

ALLEN&HEATH

ZEDi-8 ZED-6/6FX



SERVICE MANUAL

ISSUE 1.1

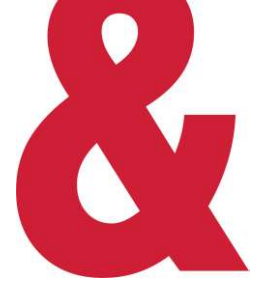
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ALLEN&HEATH

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<https://www.allen-heath.com>



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Notices

Legal Notice

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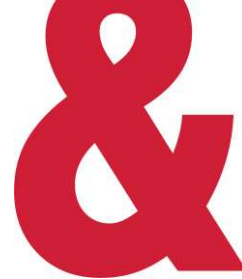
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Servicing precautions – General Notes

- Service Personnel:** Service work should be carried out by technically qualified personnel only. Mains power is dangerous and can kill. Do not attempt to work on a linear or switched mode power supply if you are not suitably qualified to do so. Do not attempt to repair surface mount circuit assemblies unless you are suitably qualified and have the necessary facilities to do so. Replacement circuit assemblies can be ordered.
- Service Facilities:** Ensure a suitably sized worksurface is available. Ensure this is clear of dirt, debris and obstructions which may damage the equipment surfaces. Ensure adequate lighting. Use the correct tools for the job and ensure that they are in good working order. Ensure all workshop safety requirements are adhered to.
- Safety Information:** Failure to follow the appropriate service and safety procedures may result in personal injury. You must read and adhere to the Safety instructions available in the box with the finished goods or available to service centres via your Asset Library login.
- Service information:** Check that you have all the information you need before starting the service job. Refer to the Allen & Heath website for user facing information such as firmware guides (including block diagrams), weights and dimensions and Technical Spec Data Sheets at www.allen-heath.com. For any other information contact Allen & Heath Product Support at <https://support.allen-heath.com>.
- Saving Data:** In order to preserve the customer data, you should save any console data onto two separate USB devices if applicable.
- Mains Power:** Connect the equipment to mains power only of the type described in the user guide and marked on the rear panel. The power source must provide a good ground connection. Ensure you always use an isolation transformer when working on any mains power supply unit.
- Mains Cord and Fuse:** Use the correct power cord as supplied with the equipment. Do not remove or tamper with the ground connection in the power cord. Heed the important mains plug wiring instructions in the Safety Instructions sheet. Always replace the equipment mains fuse with the correct type and rating as marked on the equipment panel.



Static Discharge:	Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated before commencing servicing.
Opening the unit:	Switch off and remove the mains power cord before opening the equipment. Ensure all power supply covers and safety shields are in place before applying power with the unit open for diagnostic fault finding.
Fault finding:	In-warranty faults should be corrected by board swapping. If attempting an out of warranty repair at a component level, replace suspected faulty components only with those specified by Allen & Heath. The use of lower grade alternatives may degrade the performance or risk damage to the equipment.
Closing the unit:	Before finishing, check the quality and accuracy of the service work carried out. Remove any dirt or debris as this may cause equipment failure in the future. Ensure all assemblies, harnesses and connectors are correctly aligned, plugged in and cable tied. Ensure that jumper settings and control configurations are correctly set according to the requirements of the customer.
Testing the unit:	Before operating the equipment, read and adhere to the Safety Instructions for the unit. Test that the service work has been successfully carried out.
Shipping the unit:	Use adequate packing such as the original packaging or purpose designed flight case if you need to ship the unit. To avoid injury to yourself or damage to the equipment take care when lifting, moving or carrying the equipment.
Important:	Information provided is believed to be accurate, but research is ongoing, and improvements or changes can be made to the unit without notice. If you have any questions, please contact Product Support at https://support.allen-heath.com .
Battery Handling:	Batteries can explode with improper handling. Follow the following precautions if a battery is fitted to this product. • Battery replacement should be performed by qualified service personnel. • Always replace with batteries of the same type. • When installing on the PCB by soldering, solder using the connection terminals provided on the battery cells. • Never solder directly onto the cells. Perform soldering as quickly as possible. • Never reverse the battery polarity when installing. • Do not short the batteries. • Do not attempt to recharge batteries. • Do not disassemble the batteries. • Never heat batteries or throw them into fire.



