D-Control Service Guide

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Communications & Safety Regulation Information

Compliance Statement
The models D-Control and XMON comply with the following standards regulating interference and EMC:
- FCC Part 15 Class A
- EN55103 – 1, environment E4
- EN55103 – 2, environment E4
- AS/NZS 3548 Class A
- CISPR 22 Class A
- ICES-003 Class A

Canadian Compliance Statement:
This Class B digital apparatus complies with Canadian ICES-003
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CE Compliance Statement:

Digidesign is authorized to apply the CE (Conformité Europénne) mark on this compliant equipment thereby declaring conformity to EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC.

Australian Compliance:

ACN 069 650 120

Radio and Television Interference
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

Communications Statement
This equipment has been tested to comply with the limits for a Class A digital device. Changes or modifications to this product not authorized by Digidesign, Inc., could void the Certification and negate your authority to operate the product. This product was tested for CISPR compliance under conditions that included the use of peripheral devices and shielded cables and connectors between system components. Digidesign recommends the use of shielded cables and connectors between system components to reduce the possibility of causing interference to radios, television sets, and other electronic devices.

Safety Statement
This equipment has been tested to comply with USA and Canadian safety certification in accordance with the specifications of UL Standards: UL60065 7th/IEC 60065 7th and Canadian CAN/CSA C22.2 60065:03. Digidesign Inc., has been authorized to apply the appropriate UL & CUL mark on its compliant equipment.

Important Safety Instructions

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
AVIS
RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

Do not attempt to service the equipment. There are no user-serviceable parts inside. Please refer all servicing to authorized Digidesign personnel.

Any attempt to service the equipment will expose you to a risk of shock and will void the manufacturer's warranty.

SPECIAL WARNING REGARDING VENTILATION:

Do not install D-Control anywhere or in any way that blocks free air flow at any time around the back panel of the unit.

SPECIAL WARNING REGARDING AMBIENT TEMPERATURE:

Before powering on the D-Control unit, be sure to allow it to reach room temperature. The unit includes some components that are senstive to cold temperatures, so it is recommended that you unpack the unit and allow it to acclimate before turning it on for the first time.

Repair Kit Release of Liability

This Agreement governs the use of Digidesign Repair Kits. Please read the following paragraphs carefully. If you disagree with any of the following terms, or feel unsure of your ability to use any Digidesign Repair Kit after reading the instructions, please stop immediately and contact Digidesign customer support.

By requesting a Repair Kit and/or proceeding with any repair, you agree to the following:

1. YOU ACKNOWLEDGE THAT DIGIDESIGN PRODUCTS MAY CONTAIN AN INTERNAL POWER SUPPLY THAT IS EXPOSED WHEN THE UNIT IS OPENED. YOU FURTHER ACKNOWLEDGE THAT OPENING UNIT CAN RESULT IN RISK, AND IF NOT PROPERLY PERFORMED, POSSIBLY INJURY OR DEATH TO USER. ACCORDINGLY, YOU AGREE THAT OPENING UNIT AND REPLACING COMPONENTS CAN BE EXTREMELY DANGEROUS AND THAT YOU ARE PROCEEDING AT YOUR OWN RISK.

2. You agree to release Digidesign from any and all claims and liabilities for personal injury or property damage, including damage to the unit under repair or other equipment, which occurs as a result of either opening or replacing components of a Digidesign product.

3. IN NO EVENT SHALL DIGIDESIGN BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OF ANY KIND ARISING OUT OF THE USE OF REPAIR KITS, INCLUDING LOST PROFITS, DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, DAMAGE FOR PERSONAL INJURY, EVEN IF DIGIDESIGN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. DIGIDESIGN'S LIABILITY FOR ANY CLAIM, LOSSES, DAMAGES OR INJURY, WHETHER CAUSED BY BREACH OF CONTRACT, TORT, OR ANY OTHER THEORY OF LIABILITY, SHALL NOT EXCEED THE FEE PAID BY YOU FOR THE REPAIR KIT. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

4. You agree to bear sole responsibility for any damage you may cause in the course of performing repairs.

5. REPAIR KITS ARE PROVIDED "AS IS." DIGIDESIGN DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS

6. You agree that you will not resell or offer to others use of Digidesign repair kits.

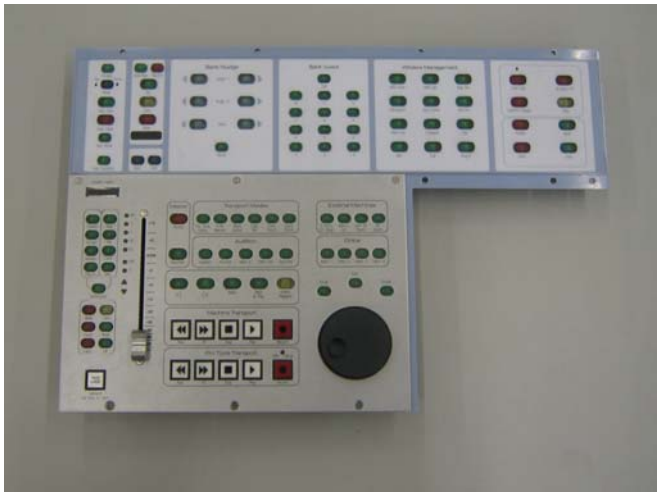
7. This Release of Liability will be governed by the laws of the State of California and will be interpreted as if the agreement were made between California residents and performed entirely within California. All disputes under this Agreement or involving use of the Product shall be subject to binding arbitration in San Francisco, California in accordance with the commercial arbitration laws of the American Arbitration Association.

Contents

D-Control Main Unit

Replacing the D-Control Main Unit Transport Panel

The following procedure outlines the steps needed to remove and replace the Transport Panel on the D-Control Main Unit. This panel is located in the lower left quadrant of the Main Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Main Unit Transport Panel:

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.

1 Using a Philips #1 screwdriver, remove the 15 type E screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit.

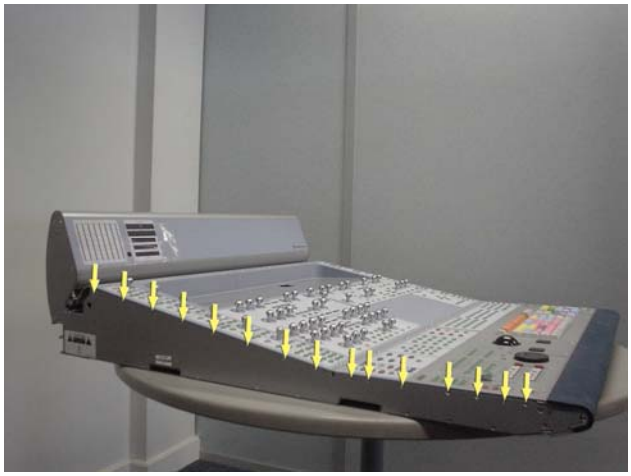


Figure 1. Removal of 15 left side end plate screws.

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.

2 Using a Philips #1 screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit

Figure 2. Removal of 8 left side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.

3 Using a Philips #2 screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

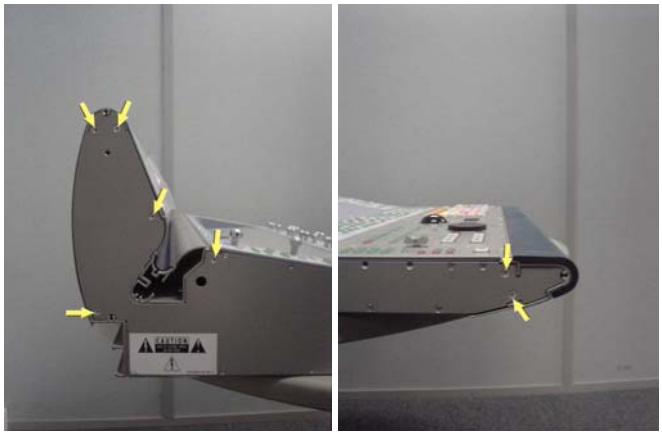


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit.

Before you proceed, please note that there are 3 different types of screws used to secure the Transport Panel to the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 screws indicated in Figure 4 that secure the Transport Panel to the Main Unit (top row uses type D, middle row uses type J, bottom row uses type C).

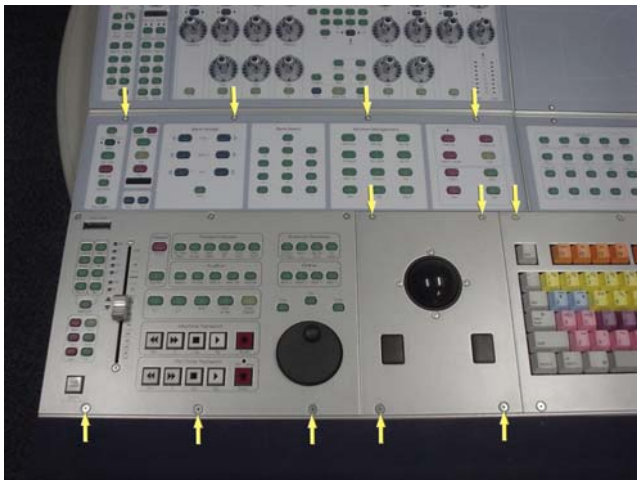


Figure 4. Transport Panel screws.

6 Carefully lift the Trackball Panel out and disconnect the cable that connects the Trackball Panel to the Keyboard. See Figure 5.

Figure 5. Disconnecting the cable from the Trackball Panel.

7 Carefully slide the Transport Panel outwards so that you have clearance from the Keyboard Panel. See Figure 6.

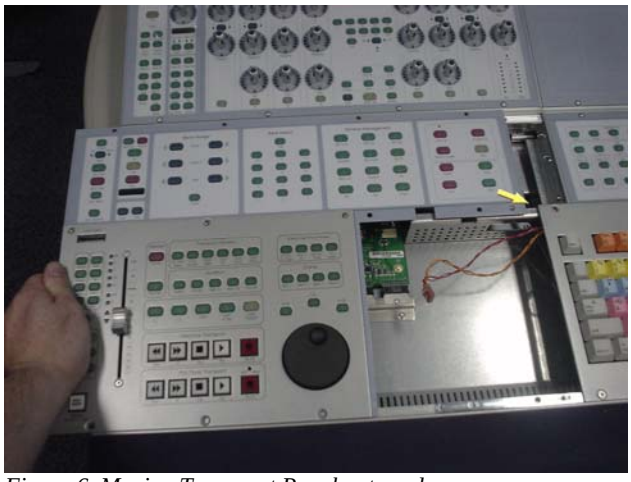


Figure 6. Moving Transport Panel outwards.

8 While lifting the Transport Panel upwards from the top, carefully disconnect the following cables shown in Figure 7.

a) Focus Fader cable
b) 50 Pin data cable
c) 10 Pin power cable

Figure 7. Disconnecting the 3 cables.

9 The Transport Panel should now lift away from the Main Unit.

To replace the D-Control Main Unit Transport Panel:

10 Taking note of orientation connect:

a) Focus Fader cable
b) 50 Pin data cable
c) 10 Pin power cable

The Focus Fader cable should plug into P9 of the Main Unit FMC Board.

11 Carefully slide the Transport Panel back into position paying attention not to catch any cables coming from the Focus Fader. Once in position all screw holes should line up correctly into position like in Figure 8.

Figure 8. Positioning the Transport Panel.

12 Connect the cable coming from the Keyboard Panel and carefully position the Trackball Panel back into the correct position on the Main Unit. See Figure 9.

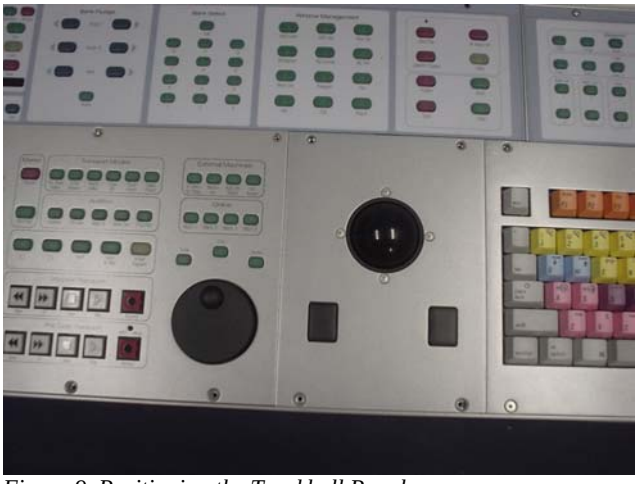


Figure 9. Positioning the Trackball Panel.

⚠ *Before you proceed, please note that there are 3 different types of screws used to secure the Transport Panel to the Main Unit.*

13 Using a 5/64-inch Allen wrench, secure the top of the Transport Panel to the Main Unit with 4 type D screws. See Figure 10.

Figure 10. Securing the top of the Transport Panel.

14 Using a 5/64-inch Allen wrench, secure the bottom of the Transport Panel and the bottom of the Trackball Panel to the Main Unit with 5 type C screws. See Figure 11.

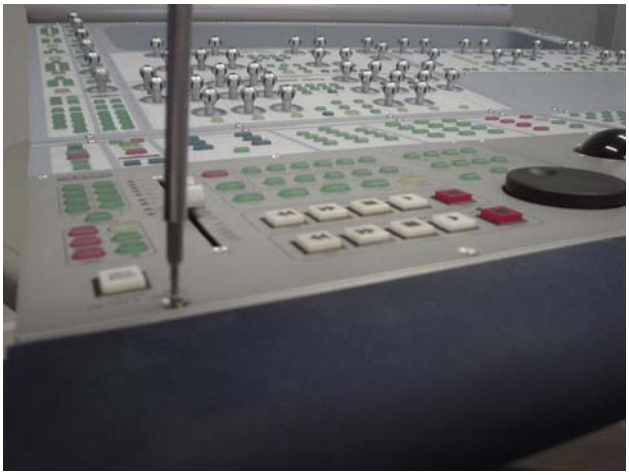


Figure 11. Securing the bottom of the Transport and Trackball Panel.

15 Using a 5/64-inch Allen wrench, secure the top of the Trackball Panel and also the top left of the Keyboard Panel to the Main Unit with 3 type J screws. See Figure 12.

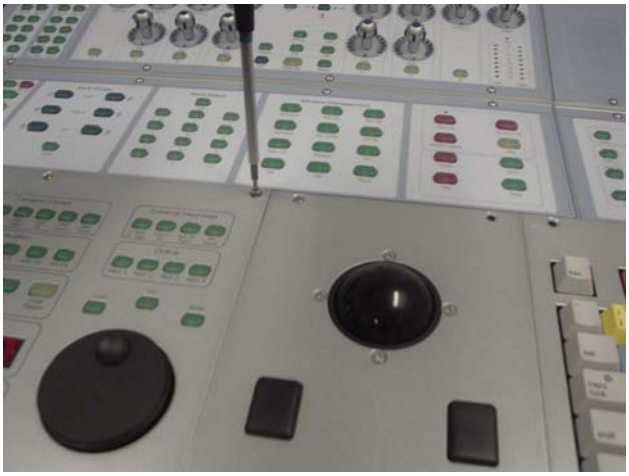
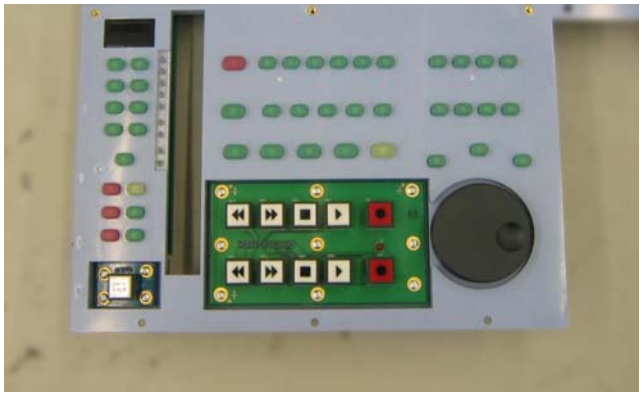


Figure 12. Securing the top of the Trackball and Keyboard Panel.

16 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Main Unit Transport Sections

The following procedure outlines the steps needed to remove and replace the Transport Sections on the D-Control Main Unit.



If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Transport Panel:

Before you proceed, please note that the top 3 screws are different to the bottom 3 screws.

1 Using a 5/64-inch Allen wrench, remove the 6 screws (top row uses type J, bottom uses type C) indicated in Figure 1 that secure the Transport Panel to the Main Unit.

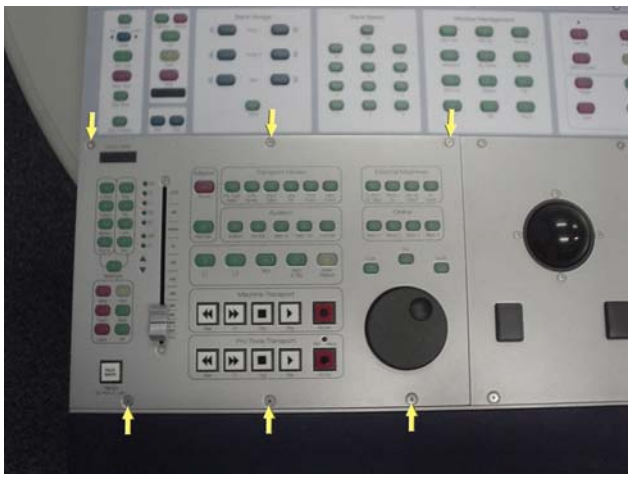


Figure 1. Transport Panel screws.

2 Carefully lift away the Transport Panel and fold over onto the Main Unit as shown in Figure 2. It is advised to use some foam padding to prevent scratches.

Figure 2. Foam padding preventing scratches.

To remove the D-Control Talkback Switch (Left Side):

1 Follow steps 1 and 2 of the Removing the Transport Panel procedure.

2 Remove the 4 type B screws that secure the Talkback Switch PCB to the Main Unit as shown in Figure 3.

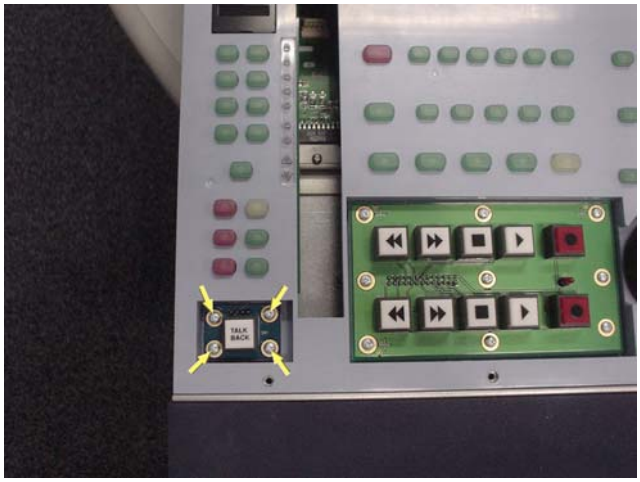


Figure 3. Removing the 4 Philips self tapping screws.

3 Carefully lift away the Talkback Switch PCB from the Main Unit and disconnect the 4 pin cable.

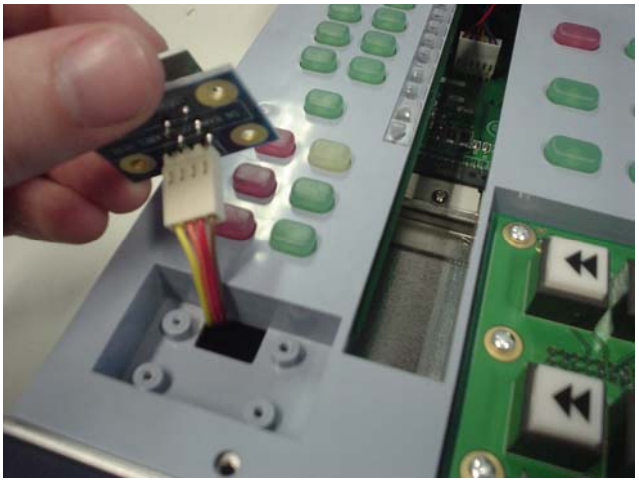


Figure 4. Disconnecting the 4 pin cable.

To replace the D-Control Talkback Switch (Left Side):

4 Taking note of orientation connect the 4 pin cable into the Talkback Switch PCB.

5 Using a Philips #1 screwdriver secure the Talkback Switch PCB to the main unit with the 4 type B screws.

⚠ *Before you proceed, please note that the top 3 screws are different to the bottom 3 screws.*

6 To replace the Transport Panel make sure the Focus Fader cable is correctly routed inside the fader slot on the Main Unit as shown in Figure 5. Using a 5/64-inch Allen wrench secure in place with the 6 screws (3 type J on top row and 3 type C in bottom row).

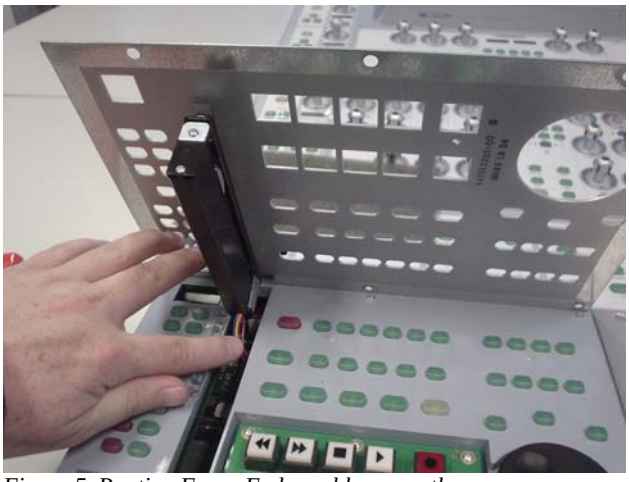


Figure 5. Routing Focus Fader cable correctly.

To remove the D-Control Transport Switch PCB:

1 Follow steps 1 and 2 of the Removing the Transport Panel procedure.

2 Using a Philips #1 screwdriver, remove the 9 type B screws that secure the Transport Switch PCB to the Main Unit. See Figure 6.

Figure 6. Removing the 9 Philips self tapping screws,

3 The Transport Switch PCB is still attached to a 26 pin cable. Carefully raise the bottom of the Transport Switch PCB and disconnect the 26 pin cable from the Transport Switch PCB. See Figure 7.

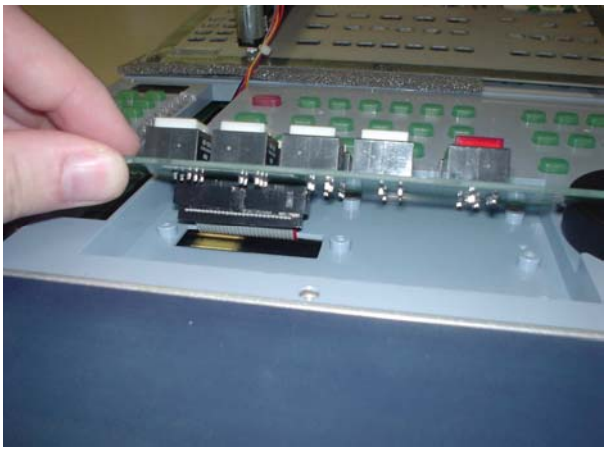


Figure 7.Removing the 26 pin cable.

4 The Transport Switch PCB can now be lifted away from the Main Unit. You will note that the 26 pin cable is very short and care should be taken not to pull on it with excessive force.

To replace the D-Control Transport Switch PCB:

5 Carefully connect the 26 pin cable back onto the Transport Switch PCB and using a Philips #1 screwdriver secure the Transport Switch PCB with the 9 type B screws.

⚠ *Before you proceed, please note that the top 3 screws are different than the bottom 3 screws.*

6 To replace the Transport Panel, make sure the Focus Fader cable is correctly routed inside the fader slot on the Main Unit as shown in Figure 5. Using a 5/64-inch Allen wrench secure in place with 6 screws (3 type J on top row, 3 type C on bottom row).

To remove the D-Control Focus Fader:

1 Follow steps 1 and 2 of the Removing the Transport Panel procedure.

2 Carefully disconnect the cable that connects the Focus Fader to the Main Unit FMC PCB as shown in Figure 8. The Transport Panel and Focus Fader should now lift away from the Main Unit.

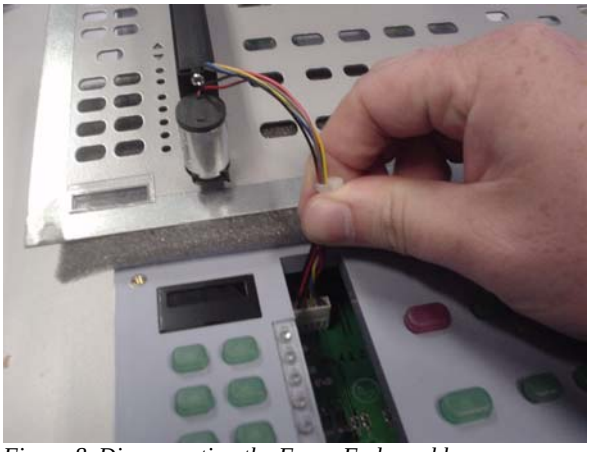


Figure 8. Disconnecting the Focus Fader cable.

3 Using a 5/64-inch Allen wrench, remove the 2 type G screws that secure the Focus Fader to the Transport Panel.

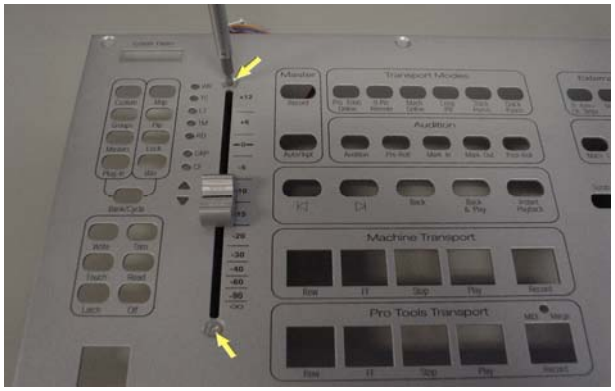


Figure 9. Removing the 2 screws from Focus Fader.

4 While holding the Focus Fader with one hand remove the Fader cap. The Focus Fader should now come away from the Transport Panel.

To replace the D-Control Focus Fader:

5 With the motor of the Focus Fader pointing towards the top of the Transport Panel insert the Focus Fader into it fader slot on the Transport Panel and carefully connect the Fader cap. This should help hold the Focus Fader in place.

6 Using a 5/64-inch Allen wrench, secure the Focus Fader to the Transport Panel using the 2 type G screws.

7 Taking note of orientation connect the cable on the Focus Fader back into the Main Unit FMC PCB on the Main Unit.

⚠ *Before you proceed, please note that the top 3 screws are different to the bottom 3 screws.*

8 To replace the Transport Panel, make sure the Focus Fader cable is correctly routed inside the fader slot on the Main Unit as shown in Figure 5. Using a 5/64-inch Allen wrench secure in place with 6 screws (3 type J on top row, 3 type C on bottom row).

To remove the D-Control Talkback Switch (Right Side):

Before you proceed, please note that the top 2 screws are different to the bottom screw.

1 Using a 5/64-inch Allen wrench, remove the 3 screws (2 type J on top row, 1 type C on bottom row) indicated in Figure 10 below that secure the Channel Strip Master Panel to the Main Unit.

Figure 10. Removal of 3 screws.

2 Using a Philips #1 screwdriver, remove the 4 type B screws that secure the Talkback Switch PCB to the Main Unit as shown in Figure 11.

Figure 11. Removing the 4 Philips head self tapping screws.

3 Carefully lift away the Talkback Switch PCB from the Main Unit and disconnect the 4 pin cable.

To replace the D-Control Talkback Switch (Right Side):

4 Taking note of orientation connect the 4 pin cable into the Talkback Switch PCB.

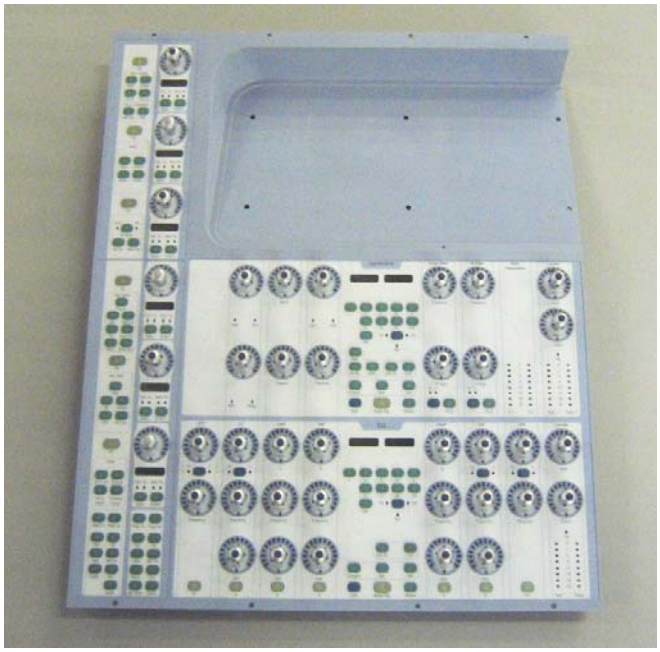
5 Using a Philips #1 screwdriver, secure the Talkback Switch PCB to the Main Unit with the 4 type B screws.

Before you proceed, please note that the top 2 screws are different to the bottom screw.

6 Using a 5/64-inch Allen wrench, secure the Channel Strip Master Panel to the Main Unit with the 3 screws (2 type J on top row, 1 type C on bottom row).

Replacing the D-Control Main Unit EQ / Dynamics Panel

The following procedure outlines the steps needed to remove and replace the EQ / Dynamics Panel on the D-Control Main Unit. This panel is located in the upper left quadrant of the Main Unit



⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

To remove the D-Control Main Unit EQ / Dynamics Panel:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

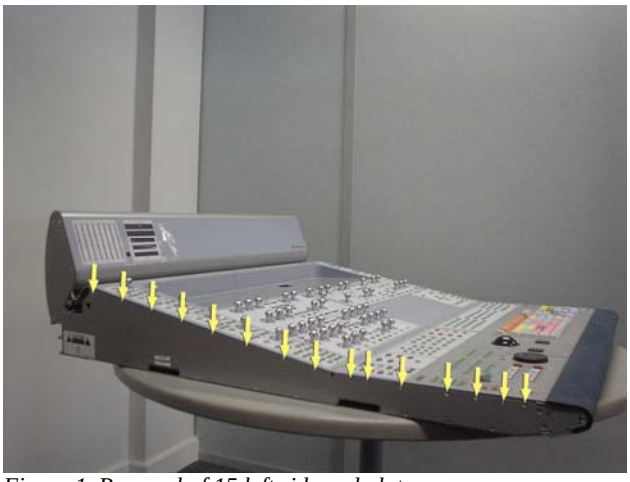


Figure 1. Removal of 15 left side end plate screws.

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit.

Figure 2. Removal of 8 left side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

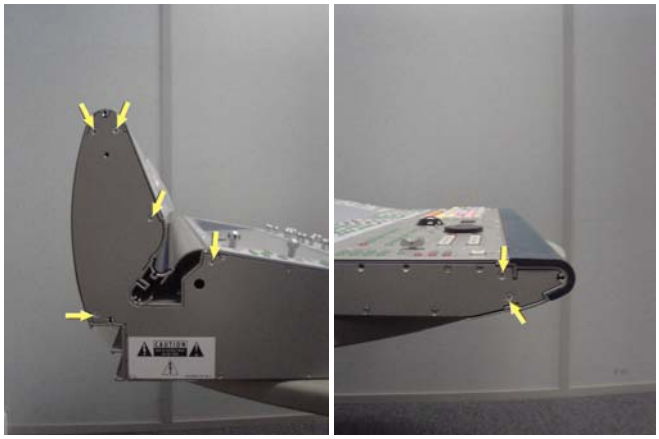


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 4 that secure the Land Panel to the Main Unit.

Figure 4. Land Panel screws.

6 The Land Panel should now lift away from the Main Unit.

Figure 5. Lifting Land Panel away.

7 Using a 5/64-inch Allen wrench, remove the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

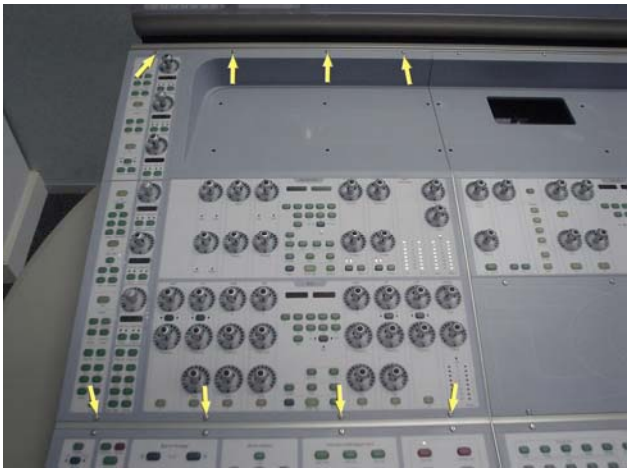


Figure 6. EQ / Dynamics Panel screws.

8 Carefully move the EQ / Dynamics Panel outwards as indicated in Figure 7.

Figure 7. Moving EQ / Dynamics Panel outwards.

9 While lifting the EQ / Dynamics Panel upwards from the top carefully disconnect both 10 Pin power cables and also the 50 pin ribbon cable as indicated in Figure 8. Make note of cables and orientation; to help ensure proper reconnection label the connectors with masking tape or sticker labels.

Figure 8. Disconnecting EQ / Dynamics Panel cables.

10 The EQ / Dynamics Panel should now lift away from the Main Unit.

To replace the D-Control Main Unit EQ / Dynamics Panel:

11 While holding the EQ / Dynamics Panel above it's position in the Main Unit connect both 10 Pin power cables and also the 50 pin ribbon cable. Take note of orientation of connectors.

12 Carefully position the EQ / Dynamics Panel into position on the Main Unit and slide into place. The EQ / Dynamics Panel should be flush against the Monitor Panel located in the upper right quadrant of the Main Unit.

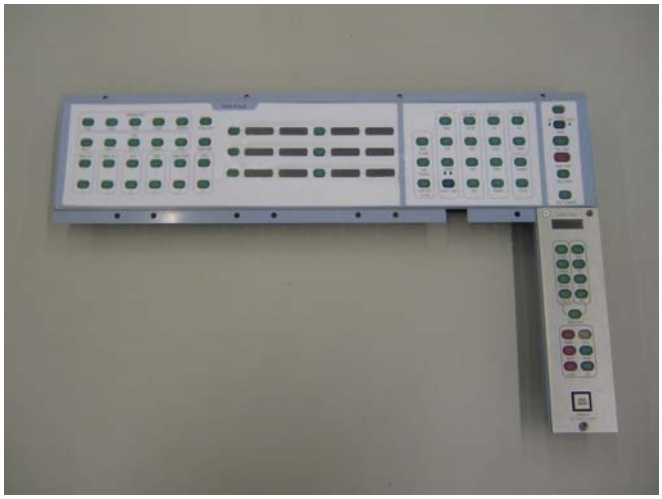
13 Using a 5/64-inch Allen wrench, install the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

14 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 4.

