ALLEN&HEATH

ZED10/ZED10FX



ZED 10 ZED 10FX

SERVICE MANUAL

ISSUE 1

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ALLEN&HEATH

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Notices

Legal Notice

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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	10	10FX
AA7588-L	SIDE MOULDING ZED 10 LEFT	1	1
AA7588-R	SIDE MOULDING ZED 10 RIGH	1	1
AA7589	FRONT PNL ZED 10	1	-
AA7780	BASE ZED 10	1	-
AA7586	FRONT PNL ZED 10FX	-	1
AA7587	BASE ZED 10FX	-	1
AA7764	SHIELD ZED 10FX PSU	-	1

Screws

Part Number	Description	10	10FX
AB0072	SCREW M3X6 PAN TORX BK PA	12	12
AB0102	NUT M3 NYLOCK	1	2
AB0244	WASHER M3 SHAKEPROOF INT	1	1
AB4738	SCREW M3X8 PAN POZI/SLOT	1	3
AB7422	SCREW 2.7X9 AB TORX BK UH	15	15
AB7765	SCREW M4X8 PAN POZI POLYM	10	10
AB8050	NUT POT 9MM SILVER	56	58
AB8592	SCREW M3X5 TRUNC CSK TORX	6	6

Accessories

Part Number	Description	10	10FX
AN7778	BOX+FIT ZED 10	1	-
AN7699	BOX+FIT ZED 10FX	-	1

