Soundcraft
Signature Plus
12, 16, 22 & 32
USER GUIDE

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Important Information

Important Safety Instructions

1. READ, KEEP, and FOLLOW all instructions. HEED all warnings.

2. DO NOT use this apparatus near water.

3. CLEAN ONLY with dry cloth.

4. DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.

5. DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

6. DO NOT defeat the safety purpose of the grounding type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

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

8. ONLY USE attachments/accessories specified by the manufacturer.

9. UNPLUG this apparatus during lightning storms or when unused for long periods of time.

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

11. DO NOT expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.

12. To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from the AC receptacle.

13. Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

14. DO NOT overload wall outlets or extension cords beyond their rated capacity as this can cause electric shock or fire.

15. Follow all locally applicable laws, codes and regulations when installing, powering, operating or servicing the product.
16. Install and operate only as directed or a safety hazard could be created.

WATCH FOR THESE SYMBOLS:

 Read manual before use.

 The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

 The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

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

WARNING: No naked flame sources – such as lighted candles – should be placed on the product.

WARNING: Equipment shall be connected to a MAINS socket outlet with a protective earthing connection.

If you have questions about how to install or operate the product, please contact Harman Professional, Inc.

Technical support:

Technical support in North America, please contact: HProTechSupportUSA@harman.com
Phone:

(844) 776-4899

Technical support outside North America, please contact your local distributor.

HARMAN Professional, Inc.

8500 Balboa Blvd. Northridge, CA 91325 USA

EU: HARMAN Professional Denmark ApS

Olof Palmes Allé 44, 8200 Aarhus N, Denmark

UK: HARMAN Professional Solutions

2 Westside, London Road, Hemel Hempstead, HP3 9TD, UK

FCC AND CANADA EMC COMPLIANCE INFORMATION:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAN ICES-3 (B)/NMB-3(B)

FCC SDOC SUPPLIER'S DECLARATION OF CONFORMITY:

HARMAN Professional, Inc. hereby declares that this equipment is in compliance with the FCC part 15 Subpart B.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

Approved under the verification provision of FCC Part 15 as a Class B Digital Device.

CAUTION: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

WEEE NOTICE

The WEEE Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE), which entered into force as European law on 14/02/2014, resulted in a major change in the treatment of electrical equipment at end-of-life.

The purpose of this Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the reuse, recycling and other forms of recovery of such wastes so as to reduce disposal. The WEEE logo on the product or on its box indicating collection for electrical and electronic equipment consists of the crossed-out wheeled bin, as shown below.

This product must not be disposed of or dumped with your other household waste. You are liable of dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local city center, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.

重要安全说明

1. 仔细阅读、妥善保管并严格遵循所有说明。请留意所有的警示信息

2. 请勿在水源附近使用本设备。

3. 仅使用干燥织布擦拭本设备。

4. 请勿堵住任何通风口。请严格按照制造商提供的指引安装设备。

5. 请勿在热源附近安装本设备，如散热器、电热器、火炉或其他能够产生热量的设备（包括功放）。

6. 请勿破坏具有安全功效的接地式插头。接地式插头有两个插片和一个接地针。其中，接地针是用来保障你的安全。如果所提供的插头与你的插座不匹配，请要求电工更换适合的插座。

7. 保护电源线，避免电源线被踩踏或者被捻搓。特别注意保护在插头、便捷插座和接触设备处的电源线。

8. 只可使用制造商指定的配件。

9. 在雷电天气或者长时间不使用时，请拔掉设备插头。

10. 所有维修服务必须由有资格的维修人员完成。设备受到任何形式的损坏都需要维修，例如电源线或插头损坏、液体或异物渗入设备、遭受雨淋或受潮、不能正常工作以及被摔碰等情况。

11. 为防止水滴入或溅入本设备，请勿将内盛液体的容器（如花瓶）置于本设备上。

12. 要将本设备与交流主电源完全断开，请从交流插座上拔下电源线插头。

13. 使用电源插头或电器耦合器作为断开装置时，断开装置应保持可操作性。

14. 切勿使墙壁插座或延长线超出其额定容量，否则可能会导致触电或火灾。

15. 在安装、通电、操作或维护本设备时，请遵循所有当地适用的法律、规范和法规。

16. 请务必按指示进行安装和操作，否则可能引发安全隐患。

请注意以下符号：

使用前请阅读手册。

等边三角形内有一个感叹号是提醒用户要遵照产品附注的重要操作和维护（维修）说明文字。

等边三角形内有一个带箭头的闪电标志是向用户警告产品机箱内存在非绝缘的“危险电压”，其强度足以对人类构成电击风险。

警告：为降低发生火灾和触电的风险，请勿让本设备遭受雨淋或受潮。

警告：为避免火灾，切勿在设备上放置蜡烛等明火源。

警告：本设备仅可接入具有接地保护的电源插座。

关于产品安装或操作，如果您有任何问题，请联系 Harman Professional, Inc.

技术支持：

北美客户如有技术支持问题，请联系：HProTechSupportUSA@harman.com 电话：

(844) 776-4899

北美以外的客户如需技术支持，请联系当地经销商。

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Table of Hazardous Substances Information

产品中有害物质的名称及含有的信息表

根据中国国家市场监督管理总局于2025年8月1日正式批准发布的《电器电子产品有害物质限制使用要求》

（GB26572-2025) 提供我们产品中可能存在的有害物质的名称和浓度水平的信息如下。

The following information is provided regarding the names and concentration levels of hazardous substances that might be present in our products, in accordance with the 'Requirements for restricted use of hazardous substances in electrical and electronic products' (GB 26572-2025), issued by the State Administration for Market Regulation of China on August 1, 2025.

部件名称	有害物质									
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚	邻苯二甲酸二（2-乙基）己酯	邻苯二甲酸丁苄酯	邻苯二甲酸二正丁酯	邻苯二甲酸二异丁酯
	(Pb)	(Hg)	(Cd)	(Cr+6)	(PBB)	(PBDE)	(DEHP)	(BBP)	(DBP)	(DIBP)
电源线	O	O	O	O	O	O	O	O	O	O
金属部件	X	O	O	O	O	O	O	O	O	O
塑料部件	O	O	O	O	O	O	O	O	O	O
外壳	O	O	O	O	O	O	O	O	O	O
电路板	X	O	O	O	O	O	O	O	O	O

注**1:**	**O:** 表示该有害物质在该部件所有均质材料中的含量均不超出电器电子产品有害物质限制使用国家标准要求。
	X: 表示该有害物质至少在该部件的某一均质材料中的含量超出电器电子产品有害物质限制使用国家标准要求。
注**2:**	以上未列出的部件, 表明其有害物质含量均不超出电器电子产品有害物质限制使用国家标准要求。

WICHTIGE SICHERHEITSINFORMATIONEN

1. Bitte alle Anweisungen LESEN, AUFBEWAHREN und BEFOLGEN. Alle Warnungen BEACHTEN.

2. Dieses Gerät NICHT in der Nähe von Wasser verwenden.

3. AUSSCHLIESSLICH mit einem trockenen Tuch reinigen.

4. NICHT die Belüftungsschlitze BLOCKIEREN. Bei der Montage den Anweisungen des Herstellers folgen.

5. Das Gerät NICHT in der Nähe von Wärmequellen wie Heizkörpern, Wärmespeichern, Öfen oder anderen Geräten (einschließlich Verstärkern) aufstellen, die Wärme erzeugen.

6. NICHT die Sicherheitsfunktion des geerdeten Steckers außer Kraft setzen. Ein geerdeter Stecker hat zwei Stifte und einen dritten Erdungskontakt. Der dritte Erdungskontakt dient der eigenen Sicherheit. Wenn der mitgelieferte Stecker nicht in die Steckdose passt, dann frage einen Elektriker nach einem Ersatz für die veraltete Steckdose.

7. Das Netzkabel so POSITIONIEREN, dass Personen weder darauf treten können, noch das Kabel insbesondere an Steckern, Steckdosen oder am Gerät direkt eingeklemmt wird.

8. Verwenden Sie NUR Zubehörteile, die vom Hersteller angegeben wurden.

9. Das Gerät während eines Gewitters oder bei Nichtverwendung über einen längeren Zeitraum von der Stromversorgung TRENNEN.

10. Wartungsarbeiten sind nur von QUALIFIZIERTEN KUNDENDIENST-MITARBEITERN auszuführen. Eine Wartung ist erforderlich, wenn das Gerät in irgendeiner Weise beschädigt wurde, falls zum Beispiel das Stromversorgungskabel oder der Stecker beschädigt ist, Flüssigkeit verschüttet wurde oder Gegenstände in das Gerät gefallen sind,

das Gerät Regen oder Feuchtigkeit ausgesetzt wurde, nicht ordnungsgemäß funktioniert oder fallen gelassen wurde.

11. Dieses Gerät darf NICHT tropfendem Wasser oder Spritzwasser ausgesetzt werden. Außerdem sicherstellen, dass keine mit Flüssigkeiten gefüllten Gegenstände – wie beispielsweise Vasen – auf diesem Gerät abgestellt werden.

12. Zum vollständigen Trennen dieses Geräts von der Netzstromversorgung den Netzkabelstecker von der Steckdose trennen.

13. Falls der Netzstecker oder eine Gerätekupplung als Trennvorrichtung verwendet wird, muss der/diese jederzeit zugänglich sein.
14. Steckdosen oder Verlängerungskabel nicht über deren Nennleistung hinaus BELASTEN, da dies zu elektrischem Schlag oder Bränden führen kann.

15. Bei der Installation, Stromversorgung, dem Betrieb oder der Wartung des Produkts alle lokal geltenden Gesetze, Vorschriften und Bestimmungen befolgen.

16. Das Gerät nur gemäß den Anweisungen installieren und bedienen, da sonst ein Sicherheitsrisiko entstehen könnte.

AUF FOLGENDE SYMBOLE ACHTEN

Bitte vor dem Gebrauch die Bedienungsanleitung durchlesen.

Das Ausrufezeichen in einem gleichseitigen Dreieck soll den Benutzer auf das Vorhandensein von wichtigen Bedienungs- und Wartungsanweisungen in den dem Gerät beiliegenden Dokumenten hinweisen.

Das blinkende Licht mit dem Pfeil-Symbol in einem gleichschenkligen Dreieck warnt vor unisolierter „gefährlicher Stromspannung“ im Gerätegehäuse, die einen Elektroschock bei Menschen verursachen kann.

WARNUNG: Um die Gefahr von Bränden oder elektrischen Schlägen zu verringern, darf dieses Gerät nicht Regen oder Feuchtigkeit ausgesetzt werden.

WARNUNG: Es dürfen keine offenen Flammen, wie brennende Kerzen, auf das Gerät gestellt werden.

WARNUNG: Das Gerät muss an eine Steckdose mit Erdungsverbindung angeschlossen werden.

Bei Fragen zur Installation oder zum Betrieb des Produkts wenden Sie sich an Harman Professional, Inc.

Technischer Support: Nordamerika: HProTechSupportUSA@harman.com Telefon: (844) 776-4899

Außerhalb Nordamerikas: Bitte kontaktieren Sie den Vertrieb vor Ort.

HARMAN Professional, Inc.

8500 Balboa Blvd. Northridge, CA 91325 USA

HARMAN Professional, Denmark ApS,

Olof Palmes Allé 44, 8200 Aarhus N, Dänemark

Vereinigtes Königreich: HARMAN Professional Solutions

2 Westside, London Road, Hemel Hempstead, HP3 9TD, Vereinigtes Königreich

CONSIGNES DE SÉCURITÉ IMPORTANTES

1. LISEZ, CONSERVEZ ET SUIVEZ toutes les instructions. RESPECTEZ tous les avertissements.

2. N’UTILISEZ PAS cet appareil près de l’eau.

3. NETTOYEZ-LE UNIQUEMENT avec un chiffon sec.

4. NE BOUCHEZ AUCUNE ouverture de ventilation. Exécutez l’installation conformément aux instructions du fabricant.

5. NE L’INSTALLEZ PAS à proximité d’une source de chaleur telle que des radiateurs, des bouches de chaleur, des fourneaux ou d’autres appareils (y compris les amplificateurs) qui produisent de la chaleur.

6. NE DÉTOURNEZ PAS l'objectif de sécurité de la fiche polarisée ou de mise à la terre. Une fiche avec mise à la terre a deux lames et une troisième broche de mise à la terre. La troisième broche est prévue pour votre sécurité. Si la fiche fournie ne s’insère pas correctement dans votre prise, consultez un électricien pour le remplacement de la prise obsolète.

7. ÉVITEZ de marcher sur le cordon secteur ou de le pincer, en particulier au niveau des fiches, des prises de courant et à son point de sortie de l’appareil.

8. UTILISEZ UNIQUEMENT les accessoires spécifiés par le fabricant.

9. DÉBRANCHEZ cet appareil pendant les orages ou s'il est inutilisé pendant de longues périodes.

10. CONFIEZ tous les travaux d'entretien à du personnel qualifié. Une révision est nécessaire si l’appareil a été endommagé d'une façon quelconque, si le cordon ou la fiche d'alimentation sont endommagés, si du liquide a été renversé sur l'appareil ou si des objets sont tombés dedans, si l’appareil a été exposé à la pluie ou à l’humidité, s'il ne fonctionne pas normalement ou s'il est tombé.

11. L’appareil NE DOIT PAS ÊTRE EXPOSÉ à un égouttement ou à des projections et aucun objet rempli de liquide, tel qu'un vase, ne doit être placé sur l’appareil.

12. Pour débrancher complètement cet appareil du secteur, débranchez la fiche du cordon d'alimentation de la prise secteur.

13. Lorsque la prise secteur ou une rallonge électrique est utilisée comme dispositif de débranchement, celle-ci doit rester facilement accessible.

14. NE SURCHARGEZ PAS les prises murales ou les rallonges au-delà de leur capacité nominale car cela peut provoquer une électrocution ou un incendie.
15. Respectez toutes les lois, codes et réglementations locales applicables lors de l’installation, de l’alimentation, de l’utilisation ou de l’entretien du produit.

16. Installez et utilisez uniquement conformément aux instructions, sinon un risque pour la sécurité peut en résulter.

SOYEZ ATTENTIF À CES SYMBOLES

Lisez le manuel avant utilisation.

Le point d'exclamation contenu dans un triangle équilatéral est destiné à alerter l'utilisateur sur la présence de consignes d'entretien et d'utilisation importantes dans la documentation accompagnant l’appareil.

L'éclair avec un symbole fléché se trouvant dans un triangle équilatéral est destiné à alerter l'utilisateur de la présence d'une « tension dangereuse » non isolée au sein du produit qui pourrait être d'une magnitude suffisante comme pour constituer un risque d'électrocution d'une personne.

AVERTISSEMENT : Pour réduire le risque d'incendie ou d'électrocution n'exposez pas cet appareil à la pluie ou à l'humidité.

AVERTISSEMENT : Aucune source de flamme nue, telle que des bougies allumées, ne doit être placée sur l'appareil.

AVERTISSEMENT : Cet appareil doit être connecté à une prise secteur avec une connexion à une mise à la terre de protection.

Si vous avez des questions sur l’installation ou le fonctionnement du produit, veuillez contacter Harman Professional, Inc.
Soutien technique : Soutien technique en Amérique du Nord, veuillez contacter : HProTechSupportUSA@harman.com Téléphone : 1 844 776-4899

Soutien technique en dehors de l'Amérique du Nord, veuillez contacter votre distributeur local.

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INSTRUCCIONES IMPORTANTES DE SEGURIDAD

1. LEE, CONSERVA y SIGUE todas las instrucciones. PRESTA ATENCIÓN a todas las advertencias.

2. NO uses este aparato cerca de agua.

3. LIMPIA SOLO con un paño seco.

4. NO bloquees ninguna abertura de ventilación. Instala conforme a las instrucciones del fabricante.

5. NO lo instales cerca de ninguna fuente de calor, como radiadores, registros de calefacción, estufas u otros aparatos (incluidos los amplificadores) que generen calor.

6. NO trates de evitar la finalidad protectora del enchufe con conexión a tierra. Un enchufe con conexión a tierra tiene dos patas y un pivote de conexión a tierra. El tercer pivote sirve como protección. Si el enchufe suministrado no encaja en la toma de corriente, consulta con un electricista la sustitución del enchufe obsoleto.

7. PROTEGE el cable de alimentación para evitar que alguien lo pise o que se pince, especialmente alrededor de los enchufes, conectores múltiples y en el punto por donde sale del aparato.

8. UTILIZA SOLO LOS herrajes/accesorios especificados por el fabricante.

9. DESENCHUFA este aparato durante las tormentas eléctricas o cuando no se vaya a utilizar durante períodos prolongados de tiempo.

10. DEJA todas las tareas de reparación o mantenimiento al personal cualificado de servicio. Se necesitan actividades de mantenimiento cuando el aparato se daña de cualquier modo, como si el cable de alimentación o el enchufe están dañados, se ha vertido líquido o han caído objetos dentro del aparato, el aparato ha estado expuesto a la lluvia o la humedad, no funciona correctamente o ha caído.

11. NO expongas este aparato a goteos ni salpicaduras, y asegúrate de no colocar objetos llenos de líquidos, como jarrones, encima de él.

12. Para desconectarlo completamente de la alimentación de CA, desconecta el enchufe del cable del receptáculo de alimentación de CA.

13. Si se usa el enchufe de toma o un acoplador de aparato como dispositivo de desconexión; el dispositivo de desconexión debe estar siempre accesible para utilizarlo inmediatamente.

14. NO sobrecargues las tomas de pared ni los cables de extensión más allá de su capacidad nominal, ya que esto puede causar una descarga eléctrica o un incendio.

15. Respeta todas las leyes, códigos y normativas locales aplicables al instalar, alimentar, usar o realizar el mantenimiento del producto.

16. Instala y usa el producto solamente como se indica; de lo contrario, podrías crear un riesgo de seguridad.

OBSERVA ESTOS SÍMBOLOS

Lee el manual antes del uso.

El punto de exclamación dentro de un triángulo equilátero pretende avisar al usuario de la presencia de instrucciones de uso y mantenimiento (reparación) importantes en la documentación que acompaña al producto.

El símbolo del rayo con punta de flecha dentro de un triángulo equilátero pretende avisar al usuario de la presencia de “tensiones eléctricas peligrosas” sin aislar dentro de la carcasa del producto que pueden tener una magnitud suficiente como para constituir un riesgo de descarga eléctrica para las personas.

ADVERTENCIA: Para reducir el riesgo de incendio o descargas eléctricas, no expongas este aparato a la lluvia ni a la humedad.

ADVERTENCIA: No se deben colocar fuentes de llama descubierta, como velas encendidas, encima del producto.

ADVERTENCIA: El equipo se debe conectar a una toma de CORRIENTE con una conexión protectora de toma de tierra.

Si tiene alguna pregunta sobre cómo instalar o usar el producto, póngase en contacto con Harman Professional, Inc.