15 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Main Unit Soft Keys/Menu Panel

The following procedure outlines the steps needed to remove and replace the Soft Keys / Menu Panel on the D-Control Main Unit. This panel is located in the lower right quadrant of the Main Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Main Unit Soft Keys / Menu Panel:

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

Figure 1. Removal of 15 right side end plate screws.

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit.

Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate..

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the right side end plate to the Main Unit.

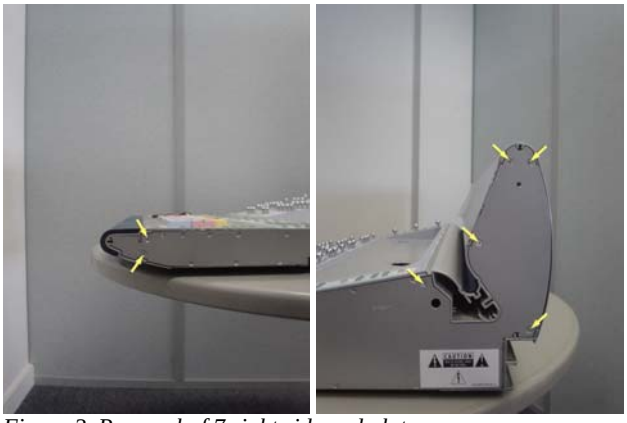


Figure 3. Removal of 7 right side end plate screws.

4 The right side end plate should now lift away from the Main Unit.

⚠ *Before you proceed, please note that there are 3 different types of screws used to secure the Soft Keys / Menu Panel to the Main Unit.*

5 Using a 5/64-inch Allen wrench, remove the 15 screws indicated in Figure 4 that secure the Soft Keys / Menu Panel to the Main Unit (top row uses type D, middle row uses type J, bottom row uses type C).

Figure 4. Soft Keys / Menu Panel screws.

6 Carefully lift the panel upwards as indicated in Figure 5 so you have access to underneath the Keyboard Panel and disconnect the 4 pin cable. The Keyboard Panel should now lift away from the Main Unit.

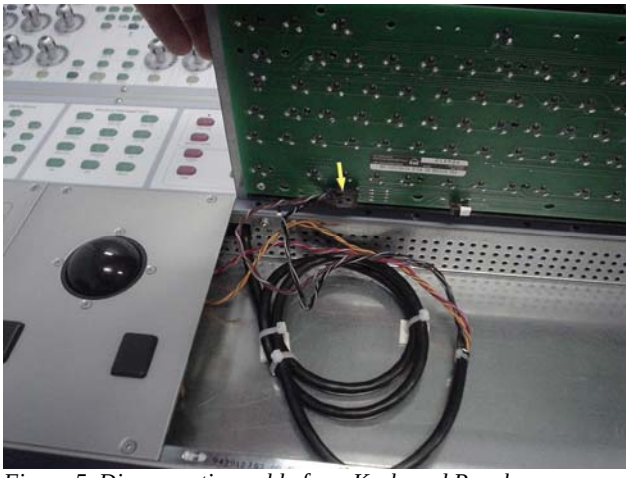


Figure 5. Disconnecting cable from Keyboard Panel.

7 Carefully slide the Soft Keys / Menu Panel outwards and gently lift upwards from the bottom as indicated in Figure 6.

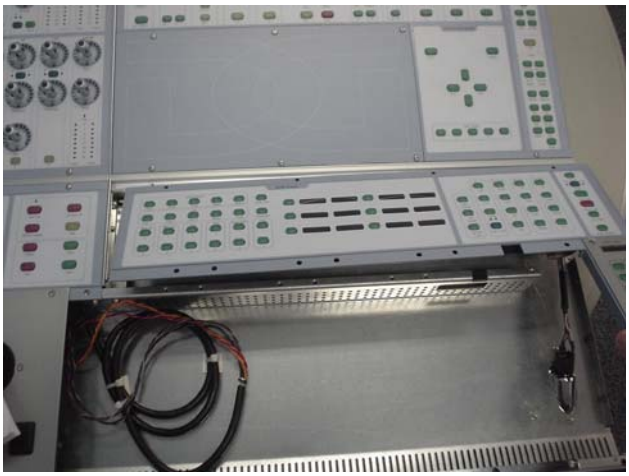


Figure 6. Lift Soft Keys / Menu Panel.

8 Disconnect the 50 pin ribbon cable and the 10 pin power cable shown in Figure 7.

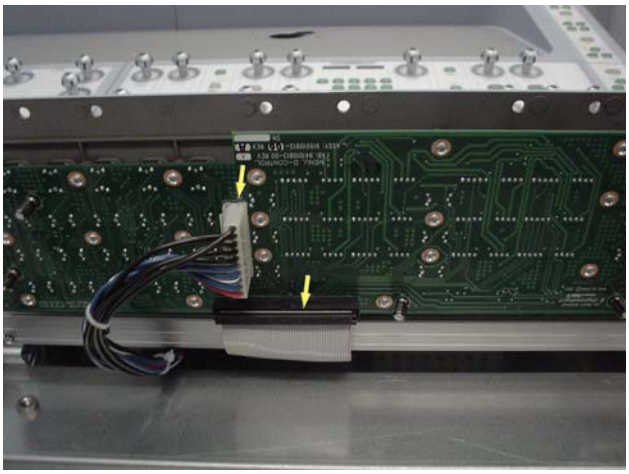


Figure 7. Disconnecting cables.

9 The Soft Keys / Menu Panel should now lift away from the Main Unit as shown in Figure 8.

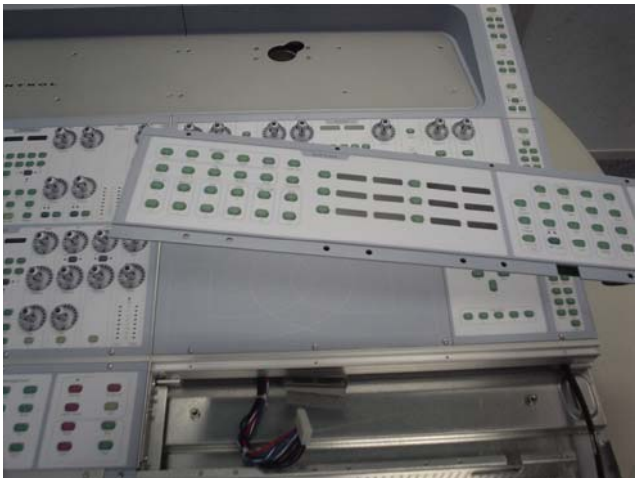


Figure 8. Lifting Soft Keys / Menu Panel from Main Unit.

To replace the D-Control Main Unit Soft Keys / Menu Panel:

10 Connect the 10 pin power cable and the 50 pin ribbon cable to the Soft Keys / Menu Panel and carefully sit back into position on the Main Unit.

⚠ *Before you proceed, please note that there are 3 different types of screws used to secure the Soft Keys / Menu Panel to the Main Unit.*

11 Using a 5/64-inch Allen wrench, install the 4 type D screws back into the top of the Soft Keys / Menu Panel but do not fully tighten.

12 Connect the 4 pin cable back into J1 on the Keyboard Panel and then carefully place back into position in the Main Unit.

13 Using a 5/64-inch Allen wrench, install the remaining 11 screws into the Soft Keys / Menu Panel and then fully tighten all 15 screws that secure the Soft Keys / Menu Panel to the Main Unit.

14 The right side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the Main Unit Monitor Panel

The following procedure outlines the steps needed to remove and replace the Monitor Panel on the D-Control Main Unit. This panel is located in the upper right quadrant of the Main Unit.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

⚠ *If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).*

To remove the D-Control Main Unit Monitor Panel:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

Figure 1. Removal of 15 right side end plate screws.

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Main Unit

Figure 2. Removal of 8 right side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the right side end plate to the Main Unit.

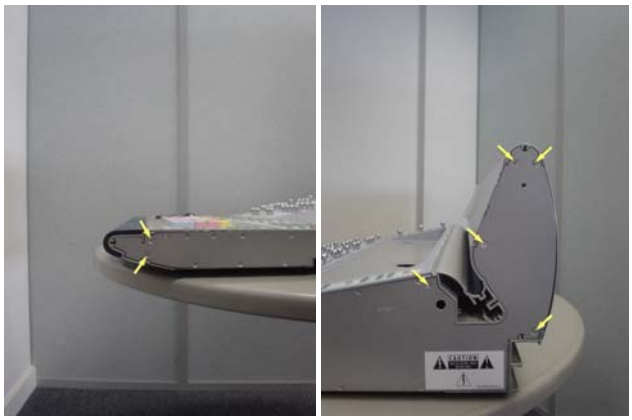


Figure 3. Removal of 7 right side end plate screws.

4 The right side end plate should now lift away from the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 4 that secure the Land Panel to the Main Unit.

Figure 4. Land Panel screws.

6 The Land Panel should now lift away from the Main Unit.

Figure 5. Lifting Land Panel away.

⚠ *Before you proceed, please note that the 3 screws on the top of the Panner Plate are different to the other screws used on the Monitor Panel.*

7 Using a 5/64-inch Allen wrench, remove the 11 type D screws indicated in Figure 6 that secure the Monitor Panel to the Main Unit.

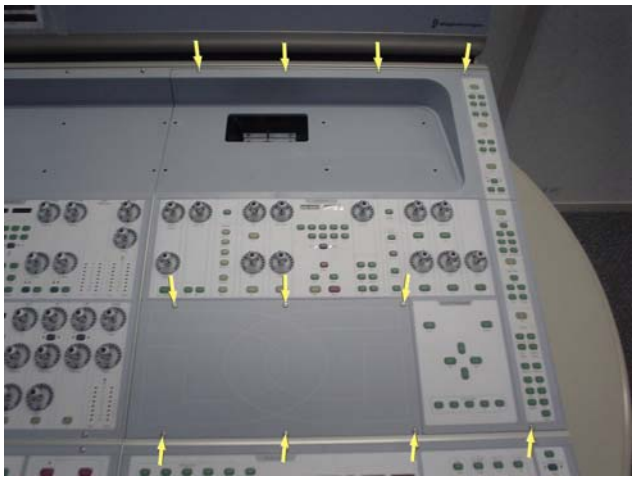


Figure 6. Remove 11 screws from Monitor Panel.

8 Carefully lift the blank Panner Plate away from the Main Unit shown in Figure 7.

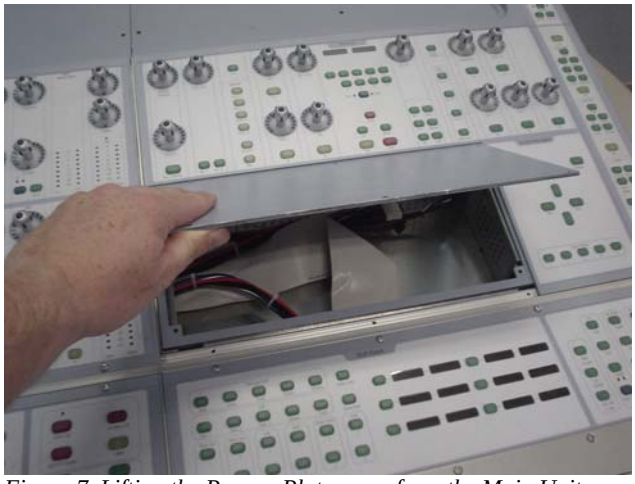


Figure 7. Lifting the Panner Plate away from the Main Unit.

9 While lifting the Monitor Panel up from the top disconnect the 10 pin power cable and the 50 pin ribbon cable as indicated in Figure 8. The Monitor Panel should now lift away from the Main Unit.

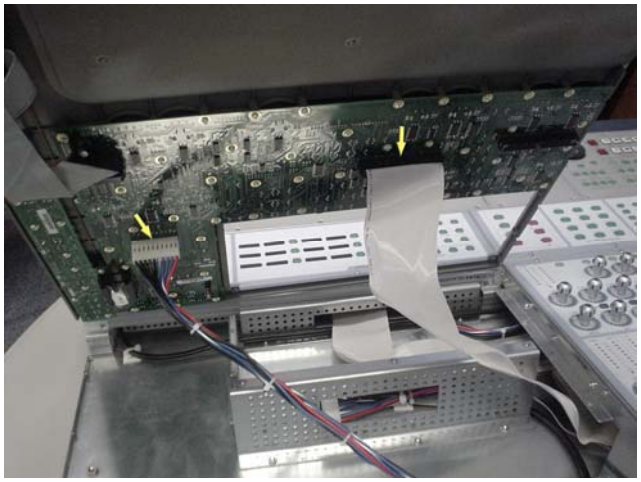


Figure 8. Disconnect cables from Monitor Panel.

To replace the D-Control Main Unit Monitor Panel:

10 Connect the 10 pin power cable into P5 on the Monitor Panel and the 50 pin ribbon cable into P1 and carefully place the Monitor Panel back into position on the Main Unit.

11 Place the Panner Plate back into position in the Main Unit.

> ⚠ *Before you proceed, please note that the 3 screws on the top of the Panner Plate are different to the other screws used on the Monitor Panel.*

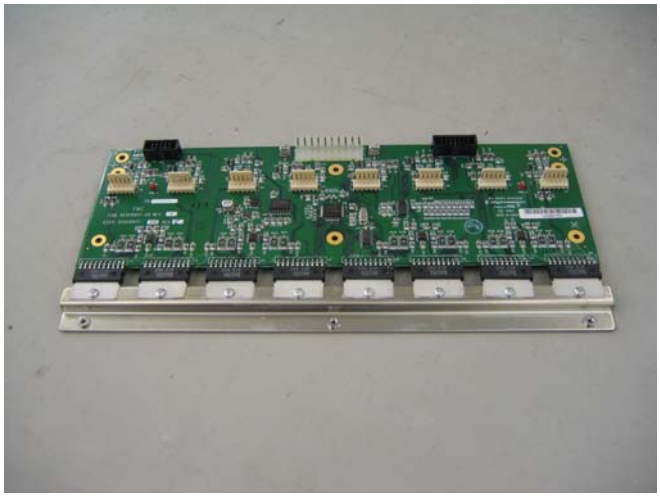
12 Using a 5/64-inch Allen wrench, secure the blank Panner Plate and the Monitor Panel to the Main Unit with the type D 11 screws.

13 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 4.

14 The right side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the Main Unit Fader Motor Control (FMC) Board

The following procedure outlines the steps needed to remove and replace the FMC PCB on the D-Control Main Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Main Unit FMC PCB:

Before you proceed, please note that the 15 screws on the top are different than the other screws used on the left side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

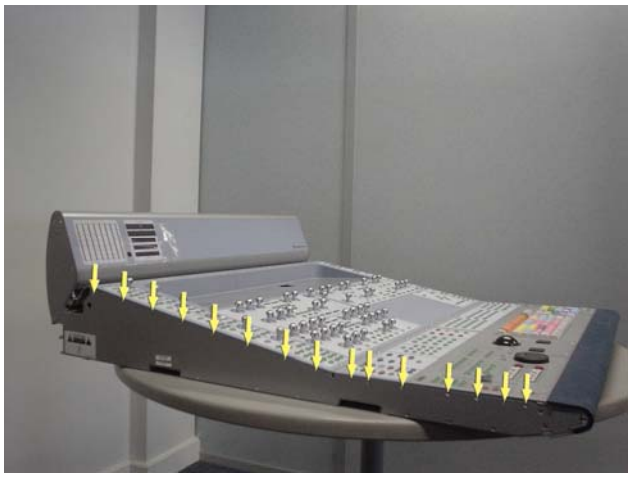


Figure 1. Removal of 15 left side end plate screws.

Before you proceed, please note that the 8 screws on the bottom are different than the other screws used on the left side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit.

Figure 2. Removal of 8 left side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

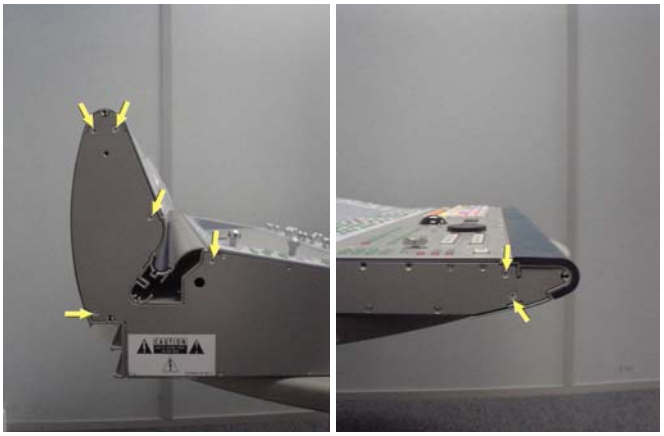


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit.

Before you proceed, please note that there are 3 different types of screws used to secure the Transport Panel to the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 screws indicated in Figure 4 that secure the Transport Panel to the Main Unit (top row uses type D, middle row uses type J, bottom row uses type C).

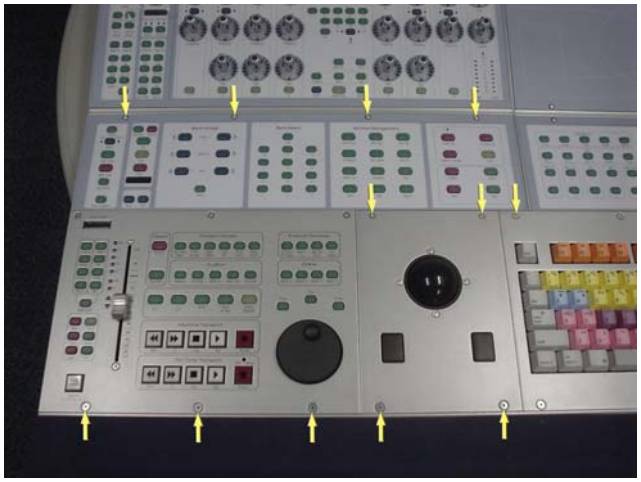


Figure 4. Lower Left Panel screws.

6 Carefully lift the Trackball Panel out and disconnect the 5 pin cable that connects the Trackball Panel to the Keyboard. See Figure 5.

Figure 5. Disconnecting the cable from the Trackball Panel.

7 Carefully slide the Transport Panel outwards so that you have clearance from the Keyboard Panel. See Figure 6.

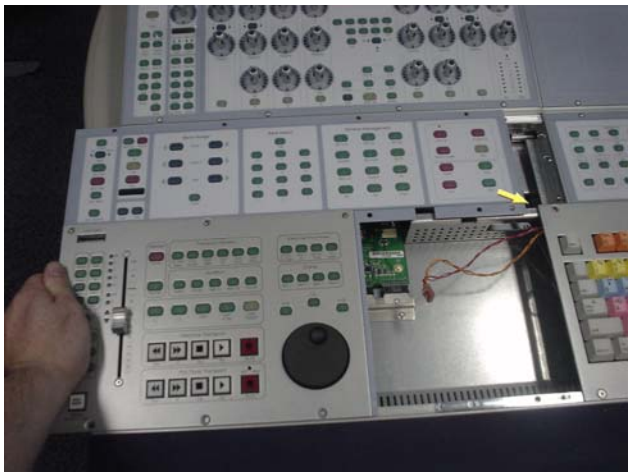


Figure 6. Moving Transport Panel outwards.

8 While lifting the Transport Panel upwards from the top, carefully disconnect the following cables shown in Figure 7.

a) Focus Fader cable
b) 50 Pin data cable
c) 10 Pin power cable

Figure 7. Disconnecting the 3 cables.

9 The Transport Panel should now lift away from the Main Unit.

10 Carefully disconnect the 10 Pin power cable and the 10 pin data cable from the Main Unit FMC PCB. See Figure 8.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

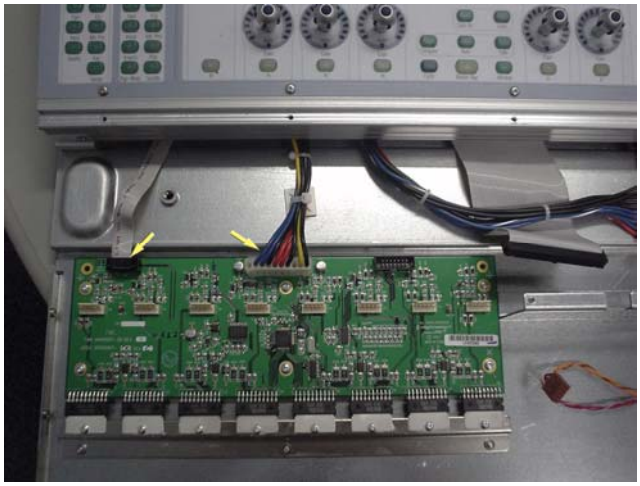


Figure 8. Disconnecting cables.

11 Carefully position the Main Unit on the table so that the front of the Main Unit is hanging over the edge exposing the 3 type E screws that secure the Main Unit FMC PCB to the Main Unit. See Figure 9.

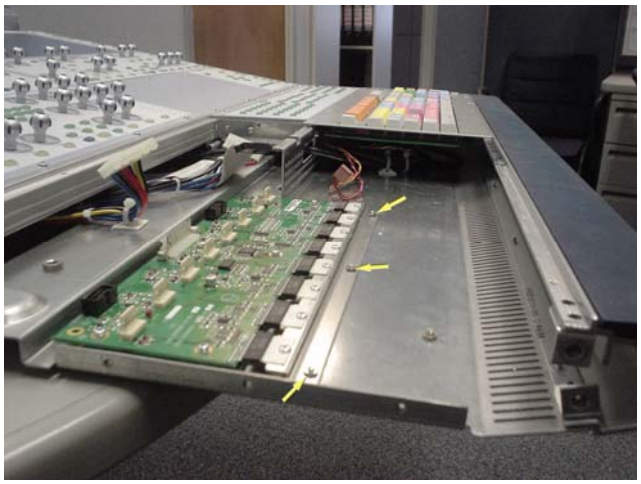


Figure 9. Position Main Unit.

12 Using a #1 Philips screwdriver, remove the 3 type E screws located on the bottom panel of the Main Unit that secures the Main Unit FMC PCB to the Main Unit. See Figure 10.

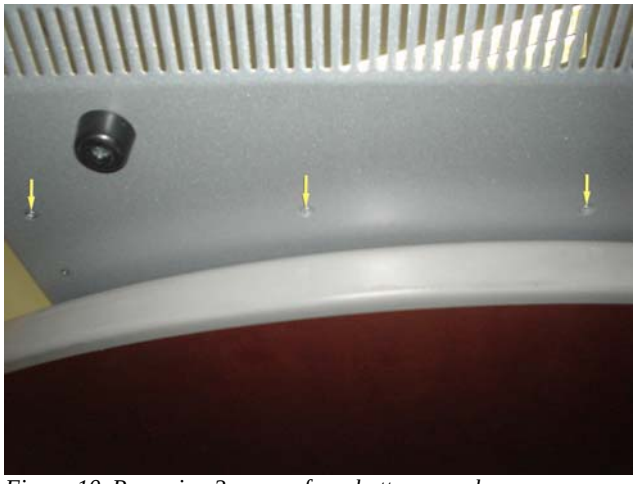


Figure 10. Removing 3 screws from bottom panel.

13 Using a #1 Philips screwdriver, looking down on the Main Unit, remove the 6 type B screws that secure the Main Unit FMC PCB to the Main Unit. See Figure 11.

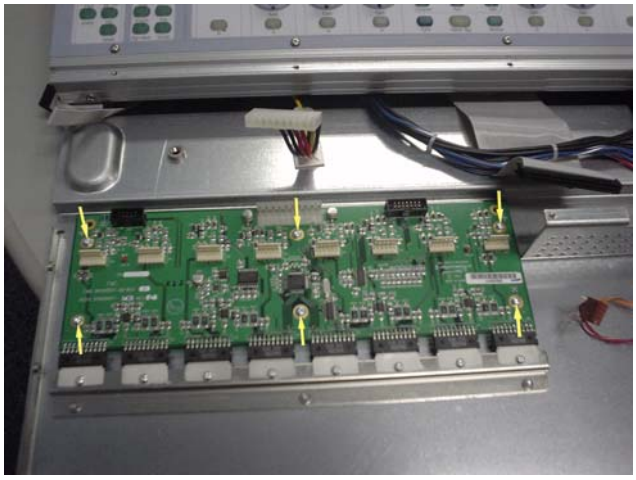


Figure 11. Removing 6 screws from Main Unit FMC PCB.

14 The Main Unit FMC PCB should now lift away from the Main Unit. See Figure 12.

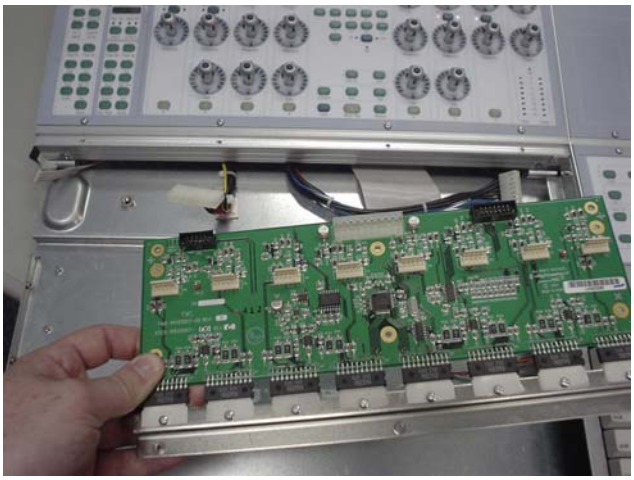


Figure 12. Removing the Main Unit FMC PCB.

To replace the D-Control Main Unit FMC PCB:

15 Apply heat sink compound to the underside of the heat sink bar. Carefully place the Main Unit FMC PCB into position in the Main Unit and from the top using a #1 Philips screwdriver, secure with 6 type B screws.

16 Using a #1 Philips screwdriver, secure the Main Unit FMC PCB to the Main Unit with 3 type B screws underneath the Main Unit.

17 Connect the 10 Pin Data cable and secure each side with hot glue. Also connect the 10 Pin power cable.

18 Taking note of orientation connect:

a) Focus Fader cable
b) 50 Pin data cable
c) 10 Pin power cable

The Focus Fader connector should plug into P9 of the Main Unit FMC Board.

19 Carefully slide the Transport Panel back into position paying attention not to catch any cables coming from the Focus Fader. Once in position all screw holes should line up correctly into position like in Figure 13.

Figure 13. Positioning the Transport Panel.

20 Connect the 5 Pin cable from the Keyboard Panel back onto the Trackball and carefully position the Trackball Panel back into the correct position on the Main Unit. See Figure 14.

Figure 14. Positioning the Trackball Panel.

21 Using a 5/64-inch Allen wrench, secure the top of the Transport Panel to the Main Unit with 4 type D screws. See Figure 15.

Figure 15. Securing the top of the Transport Panel.

22 Using a 5/64-inch Allen wrench, secure the bottom of the Transport Panel and the bottom of the Trackball Panel to the Main Unit with 5 type C screws. See Figure 16.

Figure 16. Securing the bottom of the Transport and Trackball Panel.

23 Using a 5/64-inch Allen wrench, secure the top of the Trackball Panel and also the top left of the Keyboard Panel to the Main Unit with 3 type J screws. See Figure 17.

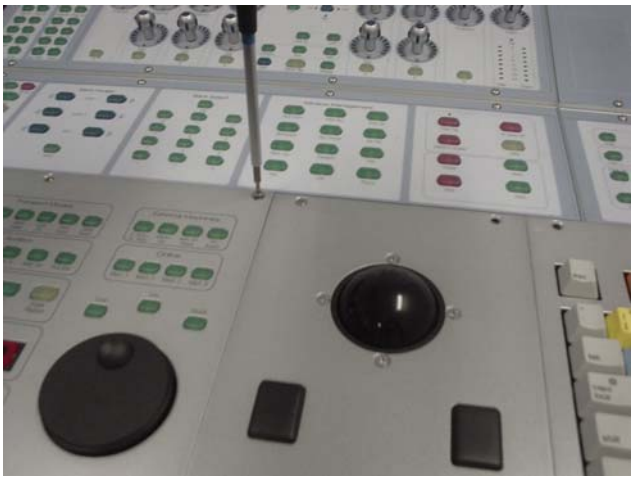


Figure 17. Securing the top of the Trackball and Keyboard Panel.

24 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used..

Replacing the D-Control Main Unit Comm Board

The following procedure outlines the steps needed to remove and replace the Comm Board on the D-Control Main Unit.

Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Main Unit Comm Board:

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

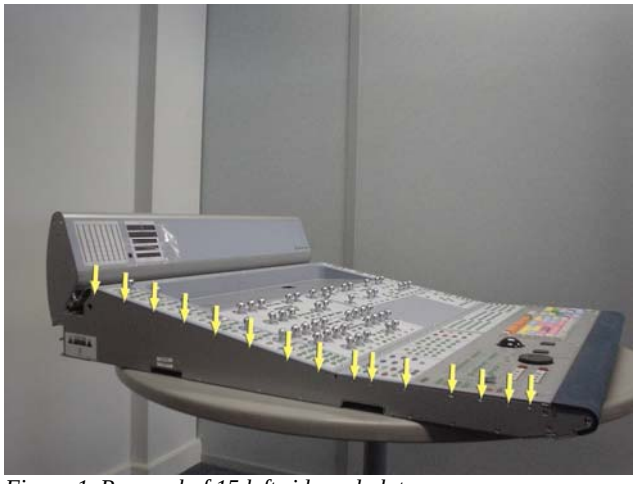


Figure 1. Removal of 15 left side end plate screws.

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit.

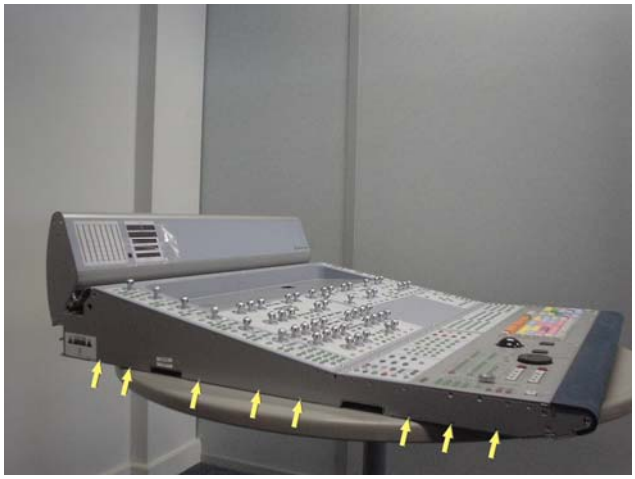


Figure 2. Removal of 8 left side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

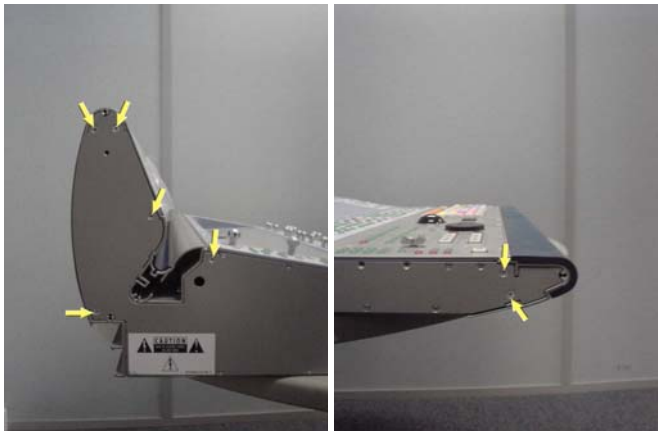


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 4 that secure the Land Panel to the Main Unit.

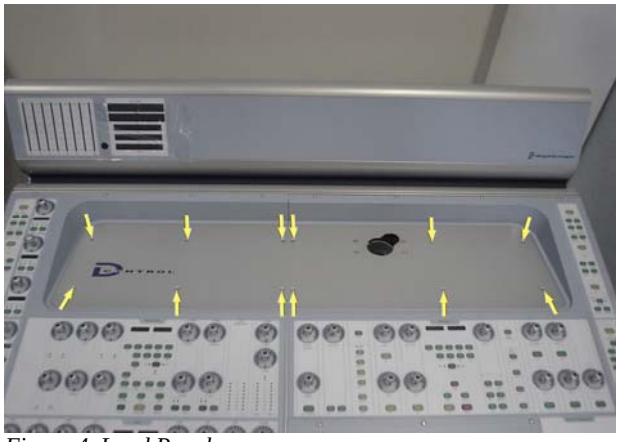


Figure 4. Land Panel screws.

6 The Land Panel should now lift away from the Main Unit.

Figure 5. Lifting Land Panel away.

7 Using a 5/64-inch Allen wrench, remove the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

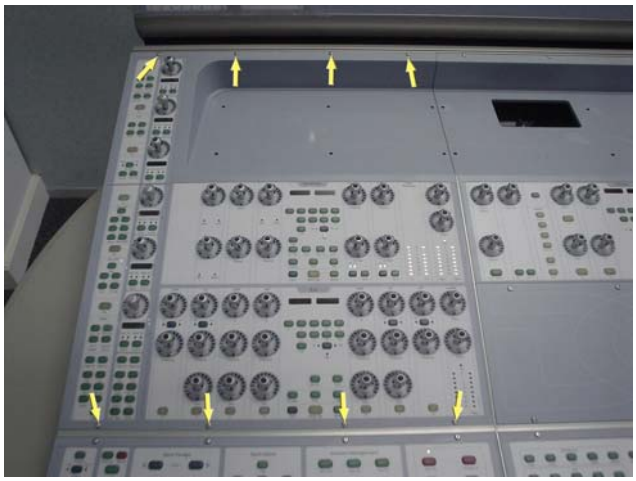


Figure 6. EQ / Dynamics Panel screws.

8 Carefully move the EQ / Dynamics Panel outwards as indicated in Figure 7.

Figure 7. Moving EQ / Dynamics Panel outwards.

9 While lifting the EQ / Dynamics Panel upwards from the top carefully disconnect both 10 Pin power cables and also the 50 pin ribbon cable as indicated in Figure 8. Make note of cables and orientation; to help ensure proper reconnection label the connectors with masking tape or sticker labels.

Figure 8. Disconnecting EQ / Dynamics Panel cables.

10 The EQ / Dynamics Panel should now lift away from the Main Unit.

11 From the back of the Main Unit, using a 5/64-inch Allen wrench remove the 13 type D screws indicated in Figure 9 that secure the back panel to the Main Unit. The back panel should now lift away from the Main Unit.

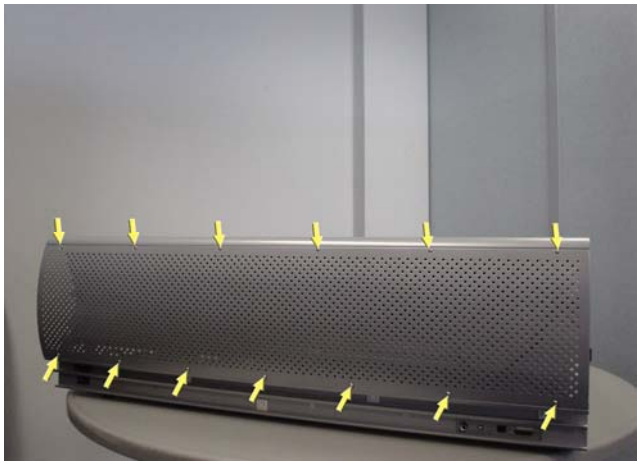


Figure 9. Back panel screws.