Cables

Part Number	Description	10	10FX
AL7696	IDC WFM ZED 10FX MAIN	1	1

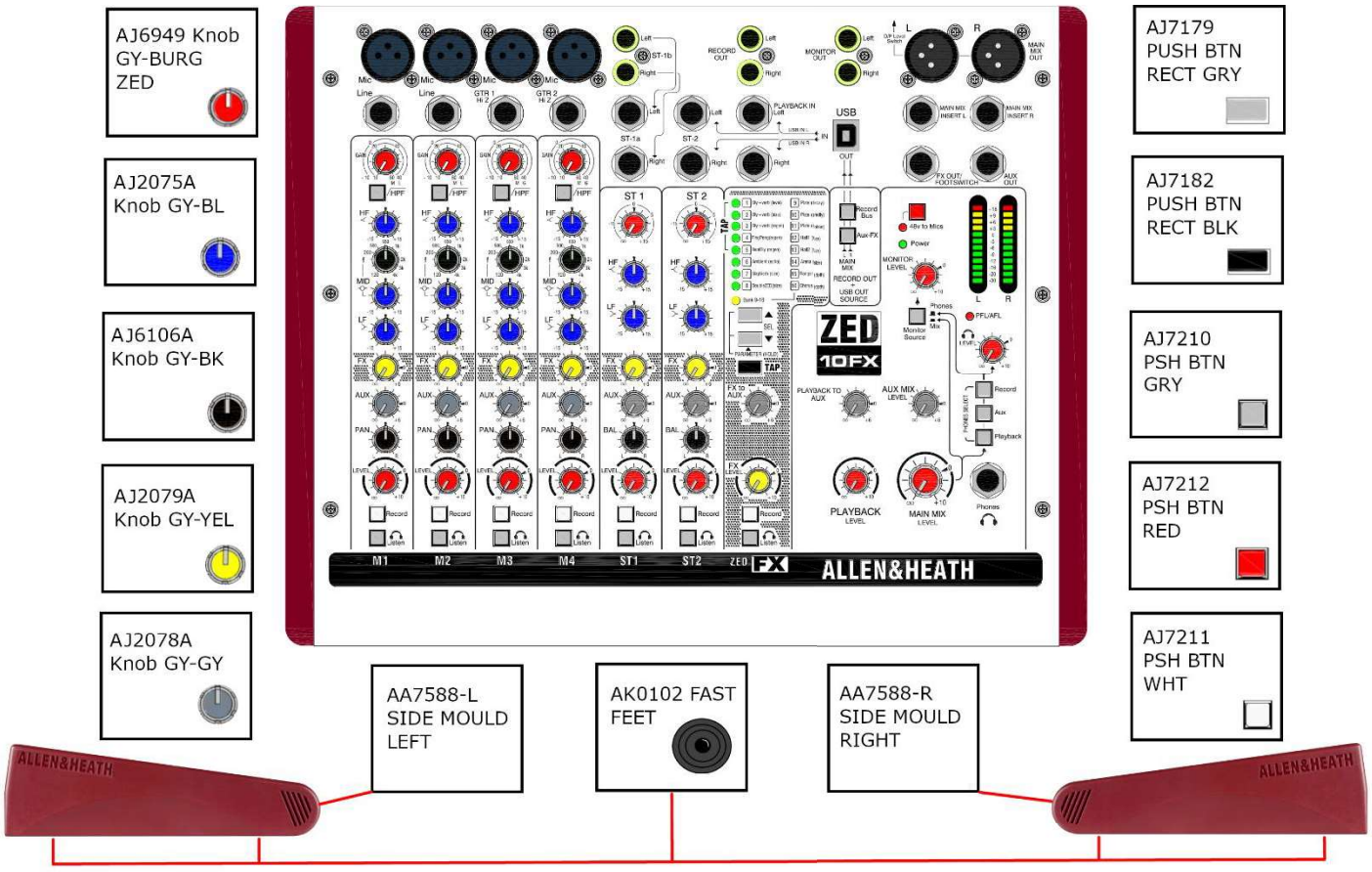
PCB

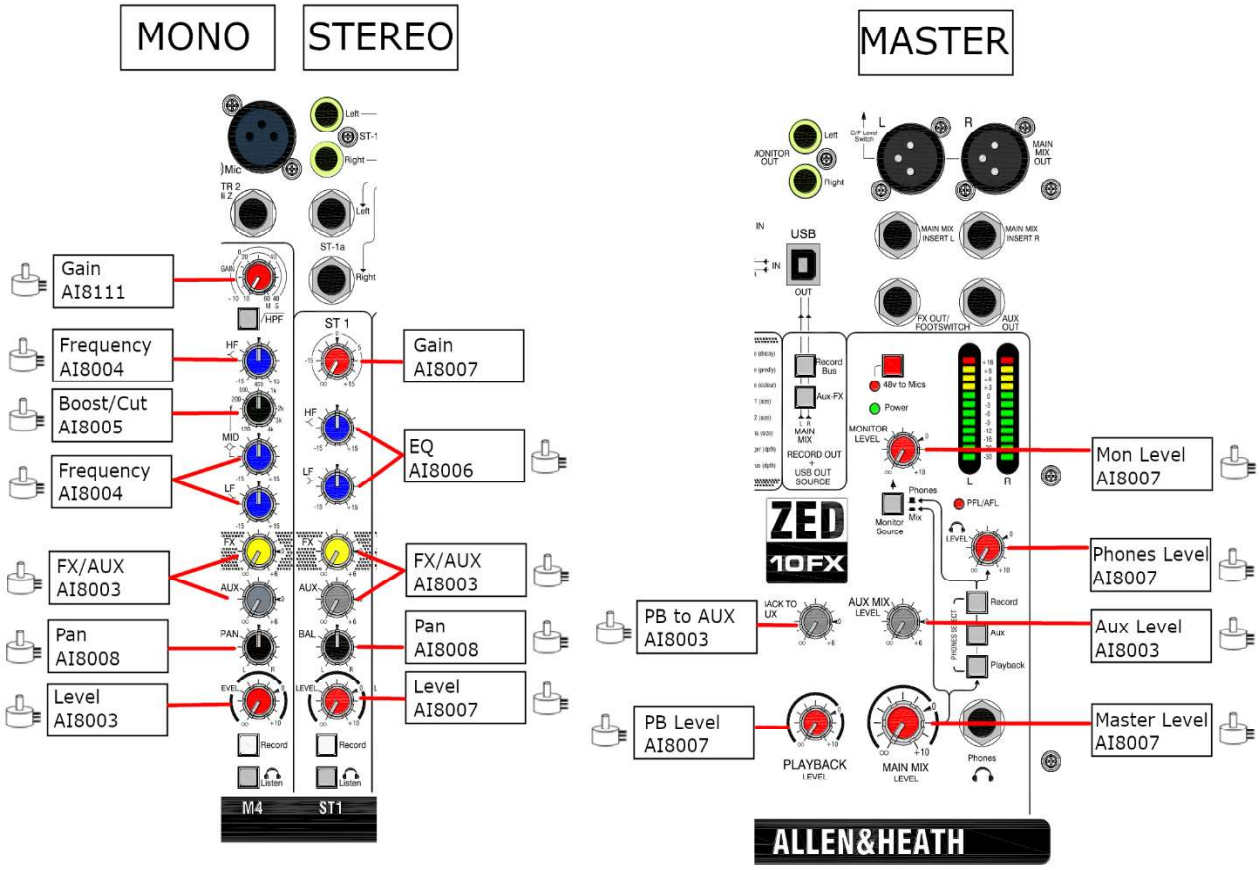
Part Number	Description	10	10FX
003-966	PCB ASSY ZED 10FX MONO I/ (AG7665)	2	2
003-967	PCB ASSY ZED 10FX MONO I/ (AG7666)	-	1
003-968	PCB ASSY ZED 10FX STEREO (AG7667)	1	1
003-969	PCB ASSY ZED 10FX STEREO (AG7667)	1	1
003-970	PCB ASSY ZED 10FX MASTER (AG7671)	1	1
003-971	PCB ASSY ZED 10FX METER (AG7672)	1	1
003-972	PCB ASSY ZED 10FX USB/PLA (AG7670)	1	1
003-974	PCB ASSY ZED 10FX PSU (AG7675)	1	1
003-975	PCB ASSY ZED 10:2 REC OUT (AG7669)	1	-
003-976	PCB ASSY ZED 10:2 DIST'N (AG7674)	1	-
003-978	PCB ASSY ZED 10FX EFFECTS (AG7668)	-	1
003-999	PCB ASSY ZED 10FX MONO I/ (AG7666)	2	1
004-367	PCB ASSY ZED 10FX EFF DIS (AG8725) When V2 stock is depleted, please use 004-1750 (V3).	-	1

