soundweb™

CONTRIO™

controllers

Installation Guide

Ethernet Wall Controllers:

EC-V

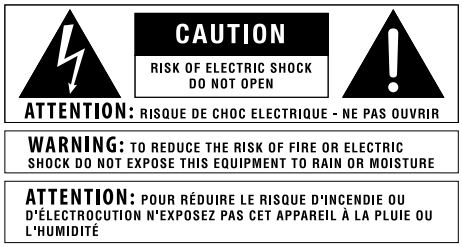
EC-4B

EC-4BV

EC-8BV

BSS by HARMAN®

IMPORTANT SAFETY INSTRUCTIONS



The symbols shown above are internationally accepted symbols that warn of potential hazards with electrical products. The lightning flash with arrowpoint in an equilateral triangle means that there are dangerous voltages present within the unit. The exclamation point in an equilateral triangle indicates that it is necessary for the user to refer to the owner's manual.

These symbols warn that there are no user serviceable parts inside the unit. Do not open the unit. Do not attempt to service the unit yourself. Refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty. Do not get the unit wet. If liquid is spilled on the unit, shut it off immediately and take it to a dealer for service. Disconnect the unit during storms to prevent damage.

The following is indicative of low altitude use; do not use this product above 2000m.



U.K. MAINS PLUG WARNING

A molded mains plug that has been cut off from the cord is unsafe. Discard the mains plug at a suitable disposal facility.

NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAINS PLUG INTO A 13 AMP POWER SOCKET.

Do not use the mains plug without the fuse cover in place. Replacement fuse covers can be obtained from your local retailer. Replacement fuses are 13 amps and MUST be ASTA approved to BS1362.

WARNING

Use only VW-1 rated wiring and Ethernet cables for RJ45 POE and analog connections. Equipment to be powered by certified POE power adaptor with rated output of 44–57VDC, 13W.

SAFETY INSTRUCTIONS

NOTICE FOR CUSTOMERS IF YOUR UNIT IS EQUIPPED WITH A POWER CORD.

WARNING: THIS APPLIANCE SHALL BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION.

THE CORES IN THE MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

GREEN AND YELLOW - EARTH BLUE - NEUTRAL BROWN - LIVE

AS COLOURS OF THE CORES IN THE MAINS LEAD OF THIS APPLIANCE MAY NOT CORRESPOND WITH THE COLOURED MARKINGS IDENTIFYING THE TERMINALS IN YOUR PLUG, PROCEED AS FOLLOWS:

- THE CORE WHICH IS COLOURED GREEN AND YELLOW MUST BE CONNECTED TO THE TERMINAL IN THE PLUG MARKED WITH THE LETTER E, OR WITH THE EARTH SYMBOL, OR COLOURED GREEN, OR GREEN AND YELLOW.
- THE CORE WHICH IS COLOURED BLUE MUST BE CONNECTED TO THE TERMINAL MARKED N OR COLOURED BLACK.
- THE CORE WHICH IS COLOURED BROWN MUST BE CONNECTED TO THE TERMINAL MARKED L OR COLOURED RED.

THIS EQUIPMENT MAY REQUIRE THE USE OF A DIFFERENT LINE CORD, ATTACHMENT PLUG, OR BOTH, DEPENDING ON THE AVAILABLE POWER SOURCE AT INSTALLATION. IF THE ATTACHMENT PLUG NEEDS TO BE CHANGED, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL WHO SHOULD REFER TO THE TABLE BELOW. THE GREEN/YELLOW WIRE SHALL BE CONNECTED DIRECTLY TO THE UNITS CHASSIS.

CONDUCTOR		WIRE COLOR	
		Normal	Alt
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E	EARTH GND	GREEN/YEL	GREEN

WARNING: IF THE GROUND IS DEFEATED, CERTAIN FAULT CONDITIONS IN THE UNIT OR IN THE SYSTEM TO WHICH IT IS CONNECTED CAN RESULT IN FULL LINE VOLTAGE BETWEEN CHASSIS AND EARTH GROUND. SEVERE INJURY OR DEATH CAN THEN RESULT IF THE CHASSIS AND EARTH GROUND ARE TOUCHED SIMULTANEOUSLY.