Parts Identification

Parts List

Chassis

Part Number	Description	i8	6	6FX
AA10045-L-OV	OVERLAY S/ADH ZED 6/I8 LE	1	1	1
AA10045-R-OV	OVERLAY S/ADH ZED 6/I8 RI	1	1	1
AA10051	FRONT PNL ZEDI-8	1	-	-
004-1255X	CHASS. ZED 6/6FX/I8 PLAST + FEET	1	1	1
AA9972	FACIA 7 SEG DISPLAY ZED	-	-	1
AA9977	FRONT PNL ZED-6	-	1	-
AA9978	FRONT PNL ZED-6FX	-	-	1

Screws

Part Number	Description	i8	6	6FX
AB0072	SCREW M3X6 PAN TORX BK PA	2	2	2
AB0073	SCREW M3X8 PAN TORX BK	1	-	-
AB0102	NUT M3 NYLOCK	1	1	1
AB10052	SCREW M3X1.5 10MM DOME TO	6	6	6
AB2809	SCREW 6BX5/16 PAN TORX BK	2	2	2
AB7422	SCREW 2.7X9 AB TORX BK UH	8	8	8
AB7611	SCREW M2X3 CSK POZI BK	2	2	2
AB8050	NUT POT 9MM SILVER	22	21	26

Accessories

Part Number	Description	i8	6	6FX
AN10072	BOX+FIT ZEDI 8	1	-	-
AN10001	BOX+FIT ZED 6FX	-	-	1
AN9999	BOX+FIT ZED 6		1	-
AL8923	SW.MAINS ROCK.H8600VBAAA	1	1	1
AN10089	LABEL ZED-6FX	-	-	1
AN10088	LABEL ZED-6	-	1	-
AN10090	LABEL ZEDI-8	1	-	-
AK12035	FEET RUBBER 16DIA.X0.5MM	4	4	4



PCB

Part Number	Description	i8	6	6FX
004-653	PCBA ZED 6/I8 MONO INPUT	2	2	-
004-654	PCBA ZED 6/I8 STEREO INPU	2	2	-
004-655	PCBA ZED 6 MASTER	-	1	1
004-660	PCBA ZEDI 8 MASTER	1	-	-
004-657	PCBA ZED 6FX MONO INPUT	-	-	2
004-658	PCBA ZED 6FX STEREO INPUT	-	-	2
004-659	PCBA ZED 6FX EFFECTS	-	-	1
004-662	PCBA ZED METER	1	1	1
004-679	PCBA ZEDI 8 USB INTERFACE	1	-	-
004-795	PCBA ZED 6/I8 PSU V2	1	1	1
AI3661	FDR 60MM 10KAX2 DUST	1	1	1

Other

Part Number	Description	i8	6	6FX
AJ10128	KNOB 11MM BK-RD	10	9	10
AJ10129	KNOB 11MM BK-BL	8	8	8
AJ10133	KNOB 11MM BK-YEL	-	-	4
AJ10194	KNOB 11MM BK-OR	4	4	4
AJ10195	KNOB FDR 11MM RD-BK	1	1	1
AJ6379	KNOB ENC.SOFT BK	-	-	1
AJ7210	PUSH BTN SQ GRY 5.5MM	11	7	9
AJ7211	PUSH BTN SQ WHT 5.5MM	2	2	2

Cables

Part Number	Description	i8	6	6FX
AL10009	WFM IDC ZED 6FX/I8 MAIN	1	-	1
AL10209	WFMA ZEDI 8 USB INTERFACE	1	-	-
AL10008	WFM IDC ZED 6 MAIN	-	1	-
AH8752	CABLE USB A-B 2M FERR	1	-	-