12 Carefully disconnect all of the cables from the Comm Board. There are 21 separate cables and it is critical that these are all labeled with a reference as shown in Figure 11 before removal. Note P11 on the Comm Board does not have a cable attached.

Figure 10. Cables on Comm Board.

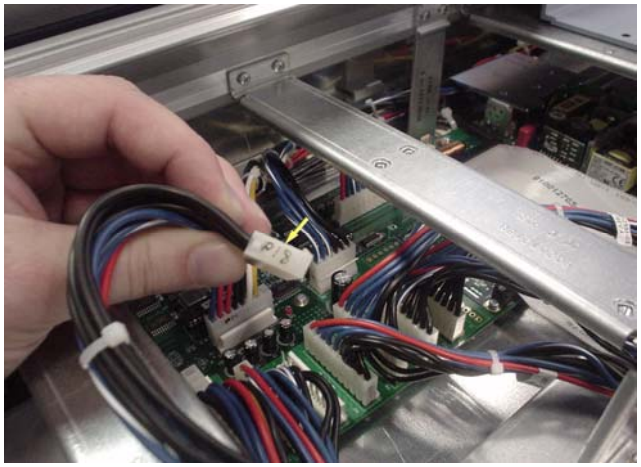


Figure 11. Referencing each cable.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers..

13 From the back of the Main Unit remove the 2 type A screw locks that secure the Xmon D-sub using a 3/16-inch nut driver and also the nut that secures the Footswitch Jack using a 14mm nut driver as shown in Figure 12.

Figure 12. Back of Main Unit. Remove 2 screws and nut.

14 There are 15 type B screws that secure the Comm Board to the Main Unit. Using a #1 Philips screwdriver, remove all 15 screws. Twelve of these are shown in Figure 13. The other 3 screws are positioned under the inner support brackets. The 3 screws located at the back of the Comm Board can be removed using a long shafted Philips screwdriver as indicated in Figure 14.

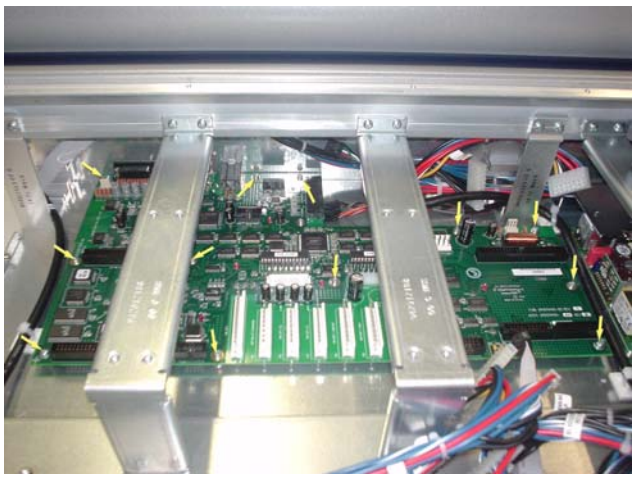


Figure 13. Comm Board screws.

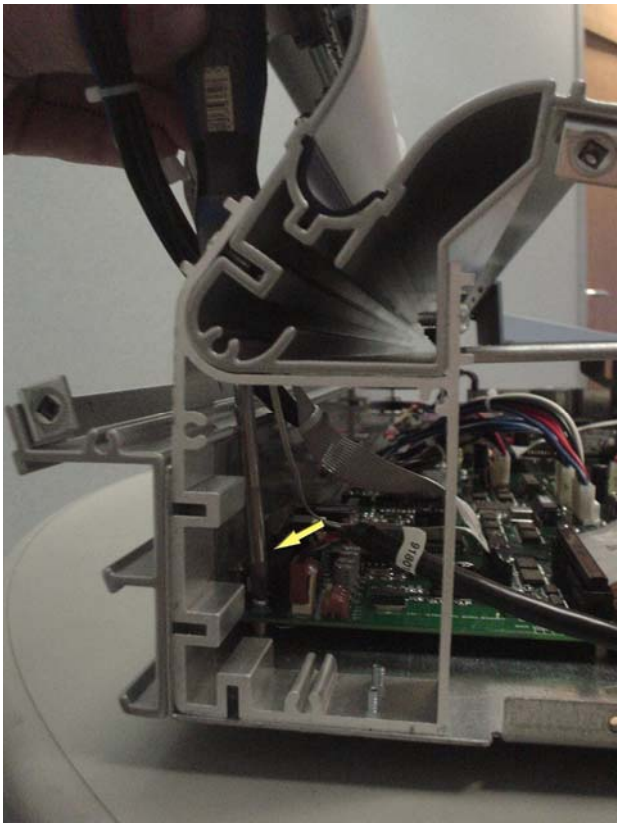


Figure 14. Using long shafted #1 Philips screwdriver.

15 The Comm Board is now free from the Main Unit and can carefully be removed by lifting it out to the side of the Main Unit as shown in Figure 15.

Figure 15. Removing the Comm Board.

To replace the D-Control Main Unit Comm Board:

16 Carefully place the Comm Board back into position in the Main Unit.

17 At the back of the Main Unit, hand tighten the 2 type A screw locks that secure the Xmon D-sub and the nut for the Footswitch Jack.

Figure 16. Hand tighten 2 screws and nut.

18 Using a #1 Philips screwdriver, secure the Comm Board to the Main unit with 15 type B screws.

You might find it useful to use a magnetized screwdriver on some of these screws.

19 When the 15 screws are secured tightly in place, fully install the 2 screw locks that secure the Xmon D-sub using a 3/16-inch nut driver and the nut that secures the Footswitch Jack using a 14mm nut driver as shown in Figure 16.

20 Carefully connect all the cables that go to the Comm Board. Take note of orientation and secure P127, P11, P109 and J104 with hot glue.

21 Using a 5/64-inch Allen wrench, secure the back panel to the Main Unit with 13 type D screws. Only fully tighten the screws when all 13 are in place.

22 While holding the EQ / Dynamics Panel above it's position in the Main Unit connect both 10 Pin power cables and also the 50 pin ribbon cable. Take note of orientation of connectors.

23 Carefully position the EQ / Dynamics Panel into position on the Main Unit and slide into place. The EQ / Dynamics Panel should be flush against the Monitor Panel.

24 Using a 5/64-inch Allen wrench, install the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

25 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 4.

26 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Main Unit Meter Bridge Board

The following procedure outlines the steps needed to remove and replace the Meter Bridge PCB on the D-Control Main Unit.

If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Main Unit Meter Bridge PCB:

1 From the back of the Main Unit, using a 5/64-inch Allen wrench, remove the 13 type D screws indicated in Figure 1 that secure the back panel to the Main Unit. The back panel should now lift away from the Main Unit.

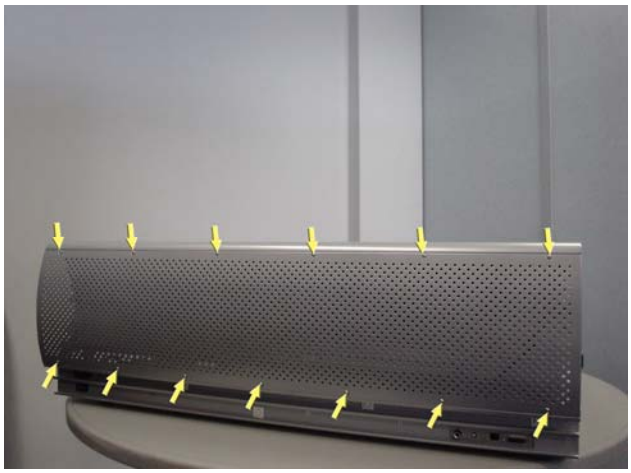


Figure 1. Back panel screws.

2 Carefully disconnect the 10 pin power cable, 14 pin ribbon cable and the 5 pin Internal Talkback Mic cable from the Meter Bridge PCB shown in Figure 2.

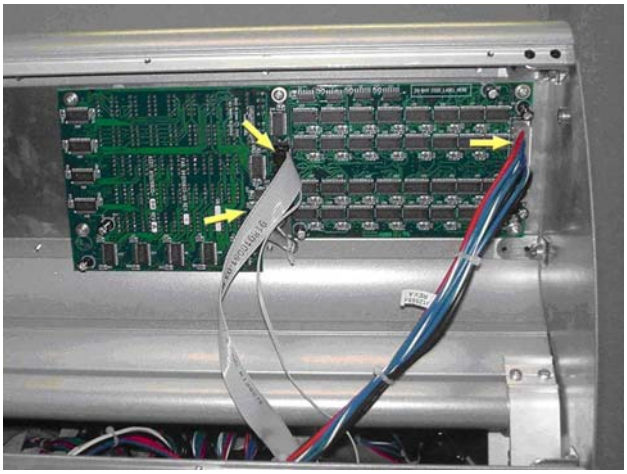


Figure 2. Disconnect cables.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

3 Using a #1 Philips screwdriver, remove the 6 type B screws that secure the Meter Bridge PCB to the Main Unit as indicated in Figure 3.

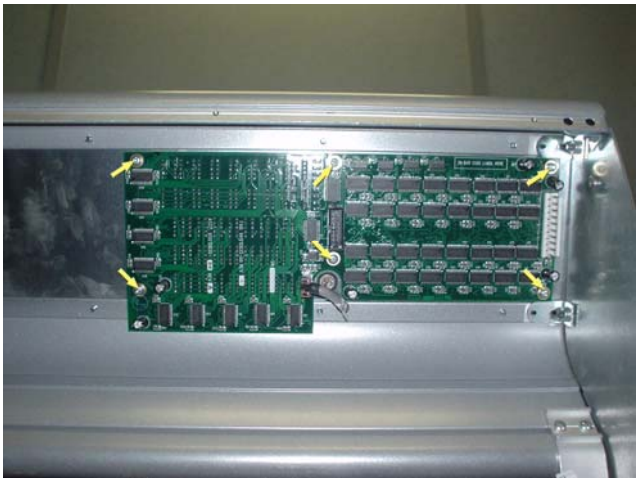


Figure 3. Removing 6 screws.

4 As shown in Figure 4 the Meter Bridge PCB should now lift away from the Main Unit.

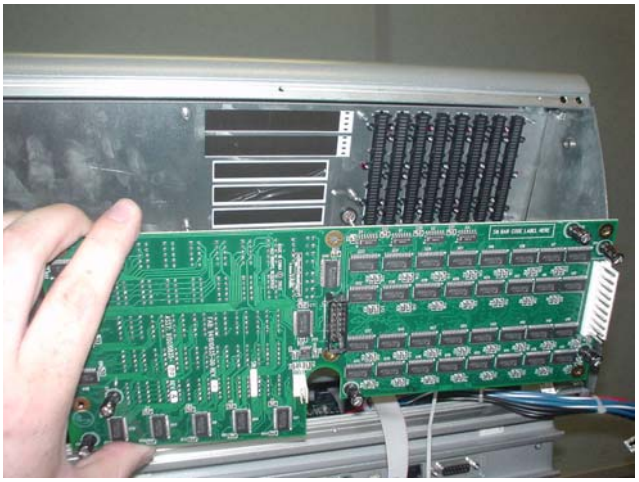


Figure 4. Removing Meter Bridge PCB.

To replace the D-Control Main Unit Meter Bridge PCB:

5 Using a #1 Philips screwdriver, carefully secure the Meter Bridge PCB to the Main Unit using the 6 type B screws.

6 Taking note of orientation carefully connect the 10 pin power cable, 14 pin ribbon cable and the 5 pin Internal Talkback Mic cable to the Meter Bridge PCB. The 14 pin ribbon cable and the 5 pin Internal Talkback Mic cable should also be secured with hot glue.

7 Using a 5/64-inch Allen wrench, secure the back panel to the Main Unit with 13 type D screws. Only fully tighten the screws when all 13 are in place.

Replacing the D-Control Main Unit Logic Power Supply Unit (PSU)

The following procedure outlines the steps needed to remove and replace the Logic PSU on the D-Control Main Unit.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

To remove the D-Control Main Unit Logic PSU:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.*

⚠ *If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

Figure 1. Removal of 15 right side end plate screws.

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Main Unit

Figure 2. Removal of 8 right side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate..*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the right side end plate to the Main Unit.

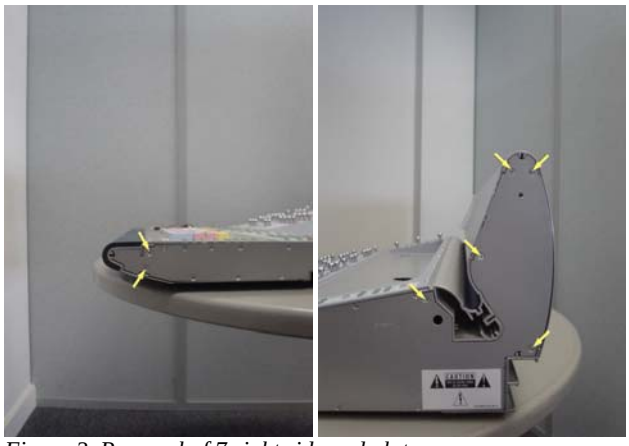


Figure 3. Removal of 7 right side end plate screws.

4 The right side end plate should now lift away from the Main Unit.

5 The 4 type B screws that secure the Logic PSU to the Main Unit are on the bottom of the Main Unit. To access the 4 screws, position the Main Unit on the table so the right side is slightly overhanging as shown in Figure 4.

Figure 4. Position Main Unit on table.

6 Using a #1 Philips screwdriver, remove the 4 type B screws that secure the Logic PSU to the Main Unit as shown in Figure 5.

Figure 5. Remove 4 screws from bottom of Main Unit.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

7 As indicated in Figure 6, disconnect the 3 pin power cable from TB1 and the 8 pin power cable from TB2 .

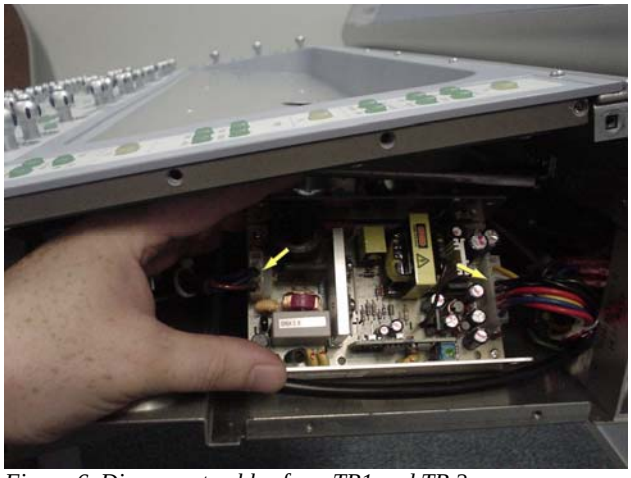


Figure 6. Disconnect cables from TB1 and TB 2.

8 The Logic PSU is now free to lift out from the Main Unit as shown in Figure 7.

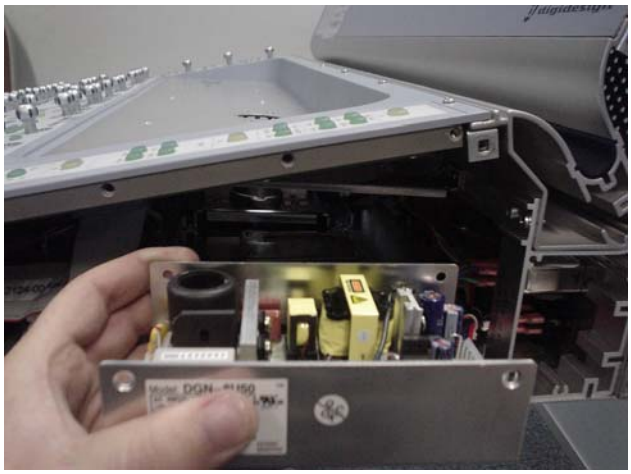


Figure 7. Remove PSU from Main Unit.

To replace the D-Control Main Unit Logic PSU:

9 Place the Logic PSU back into position in the Main Unit and secure from the bottom with 4 screws using a #1 Philips screwdriver.

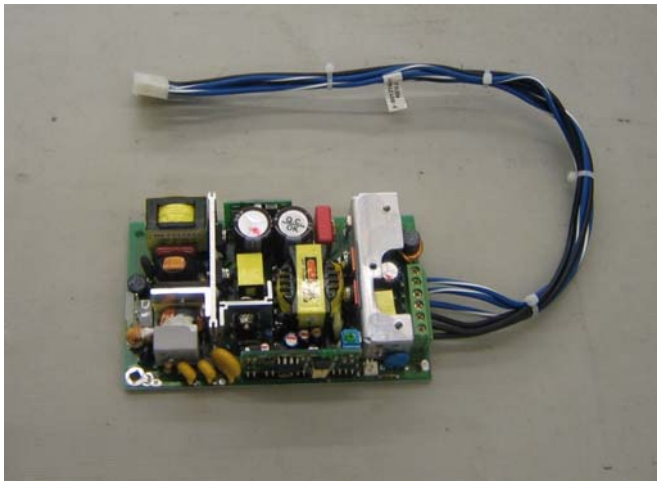
10 Connect the 3 pin power cable onto TB1 and secure with hot glue.

11 Connect the 8 pin power cable onto TB2.

12 The right side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Main Unit LED Power Supply Unit (PSU)

The following procedure outlines the steps needed to remove and replace the LED PSU on the D-Control Main Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads

To remove the D-Control Main LED PSU:

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

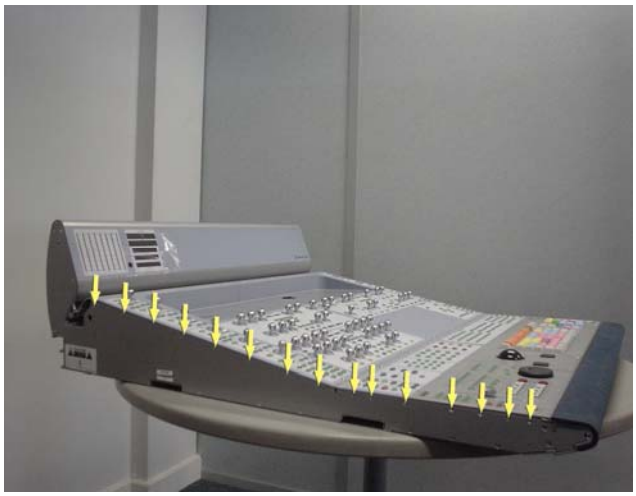


Figure 1. Removal of 15 left side end plate screws.

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit

Figure 2. Removal of 8 left side end plate screws..

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

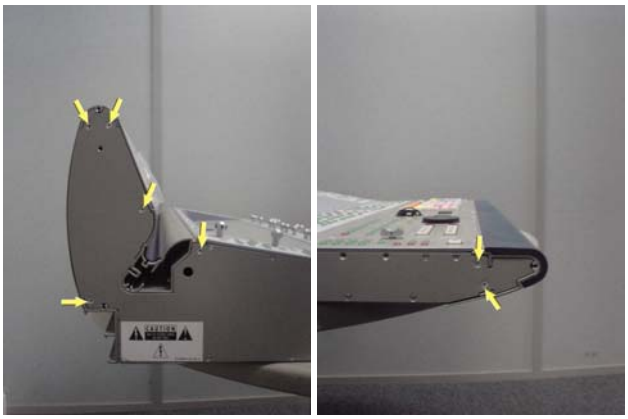


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 4 that secure the Land Panel to the Main Unit.

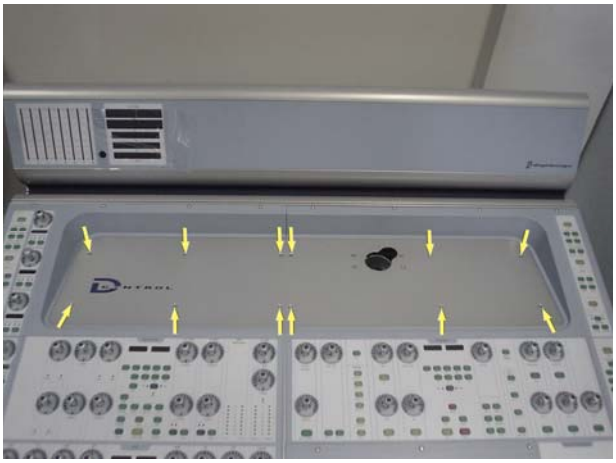


Figure 4. Land Panel screws.

6 The Land Panel should low lift away from the Main Unit.

Figure 5. Lifting Land Panel away

7 Using a 5/64-inch Allen wrench, remove the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

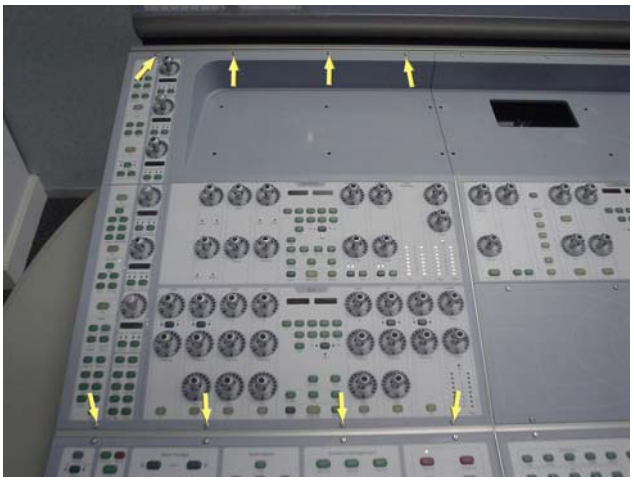


Figure 6. EQ / Dynamics Panel screws.

8 Carefully move the EQ / Dynamics Panel outwards as indicated in Figure 7.

Figure 7. Moving EQ / Dynamics Panel outwards.

9 While lifting the EQ / Dynamics Panel upwards from the top carefully disconnect both 10 Pin power cables and also the 50 pin ribbon cable as indicated in Figure 8. Make note of cables and orientation.

Figure 8. Disconnecting EQ / Dynamics Panel cables

10 The EQ / Dynamics Panel should now lift away from the Main Unit.

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.*

⚠ *If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).*

11 Using a #1 Philips screwdriver, remove the 15 type E screws indicated in Figure 9 that secure the top of the right side end plate to the Main Unit.

Figure 9. Removal of 15 right side end plate screws.

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.*

⚠ *If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).*

12 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 10 that secure the bottom of the right side end plate to the Main Unit

Figure 10. Removal of 8 right side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.*

13 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 11 that secure the sides of the right side end plate to the Main Unit.

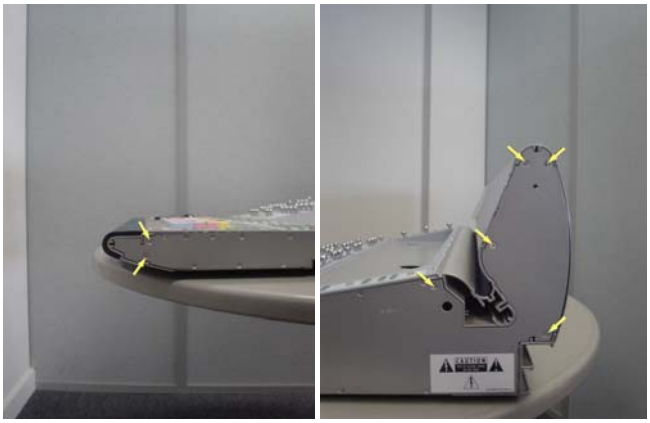


Figure 11. Removal of 7 right side end plate screws.

14 The right side end plate should now lift away from the Main Unit.

15 Using a 5/64-inch Allen wrench, remove the 11 type D screws indicated in Figure 12 that secure the Monitor Panel to the Main Unit.

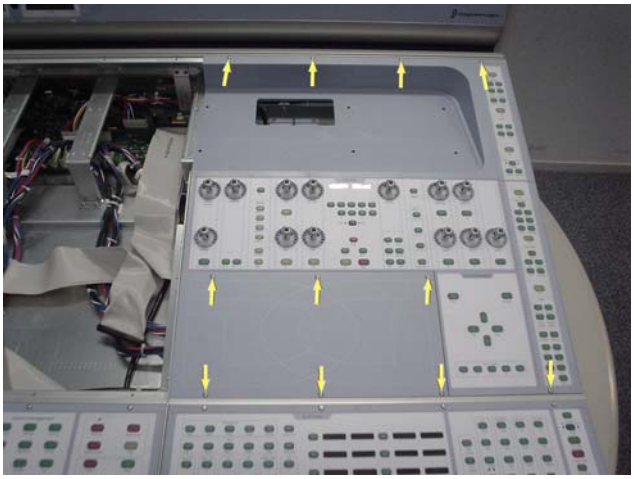


Figure 12. Remove 11 screws from Monitor Panel.

16 Carefully lift the blank Panner Plate away from the Main Unit shown in Figure 13.

Figure 13. Lifting the Panner Plate away from the Main Unit.

17 While lifting the Monitor Panel up from the top disconnect the 10 pin power cable and the 50 pin ribbon cable as indicated in Figure 14. The Monitor Panel should now lift away from the Main Unit.

Figure 14. Disconnect cables from Monitor Panel.

18 The LED PSU is located between the Comm Board and the SPACEDEC Holder on the Main Unit shown in Figure 15.

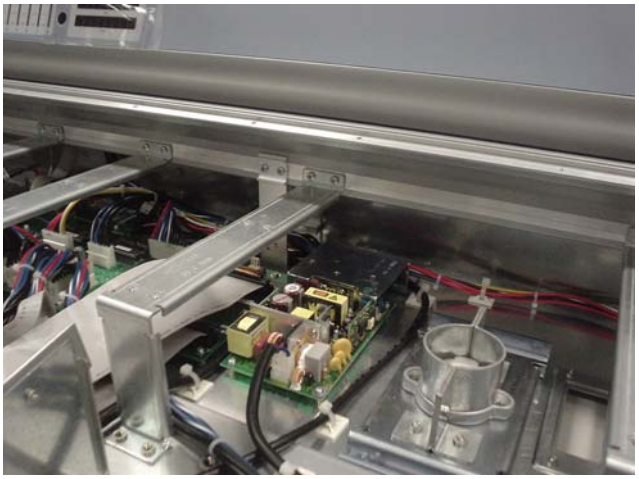


Figure 15. LED PSU location.

19 Carefully position the Main Unit on two tables so you have access to underneath the middle of the Main Unit as shown in Figure 16. It is advisable to have somebody hold the D-Control in place.

Figure 16. Position Main Unit on tables.

20 From the bottom of the Main Unit, using a #1 Philips screwdriver, remove the 5 screws indicated in Figure 17. These screws secure the PSU heat sink and the inner support bracket to the Main Unit.

Figure 17. Remove 5 screws from bottom of Main Unit.

21 Carefully position the Main Unit correctly back onto a table and using a #1 Philips screwdriver, remove the 2 type P screws that secure the inner support bracket to the Main Unit as shown in Figure 18. The inner support bracket should now lift away from the Main Unit.

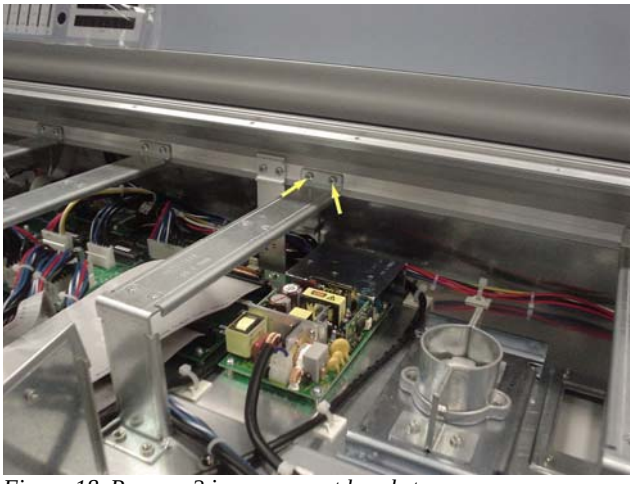


Figure 18. Remove 2 inner support bracket screws.

22 As indicated in Figure 19, using a #1 Philips screwdriver, remove the 3 screws that secure the PSU heat sink to the Main Unit.

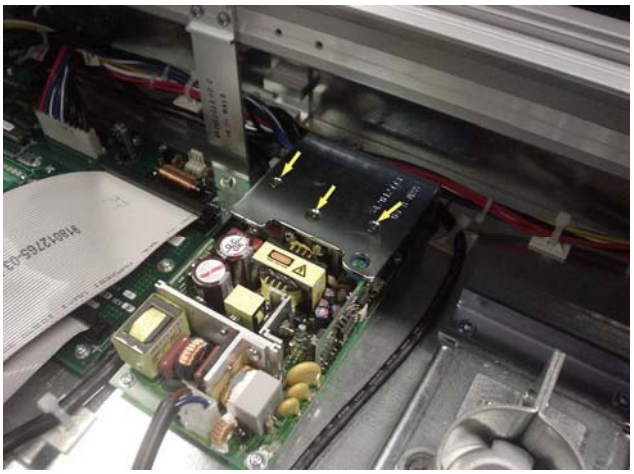


Figure 19. Remove 3 PSU heat sink screws.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

23 Disconnect the 2 pin power cable from the LED PSU as shown in Figure 20.

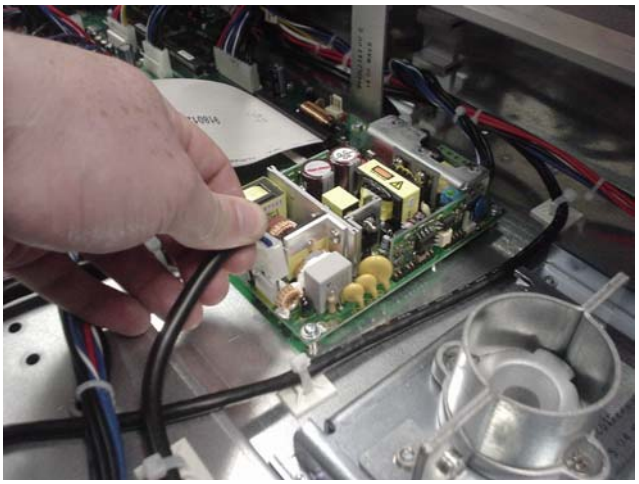


Figure 20. Disconnect the 2 pin power cable.

24 Using a #1 Philips screwdriver, remove the 4 type N screws that secure the LED PSU to the Main Unit. As shown in Figure 21 you will need to use a short screwdriver.

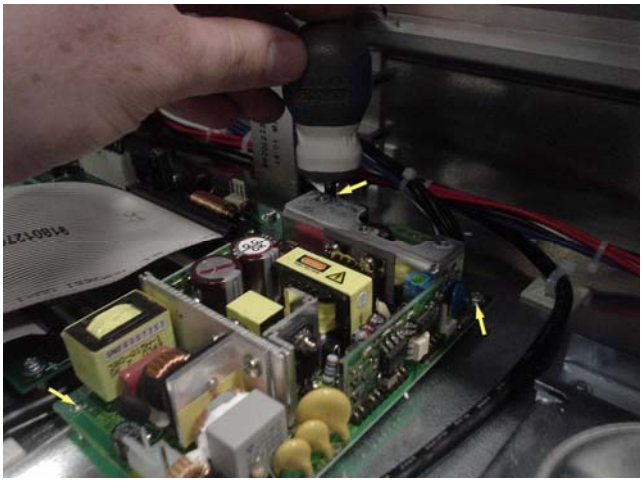


Figure 21. Remove 4 screws using a short screwdriver

25 Carefully lift the PSU out slightly from its position in the Main Unit as shown in Figure 22 and using small flat head screwdriver, disconnect the 6 wires from the LED PSU. Make a note of each wire and where it connects to the LED PSU.

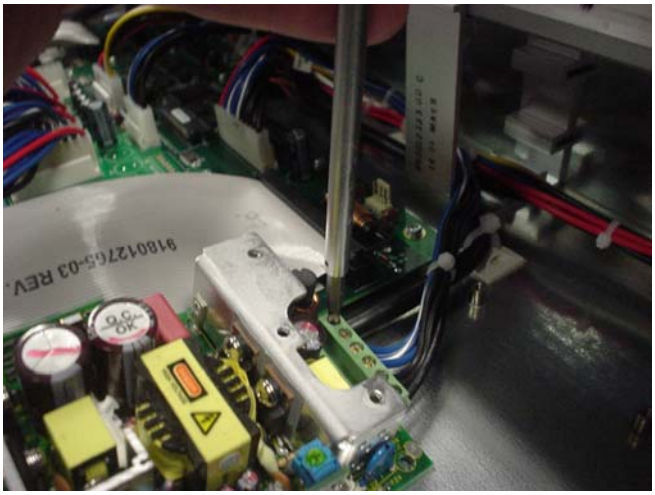


Figure 22. Disconnecting the six wires from the LED PSU.

26 The LED PSU should now lift away from the Main Unit as shown in Figure 23.

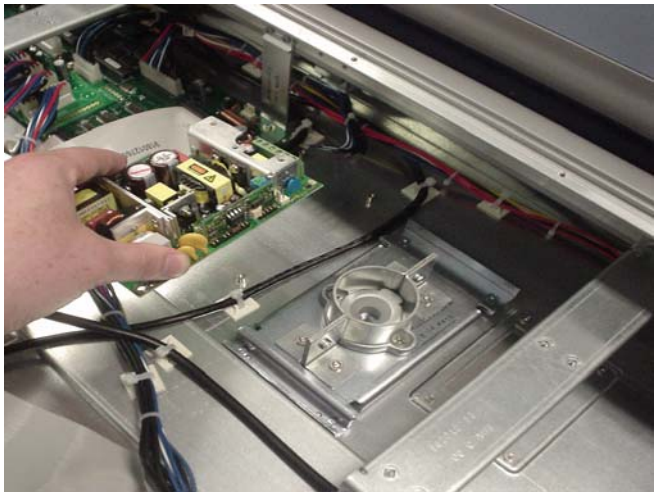


Figure 23. Lifting LED PSU away from Main Unit.

To replace the D-Control Main LED PSU:

27 Taking note of orientation connect the 6 wires to the LED PSU as indicated in Figure 22 using a small flat head screwdriver.

28 Carefully place the LED PSU back into position and using a short #1 Philips screwdriver, secure to the Main Unit with the 4 type N screws.

29 Connect the 2 pin power cable shown in Figure 20 and secure with hot glue.

30 Place the PSU heat sink back into position and using a #1 Philips screwdriver, secure with 3 screws.

31 Position the inner support bracket back into place and using a #1 Philips screwdriver, secure to the Main Unit with 2 type P screws as indicated in figure 24.