WARNING:

- APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.
- APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.
- LAITE ON LIITETTÄVÄ SUOJAKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

IMPORTANT SAFETY INSTRUCTIONS

WARNING FOR YOUR PROTECTION READ THE FOLLOWING:

READ THESE INSTRUCTIONS.

KEEP THESE INSTRUCTIONS.

HEED ALL WARNINGS.

FOLLOW ALL INSTRUCTIONS.

DO NOT USE THIS APPARATUS NEAR WATER.

CLEAN ONLY WITH A DRY CLOTH.

FOR INDOOR USE ONLY.

DO NOT BLOCK ANY OF THE VENTILATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIERS) THAT PRODUCE HEAT.

ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

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 third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for replacement of 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.

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



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.

POWER ON/OFF SWITCH: The Power switch used in this piece of equipment DOES NOT break the connection from the mains.

MAINS DISCONNECT: The plug shall remain readily operable. For rack-mount or installation where plug is not accessible, an all-pole mains switch with a contact separation of at least 3 mm in each pole shall be incorporated into the electrical installation of the rack or building.

If connected to 240V supply, a suitable CSA/UL certified power cord shall be used for this supply.

ELECTROMAGNETIC COMPATIBILITY

This device complies with part 15 of the FCC Rules and the Product Specifications noted on the **Declaration of Conformity**.
Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Operation of this unit within significant electromagnetic fields should be avoided.

- use only shielded interconnecting cables.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private households in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

CONSIGNES DE SÉCURITÉ IMPORTANTES



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

ATTENTION: POUR RÉDUIRE LE RISQUE D'INCENDIE OU D'ÉLECTROCUTION N'EXPOSEZ PAS CET APPAREIL À LA PLUIE OU L'HUMIDITÉ

Les symboles illustrés ci-dessus sont des symboles acceptés internationalement qui avertissent des dangers potentiels relatifs à l'utilisation de produits électriques. Le voyant clignotant avec une flèche dans un triangle équilatéral signifie la présence de tensions dangereuses dans l'appareil. Le point d'exclamation dans un triangle équilatéral indique que l'utilisateur doit se référer au manuel d'utilisation.

Ces symboles indiquent qu'il n'y a aucune pièce utilisable par l'utilisateur à l'intérieur de l'appareil. Ne pas ouvrir l'appareil. Ne pas essayer de réparer soi-même l'appareil. Confier toute réparation à du personnel qualifié. Ouvrir la structure de l'appareil pour quelque raison que ce soit annulera la garantie du fabricant. Ne pas mouiller l'appareil. Si du liquide est renversé sur l'appareil, fermer immédiatement l'appareil et l'apporter chez un réparateur. Débrancher l'appareil pendant les tempêtes afin d'éviter des dommages.

Ce qui suit est représentatif d'une utilisation à basse altitude ; ne pas utiliser ce produit au-dessus de 2000 m.



AVERTISSEMENT CONCERNANT LA FICHE SECTEUR

Une fiche secteur moulée qui a été coupée du cordon est dangereuse. Jeter la fiche secteur dans un centre de déchets adapté.

VOUS NE DEVEZ EN AUCUNE CIRCONSTANCE INSÉRER UNE FICHE ENDOMMAGÉE OU COUPÉE DANS UNE PRISE SECTEUR 13 AMP.

Ne pas utiliser la fiche secteur si le couvercle du coffret à fusibles n'est pas bien en place. Vous pouvez vous procurer des capots de fusible de rechange auprès de votre détaillant local. Les fusibles de remplacement sont de 13 A et DOIVENT être approuvés ASTA, BS1362.

AVERTISSEMENT

Utilisez uniquement des VW-1 notés câblage et câbles Ethernet RJ45 pour POE et les connexions analogiques. Équipement pour être alimenté par l'adaptateur secteur certifié POE avec puissance nominale de 44–57VDC, 13W.

CONSIGNES DE SÉCURITÉ

NOTICE ADRESSÉE AUX CONSOMMATEURS ÉQUIPÉS D'UN MATÉRIEL AVEC CORDON D'ALIMENTATION FOURNI.