Other

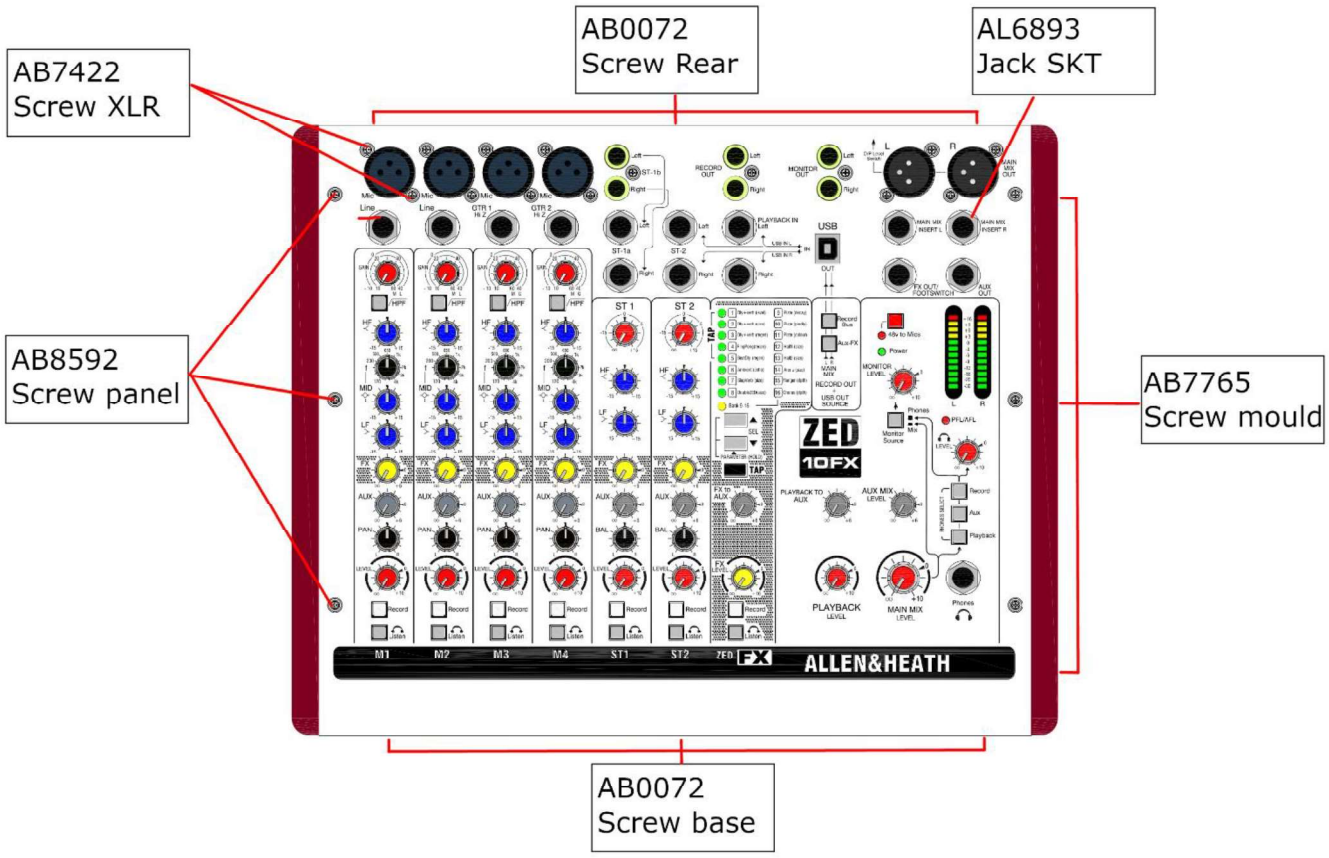
Part Number	Description	10	10FX
AJ2075A	KNOB 11MM GY-BL	16	16
AJ2079A	KNOB 11MM GY-YEL	-	7
AJ2078A	KNOB 11MM GY-GY	14	9
AJ6106A	KNOB 11MM GY-BK	10	10
AJ6949	KNOB 11MM GY-BURG ZED	16	16
AJ7179	PUSH BTN RECT GRY 10X5.5	-	2
AJ7182	PUSH BTN RECT BLK 10X5.5	-	1
AJ7210	PUSH BTN SQ GRY 5.5MM POM	16	17
AJ7211	PUSH BTN SQ WHT 5.5MM POM	6	7
AJ7212	PUSH BTN SQ RED 5.5MM POM	1	1
AK0102	FEET FAST 21DIA.X4.2MM	4	4

