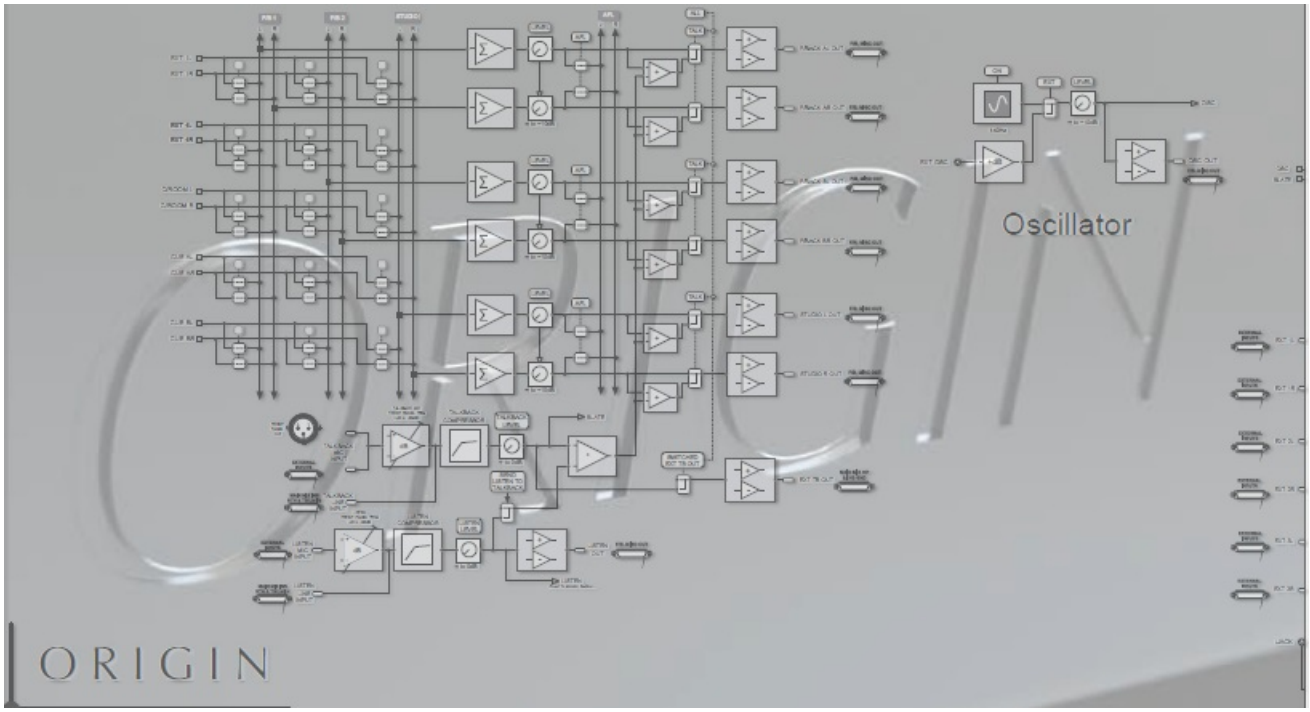
# Solid State Logic Origin 32 Channel Analog Studio Console Installation Guide

Contents

**Origin 32 Channel Analog Studio Console**

**ORIGIN**
**Installation Guide**
**Covers Origin 16 and 32 Channel versions**

**Communications (Foldback and Studio)**




**Solid State Logic**

OXFORD « ENGLAND

Vist SSL at:
www.soicstatelogic.com

“PLEASE READ ALL INSTRUCTIONS, PAY SPECIAL HEED TO SAFETY WARNINGS.
EacE

May 2023

Revision History
Revision V1.0 – January 2020 – Initial Release
Revision V1.1 – February 2020 – First Minor Revision Release
Revision V1.2 – May 2020 – Correction of Leg Fixing Detail
Revision V1.3 – June 2020 – Revision of Installation Options
Revision V1.4 – January 2021 – Updated Crate Packing Detail
Revision V2.0 – September 2022 – Addition of Origin 16 Information
Revision V2.1 – May 2023 – Addition of Mains Supply Voltage & Current

## About ORIGIN

ORIGIN takes a fresh look at what large format consoles need to do to work in harmony with a modern DAW-driven production
studio. The functional design looks back at the ‘origin’ of in-line consoles for signal flow inspiration, but its circuits are at the cutting
edge of SSL’s latest analogue developments. These new analogue designs deliver huge dynamic range and bandwidth yet still
have the characterful, pleasing qualities of space and depth that analogue audio breathes on digital audio.
ORIGIN’s simple signal flow and layout make it easy to understand and use, while powerful features such as channel direct outputs,
a fully balanced electronic architecture and precision barograph meters make it a perfect partner for the highest quality converters
and DAWs in the most professional production applications.

A unique and innovative modular centre section allows ORIGIN to adapt to different applications and priorities, whether being used
as a purely tracking console with additional boutique analogue additions to the 19” rack centre section, or a very digital/analogue
hybrid approach with screens and controllers easily reached from the centre of the console.
ORIGIN offers engineers and producers the tools required for everything from large-scale tracking to hybrid mix

down session.
Taking sustainability, ergonomics, modern gain-staging and communication requirements into consideration, ORIGIN offers a
reassuringly familiar Master Control feature-set with some ahead-of-the-curve functionality.


## Safety First!

**Important Safety Information**
This section contains definitions and warnings, and practical information to ensure a safe working environment. Please take time
to read this section before undertaking any installation work.

Before use please also refer to the Safety Guide for ORIGIN, which is included in all new console shipments.

## General Safety

- Please read and keep this document and adhere to all warnings and instructions.
- When installing this apparatus place it on a secure level surface.
- Do not block any ventilation openings and always allow free flow of air around the console for cooling.
- This electrical equipment should not be exposed to dust, water, or other liquids.
- Clean only with dry cloth or products compatible with electrical devices and never when the unit is powered.
- Do not operate near any heat sources, in direct sunlight or near naked flames.
- Do not place heavy objects on the unit.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Only use attachments/accessories recommended by the manufacturer.
- Ensure that no strain is placed on any cables connected to this apparatus. Ensure that all cables are not placed where they can be stepped on, pulled or tripped over.
- Do NOT modify this unit, alterations may affect performance, safety and/or international compliance standards.
- SSL does not accept liability for damage caused by maintenance, repair or modification by unauthorized

personnel.

## Power Safety

- Origin is not supplied with a mains lead. When selecting a mains lead please comply with the following:
- Refer to the rating label on rear of the unit and always use a suitable mains cord.
- Please use-compliant 60320 C13 TYPE SOCKET. When connecting to supply outlets ensure that appropriate sized
  conductors and plugs are used to suit local electrical requirements.
  – Maximum cord length should be 4.5m(15’).
- The cord should bear the approval mark of the country in which it is to be used.
- The appliance coupler is used as the disconnect device, ensure that it is connected to an unobstructed wall outlet.
- Connect only to an AC power source that contains a protective earthing (PE) conductor.
- Only connect units to single phase supplies with the neutral conductor at earth potential.

**CAUTION!**
This equipment must be Earthed. Disconnect all power sources before removing any panels.
No user-serviceable parts inside – to be serviced only by qualified personnel.

**WARNING!**
Un-earthed metal parts may be present inside the enclosure.
Check for hazardous voltages before touching.

## Safety And Regulations
## Definitions

**‘Maintenance’**
All maintenance must be carried out by fully trained personnel.
Note: It is advisable to observe suitable ESD precautions when maintaining electronic assemblies.

**‘Non-User Adjustments’**
Adjustments or alterations to the equipment may affect the performance such that safety and/or international compliance standards
may no longer be met. Any such adjustments must therefore only be carried out by fully trained personnel.

**‘Users’**
This equipment is designed for use solely by engineers and competent operators skilled in the use of professional audio equipment.

**‘Environment’**
This product is a class A product intended to form an integrated component part of a professional audio production environment
wherein it will perform to specification providing that it is installed according to professional practice.

Electrical Safety Warning
When installing or servicing any item of SSL equipment with power applied, when cover panels are removed, HAZARDOUS
CONDITIONS CAN EXIST.

### These hazards include:

- High voltages
- High energy stored in capacitors
- High currents available from DC power busses
- Hot component surfaces

Any metal jewellery (watches, bracelets, neck-chains and rings) that could inadvertently come into contact with uninsulated
parts should always be removed before reaching inside powered equipment.

**Safety Earth Connection**
Any mains powered item of SSL equipment must always have the earth wire connected to the mains supply ground AND
PRECAUTIONS SHOULD BE MADE SO THAT THE GROUNDING IS NOT DEFEATED. This is the safety earth and grounds the
exposed metal parts of the racks and enclosures and must not be removed for any reason.

WHEN CONNECTING TO MAINS SUPPLY OUTLETS ALWAYS REFER TO THE RATING LABEL ON THE REAR OF THE CONSOLE
AND ENSURE THAT APPROPRIATE SIZED CONDUCTORS AND PLUGS ARE USED TO SUIT LOCAL ELECTRICAL REQUIREMENTS.

### Mains Supply and Phases

To ensure safe operation of this equipment, connect only to an AC power source that contains a protective earthing (PE) conductor.
This equipment is designed for connection to single phase supplies with the neutral conductor at earth potential – category TN
or TT. This equipment is not designed for use with live and neutral connections reversed or where the neutral conductor is not at
earth potential (IT supplies). This equipment should not be connected to a power system that switches open the return (neutral)
lead when the return lead also functions as the protective earth (PE).

The ratings label, which details the console power requirements, is located adjacent to the mains inlet connectors on the power
input panel beneath the rear of the console.

### Mains Isolation and Over-Current Protection

An external disconnect device is required for this equipment which must be installed according to current wiring regulations. A
detachable power cord s a suitable disconnect device.
An external over-current protection device is required to protect the wiring to this equipment which must be installed according
to the current wiring regulations. The fusing or breaking-current is defined in the product specification. In certain countries this
function is supplied by use of a fused plug.

### Physical Safety

The console surface is too heavy for one person to move; ensure sufficient manpower is available when

positioning the console
and any associated IO or peripheral equipment.
If the console trim is removed for any reason then there may be sharp edges exposed on the frame metalwork.

**Environmental**
Temperature: Operating: +1 to 30 C . Storage: -20 to 50 C .

## Tools

Origin is supplied with a pair of T-handle Module Pullers (SSL Part #53911152A) and a 2mm Allen Key to aide with maintenance of the channel
strips. Other tools that may be needed for installation are an 8mm Metric (M8) spanner/socket or adjustable spanner to attach the legs.
If there is a need to remove the end trim of the console, a #2 Pozidriv screwdriver will be needed for the front buffer/armrest to end
trim screws.

## Regulatory Information
## CE Certification

ORIGIN is CE compliant. Note that cables supplied with SSL equipment may be fitted with ferrite rings at each end.

This is to comply with the current regulations and these ferrites should not be removed.
If any of the console metalwork is modified in any way – particularly the addition of holes for custom switches etc. – this may the
adversely affect the CE certification status of the product.

**FCC Certification**
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. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated
in a commercial environment.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the
instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is
likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Instructions for disposal of WEEE by users in the European Union**
The symbol shown here, which is on the product or on its packaging, indicates that this product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.

**RoHS Notice**
Solid State Logic has conformed and this product has conformed to European Union's Directive 2011/65/EU on Restrictions of

Hazardous Substances (RoHS) as well as the following sections of California law which refer to RoHS, namely sections 25214.10,
25214.10.2, and 58012, Health and Safety Code; Section 42475.2, Public Resources Code.

California Proposition 65
WARNING: Cancer and Reproductive Harm – **www.P65Warnings.ca.gov**

## Help and Advice

### Commissioning and Training
### Commissioning

- ORIGIN consoles do not include on-site commissioning by an SSL engineer as standard.
- Commissioning can be requested at the time of purchase at additional cost and is usually expected to take one working day.
- You should contact your local SSL office or agent at least four weeks prior to delivery to arrange a commissioning date.