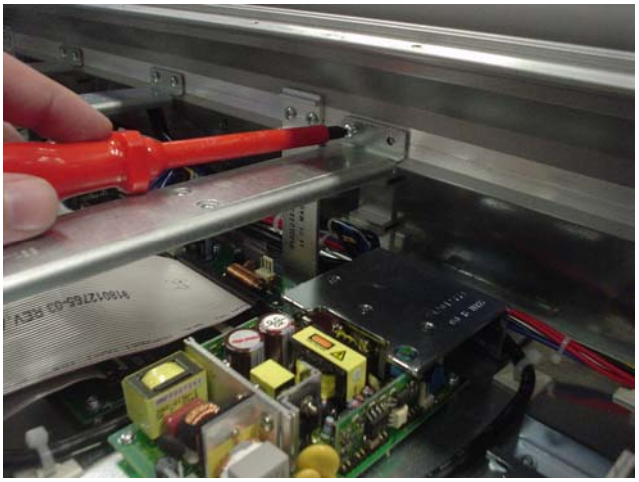


Figure 24. Secure inner support bracket with 2 screws.

32 Position Main Unit on two tables as show in Figure 16 and from the bottom using a #1 Philips screwdriver, secure the PSU heat sink and the inner support bracket to the Main Unit with 5 screws. Position the Main Unit correctly back on a table when finished.

33 Connect the 10 pin power cable into P5 on the Monitor Panel and the 50 pin ribbon cable into P1 and carefully place the Monitor Panel back into position on the Main Unit.

34 Place the blank Panner Plate back into position in the Main Unit.

35 Using a 5/64-inch Allen wrench, secure the blank Panner Plate and the Monitor Panel to the Main Unit with the 11 type D screws.

36 The right side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

37 While holding the EQ / Dynamics Panel above it's position in the Main Unit connect both 10 Pin power cables and also the 50 pin ribbon cable. Take note of orientation of connectors.

38 Carefully position the EQ / Dynamics Panel into position on the Main Unit and slide into place. The EQ / Dynamics Panel should be flush against the Monitor Panel.

39 Using a 5/64-inch Allen wrench, install the 8 type D screws that secure the EQ / Dynamics Panel to the Main Unit.

40 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 4.

41 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Trackball

The following procedure outlines the steps needed to remove and replace the Trackball on the D-Control Main Unit.

If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Trackball:

Before you proceed, please note that the top two screws are different than the bottom 2 screws.

1 Using a 5/64-inch Allen wrench, remove the 4 screws indicated in Figure 1 from the Trackball Panel. Type J are used on the top row, type C on the bottom row (see D-Control Screw Key on the last page).

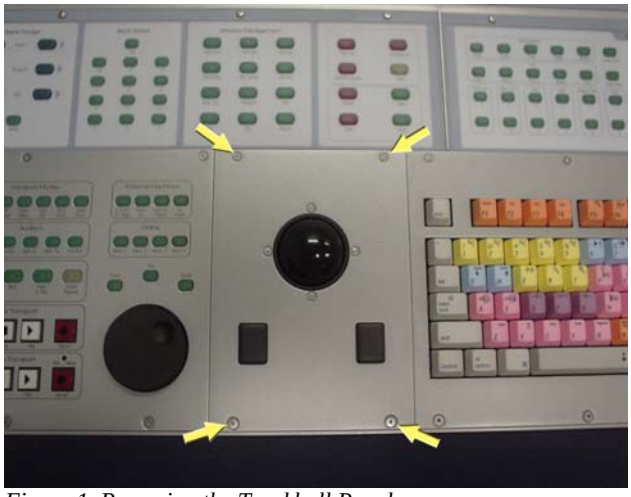


Figure 1. Removing the Trackball Panel.

2 Carefully lift the Trackball Panel giving yourself enough room to disconnect the 4 pin cable attached to the Keyboard Panel as shown in Figure 2. Once disconnected the Trackball Panel should now lift away.

Figure 2. Disconnecting the Trackball Panel.

3 To remove the Trackball from the Trackball Panel disconnect the cable coming from the Mouse Button PCB.

Figure 3. Disconnecting Mouse Button cable.

4 Using a 1/16-inch Allen wrench, remove the 4 type K screws that secure the Trackball to the Trackball Panel. See Figure 4.

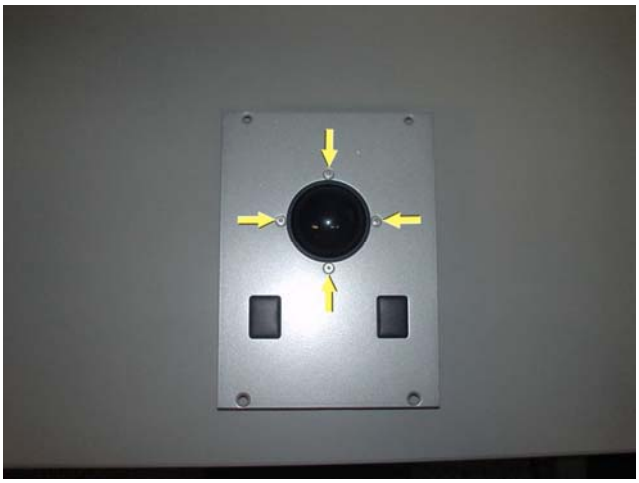


Figure 4. Trackball retaining screws.

5 The Trackball should now lift away from the Trackball Panel.

⚠ *Please note the position of the 4 washers located between the Trackball Panel and the Trackball. These are loose and may fall off during service.*

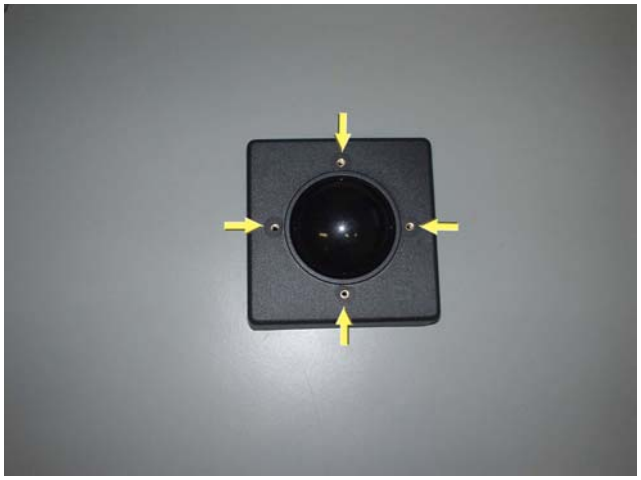


Figure 5. Trackball washers.

To replace the D-Control Trackball:

6 Place the Trackball Panel over the Trackball making sure the 4 washers are in place.

7 Using a 1/16-inch Allen wrench, install the 4 type K screws that hold the Trackball to the Trackball Panel.

8 Connect the cable coming from the Mouse Button PCB to the Trackball.

Figure 6. Connecting the Mouse Button cable.

9 Connect the cable coming from the Keyboard Panel to the Trackball.

Figure 7. Connecting the Keyboard cable.

10 Taking care with the cables, place the Trackball Panel back into position on the Main Unit as shown in Figure 8 below.

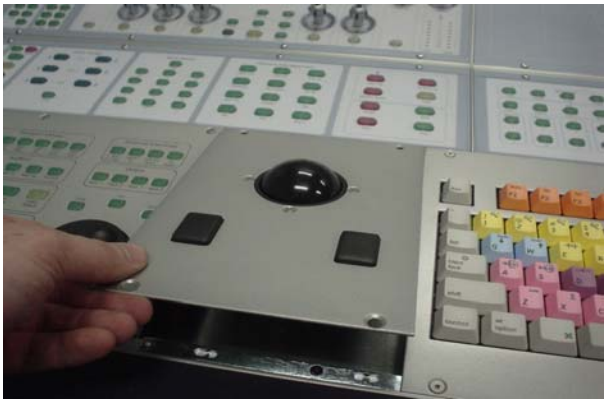


Figure 8. Placing Trackball Panel back into Main Unit.

⚠ Before you proceed, please note that the top 2 screws are different to the bottom 2 screws.

11 Secure the Trackball Panel to the Main Unit with 4 screws (type J on top row, C on bottom row).

Figure 9. Securing Trackball Panel to Main Unit.

Replacing the D-Control Mouse Buttons

The following procedure outlines the steps needed to remove and replace the Mouse Button PCB on the D-Control Main Unit.

If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Mouse Buttons:

1 Follow steps 1 and 2 of the Trackball Removal procedure.

2 Disconnect the cable that connects the Trackball to the Mouse Button PCB.

Figure 10. Disconnect the Trackball to Mouse Button PCB cable.

3 Using a Philips #1 screwdriver remove the 4 type B screws that secure the Mouse Button PCB to the Trackball Panel.

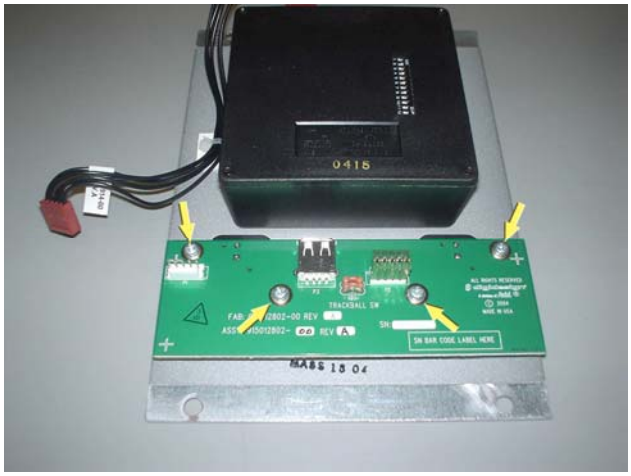


Figure 11. Removing 4 screws from Mouse Button PCB.

4 The Mouse Button PCB should now lift away from the Trackball Panel.

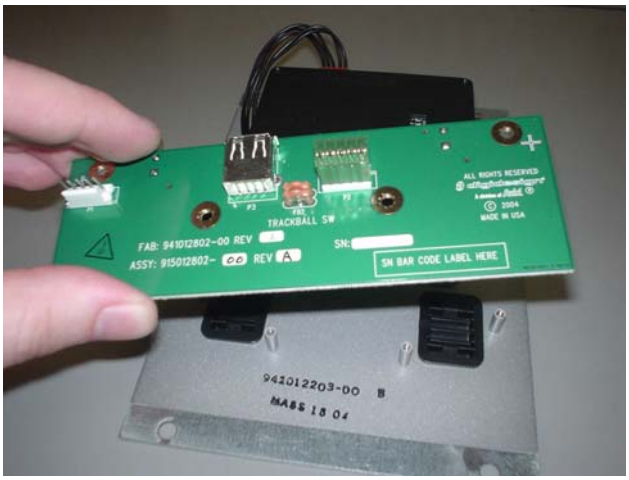


Figure 12. Mouse Button PCB.

To replace the D-Control Mouse Buttons:

5 Carefully place the Mouse Button PCB into place and secure with 4 type B screws.

6 Attach the cable coming from the Trackball back into P1 on the Mouse Button PCB.

7 Follow steps 9 thru 12 of the Trackball Replacement procedure.

Replacing a D-Control Scribble Display

The following procedure outlines the steps needed to remove and replace a Scribble Display on a D-Control Main or Fader Unit. If a Scribble Display is faulty, it will be necessary to isolate the panel it is mounted on, and then follow the specific procedure to remove that panel.

In this procedure a Scribble Display from the Focus Fader Channel Strip on the EQ / Dynamics Panel is removed and then replaced, as shown in Figure 1.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads*

Figure 1. Scribble Display to be removed.

To remove the D-Control Scribble Display:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Main Unit. **See note regarding this screw in the Screw Key at the end of this document.*

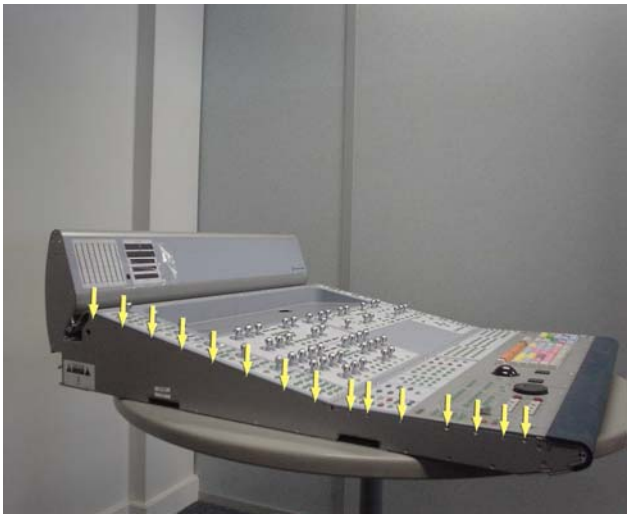


Figure 2. Removal of 15 left side end plate screws..

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Main Unit.

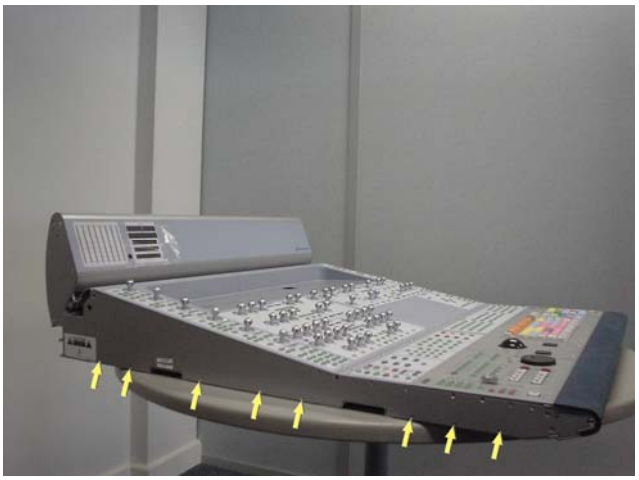


Figure 3. Removal of 8 left side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Main Unit.

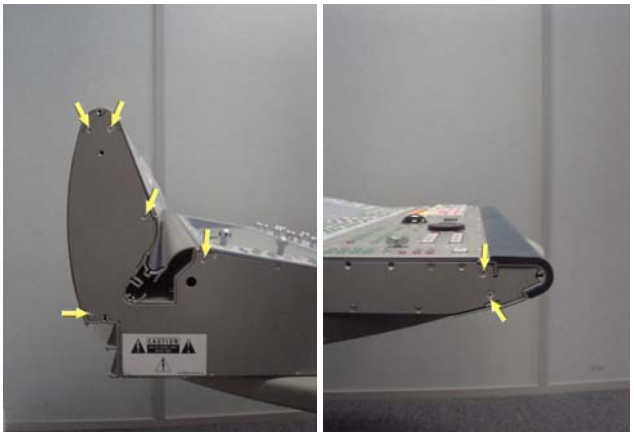


Figure 4. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 4 that secure the Land Panel to the Main Unit.

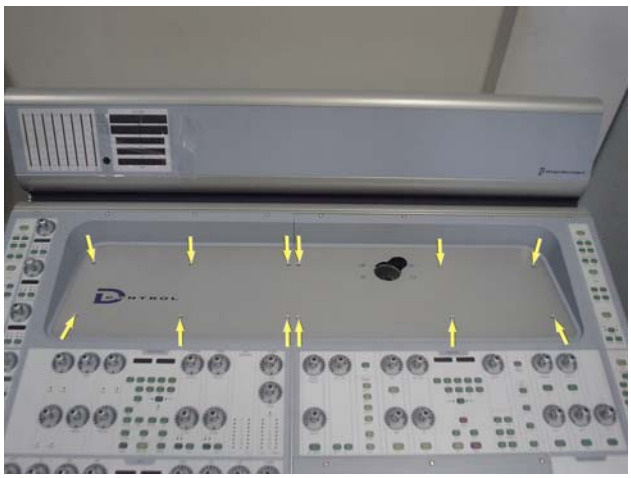


Figure 5. Land Panel screws.

6 The Land Panel should now lift away from the Main Unit.

Figure 6. Lifting Land Panel away.

7 Using a 5/64-inch Allen wrench, remove the 8 type D screws indicated in Figure 6 that secure the EQ / Dynamics Panel to the Main Unit.

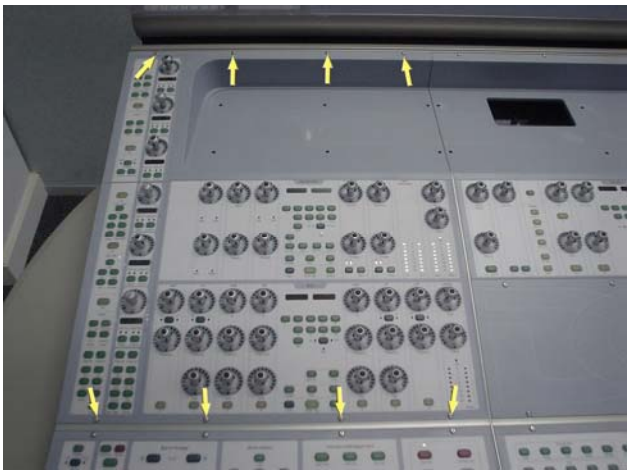


Figure 7. EQ / Dynamics Panel screws.

8 Carefully move the EQ / Dynamics Panel outwards as indicated in Figure 8.

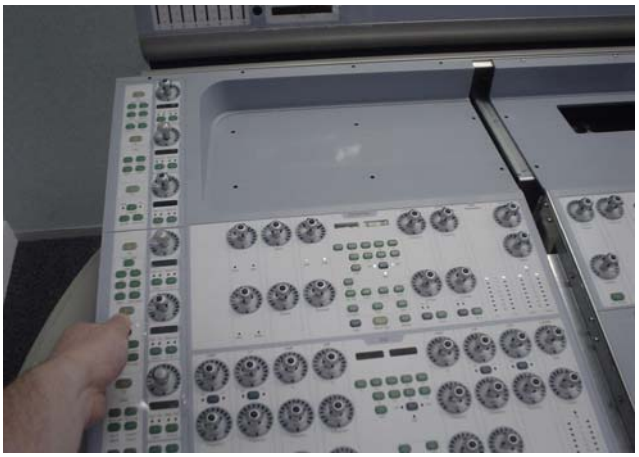


Figure 8. Moving EQ / Dynamics Panel outwards.

9 While lifting the EQ / Dynamics Panel upwards from the top carefully disconnect both 10 Pin power cables and also the 50 pin ribbon cable as indicated in Figure 9. Make note of cables and orientation.

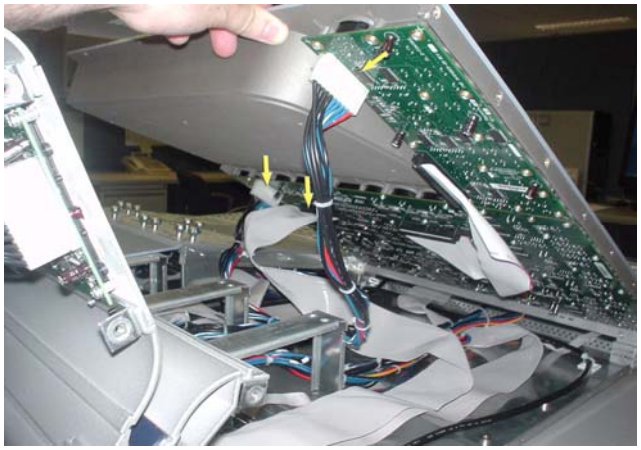


Figure 9. Disconnecting EQ / Dynamics Panel cables.

10 The EQ / Dynamics Panel should now lift away from the Main Unit.

11 From the back of the EQ / Dynamics Panel the Scribble Display is located on the PCB labeled UL D-Control, as shown in Figure 10. Disconnect the 50 pin ribbon cable connected to the PCB UL, D-Control.

Figure 10. PCB UL, D-Control.

12 Remove the Encoder Knobs from the 3 encoders connected to the PCB UL, D-Control shown in Figure 11.

Figure 11. Removal of Encoder Knobs

13 Using a #1 Philips screwdriver, remove the 14 type B screws indicated in Figure 12, that secure PCB UL, D-Control to the EQ / Dynamics Panel.

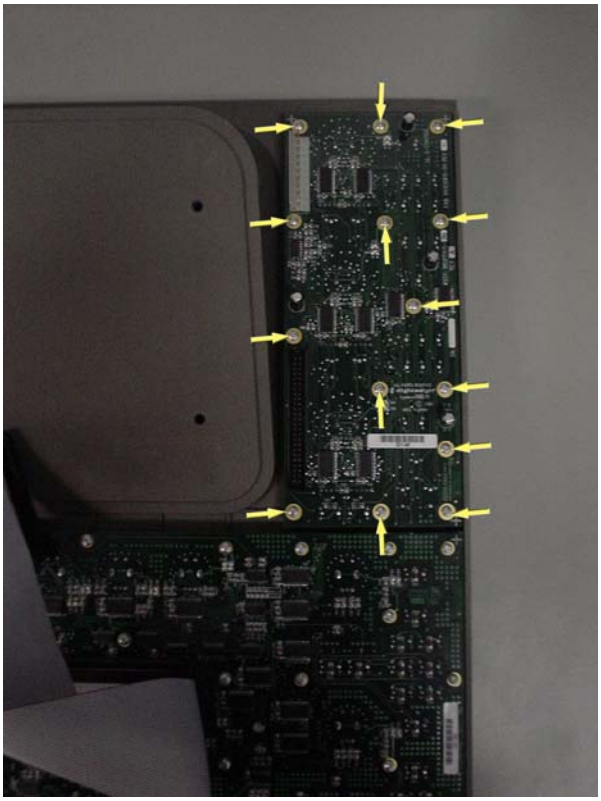


Figure 12. Remove 14 screws.

14 Carefully lift away the PCB UL, D-Control from the panel as shown in Figure 13, taking care not to unsettle any of the Switch Caps that sit loosely in the panel.

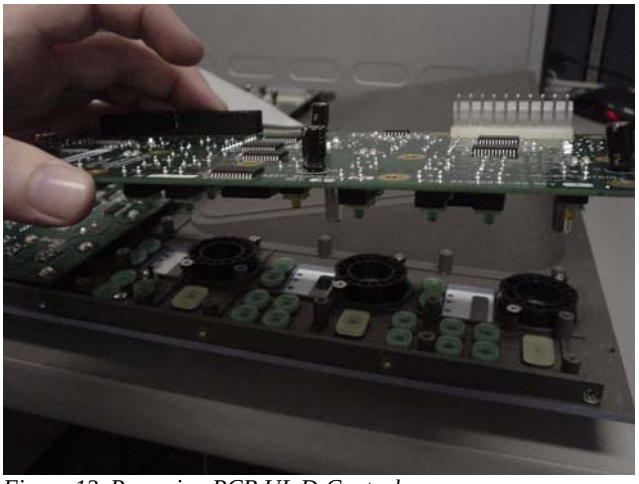


Figure 13. Removing PCB UL,D-Control.

15 Carefully disconnect the Scribble Display from the socket which is soldered to the PCB taking care not to damage any pins. See Figure 14.

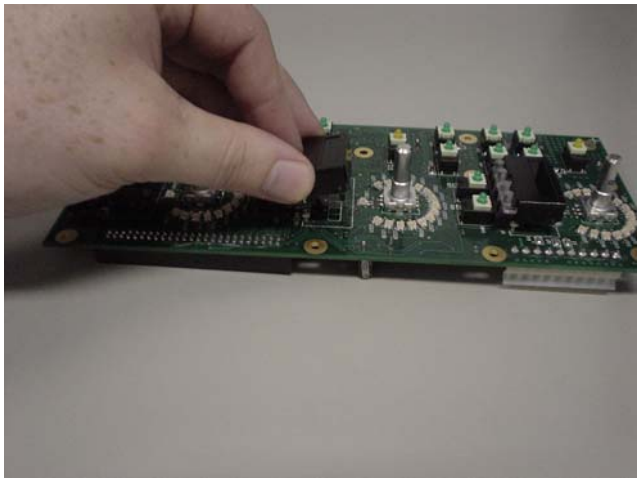


Figure 14. Disconnecting the Scribble Display.

To replace the D-Control Scribble Display:

16 Reseat the pins of the Scribble Display back into place on the Scribble Display socket and gently push down into position as shown in Figure 15.

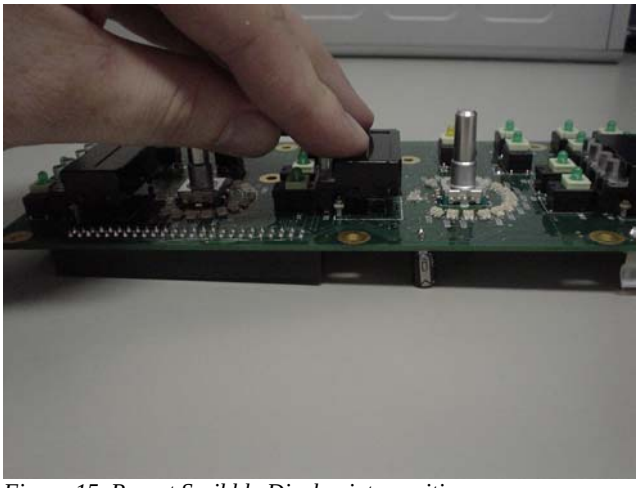


Figure 15. Reseat Scribble Display into position.

17 Taking care not to unsettle any of the Switch Caps from their positions, sit the PCB UL, D-Control back into position on the panel.

18 Using a #1 Philips screwdriver, secure the PCB UL, D-Control to the panel using the 14 type B screws.

19 Connect the 50 pin ribbon cable and attach the 3 Encoder Knobs back onto the 3 encoders.

20 On the front of the panel check that all Switch Caps are in place correctly.

21 While holding the EQ / Dynamics Panel above its position in the Main Unit connect both 10 pin power cables and also the 50 pin ribbon cable. Take note of orientation of connectors.

22 Carefully position the EQ / Dynamics Panel into position on the Main Unit and slide into place. The EQ / Dynamics Panel should be flush against the Monitor Panel.

23 Using a 5/64-inch Allen wrench, install the 8 type B screws indicated in Figure 7 that secure the EQ / Dynamics Panel to the Main Unit

24 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 5.

25 The left side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

Replacing a D-Control Encoder

The following procedure outlines the steps needed to remove and replace an Encoder on a D-Control Main or Fader Unit. If an Encoder is faulty, it will be necessary to isolate the panel it is mounted on, and then follow the specific procedure to remove that panel.

In this procedure the External Talkback Encoder on the Monitor Panel is removed and then replaced, as shown in Figure 1.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

Figure 1. External Talkback Encoder to be removed.

To remove a D-Control Encoder:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E screws indicated in Figure 2 that secure the top of the right side end plate to the Main Unit.

Figure 2. Removal of 15 right side end plate screws.

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.*

⚠ *If the Main Unit was installed in a configuration with a Fader Module to the right, then there will be a Spacer Plate attached to the right side of the Main Unit. This Spacer Plate needs to be removed before the other screws can be accessed (as described below).*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 3 that secure the bottom of the right side end plate to the Main Unit

Figure 3. Removal of 8 right side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 4 that secure the sides of the right side end plate to the Main Unit.

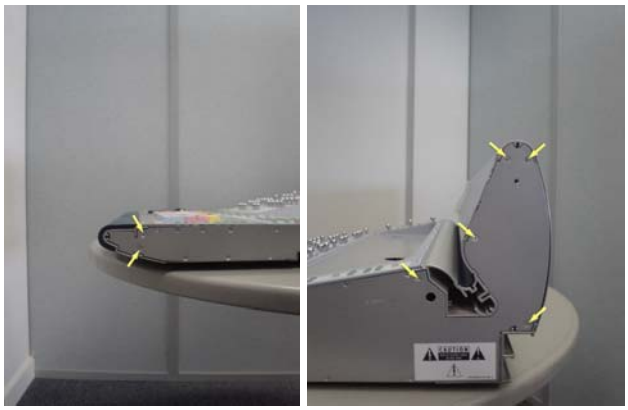


Figure 4. Removal of 7 right side end plate screws.

4 The right side end plate should now lift away from the Main Unit.

5 Using a 5/64-inch Allen wrench, remove the 12 type J screws indicated in Figure 5 that secure the Land Panel to the Main Unit.

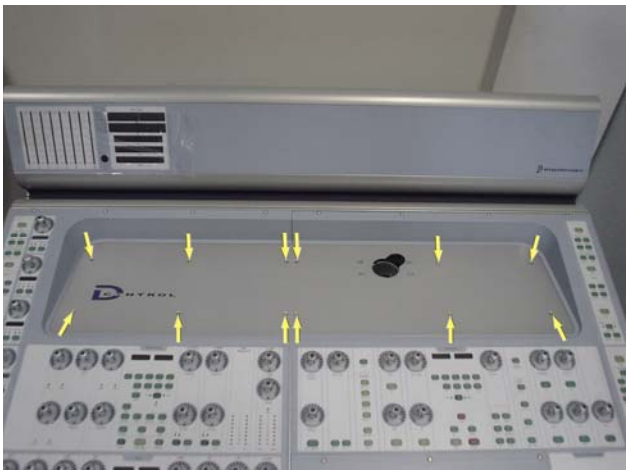


Figure 5. Land Panel screws.

6 The Land Panel should low lift away from the Main Unit as shown in Figure 6.

Figure 6. Lifting Land Panel away.

⚠ *Before you proceed, please note that the 3 screws on the top of the Panner Plate are different to the other screws used on the Monitor Panel.*

7 Using a 5/64-inch Allen wrench, remove the 11 type D screws indicated in Figure 7 that secure the Monitor Panel to the Main Unit.

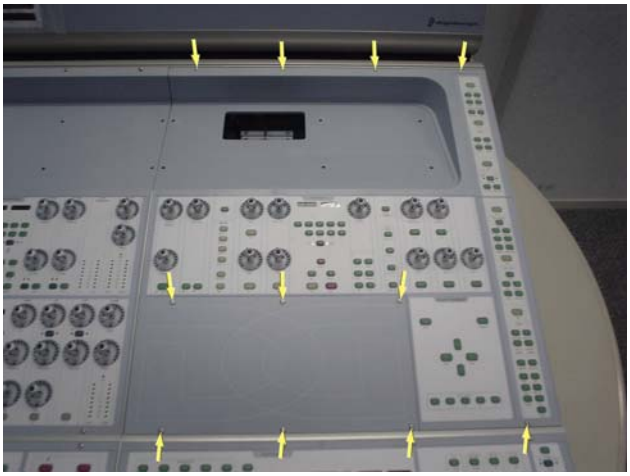


Figure7. Remove 11 screws from Monitor Panel.

8 Carefully lift the Panner Plate away from the Main Unit shown in Figure 8.

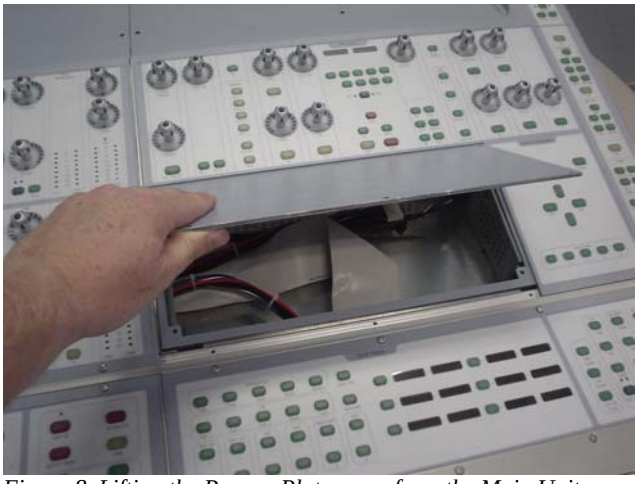


Figure 8. Lifting the Panner Plate away from the Main Unit.

9 While lifting the Monitor Panel up from the top disconnect the 10 pin power cable and the 50 pin ribbon cable as indicated in Figure 9. The Monitor Panel should now lift away from the Main Unit.

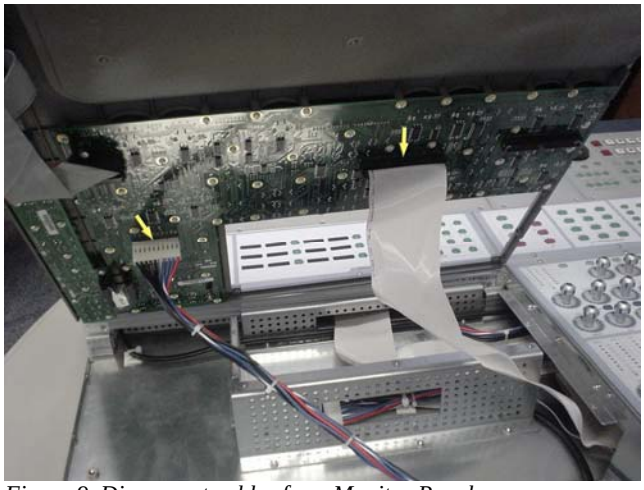


Figure 9. Disconnect cables from Monitor Panel.

10 Remove all Encoder Knobs from the PCB which has the External Talkback Encoder attached.

11 Carefully turn the Monitor Panel over to reveal the screws that secure the PCB to the Panel. As indicated in Figure 10 disconnect both 26 pin ribbon cables attached to the PCB which holds the External Talkback Encoder.

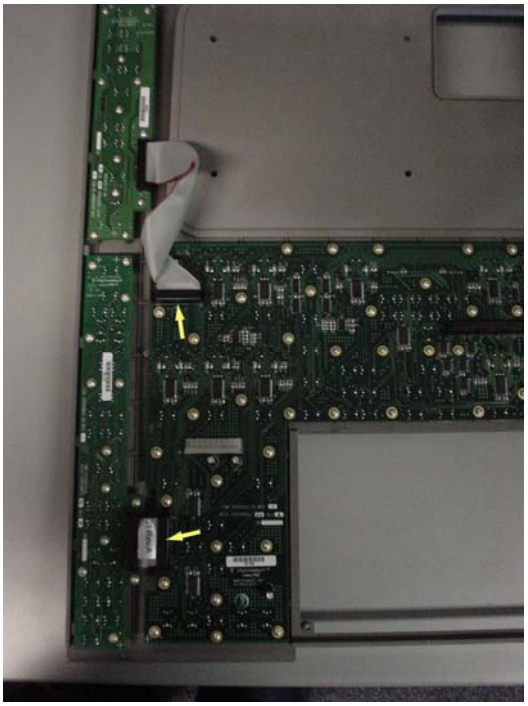


Figure 10. Disconnect both 26 pin ribbon cables.

12 Using a #1 Philips screwdriver, remove the 49 type B screws that secure the PCB to the Monitor Panel as shown in Figure 11.

Figure 11. Remove all 49 self tapping screws shown

13 Once all the screws are removed the PCB should now lift away from the Monitor Panel. As in Figure 12, lift the PCB upwards making sure not to unsettle any Switch Caps that sit loosely in the Monitor Panel.

Figure 12. Lift PCB away from Monitor Panel.

