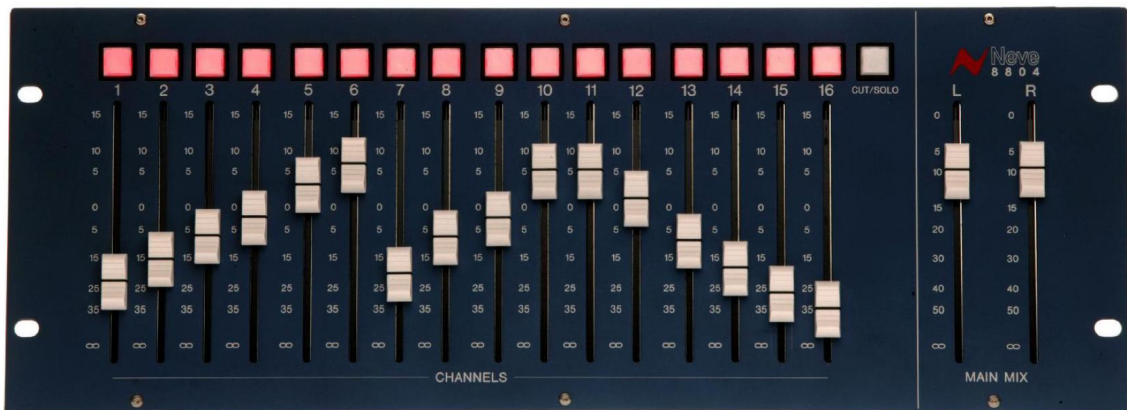




Neve 8804 Fader Pack User Manual

527 - 369
Issue 2.7



The 8804 fader pack is a complimentary product for the 8816 Summing Mixer. It provides fader level control and Direct Outputs control from each channel, plus Mute and Solo function.

Health & Safety Notice

**For your own safety and for the protection of others,
please observe the following safety instructions:**

- Read these instructions.
- Heed all safety warnings.
- Do not use near water.
- Clean only with a dry cloth.
- Do not install near heat sources.
- Do not block ventilation openings.
- Protect the power cord.
- Only use accessories specified by the manufacturer.
- Unplug when unused for long periods of time.
- Refer all servicing to qualified personnel only.

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Table of Contents

Health & Safety Notice.....	2	Auxiliary Send.....	9
Customer Service.....	3	Recall.....	9
Overview.....	4	Setting Up.....	9
System Requirements.....	4	Master / Slave settings.....	10
Getting Started.....	5	Recall Software Installation.....	11
The 8804 Unit.....	6	Installation for PC.....	11
Rear Connections.....	6	Installation for Mac.....	13
USB Port.....	6	New Versions of Recall Software for Mac.....	13
Direct Outputs.....	6	Firmware Upgrades.....	14
Fader I/O.....	7	Selecting a File for Transfer.....	14
Unpacking.....	7	File Downloading.....	15
Mounting.....	7	Corrupted or Old Firmware.....	15
Operation.....	8	Pin outs.....	16
Channel Faders.....	8	Direct Outputs – 50 way connector.....	16
Master Faders.....	8	Direct Outputs – 2 x 25 way.....	17
Cut/Solo Channel Switches.....	8	Audio link between 8804 & 8816.....	18
Cut/Solo Master Switch.....	9	Unit Specifications.....	19
Direct Outputs.....	9		

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A3 Circuit Block Diagrams

8804

Optional control with 8816 Summing Mixer

Customer Service

In the unlikely even that this unit should malfunction or develop a fault, then please register the fault details on our website, by clicking the link below.

You will also need to enter the unit's serial number when you do this, so please have this to hand.

http://www.ams-neve.info/crm/fault_report.html

Once the fault details have been registered, one of our technical support team will be in touch via email.

This link should also be used for further operational or technical help, or any general enquiry about the unit.

Overview

The 8804 fader pack is a complementary product for the 8816 Summing Mixer (please see the separate **8816 User Manual**).



When adding an 8804 to an 8816 that was previously used in standalone mode, it will be necessary to change jumper settings within the 8816. Please refer to the **8816 User Manual** on how to do this.

8816 units shipped with an 8804 fader pack will be ready for use with the 8804.

On older 8816 models it may also be necessary to update the firmware, please refer to page 14 on how to do this. If in doubt please consult your local Neve Dealer.

8804 provides fader level control, direct outputs from each channel, mute and solo control.

With an 8804 attached, the level control on the 8816 is re-assigned as an Auxiliary Pre-fade Send.

Settings on the 8804 may be stored and recalled using the same Recall software as the 8816 and other members of the Neve 88 Outboard series.

System Requirements

The 8804 may be used as a standalone unit.

If you wish to use the units Recall facility, it should be connected directly to the computer or via a powered USB hub but **not** via a passive USB hub.

If you wish to use the Neve Recall software to store and reload user configurations you must have one of the following supported operating systems:

PC:

- Windows 2000, Service Pack 4 or later
- Windows XP, Service Pack 3 or later
- Vista, Service Pack 1 or later

Mac:

- Mac OS 10.3.9 or later

Getting Started

▶ Install the Recall software provided on to your PC or Mac and then start it running.

Please refer to page 11 on how to do this.

▶ Connect the 8804 USB port to a PC (or Mac) using a USB cable.

It should be connected directly to the computer or via a powered USB hub but **not** via a passive USB hub.

The 8804 has no power supply, and takes it's power from the computer via USB.

▶ Connect the 50 pin **Fader I/O** socket on the rear of the 8804 to the 50 pin socket on the rear of the 8816 using the cable provided.

▶ Connect the associated 8816 to the same PC (or Mac) using a USB cable.

If the Recall software has been started, the 8804 fader pack will now control the level of signals on the 8816 channel inputs and master outputs.