Asistencia técnica:
Asistencia técnica para Norteamérica, póngase en contacto con:
HProTechSupportUSA@harman.com Teléfono:(844) 776-4899
Asistencia técnica fuera de Norteamérica: póngase en contacto con un distribuidor local.
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Reino Unido: HARMAN Professional Solutions
2 Westside, London Road, Hemel Hempstead, HP3 9TD, Reino Unido

중요한 안전 지침

1. 모든 지침을 읽고, 명심하고, 준수하십시오. 모든 경고에 유의하십시오.

2. 장치를 물 근처에서 사용하지 마십시오.

3. 마른 천으로만 장치를 세척하십시오.

4. 환기 구멍을 막지 마십시오. 제조업체의 지침에 따라 장치를 설치하십시오.

5. 라디에이터, 열 조정 장치, 난로 또는 열이 발생하는 기타 장치(앰프 포함) 등, 열원 근처에서 장치를 설치하지 마십시오.

6. 접지형 플러그의 안전 주의사항을 숙지하십시오. 접지형 플러그에는 블레이드 두 개와 세 번째 접지 단자 한 개가 있습니다. 세 번째 단자는 안전을 위해 제공됩니다. 제공되는 플러그가 콘센트에 끼워지지 않아 콘센트를 교체하려면 전기 기사와 상의하십시오.

7. 전원 코드, 특히 플러그나 콘센트, 그리고 기기에서 나오는 전선 부위가 발에 밟히거나 걸리지 않도록 보호하십시오.

8. 제조업체에서 지정한 부착물/액세서리만 사용하십시오.

9. 천둥번개를 동반한 폭풍이 발생하거나 장기간 장치를 사용하지 않을 때는 장치에서 플러그를 뽑으십시오.

10. 자격을 갖춘 담당자에게 모든 서비스를 요청하십시오. 전원 공급 코드나 플러그 손상, 액체 유출 또는 장치에 물체 낙하, 빗물이나 습기에 장치 노출, 비정상적인 장치 작동 또는 장치 정지 등으로 장치가 손상을 입으면 장치를 수리해야 합니다.

11. 본 장비를 낙숫물이나 분무에 노출시키면 안 되며 꽃병과 같이 액체가 채워진 물건을 장비 위에 올려 놓지 마십시오.

12. AC 주 전원에서 본 기기를 완전히 분리하려면 AC 콘센트에서 전원 공급 코드 플러그를 분리하십시오.

13. 주 전원 플러그 또는 기기 커플러가 분리 장치로 사용될 경우 분리 장치는 항상 작동할 준비가 되어 있어야 합니다.

14. 벽 콘센트나 연장 코드가 정격 용량을 초과하면 감전이나 화재가 발생할 수 있으므로 과부하되지 않게 하십시오.

15. 제품을 설치, 전원, 작동 또는 서비스할 때는 해당 지역의 모든 관련 법률, 규정 및 기준을 준수하십시오.

16. 지시에 따라 설치 및 작동하지 않을 경우 안전 위험이 발생할 수 있습니다.

다음 기호에 주의하십시오:

사용 전 매뉴얼을 읽으십시오.

정삼각형 안에 있는 느낌표는 사용자에게 제품과 함께 제공되는 자료에 있는 중요한 작동이나 유지보수(서비스) 지침을 알려주는 데 사용됩니다.

정삼각형 안에 화살촉이 있는 번개 기호는 제품의 인클로저 내에 감전 위험이 높은 정도의 비절연 "위험 전압"이 있음을 나타냅니다.

경고: 화재나 감전 위험을 줄이려면 장치를 빗물이나 습기에 노출하지 마십시오.

경고: 불 켜진 양초처럼 노출된 불꽃을 제품 위에 두지 마십시오.

경고: 장비는 보호 접지 연결 부위가 있는 메인 소켓 콘센트에 연결해야 합니다.

Harman Professional, Inc.에 문의해 주십시오.

기술 지원:

북미 지역의 경우 기술 지원 관련 사항은 다음 연락처로 문의해 주십시오.
HProTechSupportUSA@harman.com 전화:

(844) 776-4899

북미 이외 지역의 경우 기술 지원 관련 사항은 현지 대리점에 문의해 주십시오.

HARMAN Professional, Inc.

8500 Balboa Blvd. Northridge, CA 91325 USA

EU: HARMAN Professional Denmark ApS

Olof Palmes Allé 44, 8200 Aarhus N, Denmark

영국: HARMAN Professional Solutions

2 Westside, London Road, Hemel Hempstead, HP3 9TD, UK

Compliance Information

This equipment complies with the following directives:

Low Voltage Directive (LVD)

Directive 2014/35/EU of 26 February 2014

Electromagnetic Compatibility (EMC)

Directive 2014/30/EU of 26 February 2014

Restriction of the use of certain hazardous substances (ROHS)

Directive 2011/65/EU of 8 June 2011

Directive 2015/863 of 31 March 2015

EN 62368-1:2014+A11:2017

EN 55032:2015+A1:2020

EN 55035:2017+A11:2020

EN 61000-3-2:2019+A1:2021

EN 61000-3-3:2013+A1:2019+A11:2021

EN IEC 63000:2018

Warning: Any modification or changes made to this device, unless explicitly approved by Harman, will invalidate the authorization of this device. Operation of an unauthorized device is prohibited under Section 302 of the Communications act of 1934, as amended, and Subpart 1 of Part 2 of Chapter 47 of the Code of Federal Regulations.

Warnings and Safety Information

For your own safety and to avoid invalidation of the warranty, please read this section carefully.

- Do not install near any heat sources such as radiators, heat resistors, stoves, or other apparatus (including amplifiers) that produce heat.
- Clean the apparatus only with a dry cloth.
- THIS UNIT MUST BE EARTHED - Under no circumstances should the mains earth be disconnected from the mains lead.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not use this apparatus near water.
- Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled, objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- No naked flame sources, such as lighted candles or cigarettes, etc., should be placed on the apparatus.
- No user serviceable parts. Refer all servicing to a qualified service engineer through the appropriate Soundcraft dealer.
- The packaging in which your console arrived is part of the product and must be retained for future use.

Advice for those that push the boundaries

Although your new console will not output any sound until you feed it signals, it can produce sounds that, when monitored through an amplifier or headphones, can damage hearing over time.

Please take care when working with your audio—if you are manipulating controls you don't understand (which we all do when we are learning), make sure your monitors are turned down. Remember that your ears are

the most important tool of your trade; look after them, and they will look after you.

Warranty

End User means the person who first puts the equipment into regular operation.

Dealer means the person other than Soundcraft (if any) from whom the End User purchased the Equipment, provided such a person is authorized for this purpose by Soundcraft or its accredited Distributor.

Equipment means the equipment supplied with this manual.

If within the period of three years from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or replace the defective components. Any components replaced will become the property of Soundcraft.

Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft), and postage must be prepaid.

This warranty shall only be available if

1. The Equipment has been properly installed in accordance with the instructions contained in Soundcraft's manual.
2. The End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and
3. No persons other than authorized representatives of Soundcraft or the Dealer have effected any replacement of parts, maintenance adjustments, or repairs to the Equipment; and
4. The End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance with Soundcraft's recommendations.
5. Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning, or humidity control.
6. The benefit of this Warranty may not be assigned by the End User.
7. End Users, who are consumers, should note their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.

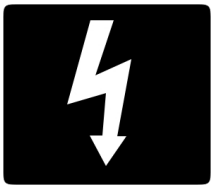
Important Symbols

Cautions

Alerts the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Warnings

Alerts the user to the presence of uninsulated ‘dangerous voltage’ within the product’s enclosure that may be of insufficient magnitude to constitute a risk of electric shock to persons.



Introduction to Signature Plus

Drawing on over 50 years of live sound mixing experience, the Signature Plus Series combines superb analog control, clear and creative sound options, and unrivaled professional workflows in a compact, portable analog mixer.

Built tough for trouble-free performance night after night, Signature Plus Series mixers deliver great-sounding results thanks to high-grade Ghost® preamps, powerful dbx® OverEasy dynamics and inserts, Sapphyre, the most musical EQ in the business, pristine Lexicon® hardware effects, and elegant, convenient professional workflows that help you discover your Signature sound.

The Signature Plus Series consoles bring musicality, creativity, and technical excellence together, thanks not only to new technology and ideas but also to a 50-year legacy of producing outstanding performance tools. This console incorporates classic analog designs from Soundcraft's legacy of world-class consoles.

The Signature Plus Experience

Intuitive Professional Control

Signature Plus features a clean, purpose-driven layout that optimizes input and output sections for fast, confident navigation. Color-coded buttons and tactile "squircle" knobs adjust quickly and precisely—even in low-light or high-pressure environments.

Creative Analog Character

Soundcraft Ghost mic preamps deliver smooth overload behavior and rich harmonics, paired with Sapphyre EQ for musical tone shaping. Built-in dbx one-knob compressors with harmonic enhancement and insert points provide flexible and creative sound shaping.

Exclusive Lexicon Hardware Effects

As the only console in its class with a built-in Lexicon hardware processor, Signature Plus adds preset Store and Tap Tempo functions for expanded creative control.

Advanced Talkback To:, Listen & Metering

A dedicated Listen bus lets engineers monitor channels without interrupting the main mix, while Talkback To routing ensures clear communication when and where needed. Extensive SSM (Simple Success Metering) provides fast visual feedback across all inputs and outputs.

Getting Started with Signature Plus

Anyone with minimal audio experience should be able to operate the Soundcraft Signature console without reading much of this manual, though we recommend taking the time to go through it.

Please note: Most of the illustrations in this manual are based on the Signature Plus 12 consoles. Where there are differences between the operation of Signature 12, 16, 22, and 32, it is noted in the relevant section.

Introduction to Analog Mixing Consoles

The main function of a mixing console is to combine different audio inputs and independently adjust the levels of those contributions to multiple mixes. With this very basic functionality, you can control and balance any kind of audio from a one-man band to an orchestra.

Most mixers, however (including the Signature Plus Series), offer far more than that. A variety of features let the operator shape the mix and use routing options for added convenience in audio mixing applications, such as external effects sends, stage monitoring outputs, independent headphone monitoring, and digital inputs and outputs.

Input Choices

The mixer supports a wide range of microphones and instruments with mic, line, and Hi-Z input types/selections, including 48V phantom power for powered (condenser/capacitor) microphones. The gain control lets you optimize input levels.

Ghost® pre-amps

The Soundcraft Ghost console's mic pre-amp is known for its ultra-low noise and high headroom, making high +65 dB gain settings possible without compromising signal integrity.

Hi-Z instrument inputs

Switchable input stage, optimized for acoustic guitars, electric guitars, and basses.

Simple Success Metering (SSM)

Simple Success Metering adds a single three-color LED for fast level setting at every input, channel output, and console output position of the audio signal flow.

The colors follow the same level breakpoints used on, and shown on, the LED ladder meter on the MIX channel strip. In general, no color means no signal is present; green is likely to be low level and not contribute significantly to the MIX; yellow is in the mid-range audio level that you can hear in the mix; and red is high-peaking risk and should usually be turned down.

Simple Success Metering lets users quickly see levels at major “gain staging” points for every audio signal, from entry to exit, through the mixing console routing outputs.

Inserts

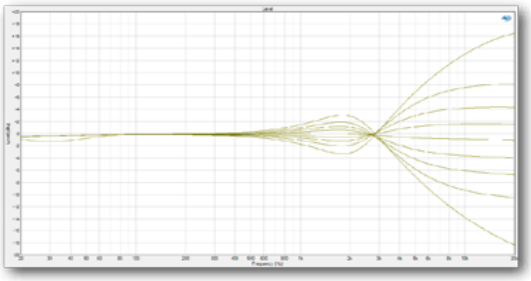
Insert jacks are provided on all mono input channels so users can add their own outboard processing and creative character to their mixes. Inserts are often used for patching in harder compressors for harder-hitting kick, snare, and electric guitars. They can also add features like de-esser options to handle voice sibilance.

dbx OverEasy One Knob Compressors

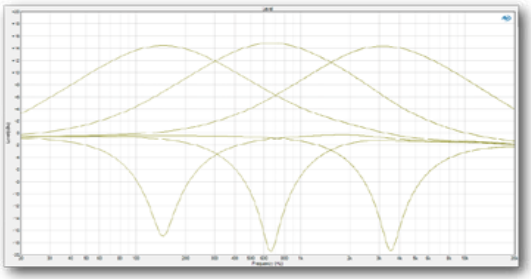
The dbx OverEasy One Knob Compressors on every mono input channel give fast, intuitive control of the compression threshold and relative makeup gain with a single pot. The dbx OverEasy is a light compressor, great on speaking, singing, acoustic instruments, bass, pianos, keyboards, etc.

Sapphyre British Asymmetric EQ

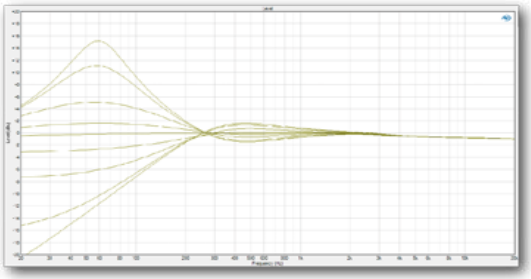
The Soundcraft Signature Plus console uses a special Asymmetric EQ first developed for the renowned Soundcraft Sapphyre console. This EQ makes both creative and functional tonal shaping of your signal simple and intuitive - an EQ that works the way music does.



HF - High Frequency Shelf
A slight cut at boost prevents harsh resonance, and a slight boost at cut preserves brightness



MF (Mid-frequencies, bell shape)
A wide boost prevents harsh resonance and a narrow cut allows precision 'fixing'.



LF - Low Frequency Shelf
A slight cut at boost prevents muddiness, and a slight boost at cut preserves body.

The shelving bands of the EQ (LF and HF) use a slight boost at the EQ's frequency when cutting, and a slight cut when boosting.

For low frequencies, a slight cut when boosting prevents muddiness in the signal, while a slight boost when cutting enables you to clean up the low end without losing precious 'punch' and 'body' of the signal. For the HF shelf, a slight cut when boosting prevents harsh resonance at the EQ's frequency, and a slight boost before a cut can help maintain brightness while reducing HF.

The mid-band (bell-shaped) EQ has a wide bandwidth (low Q) when boosting and a narrower bandwidth (high Q) when cutting.

The wide boost prevents harsh resonances and tonal changes, allowing a more pleasing, musical EQ boost. The narrow-cut targets problematic frequencies to eliminate resonances, rings, and hum, and to prevent feedback. If this was too wide, you could remove too much 'body', creating a thin sound.

GB Style Routing

The GB Console legacy is in the Signature Plus signal routing, famous for its clean and clear layout of signal paths and controls. It offers pre/post switching for all Aux buses, plus Listen, Mute, Talkback, plus flexible routing and sub-groups.

Internal Lexicon Hardware FX

FX (Effects) processing, such as reverb, delay, chorus, phasing, and so on, can be incorporated into a mixing console so that you don't have to invest in 'outboard' equipment or use up valuable physical inputs and outputs. You can apply the Signature Plus Lexicon hardware FX processing in a controlled way using the FX Send bus and the dedicated stereo FX Return channel. Signature Plus also adds single-button Store and Tap Tempo features.

Mix Faders

Faders make it easy to see and adjust relative channel output levels. They allow you to quickly visualize the mix.

Output Options

As well as mixing all the input (source) channels into one MIX stereo output, you can also send any input channels into additional group outputs and create several different aux (auxiliary) mixes of all channels to send to an FX (Effects) processor or stage monitor, for example. The headphones and Control Room output sections let the operator listen to the full Main or AUX Mixes or a selection of channels via the Listen System.

Listen Bus

The Listen bus is a fast solution for monitoring points in the signal flow without interrupting the main MIX channels heard by the audience or the Aux buses to stage monitors or post-fader effects.

Listen systems involve at least two decisions. One is selecting where the Listen bus will output, by engaging the yellow ear button on either or both the Headphone source buttons or the Control Room source buttons. The other is engaging one or more Listen bus buttons at the end of the input channels, the FX RTN channel, the Aux Send rows, or the FX Send row. Selecting both a Listen

output path and a Listen source overrides the selected Listen output path and takes priority over all source selections on Headphone or Control Room monitoring.

Talkback To: Bus

Talkback To: Bus lets the mix engineer speak into a microphone connected to a dedicated talkback mic input and quickly switch it on and off; the bus can also be targeted to communicate with specific output buses, so you can talk with specific people as needed.

4x4 USB-C 192kHz Audio

USB-C connection is necessary to work with digital audio systems and computer- or mobile-based Digital Audio Workstations. The Signature Plus series uses a built-in USB-C interface for 4-channel input/output paths. For example, the user could use it to play back music between sets, play backing tracks into the mix during shows, or play headphone mixes created in their workstation applications out to a recording artist on headphones. There are lots of ways to use this feature.

Sections of the Console

Mono Channel Strip

1. XLR/TRS Input Combo Jack

Connect microphones or line-level XLR audio input signals here.

If you are using a condenser mic, turnoff the +48V phantom power supply button by disengaging the "Global 48V Phantom" power button on the horizontal row above the mic preamp controls, connect the XLR cable coming from a condenser microphone(s), and then turn back on the +48 Global Phantom power button.

WARNING: Do not apply Phantom Power before or during connecting an XLR-connected microphone.

Connect Line-level sources using the TS or TRS ¼" plugs here to the center TRS jack input. These could come from sources including synths, drum machines, DI boxes, etc.

2. TRS Insert Jack

Connect Signal processors here, e.g., external compressors, gates, sibilance de-essers, etc. To use the Insert Point, use a special cable designed for connecting to this Insert jack on one side, and in and out of effects processors on the other side. See the cable example section for more details on insert cables.

3. HI-Z Select button

4. Preamp Gain

Adjust this pot to increase or decrease the incoming signal level. The pot can adjust gain up to +65 dB.

5. SSM Post Gain Input Level

The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The color changes match those on the MIX channel LED ladder meter.

6. PAD Button

The PAD button engages a -20dB level reduction on the input signal, before the mic preamp level gain adjustment pot.

	7. 100Hz High Pass Filter Button The 100HZ high-pass filter button engages a 100HZ high-pass filter on the input signal. This is often engaged on any input signal that doesn't contain frequency content below 100HZ. 8. 1-knob Compressor Threshold Control Pot The rotary pot adjusts the threshold and makeup gain of the one-knob compressor. When you rotate the pot all the way to the right, the Threshold sets the compressor knee at the highest level, affecting only the loudest parts of the audio signal. As you rotate the pot to the left, the threshold knee lowers in the audio signal level range while also raising the make-up gain. 9. 1-knob Compressor enable button The ON button engages the compressor. When the ON button is disengaged, the compressor is bypassed. 10. Sapphyre EQ Pots Mono input channels have four rotary pot adjustments. One controls the low-frequency range, one controls the mid-frequency range (with an added pot to choose the center of the mid-frequency adjustment), and one controls the upper-frequency range. The Sapphyre boost to the right of the pot has a wider width than the cut on the left of the pot rotation. Adjusting these control pots adjusts the audio signal's frequency balance. 11. Aux 1- 4 Pots The pots on the inputs to the AUX bus rows adjust the signal level to the AUX bus row. These are often used to build a mix to send to an artist's monitors (headphones/in-ear/stage monitors). Aux 1-4 are globally switchable pre/post fader using the POST button on the right side of the row. The pot's rotation provides a level range up to +10dB gain. 12. FX Send Pot This control sets the level of the post-fade signal being sent to the FX bus; from there it is routed to the FX processor. The pot's rotation provides a level range up to +10dB gain. 13. PAN Pot

Use this pot rotation to position the audio signal within the channel stereo output field. This affects the output to MIX, to groups 1-2, and to groups 3-4, but not to the AUX 1-4 send channels when their POST buttons are engaged.