EXTERIOR PARTS

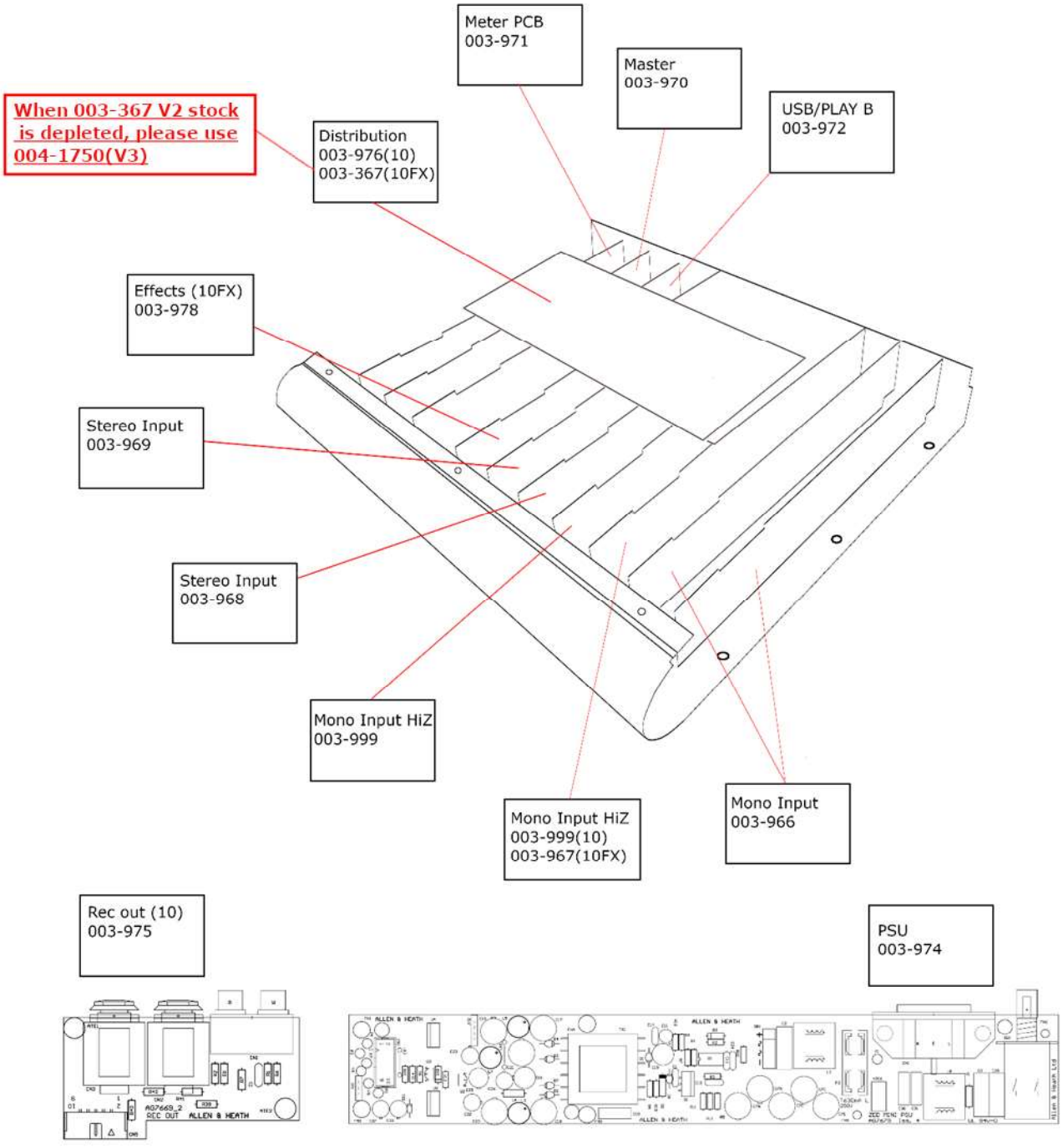



MONO
STEREO
MASTER
Gain
AI8111
Frequency
AI8004
Boost/Cut
AI8005
Frequency
AI8004
FX/AUX
AI8003
Pan
AI8008
Level
AI8003
Gain
AI8007
EQ
AI8006
FX/AUX
AI8003
Pan
AI8008
Level
AI8007
PB to AUX
AI8003
PB Level
AI8007
Mon Level
AI8007
Phones Level
AI8007
Aux Level
AI8003
Master Level
AI8007
ZED
10FX
ALLEN&HEATH

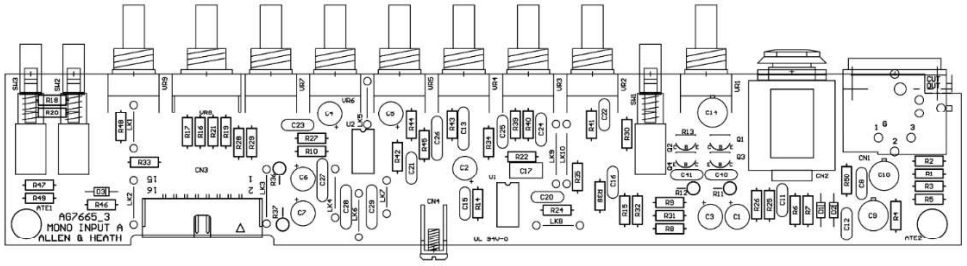
Screws


AB7422
Screw XLR
AB0072
Screw Rear
AL6893
Jack SKT
AB8592
Screw panel
AB7765
Screw mould
AB0072
Screw base
ZED
10FX
ALLEN&HEATH