Mutes and Solos may be controlled from either the 8804 or the 8816 Mute / Solo switches.

The Mute and Solo buttons will not synchronise between the two units until both units are connected to the PC (or Mac) via USB and the Recall software is running.

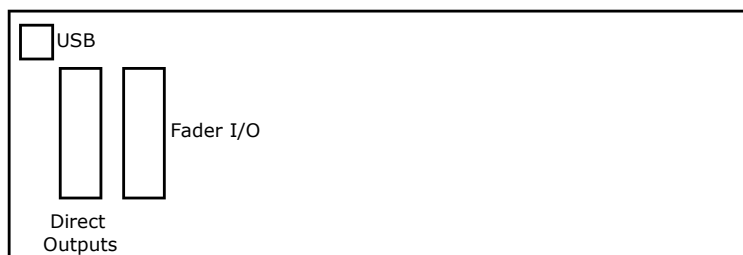
The 8804 Unit

Rear Connections

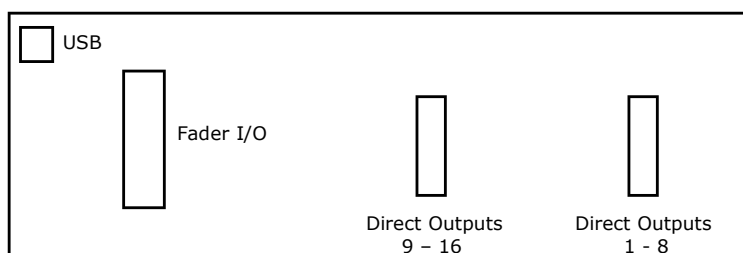
The rear of the 8804 has connections for:

- USB
- Audio connection to the 8816 (Fader I/O)
- Direct Outputs

Depending on the age of the unit, the Direct Outputs will either be on a 50-way connector as shown here...



....or on 2 x 25-way D-type connectors, each handling 8 audio paths:



USB Port

The USB port should be connected to either a PC or a Mac.

During normal operation the USB provides communication between the 8804 unit and the associated 8816 unit (sending Cut and Solo commands from one to the other), plus providing power to the 8804.

For this reason, when connecting the unit to a PC (or Mac), it must either be connected directly to an available USB port, or via a powered hub **not** via a passive hub.

It also provides a link to the PC or Mac for the saving and restoring of 8804 settings.

Please see the separate Recall manual.

Direct Outputs

Depending on the age of the unit, these will either be available on a single 50-way connector, or on two x 25-way D-type connectors. We do not include cables for the Direct Output connections.

The Direct Outputs are balanced.

Please refer to page 16 for connector pin-out information.

Fader I/O

This 50-way D-type connector is the analogue audio link between the 8816 and the 8804.

This cable is provided with the 8804.

▶ Connect one end to the 8804, connect the other end to the 50 way D-type socket on the associated 8816 unit.

Please refer to page 18 for connector pin-out information should you need it.

Unpacking

The 8804 is shipped in a purpose made protective box.

Beneath the 8804 unit is a polystyrene floor, underneath this floor should be:

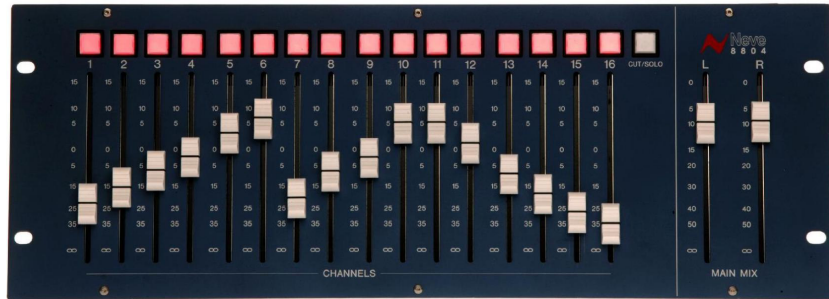
- a CD containing software and manuals
- a 50 pin audio cable
- a USB cable
- a ribbon cable for installation inside an 8816 unit.

Mounting

The 8804 can be rack mounted, used on a table top or mounted in custom furniture:

- ▶ To mount in a standard 19 inch rack the securing screws should be placed through the mounting holes using plastic washers to avoid scratching the unit surface.
- ▶ For table top use, the tilt bar on the rear of the unit should be extended, supporting the unit at a convenient working angle.
- ▶ The 8804 may be placed in custom studio furniture using the lip of the unit for support.

Channel Faders



Sixteen 100mm channel faders on the 8804 surface control the levels on channels 1 - 16 with a gain range from $-\infty$ dB to +15dB.

Having 15dB gain in hand is a useful creative tool, particularly when riding levels in the mix.

Care should be taken not to overload the workstation or other recording device by using too much boost across multiple channels simultaneously.

With the 8804 fader pack attached, the 8816 rotary pots are taken out of the main circuit and retasked as an auxiliary send level control.

These auxes will always be pre-fader, and cannot be changed to post-fader, and in this situation, the 8816 Master Level pot is no longer used.

Master Faders

Two master faders control the Mix Left and Mix Right output levels with a gain range from $-\infty$ dB to 0dB.

With both faders at the top of their range the mix gain is unity.

Cut/Solo Channel Switches

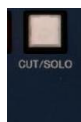
Cut/Solo buttons above each channel activate the Mute relays in the 8816 via the USB connection.

The switches on the 8816 or on the 8804 may both be used, each will illuminate to reflect changes made from the other.

- In **Cut** mode each button mutes the associated channel.
- In **Solo** mode each button solos the associated channel.

The solo type is **Solo In Place**, where all non-soloed channels are muted.

Cut/Solo Master Switch



The Cut/Solo switch on the upper right of the 8804 sets the mode of the Cut/Solo channel switches.