Please note: The console must be installed in a clean environment. The presence of dust – particularly cement particles – increases
the chance of long-term damage being caused to the moving faders and other controls. Such damage may cause the warranty
to be rendered invalid.

**Training**
A range of operational and maintenance training options are available from SSL or one of our authorized representatives.
For further information please contact SSL's Support Department at: support@solidstatelogic.com.

### Warranty
### Factory Warranty

All new systems include a 13 month warranty which commences on the date of shipment. This warranty includes:

- Technical support – phone, fax and e-mail – via your local distributor or office during normal business hours
- Supply of exchange parts*
- Service engineer visits (note that travel and subsistence costs are not covered by the warranty)

* It is not anticipated that a visit from an SSL engineer will be necessary in the majority of cases where a replacement part is
required. Console sub-assemblies are designed to be easily removable to facilitate replacement.

### Extended Warranty

The standard warranty period may optionally be extended up to a maximum of 5 years on a 'Parts supply' basis. To order extended warranty please contact your SSL representative or e-mail SSL's Service department at: support@solidstatelogic.com.

### Special Tools and Fasteners

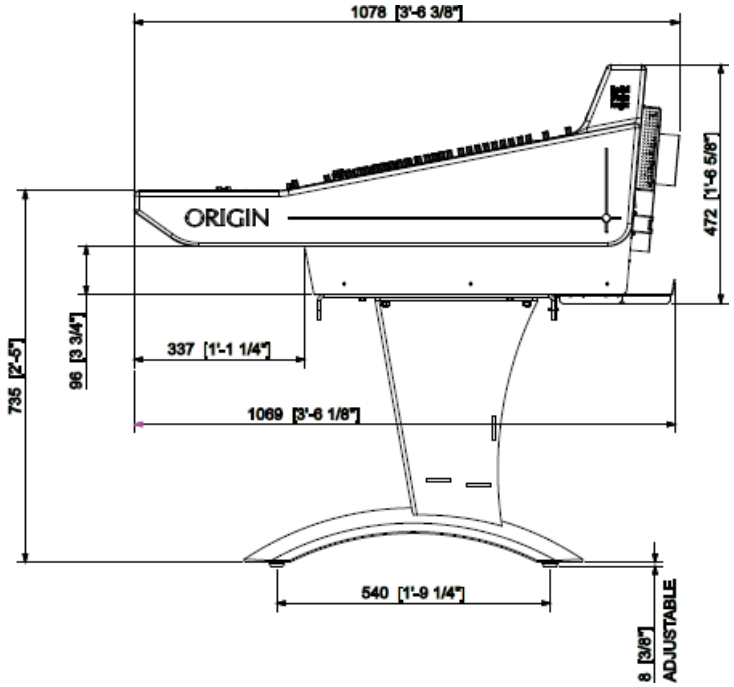
Each ORIGIN console is supplied with a pair of M4 thread T-Bar module removal tools (SSL Part No. 53911152A) which fix into the
threaded holes that are exposed when the upper and lower channel fixing screws are removed.
Other than this no special tools are required for maintenance. All fasteners are Metric sizes and threads. Most screws used to fix
panels are M3 Hex headed countersunk or cap screws which need a 2 mm hex, or Allen key to remove, or they are Pozidriv #2
headed screws. The feet are fixed with 8 mm (M8) Hex nuts (supplied).

**User Guide**
The ORIGIN User Guide can be downloaded from the ORIGIN section of the SSL website at :
**https://www.solidstatelogic.com**

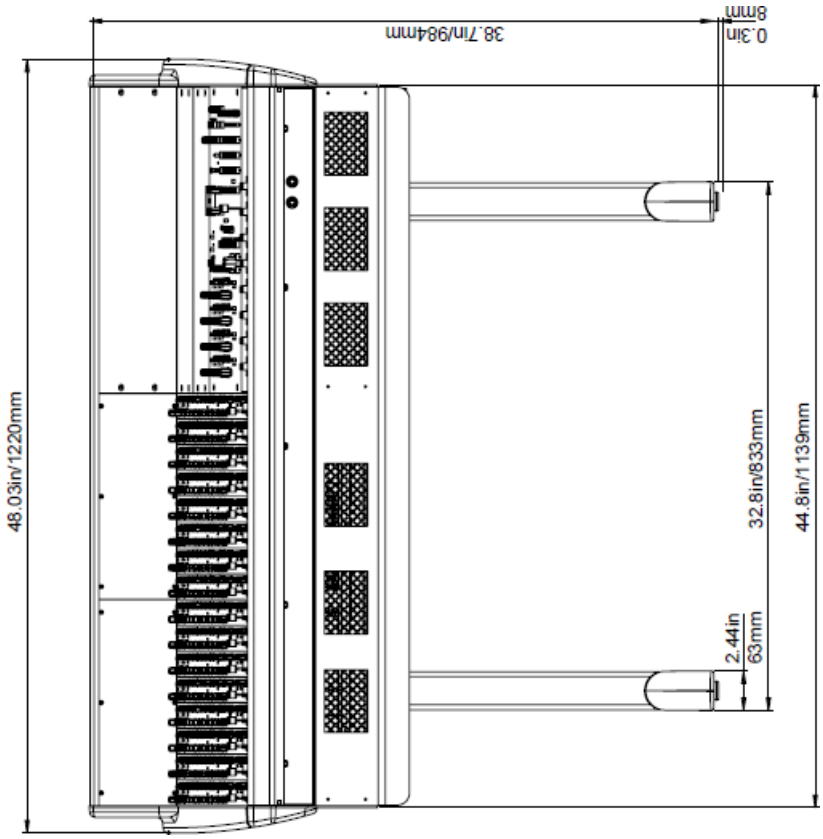
## ORIGIN Power, Weight and Dimensions

Approx. Dimensions are shown in mm [and feet-inches] in the diagrams below and on the following pages.
Other specs are:

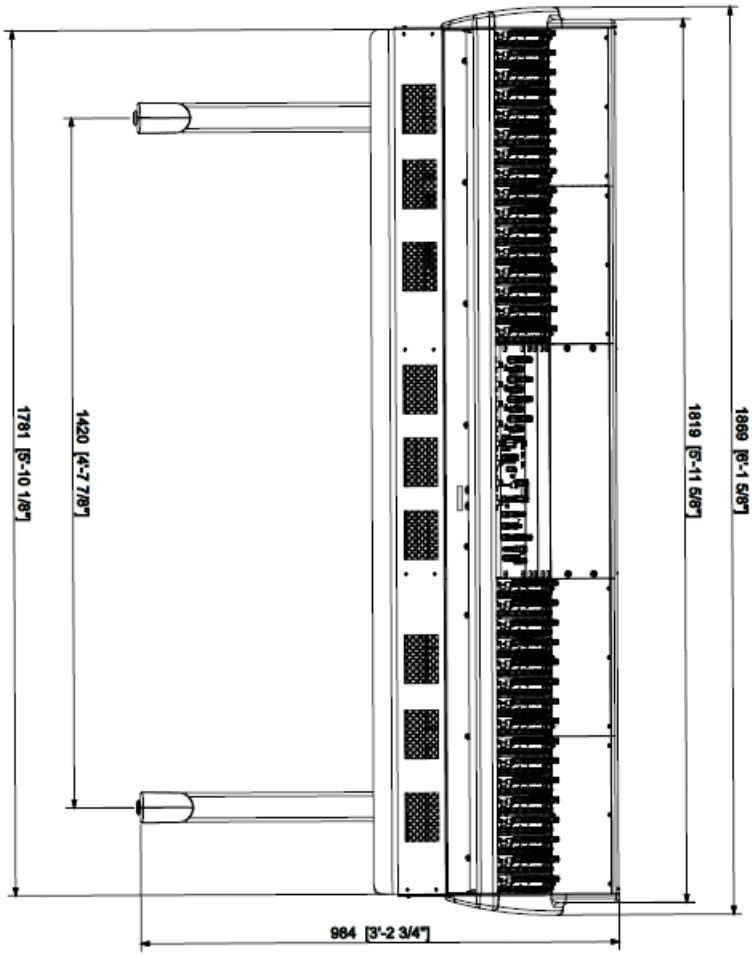
| | ORIGIN 16 | ORIGIN 32 |
|---|---|---|
| Approximate Weight | 198 lb / 90 kg including legs and trim 157 lb / 71 kg excluding legs | 357 lb / 162 kg including legs and trim 315 lb / 143 kg excluding legs |
| Power Requirements | Mains Supply :<br>Voltage : Autoranging 100V to 240V Current : 6.0 A to 3.0 A<br>Power Consumption:<br>Typically <500 Watts<br>600 Watts maximum when on<br>Typically <40 Watts when in standby/ sleep. | Mains Supply :<br>Voltage : Autoranging 100V to 240V<br>Current : 12.0 A to 6.0 A<br>Power Consumption:<br>Typically <900 Watts<br>1200 Watts maximum when on<br>Typically <40 Watts when in standby/ sleep. |




**Origin 16**




**Origin 32**




### General precautions

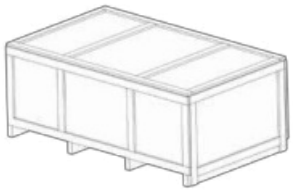
- To prevent damage to the controls and cosmetics, avoid placing heavy objects on the control surface, obstructing
  the faders, scratching the surface with sharp objects, or rough handling and vibration.
- Protect the equipment from damage through liquid or dust contamination. Avoid dust or small objects getting into
  the fader slots. Power off and cover the console when it is not being used for a long period.
- Electronic technology can be affected by extreme cold. If the equipment has been stored in sub-zero temperatures
  allow time for it to reach normal operating temperature before use. Recommended operating temperature for ORIGIN is +1 degree (Non-condensing) to 40 degrees Celsius.
- Avoid using the equipment in extreme heat and direct sunlight. Make sure the console ventilation slots are not obstructed and that there is adequate air movement around the equipment.
- ORIGIN is designed to be permanently mounted in a fixed installation. If the console has to be moved, please consult
  SSL for packing and transportation advice.
- Avoid the use of chemicals, abrasives or solvents. Clean the control surface with a soft brush and dry lint-free cloth.
- It is recommended that servicing is carried out only by an authorized SSL support partner or agent. Contact details
  for your local distributor can be found on the SSL web site or by contacting support@solidstatelogic.com.
- SSL do not accept liability for damage caused by maintenance, repair or modification by unauthorised

personnel.