14. MIX Assign Button
Engaging the MIX button routes a copy of the channel output to the MIX L&R channel.

15. GROUP 1-2 and 3-4 Assign Buttons
Engaging the 1-2 Group and/or 3-4 Group buttons routes a copy of the channel output to the 1-2 Group or 3-4 Group channel inputs.

16. LISTEN Button (Ear icon)
Use the Listen button to monitor the post-EQ signal from this input channel.

When engaged, a copy of the audio signal routes to the Listen bus.

The Listen bus can be monitored on:

- The Headphone output monitor section when its Listen bus button is engaged.
- The Control Room L&R outputs when its Listen bus button is engaged.

17. MUTE Button
When this red button is engaged, you will hear no signal from the channel (post-mute signals). If any AUX 1-4 sends are set to post-fader, they will not pass signal from this channel.

18. CHANNEL OUTPUT SSM LEVEL LED
The channel output SSM indicates the audio signal at the channel strip's pre-fader output level.

The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The color changes match those on the MIX channel LED ladder meter.

19. Input Channel Fader
This fader controls the level output to the items selected on the channel output buttons. (i.e., MIX, group 1-2, group 3-4, and AUX sends with their POST-fader button engaged.)

Stereo Channel Strip

The 12- and 16-channel mixers have 1 stereo channel strip.
The 22- and 32-channel mixers have 2 stereo channel strips.

1. Combo Input Jack (XLR/TRS Combo Input Jack

Connect microphones or line-level XLR input signals here.

On stereo channels, the Combo jack can bring in mono signals to both sides of the channel strip, or the left side of a stereo channel when connected to the TRS part of the Combo connector.

If you are using a condenser mic, turn off the +48V phantom power supply button by disengaging the "Global 48V Phantom" power button on the horizontal row above the mic preamp controls, connect the XLR cable coming from a condenser microphone(s), and then turn back on the +48 Global Phantom power button.

⚠

WARNING: Do not apply Phantom Power before or during connecting an XLR-connected microphone.

Connect Line-level sources using the TS or TRS ¼" plugs here to the center TRS jack input. These could come from sources including synths, drum machines, DI boxes, etc.

2. Right Audio Channel ¼" TRS Jack

Connect Signal processors here, e.g., external compressors, gates, sibilance de-essers, etc. To use the Insert Point, use a special cable designed for connecting to this Insert jack on one side, and in and out of effects processors on the other side. See the cable example section for more details on insert cables.

3. Ghost Preamp Gain Control Pot

Adjust this pot to increase or decrease the incoming signal level. The pot can adjust gain up to +65 dB.

4. Channel Input SSM LED

The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The color changes match those on the MIX channel LED ladder meter.

5. PAD Button

The PAD button engages a -20dB level reduction on the input signal,

	before the mic preamp level gain adjustment pot. 6. 100HZ High Pass Filter Button The 100HZ high pass filter button engages a 100HZ high pass filter on the input signal. This is often engaged on any input signal that doesn't contain frequency content below 100HZ. 7. Sapphyre EQ Pots Stereo input channels have three rotary pot adjustments. One controls the low-frequency range, one controls the mid-frequency range, and one controls the upper-frequency range. Adjusting these control pots adjusts the frequency balance of the audio signal. 8. AUX 1-4 Send Pots The pots on the inputs to the AUX bus rows adjust the signal level to the AUX bus row. These are often used to build a mix to send to an artist's monitors (headphones/in-ear/stage monitors). Aux 1-4 are globally switchable pre/post fader using the POST button on the right side of the row. The pot's rotation provides a level range up to +10dB gain. 9. FX Send Pot This control sets the level of the post-fade signal being sent to the FX bus; from there it is routed to the FX processor. The pot's rotation provides a level range up to +10dB gain. 10. Balance Control Pot Use this pot rotation to position the audio signal within the channel stereo output field. This affects the output to MIX, to groups 1-2, and to groups 3-4, but not to the AUX 1-4 send channels when their POST buttons are engaged. 11. MIX Button Engaging the MIX button routes a copy of the channel output to the MIX L&R channel. 12. 1-2 Group and 3-4 Group Buttons Engaging the 1-2 Group and/or 3-4 Group buttons routes a copy of the channel output to the 1-2 Group or 3-4 Group channel inputs. 13. MUTE Button (ear off icon)

	When this red button is engaged, you will hear no signal from the channel (post-mute signals). If any AUX 1-4 sends are set to post-fader, they will not pass signal from this channel. 14. Listen Button (Ear icon) Use the Listen button to monitor the post-EQ signal from this input channel. When engaged, a copy of the audio signal routes to the Listen bus. The Listen bus can be monitored on: - The Headphone output monitor section when its Listen bus button is engaged. - The Control Room L&R outputs when its Listen bus button is engaged. 15. Channel Output SSM Level LED The channel output SSM indicates audio signal at the pre-fader output level of the channel strip. The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The color changes match those on the MIX channel LED ladder meter. 16. Input Channel Fader This fader controls the level output to the items selected on the channel output buttons. (i.e., MIX, group 1-2, group 3-4, and AUX sends with their POST-fader button engaged.)

Stereo USB Channel Strips

Stereo USB Channel Strips:

There are two stereo channel strips that work together to enable the USB-C 4x4 channel workflows
The first Stereo USB 1-2 channel supports a combo, TRS, and USB return for channels 1-2.
The second Stereo USB 3-4 channel supports a stereo RCA pair and USB returns for channels 3-4.

1. Combo Input Jack (XLR/TRS Combo Input Jack)
   Connect microphones or line-level XLR input signals here.

   On stereo channels, the Combo jack can bring in mono signals to both sides of the channel strip, or the left side of a stereo channel when connected to the TRS part of the Combo connector.

   If you are using a condenser mic, turn off the +48V phantom power supply button by disengaging the "Global 48V Phantom" power button on the horizontal row above the mic preamp controls, connect the XLR cable coming from a condenser microphone(s), and then turn back on the +48 Global Phantom power button.

⚠

WARNING: Do not apply Phantom Power before or during connecting an XLR-connected microphone.

   Connect Line-level sources using the TS or TRS ¼" plugs here to the center TRS jack input. These could come from sources including synths, drum machines, DI boxes, etc.

2. Right Audio Channel ¼" TRS Jack
   Connect Signal processors here, e.g., external compressors, gates, sibilance de-essers, etc. To use the Insert Point, use a special cable designed for connecting to this Insert jack on one side, and in and out of effects processors on the other side. See the cable example section for more details on insert cables.

3. Ghost Preamp Gain Control Pot
   Adjust this pot to increase or decrease the incoming signal level. The pot can adjust gain up to +65 dB.

4. RCA Stereo Level Trim Control Pot
   Adjust this pot to trim up or down the RCA stereo input audio signal

level from -20 to +20dB.

5. Channel Input SSM LED

The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The color changes match those on the MIX channel LED ladder meter.

6. PAD Button

The PAD button engages a -20dB level reduction on the input signal, before the mic preamp level gain adjustment pot.

7. 100HZ High Pass Filter Button

The 100HZ high pass filter button engages a 100HZ high pass filter on the input signal. This is often engaged on any input signal that doesn't contain frequency content below 100HZ.

8. USB 1-2 Trim Pot and USB 3-4 Trim Pot

The USB 1-2 and USB 3-4 trim pots adjust the USB return levels to both the channel strips and the output section USB bus points.

9. 1-2 USB ON Button and 3-4 USB ON Button

The USB signals are dual-bused to both the ON button to continue down each channel strip and to the MIX channel, the Headphone monitoring selection section, and the Control Room Monitoring selection section.

When the ON button is engaged on the channel strip, the USB signal continues down the channel strip to the Aux 1-4 sends, the FX send, and the channel strip output controls.

10. Sapphyre EQ Pots

Stereo input channels have three rotary pot adjustments. One controls the low-frequency range, one controls the mid-frequency range, and one controls the upper-frequency range.

Adjusting these control pots adjusts the frequency balance of the audio signal.

11. AUX 1-4 Send Pots

The pots on the inputs to the AUX bus rows adjust the signal level to the AUX bus row. These are often used to build a mix to send to an artist's monitors (headphones/in-ear/stage monitors). Aux 1-4 are globally switchable pre/post fader using the POST button on the right side of the row.

The pot's rotation provides a level range up to +10dB gain.

12. FX Send Pot
This control sets the level of the post-fade signal being sent to the FX bus; from there it is routed to the FX processor.

The pot's rotation provides a level range up to +10dB gain.

13. Balance Control Pot
Use this pot rotation to position the audio signal within the channel stereo output field. This affects the output to MIX, to groups 1-2, and to groups 3-4, but not the AUX 1-4 send channels when their POST buttons are engaged.

14. MIX Button
Engaging the MIX button routes a copy of the channel output to the MIX L&R channel.

15. 1-2 Group and 3-4 Group Buttons
Engaging the 1-2 Group and/or 3-4 Group buttons routes a copy of the channel output to the 1-2 Group or 3-4 Group channel inputs.

16. MUTE Button (ear off icon)
When this red button is engaged, you will hear no signal from the channel (post-mute signals). If any AUX 1-4 sends are set to post-fader, they will not pass signal from this channel.

17. Listen Button (Ear icon)
Use the Listen button to monitor the post-EQ signal from this input channel.

When engaged, a copy of the audio signal routes to the Listen bus.

The Listen bus can be monitored on:
- The Headphone output monitor section when its Listen bus button is engaged.
- The Control Room L&R outputs when its Listen bus button is engaged.

18. Channel Output SSM Level LED
The channel output SSM indicates audio signal at the prefader output level of the channel strip.

The SSM three-color LED on one LED meter delivers LED ladder-style green/yellow/red levels using a single, space-efficient LED. The

	color changes match those on the MIX channel LED ladder meter. 19. Input Channel Fader This fader controls the level output to the items selected on the channel output buttons. (i.e., MIX, group 1-2, group 3-4, and AUX sends with their POST-fader button engaged.)

Group Channel Controls

	1. GROUP 1-2 AND 3-4 FADERS The GROUP faders adjust the level of the sub-group independent channel levels. 2. SUM BUTTON When the mono SUM button is engaged, the subgroup level is fed evenly to both the left and right MIX channel outputs. This is often used when a mono mix is desired for situations like a live event where the audience is wide and close to the speaker system, offering the full mix into all speakers on stage for the best balance across the larger audience area. 3. LISTEN BUTTON (ear icon) When the LISTEN button is engaged, the channel signal contributes to the Listen bus, which can be monitored when the LISTEN button is also engaged on either the Headphones and/or the Control Room Listen bus selection. 4. SSM LED The AUX 1-4 SSM LEDs are individual three-color meters that use the same color levels as the LED ladder meter on the MIX channel. Green, yellow, and red. 5. MIX BUTTON When the MIX button is not engaged, the Group signal is only routed out the ¼" TRS output Group 1-4 jacks. When the MIX button is engaged, the signal is also added to the MIX channel bus.

MIX Channel Controls

1. T/B Mic XLR In Jack

Plug the mic you use for Talkback into the T/B XLR input jack.

When the +48V Global Phantom power button above the input channel Preamp pots is engaged, this XLR jack provides phantom power.

2. T/B Mic Ghost Preamp Pot

Rotate the T/B mic preamp to adjust up to +65dB of mic pre gain.

3. T/B Mic Preamp SSM LED Meter

The T/B SSM meter shows the Talkback bus signal level after the mic preamp.

The off/green/yellow/red color changes follow the same levels shown on the LED ladder meter on the Mix channel, but are displayed on a single LED.

4. LED Ladder Meter

The LED ladder meter is a traditional LED ladder audio-level meter, shown in green/yellow/red.

The text on the left side of the meter represents dBu analog signal levels for both the left and right channels.

The text on the right represents dBFS digital levels for the left and right levels going out of the USB-C bus, when the MIX fader is at unity gain.

5. MIX To AUX Pots

The MIX to AUX 1-4 pots adjust the MIX signal level that contributes directly to the AUX 1-4 main mix pots. These are useful for quickly feeding the full MIX signal to each of the four AUX 1-4 buses for quick monitor mixes or additional

output routing points for secondary speaker locations, such as lobby area mix levels.

6. Large T/B button status LED
The large T/B button status LED shows the button's current electronically engaged status.

7. T/B TALKBACK BUTTON (large)
The large T/B button is the main Talkback control for activating an audio signal onto the Talkback bus.

You can hold the large Talkback button for temporary engagement or double tap it to lock it on. A quick single tap releases the engaged state.

The Talkback system is active when this large T/B button is engaged plus any of the T/B output buttons are also engaged on any combination of the MIX channel, the AUX 1-4 rows, the FX bus row, or the Headphones or Control Room monitoring selection sections.

8. T/B TO MIX BUTTON (small)
When the smaller T/B button is engaged, the Talkback bus is routed to the MIX L&R channels when the large T/B button is also engaged.

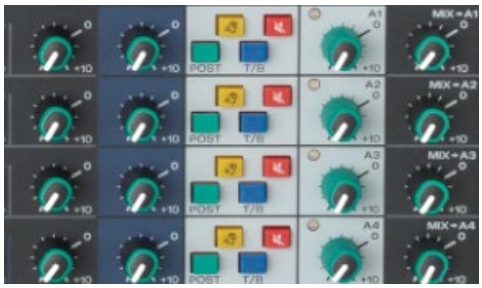
9. USB-INT Button

10. Mute Button (speaker icon)
When the MUTE button is engaged, the MIX L&R signal is stopped.

11. DIM Button
When the DIM button is engaged, the MIX L&R signal is lowered by -12dB.

12. MIX Fader
The MIX fader adjusts the level going to the MIX L&R output channel.

Aux Send Buses



1. AUX 1-4 SEND POTS

Adjust this control to change the channel signal level contribution to each of the AUX 1-4 buses. AUX buses are often used as a monitor mix to a performer's monitor listening mix (headphones/in-ear/stage monitors, etc).

2. AUX POST BUTTON

Engaging the POST button on each row makes each AUX 1-4 globally switchable as pre/post faders.

3. AUX LISTEN BUTTON

Engaging the yellow Listen (ear icon) button adds the AUX bus signal to the LISTEN bus for monitoring when the LISTEN output bus is also engaged on the console's Headphones or Control Room section.

4. AUX MUTE BUTTON

Engaging each row's Mute button stops the signal from going out the AUX bus output.

5. AUX T/B BUTTON

Engaging the Talkback button (T/B) enables the AUX bus to monitor the Talkback bus, when the large T/B button is also engaged on the MIX channel.

6. MIX TO AUX POT

The MIX to AUX pots control the signal level contribution from the MIX channel directly to the level of AUX 1-4 main level control. This can be used as a quick way to feed the mix to each aux on stage for things like a speaking panel's monitor mixes.

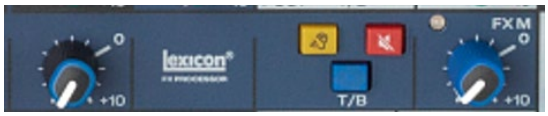
7. AUX OUTPUT POT

The AUX 1-4 output pots adjust the level of the AUX output signal analog output to the AUX 1-4 TRS jack.

8. AUX OUTPUT SSM LED

The AUX 1-4 SSM LED are a three-color meter using the same color levels as the LED ladder meter on the MIX channel. Green, yellow, and red.

FX Send Bus



1. FX Send channel pot - Each input channel has one FX Send pot to contribute to the FX bus going to the Lexicon effects processor. Turning it all the way left provides no level contribution to the Aux bus. At the 0 mark, it contributes at unity gain. Above the unity mark, it contributes a boosted signal relative to the channel strip's audio level.
2. Listen button – The Listen (ear icon) button also contributes the signal to the Listen bus, which can be heard by also selecting the Listen button on the Headphones and/or Control Room section.
3. Mute button – The Mute (speaker off icon) button mutes the contribution of the FX send row to the effects process before the Lexicon input.
4. T/B button – The T/B button on the FX Sends row allows the user to select the FX processor as a talkback bus target. Users can set up, speak into their own talkback mic, and then push the large blue T/B button on the MIX channel to speak into the talkback bus. This workflow lets the user audition their voice through different FX presets or settings when needed, and quickly hear the effects applied.
5. FX MAIN Pot – This is the FX main level feed to the Lexicon hardware effects processor section.
6. FX SSM LED – This LED represents the level coming from the FX contributions and the FX M pot that is contributing to the FX processor. The green/yellow/red lights show the same level ranges as shown on the MIX channel LED ladder meter color ranges.

FX Controls

1. Tap Tempo Button
   Tapping this button twice sets the Delay Tempo of the selected program. The LED flashes to indicate current tempo. Tap this button in time with the music source to synchronize the delay time to the music's tempo.

2. Store Button
   Stores program modifications to one of the program locations. Press and hold for three seconds to store the preset's three adjustment settings in the current preset location. The LED flashes rapidly during the store operation, then stays illuminated for 1 second to show the operation is complete.

3. Pre Delay / Time/ Speed Pot
   Controls Pre Delay of the reverbs or the first parameter (time or speed related) of the selected effect. The LED illuminates when the parameter matches the stored setting.

4. Decay / Feedback/Depth Pot
   Controls Decay of the reverbs or the second parameter (feedback or depth related) of the selected effect. The LED illuminates when the parameter matches the stored setting.

5. Variation Pot
   Controls Liveliness or Diffusion (depending on the preset selected) or the third parameter of the selected effect. The LED illuminates when the parameter matches the stored setting.

6. Program Select Knob
   Navigates through FX presets; turning to the required program and stopping initiates loading, which takes about 1 second. The pot can be rotated clockwise or counterclockwise and will alternate between BANK A and BANK B with every full rotation. The current bank is shown by its

	illuminated LED, which also flashes if the FX processor is muted. A handy list of the presets are printed on the front panel.