14 Locate the Encoder that needs to be removed. See Figure 13 for External Talkback Encoder location.

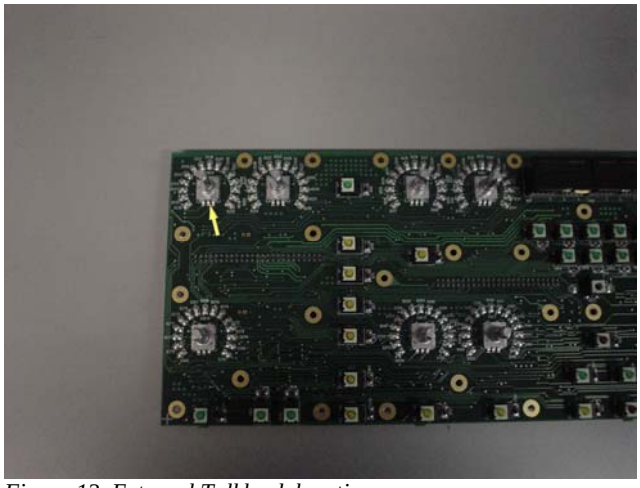


Figure 13. External Talkback location.

15 To remove the Encoder from the PCB, turn the board over so you can see the pins of the Encoder identified in Figure 14. Unsolder the 5 pins and also the 2 support pins of the Encoder and remove from the PCB.

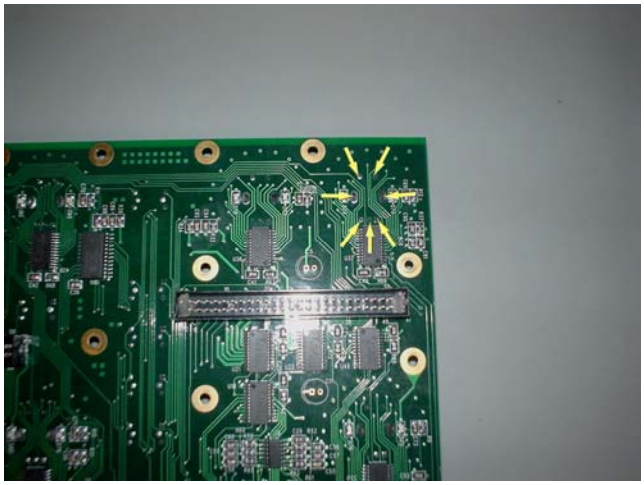


Figure 14. Unsolder Encoders 5 pins and the 2 support pins.

To replace a D-Control Encoder:

16 Position the Encoder in place and solder the 5 pins and 2 support pins to the PCB.

17 Check all Switch Caps are in place correctly and then carefully place the PCB back into position on the Monitor Panel. As in Figure 15 raise one end of the Monitor Panel up slightly so all the Switch Caps are sitting correctly in place.

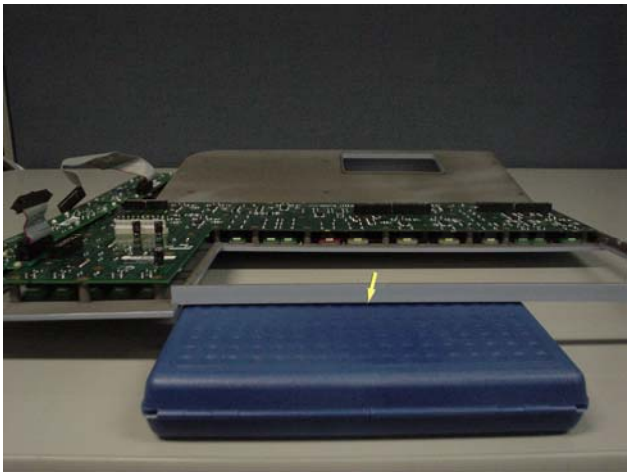


Figure 15. Raise Monitor Panel up slightly at one end.

18 Using a #1 Philips screwdriver, secure the PCB to the Monitor Panel using 49 type B screws and then check that all of the Switch Caps are still in place.

19 Connect both 26 pin ribbon cables shown in Figure 10.

20 Turn Monitor Panel over and plug back on the Encoder Knobs in the correct sequence.

21 Connect the 10 pin power cable into P5 on the Monitor Panel and the 50 pin ribbon cable into P1 and carefully place the Monitor Panel back into position on the Main Unit.

22 Place the Panner Plate back into position in the Main Unit.

23 Using a 5/64-inch Allen wrench, secure the blank Panner Plate and the Monitor Panel to the Main Unit with the 11 type D screws.

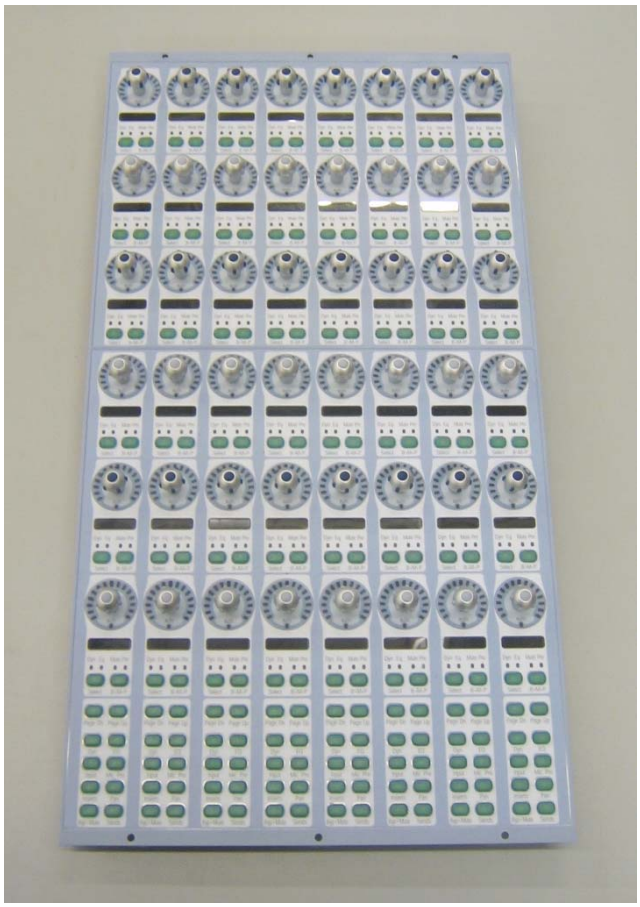
24 Position the Land Panel in place and secure to the Main Unit using the screws indicated in Figure 5.

25 The right side end plate can now be secured to the Main Unit. Care must be taken that the correct screws are used.

D-Control Fader Unit

Replacing the D-Control Fader Unit Left Encoder Panel

The following procedure outlines the steps needed to remove and replace the Left Encoder Panel on the D-Control Fader Unit. This panel is located in the upper left quadrant of the Fader Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit Left Encoder Panel:

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

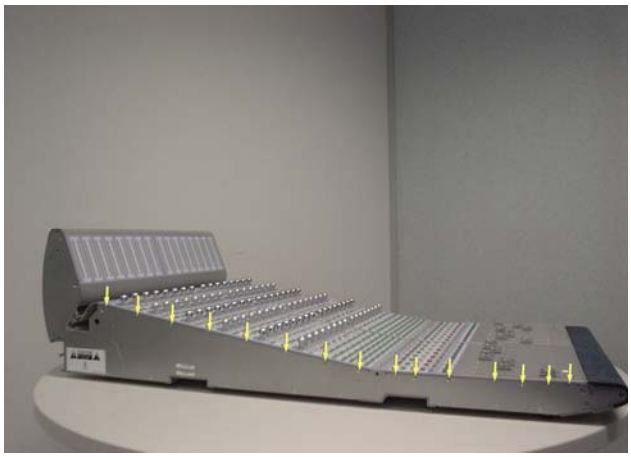


Figure 1. Removal of 15 left side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Fader Unit

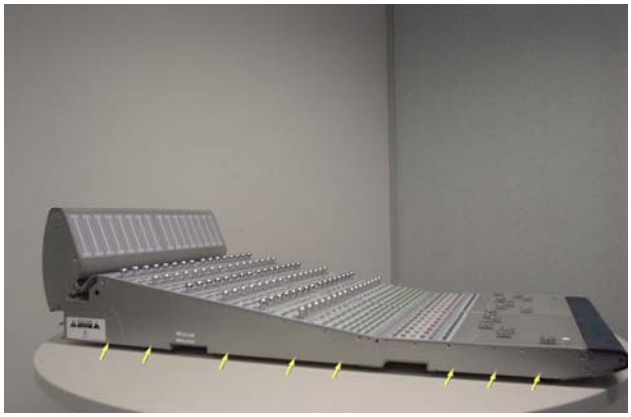


Figure 2. Removal of 8 left side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Fader Unit.

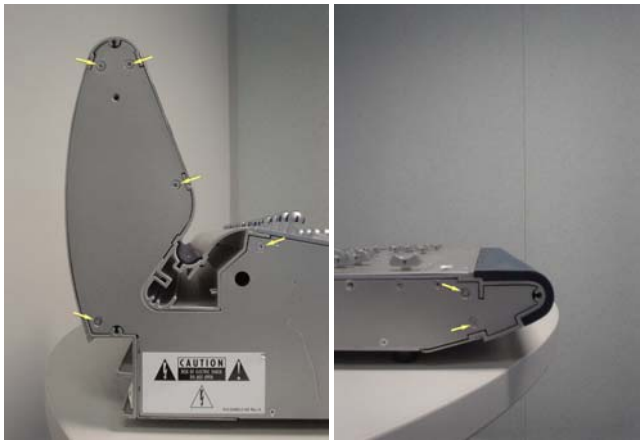


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Fader Unit.

5 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 4 that secure the Left Encoder Panel to the Fader Unit.

Figure 4. Left Encoder Panel screws.

6 Carefully move the Left Encoder Panel outwards as indicated in Figure 5.

Figure 5. Moving Left Encoder Panel outwards.

7 While lifting the Left Encoder Panel upwards from the top carefully disconnect both 10 pin power cables and also the three 50 pin ribbon cables as indicated in Figure 6. Make note of cables and orientation.

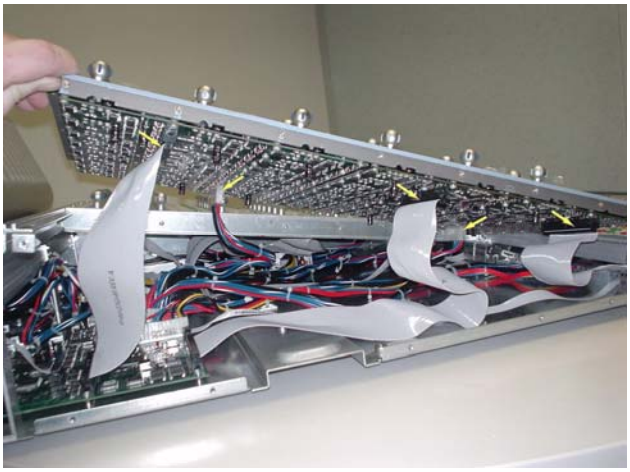


Figure 6. Disconnecting Left Encoder Panel cables.

8 The Left Encoder Panel should now lift away from the Fader Unit.

To replace the D-Control Fader Unit Left Encoder Panel:

9 While holding the Left Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

10 Carefully position the Left Encoder Panel into position on the Fader Unit and slide into place. The Left Encoder Panel should be flush against the Right Encoder Panel located in the upper right quadrant of the Fader Unit.

11 Using a 5/64-inch Allen wrench, install the 6 type D screws indicated in Figure 4 that secure the Left Encoder Panel to the Fader Unit.

12 The left side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Left Fader Panel

The following procedure outlines the steps needed to remove and replace the Left Fader Panel on the D-Control Fader Unit. This panel is located in the lower left quadrant of the Fader Unit.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

To remove the D-Control Fader Unit Left Fader Panel:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

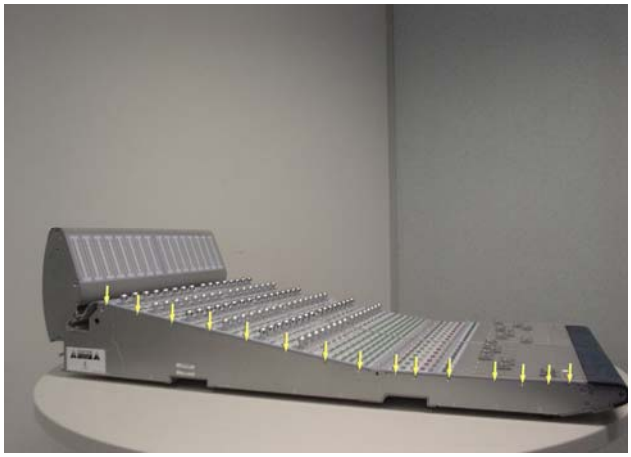


Figure 1. Removal of 15 left side end plate screws

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Fader Unit

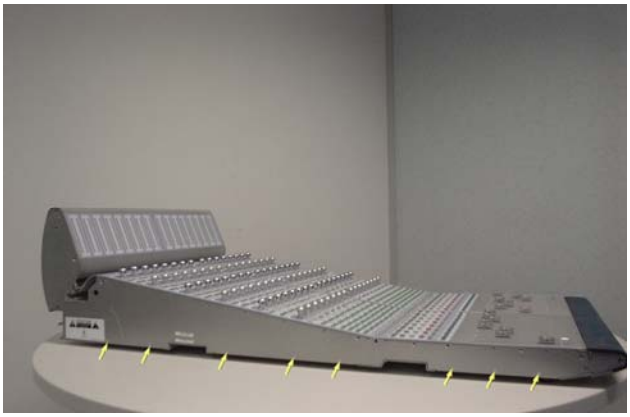


Figure 2. Removal of 8 left side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Fader Unit.

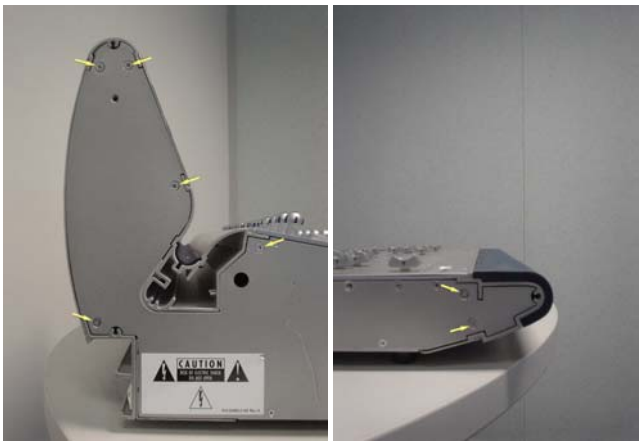


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Fader Unit.

⚠ *Before you proceed, please note that there are 2 different types of screws used to secure the Left Fader Panel to the Fader Unit.*

5 Using a 5/64-inch Allen wrench, remove the 6 screws indicated in Figure 4 that secure the Left Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

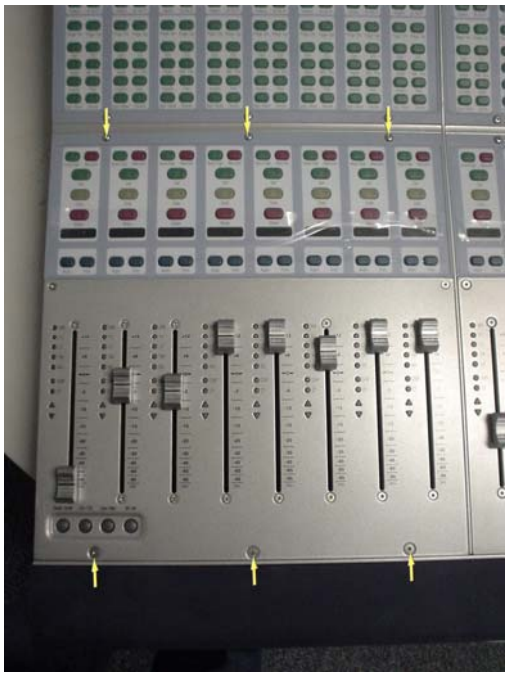


Figure 4. Left Fader Panel screws.

6 While lifting the Left Fader Panel upwards from the top carefully disconnect the 10 pin power cable and also the 50 pin ribbon cable as indicated in Figure 5.

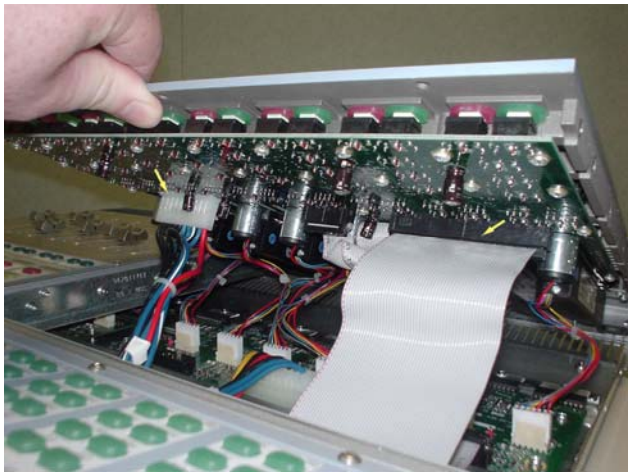


Figure 5. Disconnecting Left Fader Panel cables.

7 While lifting the Left Fader Panel upwards from the top carefully disconnect the eight 6 pin fader cables as indicated in Figure 6.

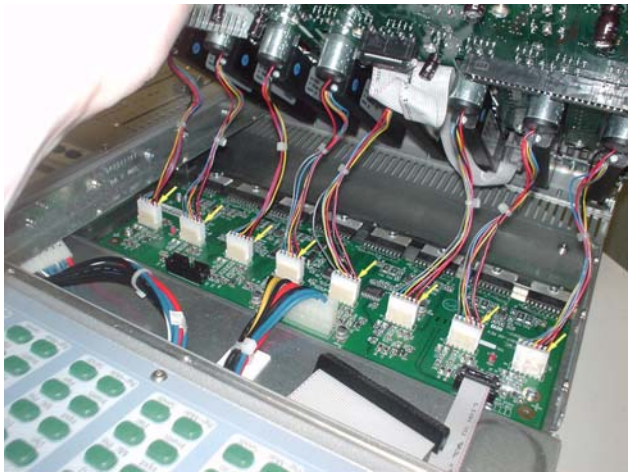


Figure 6. Disconnecting the 8 fader cables.

8 The Left Fader Panel should now lift away from the Fader Unit as indicated in Figure 7.

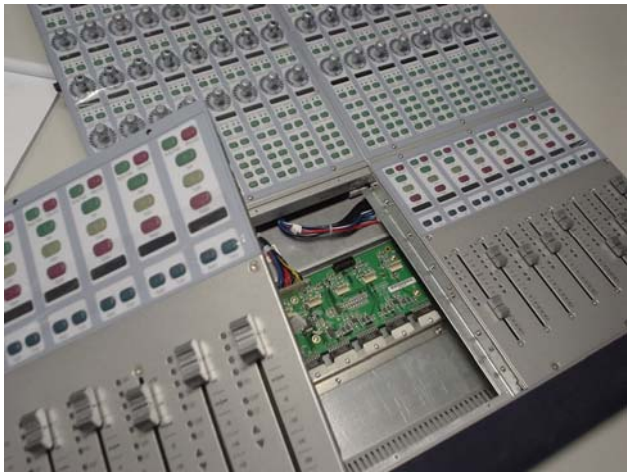


Figure 7. Lifting away the Left Fader Panel.

To replace the D-Control Fader Unit Left Fader Panel:

9 While holding the Left Fader Panel above it's position in the Fader Unit carefully connect the eight 6 pin fader cables, 10 pin power cable and the 50 pin ribbon cable. Take note of orientation of connectors

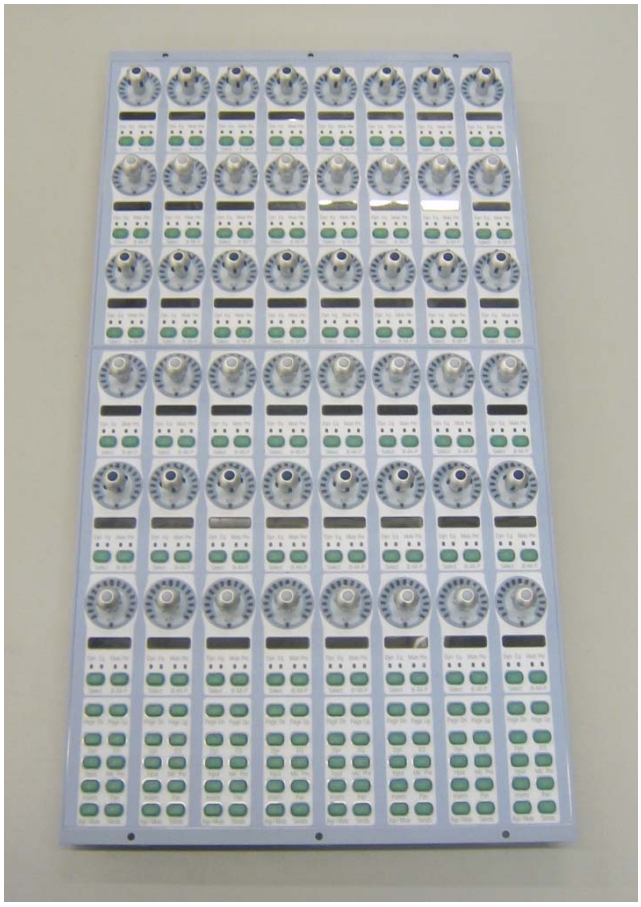
10 Carefully position the Left Fader Panel into position on the Fader Unit and sit into place. The Left Fader Panel should be flush against the Right Fader Panel located in the lower right quadrant of the Fader Unit.

11 Using a 5/64-inch Allen wrench, install the 6 screws indicated in Figure 4 that secure the Left Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

12 The left side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Right Encoder Panel

The following procedure outlines the steps needed to remove and replace the Right Encoder Panel on the D-Control Fader Unit. This panel is located in the upper right quadrant of the Fader Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit Right Encoder Panel:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

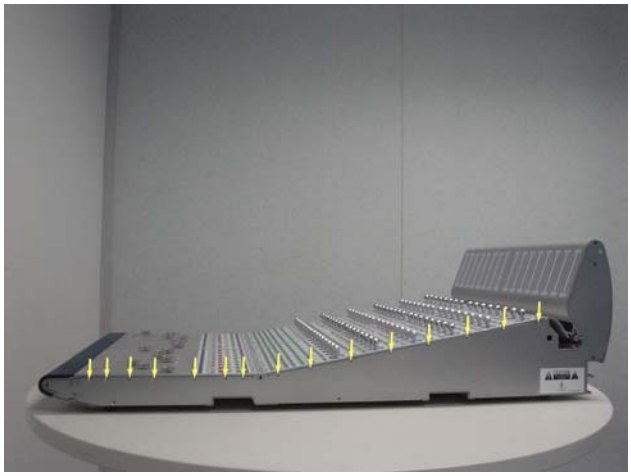


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

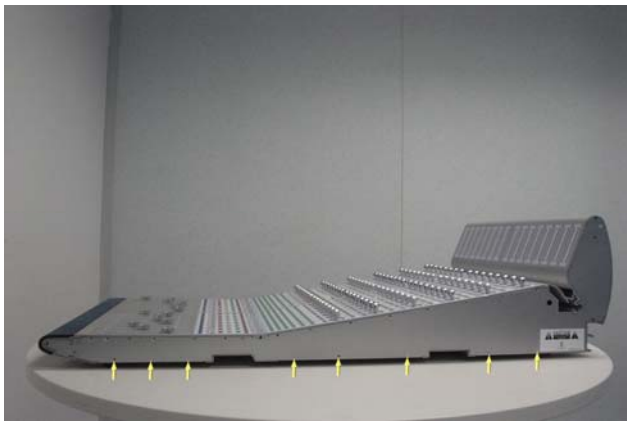


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

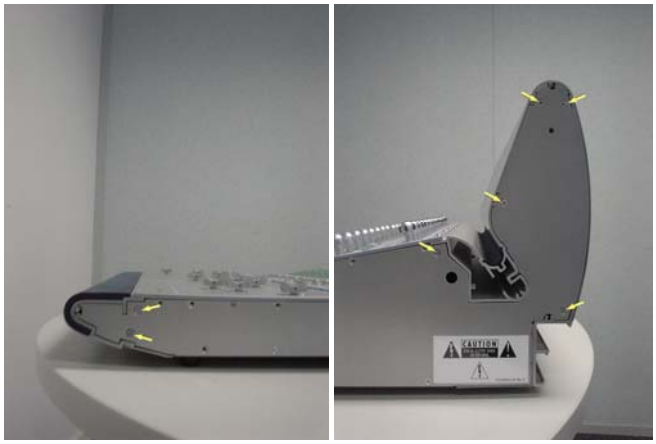


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

5 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit.

Figure 4. Right Encoder Panel screws.

6 Carefully move the Right Encoder Panel outwards as indicated in Figure 5.

Figure 5. Moving Right Encoder Panel outwards.

7 While lifting the Right Encoder Panel upwards from the top carefully disconnect both 10 pin power cables and also the three 50 pin ribbon cables as indicated in Figure 6. Make note of cables and orientation.

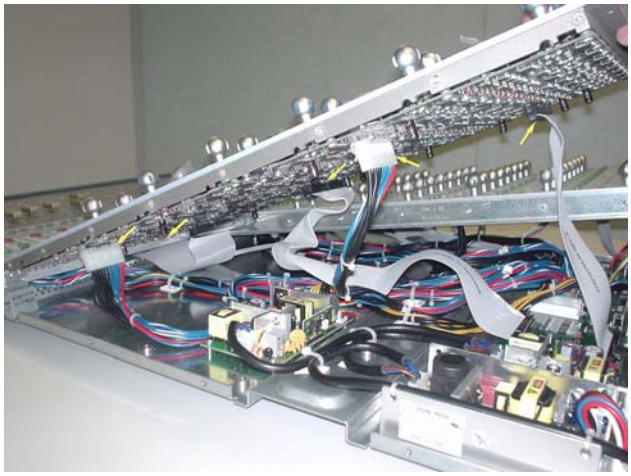


Figure 6. Disconnecting Right Encoder Panel cables.

8 The Right Encoder Panel should now lift away from the Fader Unit.

To replace the D-Control Fader Unit Right Encoder Panel:

9 While holding the Right Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

10 Carefully position the Right Encoder Panel into position on the Fader Unit and slide into place. The Right Encoder Panel should be flush against the Left Encoder Panel located in the upper left quadrant of the Fader Unit.

11 Using a 5/64-inch Allen wrench, install the 6 type D screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit.

12 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Right Fader Panel

The following procedure outlines the steps needed to remove and replace the Right Fader Panel on the D-Control Fader Unit. This panel is located in the lower right quadrant of the Fader Unit.

Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit Right Fader Panel:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

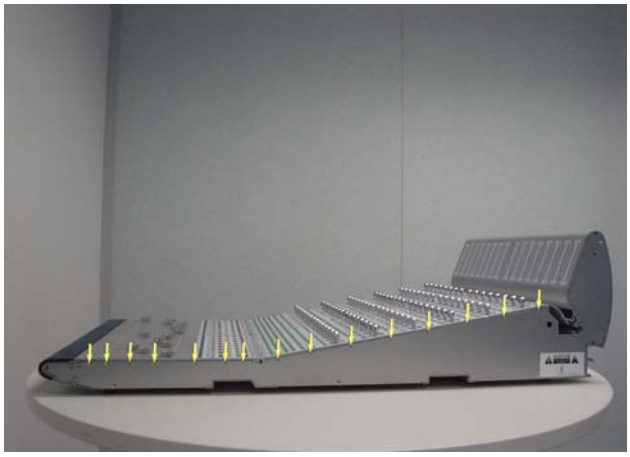


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

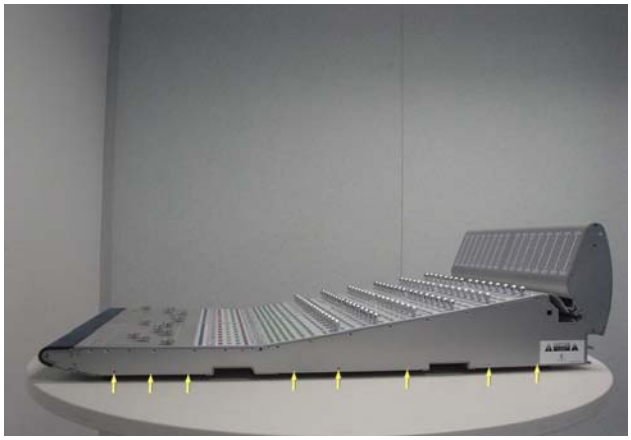


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

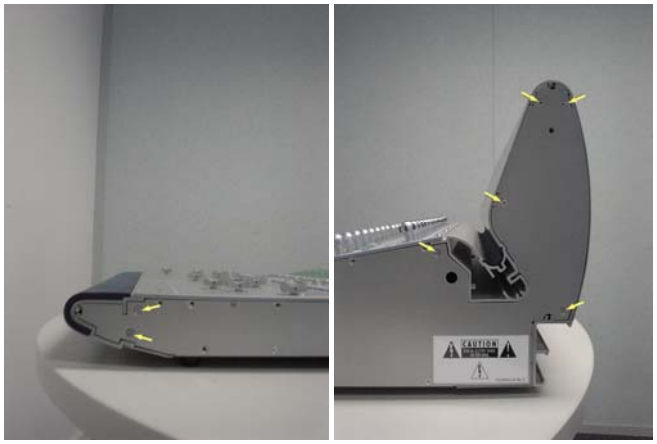


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

> ⚠ *Before you proceed, please note that there are 2 different types of screws used to secure the right Fader Panel to the Fader Unit.*

5 Using a 5/64-inch Allen wrench, remove the 6 screws indicated in Figure 4 that secure the Right Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

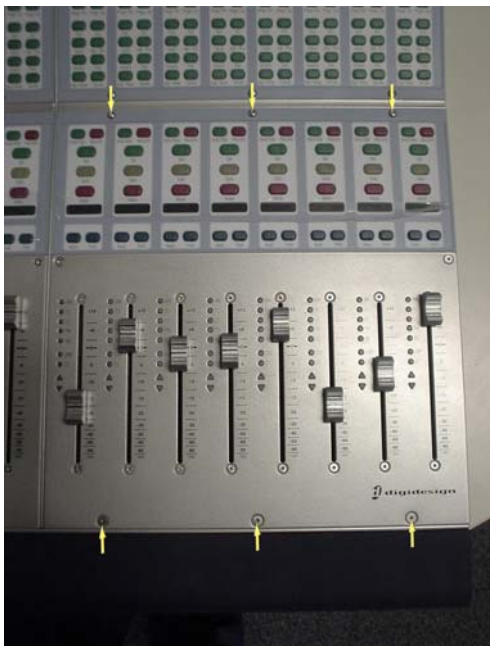


Figure 4. Right Fader Panel screws.

6 While lifting the Right Fader Panel upwards from the top carefully disconnect the 10 pin power cable and also the 50 pin ribbon cable as indicated in Figure 5.

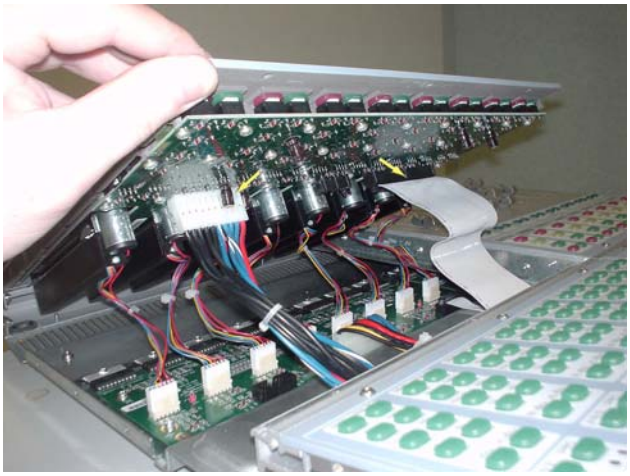


Figure 5. Disconnecting Right Fader Panel cables.

7 While lifting the Right Fader Panel upwards from the top carefully disconnect the eight 6 pin fader cables as indicated in Figure 6.

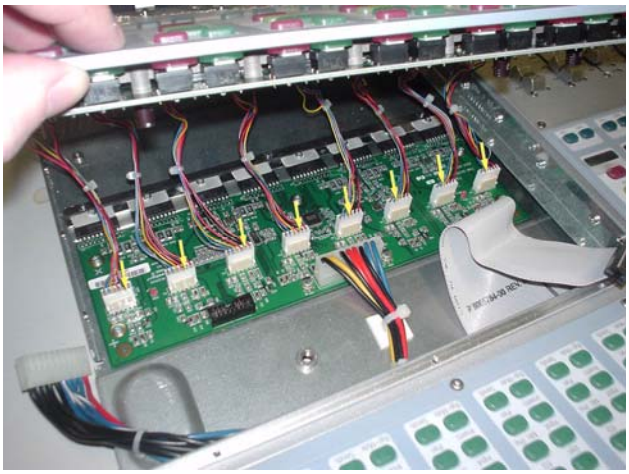


Figure 6. Disconnecting the 8 fader cables.

8 The Right Fader Panel should now lift away from the Fader Unit as indicated in Figure 7.

Figure 7. Lifting away t

To replace the D-Control Fader Unit Right Fader Panel:

9 While holding the Right Fader Panel above it's position in the Fader Unit carefully connect the eight 6 pin fader cables, 10 pin power cable and the 50 pin ribbon cable. Take note of orientation of connectors

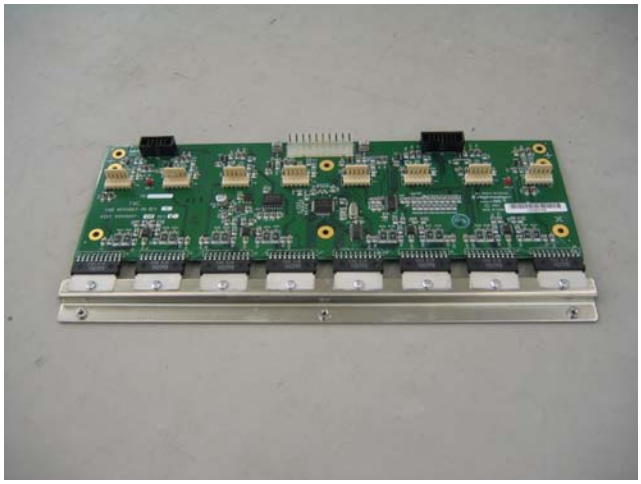
10 Carefully position the Right Fader Panel into position on the Fader Unit and sit into place. The Right Fader Panel should be flush against the Left Fader Panel located in the lower left quadrant of the Fader Unit.

11 Using a 5/64-inch Allen wrench, install the 6 screws indicated in Figure 4 that secure the Right Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

12 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Left Fader Motor Control Board

The following procedure outlines the steps needed to remove and replace the Left FMC PCB on the D-Control Fader Unit.



⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

To remove the D-Control Fader Unit Left FMC PCB:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

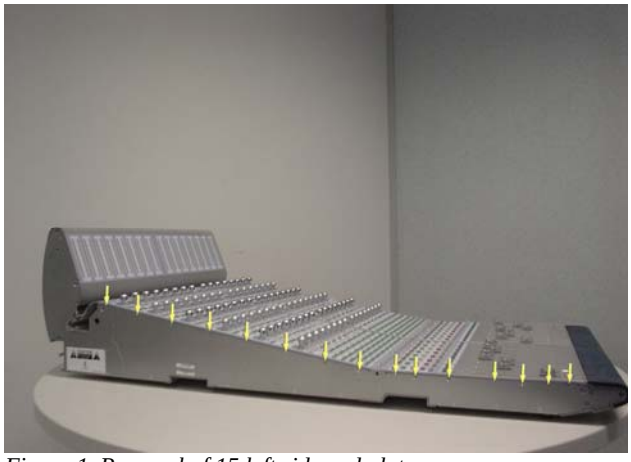


Figure 1. Removal of 15 left side end plate screws

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Fader Unit

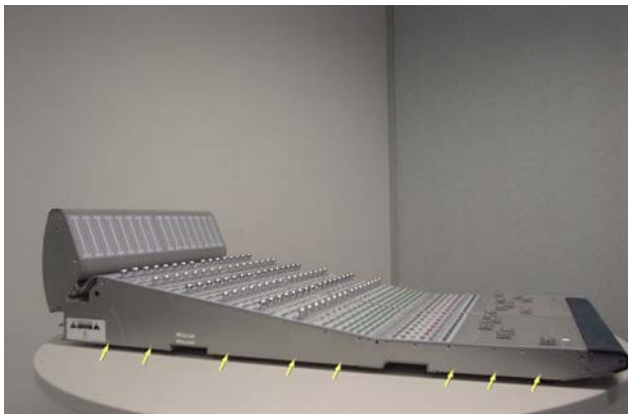


Figure 2. Removal of 8 left side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Fader Unit.

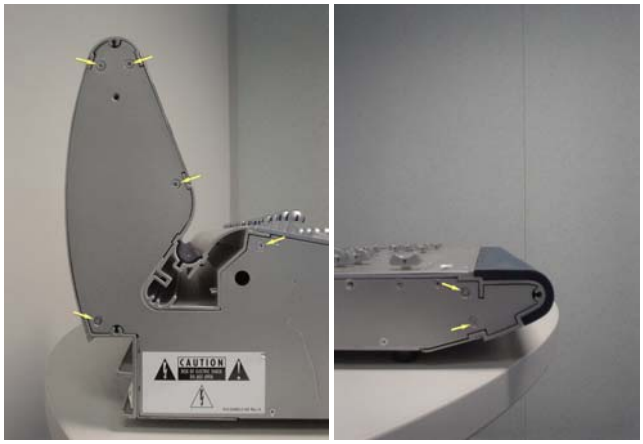


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Fader Unit.

⚠ *Before you proceed, please note that there are 2 different types of screws used to secure the Left Fader Panel to the Fader Unit.*

5 Using a 5/64-inch Allen wrench, remove the 6 screws indicated in Figure 4 that secure the Left Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

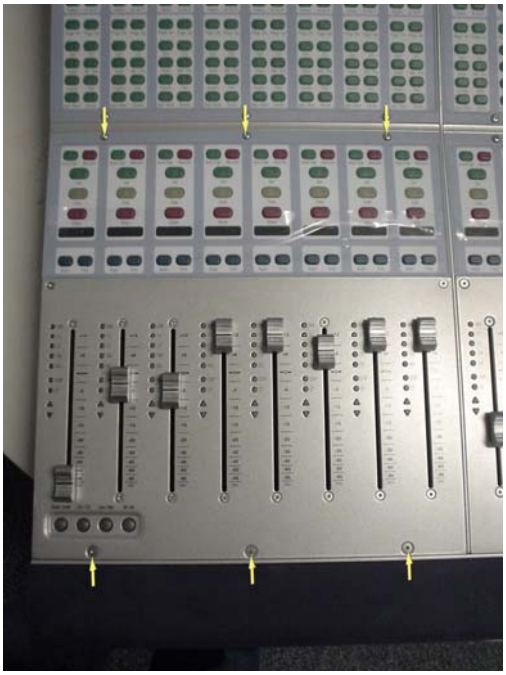


Figure 4. Left Fader Panel screws.

6 While lifting the Left Fader Panel upwards from the top carefully disconnect the 10 pin power cable and also the 50 pin ribbon cable as indicated in Figure 5.

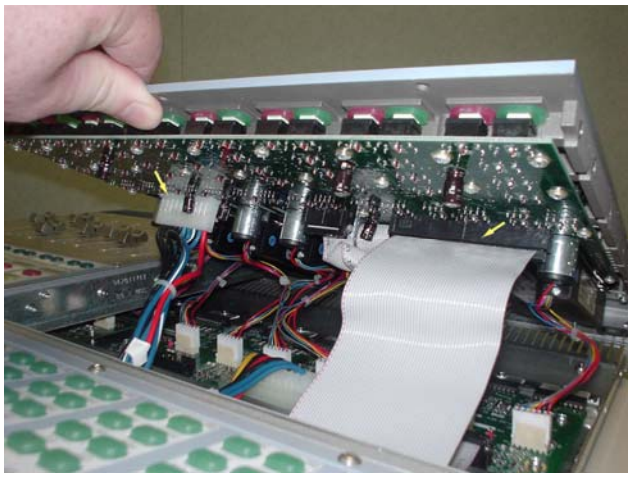


Figure 5. Disconnecting Left Fader Panel cables.

7 While lifting the Left Fader Panel upwards from the top carefully disconnect the eight 6 pin fader cables as indicated in Figure 6.

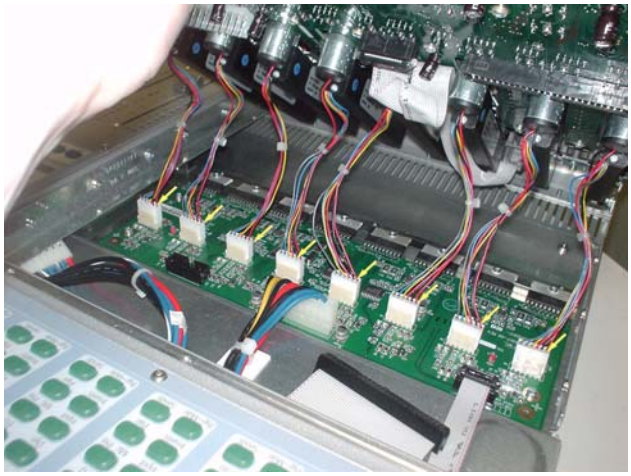


Figure 6. Disconnecting the 8 fader cables.

8 The Left Fader Panel should now lift away from the Fader Unit as indicated in Figure 7.

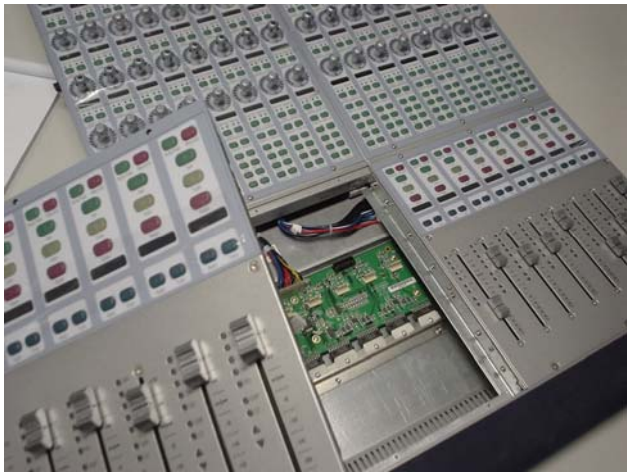


Figure 7. Lifting away the Left Fader Panel.

9 Carefully disconnect the 10 pin power cable and also the 10 pin ribbon cable from the Left FMC PCB as indicated in Figure 8.

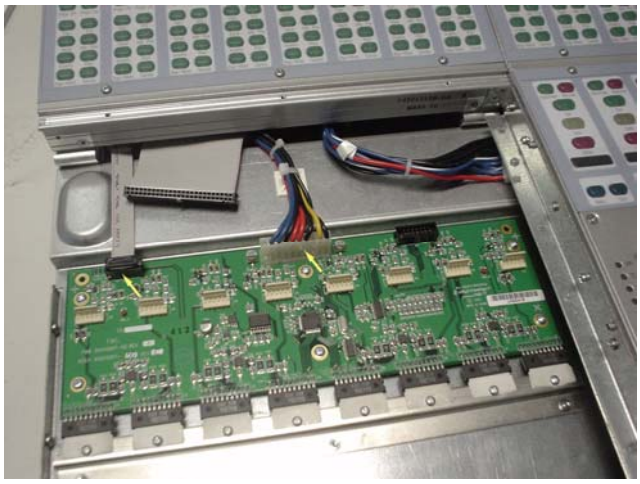


Figure 8. Disconnecting the Left FMC PCB cables.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

10 Carefully position the Fader Unit on the table so that the front of the Fader Unit is hanging over the edge exposing the 3 Philips screw heads that secures the Left FMC PCB to the Fader Unit as indicated in Figure 9.

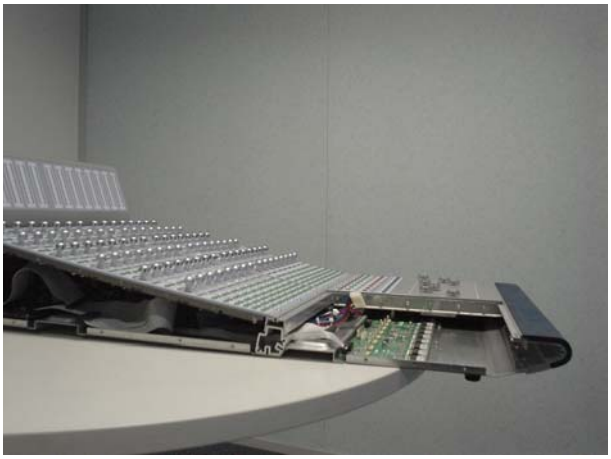


Figure 9. Position Fader Unit on table.

11 Using a #1 Philips screwdriver, remove the 3 type E screws located on the bottom panel of the Fader Unit that secures the Left FMC PCB to the Fader Unit. See Figure 10.

Figure 10. Removing 3 screws from bottom panel.

12 Using a #1 Philips screwdriver, looking down on the Fader Unit, remove the 6 type B screws that secure the Left FMC PCB to the Fader Unit. See Figure 11.

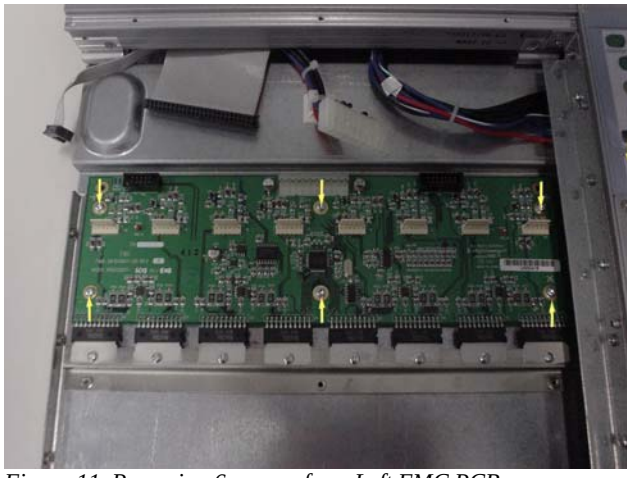


Figure 11. Removing 6 screws from Left FMC PCB.

13 The Left FMC PCB should now lift away from the Fader Unit. See Figure 12.

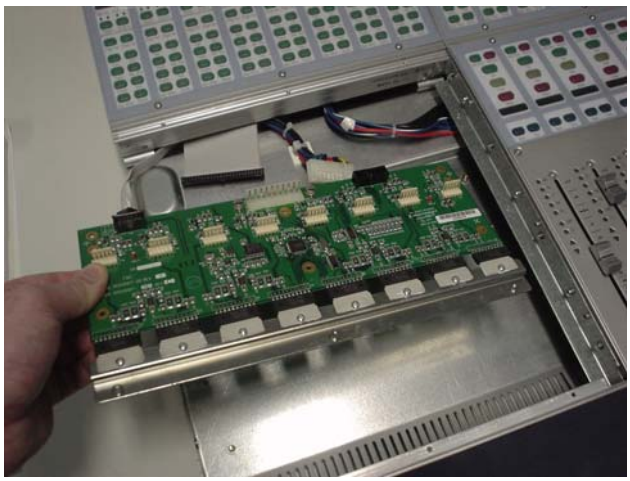


Figure 12. Removing the Left FMC PCB.

To replace the D-Control Fader Unit Left FMC PCB:

Before you proceed, please note that you may need to add heat sink compound to the heat sink on the Left FMC PCB as shown in Figure 13.

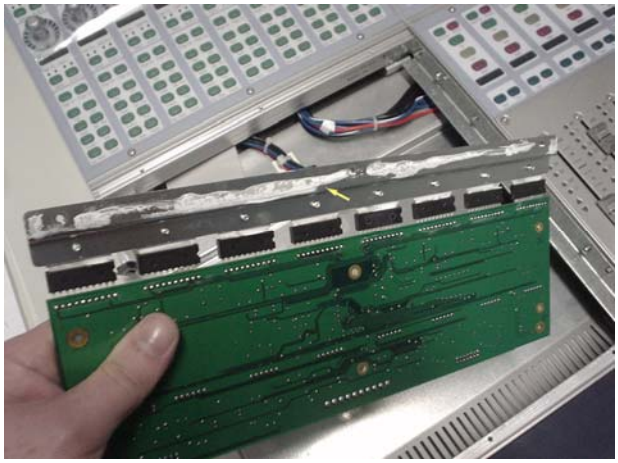


Figure 13. Applying heat sink compound.

14 Apply heat sink compound to the heat sink bar. Carefully place the Left FMC PCB into position in the Fader Unit and from the top using a #1 Philips screwdriver, secure with 6 type B screws.

15 Using a #1 Philips screwdriver, secure the Left FMC PCB to the Fader Unit with 3 type E screws underneath the Fader Unit.

16 Connect the 10 Pin ribbon cable and secure each side with hot glue. Also connect the 10 Pin power cable.

17 While holding the Left Fader Panel above it's position in the Fader Unit carefully connect the eight 6 pin fader cables, 10 pin power cable and the 50 pin ribbon cable. Take note of orientation of connectors

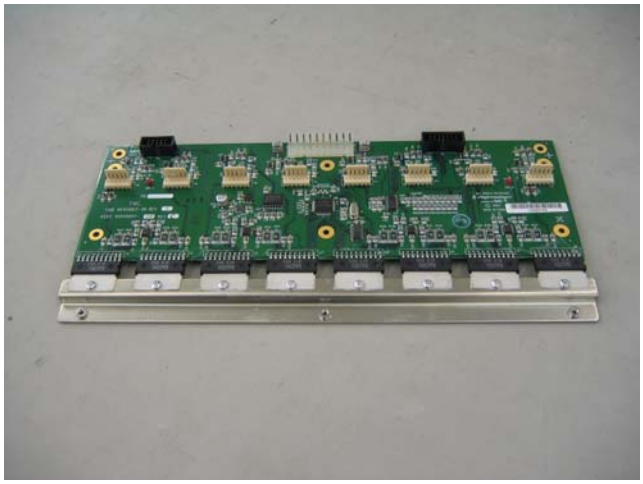
18 Carefully position the Left Fader Panel into position on the Fader Unit and sit into place. The Left Fader Panel should be flush against the Right Fader Panel located in the lower right quadrant of the Fader Unit.

19 Using a 5/64-inch Allen wrench, install the 6 (top row uses type D, bottom row uses type C) screws indicated in Figure 4 that secure the Left Fader Panel to the Fader Unit.

20 The left side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Right Fader Motor Control Board

The following procedure outlines the steps needed to remove and replace the Right FMC PCB on the D-Control Fader Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit Right FMC PCB:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

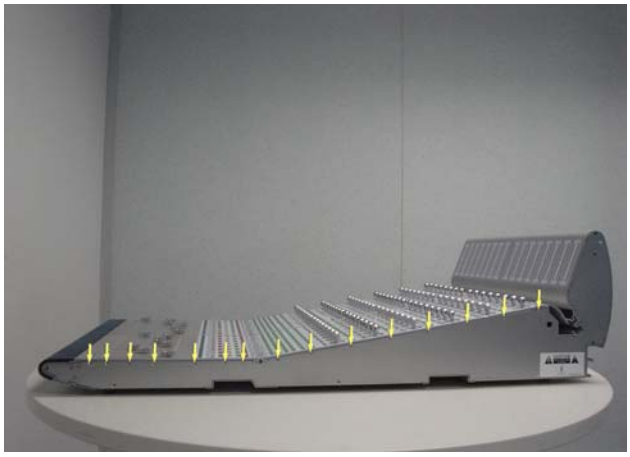


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

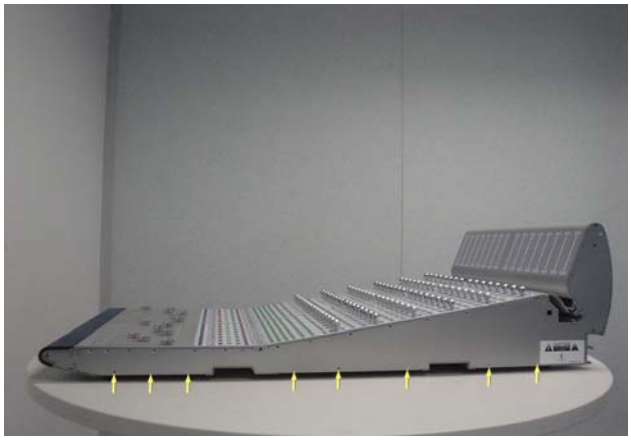


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

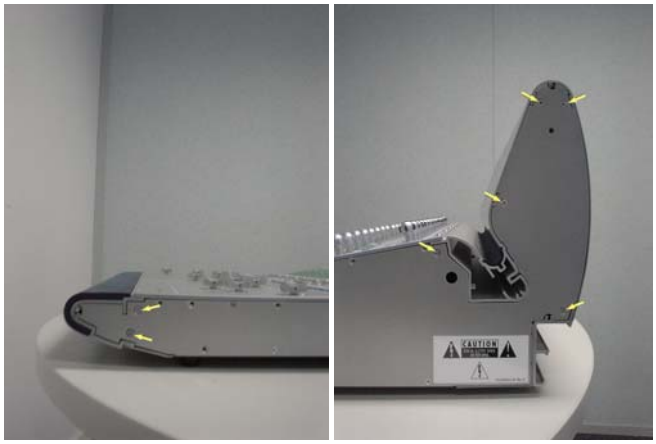


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

> ⚠ *Before you proceed, please note that there are 2 different types of screws used to secure the right Fader Panel to the Fader Unit.*

5 Using a 5/64-inch Allen wrench, remove the 6 screws indicated in Figure 4 that secure the Right Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

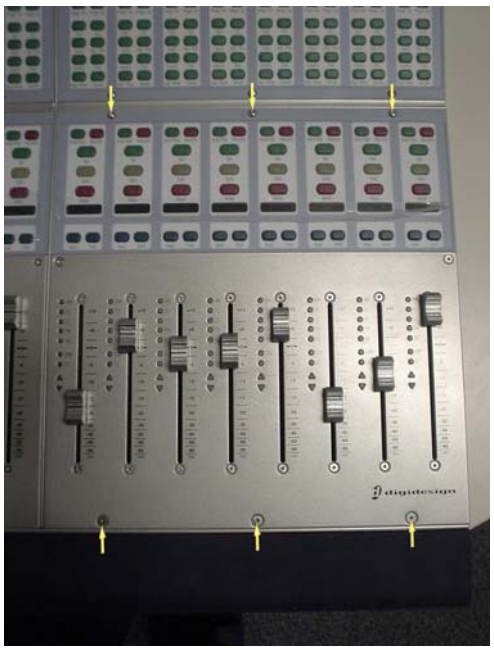


Figure 4. Right Fader Panel screws.

6 While lifting the Right Fader Panel upwards from the top carefully disconnect the 10 pin power cable and also the 50 pin ribbon cable as indicated in Figure 5.

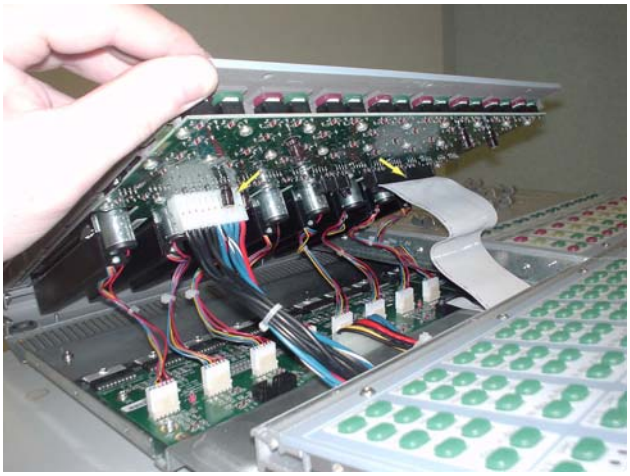


Figure 5. Disconnecting Right Fader Panel cables.

7 While lifting the Right Fader Panel upwards from the top carefully disconnect the eight 6 pin fader cables as indicated in Figure 6.

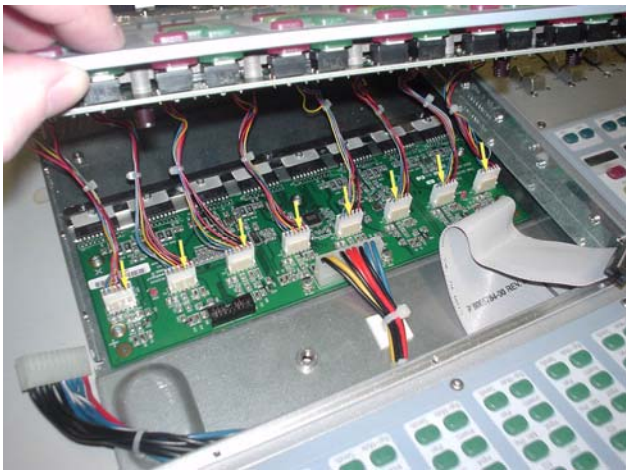


Figure 6. Disconnecting the 8 fader cables.

8 The Right Fader Panel should now lift away from the Fader Unit as indicated in Figure 7.

Figure 7. Lifting away the Right Fader Panel.

9 Carefully disconnect the 10 pin power cable and also the 10 pin ribbon cable from the Right FMC PCB as indicated in Figure 8.

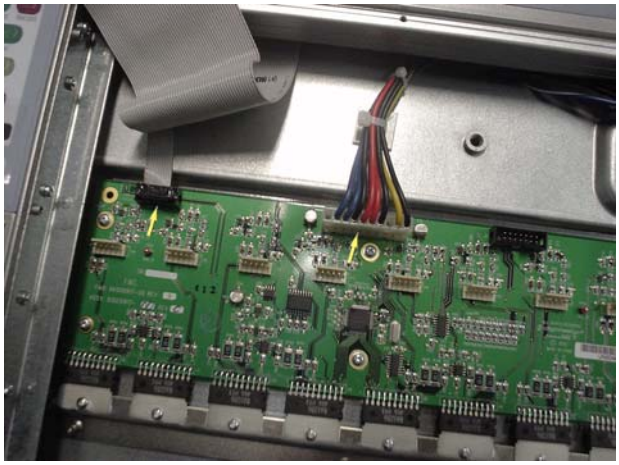


Figure 8. Disconnecting the Right FMC PCB cables.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

10 Carefully position the Fader Unit on the table so that the front of the Fader Unit is hanging over the edge exposing the 3 Philips screw heads that secures the Right FMC PCB to the Fader Unit as indicated in Figure 9.

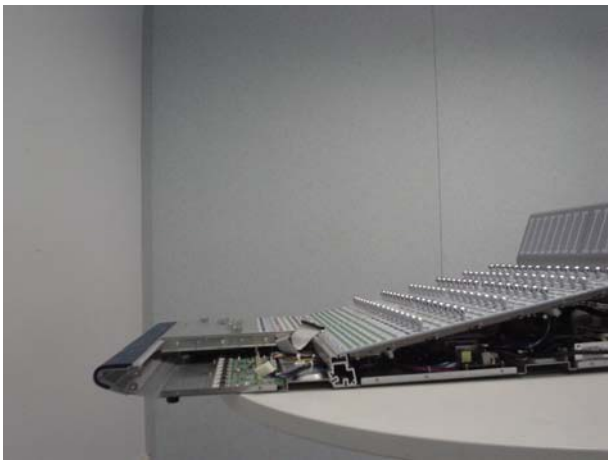


Figure 9. Position Fader Unit on table.

11 Using a #1 Philips screwdriver, remove the 3 type E screws located on the bottom panel of the Fader Unit that secures the Right FMC PCB to the Fader Unit. See Figure 10.

Figure 10. Removing 3 screws from bottom panel.

12 Using a #1 Philips screwdriver, looking down on the Fader Unit, remove the 6 type B screws that secure the Right FMC PCB to the Fader Unit. See Figure 11.

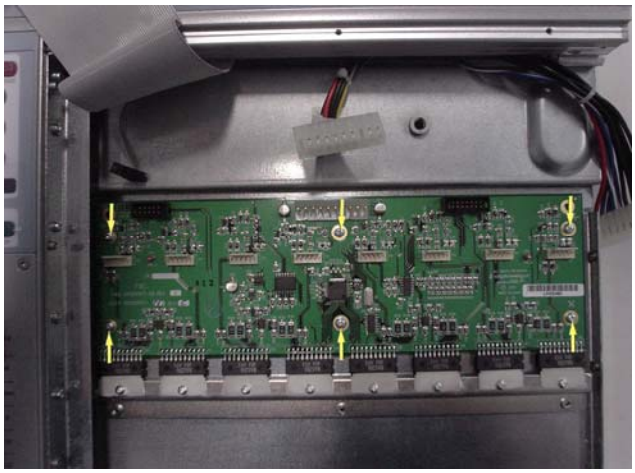


Figure 11. Removing 6 screws from Right FMC PCB.

13 The Right FMC PCB should now lift away from the Fader Unit. See Figure 12.

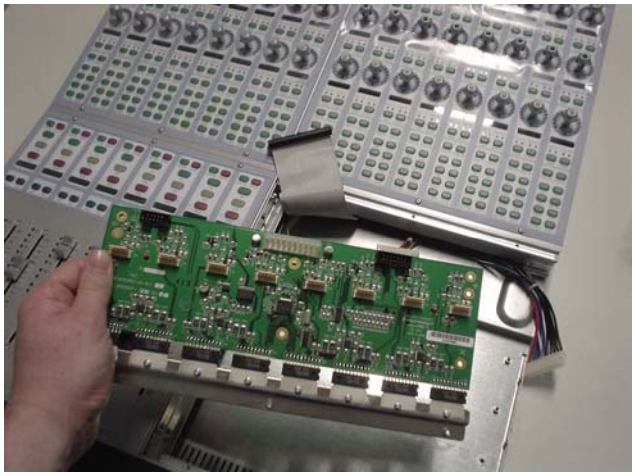


Figure 12. Removing the Right FMC PCB.

To replace the D-Control Fader Unit Right FMC PCB:

⚠ *Before you proceed, please note that you may need to add heat sink compound to the heat sink on the Right FMC PCB as shown in Figure 13.*

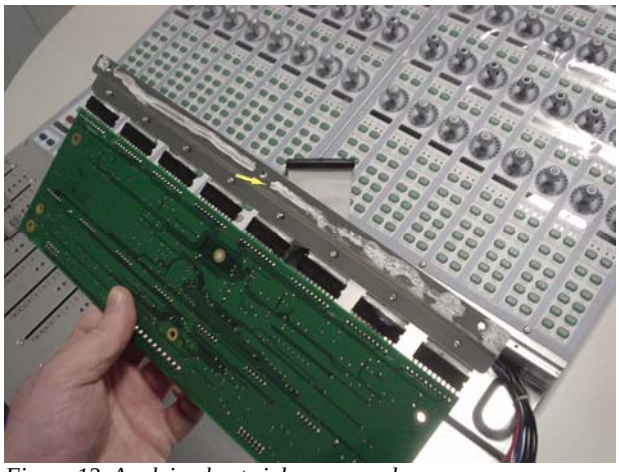


Figure 13. Applying heat sink compound.

14 Apply heat sink compound to the heat sink bar. Carefully place the Right FMC PCB into position in the Fader Unit and from the top using a #1 Philips screwdriver, secure with 6 type B screws.

15 Using a #1 Philips screwdriver, secure the Right FMC PCB to the Fader Unit with 3 type E screws underneath the Fader Unit.

16 Connect the 10 Pin ribbon cable and secure each side with hot glue. Also connect the 10 Pin power cable.

17 While holding the Right Fader Panel above it's position in the Fader Unit carefully connect the eight 6 pin fader cables, 10 pin power cable and the 50 pin ribbon cable. Take note of orientation of connectors

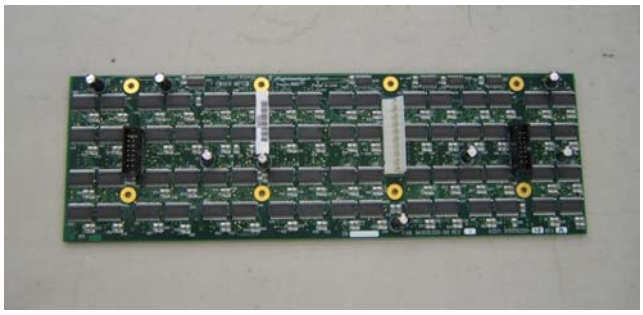
18 Carefully position the Right Fader Panel into position on the Fader Unit and sit into place. The Right Fader Panel should be flush against the Left Fader Panel located in the lower left quadrant of the Fader Unit.

19 Using a 5/64-inch Allen wrench, install the 6 screws indicated in Figure 4 that secure the Right Fader Panel to the Fader Unit (top row uses type D, bottom row uses type C).

20 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Meter Bridge 1-8 Board

The following procedure outlines the steps needed to remove and replace the Meter Bridge 1–8 PCB on the D-Control Fader Unit.



If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Fader Unit Meter Bridge 1–8 PCB:

1 From the back of the Fader Unit, using a 5/64-inch Allen wrench, remove the 13 type D screws indicated in Figure 1 that secure the back panel to the Fader Unit. The back panel should now lift away from the Fader Unit.

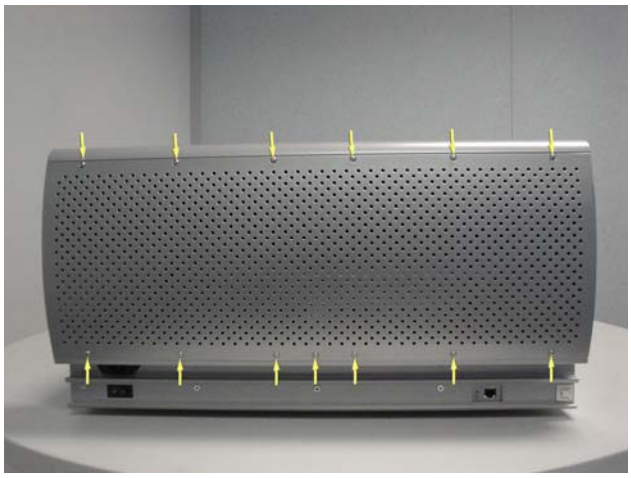


Figure 1. Back panel screws.

2 Carefully disconnect the 10 pin power cable and both 10 pin data cables from the Meter Bridge 1-8 PCB shown in Figure 2.

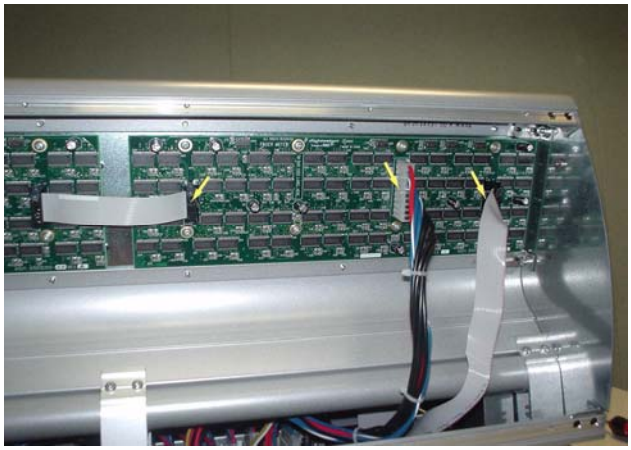


Figure 2. Disconnect cables.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

3 Using a #1 Philips screwdriver, remove the 8 type B screws that secure the Meter Bridge 1-8 PCB to the Fader Unit as indicated in Figure 3.

Figure 3. Removing 8 screws.

4 As shown in Figure 4 the Meter Bridge 1-8 PCB should now lift away from the Fader Unit.

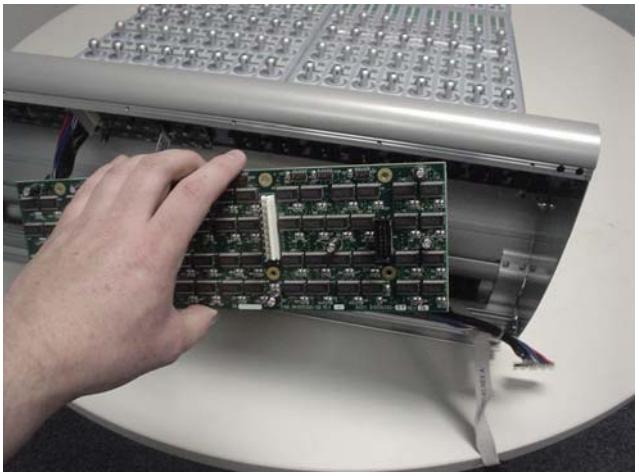


Figure 4. Removing Meter Bridge 1-8 PCB.

To replace the D-Control Fader Unit Meter Bridge 1-8 PCB:

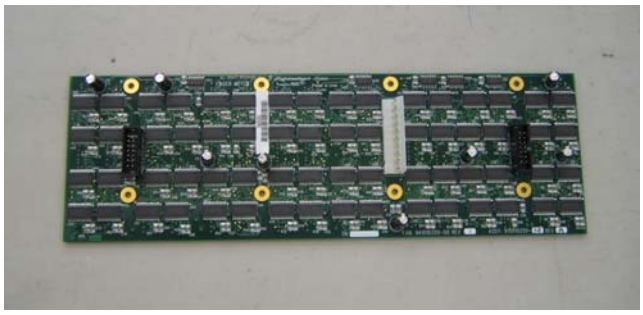
5 Using a #1 Philips screwdriver, carefully secure the Meter Bridge 1-8 PCB to the Fader Unit using the 8 type B screws.