- When the Master switch is illuminated yellow the channel buttons are in **Solo** mode.
- When the switch is unlit all channel switches are in **Mute** mode (left).

Direct Outputs



The 8804 provides balanced Direct Outputs from each of the 16 channels. These can be used for recording or as sends to effects units and processors.

The Direct Outputs can be set **Pre-** or **Post-** faders within the Recall software.

If a channel Direct Output is set to post-fader, the user can select whether this Direct Output will be muted by the **Cut/Solo** switch.

Please see the separate Recall Manual for how to set up the Direct Outputs as Pre- or Post- Fader.

The Direct Output balanced circuits will be on either on a 50 pin D-type connector, or on two 25-way D-type connectors on the rear of the 8804.

Please refer to page 16 for Direct Output wiring pin outs.

Auxiliary Send

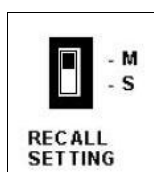


With the levels controlled from the 8804 faders, the rotary level control on the 8816 is available to use as an auxiliary pre-fade send level control.

The output appears on Circuit 4 of Connector 3 on the 8816.

Please see the 8816 User Manual for details of this connector.

Recall



Setting Up

- ▶ Connect the 8804 and 8816 units to the PC (or Mac) via USB cables.
- ▶ Ensure that both of the 8804 and 8816 units have been set to the same state, [**M** (Master) or **S** (Slave)], using the Recall Setting switch on the back of each unit.
- ▶ With the 8816 unit and 8804 connected to the PC (or Mac), start the Neve Recall software.

The **Cut/Solo** switches are automatically synchronised between the two units, therefore both units reflect the same Cut or Solo state as each other.

In the default set-up mode the 8816 becomes the control unit for mutes during Recall, this can be switched to the 8804.

Please see the Recall manual for more information.

NB:
No more than **two** 8804 units can be connected at any time to a PC (or Mac) and Recalled or synchronised with their respective 8816 units.

Master / Slave settings

It is possible to have a maximum of two 8816 units and two optional 8804 fader packs connected via USB to the Recall software.

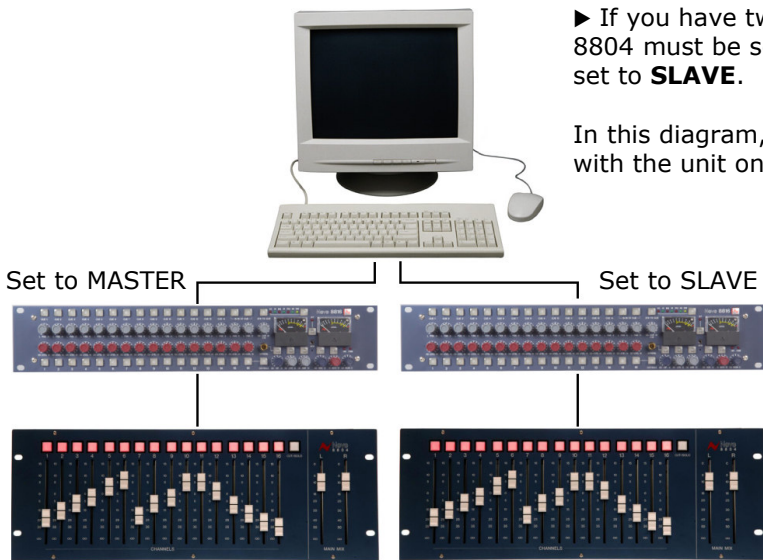
► If you only have one 8816 and one 8804 fader pack connected, both units must be set to **SLAVE** so the Recall software will operate correctly, as shown left.



Set to SLAVE

► If you have two 8816s and two 8804 fader packs, then one 8816 and 8804 must be set to **MASTER**, and the other 8816 and 8804 must be set to **SLAVE**.

In this diagram, the 8816 on the left is the master in terms of audio, with the unit on the right feeding submix signals into it.

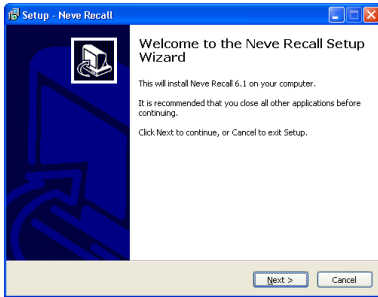


Set to MASTER

Set to SLAVE

Recall Software Installation

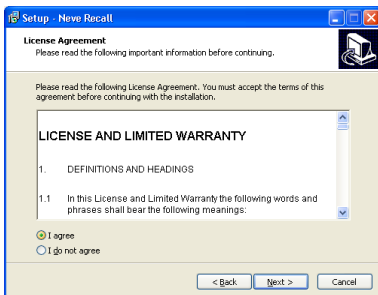
Installation for PC



Insert the CD into the drive and the **Setup** program should automatically launch.

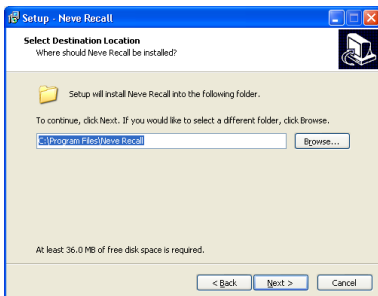
If the application fails to launch automatically on inserting the CD, then go to the CD Drive in Windows Explorer and double-click the **NeveRecall.msi** file or the **setup.exe** file to launch the Setup program manually.

► Click **Next**.



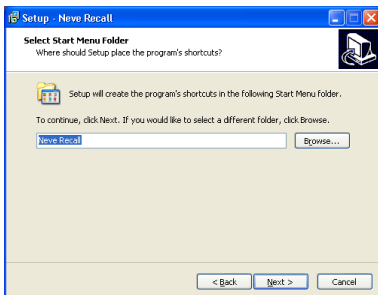
► Click **I Agree**, then click **Next**.