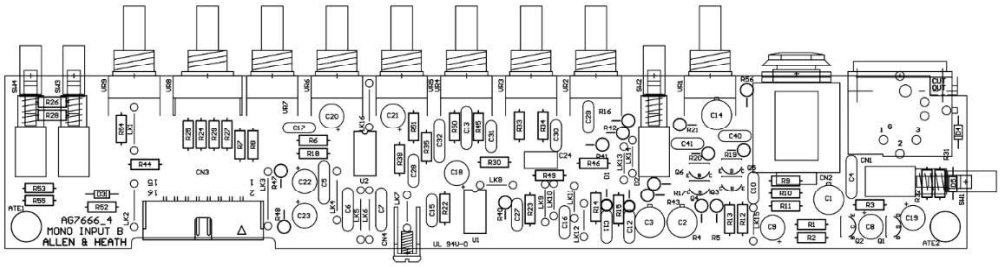
Circuit Board Layout



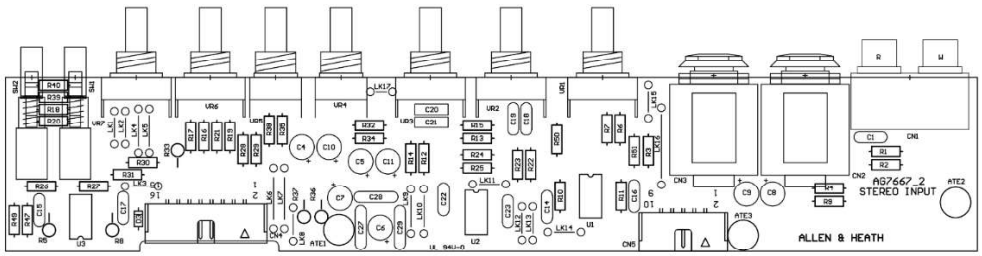
Circuit Board Identification



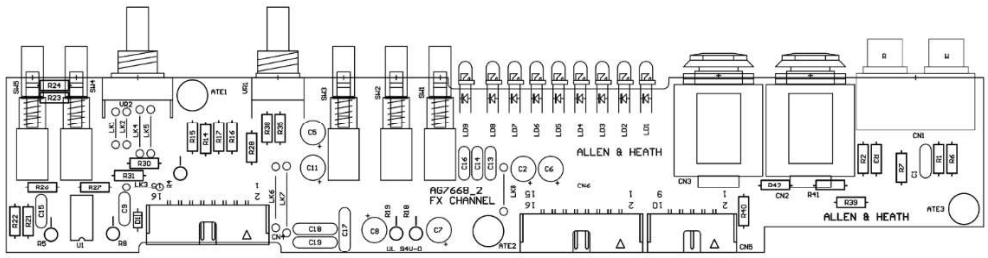
003-966 PCB ASSY ZED 10FX MONO I/ (AG7665)



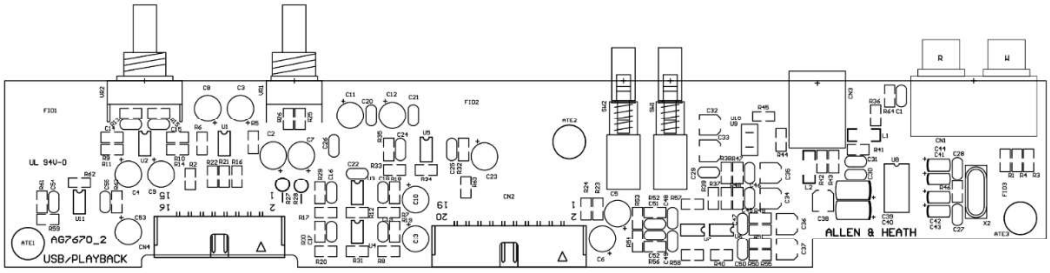
003-967 PCB ASSY ZED 10FX MONO I/ (AG7666)



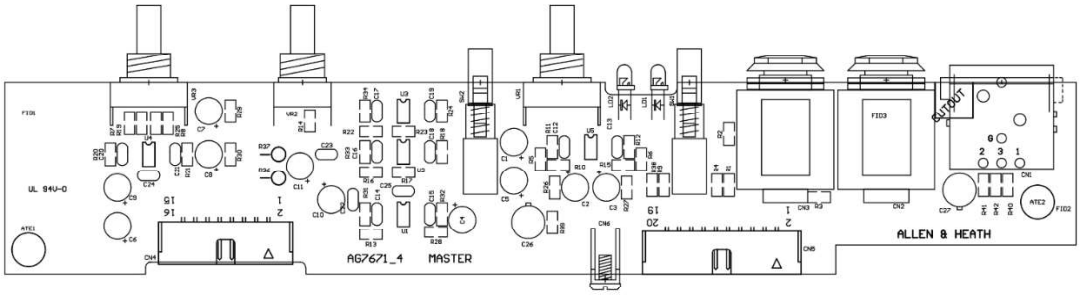
003-968 PCB ASSY ZED 10FX STEREO (AG7667)



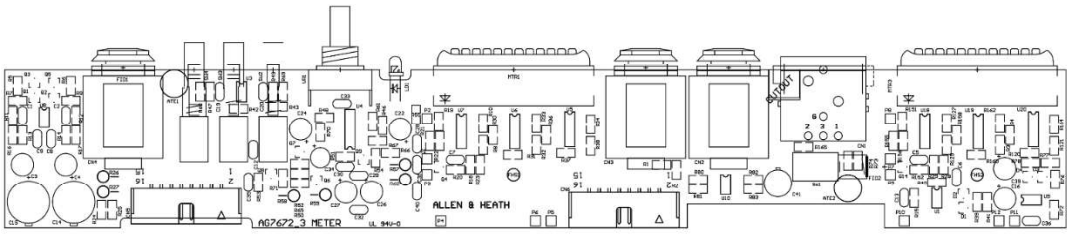
003-978 PCB ASSY ZED 10FX EFFECTS (AG7668)