AVERTISSEMENT : CET APPAREIL DOIT ÊTRE BRANCHÉ SUR UNE PRISE SECTEUR DOTÉE D'UNE PROTECTION PAR MISE À LA TERRE.

LES COULEURS DES NOYAUX DANS LES FILS SECTEURS DOIVENT RESPECTER LES CODES SUIVANTS :

VERT ET JAUNE - TERRE BLEU - NEUTRE MARRON - PHASE

LES COULEURS DES NOYAUX DANS LES FILS SECTEURS DE CET APPAREIL PEUVENT NE PAS CORRESPONDRE AUX INSCRIPTIONS COLORÉES IDENTIFIANT LES TERMINAUX DANS VOTRE FICHE ; IL FAUT DONC PROCÉDER DE LA FAÇON SUIVANTE :

- LE NOYAU VERT ET JAUNE DOIT ÊTRE BRANCHÉ AU TERMINAL DE LA FICHE OÙ APPARAÎT LA LETTRE E OU LE SYMBOLE DE MISE À LA TERRE, OU AU TERMINAL VERT OU VERT ET JAUNE.
- LE NOYAU BLEU DOIT ÊTRE BRANCHÉ AU TERMINAL MARQUÉ D'UN N OU DE COULEUR NOIRE.
- LE NOYAU MARRON DOIT ÊTRE BRANCHÉ AU TERMINAL MARQUÉ D'UN L OU DE COULEUR ROUGE.

CE MATÉRIEL PEUT NÉCESSITER L'UTILISATION D'UN CORDON D'ALIMENTATION DIFFÉRENT ET/OU D'UNE FICHE DE BRANCHEMENT DIFFÉRENTE SELON LA SOURCE D'ALIMENTATION DISPONIBLE À L'INSTALLATION. SI LA FICHE DE BRANCHEMENT DOIT ÊTRE CHANGÉE, FAIRE APPEL À UN TECHNICIEN QUALIFIÉ QUI DEVRA SE RÉFÉRER AU TABLEAU CI-DESSOUS. LE FIL VERT/JAUNE DOIT ÊTRE BRANCHÉ DIRECTEMENT AU CHÂSSIS DE L'APPAREIL.

CONNECTEURS		COULEUR DU FIL	
		Normal	Alt
L	PHASE	MARRON	NOIR
N	NEUTRE	BLEU	BLANC
E	TERRE	VERT/JAU	VERT

ATTENTION : UN DÉFAUT DE MISE À LA TERRE PEUT PROVOQUER CERTAINS DYSFONCTIONNEMENTS DE L'APPAREIL OU DU SYSTÈME AUQUEL IL EST RELIÉ, POUVANT SE TRADUIRE PAR UNE TENSION COMPOSÉE ENTRE LA MASSE ET LA PRISE DE TERRE. CELA PEUT PROVOQUER DES BLESSURES SÉRIEUSES OU FATALES SI LA MASSE ET LA PRISE DE TERRE SONT TOUCHÉES EN MÊME TEMPS.

WARNING:

- APPARATET MÅ TILKOPLES JORDET STIKKONTAKT.
- APPARATEN SKALL ANSLUTAS TILL JORDAT UTTAG.
- LAITE ON LIITETTÄVÄ SUOJAKOSKETTIMILLA VARUSTETTUUN PISTORASIAAN.

CONSIGNES DE SÉCURITÉ IMPORTANTES

AVERTISSEMENT POUR VOTRE SÉCURITÉ LIRE ATTENTIVEMENT :

LIRE CES CONSIGNES.

CONSERVER CES CONSIGNES.

RESPECTER TOUS LES AVERTISSEMENTS.

SUIVRE TOUTES LES CONSIGNES.

NE PAS UTILISER CET APPAREIL PRÈS DE L'EAU.

NETTOYER UNIQUEMENT AVEC UN CHIFFON SEC.

POUR USAGE INTÉRIEUR UNIQUEMENT.

NE PAS OBSTRUER LES OUÏES D'AÉRATION. EFFECTUER L'INSTALLATION CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

NE PAS INSTALLER À PROXIMITÉ DE SOURCES DE CHALEUR TELLES QUE DES RADIATEURS, BOUCHES D'AÉRATION, PLAQUES CHAUFFANTES OU TOUT AUTRE APPAREIL (Y COMPRIS DES AMPLIFICATEURS) DÉGAGEANT DE LA CHALEUR.