**WARNING:** To reduce the risk of fire or electric shock do not expose this apparatus to rain or moisture.

**Unpacking**
ORIGIN is supplied in a sealed wooden shipping crate similar to that shown

**Safety Notices**
**IMPORTANT:** Please read the safety notice information included in the Safety Guide supplied inside the box before using
ORIGIN.



| | ORIGIN 16 | ORIGIN 32 |
|---|---|---|
| Volumetric weight<br>for shipping | 210 kg, 460 lb | 280 kg, 620 lb |
| Approximate<br>Crate Dimensions<br>Length :<br>Height :<br>Depth : | <br>1390mm (54.8 inches)<br>680mm (26.8 inches)<br>1210mm (47.6 inches) | <br>2040mm (80.3 inches)<br>680mm (26.8 inches)<br>1210mm (47.6 inches) |

## Safety Notices

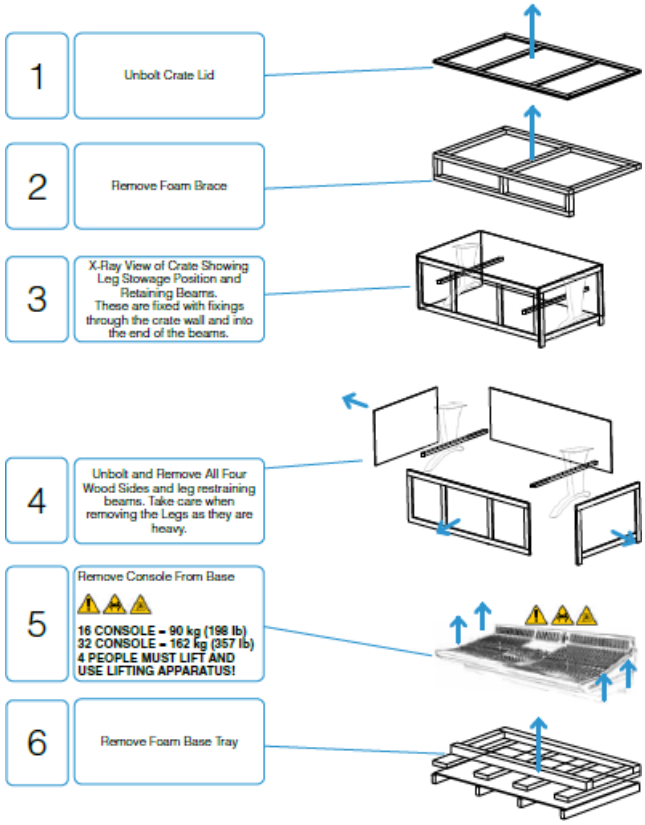
IMPORTANT: Please read the safety notice information included in the Safety Guide supplied inside the box before using ORIGIN.

IMPORTANT – ORIGIN Frame Structure and Maneuvering The Console.

The structure of ORIGIN is built on a strong steel U-beam which spans the width of the base of the console. Only this should be used to lift and maneuver the console when using a forklift or other mechanical lifting aid.

DO NOT USE THE OPTIONAL REMOVABLE END TRIM TO MOVE OR HANDLE THE CONSOLE.

## Unpacking and Mounting Hardware
## Dismantling the shipping crate (32 Channel Console shown)




## Mounting the console on the legs (if supplied)

Once the crate is dismantled, the next activity is to remove the console, legs and fixing nuts from the shipping crate and to mount the console on it's legs. It is suggested that the foam lattice used in the shipping crate is used to protect the floor and console when fitting the legs

CAUTION: The 16 ch console weighs approx 90kg (198lb) and the 32 ch console weighs approx 150kg (330lb), multiple people and/or lifting supports must be used to remove the console from the shipping crate.

1 Ensure that the legs, leg fixings and console are conveniently located for assembly.
In the diagram on the left the foam base tray is in position behind the console to provide a cushioned base to protect the rear of the console and the floor when fitting the legs.

2 Lift** the console and gently place it onto its rear. The console will rest in a near vertical position on the rear panel heatsinks and the cable tray mounted on the rear edge.
**The console is heavy! Several strong people will be needed for this activity.

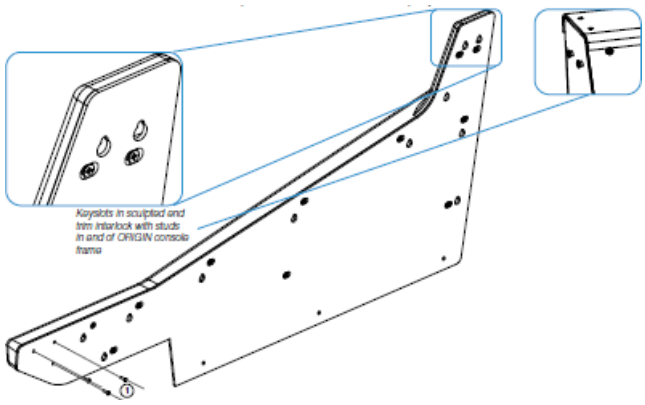
3 With the console carefully resting on it's rear, use the eight M8 nuts supplied to attach the legs onto the studs protruding from the console base. It is important for a person to support the console as the legs are attached as the additional weight

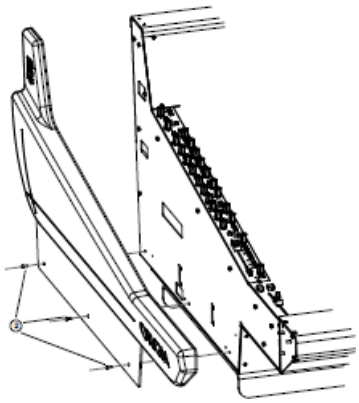
of the legs will change the centre of gravity,

4 With the legs attached securely, the console can be lifted to it's final position.
The rubber feet at the base of the legs have a small amount of screw adjustment allowing adjustment for uneven floors.

## Fitting/Removing the Sculpted End Trim

If Sculpted End Trim has been ordered, this will normally be fitted prior to packing. It is possible to remove this end trim, for example
to reduce the overall width of the console, or to provide a surface to mate to third party furniture



Removing the end trim starts with removing the three cross headed screws that secure the front buffer/ armrest (1 in the diagram above) and the three 2mm hex headed retaining screws (2 in the diagram on the right) on the bottom edge of the trim. With these six screws removed the trim can be gently slid up vertically to align the keyhole slots with the locating lugs and then removing the trim horizontally.

Fitting the trim is the opposite process, i.e. position the trim keyhole locating apertures so they locate onto the end of the console over the locating studs, then gently slide the trim down vertically so that the bottom three locating screw holes align with the threaded holes in the end of the console, then screw the trim in place with the three trim retaining screws (2 in the diagram on the right) and the other three screws inside of the front buffer/armrest (1 in the diagram above).

## ORIGIN Master Section

About the ORIGIN Master Section and centre section rack layout.

The ORIGIN Master Section is designed to be the heart of a flexible, configurable central layout. The 6U 19″ rack width is designed
to be re-positionable for different application priorities. As standard, the master section is fitted in the bottom 6U of the 12U central
rack layout and there are two 3U panels blank panels above. The Master Section is cabled such that it can be placed in any of the
rack slots from the lowest 6U to the top 6U and therefore the blank panels may be re-arranged to support other third party devices
such as keyboards, or controllers. Additionally custom 19″ panels, such as switch panels, or trays for controllers may be fitted.

It is possible to fit shallow audio devices, such as 500 series rack modules, into the upper areas of the centre racking, care should
be taken that any devices fitted do not introduce overheating issues, either because of their own power consumption, or because
they restrict airflow, see the IMPORTANT INFORMATION below.

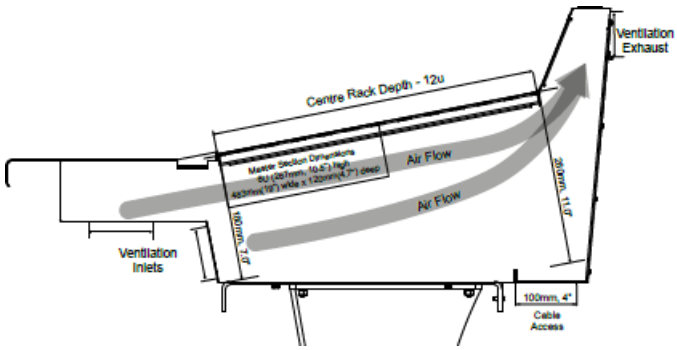
**MASTER SECTION RACK CABLE ACCESS**
Cable access for 19″ rack units is available through an access hole at the rear of the base of the cavity (see diagram below).

## VERY IMPORTANT INFORMATION

**HEAT AND VENTILATION**
As shown in the drawing below, ventilation through the internal cavity of the centre section is very important. Any device which is
fitted into the racking which significantly restricts airflow through the central cavity could create overheating issues for the
electronics in the Master Section. Deep units which could significantly obstruct airflow should have at least a 1U ventilation
panel underneath their rack position to allow airflow through the Master Section.

**ELECTRICAL NOISE AND INTERFERENCE**
Any third party electronics mounted in the centre section racking could expose the Master Section to electrical noise/interference
and compromise the audio performance of ORIGIN. Obviously, SSL cannot be responsible for any issues that may arise because
of this and owners should remove any devices causing such issues to preserve the audio performance of the console.

**MOVING THE MASTER SECTION**
Though the Master Section is designed to be re-positioned, it is not designed for continuous changes of position, it is moveable to
configure the console for different applications, not to be moved for each session.



## Standard Layout

The layout on the left is the default layout from the factory. As can be seen, all the panels above the Stereo Group faders are 19″ format panels. The Master Section is a 6U panel and above that are two 3U panels. The Meter Panel in the overbridge is also a 3U panel.

**500 Series Racks**

In this layout, the two 3U panels have been replaced with a 500 series rack fitted with 8 mono SSL Dynamics modules and a stereo SSL Bus Compressors. A 1U grill panel has been fitted above the centre section to aid with ventilation and the remaining 2U filled with a 2U blank panel.
The lower right blank area next to the Stereo Group faders has an Apple Magic Trackpad placed on it to show for scale.

**IMPORTANT:**
Please read the VERY IMPORTANT INFORMATION on the previous page before fitting any electronic devices into the centre section racking.

**Full Sized Keyboard**

In this layout, the Master Section has been moved towards the rear of the console by 3U**. A blank 3U panel has been moved into the space above the Stereo Group Faders and this can be used for a computer keyboard. The lower right blank area next to the Stereo Group faders has an Apple Magic Trackpad.

****NOTE: Moving The 6U Master Section**

The 6U ORIGIN Master Section has many of the console audio and control signals wired to it. Please exercise anti-static precautions before moving and take great care to ensure no cables are snagged or disconnected when moving.

**DAW Controller Layout**

In this layout, the Master Section has been moved to the top 6U of the console centre section. The two 3U blank panels have been moved into the space above the Stereo Group Faders and this space is used for a DAW controller.

****NOTE: Moving The 6U Master Section**

The 6U ORIGIN Master Section has many of the console audio and control signals wired to it. Please exercise anti-static precautions before moving and take great care to ensure no cables are snagged or disconnected when moving.

## Unpacking and Mounting Hardware

**Centre Section Racking**

The MAXIMUM** depth for each 1U of the centre section rack space is shown below. The 11th and 12th U of rack space are angled such that a deep unit could extend through the cable entry space in the rear of the console. With any rack units that restrict air flow through the centre section, ventilation rack panels must be used to keep airflow through the Master Section.
** MAXIMUM depth available includes cables, connectors and cable bend radiuses.

**Alternate Meter Layout**

As the centre meters are also built as a 3U panel, they can also be moved into the upper 3U in the Centre Section. In the images shown, the blank 3U panel is moved into the overbridge to keep the centre meters visible if

the overbridge space is likely to be obscured (for example by a flat screen monitor, see image below)

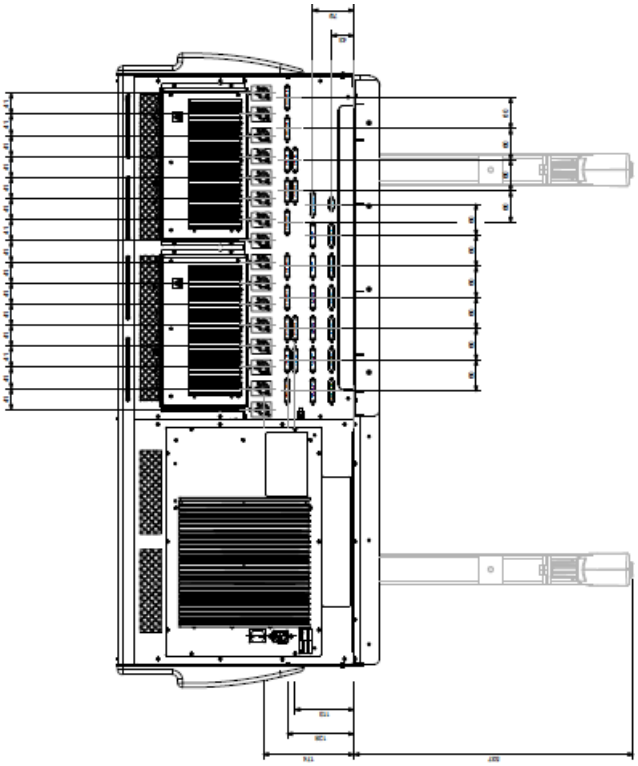
**Centre Section Racking**

The MAXIMUM** depth for each 1U of the centre section rack space is shown below. The 11th and 12th U of rack space are angled such that a deep unit could extend through the cable entry space in the rear of the console. With any rack units that restrict air flow through the centre section, ventilation rack panels must be used to keep airflow through the Master Section.