If you click **I Do Not Agree**, the install procedure will terminate.

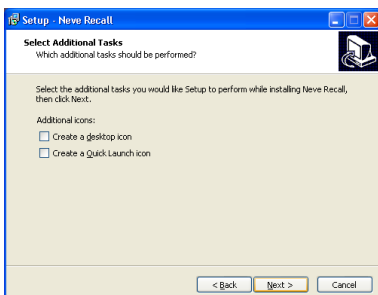


The installation programme will select a default location for files to be copied and created to.

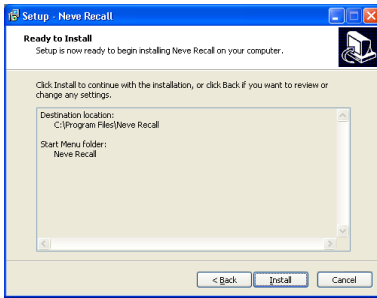
► Click **Next** to keep the default location, or click **Browse** to select another location.



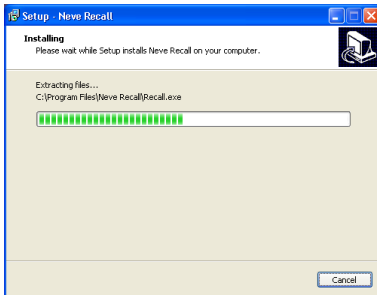
► Click **Next**.



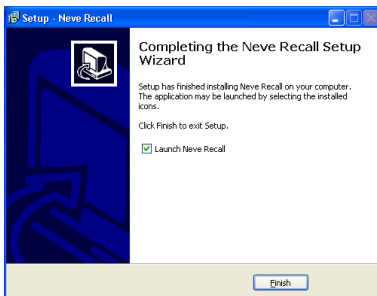
► Tick as desired then click **Next**.



► Click **Install**.



The install will start and the progress displayed.



If you wish to launch Recall, tick the **Launch Neve Recall** box.

► Click **Finish**.

The software will now be ready to use, and will be accessible from **Start Menu / Programs / Neve Recall / Neve Recall**, or from the **Recall** icon on the Windows Desktop.

Installation for Mac



Insert the CD containing the software into the Mac, and the install programme will launch automatically.

► Click **Continue**.

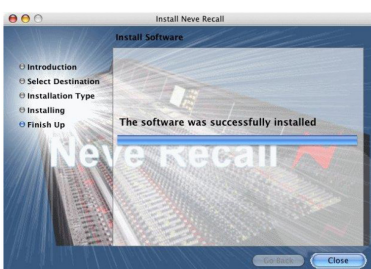


Select the location where you wish the software to be installed to.

► Click **Continue**.



► Click **Upgrade**, and the software will start to install.



The progress bar will show the state of the installation.

► Once completed, click **Close**.

The software is now ready to use.

New Versions of Recall Software for Mac

Where you wish to install a new version of the Recall software on a Mac, you will need to uninstall the previous version first and remove some files:

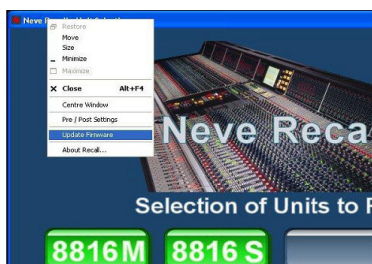
- From the **Applications** folder, move the **Neve Recall** folder to the **Trash**;
- From the **//System Library/Extensions** folder, move **Neve8816.kext** to the Trash (move this file, regardless of the actual outboard units you may have connected via USB)
- From the **//Library/Receipts** folder, move **Neve Recall.pkg** to the Trash.

You will now be able to install the new version.

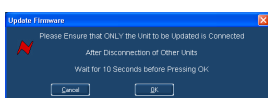
Firmware Upgrades

In order to get the most from your Neve unit, the latest firmware should be installed.

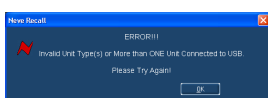
Upgrading your software is a simple process with on screens prompts to guide you.



- ▶ Start the **Recall** software.
- ▶ On the main screen, right-click the window title bar (Mac users select **Recalls**)
- ▶ Click **Upgrade Firmware**.
- ▶ Select the file to transfer.

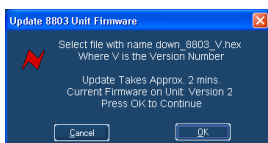


You will be prompted about removing other units.



When updating units, only the unit that is being updated should be connected via USB. All other units should have their USB disconnected.

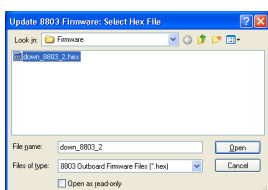
Even if you are updating two units of the same model, they should be connected individually and updated in two separate operations. If more than one unit is connected via USB when the Update is about to be performed, a screen will prompt you to disconnect the other units.



A prompt screen will confirm the software number & version you should select, and display the current version of firmware for the unit.

- ▶ Click **OK**.

Selecting a File for Transfer



The **Open File** dialog will appear.

To locate the firmware file, browse to the location:

- PC users: C:\Program Files\Neve Recall\Firmware
- Mac users: Applications\Neve Recall\Firmware

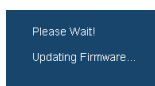
The file names follow the format **down_88XY_V.hex** where XY are the last two digits of the 88 unit name (e.g. '16' for 8816) and **V** is the software version number.

A typical filename could be **down_8804_3.hex**.

- ▶ Double click on the latest filename which matches your unit.