Knobs



AJ6379
ENC KB

AJ10128
BK-RD

AJ10194
BK-OR

AJ7211
BTN WHT

AA9973
Lightpipe

AN10008
ZED6

AJ10195
FDR KB

AJ10129
BK-BL

AJ10128
BK-RD

AJ7210
BTN GRY

AA9972
FACIA

AN10089
ZED6FX

AN10090
ZEDi8

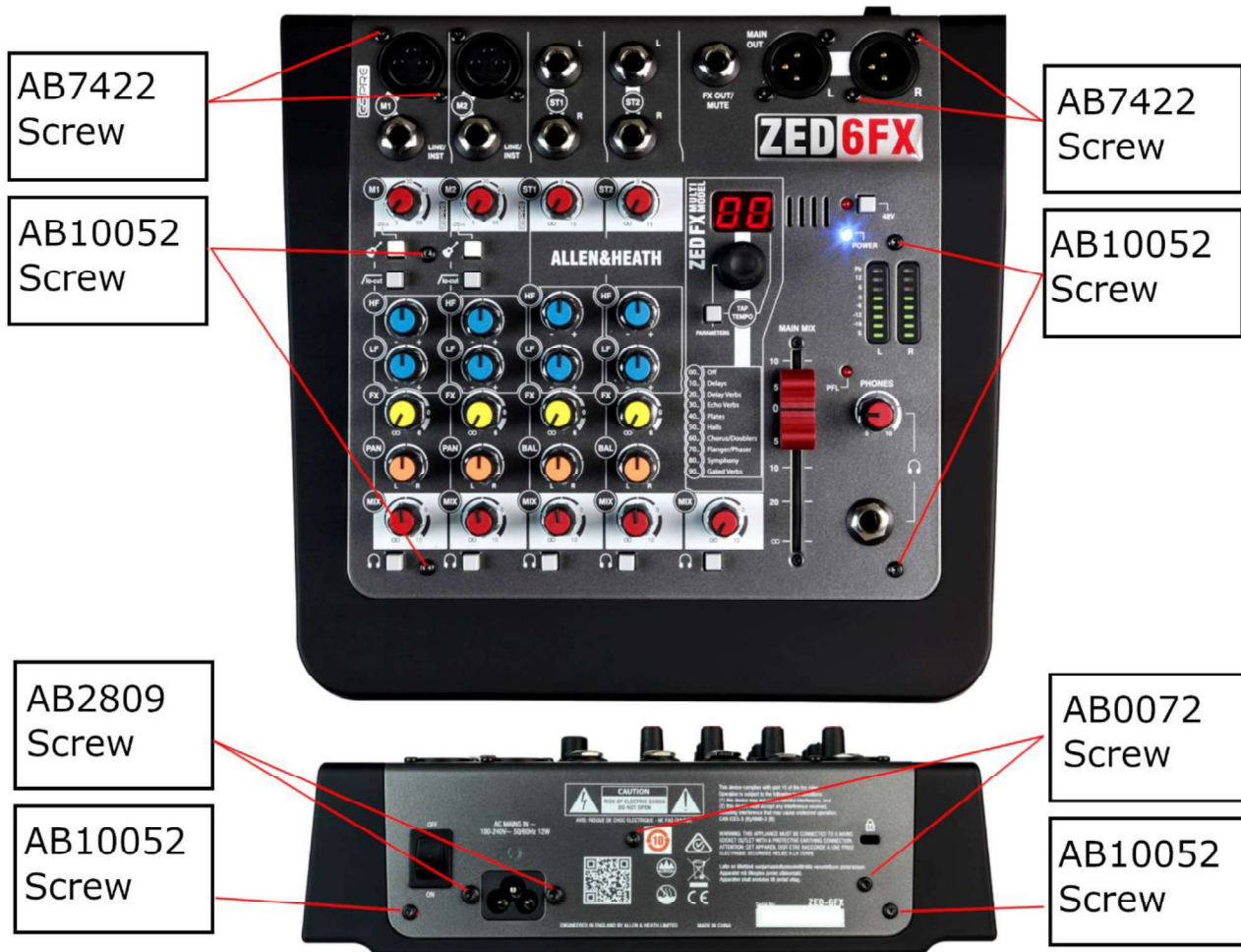


Pots, Switches & sockets



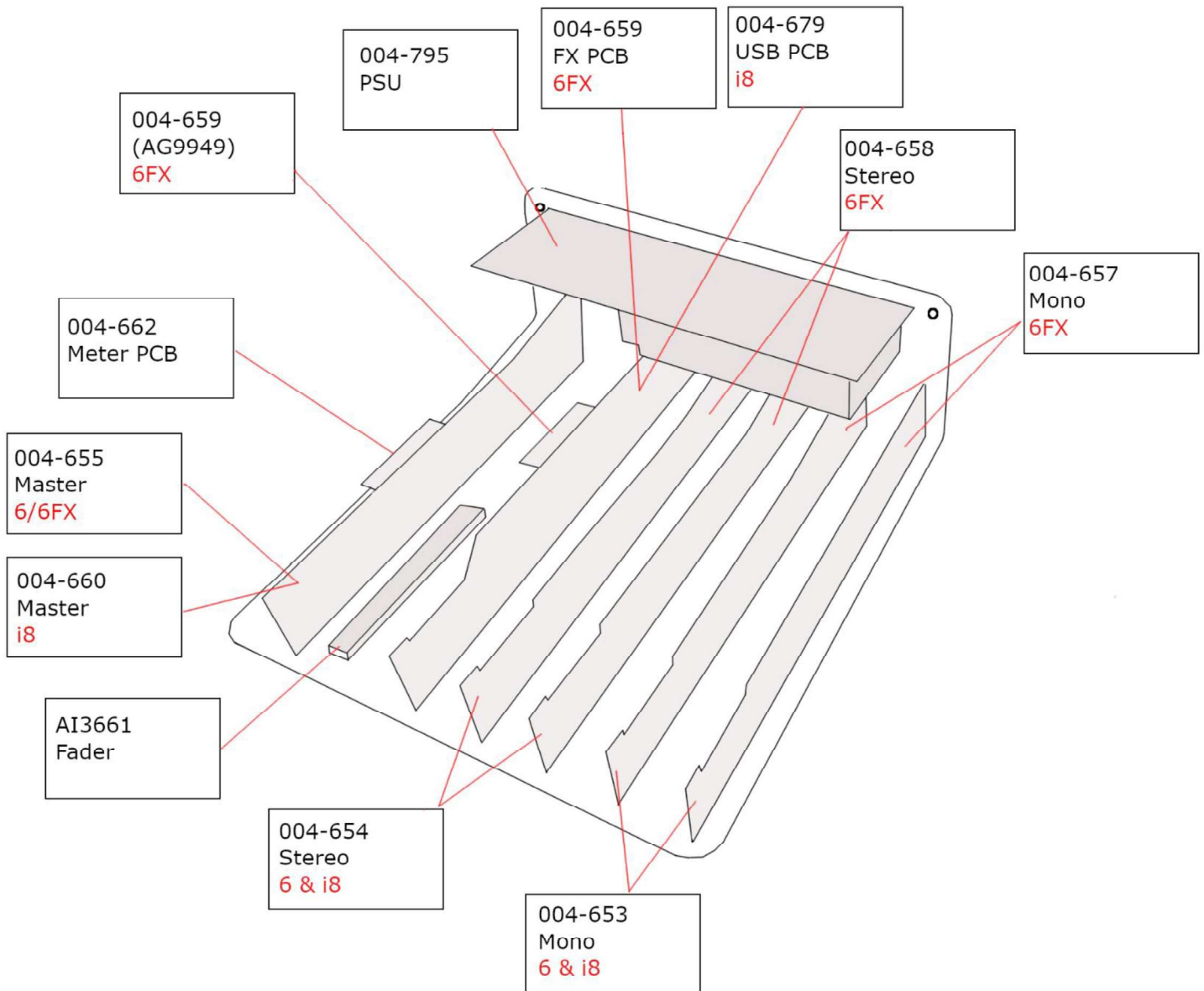


screws



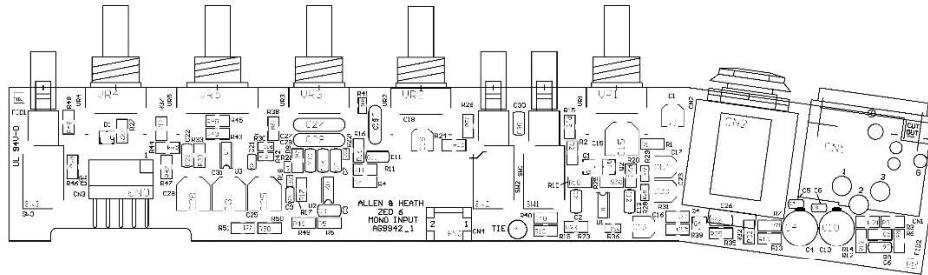


Circuit Board Layout

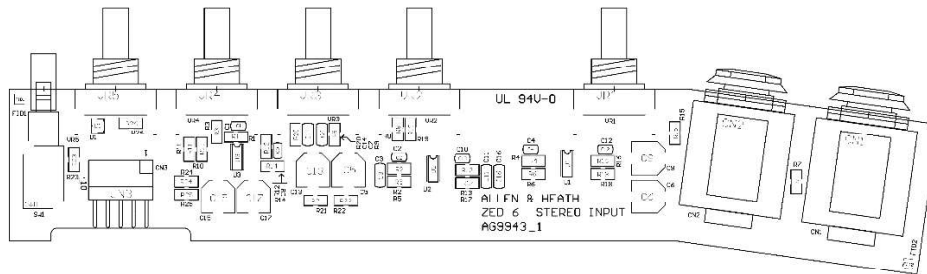