** MAXIMUM depth available includes cables, connectors and cable bend radiuses.

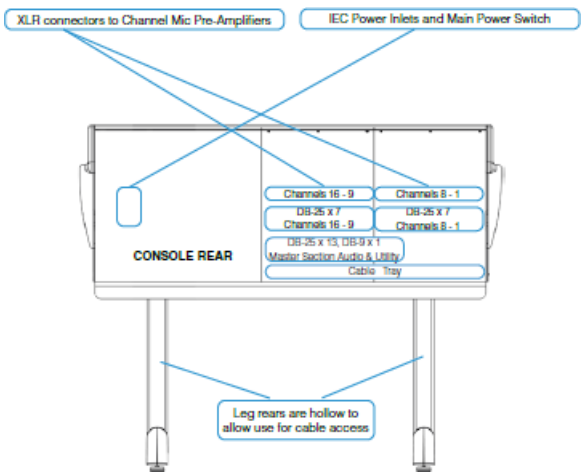
## Making Connections – Origin 16

### Rear Connector Locations



### Rear View – Power and Audio Connectors

Location of the main audio and power connections are shown in the diagram below looking towards the rear of the console.



**Audio Connector Details**
**Microphone Inputs**

Microphone Inputs

| | |
|---|---|
| | 3-pin XLR Female |
| Pin | Description |
| 1 | 0V Chassis |
| 2 | Signal +ve (Hot) |
| 3 | Signal -ve (Cold) |

ORIGIN Installation Guide

Making Connections – Origin 16

Chan (Channel) Path Mic XLR Inputs

| | | Patch | | | Patch |
|---|---|---|---|---|---|
| XLR# | Chan Mic IN 1-8 | Ref** | XLR# | Chan Mic IN 9-16 | Ref** |
| 1 | Chan Mic IP 1 | B1 | 9 | Chan Mic IP 9 | B9 |
| 2 | Chan Mic IP 2 | B2 | 10 | Chan Mic IP 10 | B10 |
| 3 | Chan Mic IP 3 | B3 | 11 | Chan Mic IP 11 | B11 |
| 4 | Chan Mic IP 4 | B4 | 12 | Chan Mic IP 12 | B12 |
| 5 | Chan Mic IP 5 | B5 | 13 | Chan Mic IP 13 | B13 |
| 6 | Chan Mic IP 6 | B6 | 14 | Chan Mic IP 14 | B14 |
| 7 | Chan Mic IP 7 | B7 | 15 | Chan Mic IP 15 | B15 |
| 8 | Chan Mic IP 8 | B8 | 16 | Chan Mic IP 16 | B16 |

### Channel DB-25 Connectors

The Large Fader and Small Fader Path line level audio connections are on the rear panel of the console. Each connector set of seven DB-25 connectors carries the fully balanced audio for eight channels, laid out on the rear of the console as shown on the previous page, so for 32 channels there are four sets of seven DB-25 connectors. Each connector uses the common AES59 format for analogue audio DB-25 connectors, the pinout is shown on the right.

The physical layout of the seven connectors is shown below as viewed when looking at the rear of the console.

DB-25 Line Level Audio Connectors for Channels 1-8, 9-16, 17-24, 25-32 (4 sets of seven female connectors)

### Channel DB-25 Pinouts

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

### Chan (Channel) Path Line Inputs

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Chan Line IN 1-8 | Ref** | Chan Line IN 9-16 | Ref** |
| 1 | 24 | 12 | 25 | Ch Line IP 1 | D1 | Ch Line IP 9 | D9 |
| 2 | 10 | 23 | 11 | Ch Line IP 2 | D2 | Ch Line IP 10 | D10 |
| 3 | 21 | 9 | 22 | Ch Line IP 3 | D3 | Ch Line IP 11 | D11 |
| 4 | 7 | 20 | 8 | Ch Line IP 4 | D4 | Ch Line IP 12 | D12 |
| 5 | 18 | 6 | 19 | Ch Line IP 5 | D5 | Ch Line IP 13 | D13 |
| 6 | 4 | 17 | 5 | Ch Line IP 6 | D6 | Ch Line IP 14 | D14 |
| 7 | 15 | 3 | 16 | Ch Line IP 7 | D7 | Ch Line IP 15 | D15 |
| 8 | 1 | 14 | 2 | Ch Line IP 8 | D8 | Ch Line IP 16 | D16 |



Channel DB-25 Pinouts cont'd

Making Connections – Origin 16

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

Mon (Monitor) Path Line Inputs

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Mon Line IN 1-8 | Ref** | Mon Line IN 9-16 | Ref** |
| 1 | 24 | 12 | 25 | Mon Line IP 1 | B17 | Mon Line IP 9 | B25 |
| 2 | 10 | 23 | 11 | Mon Line IP 2 | B18 | Mon Line IP 10 | B26 |
| 3 | 21 | 9 | 22 | Mon Line IP 3 | B19 | Mon Line IP 11 | B27 |
| 4 | 7 | 20 | 8 | Mon Line IP 4 | B20 | Mon Line IP 12 | B28 |
| 5 | 18 | 6 | 19 | Mon Line IP 5 | B21 | Mon Line IP 13 | B29 |
| 6 | 4 | 17 | 5 | Mon Line IP 6 | B22 | Mon Line IP 14 | B30 |
| 7 | 15 | 3 | 16 | Mon Line IP 7 | B23 | Mon Line IP 15 | B31 |
| 8 | 1 | 14 | 2 | Mon Line IP 8 | B24 | Mon Line IP 16 | B32 |

LF (Large Fader) Insert Sends

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | LF Ins Snd 1-8 | Ref** | LF Ins Snd 9-16 | Ref** |
| 1 | 24 | 12 | 25 | LF Ins Snd 1 | C17 | LF Ins Snd 9 | C25 |
| 2 | 10 | 23 | 11 | LF Ins Snd 2 | C18 | LF Ins Snd 10 | C26 |
| 3 | 21 | 9 | 22 | LF Ins Snd 3 | C19 | LF Ins Snd 11 | C27 |
| 4 | 7 | 20 | 8 | LF Ins Snd 4 | C20 | LF Ins Snd 12 | C28 |
| 5 | 18 | 6 | 19 | LF Ins Snd 5 | C21 | LF Ins Snd 13 | C29 |
| 6 | 4 | 17 | 5 | LF Ins Snd 6 | C22 | LF Ins Snd 14 | C30 |
| 7 | 15 | 3 | 16 | LF Ins Snd 7 | C23 | LF Ins Snd 15 | C31 |
| 8 | 1 | 14 | 2 | LF Ins Snd 8 | C24 | LF Ins Snd 16 | C32 |

LF (Large Fader) Insert Returns

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | LF Ins Rtn 1-8 | Ref** | LF Ins Rtn 9-16 | Ref** |
| 1 | 24 | 12 | 25 | LF Ins Rtn 1 | D17 | LF Ins Rtn 9 | D25 |
| 2 | 10 | 23 | 11 | LF Ins Rtn 2 | D18 | LF Ins Rtn 10 | D26 |
| 3 | 21 | 9 | 22 | LF Ins Rtn 3 | D19 | LF Ins Rtn 11 | D27 |
| 4 | 7 | 20 | 8 | LF Ins Rtn 4 | D20 | LF Ins Rtn 12 | D28 |
| 5 | 18 | 6 | 19 | LF Ins Rtn 5 | D21 | LF Ins Rtn 13 | D29 |
| 6 | 4 | 17 | 5 | LF Ins Rtn 6 | D22 | LF Ins Rtn 14 | D30 |
| 7 | 15 | 3 | 16 | LF Ins Rtn 7 | D23 | LF Ins Rtn 15 | D31 |
| 8 | 1 | 14 | 2 | LF Ins Rtn 8 | D24 | LF Ins Rtn 16 | D32 |

SF (Small Fader) Insert Sends

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | SF Ins Snd 1-8 | Ref** | SF Ins Snd 9-16 | Ref** |
| 1 | 24 | 12 | 25 | SF Ins Snd 1 | E1 | SF Ins Snd 9 | E9 |
| 2 | 10 | 23 | 11 | SF Ins Snd 2 | E2 | SF Ins Snd 10 | E10 |
| 3 | 21 | 9 | 22 | SF Ins Snd 3 | E3 | SF Ins Snd 11 | E11 |
| 4 | 7 | 20 | 8 | SF Ins Snd 4 | E4 | SF Ins Snd 12 | E12 |
| 5 | 18 | 6 | 19 | SF Ins Snd 5 | E5 | SF Ins Snd 13 | E13 |
| 6 | 4 | 17 | 5 | SF Ins Snd 6 | E6 | SF Ins Snd 14 | E14 |
| 7 | 15 | 3 | 16 | SF Ins Snd 7 | E7 | SF Ins Snd 15 | E15 |
| 8 | 1 | 14 | 2 | SF Ins Snd 8 | E8 | SF Ins Snd 16 | E16 |



Making Connections – Origin 16

Channel DB-25 Pinouts cont’d

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

SF (Small Fader) Insert Returns

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | SF Ins Rtn 1-8 | Ref** | SF Ins Rtn 9-16 | Ref** |
| 1 | 24 | 12 | 25 | SF Ins Rtn 1 | F1 | SF Ins Rtn 9 | F9 |
| 2 | 10 | 23 | 11 | SF Ins Rtn 2 | F2 | SF Ins Rtn 10 | F10 |
| 3 | 21 | 9 | 22 | SF Ins Rtn 3 | F3 | SF Ins Rtn 11 | F11 |
| 4 | 7 | 20 | 8 | SF Ins Rtn 4 | F4 | SF Ins Rtn 12 | F12 |
| 5 | 18 | 6 | 19 | SF Ins Rtn 5 | F5 | SF Ins Rtn 13 | F13 |
| 6 | 4 | 17 | 5 | SF Ins Rtn 6 | F6 | SF Ins Rtn 14 | F14 |
| 7 | 15 | 3 | 16 | SF Ins Rtn 7 | F7 | SF Ins Rtn 15 | F15 |
| 8 | 1 | 14 | 2 | SF Ins Rtn 8 | F8 | SF Ins Rtn 16 | F16 |

Channel Direct Outputs

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Direct Out 1-8 | Ref** | Direct Out 9-16 | Ref** |
| 1 | 24 | 12 | 25 | Direct Out 1 | G1 | Direct Out 9 | G9 |
| 2 | 10 | 23 | 11 | Direct Out 2 | G2 | Direct Out 10 | G10 |
| 3 | 21 | 9 | 22 | Direct Out 3 | G3 | Direct Out 11 | G11 |
| 4 | 7 | 20 | 8 | Direct Out 4 | G4 | Direct Out 12 | G12 |
| 5 | 18 | 6 | 19 | Direct Out 5 | G5 | Direct Out 13 | G13 |
| 6 | 4 | 17 | 5 | Direct Out 6 | G6 | Direct Out 14 | G14 |
| 7 | 15 | 3 | 16 | Direct Out 7 | G7 | Direct Out 15 | G15 |
| 8 | 1 | 14 | 2 | Direct Out 8 | G8 | Direct Out 16 | G16 |

**ORIGIN Installation Guide**

Making Connections – Origin 16

Master Section DB-25 Connectors

The Master Section audio connections are on the rear panel of the

console as a group of 13 female DB-25 connectors under the Channel

DB-25 Connectors for Channels 9-16.