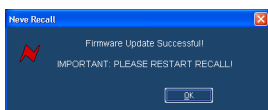
If an incorrect file is selected the user will be prompted to select another file.

File Downloading



Once the file is selected, the transfer will begin and the Recall screen will display that the download is under way.

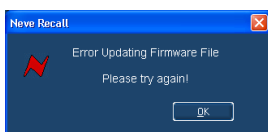
This process may take up to two minutes for each unit.



Upon completion, the message **Firmware Update Successful** will be displayed.

► Click **OK** to continue.

You can continue to update other units successfully without restarting Recall, but the Recall software must be restarted once this process is finished.



If the transfer fails (for example if the USB is removed by accident or power is lost to the unit), a warning message will prompt to the user to try again.

If Recall is started with a unit that has no firmware, the user will be prompted to upgrade the firmware, as the unit cannot be used in Recall unless the firmware installation is successful.

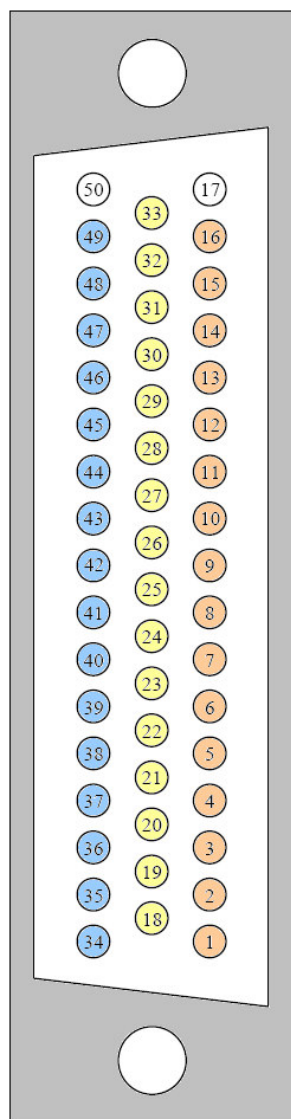
Corrupted or Old Firmware

If the firmware is corrupted or the unit has an old version of firmware, a prompt will appear upon starting the Recall software to indicate that firmware must be updated before the user can proceed.

The process described above can then be followed to update the latest firmware.

Pin outs

The Direct Outputs will either be available on a single 50-way connector (earlier model), or on two x 25-way connectors (later model), depending on when your unit was manufactured.

Direct Outputs – 50 way connector

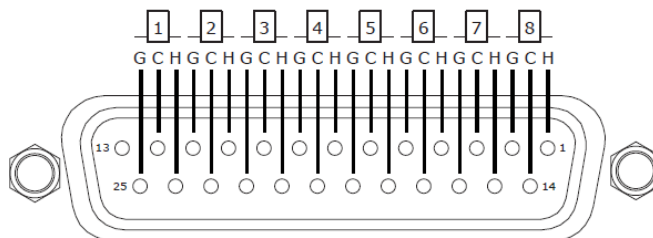
Pin Number / Cable	
1 Channel 1 Hot	26 Channel 9 Shield
2 Channel 2 Hot	27 Channel 10 Shield
3 Channel 3 Hot	28 Channel 11 Shield
4 Channel 4 Hot	29 Channel 12 Shield
5 Channel 5 Hot	30 Channel 13 Shield
6 Channel 6 Hot	31 Channel 14 Shield
7 Channel 7 Hot	32 Channel 15 Shield
8 Channel 8 Hot	33 Channel 16 Shield
9 Channel 9 Hot	34 Channel 1 Cold
10 Channel 10 Hot	35 Channel 2 Cold
11 Channel 11 Hot	36 Channel 3 Cold
12 Channel 12 Hot	37 Channel 4 Cold
13 Channel 13 Hot	38 Channel 5 Cold
14 Channel 14 Hot	39 Channel 6 Cold
15 Channel 16 Hot	40 Channel 7 Cold
16 Channel 16 Hot	41 Channel 8 Cold
17 - not used -	42 Channel 9 Cold
18 Channel 1 Shield	43 Channel 10 Cold
19 Channel 2 Shield	44 Channel 11 Cold
20 Channel 3 Shield	45 Channel 12 Cold
21 Channel 4 Shield	46 Channel 13 Cold
22 Channel 5 Shield	47 Channel 14 Cold
23 Channel 6 Shield	48 Channel 15 Cold
24 Channel 7 Shield	49 Channel 16 Cold
25 Channel 8 Shield	50 - not used -

The metal shell of the Connector should be connected to the 8804 chassis.

Direct Outputs – 2 x 25 way

On newer issues of the 8804 fader pack, this single 50-way D-connector has been replaced by two 25 way D-connectors.

Both of these connectors use standard Tascam wiring, so any cables that adhere to this convention can be used.

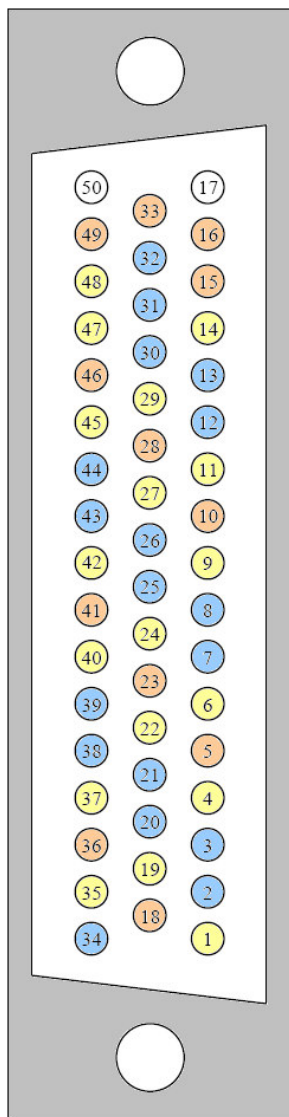


Looking at the fader pack from the rear, the connector on the **right** is for channels 1 – 8.