UTILISER UNIQUEMENT LES PIÈCES/ACCESSOIRES MENTIONNÉS PAR LE FABRICANT.

DÉBRANCHER L'APPAREIL AU COURS DES ORAGES OU EN CAS DE NON-UTILISATION PENDANT UNE DURÉE PROLONGÉE.

Ne pas détériorer la sécurité de la fiche polarisée ou de la fiche de terre. Les fiches polarisées sont équipées de deux bornes de largeurs différentes. Les fiches de terre comportent deux lames et une troisième broche de mise à la terre. La broche la plus large ou troisième broche de mise à la terre est prévue pour votre sécurité. Si la fiche fournie ne correspond pas à votre installation électrique, faire appel à un électricien pour remplacer la prise hors normes.

Protéger le cordon d'alimentation contre les risques de piétinement ou de pincement, notamment au niveau des fiches, des prises de courant et du point d'attache avec le matériel.



Utiliser uniquement le chariot, le support, le trépied ou la table spécifié(e) par le fabricant ou vendu(e) avec le matériel. Si vous utilisez un chariot pour déplacer l'appareil, soyez suffisamment prudent pour éviter une éventuelle blessure consécutive au basculement du chariot et de sa charge.

Les réparations doivent être confiées à un technicien S.A.V. qualifié. Une réparation est nécessaire en cas de dommage quelconque et en particulier en cas d'endommagement du cordon d'alimentation ou de la fiche électrique, d'infiltration liquide, d'introduction involontaire d'un objet dans l'appareil, d'exposition de l'appareil à la pluie ou à un milieu humide, de fonctionnement anormal ou de chute de l'appareil.

INTERRUPTEUR MARCHE/ARRÊT : l'interrupteur d'alimentation de cet équipement NE coupe PAS la connexion secteur.

DÉBRANCHEMENT DE L'APPAREIL : la prise de courant doit rester facilement accessible. Pour un montage en rack ou une installation avec une prise inaccessible, un interrupteur omnipolaire à distance d'ouverture de contact d'au moins 3 mm doit être intégré à l'installation électrique du rack ou du local.

Si le matériel est relié à une alimentation de 240 V, utiliser impérativement un cordon d'alimentation adapté certifié CSA/UL pour ce branchement.

COMPATIBILITÉ ÉLECTROMAGNÉTIQUE

Cet appareil est conforme au volet 15 des règles du FCC et aux spécifications techniques évoquées dans la **Déclaration de conformité**.
Son fonctionnement est soumis aux deux conditions suivantes :

- cet appareil ne doit pas causer d'interférences nuisibles et
- cet appareil doit accepter les interférences captées, y compris les interférences susceptibles de nuire à son fonctionnement.

L'utilisation de cet appareil à proximité de champs électromagnétiques puissants n'est pas recommandée.

- utiliser exclusivement des câbles d'interconnexion blindés.



Ne pas jeter ce produit avec les ordures ménagères. Il existe un système de collecte sélective pour les produits électroniques usagés en conformité avec les lois en vigueur en matière de traitement, de récupération et de recyclage.

Dans les 25 États membres de l'UE, en Norvège et en Suisse, les ménages peuvent envoyer leurs produits électroniques usagés sans frais vers des centres de collecte sélective ou chez un distributeur (contre l'achat d'un nouveau produit).

Contacter les autorités locales pour connaître les procédures de traitement des déchets adaptées dans les pays non mentionnés ci-dessus.

Non seulement cette précaution vous permettra d'être sûr que votre produit est correctement traité, récupéré et recyclé, mais elle vous évitera également de nuire involontairement à l'environnement et à la santé humaine.

IMPORTANT SAFETY INSTRUCTIONS / CONSIGNES DE SÉCURITÉ IMPORTANTES

DECLARATION OF CONFORMITY

Manufacturer's Name: BSS Audio
Manufacturer's Address: 10653 S. River Front Parkway, Suite 300
South Jordan, Utah 84095, USA

declares that the product:

Product name: EC_V, EC_4B, EC_4BV and EC_8BV
Note: Product name may be suffixed by the letters EU, M, MX or V.