Each connector uses the common AES59 format for analogue audio

DB-25 connectors, the pinout is shown on the right.

The physical layout of the Thirteen connectors is shown below as viewed when looking at the rear of the console.

DB-25 Line Level Audio Connector Layout for the Master Section (all female connectors)

Master Section DB-25 Pinouts

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

Bus O/P (Bus Outputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Bus Output 1-8 | Ref** | Bus Output 9-16 | Ref** |
| 1 | 24 | 12 | 25 | Bus Output 1 | E17 | Bus Output 9 | E25 |
| 2 | 10 | 23 | 11 | Bus Output 2 | E18 | Bus Output 10 | E26 |
| 3 | 21 | 9 | 22 | Bus Output 3 | E19 | Bus Output 11 | E27 |
| 4 | 7 | 20 | 8 | Bus Output 4 | E20 | Bus Output 12 | E28 |
| 5 | 18 | 6 | 19 | Bus Output 5 | E21 | Bus Output 13 | E29 |
| 6 | 4 | 17 | 5 | Bus Output 6 | E22 | Bus Output 14 | E30 |
| 7 | 15 | 3 | 16 | Bus Output 7 | E23 | Bus Output 15 | E31 |
| 8 | 1 | 14 | 2 | Bus Output 8 | E24 | Bus Output 16 | E32 |

ST GRP IP (Stereo Group Inputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Grp IP 1-4 | Ref** | St Grp IP 5-8 | Ref** |
| 1 | 24 | 12 | 25 | St Grp IP 1L | F17 | St Grp IP 5L | F25 |
| 2 | 10 | 23 | 11 | St Grp IP 1R | F18 | St Grp IP 5R | F26 |
| 3 | 21 | 9 | 22 | St Grp IP 2L | F19 | St Grp IP 6L | F27 |
| 4 | 7 | 20 | 8 | St Grp IP 2R | F20 | St Grp IP 6R | F28 |
| 5 | 18 | 6 | 19 | St Grp IP 3L | F21 | St Grp IP 7L | F29 |
| 6 | 4 | 17 | 5 | St Grp IP 3R | F22 | St Grp IP 7R | F30 |
| 7 | 15 | 3 | 16 | St Grp IP 4L | F23 | St Grp IP 8L | F31 |
| 8 | 1 | 14 | 2 | St Grp IP 4R | F24 | St Grp IP 8R | F32 |



Master Section DB-25 Pinouts Cont’d

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

ST GRP OP (Stereo Group Outputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Grp OP 1-4 | Ref** | St Grp OP 5-8 | Ref** |
| 1 | 24 | 12 | 25 | St Grp OP 1L | G17 | St Grp OP 5L | G25 |
| 2 | 10 | 23 | 11 | St Grp OP 1R | G18 | St Grp OP 5R | G26 |
| 3 | 21 | 9 | 22 | St Grp OP 2L | G19 | St Grp OP 6L | G27 |
| 4 | 7 | 20 | 8 | St Grp OP 2R | G20 | St Grp OP 6R | G28 |
| 5 | 18 | 6 | 19 | St Grp OP 3L | G21 | St Grp OP 7L | G29 |
| 6 | 4 | 17 | 5 | St Grp OP 3R | G22 | St Grp OP 7R | G30 |
| 7 | 15 | 3 | 16 | St Grp OP 4L | G23 | St Grp OP 8L | G31 |
| 8 | 1 | 14 | 2 | St Grp OP 4R | G24 | St Grp OP 8R | G32 |

ST (Stereo) Return InputsMonitor Outputs

| | 25 Way F D-type | | | | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Rtn IP 1-4 | Ref** |
| 1 | 24 | 12 | 25 | St Rtn IP 1L | B33 |
| 2 | 10 | 23 | 11 | St Rtn IP 1R | B34 |
| 3 | 21 | 9 | 22 | St Rtn IP 2L | B35 |
| 4 | 7 | 20 | 8 | St Rtn IP 2R | B36 |
| 5 | 18 | 6 | 19 | St Rtn IP 3L | B37 |
| 6 | 4 | 17 | 5 | St Rtn IP 3R | B38 |
| 7 | 15 | 3 | 16 | St Rtn IP 4L | B39 |
| 8 | 1 | 14 | 2 | St Rtn IP 4R | B40 |

| | 25 Way F D-type | | | Monitor | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Outputs | Ref** |
| 1 | 24 | 12 | 25 | Main L | A41 |
| 2 | 10 | 23 | 11 | Main R | A42 |
| 3 | 21 | 9 | 22 | Alt Mon 1L | A43 |
| 4 | 7 | 20 | 8 | Alt Mon 1R | A44 |
| 5 | 18 | 6 | 19 | Alt Mon 2L | A45 |
| 6 | 4 | 17 | 5 | Alt Mon 2R | A46 |
| 7 | 15 | 3 | 16 | Alt Mon 3L | A47 |
| 8 | 1 | 14 | 2 | Alt Mon 3R | A48 |

External Inputs (and TB/Lstn Mic Parallel IPs)Cue/Aux Outputs

| | 25 Way F D-type | | | | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | External IP 1-3 | Ref** |
| 1 | 24 | 12 | 25 | External IP 1 L | D33 |
| 2 | 10 | 23 | 11 | External IP 1 R | D34 |
| 3 | 21 | 9 | 22 | External IP 2 L | D35 |
| 4 | 7 | 20 | 8 | External IP 2 R | D36 |
| 5 | 18 | 6 | 19 | External IP 3 L | D37 |
| 6 | 4 | 17 | 5 | External IP 3 R | D38 |
| 7 | 15 | 3 | 16 | Tb Mic In Parallel | D39 |
| 8 | 1 | 14 | 2 | Listn Mic In ||lel | D40 |

| | 25 Way F D-type | | | Cue A,B Aux 1-4 | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Outputs | Ref** |
| 1 | 24 | 12 | 25 | St Cue OP A L | C41 |
| 2 | 10 | 23 | 11 | St Cue OP A R | C42 |
| 3 | 21 | 9 | 22 | St Cue OP B L | C43 |
| 4 | 7 | 20 | 8 | St Cue OP B R | C44 |
| 5 | 18 | 6 | 19 | Aux Output 1 | C45 |
| 6 | 4 | 17 | 5 | Aux Output 2 | C46 |
| 7 | 15 | 3 | 16 | Aux Output 3 | C47 |
| 8 | 1 | 14 | 2 | Aux Output 4 | C48 |

Main Mix (Bus) Outputs and (Mix Bus) Insert SendF/B (Foldback, Studio) and Misc Outputs

| | 25 Way F D-type | | | | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Main OPs | Ref** |
| 1 | 24 | 12 | 25 | Mix Ins Snd L | E33 |
| 2 | 10 | 23 | 11 | Mix Ins Snd R | E34 |
| 3 | 21 | 9 | 22 | Mix OP L | E35 |
| 4 | 7 | 20 | 8 | Mix OP R | E36 |
| 5 | 18 | 6 | 19 | N/C | E37 |
| 6 | 4 | 17 | 5 | N/C | E38 |
| 7 | 15 | 3 | 16 | N/C | E39 |
| 8 | 1 | 14 | 2 | Ext TB Out | E40 |

| | 25 Way F D-type | | | Osc, Foldback | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | & Studio LS | Ref** |
| 1 | 24 | 12 | 25 | Oscillator Out | E41 |
| 2 | 10 | 23 | 11 | Listen Mic Out | E42 |
| 3 | 21 | 9 | 22 | Foldback Out AL | E43 |
| 4 | 7 | 20 | 8 | Foldback Out AR | E44 |
| 5 | 18 | 6 | 19 | Foldback Out BL | E45 |
| 6 | 4 | 17 | 5 | Foldback Out BR | E46 |
| 7 | 15 | 3 | 16 | Studio L | E47 |
| 8 | 1 | 14 | 2 | Studio R | E48 |



Master Section DB-25 Pinouts Cont’d

Making Connections – Origin 16

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 28

Mix Bus INS RTN (Insert Return) and TB/LM (Talkback/Listen Mic) Line Inputs

| | 25 Way F D-type | | | Main Ins Rtn | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Talkback/Listen | Ref** |
| 1 | 24 | 12 | 25 | Main Ins Rtn L | F33 |
| 2 | 10 | 23 | 11 | Main Ins Rtn R | F34 |
| 3 | 21 | 9 | 22 | N/C | F35 |
| 4 | 7 | 20 | 8 | N/C | F36 |
| 5 | 18 | 6 | 19 | TB Line In | F37 |
| 6 | 4 | 17 | 5 | Listen Line In | F38 |
| 7 | 15 | 3 | 16 | N/C | F39 |
| 8 | 1 | 14 | 2 | N/C | F40 |

**UTILITY**

| | |
|---|---|
| | 9-Way F D-type |
| Pin | Red Light Relay |
| 1 | Normally Open Contact R1 |
| 2 | Common |
| 3 | Normally Closed Contact R1 |
| 4 | Normally Open Contact R2 |
| 5 | Common |
| 6 | Normally Closed Contact R2 |
| 7 | N/C |
| 8 | N/C |
| 9 | N/C |

R1 and R2 are separate relays, both operated by the Red Light Switch

ORIGIN Installation Guide

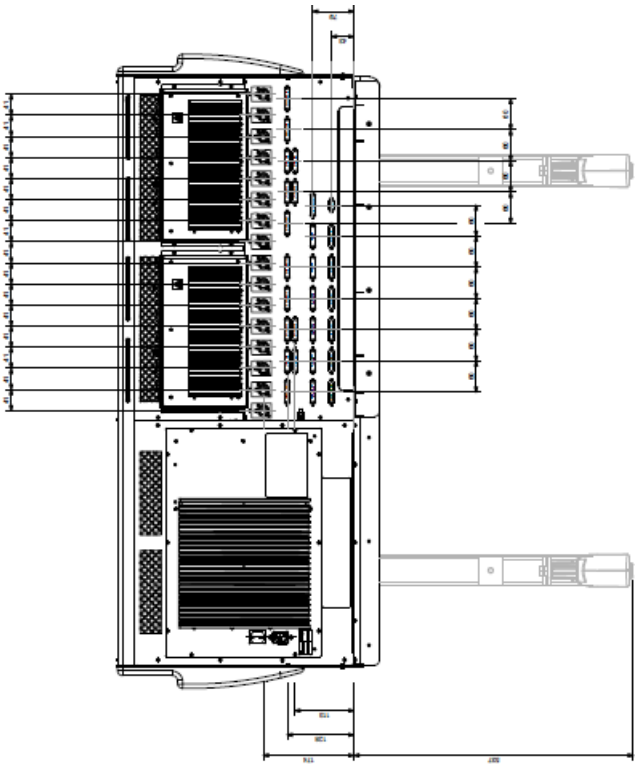
Making Connections – Origin 16

Suggested Patchbay Layout – Origin 16

**Patchbay Normalling Suggestions**
In the suggested patchbay layout below, the upper rows are configured to be half-normalled to the lower rows for each 1U pair of patchrows.
The layout is designed to use DB-25 to Bantam TT patchbays, such as the Neutrik NPPA-TT-SD25 or the Signex CPT96D25. With these patchrows, standard AES59
compatible DB-25 to DB-25 cables can be used to connect between console and patchbay,

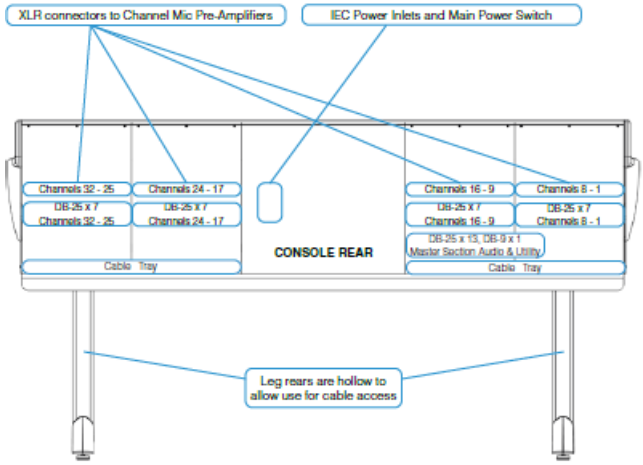
Coloured Idents are DB-25 (XLR for Mics) to/from Console Connector Panel(s)

## Making Connections – Origin 32
## Rear Connector Locations



## Rear View – Power and Audio Connectors

Location of the main audio and power connections are shown in the diagram below looking towards the rear of the console.