FX Return Channel Strip

	1. FX Pots TO AUX 1-4 These pots route both the pre-fade and a post-fade signal to the Aux 1-pre and Aux 1-post buses, respectively. 2. LISTEN Button This button routes the post effects processor signal or pre-fader signal onto the LISTEN bus system. 3. MUTE Button This button mutes the FX processor output. It does not mute the pre-fader signal to auxes, but it does mute it when POST buttons are engaged on each AUX main row. 4. MIX Button When engaged, the FX return is routed directly to the MIX channel. 5. 1-2 and 3-4 buttons – When engaged, the FX Return output is routed to Group 1-2 and/or Group 3-4. 6. FX RTN Fader This fader controls the level of the signal from the FX processor routed to the assigned buses. 7. PAN Pot The pan pot adjusts the left/right balance of the Fader output going to the Groups and/or MIX.

Output Jacks

1. A1-A4 Out TRS Jacks
These jacks output AUX 1-4 and are often used to connect to monitors on stage, additional headphone monitoring systems, or additional speaker paths, such as lobby speakers.

2. GRP 1-4 Out TRS Jacks
These jacks are the audio outputs from the GROUP 1-4 channels. These are always active, while the contribution to the MIX bus channel is only active when the GROUP channel MIX buttons are engaged.

3. FX MUTE Footswitch TS Jack
Connect a foot-controlled switch to remotely control the FX return mute function. This is often used by performing musicians for muting FX reverbs between songs while they are speaking.

4. TAP TEMPO Footswitch TS Jack
Connect a temporary closure pedal to enter TAP TEMPO time selections. The electronics calculate the tempo from the time between the last two closures of the signal path.

5. MIX L/R Output XLR Jacks
MIX L & R XLR output jacks are the output jacks of the MIX channel strip. These are often used to route the signal level to stage front-of-house speakers in a live event situation, or to an analog input audio recording system.

6. C/RM L/R XLR Output Jacks
C/RM L & R XLR output jacks are the output jacks of the C/RM monitoring section. These are often used to connect to a wedge speaker next to the user in a live event situation, or control room

	monitors in a project studio situation. 7. Headphone Output TRS Jack The ¼" TRS jack is an output from the Headphone monitoring matrix section.

Talkback Controls

1. TALKBACK XLR Mic Input Jack
Connect your Talkback mic XLR cable to the Talkback XLR input jack for use with the console's Talkback system.

2. T/B TALKBACK Preamp Pot
The Talkback Preamp pot adjusts the gain of the Talkback XLR Ghost pre-amp input level, up to +65db.

The Talkback mic pre is also _48V Phantom Powered when the +48V Global Phantom power button is engaged.

3. T/B SSM LED
The T/B SSM meter shows the Talkback bus signal level after the mic preamp.

The off/green/yellow/red color changes follow the same levels shown on the LED ladder meter on the Mix channel but are displayed on a single LED.

4. T/B TO: Buttons (small)
When the smaller T/B output buttons are engaged, the Talkback bus is routed to the related output channels when the large T/B button is also engaged.

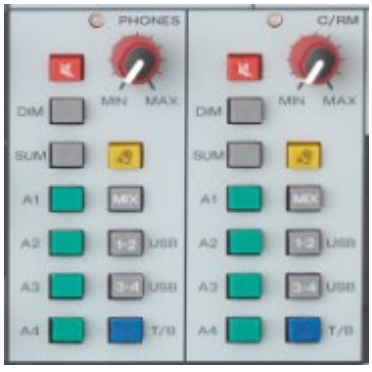
Smaller output Talkback buttons are available on any combination of the MIX channel, the AUX 1-4 rows, the FX bus row, or the Headphones or Control Room monitoring selection sections.

5. T/B TALKBACK BUTTON (large)
The large T/B button is the main Talkback control for activating an audio signal onto the Talkback bus.

You can hold the large Talkback button for temporary engagement or double-tap it to lock it on. A quick single tap releases the

	engaged state. The Talkback system is active when this large T/B button is engaged and any T/B output buttons are also engaged in any combination of the MIX channel, the AUX 1-4 rows, the FX bus row, or the Headphones or Control Room monitoring selection sections. 6. Large T/B button status LED The large T/B button status LED shows the button's current electronically engaged status. When the LED is on, the large T/B button is electronically engaged.

Monitoring Section: Headphones and Control Room

	1. MUTE BUTTON (speaker icon) When the MUTE button is engaged, the signal output of the Headphone or Control Room monitoring bus is stopped. 2. DIM BUTTON When the DIM button is engaged, the signal level is lowered -12dB. 3. SUM mono sum button When the SUM button is engaged, the left and right signals are summed and evenly duplicated to both the left and right sides of the Headphone or Control Room bus. 4. Listen button (ear icon) When the Listen button is engaged and a Listen bus input button is also engaged, the Headphone and/or Control Room section signal paths are interrupted by the Listen bus signal path.

5. A1-4 buttons

When A1-A4 buttons are engaged, the Aux 1-4 signals are summed to the Headphone and/or Control Room monitor buses.

6. MIX button

When the MIX button is engaged, the MIX L&R channel is routed to the Headphone or Control Room monitoring bus.

7. 1-2 USB button

When the 1-2 USB button is engaged, the 1-2 USB input from the USB-C jack post trim is routed to the Headphone and/or Control Room monitoring bus.

8. 3-4 USB button

When the 3-4 USB button is engaged, the 3-4 USB input from the USB-C jack post trim is routed to the Headphone and/or Control Room monitor bus.

9. T/B button

When the T/B button is engaged, the Talkback output bus is routed to the Headphone and/or Control Room monitor bus.

10. PHONES OR C/RM (Headphone or Control Room) Output Pots

The PHONES or C/RM pots control the audio level going out of each monitoring output. The Headphone is routed out the ¼" TRS PHONES jack. The C/RM is routed out the C/RM XLR output jacks.

11. PHONES or C/RM SSM LED

The monitoring SSM LEDs are individual three-color meters that use the same color levels as the LED ladder meter on the MIX channel. Green, yellow, and red.

USB-C Port

1. USB 4x4 USB-C Jack
   Connect your USB-C cable between the console USB 4x4 jack to connect four streams of bidirectional audio up to 192khz at 24 bit.

AC Power Port

1. IEC AC Power Input Jack
   Plug in the provided AC power cord here.

2. Power Switch
   Use this to turn the mixing console on or off.
   In general, power on or off the total audio environment in reverse signal flow order.

Phantom Power Control

Signature Plus 12, 16 &22:

1. Global 48V Phantom Power Button
   Button to enable 48V phantom power to all XLR inputs (including Talkback XLR)

Signature Plus 32:

2. 48V Phantom 1-10
   Engaging this button turns on 48V Phantom power for input channels 1-10.

3. 48V Phantom 11-29
   Engaging this button turns on 48V Phantom power for input channels 11-29 and the Talkback Ghost mic preamp.

Lexicon Digital Effects

Lexicon designed the console effects for both live sound reinforcement and home recording. Featuring the deep, rich reverb algorithms Lexicon® is renowned for, the effects processor offers increased versatility and high-quality effects, all instantly accessible via the extremely intuitive front-panel controls. The effects processor has 32 programs, stored in two banks of 16, and you can save your own custom effect settings.

Front panel controls include a Program Select knob, Tempo and Store buttons, and three independent Parameter knobs that provide instant access and control over the most critical parameters for the selected effect.

The table at the end of this section lists the functions of the parameter knobs for each FX program.

Note: When the console powers up, the recalled program will always be the selected program in BANK A.

True Lexicon effects for adding reverb, chorus, and delay creative character to your mixes. Now enhanced with Tap Tempo for intuitive delay-time setting, a Store function to update presets for your desired creative character on each of the 32 presets, and the ability to audition either Lexicon input or output on the Listen bus system to Headphones or Control Room outputs. And foot switch jacks for controlling the FX Bypass and Tap Tempo entry, without lifting a finger.

FX Controls

See sections FX Send Bus, FX Controls, FX Return Channel Strip

FX Operation

Setting up effects requires three things

1. On the input channels, set the FX Send Row pots to create your input signal levels from your input channels to your Lexicon Hardware Effects processor.
2. On the Lexicon Hardware Processor, select the desired effects preset. Then adjust the parameters for that effect, plus the Tap Tempo time input when using any delay presets.
3. On the FX Return channel, turn up the FX Return channel Aux 1-4 pots to add the FX to each of the Aux row outputs, and route and turn up the fader to route the signal into the FX return channel outputs.

Lexicon Hardware Effects Workflow

Turn the Program Select knob to choose a program. The console has 32 programs, held in two banks of 16 programs. There are individual BANK A and BANK B LEDs to indicate which bank is currently selected. When turning the rotary Program Select knob through 360 degrees (a full rotation), the selected bank will alternate between BANK A and BANK B.

Set Audio Levels

1. Set the gain on the input channel appropriate to the source (vocal microphone, guitar, keyboard, etc.).

2. Set the FX send on the input channel to the 12 o'clock position.

3. Set the EFFECTS Fader on the FX section to the fully down position.

4. Provide a source signal (by speaking or singing into the microphone, playing guitar, keyboard, etc.) on the selected channel.

5. Turn up the FX Send level on the channel until the SSM LED in the FX Panel lights yellow. If the SSM LED stays lit red, you're sending too much signal to the effect processor: reduce FX Send on the input channel.

6. Raise the EFFECTS Fader towards the 0dB position to feed the required level of FX Processor output signal to the mix.

7. To increase or decrease the amount of effect on the signal, adjust the FX Send level on the input channel that you want affected.

Lexicon FX Factory Reset

Use this procedure to erase all user-stored program data and restore the effects processor presets to their factory state. To perform a **Factory Reset,** power off the mixing console, and press and hold the STORE button while powering up the console. Once the effects processor has initialized (after three seconds), release the STORE button, and the Lexicon effects processor will now be restored to its factory presets state.

Reverbs

Reverberation (or “reverb” for short) is the complex effect created by the way we perceive sound in an enclosed space. When sound waves encounter an object or boundary, they don’t just stop. Some of the sound is absorbed by the object, but most is reflected or diffused. In an enclosed space, reverb depends on many features of that space, including its size, shape, and the types of materials that line the walls. Even with closed eyes, a listener can easily tell the difference between a closet, a locker room, and a large auditorium. Reverb is a natural component of the acoustic experience, and most people feel that something is missing without it.

Hall Reverb

A Hall is designed to emulate the acoustics of a concert hall – a space large enough to contain an orchestra and an audience. Because of their size and characteristics, Halls are the most natural-sounding reverbs, designed to remain “behind” the direct sound – adding ambience and space but leaving the source unchanged. This effect has relatively low initial echo density that builds gradually over time. Vocal Hall and Drum Hall reverbs are specifically tailored for those uses.

Vocal Hall has a lower overall diffusion, which works well with program material that has softer initial transients, such as a voice.

Drum Hall has a higher diffusion setting, which helps smooth out the faster transients found in drums and percussion instruments.

In addition to general instrumental and vocal applications, the Hall program is a good choice for giving separately recorded tracks the sense of belonging to the same performance.

Plate Reverb

A Plate reverb is a large, thin sheet of metal suspended upright under tension on springs. Transducers attached to the plate transmit a signal that makes it vibrate, making the sound appear to occur in a large, open space. The Plates FX processor models metal plates with high initial diffusion and a relatively bright, colored sound. Plate reverbs are designed to be heard as part of the music, mellowing and thickening the initial sound. Plate reverbs are often used to enhance popular music, particularly percussion.

Room Reverb

Room produces an excellent simulation of a very small room, which is useful for dialog and voice-over applications. Room is also practical when used judiciously for fattening up high-energy signals like electric guitar amp recordings. Historically, recording studio chambers were oddly shaped rooms with a loudspeaker and set of microphones to capture ambience from various parts of the room.

Chamber Reverb

Chamber programs produce even relatively dimensionless reverberation with little color change as sound decays. The initial diffusion is like the Hall programs. However, the sense of size and space is much less obvious. This characteristic, coupled with the low color of the decay tail, makes these programs useful on a wide range of material - especially the spoken voice, to which Chamber programs add a noticeable increase in loudness with low color.

Gated Reverb

Gated reverb is created by feeding a reverb, such as a metal plate, through a gate device. Decay Time is set to instant, while Hold Time varies the duration and sound. The Gated reverb provides a fairly constant sound with no decay until the reverb is abruptly cut off. This program works well on percussion, particularly snare and toms; experiment with other sound sources as well.

Reverse Reverb

Reverse reverb works in the opposite fashion from normal reverb. Whereas a normal reverb has the loudest series of reflections heard first that then become quieter over time, the Reverse reverb has the softest reflections (essentially the tail of the reverb) heard first and then grows louder over time until they abruptly cut off.

Ambience Reverb

Ambience is used to simulate the effect of a small or medium-sized room without noticeable decay. It is often used for voice, guitar, or percussion.

Studio Reverb

Much like Room reverb, Studio produces an excellent simulation of smaller, well-controlled acoustic spaces, characteristic of the main performance areas in recording studios. Studio is also useful for dialog and voiceover applications, as well as for individual instruments and electric guitar tracks.

Arena Reverb

Arena reverb emulates a huge physical space such as an indoor sports venue or stadium. Arena reverb has long secondary reflection times and reduced high-frequency content. Arena is a mostly mid- and low-frequency-dominant reverb and is an ideal choice for “special effect”- type applications that require extremely long reverb times. It is not a good choice for a very busy mix, since it can reduce intelligibility.

Spring Reverb

A Spring reverb is created by a pair of piezoelectric crystals—one acting as a speaker and the other acting as a microphone— connected by a simple set of springs. The characteristic

‘boing’ of a spring is an important component of many classic rock and rockabilly guitar sounds.

KARAOKE

The Golden Karaoke Patch delivers great Karaoke performance sound in any-sized KTV room.

Reverb Controls

Pre Delay

Creates an additional time delay between the source signal and the onset of reverberation. This control is not intended to precisely mimic time delays in natural spaces, as reverberation builds gradually and the initial gap is usually relatively short. For the most natural effect, set the Pre Delay values between 10 and 25 milliseconds. However, if a mix is very busy or cluttered, increasing the Pre Delay may help clarify it and set each instrument apart.

Decay

Controls the amount of time the reverb can be heard. Higher settings increase reverberation time, which is usually associated with larger acoustical environments but can decrease intelligibility. Lower settings shorten reverb times and should be used when a smaller apparent space or a more subtle effect is desired.

Liveliness

Adjusts the amount of high-frequency content in the reverberation tails. Higher settings increase the high-frequency response, creating brighter reverbs; lower settings create darker reverbs with more bass-frequency emphasis.

Diffusion

Controls the initial echo density. High Diffusion settings result in high initial echo density, and low settings result in low initial density. In a real-world situation, irregular walls lead to high diffusion, while large, flat walls lead to low diffusion. For drums and percussion, try using higher Diffusion settings.

Shape

This control helps convey both room shape and room size. Low Shape values keep most of the sound energy in the early part of the reverb tail. High values move the energy to later in the reverb and are helpful in creating the sense of a strong rear wall or “backslap.

Boing

This unique spring reverb parameter increases or decreases the amount of spring rattle, a physical characteristic of spring tank reverbs.

Delays

Delays repeat a sound shortly after it first occurs. A delay becomes an echo when the output is fed back into the input (feedback). This turns a single repeat into a series of repeats, each a little softer than the last.

Studio Delay

The Studio Delay features up to 2.5 seconds of stereo delay and offers a built-in ducker that attenuates the delay output whenever signal is present at the input. This helps keep the original signal from being muddied by repeated delays.

Digital Delay

The Digital Delay is the cleanest, most accurate delay program, with up to 5 seconds of mono delay and a built-in ducking feature.

Tape Delay

In the days before digital, delays were created using a special tape recorder in which the magnetic recording tape was looped and had closely spaced recording and playback heads. The delay effect was created by the tape moving through the gap between the record and playback heads, while the delay time was adjusted by varying the speed of the tape loop. Although very musical-sounding, wow and flutter, combined with a significant loss of high frequencies and, to some extent, low frequencies, are all elements commonly associated with tape recordings. The Tape Delay offers up to 5 seconds of mono delay.

Pong Delay

This delay effect pans the delay repeats from left to right, while the input signal remains at its original (center) position.

Pong Delay offers up to 5 seconds of mono delay time.

Modulated Delay

The Modulated Delay is enhanced by an LFO (low-frequency oscillator) that produces a chorusing effect on the delay repeats. This is a great delay for guitar and instrument passages that need that “special something.” The Modulated Delay features up to 2.5 seconds of stereo modulated delay.

Reverse Delay

This delay effect emulates the old studio trick of flipping a tape over, playing it backward through a tape delay, and recording the effect. The delays “build up” from softer to louder – creating the sensation that the delays come before the signal. Up to 5 seconds of mono delay time are available.

Delay Controls

Time Range

Controls the delay length relative to Tap Tempo. At the 12 o’clock position, delay repeats are synchronous with the Tempo light (represented by a Quarter Note); lower values create faster repeats, higher values increase the time between repeats. Range 0-72. See The Effects Data Chart for exact note values.

Feedback

Controls the number of delay repeats by feeding the delay output signal back into the delay input. This creates a series of delay repeats, each slightly attenuated until they become inaudible. Higher settings create more repeats; lower settings reduce the number of repeats. When this knob is turned fully clockwise, it engages Repeat Hold – delay repeats play back in an infinite loop, but no further input signal is introduced into the delay effect. Repeat Hold is available only on Studio, Digital and Pong Delay.

Smear

This parameter controls the amount of “smear,” or signal degradation and frequency loss. Particularly evident in the Tape Delay: the higher the setting, the more each repeat loses intelligibility relative to the original signal.

Tap Ratio

Tap Ratio sets the length between the first and second tap repeats of the Pong Delay. At 12 o’clock, repeats alternate evenly between the left and right channels. As this knob is turned counterclockwise, the first tap occurs earlier, and the second tap occurs later than they did at the 12 o’clock position. When the knob is turned clockwise, the first tap occurs later, and the second tap occurs earlier.

Depth

This controls the intensity of modulation, or “depth” in the Modulated Delay. Lower settings produce a subtler effect, while higher values produce a more “seasick” feeling.

Tempo Button

Tap this button two or more times to set the delay times. The Tempo button LED flashes the tapped tempo, and delay taps are synchronized with the flashing LED. Use the Time Range knob to increase or decrease delay times after tapping in a tempo.

Note: When Delay Feedback is at maximum (fully clockwise) in some programs, the mode switches to a constant audio loop. This is indicated in the Effects Data Chart as "+H".

Modulated Effects

Chorus

Chorus creates a lush, full sound by combining two or more signals, where one is unaffected and the other varies in pitch very slightly over time. Chorus is commonly used to fatten up tracks and to add body to guitars without coloring the original tone. Chorus can also be used with discretion to thicken a vocal track.

Knob 1: Speed controls the modulation rate of the Chorus effect. Lower settings are subtle, while higher values are much more pronounced.

Knob 2: Depth controls the amount of pitch shifting for each voice. Lower settings provide subtle thickening and warmth to a track, while higher settings give a more pronounced, multi-voice effect.

Knob 3: Voices controls the number of additional Chorus voices. Up to 8 voices can be added, with continuous variation in 100 individual steps.