6 Taking note of orientation carefully connect the 10 pin power cable, and both 10 pin data cables to the Meter Bridge 1-8 PCB. Both 10 pin data cables should also be scured with hot glue.

7 Using a 5/64-inch Allen wrench, secure the back panel to the Fader Unit with 13 type D screws. Only fully tighten the screws when all 13 are in place.

Replacing the D-Control Fader Unit Meter Bridge 9-16 Board

The following procedure outlines the steps needed to remove and replace the Meter Bridge 9-16 PCB on the D-Control Fader Unit.



If you are using a power screwdriver please be sure to use the lowest torque setting to prevent damage to screws or inserts.

To remove the D-Control Fader Unit Meter Bridge 9-16 PCB:

1 From the back of the Fader Unit, using a 5/64-inch Allen wrench, remove the 13 type D screws indicated in Figure 1 that secure the back panel to the Fader Unit. The back panel should now lift away from the Fader Unit.

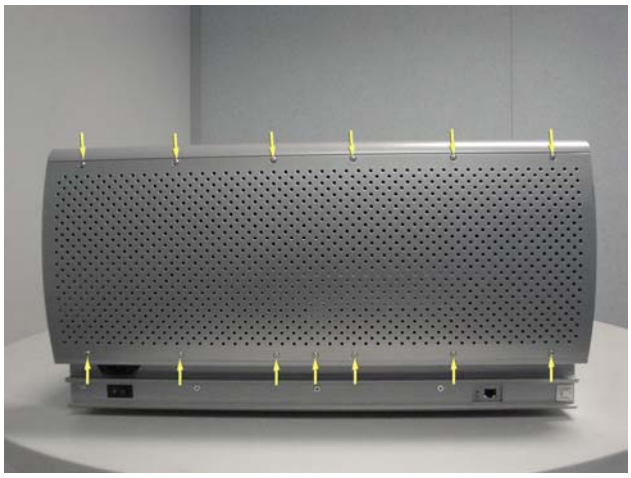


Figure 1. Back panel screws.

2 Carefully disconnect the 10 pin power cable and the 10 pin data cable from the Meter Bridge 9-16 PCB shown in Figure 2.

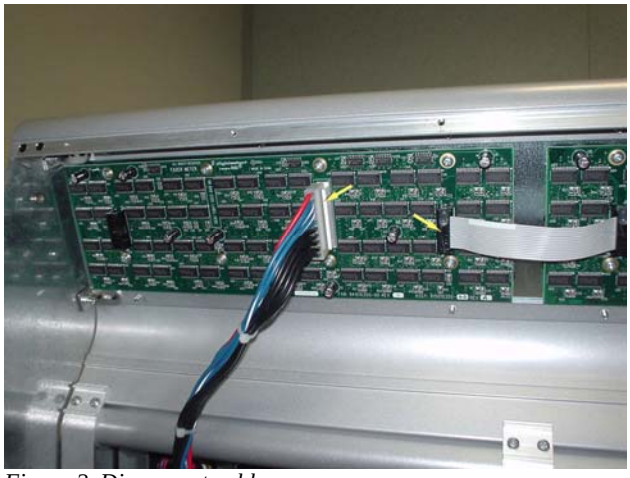


Figure 2. Disconnect cables.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

3 Using a #1 Philips screwdriver, remove the 8 type B screws that secure the Meter Bridge 9-16 PCB to the Fader Unit as indicated in Figure 3.

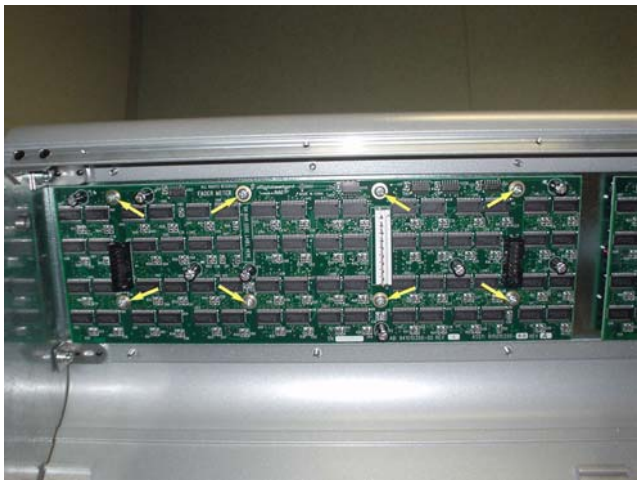


Figure 3. Removing 8 screws.

4 As shown in Figure 4 the Meter Bridge 9-16 PCB should now lift away from the Fader Unit.

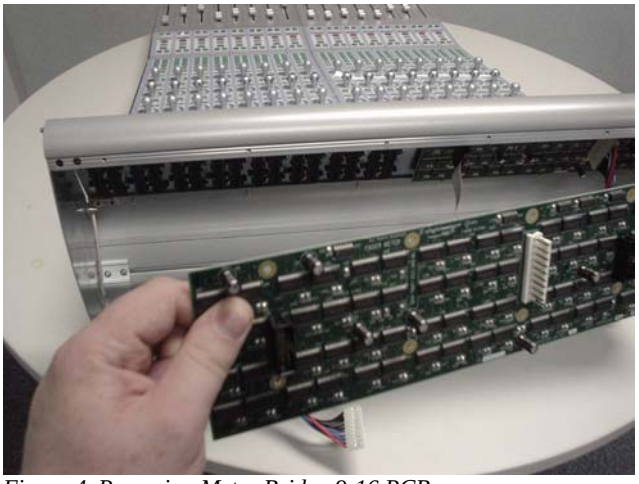


Figure 4. Removing Meter Bridge 9-16 PCB.

To replace the D-Control Fader Unit Meter Bridge 9-16 PCB:

5 Using a #1 Philips screwdriver, carefully secure the Meter Bridge 9-16 PCB to the Fader Unit using the 8 type B screws.

6 Taking note of orientation carefully connect the 10 pin power cable, and the 10 pin data cable to the Meter Bridge 9-16 PCB. The 10 pin data cable should also be secured with hot glue.

7 Using a 5/64-inch Allen wrench, secure the back panel to the Fader Unit with 13 type D screws. Only fully tighten the screws when all 13 are in place.

Replacing the D-Control Fader Unit Comm Board

The following procedure outlines the steps needed to remove and replace the Comm Board on the D-Control Fader Unit.

⚠ *Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.*

To remove the D-Control Fader Unit Comm Board:

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the left side end plate.*

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the left side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

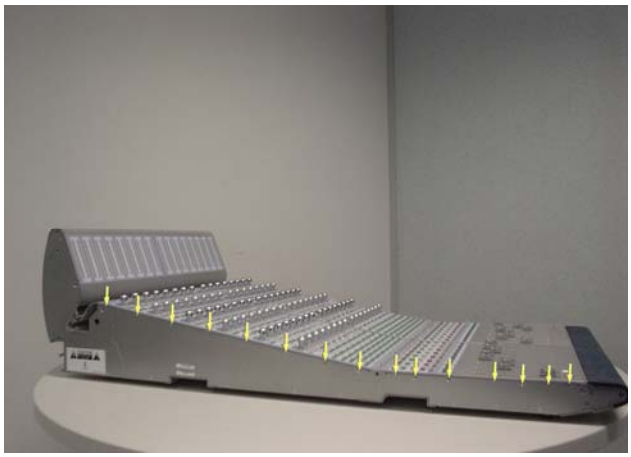


Figure 1. Removal of 15 left side end plate screws

⚠ *Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the left side end plate.*

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the left side end plate to the Fader Unit

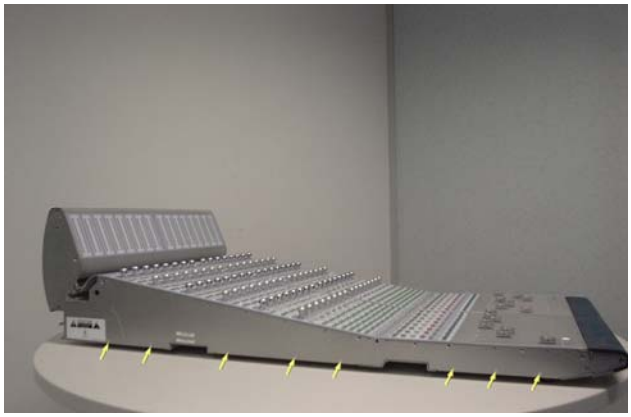


Figure 2. Removal of 8 left side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the left side end plate.*

3 Using a #2 Philips screwdriver, remove the 7 type F screws indicated in Figure 3 that secure the sides of the left side end plate to the Fader Unit.

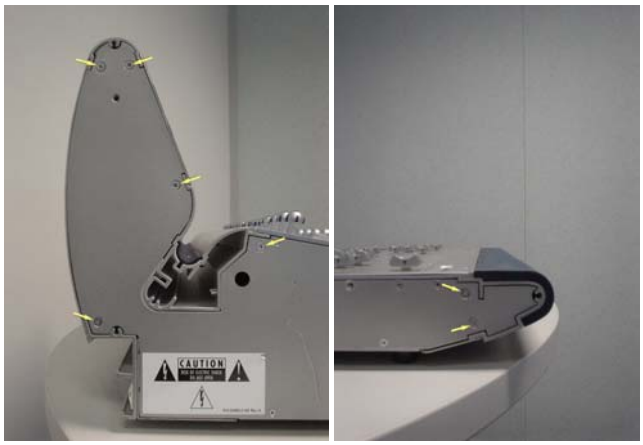


Figure 3. Removal of 7 left side end plate screws

4 The left side end plate should now lift away from the Fader Unit.

5 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 4 that secure the Left Encoder Panel to the Fader Unit.

Figure 4. Left Encoder Panel screws.

6 Carefully move the Left Encoder Panel outwards as indicated in Figure 5.

Figure 5. Moving Left Encoder Panel outwards.

7 While lifting the Left Encoder Panel upwards from the top carefully disconnect both 10 pin power cables and also the three 50 pin ribbon cables as indicated in Figure 6. Make note of cables and orientation.

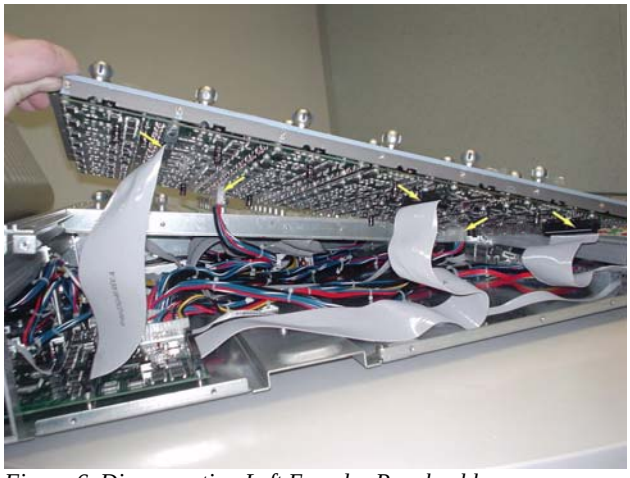


Figure 6. Disconnecting Left Encoder Panel cables.

8 The Left Encoder Panel should now lift away from the Fader Unit.

⚠ *Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.*

9 Using a #1 Philips screwdriver, remove the 15 type E screws indicated in Figure 7 that secure the top of the right side end plate to the Fader Unit.

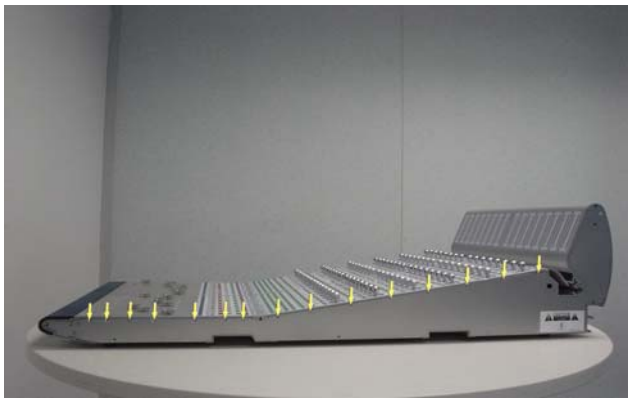


Figure 7. Removal of 15 right side end plate screws

⚠ Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

10 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 8 that secure the bottom of the right side end plate to the Fader Unit

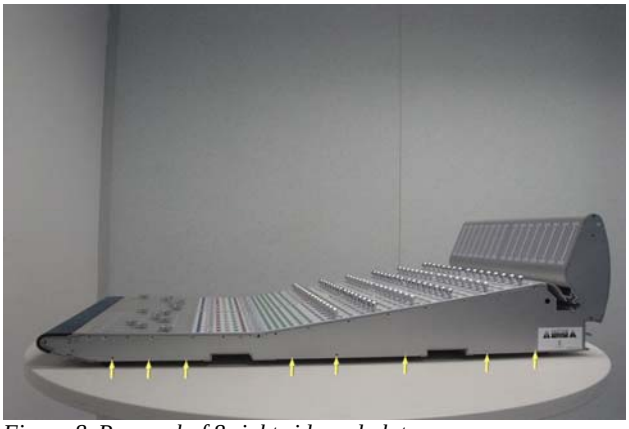


Figure 8. Removal of 8 right side end plate screws.

⚠ *Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.*

11 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 9 that secure the sides of the right side end plate to the Fader Unit.

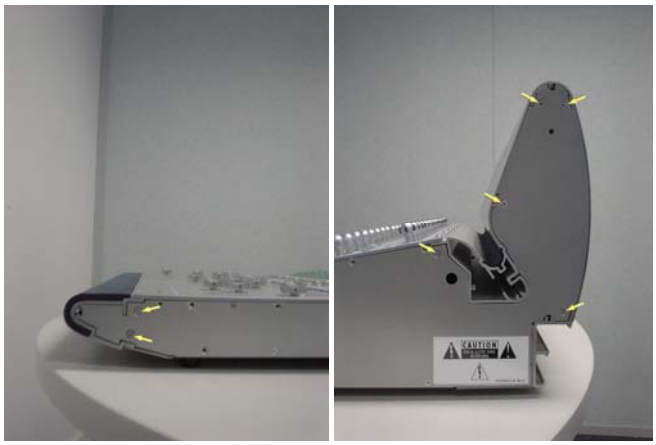


Figure 9. Removal of 7 right side end plate screws

12 The right side end plate should now lift away from the Fader Unit.

13 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 10 that secure the Right Encoder Panel to the Fader Unit.

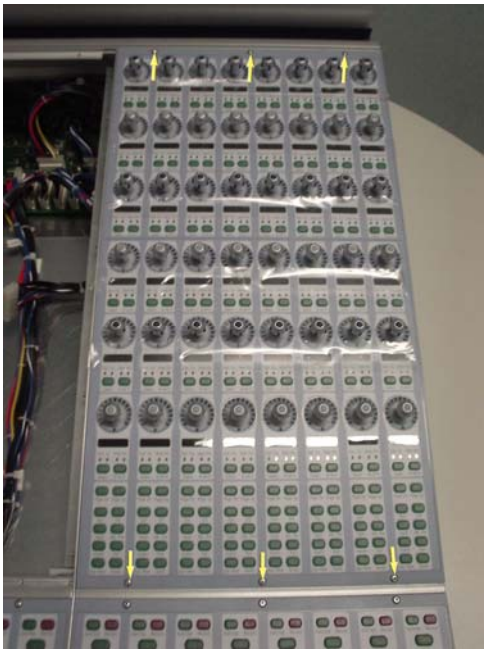


Figure 10. Right Encoder Panel screws.

14 Carefully move the Right Encoder Panel outwards. While lifting the Right Encoder Panel upwards from the top carefully disconnect both 10 pin power cables and also the three 50 pin ribbon cables as indicated in Figure 11. Make note of cables and orientation.

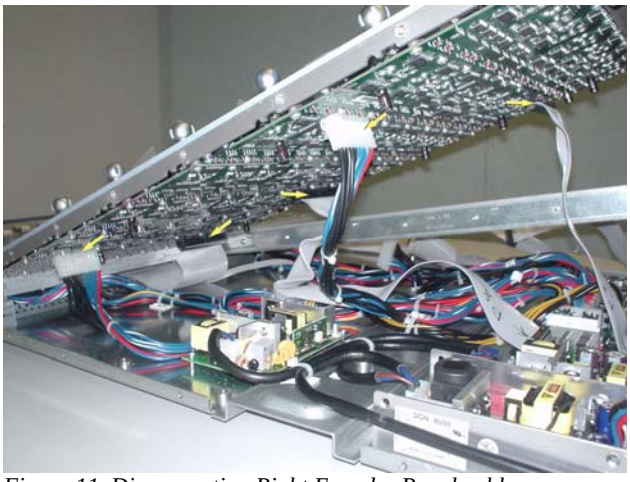


Figure 11. Disconnecting Right Encoder Panel cables.

15 The Right Encoder Panel should now lift away from the Fader Unit

16 From the back of the Fader Unit, using a 5/64-inch Allen wrench remove the 13 type D screws indicated in Figure 12 that secure the back panel to the Fader Unit. The back panel should now lift away from the Fader Unit.

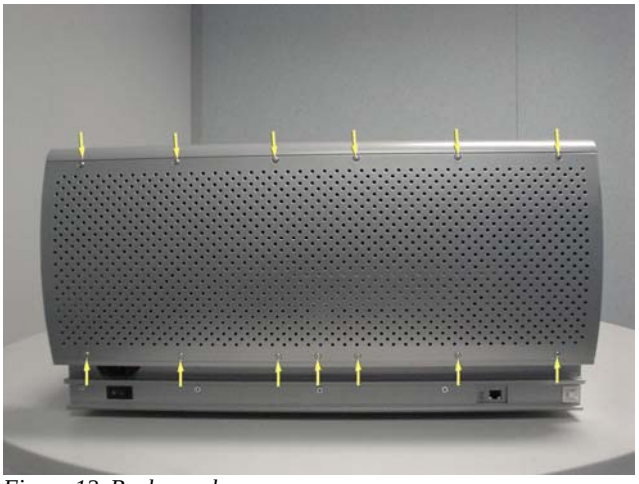


Figure 12. Back panel screws.

17 Carefully disconnect all of the cables from the Comm Board. There are 19 separate cables and it is critical that these are all labeled with a reference as shown in Figure 14 before removal. Note P105 and P111 on the Comm Board do not have a cable attached.

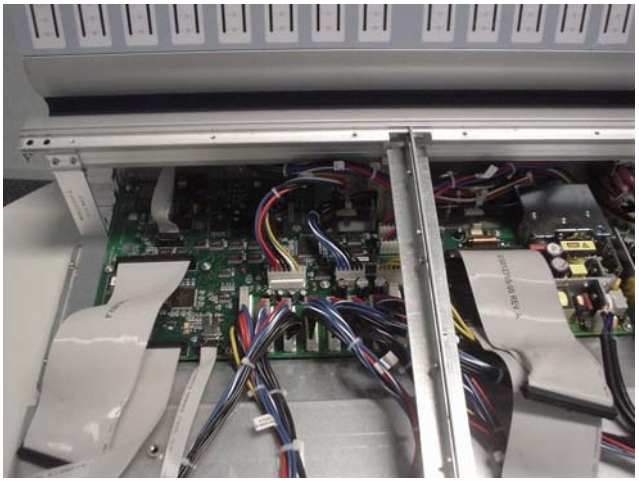


Figure 13. Cables on Comm Board.

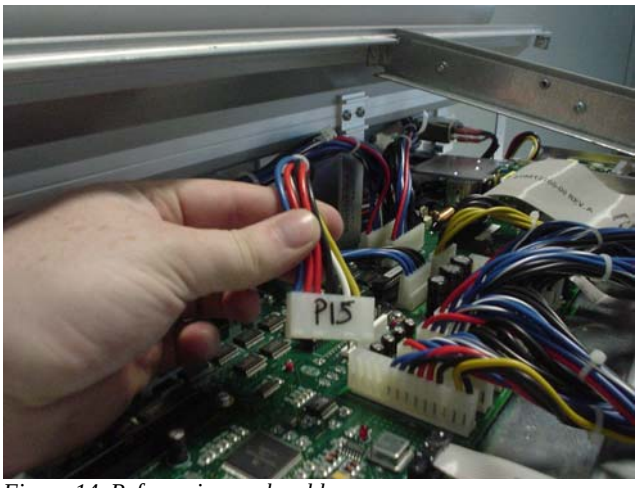


Figure 14. Referencing each cable.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

18 There are 15 type B screws that secure the Comm Board to the Fader Unit. Using a #1 Philips screwdriver, remove all 15 screws. Fourteen of these are shown in Figure 15. The other screw is positioned under the inner support bracket. The 3 screws located at the back of the Comm Board can be removed using a long shafted Philips screwdriver as indicated in Figure 16.

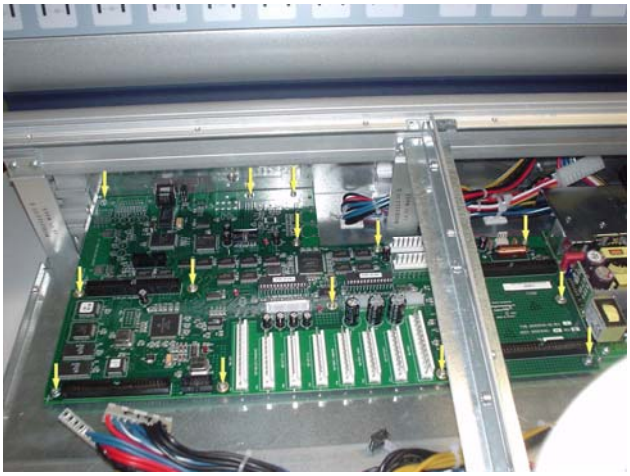


Figure 15. Comm Board screws.

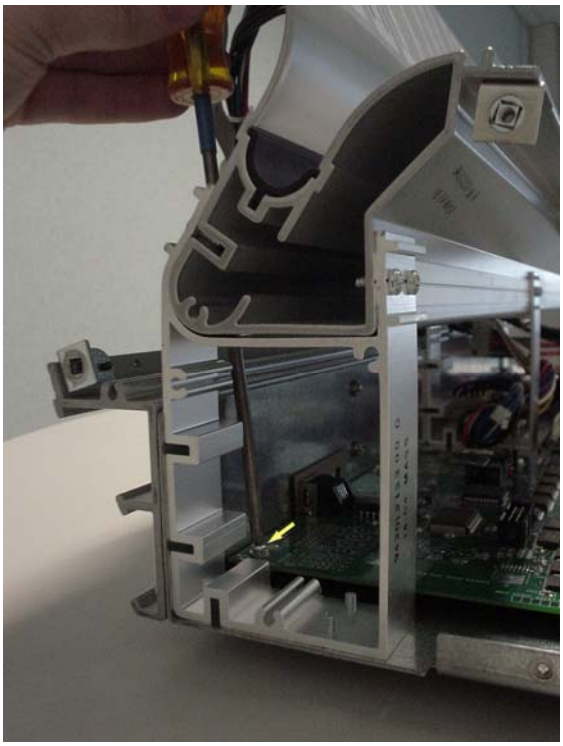


Figure 16. Using long shafted #1 Philips screwdriver.

19 The Comm Board is now free from the Fader Unit and can carefully be removed by lifting it out to the side of the Fader Unit as shown in Figure 17.

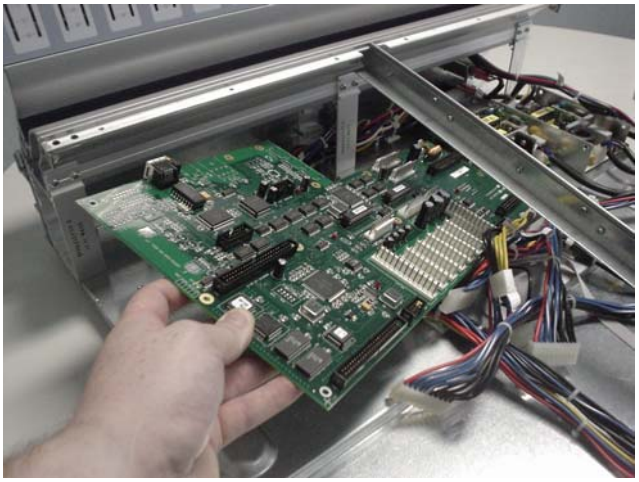


Figure 17. Removing the Comm Board.

To replace the D-Control Fader Unit Comm Board:

20 Carefully place the Comm Board back into position in the Fader Unit.

21 Using a #1 Philips screwdriver, secure the Comm Board to the Fader Unit with 15 type B screws.

You might find it useful to use a magnetized screwdriver on some of these screws.

22 Carefully connect all the cables that go to the Comm Board. Take note of orientation and secure P127 and P11 with hot glue.

23 Using a 5/64-inch Allen wrench, secure the back panel to the Fader Unit with 13 type D screws. Only fully tighten the screws when all 13 are in place.

24 While holding the Right Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

25 Carefully position the Right Encoder Panel into position on the Fader Unit and slide into place.

26 Using a 5/64-inch Allen wrench, install the 6 type D screws indicated in Figure 10 that secure the Right Encoder Panel to the Fader Unit.

27 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

28 While holding the Left Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

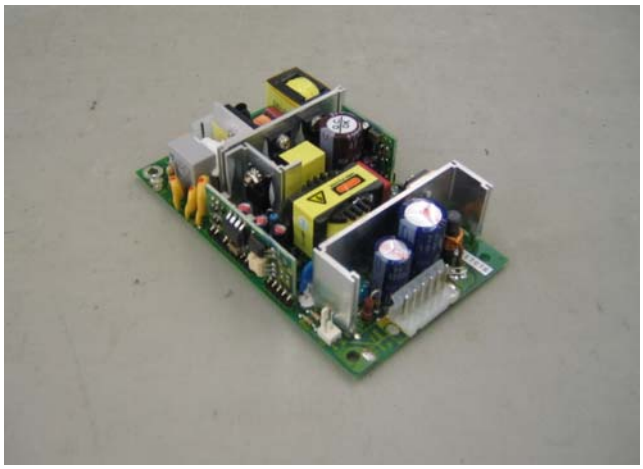
29 Carefully position the Left Encoder Panel into position on the Fader Unit and slide into place. The Left Encoder Panel should be flush against the Right Encoder Panel located in the upper right quadrant of the Fader Unit.

30 Using a 5/64-inch Allen wrench, install the 6 type D screws indicated in Figure 4 that secure the Left Encoder Panel to the Fader Unit.

31 The left side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Fader Power Supply Unit (PSU)

The following procedure outlines the steps needed to remove and replace the Fader PSU on the D-Control Fader Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader PSU on the Fader Unit:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

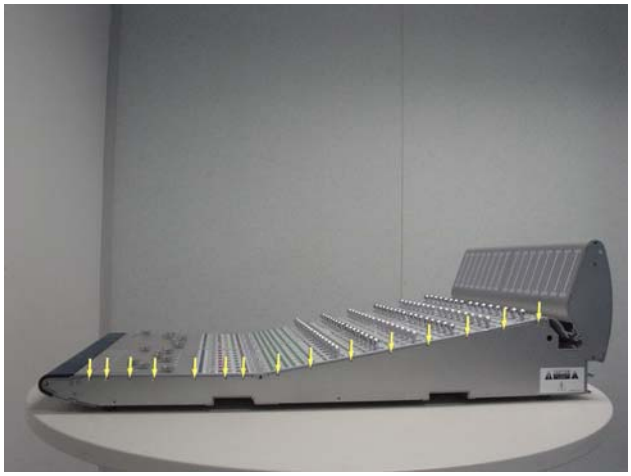


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

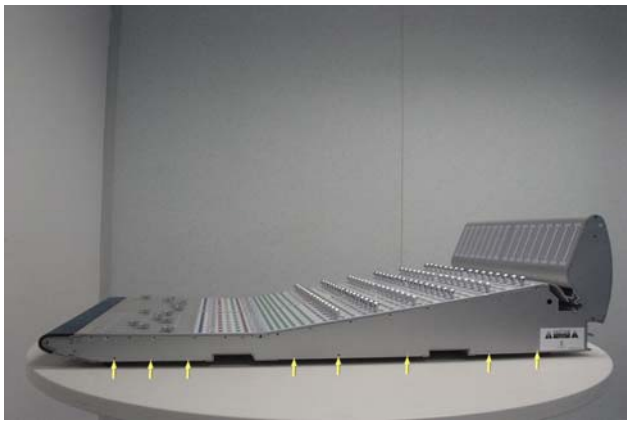


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

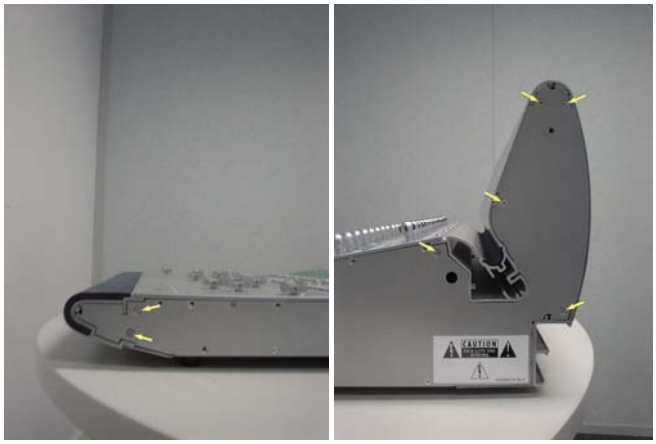


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

5 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit.

Figure 4. Right Encoder Panel screws.

6 Carefully move the Right Encoder Panel outwards as indicated in Figure 5.

Figure 5. Moving Right Encoder Panel outwards.

7 While lifting the Right Encoder Panel upwards from the top carefully disconnect both 10 Pin power cables and also the three 50 pin ribbon cables as indicated in Figure 6. Make note of cables and orientation.

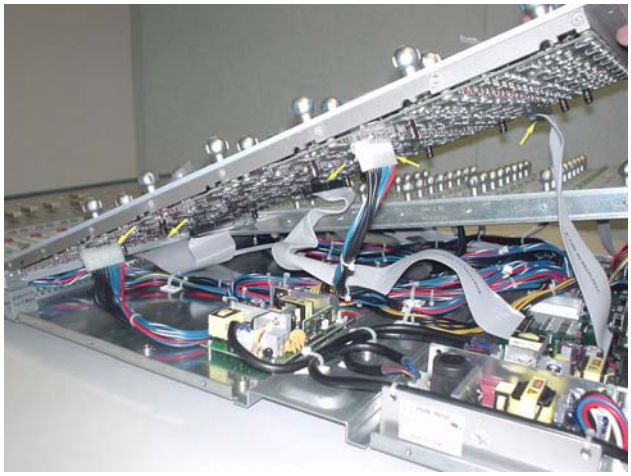


Figure 6. Disconnecting Right Encoder Panel cables.

8 The Right Encoder Panel should now lift away from the Fader Unit.

9 Carefully disconnect the 6 pin output cable and also the 2 pin input cable from the Fader PSU as indicated in Figure 7.

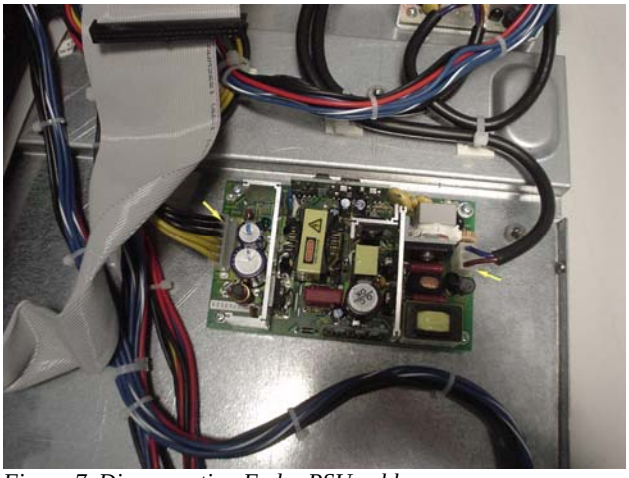


Figure 7. Disconnecting Fader PSU cables.

10 Using a #1 Philips screwdriver, remove the 4 type B screws indicated in Figure 8 that secure the Fader PSU to the Fader Unit

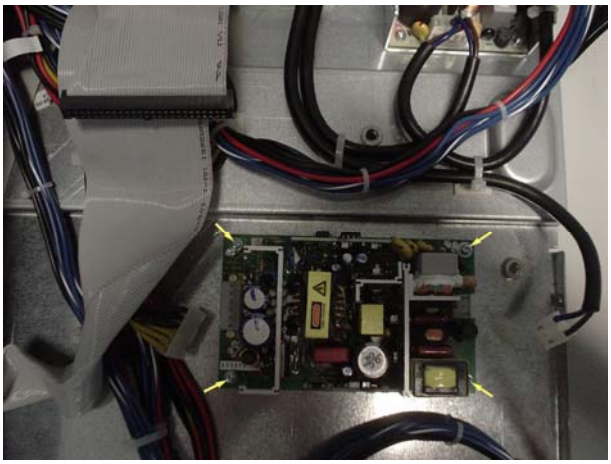


Figure 8. Fader PSU screws.

11 The Fader PSU should now lift away from the Fader Unit.

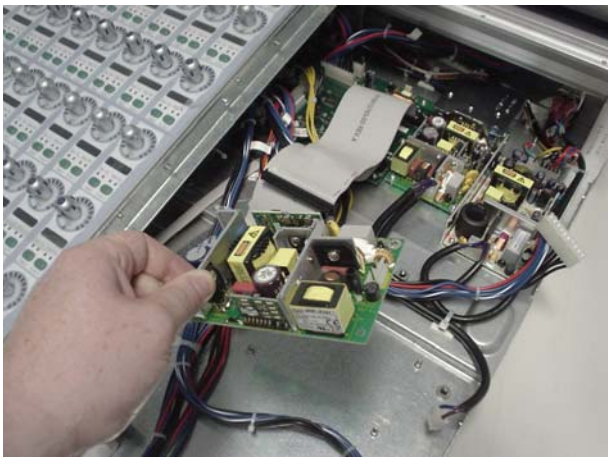


Figure 9. Lifting Fader PSU away from Fader Unit.

To replace the D-Control Fader PSU on the Fader Unit:

12 Carefully position the Fader PSU into position in the Fader Unit and using a #1 Philips screwdriver, install the 4 type B screws indicated in Figure 8 that secure the Fader PSU to the Fader Unit

13 Carefully connect the 6 pin output cable and also the 2 pin input cable to the Fader PSU as indicated in Figure 7.

14 While holding the Right Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

15 Carefully position the Right Encoder Panel into position on the Fader Unit and slide into place. The Right Encoder Panel should be flush against the Left Encoder Panel located in the upper left quadrant of the Fader Unit.

16 Using a 5/64-inch Allen wrench, install the 6 screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit (top row uses type D, bottom row uses type C).

17 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit Logic Power Supply Unit (PSU)

The following procedure outlines the steps needed to remove and replace the Logic PSU on the D-Control Fader Unit.

Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit Logic PSU:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

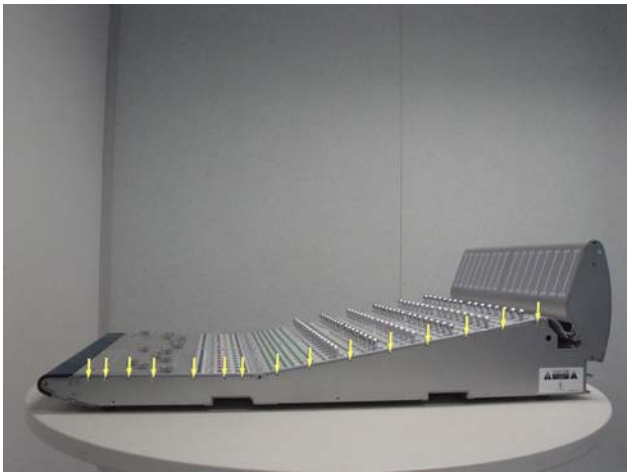


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

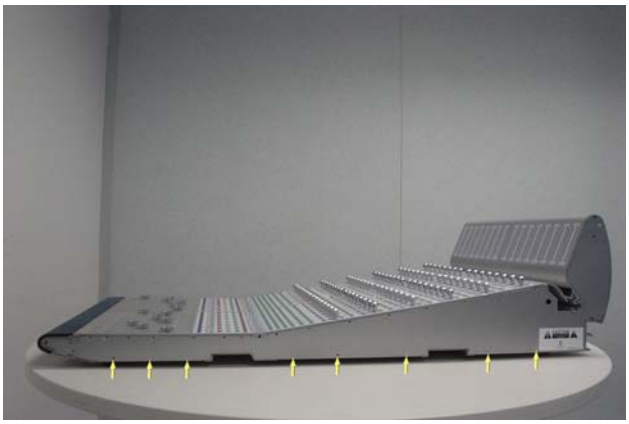


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

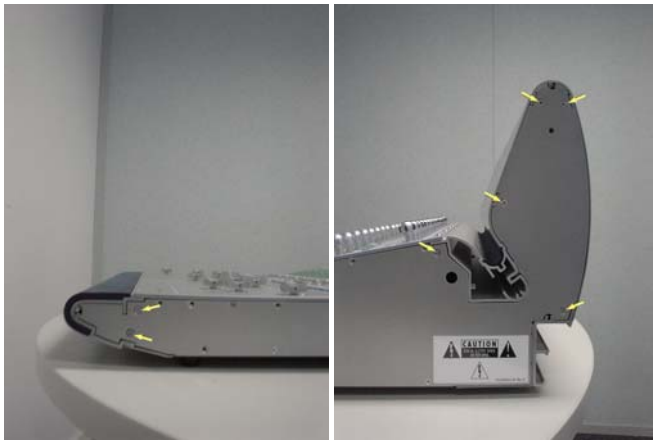


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

5 The 4 screws that secure the Logic PSU to the Fader Unit are on the bottom of the Fader Unit. To access the 4 type N screws, position the Fader Unit on the table so the right side is slightly overhanging as shown in Figure 4.

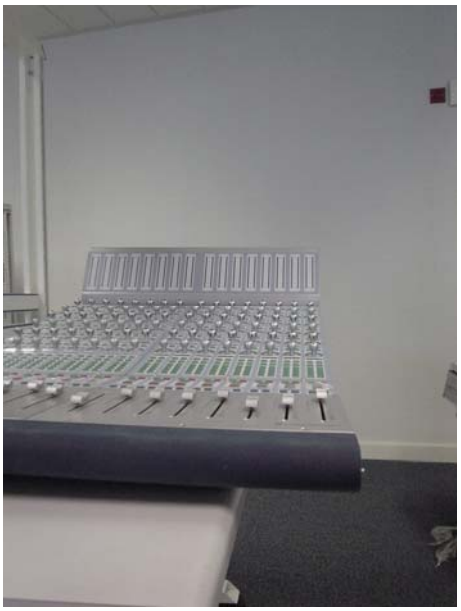


Figure 4. Position Fader Unit on table.

6 Using a #1 Philips screwdriver, remove the 4 screws that secure the Logic PSU to the Fader Unit as shown in Figure 5.

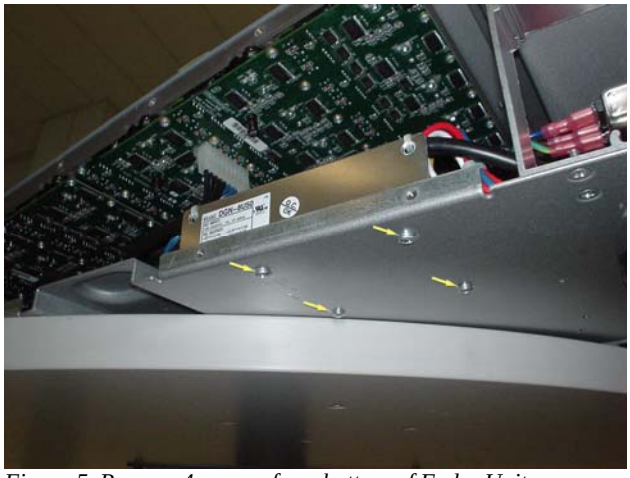


Figure 5. Remove 4 screws from bottom of Fader Unit.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

7 As indicated in Figure 6, carefully cut both cable ties used to secure the power input cable to the Logic PSU.

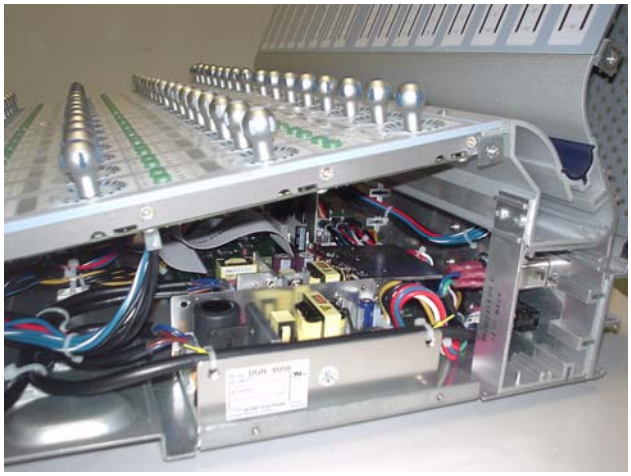


Figure 6. Cut cable ties.

8 As indicated in Figure 7, disconnect the 3 pin power cable from TB1 and the 8 pin power cable from TB2 .

Figure 7. Disconnect cables from TB1 and TB 2.

9 The Logic PSU is now free to lift out from the Fader Unit as shown in Figure 8.

Figure 8. Remove PSU from Fader Unit.

To replace the D-Control Fader Unit Logic PSU:

9 Place the Logic PSU back into position in the Fader Unit and secure from the bottom with 4 type N screws using a #1 Philips screwdriver.

10 Connect the 3 pin power cable onto TB1 and secure with hot glue.

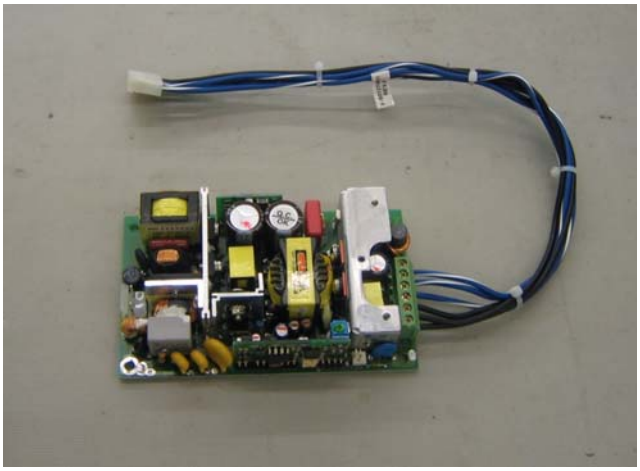
11 Connect the 8 pin power cable onto TB2.

12 Secure the power input cable to the side of the Logic PSU using 2 cable ties as indicated in Figure 6.

13 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing the D-Control Fader Unit LED Power Supply Unit (PSU)

The following procedure outlines the steps needed to remove and replace the LED PSU on the D-Control Fader Unit.



Do not use a power screwdriver or similar high-torque device to remove and replace the screws in the end plates as this may strip the insert threads.

To remove the D-Control Fader Unit LED PSU:

If the Fader Module was installed in a configuration with another Fader Module on its right, then there should be a Spacer Plate attached to the right side of the Fader Module. This Spacer Plate needs to be removed before the other screws can be accessed (as described below). (Note: Units at the far right position do not have a Spacer Plate)

Before you proceed, please note that the 15 screws on the top are different to the other screws used on the right side end plate.

1 Using a #1 Philips screwdriver, remove the 15 type E* screws indicated in Figure 1 that secure the top of the right side end plate to the Fader Unit. **See note regarding this screw in the Screw Key at the end of this document.*

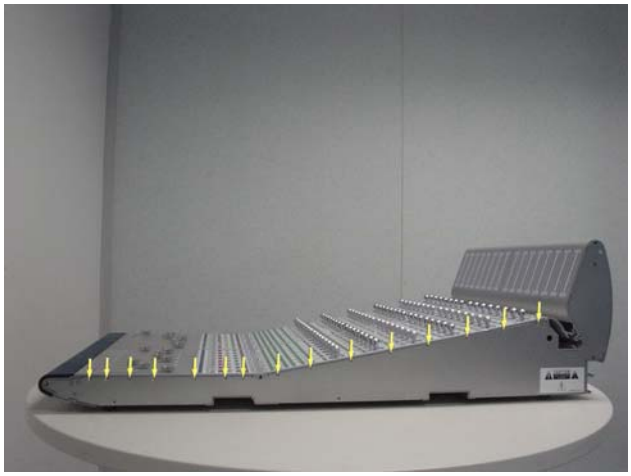


Figure 1. Removal of 15 right side end plate screws

Before you proceed, please note that the 8 screws on the bottom are different to the other screws used on the right side end plate.

2 Using a #1 Philips screwdriver, remove the 8 type E screws indicated in Figure 2 that secure the bottom of the right side end plate to the Fader Unit

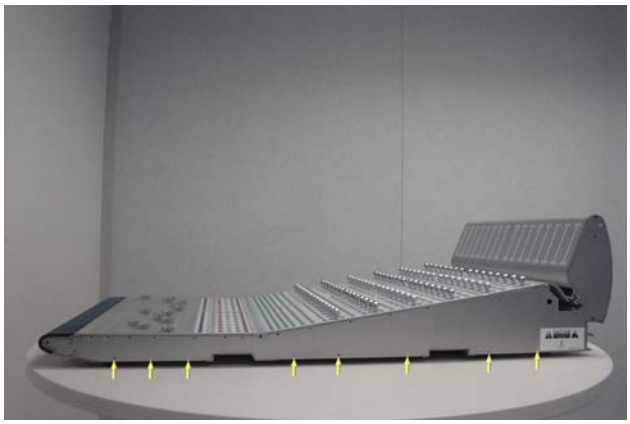


Figure 2. Removal of 8 right side end plate screws.

Before you proceed, please note that the 7 screws on the sides are different to the other screws used on the right side end plate.

3 Using a #2 Philips screwdriver, remove the 7 type I screws indicated in Figure 3 that secure the sides of the right side end plate to the Fader Unit.

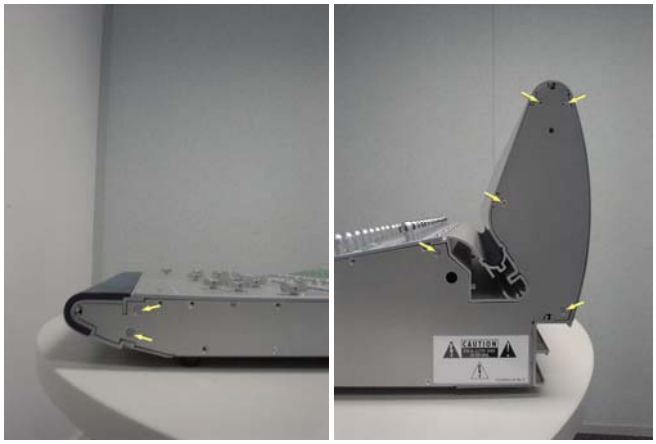


Figure 3. Removal of 7 right side end plate screws

4 The right side end plate should now lift away from the Fader Unit.

5 Using a 5/64-inch Allen wrench, remove the 6 type D screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit.

Figure 4. Right Encoder Panel screws.

6 Carefully move the Right Encoder Panel outwards as indicated in Figure 5.

Figure 5. Moving Right Encoder Panel outwards.

7 While lifting the Right Encoder Panel upwards from the top carefully disconnect both 10 pin power cables and also the three 50 pin ribbon cables as indicated in Figure 6. Make note of cables and orientation.

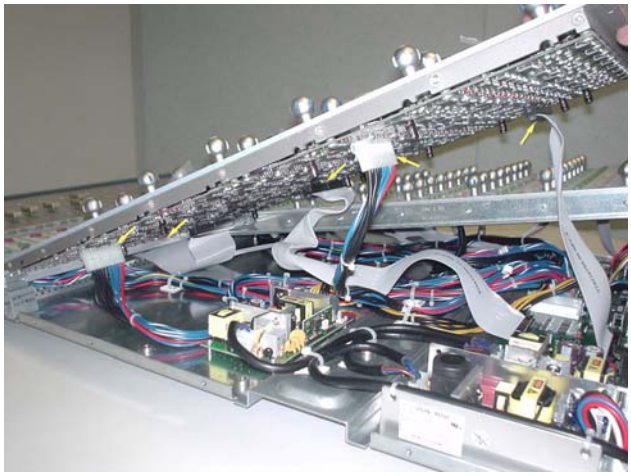


Figure 6. Disconnecting Right Encoder Panel cables.

8 The Right Encoder Panel should now lift away from the Fader Unit.

9 The LED PSU is located between the Comm Board and the Logic PSU in the Fader Unit highlighted in Figure 7.

Figure 7. LED PSU location.

10 Carefully position the Fader Unit on the table so you have access the underneath of the Fader Unit as shown in Figure 8.

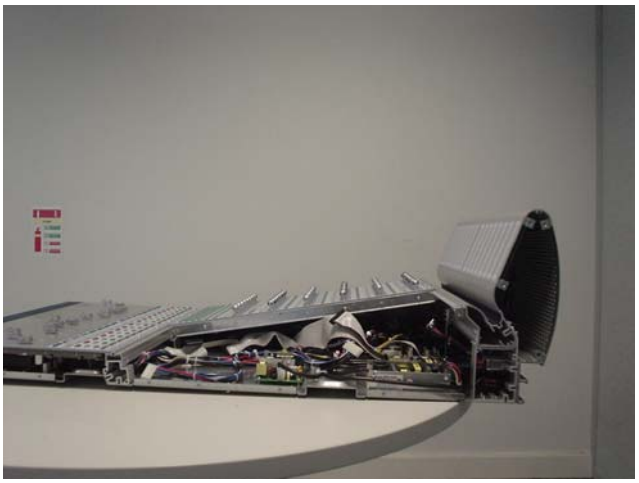


Figure 8. Position Fader Unit on table.

11 From the bottom of the Fader Unit, using a #1 Philips screwdriver, remove the 3 type E screws indicated in Figure 9. These screws secure the PSU heat sink to the Fader Unit.

Figure 9. Remove 3 screws from bottom of Fader Unit.

12 As indicated in Figure 10, using a #1 Philips screwdriver, remove the 3 screws that secure the PSU heat sink to the PSU.

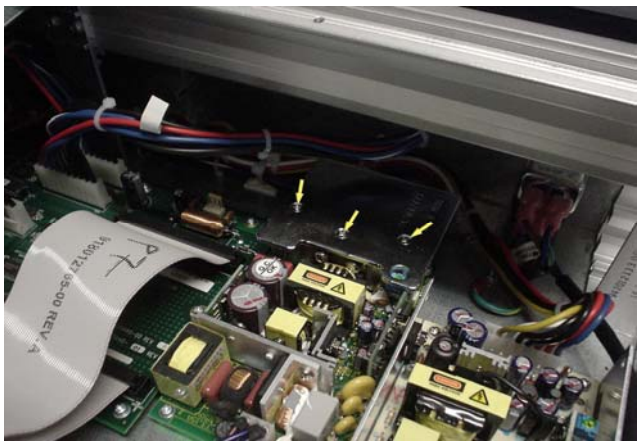


Figure 10. Remove 3 PSU heat sink screws.

To remove hot glue from any connector, brush a generous amount of isopropyl alcohol onto the hot glue. After a couple of seconds the hot glue should just pull away from the connector using small pliers.

13 Disconnect the 2 pin power cable from the LED PSU as shown in Figure 11.

Figure 11. Disconnect the 2 pin power cable.

14 Using a #1 Philips screwdriver, remove the 4 type B screws that secure the LED PSU to the Fader Unit. As shown in Figure 12 you will need to use a short screwdriver.

Figure 12. Remove 4 screws using a short screwdriver

15 Carefully lift the PSU out slightly from its position in the Fader Unit as shown in Figure 13 and using small flat head screwdriver, disconnect the 6 wires from the LED PSU. Make a note of each wire and where it connects to the LED PSU.

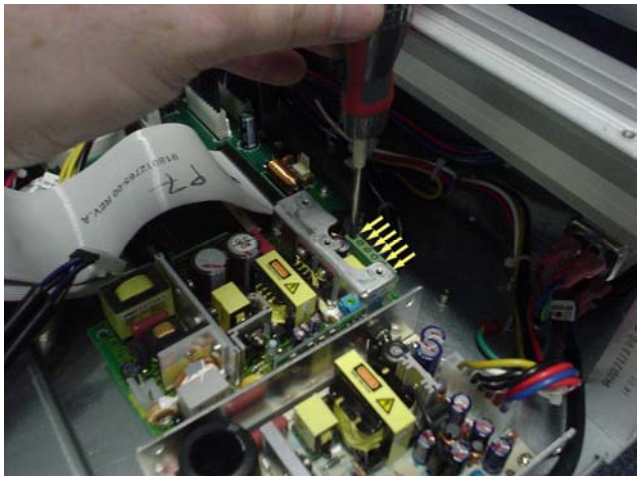


Figure 13. Disconnecting the six wires from the LED PSU.

16 The LED PSU should now lift away from the Fader Unit as shown in Figure 14.

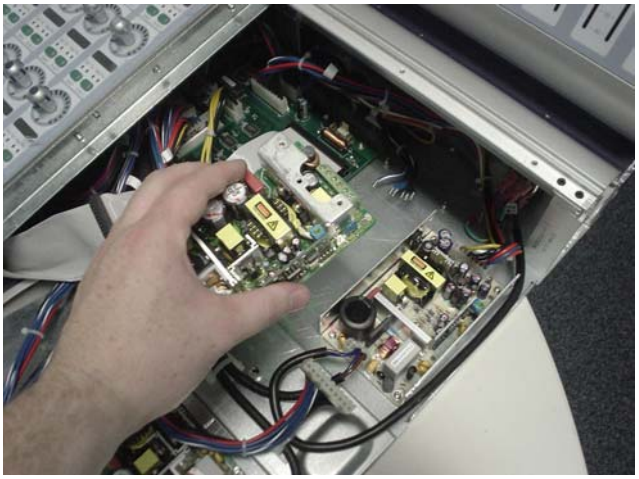


Figure 14. Lifting LED PSU away from Fader Unit.

To replace the D-Control Fader Unit LED PSU:

17 Taking note of orientation connect the 6 wires to the LED PSU as indicated in Figure 13 using a small flat head screwdriver.

18 Carefully place the LED PSU back into position and using a short #1 Philips screwdriver, secure to the Fader Unit with the 4 type B screws.

19 Connect the 2 pin power cable shown in Figure 11 and secure with hot glue.

20 Place the PSU heat sink back into position and using a #1 Philips screwdriver, secure with 3 screws.

21 Carefully position the Fader Unit on the table so you have access the underneath of the Fader Unit as shown in Figure 8 and using a #1 Philips screwdriver, secure the PSU heat sink to the Fader Unit with 3 screws. Position the Fader Unit correctly back on a table when finished.

22 While holding the Right Encoder Panel above it's position in the Fader Unit connect both 10 pin power cables and also the three 50 pin ribbon cables. Take note of orientation of connectors.

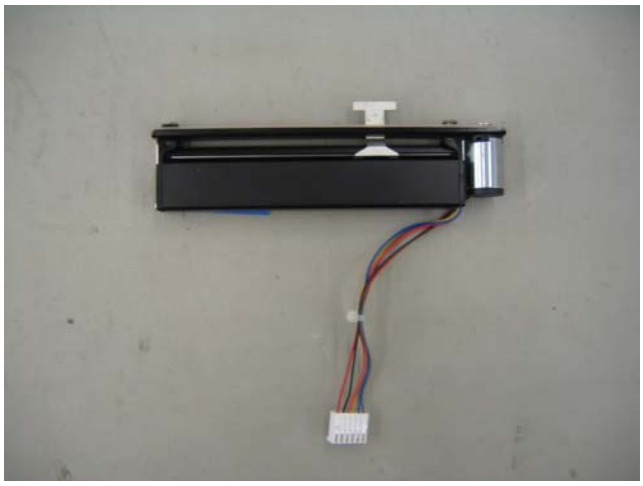
23 Carefully position the Right Encoder Panel into position on the Fader Unit and slide into place. The Right Encoder Panel should be flush against the Left Encoder Panel located in the upper left quadrant of the Fader Unit.

24 Using a 5/64-inch Allen wrench, install the 6 type D screws indicated in Figure 4 that secure the Right Encoder Panel to the Fader Unit.

25 The right side end plate can now be secured to the Fader Unit. Care must be taken that the correct screws are used.

Replacing a D-Control Fader

The following procedure outlines the steps needed to remove and replace a Fader on the D-Control Fader Unit. In this procedure we will remove and replace fader 13 on the Fader Unit.



To remove the D-Control Fader Unit Fader:

⚠ *Before you proceed, please note that the 2 screws on the top are different to the 3 screws used on the bottom of the Fader Panel.*

1 Using a 5/64-inch Allen wrench, remove the 5 screws indicated in Figure 1 that secure the Fader Panel to the Fader Unit (top row uses type J, bottom row uses type C).

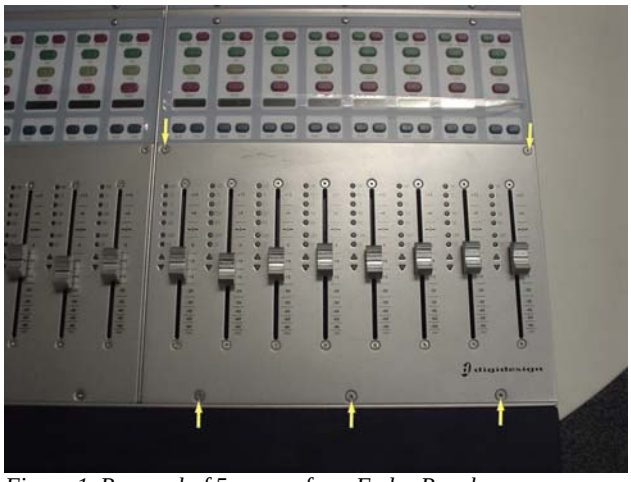


Figure 1. Removal of 5 screws from Fader Panel.

2 Using a 5/64-inch Allen wrench, remove the 2 type G screws indicated in Figure 2 that secure the fader to the Fader Panel.

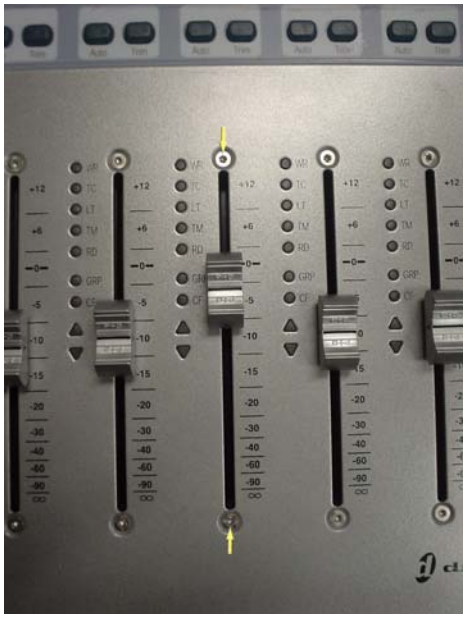


Figure 2. Removal of 2 screws from fader.

3 While lifting the Fader Panel upwards from the top as indicated in Figure 3, carefully disconnect the 6 pin fader cable from the Fader Motor Controller (FMC) PCB as shown in Figure 4.

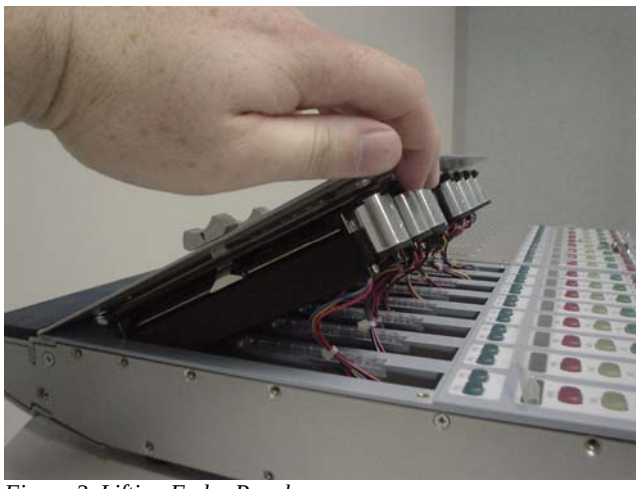


Figure 3. Lifting Fader Panel.

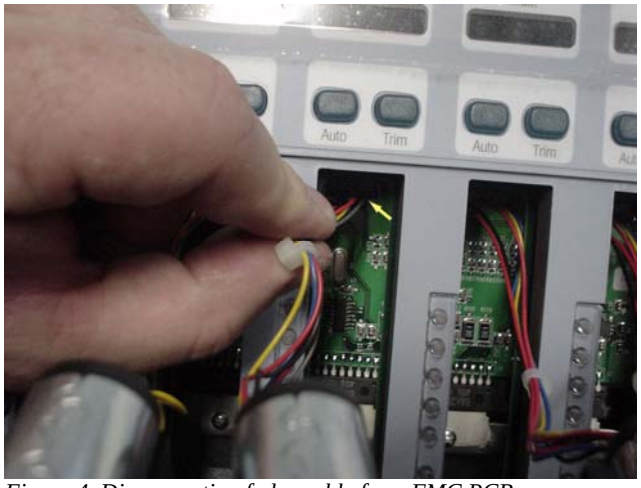


Figure 4. Disconnecting fader cable from FMC PCB.

4 Carefully remove the fader cap from the fader as shown in Figure 5.


Figure 5. Removing fader cap.

5 The fader should now lift away from the Fader Unit as indicated in Figure 6.


Figure 6. Removing fader.

To replace the D-Control Fader Unit Fader:

6 Carefully position the fader into the blank slot on the Fader Panel in the same direction as the other faders and attach the fader cap.

7 Carefully connect the 6 pin fader cable back into the FMC PCB.

8 Using a 5/64-inch Allen wrench, install the 2 type G screws indicated in Figure 2 that secure the fader to the Fader Panel. The Fader Panel should now sit back into place on the Fader Unit.

9 Using a 5/64-inch Allen wrench, install the 5 screws indicated in Figure 1 that secure the Fader Panel to the Fader Unit (top row uses type J, bottom row uses type C).

Appendix A: D-Control Parts Key

There are a LARGE number of screws used on the D-Control. Here is a key to help getting the screws into the correct locations. For the purposes of this Service Manual we will use single letter signifiers to differentiate the screws; part numbers are listed here for your convenience when ordering replacements.

Code	Description	Location Used	Part Number
A	*Screw locks, 4-40, hex, 5/16,*	secures 15-pin XMON cable	*280004895-00*
B	*Phillips, pan head*	internally secures Comm and other boards	*280112208-00*
C	*6-32 x 3/8, hex, flat head, ss*	front row of keyboard & transport panels, etc…	*280112227-00*
D	*6-32 x 3/8, hex, pan head, ss*	back panel and top plastic cover	*280112228-00*
E	*M3 x 6, Phillips, flat head, zinc*	bottom pan positions, 23 screws used in side *	*280112521-00*
F	*6-32 x 3/16, Phillips flat head*	7 used in each side, except where type I is used	*280114166-00*
G	*M3/4, hex, flat head, ss*	2 used for each fader	*280112939-00*
H	*M4x8, Phillips, flat head, zinc*	rear bottom rail (ethernet, USB, AC panel)	*280112941-00*
I	*6-32 x 3/8, Phillips flat head*	7 used in side panel, only when spacer plate is present	*280112936-00*
J	*M3x10, hex, flat head, ss*	top row of keyboard panel and land plate	*280113013-00*
K	*4-40 x 7/16, hex, flat head*	4 screws surrounding trackball	*280113705-00*
L	*6-32 x 1/12, hex, button head*	3 used in panner panel	*280113737-00*
M	*M4 x 8 hex, flat head*	4 used for monitor bracket beneath land plate	*280114018-00*
N	*6-32 x 3/16, Phillips, flat heat*	Fader Module PSU	*280114166-00*
P	*6-32 x 3/8, Phillips, pan head*	internal brackets	*280112244-00*

***** D-Control units shipped before October 2004 used this screw for the *bottom row of holes on the sides ONLY*. The top row previously used 4-40 Phillips head screws, but they were changed out in favor of these M3 screws (type E above).

Appendix B: Disassembling the D-Control Stand

In order to gain access to many of the areas of the D-Control described in this guide you will have to loosen the D-Control Stand. *IT IS IMPERATIVE THAT THE SCREWS SECURING THE METAL STAND PARTS ARE NOT REMOVED COMPLETELY DURING THIS PROCESS.* Only loosen the specified screws slightly, to the point where they can be turned by hand. If the screws are completely removed the stand will become unstable and could cause injury. Please refer to the D-Control User Guide ("Setting Up D-Control") for stand part information and instructions on re-assembling the stand.

1 Remove the plastic side cap(s) as shown in Figure 1. It is usually necessary to remove only the one cap adjacent to the unit in question, but in some cases both should be removed.

Figure 1. Removing plastic side cap.

2 Loosen but DO NOT REMOVE the screws (1/4-inch-20 x 1/2-inch button head cap) on the rear crossbar assembly as shown in Figure 2.

Figure 2. Loosening the crossbar screws.

3 Loosen but DO NOT REMOVE the screws (1/4-inch-20 x 1/2-inch socket head cap) that secure the pan support rails to the legs. See Figure 3.

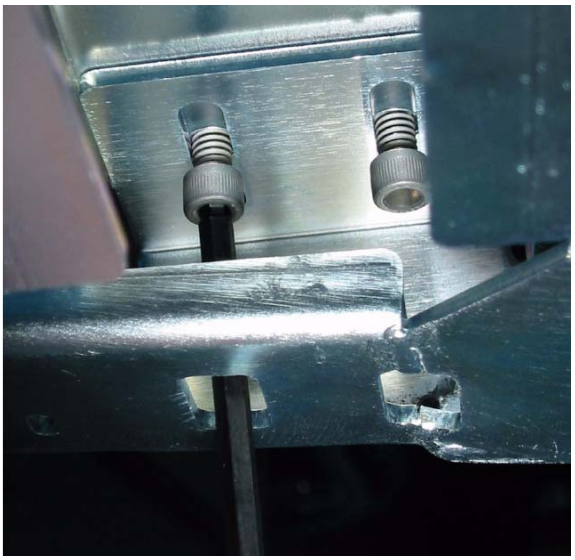


Figure 3. Loosening the pan support rail

4 On each leg there is a horizontal flange with 2 screws (M6 x 8mm Philips pan head screws) that lock the outer D-Control units in place. These screws should be removed altogether to allow the units to move laterally. As with the plastic side caps you only need to remove the screws adjacent to the unit being serviced; if the unit is in the middle you may have to remove the flange screws at all.

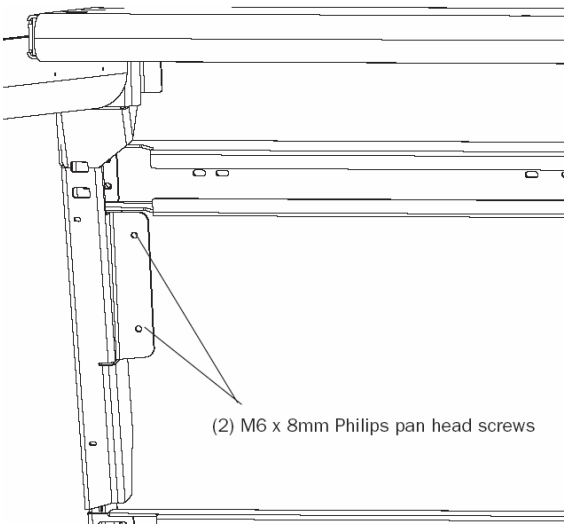


Figure 4. Remove the horizontal flange screws

5 Move the stand legs apart from one another (laterally) so that there is room between the D-Control units and/or the sides of the stand. You should also notice that there are gaps between the legs and the rear crossbar assembly.

6 You should now have better access to the side panels. To gain complete access to a unit it will be necessary to remove it altogether from the stand. Remove the screws (M6 x 8mm Philips pan head screws) securing the D-Control unit to the front and rear pan support rails (only accessible from the underside of the units). See Figure 5.

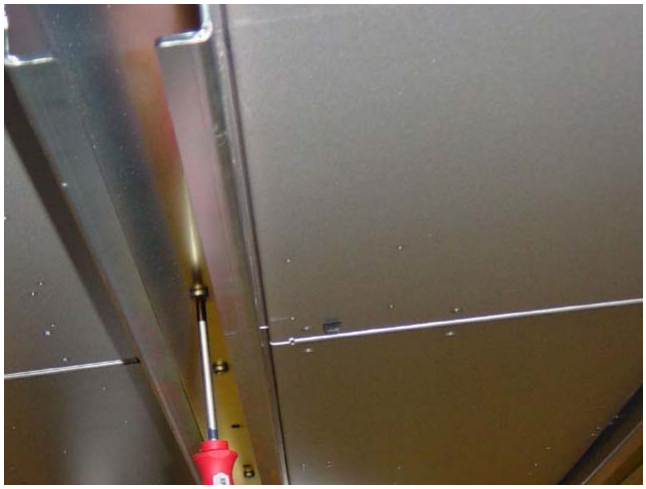


Figure 5. Unsecuring the units from the rails.

Tools for Disassembling the Stand

The following tools are required to assemble and disassemble the D-Control stand:

- 5/32-inch Allen wrench (for button head cap screws)
- 3/16-inch Allen wrench (for socket head cap screws)
- 3/8-inch Allen wrench (for stand leveling screws)
- #2 Philips screwdriver (for large Philips head screws)
- #1 Philips screwdriver (for small Philips head screws)
- small hammer (for 1-inch roll pins)

The following tools are optional, but will help with assembly:

- rubber mallet for adjusting the stand
- ratcheting nylon strap for closing up the stand