## Audio Connector Details
## Microphone Inputs

Audio Connector Details

Microphone Inputs

| | |
|---|---|
| | 3-pin XLR Female |
| Pin | Description |
| 1 | 0V Chassis |
| 2 | Signal +ve (Hot) |
| 3 | Signal -ve (Cold) |

ORIGIN Installation Guide

Chan (Channel) Path Mic XLR Inputs

Making Connections – Origin 32

| | | Patch | | | Patch | | | Patch | | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| XLR# | Chan Mic IN 1-8 | Ref** | XLR# | Chan Mic IN 9-16 | Ref** | XLR# | Chan Mic IN 17-24 | Ref** | XLR# | Chan Mic IN 25-32 | Ref** |
| 1 | Chan Mic IP 1 | B1 | 9 | Chan Mic IP 9 | B9 | 17 | Chan Mic IP 17 | B17 | 25 | Chan Mic IP 25 | B25 |
| 2 | Chan Mic IP 2 | B2 | 10 | Chan Mic IP 10 | B10 | 18 | Chan Mic IP 18 | B18 | 26 | Chan Mic IP 26 | B26 |
| 3 | Chan Mic IP 3 | B3 | 11 | Chan Mic IP 11 | B11 | 19 | Chan Mic IP 19 | B19 | 27 | Chan Mic IP 27 | B27 |
| 4 | Chan Mic IP 4 | B4 | 12 | Chan Mic IP 12 | B12 | 20 | Chan Mic IP 20 | B20 | 28 | Chan Mic IP 28 | B28 |
| 5 | Chan Mic IP 5 | B5 | 13 | Chan Mic IP 13 | B13 | 21 | Chan Mic IP 21 | B21 | 29 | Chan Mic IP 29 | B29 |
| 6 | Chan Mic IP 6 | B6 | 14 | Chan Mic IP 14 | B14 | 22 | Chan Mic IP 22 | B22 | 30 | Chan Mic IP 30 | B30 |
| 7 | Chan Mic IP 7 | B7 | 15 | Chan Mic IP 15 | B15 | 23 | Chan Mic IP 23 | B23 | 31 | Chan Mic IP 31 | B31 |
| 8 | Chan Mic IP 8 | B8 | 16 | Chan Mic IP 16 | B16 | 24 | Chan Mic IP 24 | B24 | 32 | Chan Mic IP 32 | B32 |

### Channel DB-25 Connectors

The Large Fader and Small Fader Path line level audio connections

are on the rear panel of the console. Each connector set of seven

DB-25 connectors carries the fully balanced audio for eight channels,

laid out on the rear of the console as shown on the previous page, so

for 32 channels there are four sets of seven DB-25 connectors. Each

connector uses the common AES59 format for analogue audio DB-25

connectors, the pinout is shown on the right.

The physical layout of the seven connectors is shown below as viewed

when looking at the rear of the console.

DB-25 Line Level Audio Connectors for Channels 1-8, 9-16, 17-24, 25-32 (4 sets of seven female connectors)

Channel DB-25 Pinouts

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

### Chan (Channel) Path Line Inputs

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Chan Line IN 1-8 | Ref ** | Chan Line IN 9-16 | Ref ** | Chan Line IN 17-24 | Ref ** | Chan Line IN 25-32 | Ref ** |
| 1 | 24 | 12 | 25 | Ch Line IP 1 | D1 | Ch Line IP 9 | D9 | Ch Line IP 17 | D17 | Ch Line IP 25 | D25 |
| 2 | 10 | 23 | 11 | Ch Line IP 2 | D2 | Ch Line IP 10 | D10 | Ch Line IP 18 | D18 | Ch Line IP 26 | D26 |
| 3 | 21 | 9 | 22 | Ch Line IP 3 | D3 | Ch Line IP 11 | D11 | Ch Line IP 19 | D19 | Ch Line IP 27 | D27 |
| 4 | 7 | 20 | 8 | Ch Line IP 4 | D4 | Ch Line IP 12 | D12 | Ch Line IP 20 | D20 | Ch Line IP 28 | D28 |
| 5 | 18 | 6 | 19 | Ch Line IP 5 | D5 | Ch Line IP 13 | D13 | Ch Line IP 21 | D21 | Ch Line IP 29 | D29 |
| 6 | 4 | 17 | 5 | Ch Line IP 6 | D6 | Ch Line IP 14 | D14 | Ch Line IP 22 | D22 | Ch Line IP 30 | D30 |
| 7 | 15 | 3 | 16 | Ch Line IP 7 | D7 | Ch Line IP 15 | D15 | Ch Line IP 23 | D23 | Ch Line IP 31 | D31 |
| 8 | 1 | 14 | 2 | Ch Line IP 8 | D8 | Ch Line IP 16 | D16 | Ch Line IP 24 | D24 | Ch Line IP 32 | D32 |



Making Connections – Origin 32

Channel DB-25 Pinouts cont’d

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

Mon (Monitor) Path Line Inputs

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold | Scrn | Mon Line IN 1-8 | Ref ** | Mon Line IN 9-16 | Ref ** | Mon Line IN 17-24 | Ref ** | Mon Line IN 25-32 | Ref** |
| 1 | 24 | 12 | 25 | Mon Line IP 1 | F1 | Mon Line IP 9 | F9 | Mon Line IP 17 | F17 | Mon Line IP 25 | F25 |
| 2 | 10 | 23 | 11 | Mon Line IP 2 | F2 | Mon Line IP 10 | F10 | Mon Line IP 18 | F18 | Mon Line IP 26 | F26 |
| 3 | 21 | 9 | 22 | Mon Line IP 3 | F3 | Mon Line IP 11 | F11 | Mon Line IP 19 | F19 | Mon Line IP 27 | F27 |
| 4 | 7 | 20 | 8 | Mon Line IP 4 | F4 | Mon Line IP 12 | F12 | Mon Line IP 20 | F20 | Mon Line IP 28 | F28 |
| 5 | 18 | 6 | 19 | Mon Line IP 5 | F5 | Mon Line IP 13 | F13 | Mon Line IP 21 | F21 | Mon Line IP 29 | F29 |
| 6 | 4 | 17 | 5 | Mon Line IP 6 | F6 | Mon Line IP 14 | F14 | Mon Line IP 22 | F22 | Mon Line IP 30 | F30 |
| 7 | 15 | 3 | 16 | Mon Line IP 7 | F7 | Mon Line IP 15 | F15 | Mon Line IP 23 | F23 | Mon Line IP 31 | F31 |
| 8 | 1 | 14 | 2 | Mon Line IP 8 | F8 | Mon Line IP 16 | F16 | Mon Line IP 24 | F24 | Mon Line IP 32 | F32 |

LF (Large Fader) Insert Sends

| | 25 Way F D-type | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold Scrn | LF Ins Snd 1-8 | Ref** | LF Ins Snd 9-16 | Ref** | LF Ins Snd 17-24 | Ref** | LF Ins Snd 25-32 | Ref** |
| 1 | 24 | 12 25 | LF Ins Snd 1 | G1 | LF Ins Snd 9 | G9 | LF Ins Snd 17 | G17 | LF Ins Snd 25 | G25 |
| 2 | 10 | 23 11 | LF Ins Snd 2 | G2 | LF Ins Snd 10 | G10 | LF Ins Snd 18 | G18 | LF Ins Snd 26 | G26 |
| 3 | 21 | 9 22 | LF Ins Snd 3 | G3 | LF Ins Snd 11 | G11 | LF Ins Snd 19 | G19 | LF Ins Snd 27 | G27 |
| 4 | 7 | 20 8 | LF Ins Snd 4 | G4 | LF Ins Snd 12 | G12 | LF Ins Snd 20 | G20 | LF Ins Snd 28 | G28 |
| 5 | 18 | 6 19 | LF Ins Snd 5 | G5 | LF Ins Snd 13 | G13 | LF Ins Snd 21 | G21 | LF Ins Snd 29 | G29 |
| 6 | 4 | 17 5 | LF Ins Snd 6 | G6 | LF Ins Snd 14 | G14 | LF Ins Snd 22 | G22 | LF Ins Snd 30 | G30 |
| 7 | 15 | 3 16 | LF Ins Snd 7 | G7 | LF Ins Snd 15 | G15 | LF Ins Snd 23 | G23 | LF Ins Snd 31 | G31 |
| 8 | 1 | 14 2 | LF Ins Snd 8 | G8 | LF Ins Snd 16 | G16 | LF Ins Snd 24 | G24 | LF Ins Snd 32 | G32 |

LF (Large Fader) Insert Returns

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold | Scrn | LF Ins Rtn 1-8 | Ref** | LF Ins Rtn 9-16 | Ref** | LF Ins Rtn 17-24 | Ref** | LF Ins Rtn 25-32 | Ref** |
| 1 | 24 | 12 | 25 | LF Ins Rtn 1 | H1 | LF Ins Rtn 9 | H9 | LF Ins Rtn 17 | H17 | LF Ins Rtn 25 | H25 |
| 2 | 10 | 23 | 11 | LF Ins Rtn 2 | H2 | LF Ins Rtn 10 | H10 | LF Ins Rtn 18 | H18 | LF Ins Rtn 26 | H26 |
| 3 | 21 | 9 | 22 | LF Ins Rtn 3 | H3 | LF Ins Rtn 11 | H11 | LF Ins Rtn 19 | H19 | LF Ins Rtn 27 | H27 |
| 4 | 7 | 20 | 8 | LF Ins Rtn 4 | H4 | LF Ins Rtn 12 | H12 | LF Ins Rtn 20 | H20 | LF Ins Rtn 28 | H28 |
| 5 | 18 | 6 | 19 | LF Ins Rtn 5 | H5 | LF Ins Rtn 13 | H13 | LF Ins Rtn 21 | H21 | LF Ins Rtn 29 | H29 |
| 6 | 4 | 17 | 5 | LF Ins Rtn 6 | H6 | LF Ins Rtn 14 | H14 | LF Ins Rtn 22 | H22 | LF Ins Rtn 30 | H30 |
| 7 | 15 | 3 | 16 | LF Ins Rtn 7 | H7 | LF Ins Rtn 15 | H15 | LF Ins Rtn 23 | H23 | LF Ins Rtn 31 | H31 |
| 8 | 1 | 14 | 2 | LF Ins Rtn 8 | H8 | LF Ins Rtn 16 | H16 | LF Ins Rtn 24 | H24 | LF Ins Rtn 32 | H32 |