Circuit	Channel	Pin		
		Hi	Lo	Screen
1	1	24	12	25
2	2	10	23	11
3	3	21	9	22
4	4	7	20	8
5	5	18	6	19
6	6	4	17	5
7	7	15	3	16
8	8	1	14	2

The connector on the **left** is for channels 9 – 16.

Circuit	Channel	Pin		
		Hi	Lo	Screen
1	9	24	12	25
2	10	10	23	11
3	11	21	9	22
4	12	7	20	8
5	13	18	6	19
6	14	4	17	5
7	15	15	3	16
8	16	1	14	2

Audio link between 8804 & 8816

Pin Number / Cable	
1 Channel 1 In	26 Channel 11 Out
2 Channel 2 Out	27 Channel 12 In
3 Channel 3 Out	28 Channel 13-14 Gnd
4 Channel 4 In	29 Channel 15 In
5 Channel 5-6 Gnd	30 Channel 16 Out
6 Channel 7 In	31 Mix Left Out
7 Channel 8 Out	32 Mix Right Out
8 Channel 9 Out	33 Direct Even Gnd
9 Channel 10 In	34 Channel 1 Out
10 Channel 11-12 Gnd	35 Channel 2 In
11 Channel 13 In	36 Channel 3-4 Gnd
12 Channel 14 Out	37 Channel 5 In
13 Channel 15 Out	38 Channel 6 Out
14 Channel 16 In	39 Channel 7 Out
15 Mix Left Gnd	40 Channel 8 In
16 Mix Right Gnd	41 Channel 9-10 Gnd
17 +16v	42 Channel 11 In
18 Channel 1-2 Gnd	43 Channel 12 Out
19 Channel 3 In	44 Channel 13 Out
20 Channel 4 Out	45 Channel 14 In
21 Channel 5 Out	46 Channel 15-16 Gnd
22 Channel 6 In	47 Mix Left In
23 Channel 7-8 Gnd	48 Mix Right In
24 Channel 9 In	49 Direct Odd Gnd
25 Channel 10 Out	50 -16v

NB:

The metal shell of the connector should be connected to the 8804 chassis.

NB:

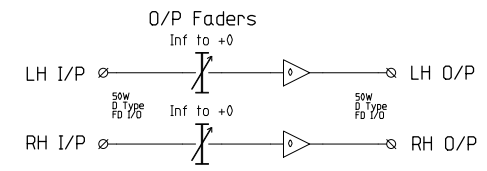
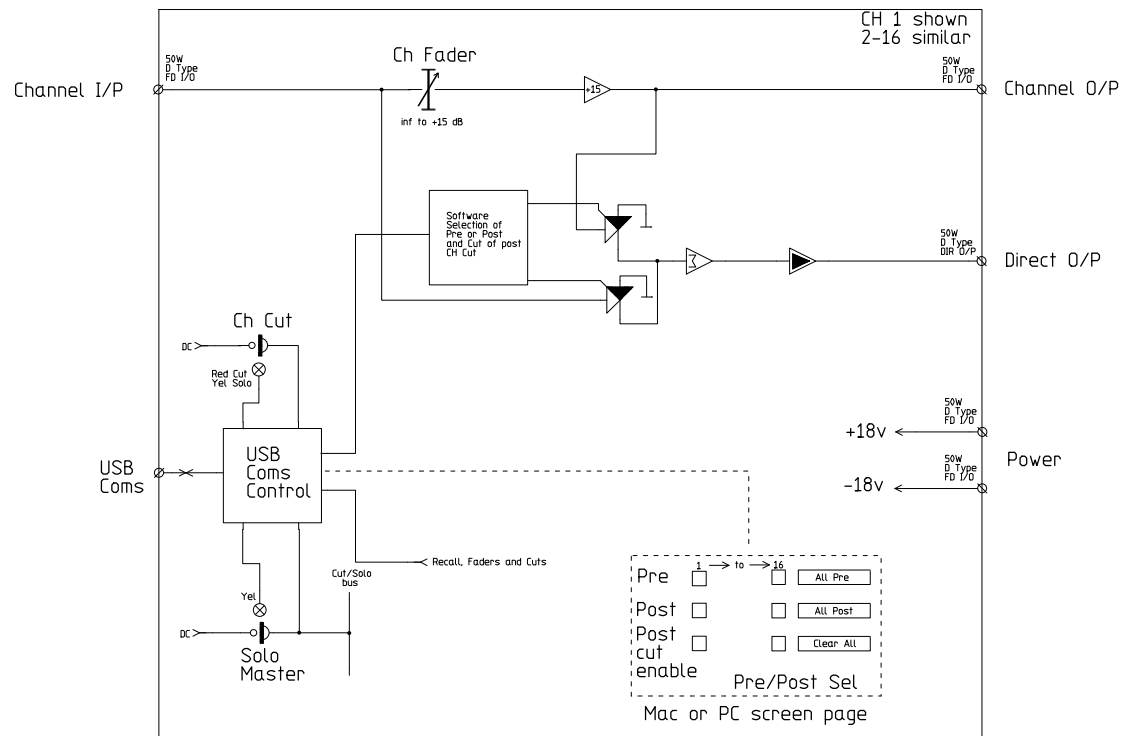
IN means an input **to** 8804