Flanger

This effect was originally created by simultaneously recording and playing back two identical programs on two tape recorders, then using hand pressure against the flange of the tape reels to slow down first one machine, then the other. The result was a series of changing phase cancellations and reinforcements, with characteristic swishing, tunneling, and fading sounds.

Knob 1: Speed controls the modulation rate of the Flanger effect.

Knob 2: Depth controls the intensity of the Flanger effect. Lower settings produce a slight "whooshing" sound, while higher settings produce a much more dramatic "jet airplane" sound.

Knob 3: Regeneration. This knob controls how much modulated signal is fed back into the input, creating feedback. Higher amounts add a metallic resonance to the signal.

Phaser

The Phaser automatically moves frequency notches up and down the signal spectrum using a low-frequency oscillator (LFO), creating an oscillating “comb-filter”- type effect. This effect is very useful on keyboards (especially pad presets) and guitars.

Knob 1: Speed controls the modulation rate of the Phaser effect.

Knob 2: Depth controls the intensity of the Phaser effect.

Knob 3: Regeneration. This knob controls how much modulated signal is fed back into the input, creating feedback. Higher amounts increase the effect signal's resonance.

Tremolo/Pan

Tremolo and Panner create rhythmic changes in signal amplitude. Tremolo affects both channels’ amplitudes simultaneously, while the Panner affects each channel's amplitude alternately.

Knob 1: Speed controls the modulation rate of the Tremolo/Panner.

Knob 2: Depth controls the intensity of the volume amplitude change.

Knob 3: Phase Controls whether the amplitude change occurs in both channels simultaneously (Tremolo) or alternates between channels (Panner).

Vibrato

Vibrato is obtained by smoothly varying the pitch of the signal, just sharp or flat of the original, at a determined rate. **Vibrato** *Stereo (Wet only)* **Rotary** *Mono (Wet only)* **Tremolo/Pan** *Stereo (Wet only)*

Knob 1: Speed controls the modulation rate of Vibrato.

Knob 2: Depth controls the maximum amount of pitch shift. Lower settings result in a mere “warble,” while higher settings produce a more exaggerated “wow” sound.

Knob 3: Phase. This control sets the left and right channel waveforms out of phase, resulting in a left-to-right panning motion. This effect shifts the input signal's frequency spectrum. Altering the pitch of a sound produces a wide range of effects - from subtle detunes to full interval shifts up or down a two-octave range.

Lexicon Hardware FX Settings Detail Chart

Bank	No	NAME	ADJUST 1	DEFAULT	RANGE	ADJUST 2	DEFAULT	RANGE	ADJUST 3	DEFAULT	RANGE	
A	1	SMALL HALL	PREDELAY	10ms	0-100ms	DECAY	1.0s	0-99	LIVELINESS	75	0-99	
A	2	LARGE HALL	PREDELAY	20ms	0-200ms	DECAY	2.0s	0-99	LIVELINESS	35	0-99	
A	3	VOCAL HALL	PREDELAY	10ms	0-200ms	DECAY	1.0s	0-99	LIVELINESS	65	0-99	
A	4	DRUM HALL	PREDELAY	10ms	0-100ms	DECAY	0.8s	0-99	LIVELINESS	75	0-99	
A	5	SMALL PLATE	PREDELAY	2ms	0-100ms	DECAY	1.0s	0-99	LIVELINESS	90	0-99	
A	6	LARGE PLATE	PREDELAY	2ms	0-200ms	DECAY	1.75s	0-99	LIVELINESS	90	0-99	
A	7	VOCAL PLATE	PREDELAY	10ms	0-200ms	DECAY	1.0s	0-99	LIVELINESS	65	0-99	
A	8	DRUM PLATE	PREDELAY	10ms	0-100ms	DECAY	1.0s	0-99	LIVELINESS	75	0-99	
A	9	ROOM	PREDELAY	2ms	0-100ms	DECAY	400ms	0-99	LIVELINESS	50	0-99	
A	10	STUDIO	PREDELAY	5ms	0-100ms	DECAY	500ms	0-99	LIVELINESS	70	0-99	
A	11	CHAMBER	PREDELAY	0ms	0-100ms	DECAY	1.2s	0-99	LIVELINESS	60	0-99	
A	12	AMBIENCE	PREDELAY	0ms	0-100ms	DECAY	400ms	0-99	LIVELINESS	70	0-99	
A	13	ARENA	PREDELAY	25ms	0-200ms	DECAY	2.75s	0-99	LIVELINESS	60	0-99	
A	14	GATED	PREDELAY	0ms	0-200ms	DECAY	300ms	0-99	DIFFUSION	25	0-99	
A	15	REVERSE	Delay Time	240ms	0-740ms	Echo Repeat	44	0-99	Level	50	0-99	
A	16	KARAOKE	PREDELAY	200mS	0-200ms	DECAY	0	0-99	DIFFUSION	50	0-99	
B	1	SPRING	PREDELAY	0	0-100ms	DECAY	1.75s	0-99	BOING	35	0-99	
B	2	STUDIO DELAY	TIME RANGE	275ms	20ms-2.5s	FEEDBACK	15	0-99+H	DUCK THRESHOLD	-6dB	-70-0dB	
B	3	DIGITAL DELAY	TIME RANGE	800ms	20ms-5.0s	FEEDBACK	20	0-99+H	DUCK THRESHOLD	-8dB	-70-0dB	
B	4	TAPE DELAY	TIME RANGE	500ms	20ms-5.0s	FEEDBACK	24	0-99	SMEAR	25	0-99	
B	5	PONG DELAY	TIME RANGE	1.0s	20ms-5.0s	FEEDBACK	30	0-99+H	TAP RATIO	1:01	0-23	
B	6	MOD DELAY	TIME RANGE	345ms	20ms-2.5s	FEEDBACK	25	0-99	MOD DEPTH	75	0-99	
B	7	REVERSE DELAY	TIME RANGE	500ms	20ms-2.5s	FEEDBACK	0	0-99	SMEAR	50	0-99	
B	8	CHORUS	SPEED	25	0-99	DEPTH	75	0-99	VOICES	50	0-99	
B	9	FLANGER	SPEED	15	0-99	DEPTH	25	0-99	REGENERATION	80	0-99	
B	10	PHASER	SPEED	25	0-99	DEPTH	75	0-99	REGENERATION	80	0-99	
B	11	TREMELO/PAN	SPEED	40	0-99	DEPTH	80	0-99	PHASE	50	0-99	
B	12	VIBRATO	SPEED	30	0-99	DEPTH	30	0-99	PHASE	80	0-99	
B	13	REV/DEL SHORT	TIME RANGE	275ms	20ms-2.5s	FEEDBACK	15	0-99+H	DECAY	0.75S	0-99	
			LIVELINESS	60		PREDELAY	2ms		DUCK THRESHOLD	-6dB		SERIAL : DELAY THEN REVERB
B	14	REV/DEL LONG	TIME RANGE	800ms	20ms-2.5s	FEEDBACK	20	0-99+H	DECAY	2.0S	0-99	
			LIVELINESS	40		PREDELAY	10ms		DUCK THRESHOLD	-8dB		SERIAL : DELAY THEN REVERB
B	15	PHASE DELAY	TIME RANGE	500ms	20ms-2.5s	FEEDBACK	20	0-99+H	SPEED	25	0-99	
			DEPTH	75		REGENERATION	80		DUCK THRESHOLD	-8dB		SERIAL : DELAY THEN PHASE
B	16	ROTARY DELAY	TIME RANGE	500ms	20ms-2.5s	FEEDBACK	20	0-99+H	SPEED	50	0-99	
			DOPPLER	60		SPREAD	99		DUCK THRESHOLD	-8dB		SERIAL : DELAY THEN ROTARY

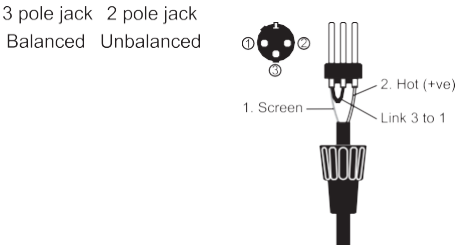
Audio Wiring Basics:

The final output from your sound system can only be as good as the weakest link in the chain, and the source signal matters most because it is the starting point. Just as you need to become familiar with your mixer's control functions, you must also recognize the importance of choosing inputs correctly, placing microphones well, and setting input channels properly. However, no amount of careful setup can account for the spontaneity and unpredictability of live performance. The mixer must be set up to provide “spare” control range to compensate for changing microphone position and the audio absorption effect of a large audience. (Different acoustic characteristics between an empty audience soundcheck and a full audience show.)

Input Jacks:

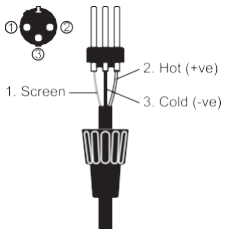
XLR Mic Input

The MIC input accepts XLR-type connectors and is designed to suit a wide range of BALANCED or UNBALANCED low-level signals, whether from delicate vocals requiring the best low-noise performance, or drum kits needing maximum headroom. Professional dynamic, condenser, or ribbon mics are best because these are LOW IMPEDANCE. While you can use low-cost HIGH IMPEDANCE mics, you do not get the same degree of immunity to interference on the microphone cable, and as a result, the level of background noise may be higher. If you turn the PHANTOM POWER on, the socket provides the appropriate voltage for professional condenser mics. Set the input level using the input GAIN knob.



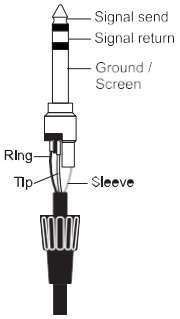
DO NOT use UNBALANCED sources with the phantom power switched on. The voltage on pins 2 & 3 of the XLR connector may cause serious damage. BALANCED dynamic mics may normally be used with phantom power switched on (contact your microphone manufacturer for guidance)

Balanced Mic XLR



TRS Line Input

Headphones



WARNING!

Start with the input GAIN knob turned fully anticlockwise when plugging high level sources into the LINE input to avoid overloading the input channel or giving you a very loud surprise!

The LINE input offers the same gain range as the MIC input but with a higher input impedance and is 20dB less sensitive. This suits most line-level sources.

Accepts 3-pole 'A' gauge jacks, or 2-pole mono jacks which will automatically ground the 'cold' input. Use this input for sources other than mics, such as keyboards, drum machines, and synths.

The input is BALANCED for low noise and interference immunity, but you can use UNBALANCED TS sources by wiring the jacks as shown; keep cable lengths as short as possible to minimize interference pickup. Note that the ring must be grounded if the source is unbalanced.

Set the input level using the GAIN knob, starting with the knob turned fully counterclockwise.

Insert Point

The unbalanced, pre-EQ insert point breaks the channel signal path, allowing you to add limiters, compressors, special EQ, or other signal-processing units. The Insert is a 3-pole 'A' gauge jack socket which is normally bypassed. When you insert a jack, the signal path is broken just before the EQ section.

The signal from the channel appears on the TIP of the plug and returns to the RING, with the sleeve as common ground.

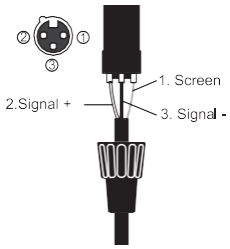
The Send may be tapped off as an alternative pre-fade, pre-EQ direct output, if required, using a lead with the tip and ring shorted together to ensure the signal path is not interrupted.

Stereo Inputs with Combo and TRS jacks

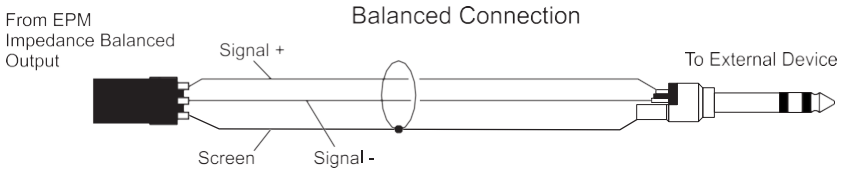
These accept 3-pole 'A' gauge jacks, or 2-pole mono jacks which will automatically ground the 'cold' input. Use these inputs for sources such as keyboards, drum machines, synths, tape machines, or as returns from processing units. The input is BALANCED for low noise and immunity to interference, but you can use UNBALANCED sources by wiring the jacks as shown, though you should keep cable lengths as short as possible to minimize interference pickup. Note that the ring must be grounded if the source is unbalanced.

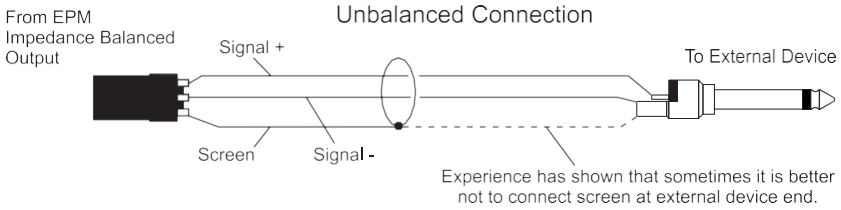
Mono sources can be fed to both paths by plugging into the Left jack only.

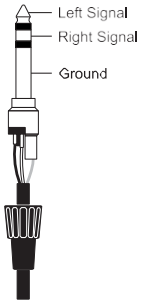
XLR Mix and Control Room Outputs



The MIX outputs are on XLR's, wired as shown, and incorporate impedance balancing, allowing long cable runs to balanced amplifiers and other equipment.







Aux & Group Bus Outputs

The Aux & Group outputs are on 3-pole 'A' gauge jack sockets, wired as shown on the left, and are impedance-balanced, allowing long cable runs to balanced amplifiers and other equipment.

Headphones

The PHONES output is a 3-pole 'A' gauge jack, wired as a stereo output as shown, ideally for headphones of 150Ω or greater. 8Ω headphones are not recommended.

Polarity (Phase)

You will probably be familiar with the concept of polarity in electrical signals, which is particularly important for balanced audio signals. Just as a balanced signal is highly effective at canceling out unwanted interference, so two microphones picking up the same

signal can cancel it out or cause serious degradation if one of the cables has the positive and negative wires reversed. This phase reversal can be a real problem when microphones are close together, so always connect the pins correctly when wiring audio cables.

Grounding and Shielding

For optimum performance, use balanced connections where possible, ensure all signals reference a solid, noise-free earthing point, and connect all signal cable screens to ground. In some unusual circumstances, to avoid earth or ground 'loops', ensure that all cable screens and other signal earths are connected to ground only at their source and not at both ends.

If the use of unbalanced connections is unavoidable, you can minimize noise by following these wiring guidelines:

On INPUTS, unbalance at the source and use a twin-screened cable as though it were balanced.

On OUTPUTS, connect the signal to the positive output pin and the output device ground to the negative. If you use a twin-screened cable, connect the screen only at the mixer end.

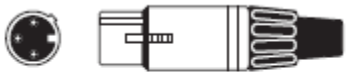
Avoid running audio cables or placing audio equipment close to thyristor dimmer units or power cables.

Noise immunity improves significantly with low-impedance sources, such as good-quality professional microphones or the outputs from most modern audio equipment. Avoid cheaper high-impedance microphones, which may suffer from interference over long cable runs, even with well-made cables.

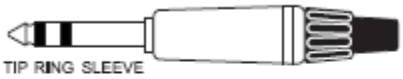
Grounding and shielding are still seen as black art, and the suggestions above are only guidelines. If your system still hums, an earth/ground loop is the most likely cause. Two examples of how an earth loop can occur are shown below.

Example Connectors and Cables:

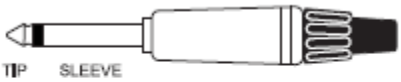
Audio Connectors Used with Soundcraft Consoles:



XLR



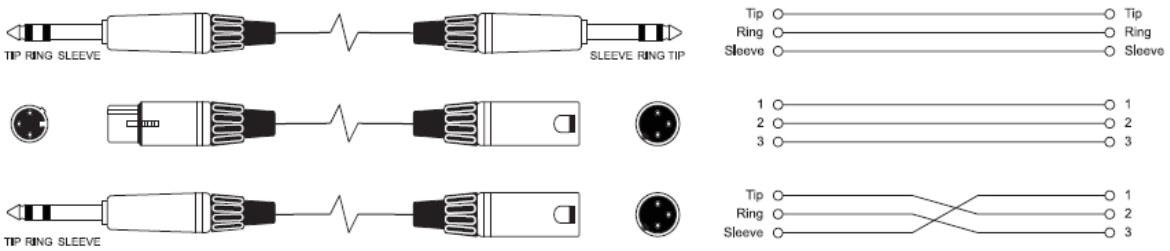
3-pole ¼"
(A guage TRS) jack



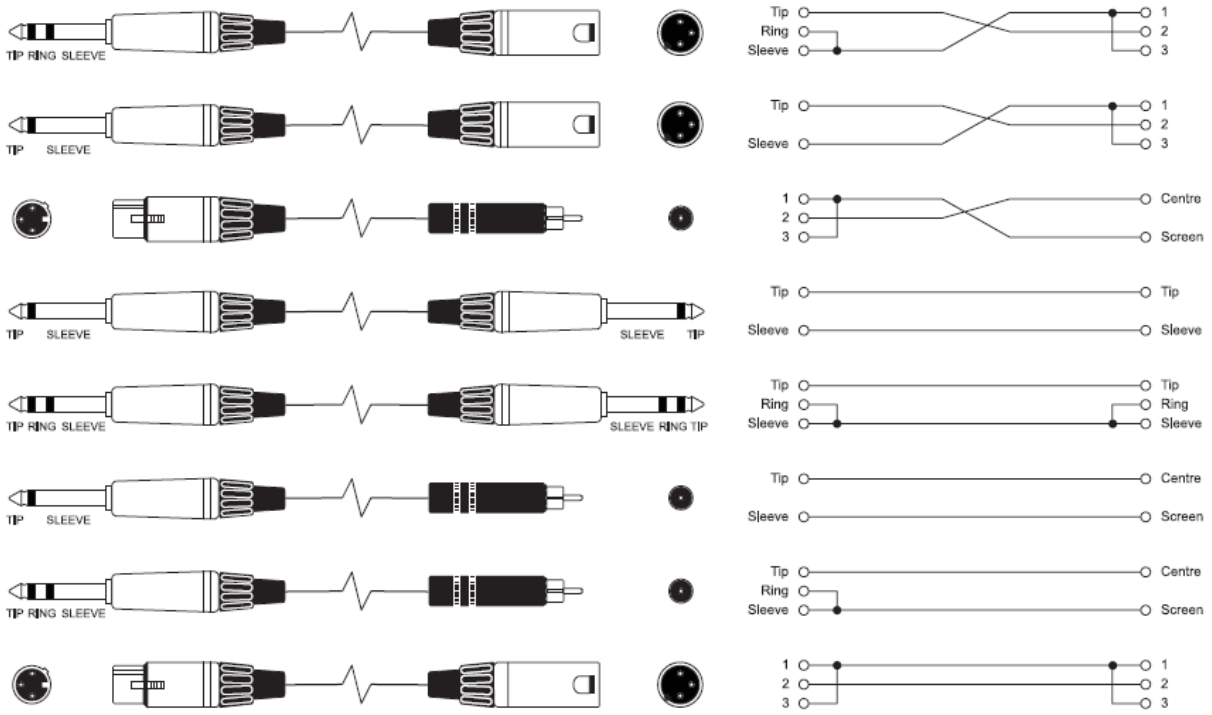
2-pole ¼"
(A guage TS) jack

RCA phono

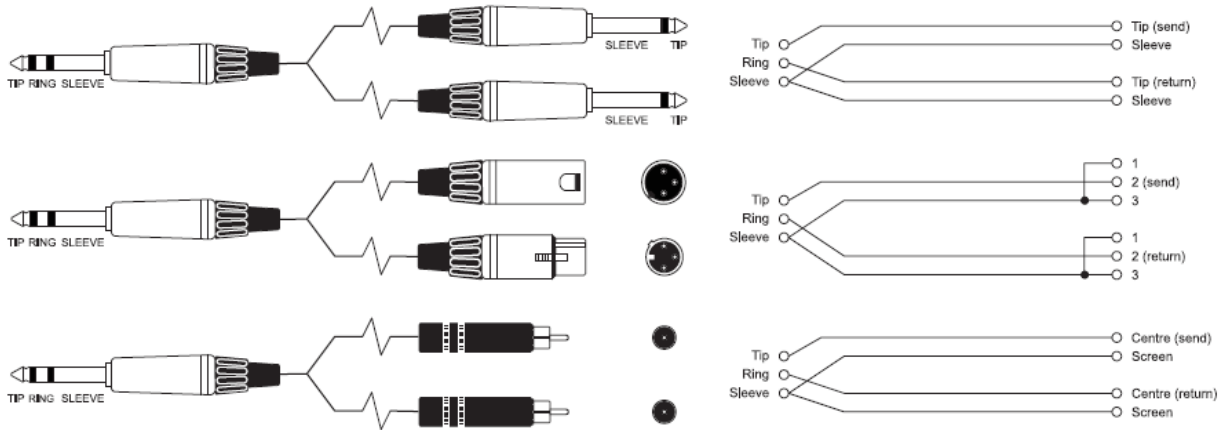
Balanced: Mic and Line Inputs, Line Outputs:



Unbalanced: Line Inputs, Line Outputs:



Insert Cables:



Troubleshooting Guide

No Sound on Outputs

Is an input signal failing to appear at an output? First, make sure the input is valid and appears on the input SSM LED meter, then work through the signal path to find where the 'break' is... Check the exact audio path of any signal by referring to the signal path diagrams.