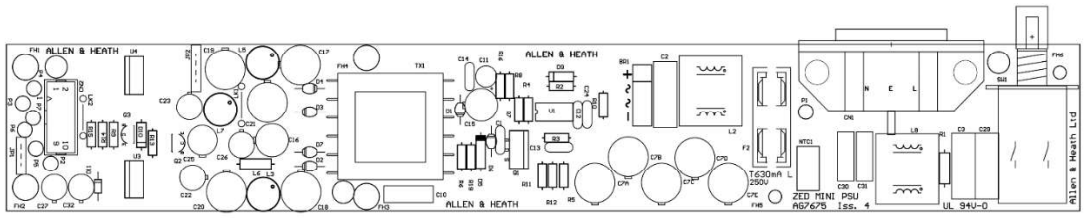
003-972 PCB ASSY ZED 10FX USB/PLA (AG7670)



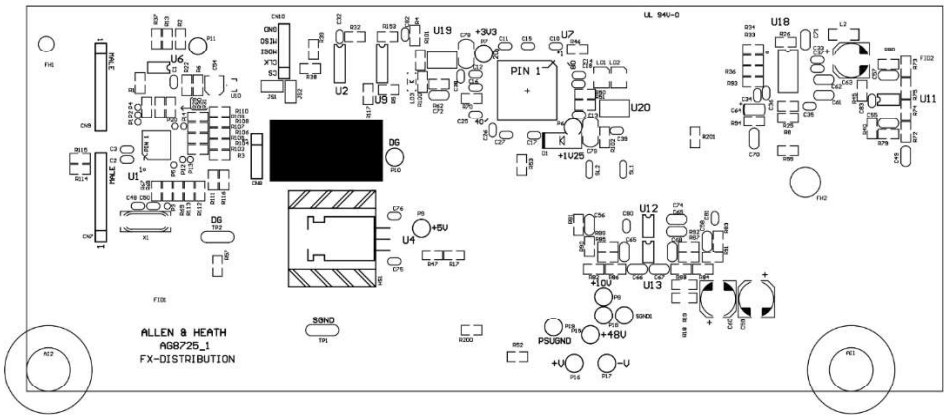
003-970 PCB ASSY ZED 10FX MASTER (AG7671)



003-971 PCB ASSY ZED 10FX METER (AG7672)

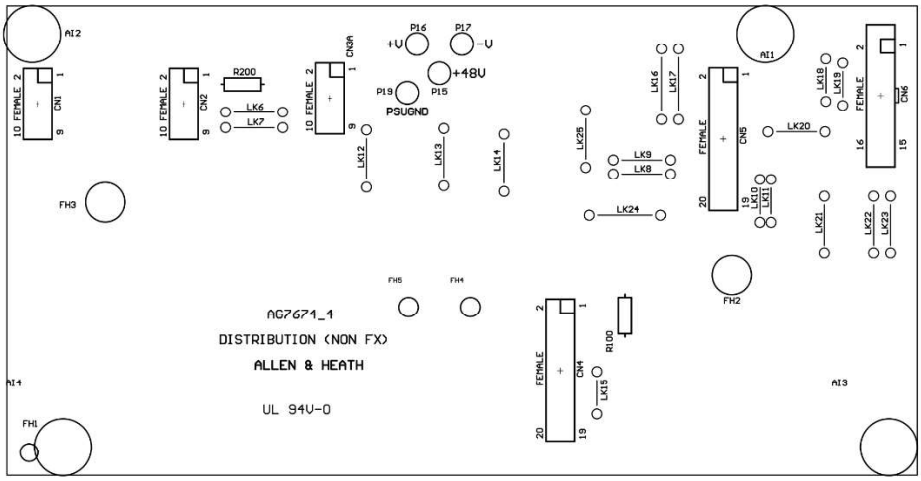


003-974 PCB ASSY ZED 10FX PSU (AG7675)

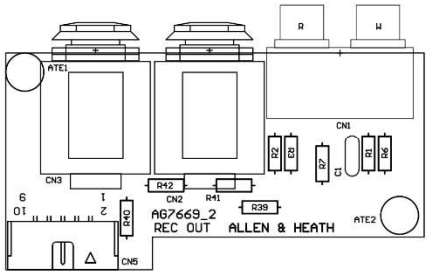


004-367 PCB ASSY ZED 10FX EFF DIST V2 (AG8725)

When V2 stock is depleted, please use 004-1750 (V3).