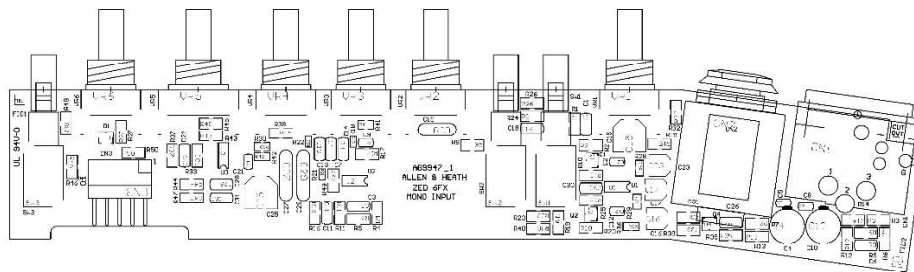
Circuit Board Identification



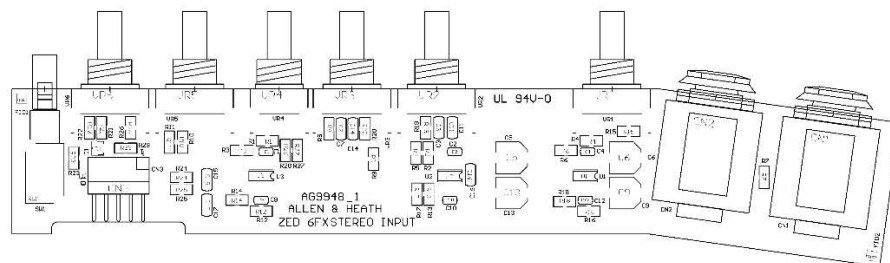
004-653 PCBA ZED 6/18 MONO INPUT



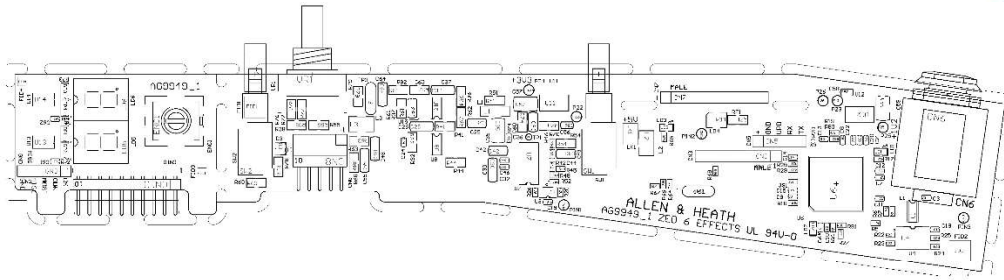
004-654 PCBA ZED 6/18 STEREO INPUT



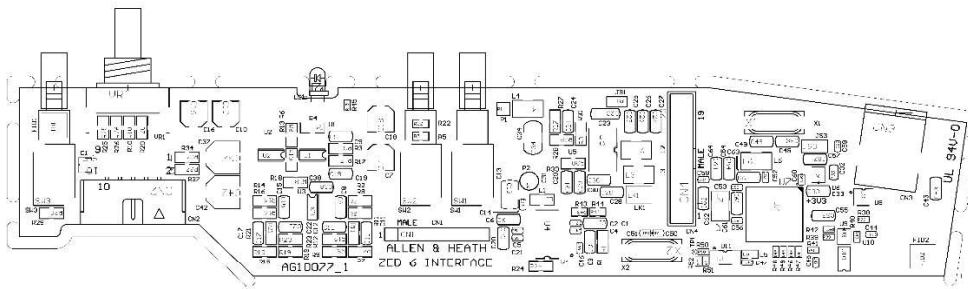
004-657 PCBA ZED 6FX MONO INPUT



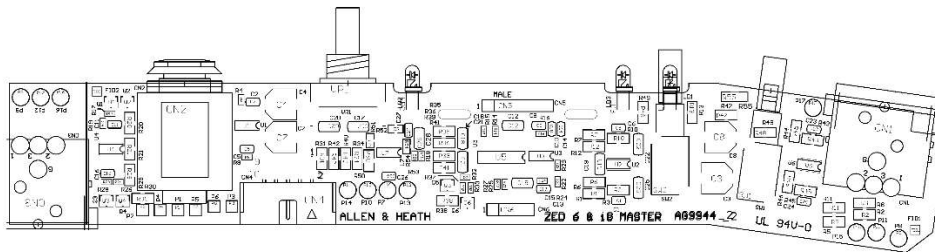
004-658 PCBA ZED 6FX STEREO INPUT



004-659 PCBA ZED 6FX EFFECTS

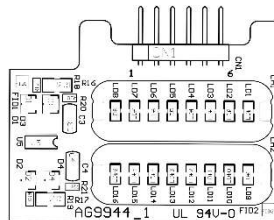


004-679 PCBA ZEDI 8 USB INTERFACE

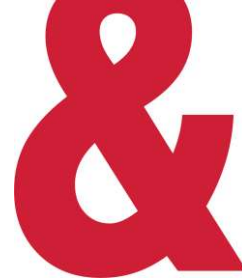


004-655 PCBA ZED 6 MASTER

004-660 PCBA ZEDI 8 MASTER



004-662 PCBA ZED METER



Servicing Information

Hot Melt Glue

Some connectors and wireforms/harnesses may be held in place with hot melt glue. You will need 99% Isopropyl Alcohol (propan-2-ol) to remove it. Follow these steps:

- Apply a small amount of 99% Isopropyl Alcohol to a swab and apply it to the edges of the glue
- Leave it for 20 seconds and then pick off the glue by hand or by using a tool that is of low risk to cause damage. Do not use excessive force. If the glue does not come off re-apply the Isopropyl Alcohol.
- Once the glue is removed from the connector release the wireform.
- Once the service/repair is complete re-apply the hot melt glue to secure the wireform in place.