1. Check Listen buttons

If a Listen light on an input channel is lit, Listen is active, and all channels except those that are 'Listen' will be muted. This will affect the headphones and control room output when their Listen buttons are engaged.

Clear all active Listens by pressing any illuminated Listen buttons on input channels, FX Return channels, Group channels, or any Aux Listen buttons.

2. Check Input Channel Path to Listen Bus

The channel Listen buttons can be very useful here. If you engage the Listen button on a channel, it sends a post-EQ, pre-Mute signal to the Listen bus, and you should see the signal indicated on the main meter, plus the Headphone and/or Control Room out when their Listen bus buttons are also engaged.

Things that might prevent the signal from getting that far include a GAIN control set too low, phantom power not switched on for a source that requires it (condenser microphone, active DI, etc.), an incomplete insert patch, or an engaged USB ON button on a channel where there is no current USB signal input.

3. Check the Input Channel routing diagram (Section 4.1) and ensure the channel controls are set up correctly.
4. Check Busses

If you have routed a signal to the MIX Stereo bus or a Group bus or turned up the channel's contribution to an Aux bus, the main controls for that bus must be set correctly. For example, if the signal is routed to the stereo MIX but the stereo MIX fader is down, you won't hear anything. If the channel is routed to a group but the group MIX button isn't engaged, you won't hear anything.

5. Check the controls on any Bus that the signal is routed to.

No sound on FX

For an internal FX to be heard, there must be both a source contribution from a valid input and an FX output patched to a valid output.

Internal FX routing has three stages: send, processor, and return. All three must be set correctly for the FX to be heard.

Increase the input channel's FX Send pot to the printed “0” position and set the FX M pot to the printed “0” position. The signal should appear on the FX M SSM LED meter. Check that the FX M pot is not muted.

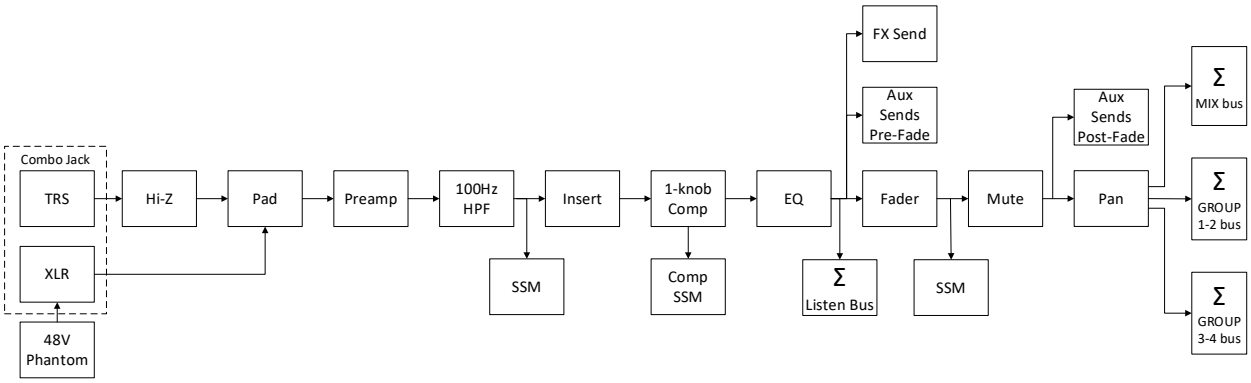
The FX signal is returned through the corresponding FX RTN Return Channel. Troubleshoot this signal path as you would do for a normal input channel, routing it to the MIX or through a Group to the MIX. Check that the fader level is near unity gain and the FX Return MUTE button is not engaged.

Signal Flow Diagrams

This section contains signal flow diagrams for the Signature Plus consoles.

Mono Channel Strip

This diagram shows the order of operations of the mono channel strip. Note that Hi-Z, PAD, 100Hz HPF, and the one-knob compressor are active only when their enable buttons are engaged in the down position. Hi-Z is only available on the rightmost 4 mono channels.

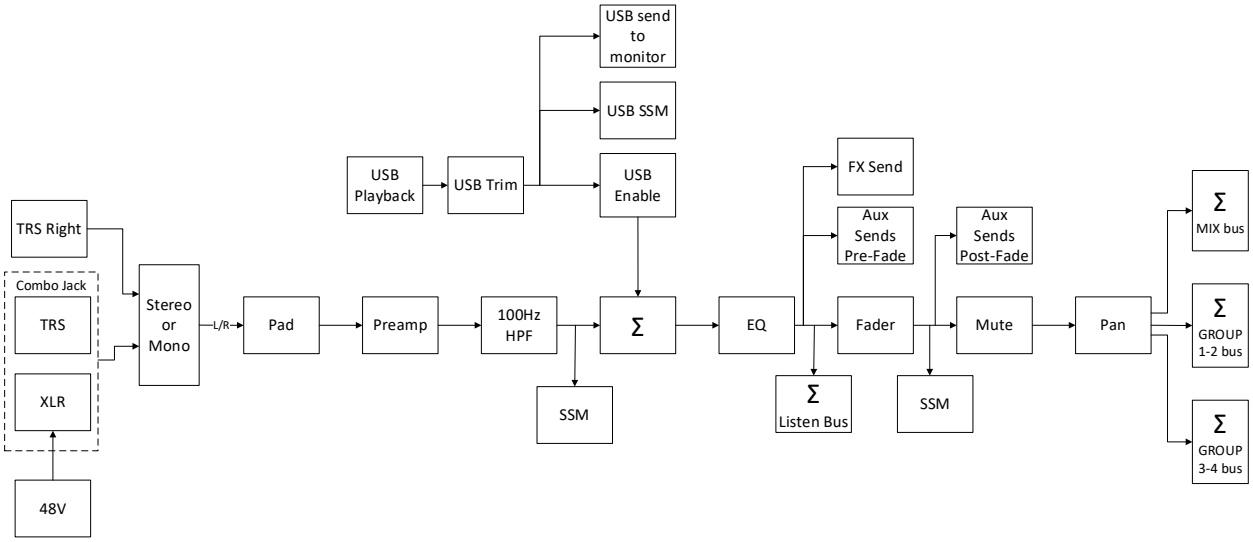


Stereo Channel Strip

This diagram shows the order of operations of the stereo channel strip. PAD, 100Hz HPF, and USB playback are active only if their enable buttons are engaged in the down position.

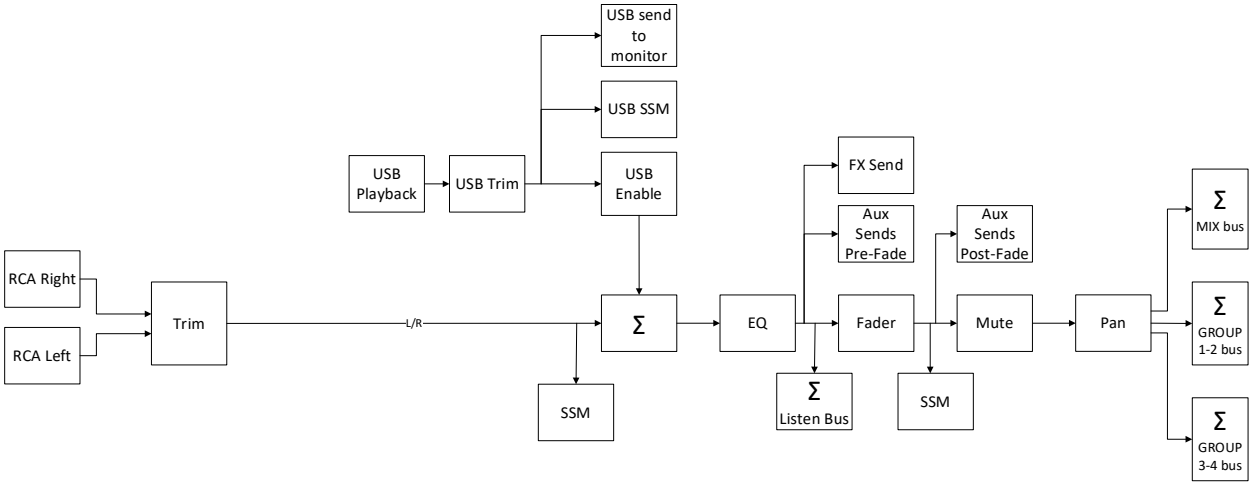
If you do not use the right-channel TRS, the combo jack signal will apply to both left and right.

Note that not all stereo channels have USB playback.



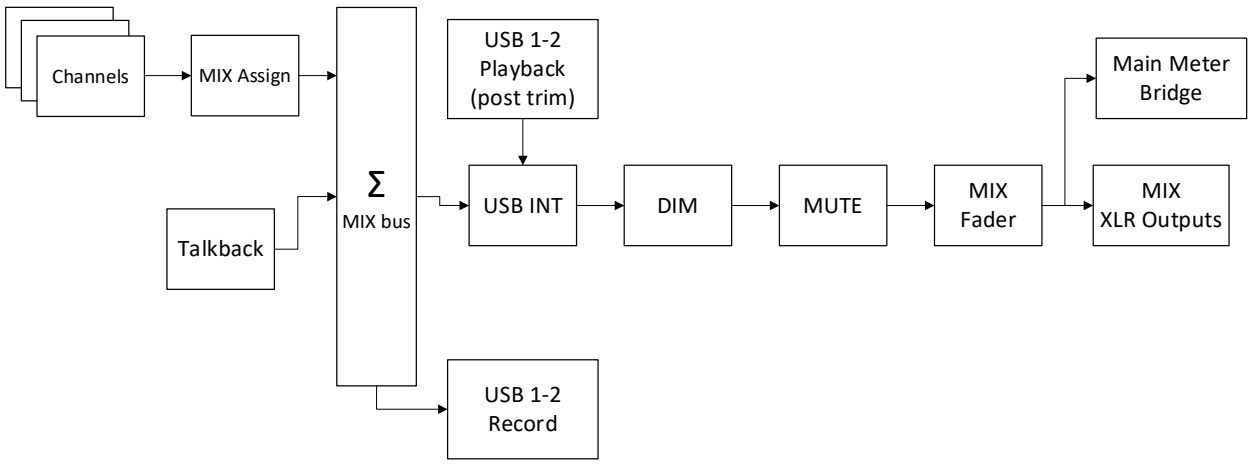
RCA Channel Strip

This diagram shows the order of operations of the RCA channel strip. The RCA Channel Strip also has the USB 3-4 input controls. When the USB 3-4 button is engaged, the RCA inputs sum with the USB 3-4 inputs to continue together down the channel strip.



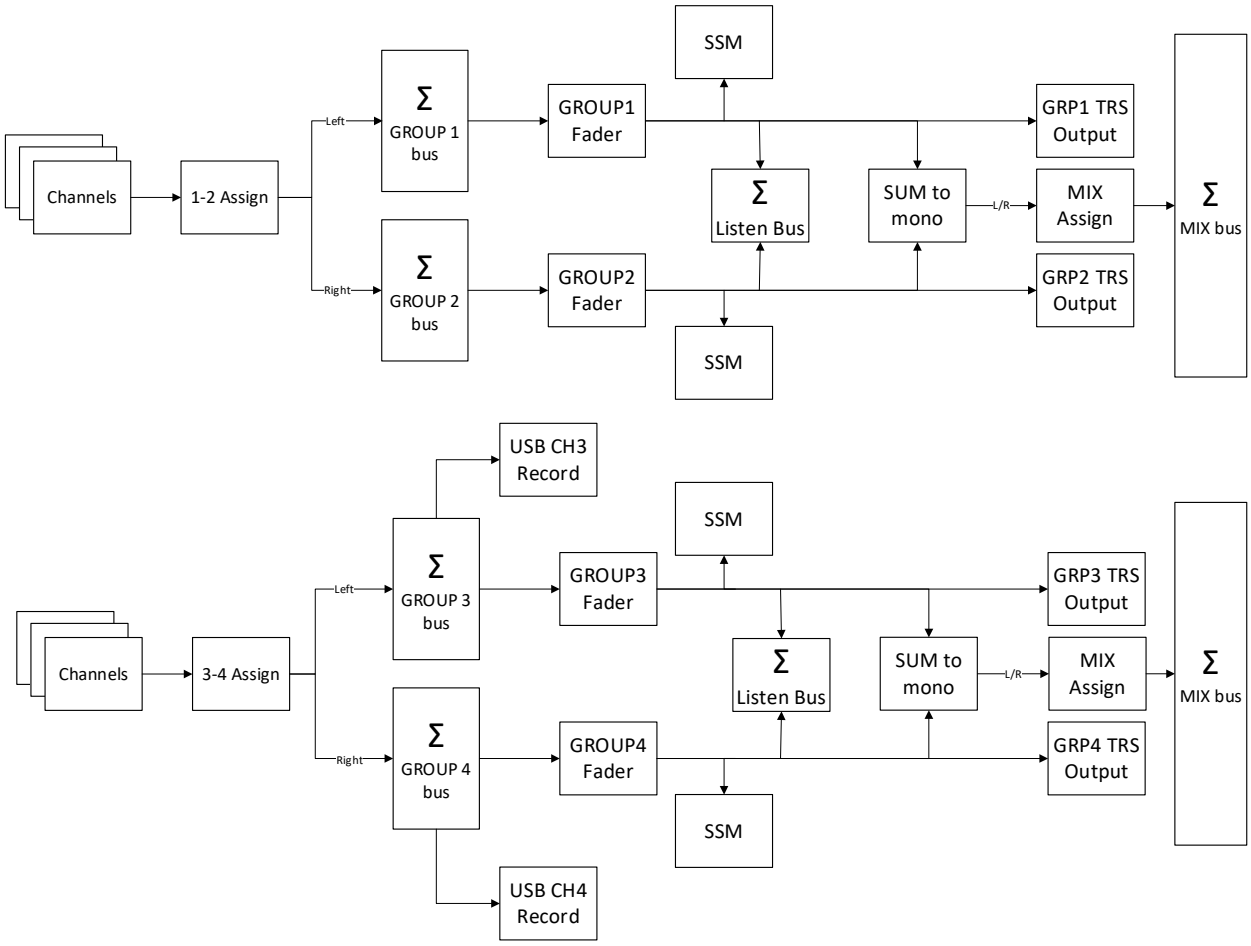
MIX Bus

This diagram shows the order of operations on the MIX bus. When USB INT is engaged, signal from the MIX bus will be muted and only USB playback will be applied.



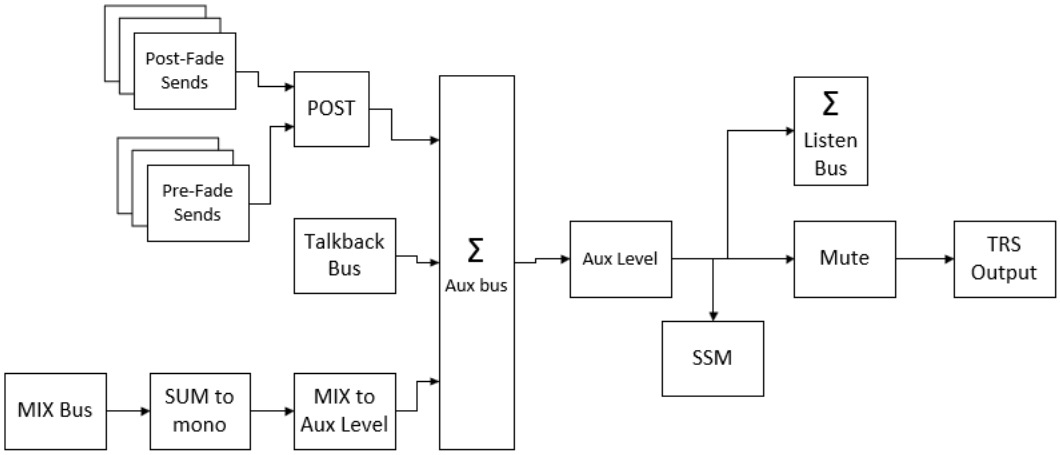
Group Bus

This diagram shows the order of operations for the group buses. Sum to mono will only apply when the button is engaged and affects the send to the MIX bus only; the group TRS outputs will always be independent. The listen bus on the groups will be in stereo.