OUT means an output **from** the 8804

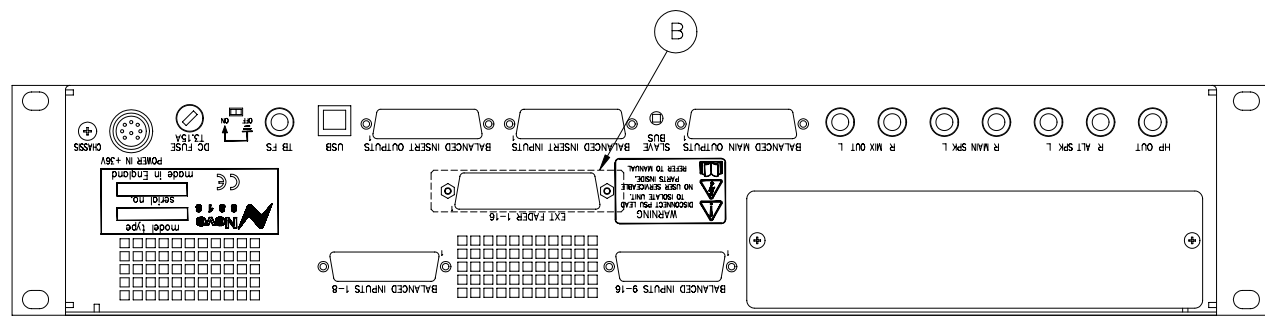
Unit Specifications

8804 Specifications	
Dimensions	Width 48.2 cm / 19"
	Height 17.6 cm / 3U
	Depth 3.2 cm / 1½"
Weight	2.1 kg
Level	Channels 1-16 $-\infty$ to +15dB
	Mix L & R $-\infty$ to +0dB
Frequency Response	+/- 0.2dB: 10Hz to 20kHz
	+/- 0.5dB: 10Hz to 40kHz
Distortion	Measurement Window: 10Hz to 80kHz
	Fader @ 0dB: Distortion <0.005% (20Hz to 20kHz)
Noise	Measurement Window: 10Hz to 22kHz
	Fader @ 0dB: Noise <90dB (20Hz to 20kHz)

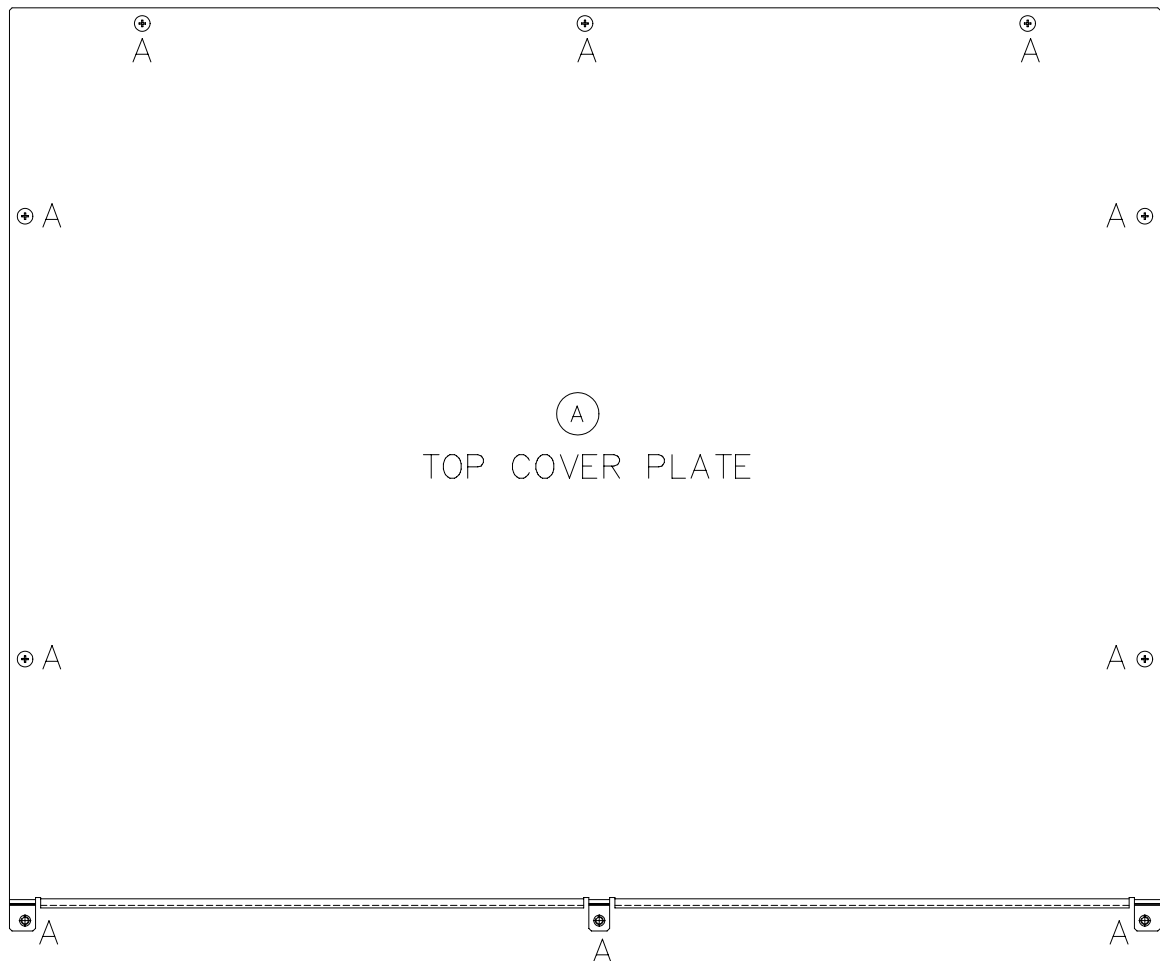
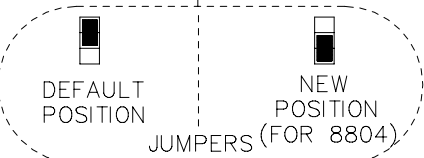
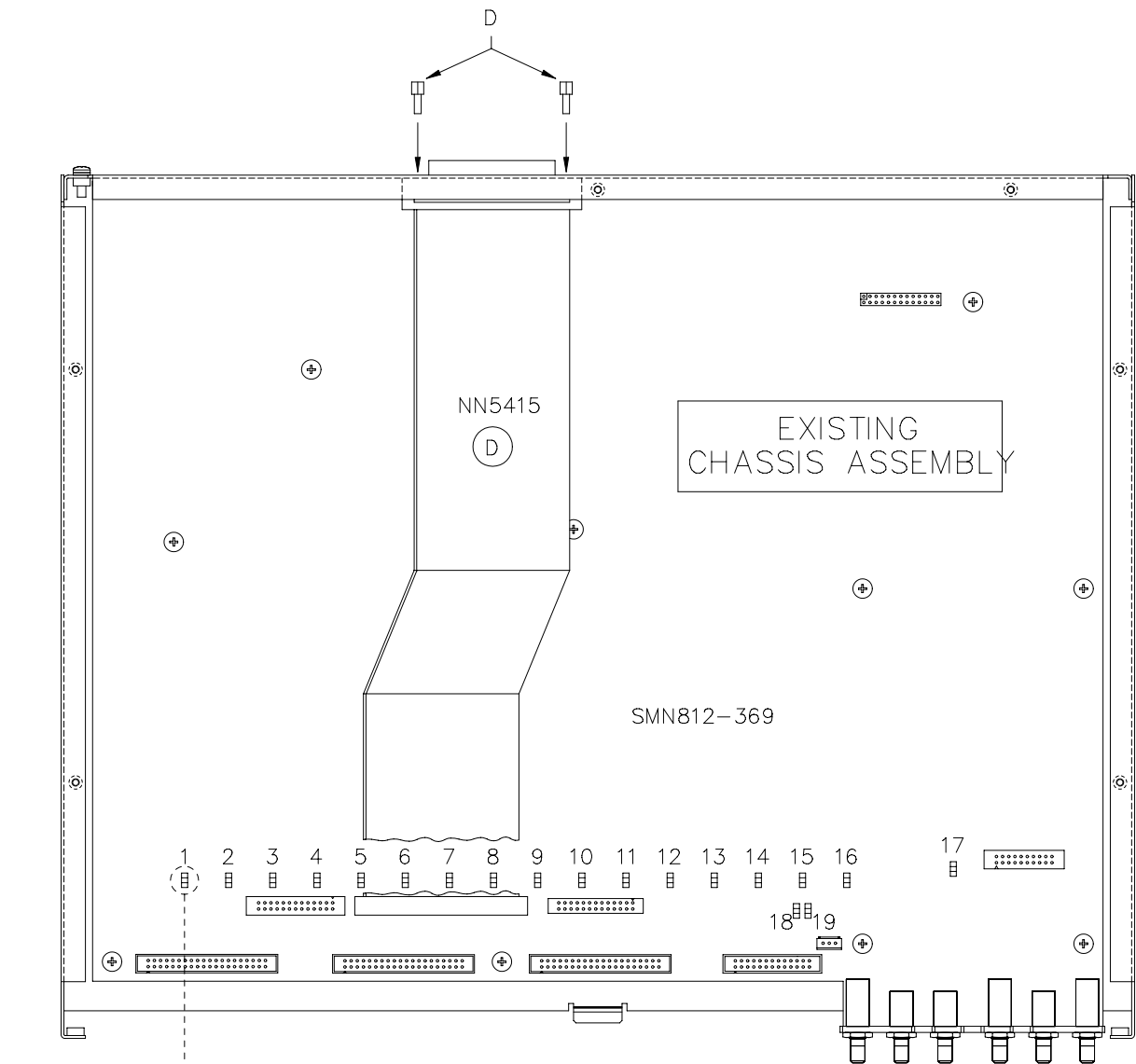
EB20553