SF (Small Fader) Insert Sends

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold | Scrn | SF Ins Snd 1-8 | Ref** | SF Ins Snd 9-16 | Ref** | SF Ins Snd 17-24 | Ref** | SF Ins Snd 25-32 | Ref** |
| 1 | 24 | 12 | 25 | SF Ins Snd 1 | I1 | SF Ins Snd 9 | I9 | SF Ins Snd 17 | I17 | SF Ins Snd 25 | I25 |
| 2 | 10 | 23 | 11 | SF Ins Snd 2 | I2 | SF Ins Snd 10 | I10 | SF Ins Snd 18 | I18 | SF Ins Snd 26 | I26 |
| 3 | 21 | 9 | 22 | SF Ins Snd 3 | I3 | SF Ins Snd 11 | I11 | SF Ins Snd 19 | I19 | SF Ins Snd 27 | I27 |
| 4 | 7 | 20 | 8 | SF Ins Snd 4 | I4 | SF Ins Snd 12 | I12 | SF Ins Snd 20 | I20 | SF Ins Snd 28 | I28 |
| 5 | 18 | 6 | 19 | SF Ins Snd 5 | I5 | SF Ins Snd 13 | I13 | SF Ins Snd 21 | I21 | SF Ins Snd 29 | I29 |
| 6 | 4 | 17 | 5 | SF Ins Snd 6 | I6 | SF Ins Snd 14 | I14 | SF Ins Snd 22 | I22 | SF Ins Snd 30 | I30 |
| 7 | 15 | 3 | 16 | SF Ins Snd 7 | I7 | SF Ins Snd 15 | I15 | SF Ins Snd 23 | I23 | SF Ins Snd 31 | I31 |
| 8 | 1 | 14 | 2 | SF Ins Snd 8 | I8 | SF Ins Snd 16 | I16 | SF Ins Snd 24 | I24 | SF Ins Snd 32 | I32 |



**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

SF (Small Fader) Insert Returns

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold | Scrn | SF Ins Rtn 1-8 | Ref** | SF Ins Rtn 9-16 | Ref** | SF Ins Rtn 17-24 | Ref** | SF Ins Rtn 25-32 | Ref** |
| 1 | 24 | 12 | 25 | SF Ins Rtn 1 | J1 | SF Ins Rtn 9 | J9 | SF Ins Rtn 17 | J17 | SF Ins Rtn 25 | J25 |
| 2 | 10 | 23 | 11 | SF Ins Rtn 2 | J2 | SF Ins Rtn 10 | J10 | SF Ins Rtn 18 | J18 | SF Ins Rtn 26 | J26 |
| 3 | 21 | 9 | 22 | SF Ins Rtn 3 | J3 | SF Ins Rtn 11 | J11 | SF Ins Rtn 19 | J19 | SF Ins Rtn 27 | J27 |
| 4 | 7 | 20 | 8 | SF Ins Rtn 4 | J4 | SF Ins Rtn 12 | J12 | SF Ins Rtn 20 | J20 | SF Ins Rtn 28 | J28 |
| 5 | 18 | 6 | 19 | SF Ins Rtn 5 | J5 | SF Ins Rtn 13 | J13 | SF Ins Rtn 21 | J21 | SF Ins Rtn 29 | J29 |
| 6 | 4 | 17 | 5 | SF Ins Rtn 6 | J6 | SF Ins Rtn 14 | J14 | SF Ins Rtn 22 | J22 | SF Ins Rtn 30 | J30 |
| 7 | 15 | 3 | 16 | SF Ins Rtn 7 | J7 | SF Ins Rtn 15 | J15 | SF Ins Rtn 23 | J23 | SF Ins Rtn 31 | J31 |
| 8 | 1 | 14 | 2 | SF Ins Rtn 8 | J8 | SF Ins Rtn 16 | J16 | SF Ins Rtn 24 | J24 | SF Ins Rtn 32 | J32 |

**Channel Direct Outputs**

| | 25 Way F D-type | | | | Patch | | Patch | | Patch | | Patch |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cct # | Hot | Cold | Scrn | Direct Out 1-8 | Ref** | Direct Out 9-16 | Ref** | Direct Out 17-24 | Ref** | Direct Out 25-32 | Ref** |
| 1 | 24 | 12 | 25 | Direct Out 1 | K1 | Direct Out 9 | K9 | Direct Out 17 | K17 | Direct Out 25 | K25 |
| 2 | 10 | 23 | 11 | Direct Out 2 | K2 | Direct Out 10 | K10 | Direct Out 18 | K18 | Direct Out 26 | K26 |
| 3 | 21 | 9 | 22 | Direct Out 3 | K3 | Direct Out 11 | K11 | Direct Out 19 | K19 | Direct Out 27 | K27 |
| 4 | 7 | 20 | 8 | Direct Out 4 | K4 | Direct Out 12 | K12 | Direct Out 20 | K20 | Direct Out 28 | K28 |
| 5 | 18 | 6 | 19 | Direct Out 5 | K5 | Direct Out 13 | K13 | Direct Out 21 | K21 | Direct Out 29 | K29 |
| 6 | 4 | 17 | 5 | Direct Out 6 | K6 | Direct Out 14 | K14 | Direct Out 22 | K22 | Direct Out 30 | K30 |
| 7 | 15 | 3 | 16 | Direct Out 7 | K7 | Direct Out 15 | K15 | Direct Out 23 | K23 | Direct Out 31 | K31 |
| 8 | 1 | 14 | 2 | Direct Out 8 | K8 | Direct Out 16 | K16 | Direct Out 24 | K24 | Direct Out 32 | K32 |



Making Connections – Origin 32

Master Section DB-25 Connectors

The Master Section audio connections are on the rear panel of the

console as a group of 13 female DB-25 connectors under the Channel

DB-25 Connectors for Channels 9-16.

Each connector uses the common AES59 format for analogue audio

DB-25 connectors, the pinout is shown on the right.

The physical layout of the Thirteen connectors is shown below as

viewed when looking at the rear of the console.

DB-25 Line Level Audio Connector Layout for the Master Section (all female connectors)

Master Section DB-25 Pinouts

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

Bus O/P (Bus Outputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Bus Output 1-8 | Ref** | Bus Output 9-16 | Ref** |
| 1 | 24 | 12 | 25 | Bus Output 1 | A33 | Bus Output 9 | A41 |
| 2 | 10 | 23 | 11 | Bus Output 2 | A34 | Bus Output 10 | A42 |
| 3 | 21 | 9 | 22 | Bus Output 3 | A35 | Bus Output 11 | A43 |
| 4 | 7 | 20 | 8 | Bus Output 4 | A36 | Bus Output 12 | A44 |
| 5 | 18 | 6 | 19 | Bus Output 5 | A37 | Bus Output 13 | A45 |
| 6 | 4 | 17 | 5 | Bus Output 6 | A38 | Bus Output 14 | A46 |
| 7 | 15 | 3 | 16 | Bus Output 7 | A39 | Bus Output 15 | A47 |
| 8 | 1 | 14 | 2 | Bus Output 8 | A40 | Bus Output 16 | A48 |

ST GRP IP (Stereo Group Inputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Grp IP 1-4 | Ref** | St Grp IP 5-8 | Ref** |
| 1 | 24 | 12 | 25 | St Grp IP 1L | B33 | St Grp IP 5L | B41 |
| 2 | 10 | 23 | 11 | St Grp IP 1R | B34 | St Grp IP 5R | B42 |
| 3 | 21 | 9 | 22 | St Grp IP 2L | B35 | St Grp IP 6L | B43 |
| 4 | 7 | 20 | 8 | St Grp IP 2R | B36 | St Grp IP 6R | B44 |
| 5 | 18 | 6 | 19 | St Grp IP 3L | B37 | St Grp IP 7L | B45 |
| 6 | 4 | 17 | 5 | St Grp IP 3R | B38 | St Grp IP 7R | B46 |
| 7 | 15 | 3 | 16 | St Grp IP 4L | B39 | St Grp IP 8L | B47 |
| 8 | 1 | 14 | 2 | St Grp IP 4R | B40 | St Grp IP 8R | B48 |



Master Section DB-25 Pinouts Cont’d

Making Connections – Origin 32

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

ST GRP OP (Stereo Group Outputs)

| | 25 Way F D-type | | | | Patch | | Patch |
|---|---|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Grp OP 1-4 | Ref** | St Grp OP 5-8 | Ref** |
| 1 | 24 | 12 | 25 | St Grp OP 1L | C33 | St Grp OP 5L | C41 |
| 2 | 10 | 23 | 11 | St Grp OP 1R | C34 | St Grp OP 5R | C42 |
| 3 | 21 | 9 | 22 | St Grp OP 2L | C35 | St Grp OP 6L | C43 |
| 4 | 7 | 20 | 8 | St Grp OP 2R | C36 | St Grp OP 6R | C44 |
| 5 | 18 | 6 | 19 | St Grp OP 3L | C37 | St Grp OP 7L | C45 |
| 6 | 4 | 17 | 5 | St Grp OP 3R | C38 | St Grp OP 7R | C46 |
| 7 | 15 | 3 | 16 | St Grp OP 4L | C39 | St Grp OP 8L | C47 |
| 8 | 1 | 14 | 2 | St Grp OP 4R | C40 | St Grp OP 8R | C48 |

ST (Stereo) Return Inputs

| | 25 Way F D-type | | | |
|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | St Rtn IP 1-4 |
| 1 | 24 | 12 | 25 | St Rtn IP 1L |
| 2 | 10 | 23 | 11 | St Rtn IP 1R |
| 3 | 21 | 9 | 22 | St Rtn IP 2L |
| 4 | 7 | 20 | 8 | St Rtn IP 2R |
| 5 | 18 | 6 | 19 | St Rtn IP 3L |
| 6 | 4 | 17 | 5 | St Rtn IP 3R |
| 7 | 15 | 3 | 16 | St Rtn IP 4L |
| 8 | 1 | 14 | 2 | St Rtn IP 4R |

### Patch

Ref** H33 H34 H35 H36 H37 H38 H39 H40

### Monitor Outputs

| | 25 Way F D-type | | | Monitor | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Outputs | Ref** |
| 1 | 24 | 12 | 25 | Main L | G41 |
| 2 | 10 | 23 | 11 | Main R | G42 |
| 3 | 21 | 9 | 22 | Alt Mon 1L | G43 |
| 4 | 7 | 20 | 8 | Alt Mon 1R | G44 |
| 5 | 18 | 6 | 19 | Alt Mon 2L | G45 |
| 6 | 4 | 17 | 5 | Alt Mon 2R | G46 |
| 7 | 15 | 3 | 16 | Alt Mon 3L | G47 |
| 8 | 1 | 14 | 2 | Alt Mon 3R | G48 |

**External Inputs (and TB/Lstn Mic Parallel IPs)Cue/Aux Outputs**

| | 25 Way F D-type | | | | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | External IP 1-3 | Ref** |
| 1 | 24 | 12 | 25 | External IP 1 L | J33 |
| 2 | 10 | 23 | 11 | External IP 1 R | J34 |
| 3 | 21 | 9 | 22 | External IP 2 L | J35 |
| 4 | 7 | 20 | 8 | External IP 2 R | J36 |
| 5 | 18 | 6 | 19 | External IP 3 L | J37 |
| 6 | 4 | 17 | 5 | External IP 3 R | J38 |
| 7 | 15 | 3 | 16 | Tb Mic In Parallel | J39 |
| 8 | 1 | 14 | 2 | Listn Mic In ||lel | J40 |

| | 25 Way F D-type | | | Cue A,B Aux 1-4 | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Outputs | Ref** |
| 1 | 24 | 12 | 25 | St Cue OP A L | I41 |
| 2 | 10 | 23 | 11 | St Cue OP A R | I42 |
| 3 | 21 | 9 | 22 | St Cue OP B L | I43 |
| 4 | 7 | 20 | 8 | St Cue OP B R | I44 |
| 5 | 18 | 6 | 19 | Aux Output 1 | I45 |
| 6 | 4 | 17 | 5 | Aux Output 2 | I46 |
| 7 | 15 | 3 | 16 | Aux Output 3 | I47 |
| 8 | 1 | 14 | 2 | Aux Output 4 | I48 |