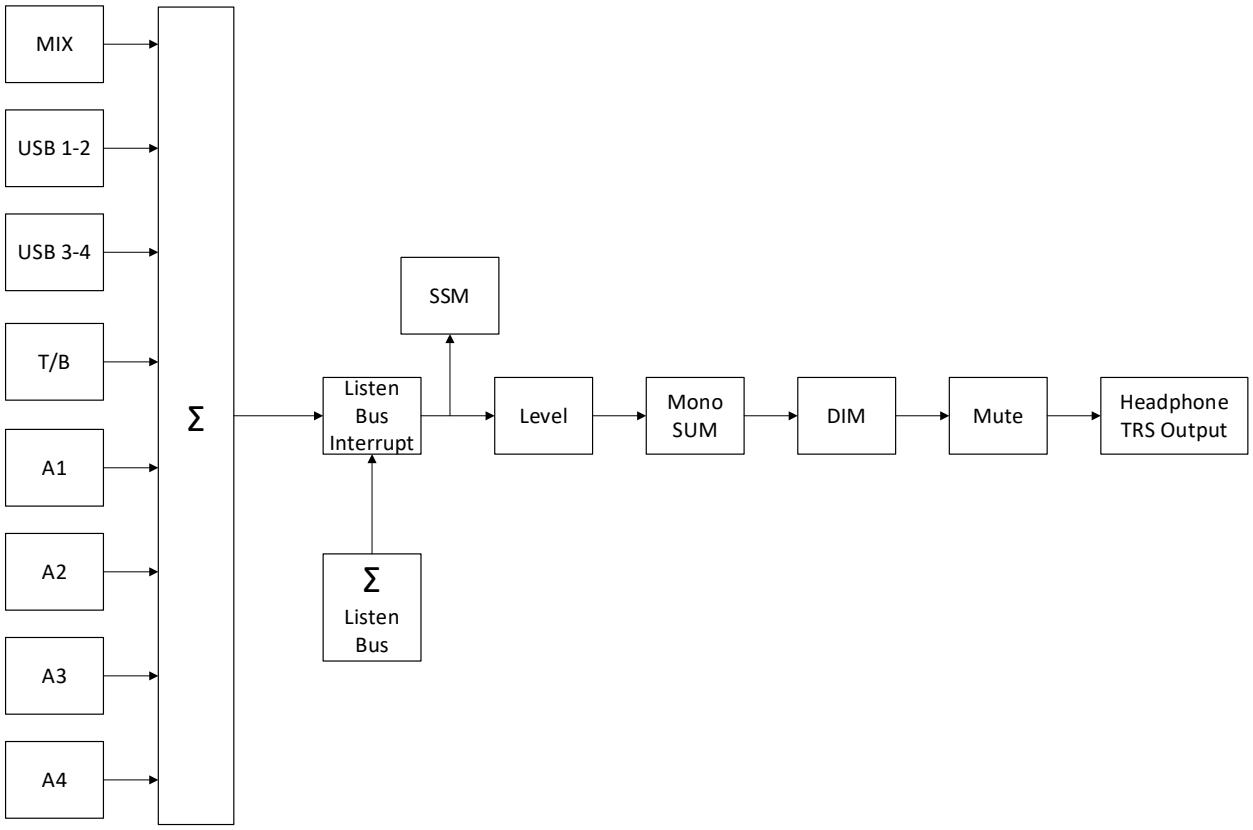
Aux Bus

This diagram shows the order of operations for the Aux buses. Sum to mono will only apply when the button is engaged and affects the MIX bus only. The Aux TRS outputs will always be independent. The Listen bus on each AUX will be in mono.



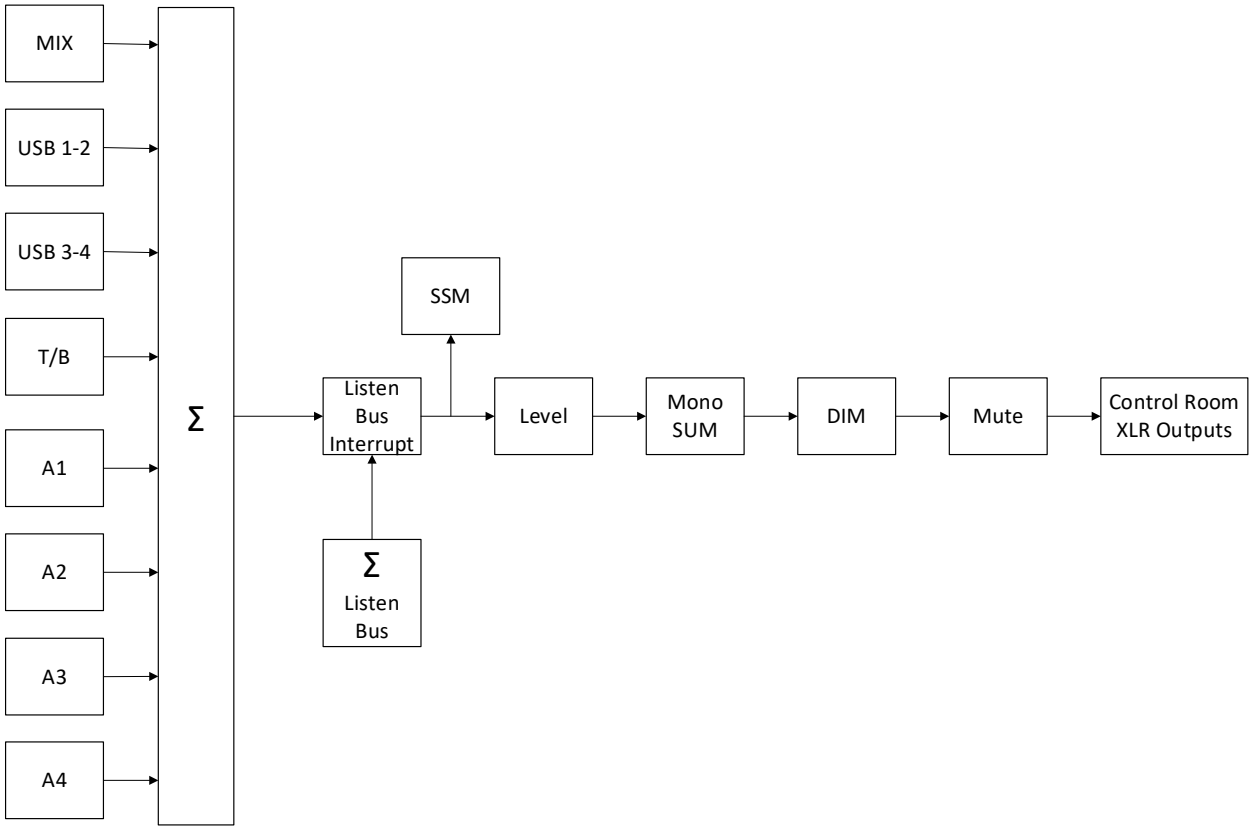
Headphone

The Headphone signal chain is a sum of all current source buttons engaged. Only the Listen bus button is an interrupt, and it interrupts only when a Listen source button is engaged while the Headphone Listen interrupt button (ear icon) is engaged.



Control Room

The Control Room signal chain is a sum of all current source buttons engaged. Only the Listen bus button is an interrupt, and it interrupts only when a Listen source button is engaged at the same time the Control Room Listen button is engaged.

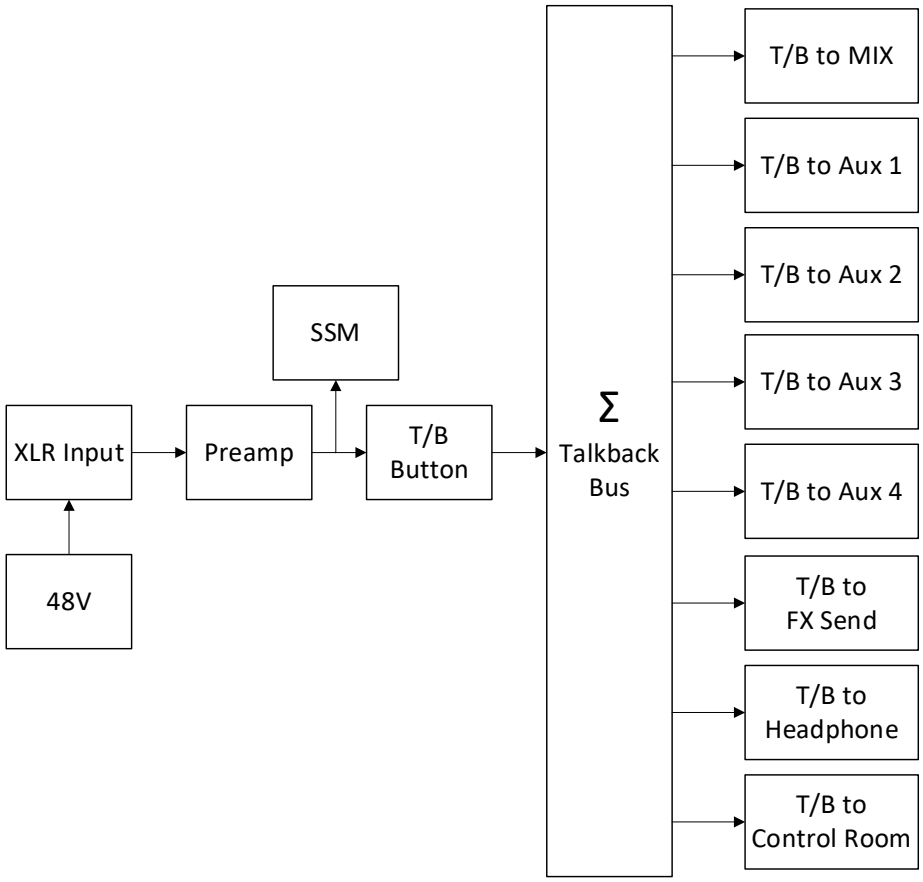


Talkback

Talkback functions as a combination of Talkback signal going onto the Talkback bus and a selection of the talkback (T/B) bus signal coming off of the talkback bus. Generally, engage the target output button(s) by selecting the output you want to Talkback to, then engage the large talkback input button on the Mix channel to engage the talkback input onto the talkback bus.

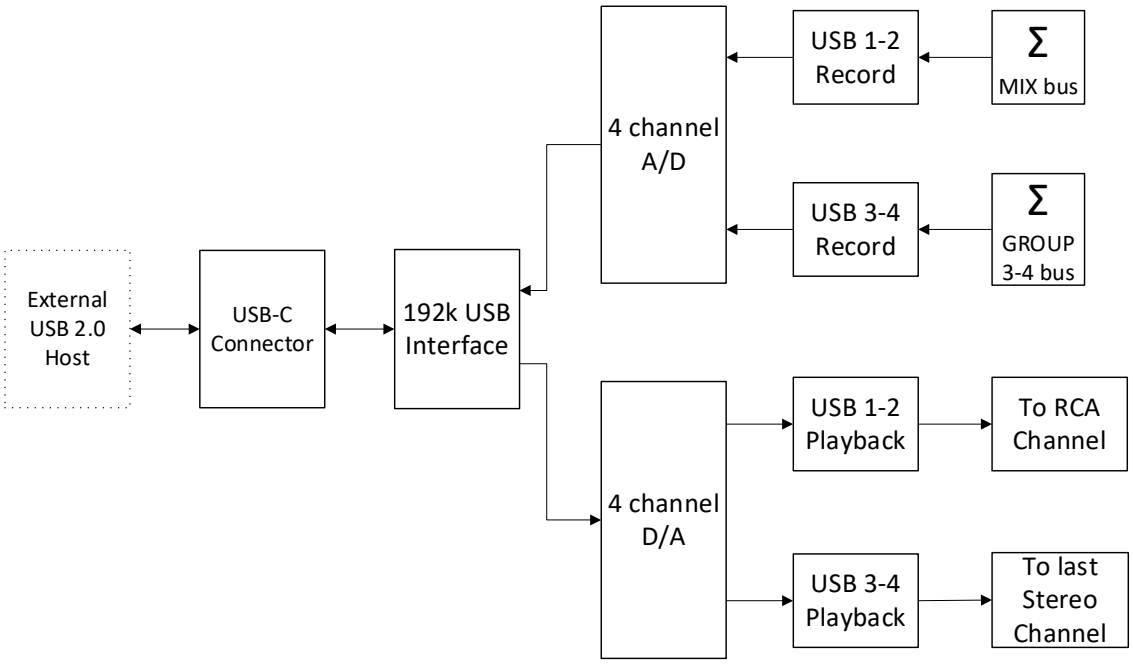
The Talkback input button can be either pushed down and held, for temporary engagement, or double clicked to lock on the talkback input button. You can see when the talkback input

is engaged by the talkback input button's LED being on. A single click on the talkback input button will release the talkback button from being locked on.



USB Audio

- USB connection uses the USB 2.0 protocol, which supports both USB-C to USB-C and USB-C to USB-A cables.
- USB connection is class-compliant and works with all major platforms, including Windows, Mac, iOS, and Android. ASIO driver for Windows is provided as part of the Soundcraft Control Panel Application
- Sample rate is set by the host device, where Signature will support various rates from 44.1kHz to 192kHz.



Performance Specifications

Conditions unless otherwise noted:

- All faders at unity, one channel routed to any output, all other channels muted
- EQ flat, Compressor in OFF position with threshold set to +10
- Stimulus signal 1kHz
- Source impedance 150ohm
- Load impedance 200kohm
- Measurements A-weighted, with AES17 (20kHz) filter
- All values typical with tolerance of +/-5%

Parameter	Test Conditions	Value
Equivalent Input Noise (EIN)	Preamp Gain @ 65dB A-weighted AES17 filter (20kHz)	-128dBu
Frequency Response	Audio band flatness, relative to 1kHz 20Hz to 20kHz	+0.5dB/-1.5dB
Frequency Response	-3dB cutoff	15Hz to 80kHz
Residual Noise	One channel routed, unity gain A-weighted	-90dBu
Residual Noise (Signature Plus 32 only)	One channel routed, unity gain A-weighted	-88dBu
Residual Noise (RCA channel only)	Channel trim at noon A-weighted USB not routed	-78dBu
THD+N	30dB preamp gain +14dBu at any output AES17 filter (20kHz)	<0.005%
CMRR	30dB preamp gain -10dBu input level	>80dB
Crosstalk	+30dB preamp gain +14dBu at output Measured signal on non-routed output, relative to +14dBu	-80dB
Aux send isolation	+30dB preamp gain Relative to +14dBu at aux output with unity	-75dB

	gain Aux pot at minimum, Aux main pot at unity	
EQ boost/cut		+/-15dB
High-pass filter	-3dB cutoff	100Hz
Input channel PAD		-18dB
DIM		-12dB
Preamp Gain	PAD not engaged	+6dB to +65dB
Preamp Gain, with PAD	PAD engaged	-12dB to 47dB
Maximum Input Level	XLR and TRS balanced inputs	+16dBu
Maximum Input Level, with PAD	XLR and TRS balanced inputs	+29dBu
Maximum Output Level	All outputs except headphones, balanced 1% THD+N	+28dBu
Maximum Output Level	All outputs except headphone, single-ended 1% THD+N	+22dBu
Input Impedance	XLR and TRS balanced inputs	1.2k ohm
Input Impedance, with PAD	XLR and TRS balanced input, PAD engaged	10k ohm
Input Impedance, HI-Z	Single-ended configuration, TRS input jack Hi-Z button engaged	1M ohm
Headphone Output Power	300 ohm load Driven to 1% THD+N	220mW

Headphone Output Power	43 ohm load Driven to 1% THD+N	400mW

General Specifications

Parameter	Value
Weight	Signature 12 – 6.1kg Signature 16 – 7.8kg Signature 22 – 15.9kg Signature 32 – 20.5kg
Dimensions	Product height 106mm (all models, including knobs) Product depth 535mm (all models) Product width: Signature 12 – 341mm Signature 16 – 438mm Signature 22 – 560mm Signature 32 – 806mm
Voltage Input	Compatible with global AC line voltage standards 90-260VAC, 50-60Hz
Power Consumption, Maximum	Signature 12 - 40W Signature 16 - 65W Signature 22 - 75W Signature 32 - 90W

1-knob Compressor Specifications

Parameter	Value	Note
Threshold	-20dBu to +10dBu	Threshold decreases as knob is turned counterclockwise
Attack time	10ms	
Release time	300ms	
Ratio	1.5 to 1	
Make-up gain	3dB to 12dB	Make-up gain increases as the threshold knob is turned counterclockwise

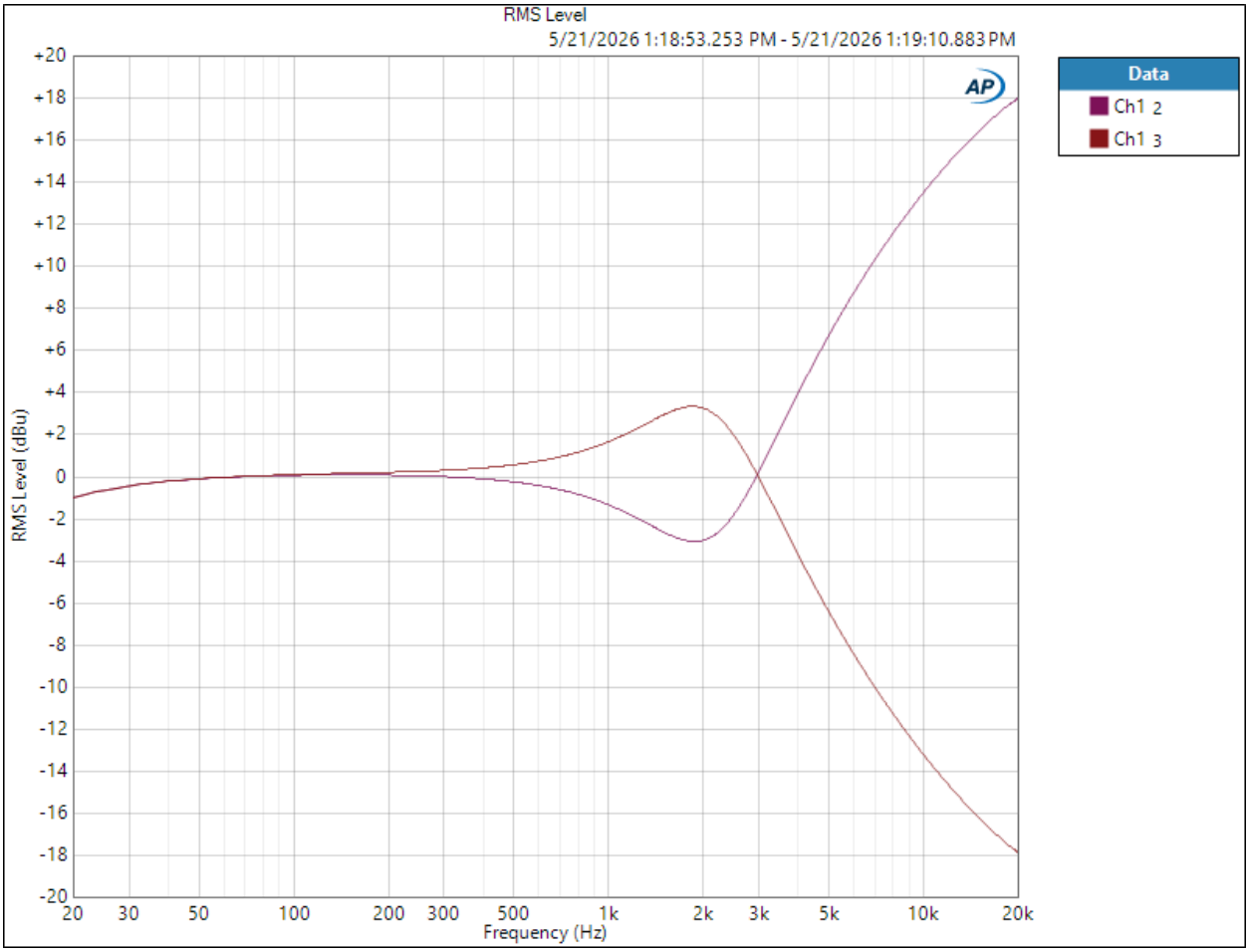
USB Specifications

Parameter	Notes	Value
Supported Sample Rates		44.1kHz, 48kHz 88.1kHz, 96kHz 176.2kHz, 196kHz
Full Scale Playback Level	USB trim knob at noon Routed through unity gain channel to MIX	+17dBu
Full Scale Recording Level	0dBFS equivalent level at MIX output	+20dBu
Dynamic Range, Playback		94dB
Dynamic Range, Recording		107dB
THD+N, Playback	-0.5 dBFS playback level Adjust USB trim to get +14dBu at any output	<0.01%
THD+N, Recording	Input to mono channel Preamp gain 30dB Route to MIX and Group 3-4 Adjust channel fader to reach -1dBFS	<0.005%

