex contact
 Digi-Key WM1114-ND
 PN34 Molex 3-pin
 PN35
 Molex 3-pin
 Digi-Key WM2123-ND
 PN36 Molex contact
 PN37 Molex contact
 PN38 Molex contact
 PN39 Molex contact

RF Modules

H1 #4 screw, flat, 1/2"
 H2 #4 lock washer
 H3 #4 nut
 H4 ins. should. washer
 H5 #4 screw, flat, 1/2"
 H6 #4 lock washer
 H7 #4 nut
 H8 ins. should. washer
 H9 #4 standoff, 3/4"
 Digi-Key 36-1946-ND

H10 #4 screw, flat, 1/2"
 H11 #4 lock washer
 H12 #4 nut
 H13 ins. should. washer
 H14 #4 screw, flat, 1/2"
 H15 #4 lock washer
 H16 #4 nut
 H17 ins. should. washer
 H18 #4 standoff, 3/4"

H19 #4 screw, flat, 1/2"
 H20 #4 lock washer
 H21 #4 nut
 H22 ins. should. washer
 H23 #4 screw, flat, 1/2"
 H24 #4 lock washer
 H25 #4 nut
 H26 ins. should. washer
 H27 #4 standoff, 3/4"

H28 #4 screw, flat, 1/2"
 H29 #4 lock washer
 H30 #4 nut
 H31 ins. should. washer
 H32 #4 screw, flat, 1/2"
 H33 #4 lock washer
 H34 #4 nut
 H35 ins. should. washer
 H36 #4 standoff, 3/4"

H37 #4 screw, flat, 1/2"
 H38 #4 lock washer
 H39 #4 nut, nylon
 H40 ins. should. washer
 H41 #4 screw, flat, 1/2"
 H42 #4 lock washer
 H43 #4 nut, nylon
 H44 ins. should. washer
 PN24
 Thermal pad
 Digi-Key
 BER233-ND

H45 #4 screw, flat, 1/2"
 H46 #4 lock washer
 H47 #4 nut, nylon
 H48 ins. should. washer
 H49 #4 screw, flat, 1/2"
 H50 #4 lock washer
 H52 ins. should. washer
 H51 #4 nut, nylon
 Digi-Key 36-9605-ND

H63 #4 screw, flat, 1/2"
 H64 #4 lock washer
 H65 #4 nut
 H66 insulator
 Mouser 532-53-77-4ACG
 H67 ins. should. washer
 Mouser 532-7721-7PPS
 M61 #4-40 1/4" flat
 M62 #4-40 1/4" flat
 M63 #4-40 1/4" flat
 M64 #4-40 1/4" flat
 H68 #4 standoff, 1/4"
 H69 #4 standoff, 1/4"
 H70 #4 standoff, 1/4"
 H71 #4 standoff, 1/4"
 H72 #4 lock washer
 H73 #4 nut
 H74 #4 lock washer
 H75 #4 nut
 H76 #4 lock washer
 H77 #4 nut
 H78 #4 lock washer
 H79 #4 nut

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