Main Mix (Bus) Outputs and (Mix Bus) Insert SendF/B (Foldback, Studio) and Misc Outputs

| | 25 Way F D-type | | | | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Main OPs | Ref** |
| 1 | 24 | 12 | 25 | Mix Ins Snd L | K33 |
| 2 | 10 | 23 | 11 | Mix Ins Snd R | K34 |
| 3 | 21 | 9 | 22 | Mix OP L | K35 |
| 4 | 7 | 20 | 8 | Mix OP R | K36 |
| 5 | 18 | 6 | 19 | N/C | K37 |
| 6 | 4 | 17 | 5 | N/C | K38 |
| 7 | 15 | 3 | 16 | N/C | K39 |
| 8 | 1 | 14 | 2 | Ext TB Out | K40 |

| | 25 Way F D-type | | | Osc, Foldback | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | & Studio LS | Ref** |
| 1 | 24 | 12 | 25 | Oscillator Out | K41 |
| 2 | 10 | 23 | 11 | Listen Mic Out | K42 |
| 3 | 21 | 9 | 22 | Foldback Out AL | K43 |
| 4 | 7 | 20 | 8 | Foldback Out AR | K44 |
| 5 | 18 | 6 | 19 | Foldback Out BL | K45 |
| 6 | 4 | 17 | 5 | Foldback Out BR | K46 |
| 7 | 15 | 3 | 16 | Studio L | K47 |
| 8 | 1 | 14 | 2 | Studio R | K48 |



Master Section DB-25 Pinouts Cont’d

**NOTE: Patch Reference on following tables only applies if using suggested standard patch layout on Page 37

Mix Bus INS RTN (Insert Return) and TB/LM (Talkback/Listen Mic) Line Inputs

| | 25 Way F D-type | | | Main Ins Rtn | Patch |
|---|---|---|---|---|---|
| Cct# | Hot | Cold | Scrn | Talkback/Listen | Ref** |
| 1 | 24 | 12 | 25 | Main Ins Rtn L | L33 |
| 2 | 10 | 23 | 11 | Main Ins Rtn R | L34 |
| 3 | 21 | 9 | 22 | N/C | L35 |
| 4 | 7 | 20 | 8 | N/C | L36 |
| 5 | 18 | 6 | 19 | TB Line In | L37 |
| 6 | 4 | 17 | 5 | Listen Line In | L38 |
| 7 | 15 | 3 | 16 | N/C | L39 |
| 8 | 1 | 14 | 2 | N/C | L40 |

**UTILITY**

| | |
|---|---|
| | 9-Way F D-type |
| Pin | Red Light Relay |
| 1 | Normally Open Contact R1 |
| 2 | Common |
| 3 | Normally Closed Contact R1 |
| 4 | Normally Open Contact R2 |
| 5 | Common |
| 6 | Normally Closed Contact R2 |
| 7 | N/C |
| 8 | N/C |
| 9 | N/C |

R1 and R2 are separate relays, both operated by the Red Light Switch

ORIGIN Installation Guide

Suggested Patchbay Layout

## ORIGIN Installation Guide

Appendix A

Appendix A – Performance Specification Audio Performance

Default test conditions (unless otherwise stated):

– Source impedance of Test Set: 40 Ω

– Input impedance of Test Set: 200 kΩ

– Reference frequency: 1 kHz

– Reference level: 0 dBu where 0 dBu = 0.775 V into any load

– Unless specified, all unweighted measurements are specified as 20 Hz to 20 kHz band limited RMS and are expressed in  units of dBu

– The onset of clipping (for headroom measurements) should be taken as 1% THD

– All distortion measurements are specified with a 36 dB/Octave low pass filter at 20 kHz and are expressed as a percentage – All levels are intended balanced

Unless otherwise quoted all figures have a tolerance of ±0.5 dB or 5%.

PureDrive™ Channel Input Microphone/Line Amplifier

| Measurement | Conditions | Value |
|---|---|---|
| Gain | **dependent on potentiometer tolerances | Mic Amp Gain Variable from +5 dB to +70 dB** Line Amp Gain Variable from -10 dB to +55 dB** |
| Input Impedance | | 1.4 kΩ |
| Max Input Level | 1% THD | Mic Amp : +21 dBu |
| Output Headroom | | >+26.5 dBu at onset of clipping |
| Frequency Response | – 20 Hz to 20 kHz<br>– -3 dB high rolloff | – +0/-0.2 dB<br>– > 90 kHz |
| THD+Noise | (-10 dBu applied, +30 dB gain) @ 1 kHz (-10 dBu applied, +30 dB gain) @ 10 kHz | – <0.004% at 1 kHz (20 Hz to 20 kHz) – <0.018% at 10 kHz (20 Hz to 40 kHz) |
| CMRR | (-10 dBu applied, +30 dB gain) | – > 57.5 dB 20 Hz to 20 kHz |
| Equivalent Input Noise (EIN) | Mic Amp, 150 Ω termination, maximum gain | – <-127.5 dBu (A-weighted) |

### Monitor Input Line Input Amplifier

| Measurement | Conditions | Value |
|---|---|---|
| Gain | **dependent on potentiometer tolerances | Variable from -20 dB to +20 dB** |
| Input Impedance | | 10 kΩ |
| Max Input Level | 1% THD | >+28 dBu before clipping |
| Output Headroom | | >+27.5dBu at onset of clipping |
| Frequency Response | – 20 Hz to 20 kHz<br>– -3 dB high rolloff | +0/-0.03 dB<br>> 156 kHz |
| THD+Noise | (-10 dBu applied, +20 dB gain) @ 1 kHz (-10 dBu applied, +20 dB gain) @ 10 kHz | <0.0003% at 1 kHz (20 Hz to 20 kHz)<br><0.0009% at 10 kHz (20 Hz to 40 kHz) |
| CMRR | | > 65 dB 20 Hz to 20 kHz |
| Equivalent Input Noise (EIN) | 150 Ω termination, maximum gain | <-104 dBu |

### ORIGIN Installation Guide

Appendix A

### Channel Equaliser

Signal applied to line input and measured at the channel insert send. EQ switched in with EQ controls centred in shelf mode.

| Measurement | Conditions | Value |
| --- | --- | --- |
| Output Headroom | | >+26.5 dBu at onset of clipping |
| THD+Noise | +20 dBu @ 1 kHz<br>+20 dBu @ 10 kHz | <0.003% at 20 dBu @1 kHz (filter 20 Hz to 20 kHz) <0.003% at 20 dBu @10 kHz (filter 20 Hz to 40 kHz) |
| Noise | | <-80dBu |

### Overall Channel Signal Chain Specifications

Signal applied to Line Input of a channel and routed to specified output by shortest path. All controls set flat, out or at unity gain  as appropriate. Pan set to full left or right.

| Measurement | Conditions | Value |
|---|---|---|
| | Auxiliary Send, Track Bus and Ma in Mix  Bus Outputs | |
| Output Headroo m | into 600 Ω at onset of clipping<br>into 10 kΩ at onset of clipping | >24 dBu<br>>26.5 dBu |
| THD+Noise | +20 dBu @ 1 kHz<br>+20 dBu @ 10 kHz | <0.0008% @1 kHz (filter 20 Hz to 20 kHz) <0.0008% @10 kHz (filter 20 Hz to 40 kHz) |
| Frequency Resp onse<br>Track Buses<br>Main Mix Bus<br>Auxilliary Buses | – 20 Hz to 20 kHz<br>– -3 dB high rolloff<br>– 20 Hz to 20 kHz<br>– -3 dB high rolloff<br>– 20 Hz to 20 kHz<br>– -3 dB high rolloff | +0/-0.3 dB<br>>70 kHz<br>+0/-0.3 dB<br>>70 kHz<br>+0/-0.3 dB<br>>70 kHz |
| Pot centre detent accuracy: | | +/-1 dB, typically <0.5 dB |



Appendix A

Crosstalk

Signal applied to Line Input of a mono channel, and routed to specified output by shortest path. All controls set flat, out or at unity  gain as appropriate. Pan set to full left or right.

| Measurement | Conditions | Value |
|---|---|---|
| Channel Muting | 20 Hz to 20 kHz | <-100 dB |
| Maximum Fader Attenuation | 20 Hz to 20 kHz | <-89 dB |
| Pan pot Isolation | 20 Hz to 20 kHz | <-55 dB |
| Routing<br>Channel to Main Mix | | <-94 dB from 20 Hz to 20 kHz |
| Routing<br>Channel to Track Buses | Channel routed to all buses apart from one under test Channel not routed | <-64 dB from 20 Hz to 20 kHz <-113 dB from 20 Hz to 20 kHz |
| Mic Input | -50 dBu applied to Mic Input at maximum gain, measured at  Direct Output, Monitor path selected | <-95 dB |

### Overall Console Noise

Measured at main Mix outputs, channels routed to Mix Bus as required with pans / balance controls centred, using Line input with  termination. All controls set flat, out or at unity gain as appropriate, channel and master faders calibrated for 0dB.

| Measurement | Conditions | Value |
|---|---|---|
| Line to Mix<br>(Pan to centre) | 1 channel routed<br>16 channels routed<br>24 channels routed**<br>32 channels routed** | <-93 dBu<br><-85 dBu<br><-83 dBu<br><-79 dBu |

**Origin 32 only

Environmental Requirements

Temperature range:

Operating: +1 to 30 °C (+34 to 86 °F).

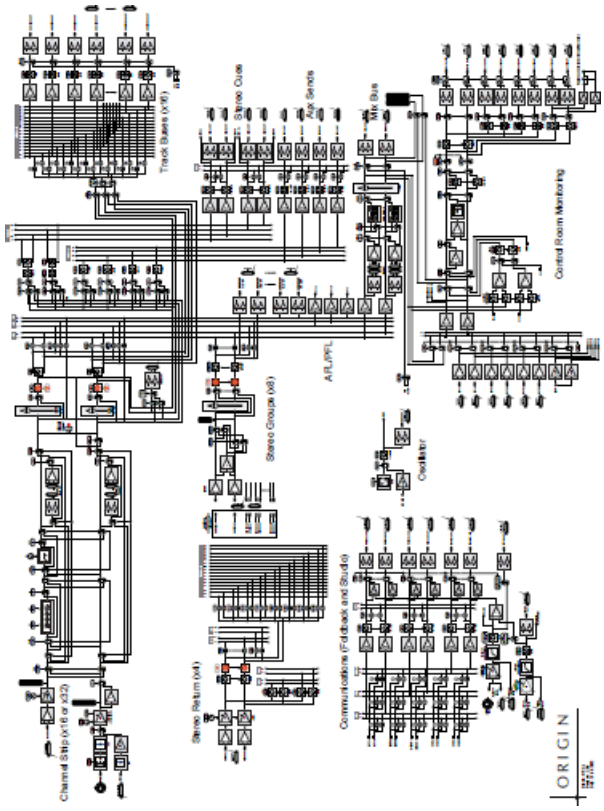
Storage: -20 to 50 °C (-4 to 122 °F).

40

ORIGIN Installation Guide

Appendix B

## Appendix B – ORIGIN Block Diagram



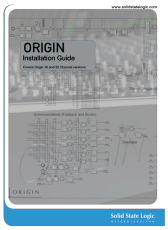

ORIGIN Installation Guide 41

42 ORIGIN Installation Guide

ORIGIN Installation Guide 43

[www.solidstatelogic.com](http://www.solidstatelogic.com)

## Documents / Resources

| | |
|---|---|
|  | Solid State Logic Origin 32 Channel Analog Studio Console [pdf] Installation Guide<br>Origin 32 Channel Analog Studio Console, Origin, 32 Channel Analog Studio Console, Analog Studio Console, Studio Console |

## References

- P65Warnings.ca.gov
- Solid State Logic | Leading the way in Sound
- Solid State Logic | Leading the way in Sound