Product option: None

conforms to the following Product Specifications:

Safety: IEC 60065: 8th Ed. 2014

EMC: EN 55022: 2010
EN 55024: 2010
FCC Part 15

Supplementary Information:

The product herewith complies with the requirements of the:
Low Voltage Directive 2014/35/EU
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
WEEE Directive 2012/19/EU

With regard to Directive 2005/32/EC and EC Regulation 1275/2008 of 17 December 2008, this product is designed, produced, and classified as Professional Audio Equipment and thus is exempt from this Directive.

C. Rex Reed
Director, Engineering
Signal Processing
10653 S. River Front Parkway, Suite 300
South Jordan, Utah 84095, USA
Date: March 23, 2017

European Contact:

Harman International
Salisbury House
London Wall
EC2M 5QQ
+44 207 562 9450

Or

Harman Professional Inc.
10653 S. River Front Parkway, Suite 300
South Jordan, Utah 84095, USA
Ph: (801) 566-8800
Fax: (801) 568-7583

DÉCLARATION DE CONFORMITÉ

Nom du fabricant : BSS Audio
Adresse du fabricant : 10653 S. River Front Parkway, Suite 300
South Jordan, Utah 84095, ÉTATS-UNIS

déclare que le produit :

Nom du produit : EC_V, EC_4B, EC_4BV and EC_8BV
Remarque : Nom du produit peut être suffixé par une combinaison des lettres de l'UE , M, MX ou V.

Option du produit : Aucune

est conforme aux spécifications suivantes :

Sécurité : CEI/IEC 60065 : 8e édition 2014

CEM : EN 55022 : 2010
EN 55024 : 2010
Partie 15 des FCC

Informations complémentaires :

Ce produit est conforme aux exigences suivantes :
Directive sur la basse tension 2014/35/UE
Directive 2014/30/UE
Directive RoHS 2011/65/UE
Directive DEEE 2012/19/UE

Ce produit appartenant à la catégorie Matériel audio professionnel, il n'est pas concerné par la directive 2005/32/CE ou par le règlement européen 1275/2008 du 17 décembre 2008.

C. Rex Reed
Directeur, Ingénierie
Traitement des signaux
10653 S. River Front Parkway, Suite 300
South Jordan, Utah 84095, ÉTATS-UNIS
Date : 23 mars 2017

Contact en Europe :

Harman International
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South Jordan, Utah 84095, ÉTATS-UNIS
Tél. : (801) 566-8800
Fax : (801) 568-7583

Product Registration/Warranty

To register your product, please visit http://bssaudio.com/en-US/support/warranty_registration.

For warranty information, please visit http://bssaudio.com/en-US/support/warranty_policy.

Included Items

EC-V, EC-4B, EC-4BV:

- Contrio Ethernet Wall Controller
- Wall Plate
- (Qty 2) 6/32" Mounting Screws

EC-V-EU, EC-4B-EU, EC-4BV-EU:

- Contrio Ethernet Wall Controller
- (Qty 2) 3.5mm Mounting Screws
- (Qty 2) 3mm Mounting Screws

EC-8BV:

- Contrio Ethernet Wall Controller
- Wall Plate
- (Qty 4) 6/32" Mounting Screws

EC-8BV-EU:

- Contrio Ethernet Wall Controller
- (Qty 2) 3.5mm Mounting Screws
- (Qty 2) 3mm Mounting Screws

Introduction

This guide was written with the aim of guiding you through the installation of a Soundweb Contrio wall controller. We recommend that you read this install guide before attempting to install and operate the controller.

BSS Audio Soundweb Contrio wall controllers are the next-generation controllers for use with BSS Audio Soundweb London and other compatible devices. Attractively priced analog and Ethernet HiQnet™ controller options are available. Each controller model is available in black or white and in US or EU mounting variants.