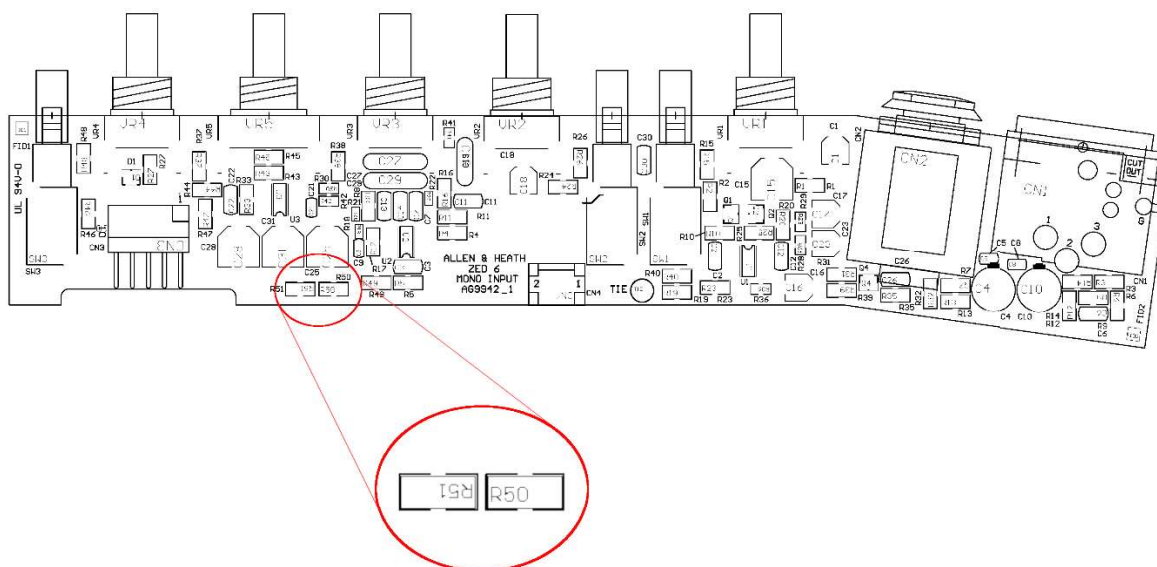
Jumper Assignments

Mono PCB 003-653

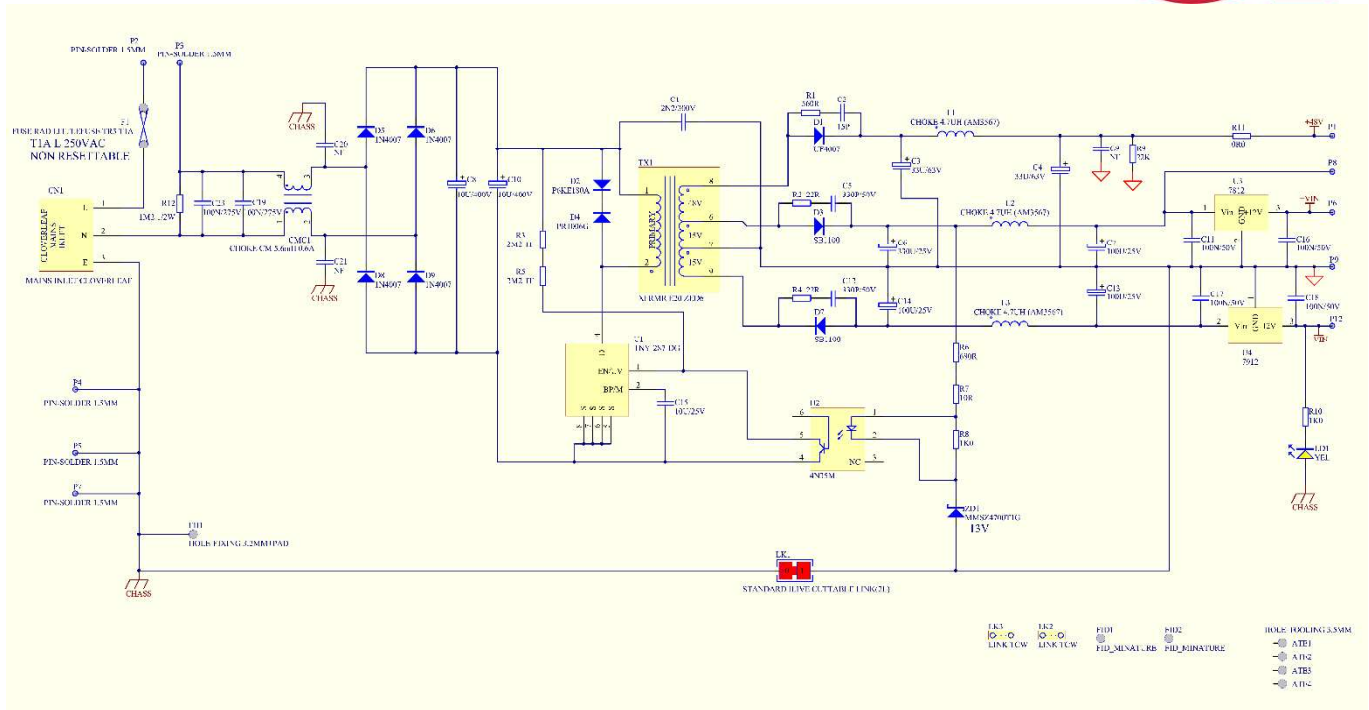
M1-M2 USB routing - pre/post EQ options

Pre EQ - R50 with 33R (0805) fitted, R51 not fitted (default)

Post EQ - R51 with 33R (0805) fitted, R50 not fitted



PSU Circuit Diagram



Other Technical Information



Block Diagram

Specifications

Weights & Dimensions

All of this information is available to end users and can be found at the following location.

<https://www.allen-heath.com/hardware/zed-series/zed-compact/zed-6/resources/>

<https://www.allen-heath.com/hardware/zed-series/zed-compact/zed-6fx/resources/>

<https://www.allen-heath.com/hardware/zed-series/zedi-compact/zedi-8/resources/>

For further information please contact Allen&Heath Product Support

<https://support.allen-heath.com>

support@allen-heath.com