	A	Issue	Drn.	RAP	TITLE 8804	USED ON	EB20553
	26/06/06	Date	Traced	RAP	16 Channel	Drng. No.	
		C.N. No.	Checked		Fader pack	SHT.	1 of 1
		Checked	AMS NEVE Plc.		2006	19	© A1



INSTALLATION PROCEDURE	TOOL REQUIRED
(A) REMOVE 10off SCREWS (MARKED A) & TOP COVER PLATE FROM THE UNIT & KEEP SAFE TO RE-USE – SEE ITEM E	
(B) REMOVE EXISTING SCREWS, NUTS, WASHERS & COVER PLATE – DISCARD OR DRILL OUT EXISTING PILLARS FROM REAR USING 6mm DIA DRILL BEING CAREFUL NOT TO BREAK THROUGH THE CHASSIS WALL FULLY	 OR
(C) SWITCH EXISTING 19off JUMPERS FROM DEFAULT POSITION TO NEW POSITION AS SHOWN	
(D) FIT CABLE NN5415 TO CONNECTOR SHOWN ON MOTHERBOARD SMN812-369 & TO REAR PANEL WHERE SHOWN. SECURE USING 2off JACK POSTS SUPPLIED (MARKED D) DO NOT OVER TIGHTEN	
(E) RE-FIT TOP COVER PLATE USING EXISTING 10off SCREWS FROM ITEM A	



(C)

☆NOTE – SOME DETAIL OMMITED IN THE INTERESTS OF CLARITY

SMW	----	17.5.06	1
NAME	MOD. No.	DATE	ISS.

THIRD ANGLE PROJECTION
DRAWN TO B.S.308

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TITLE: AM5393 – MODS TO 8816 TO FIT 8804 FADER UNIT

DRAWN: SMW
APP'D:
DATE: 17.5.06

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AMS NEVE
DRG No. AM5393
SHT 3