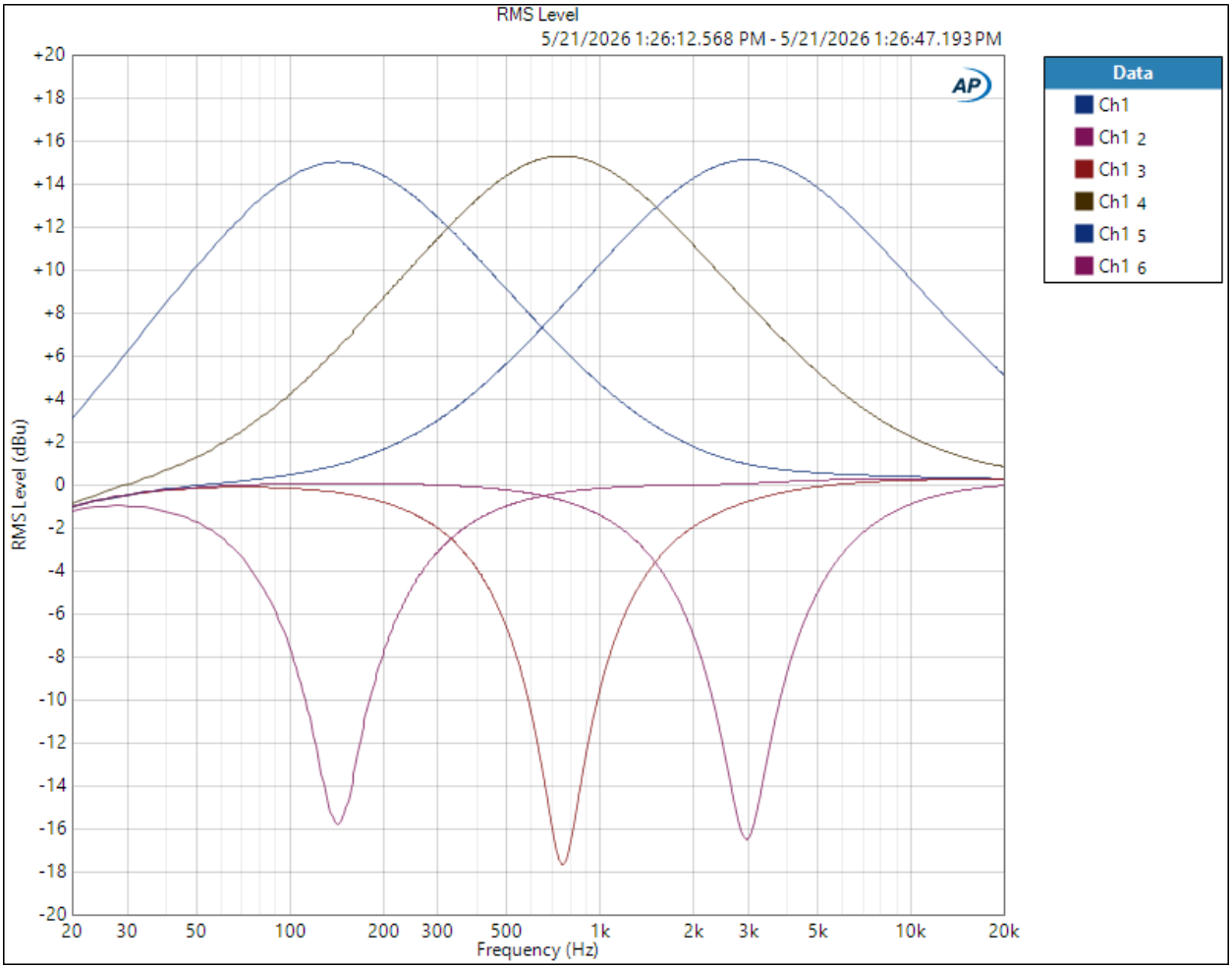
Soundcraft reserves the right to change specifications without notice.

Sapphyre EQ Reference Curves

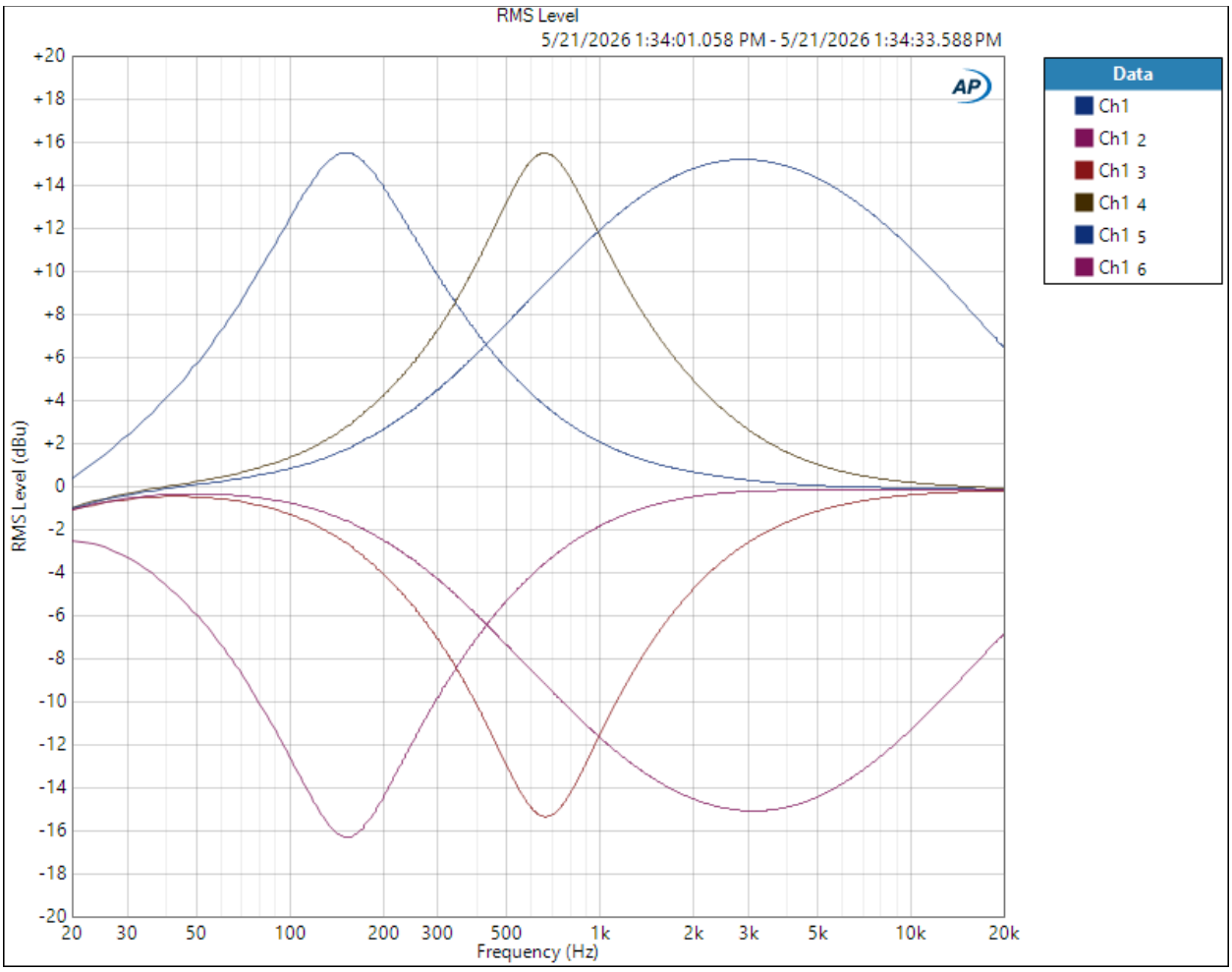
High Freq



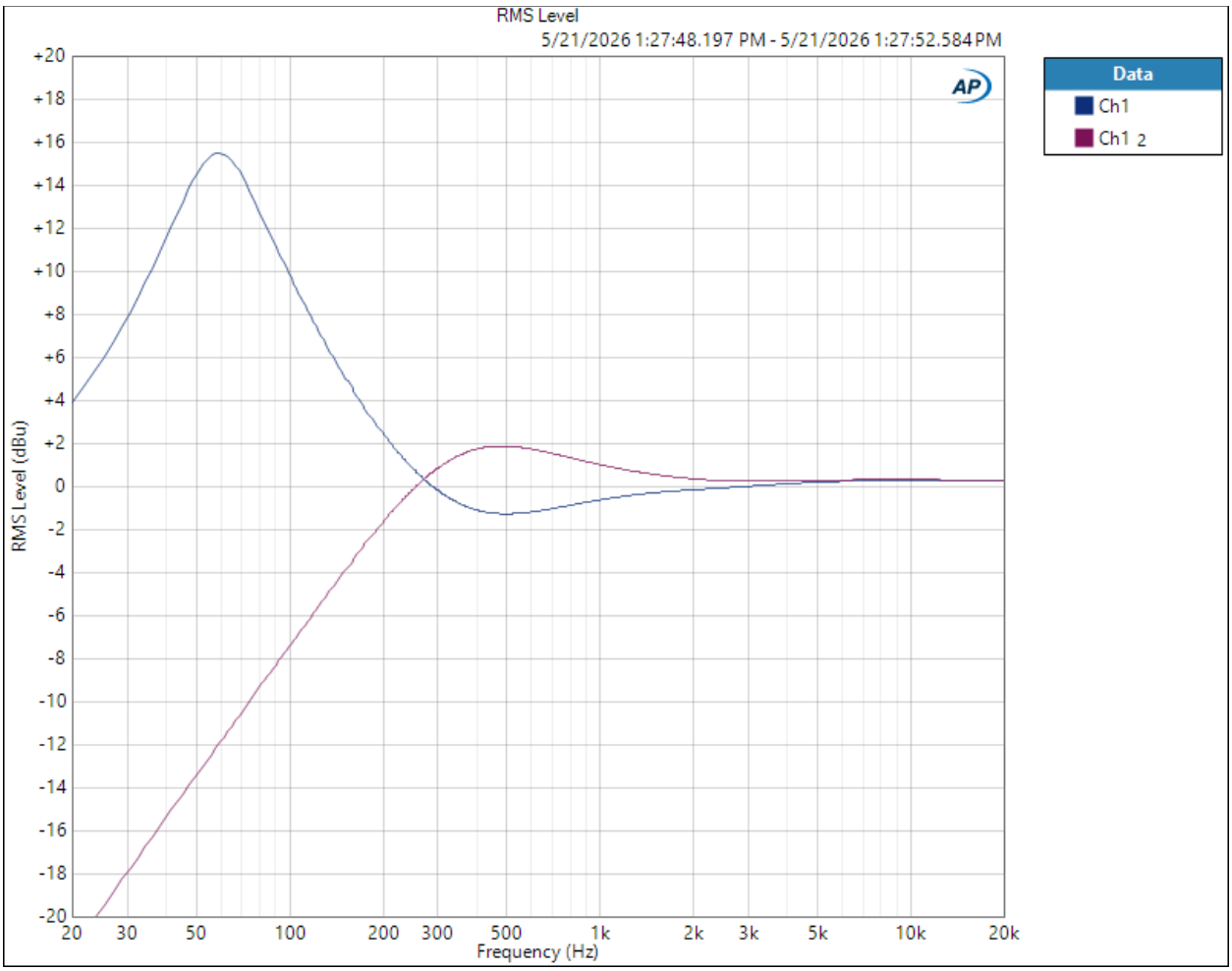
Mid-Freq (mono channel)



Mid-Freq (stereo channel)



Low-Freq


RMS Level
5/21/2026 1:27:48.197 PM - 5/21/2026 1:27:52.584 PM
Data
Ch1
Ch1 2
RMS Level (dBu)
+20
+18
+16
+14
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-14
-16
-18
-20
20
30
50
100
200
300
500
1k
2k
3k
5k
10k
20k
Frequency (Hz)

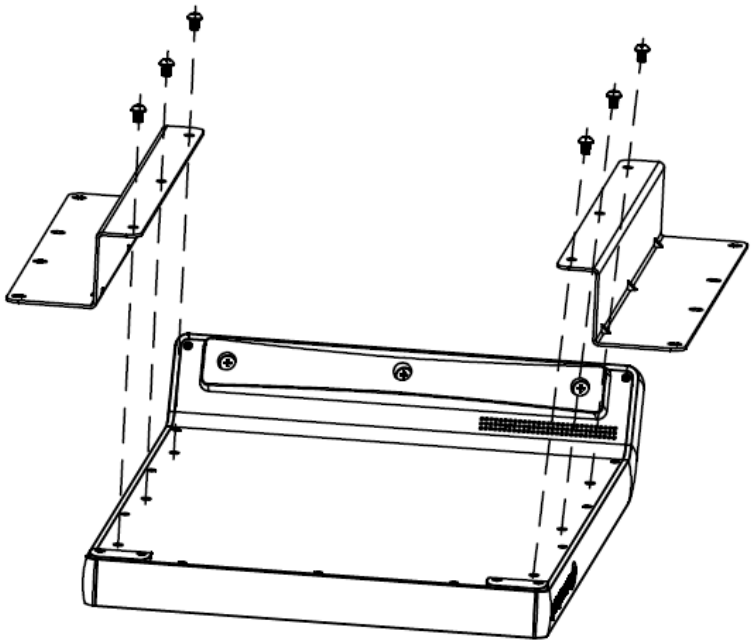
Rackmount Options

The box includes a pair of rack-mounting extensions for the Signature Plus 12 and Signature 16 consoles. Signature Plus 22 and 32 are too wide for standard rackmount applications.

The six screws for mounting the rack ears are installed from the factory on the underside of the console. These are the screws on the underside of the console with the rounded head screw heads.

To install the rack ears

1. Turn the console over so the underside panel is facing upward.
2. Place each rack ear on each side of the console with the three screw holes on each rack ear near the installed rounded cap screws.
3. Remove the three rounded head screws from one side of the console, slide the rack ear to align its three holes over the screw holes from the removed screws, and reinstall the screws through the rack ear holes into the empty screw holes on the back of each side of the console underside plate.
4. The console with installed rack ears can now be mounted in a standard 19-inch electronics rack system using user-provided screws of the proper size and depth for the rack's holes.
5. When the rack ears are not attached, the rounded head screws can be kept screwed into the six screw holes under the console.



Glossary

Aux Send	An auxiliary send bus comprising a mix of signals from channels derived independently of the main stereo mix.
Balanced Signal	A method of audio connection which 'balances' the wanted signal between two wires; these wires also have a screen which carries no signal. Any interference is picked up equally by the two wires, which cancels the unwanted signal. In this guide, the term can refer to various circuit architectures. Relevant sections provide connection details.
Clipping	The onset of severe distortion in the signal path, usually caused by the peak signal voltage being limited by the circuit's power supply voltage.
dB (decibel)	A ratio of two voltages or signal levels, expressed by the equation dB=20Log10 (V1/V2). Adding the suffix 'u' denotes that the ratio is relative to 0.775V RMS.
Equalizer or EQ	A device that allows the boosting or cutting of selected bands of frequencies in the signal path.
Fader	A linear control providing level adjustment.
Feedback	The ` howling' sound caused by bringing a microphone too close to a loudspeaker driven from its amplified signal.
FX	DSP audio processing that "effects" the sound, such as reverb or delay
Frequency response	The variation in a device's gain across frequencies.
Gain	The amount of amplitude change on a signal, expressed in dB.
Headroom	The available signal range above the nominal level before clipping occurs.
Insert	A break point in the signal path to allow the connection of external devices, for instance signal processors or other mixers at line level signals.
Nominal levels	A "safe" operating level which has sufficient headroom and SNR. Nominal levels can range from 0 dBu to +6 dBu, usually coming from a low-impedance source.
Pan	Abbreviation of 'panorama': controls the levels sent to left and right outputs.
Pot	Pot is an abbreviated term for a potentiometer that rotates.
Peaking	The point at which a signal rises to its maximum instantaneous level, before falling back down again. It can also describe an equalizer response curve that affects only a band of frequencies (as on a graphic equalizer), "peaking" at the center of that band.
Phase	A term used to describe the relationship of two audio signals. In-phase signals reinforce each other; out-of-phase signals cancel. Phase is a measurement of relative displacement between two waves of identical frequency.
Polarity	A term used to describe the orientation of the positive and negative poles of an audio connection. Normally, connections are made with positive to positive, negative to negative. If this is reversed, the result will be out-of-phase signals (see 'phase' above).
Post-fade	The point in the signal path after a fader, affected by the fader position.

Pre-fade	The point in the signal path before a fader, and therefore unaffected by the fader position.
Rolloff	A fall in gain at the extremes of the frequency response.
Shelving	An equalizer response affecting all frequencies above or below the break frequency, i.e., a high-pass or low-pass derived response.
SSM	“Simple Success Metering” – Tri-color LED in which color indicates signal level ranges to the user, as the color ranges on the MIX channel LED ladder meter LEDs. The Compressor SSM LED shows the level position relative to the OverEasy knee. Green is below the OverEasy curve, Yellow is in the OverEasy Curve, Red is over the OverEasy curve.
Spill	Acoustic interference from other sources.
Transient	A momentary rise in the signal level.
Unbalanced	A method of audio connection that uses a single wire and the cable screen as the signal return. This method does not provide the noise immunity of a balanced input (see above).
+48V	The phantom power supply, available at the channel mic inputs, powers condenser microphones and active DI boxes.