003-976 PCB ASSY ZED 10:2 DIST'N (AG7674)



003-975 PCB ASSY ZED 10:2 REC OUT (AG7669)

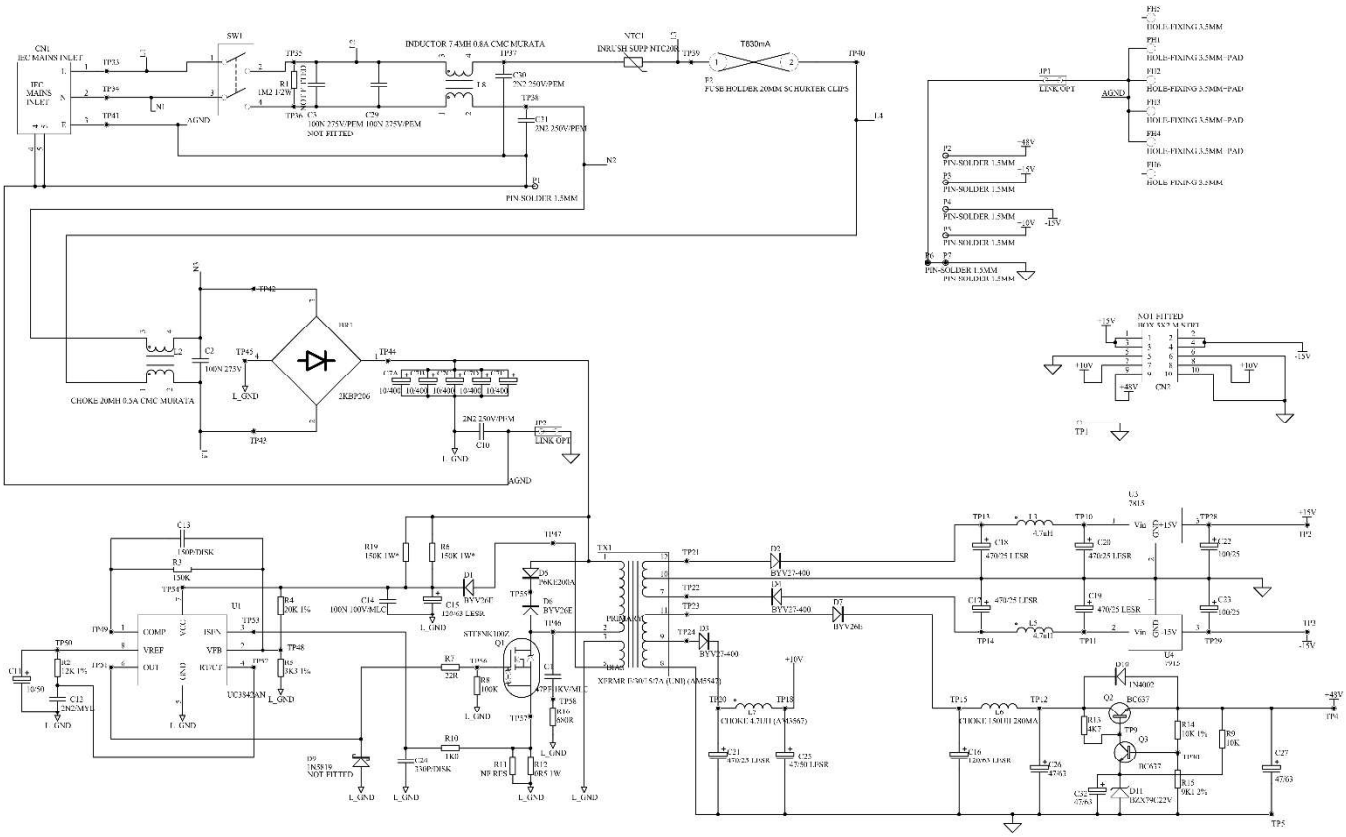
Servicing Information

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.

PSU Circuit Diagram



For the full PDF of this circuit including overlay, please download a copy from the A&H resource space. You will need your distributor/partner login to access the link below.

Click here

Other Technical Information

Block Diagram

Specifications

Weights & Dimensions

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

https://www.allen-heath.com/hardware/zed-series/zed-mini/zed-10/resources/

https://www.allen-heath.com/hardware/zed-series/zed-mini/zed-10fx/resources/

For further information please contact Allen&Heath Product Support

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