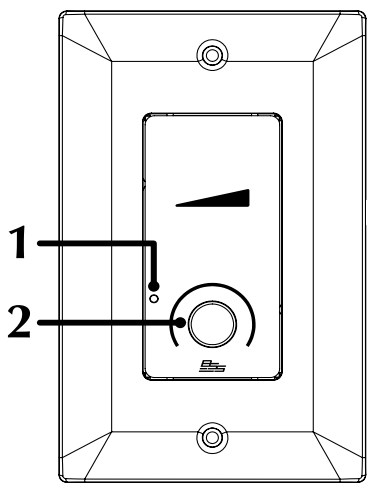
The Ethernet controllers connect to a controlled device via Ethernet using Cat 5 cable and support Power over Ethernet (PoE).

Ethernet Cable Recommendations

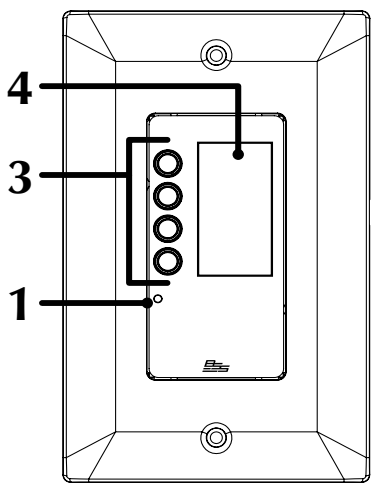
When installing Ethernet Contrio controllers, Cat 5, Cat 5e or Cat 6 cabling should be used. Extra care must be taken when using shielded Ethernet cables to ensure the shield does not short to the controller's printed circuit board. Note that bulky molded Ethernet cables may be obstructed by the printed circuit board. Therefore, it is recommended that Ethernet cables with crimp-on type RJ45 connectors be used.

Front Panel

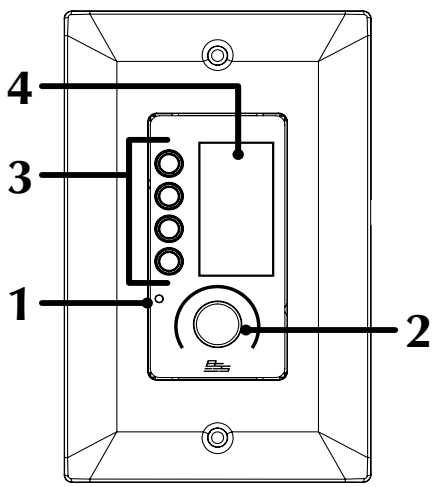
Volume
(EC-V)



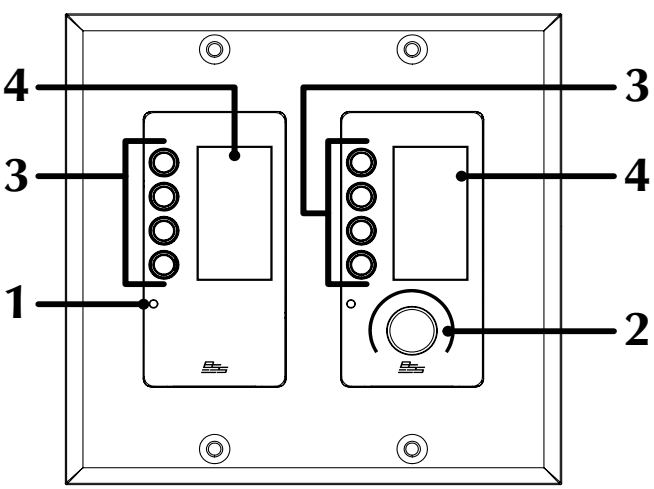
Selector
(EC-4B)



Volume/Selector
(EC-4BV)



Volume/Selector
(EC-8BV)



1. **Locate Button**
   This small pinhole provides access to the Locate button. Pressing the Locate button allows an online controller to be easily identified within Audio Architect™, see **'Locate' on page 15** for further information on functions performed with this button.

2. **Encoder w/ Pushbutton & Light Ring**
   This dual-function encoder provides rotary and pushbutton control. An RGB light ring around the encoder provides volume setting indication, signal level metering, and mute status.

3. **Selector Buttons**
   These RGB, LED-backlit buttons can be programmed to control source selection, preset selection, or any other assignable state variable and support selection between eight different colors.

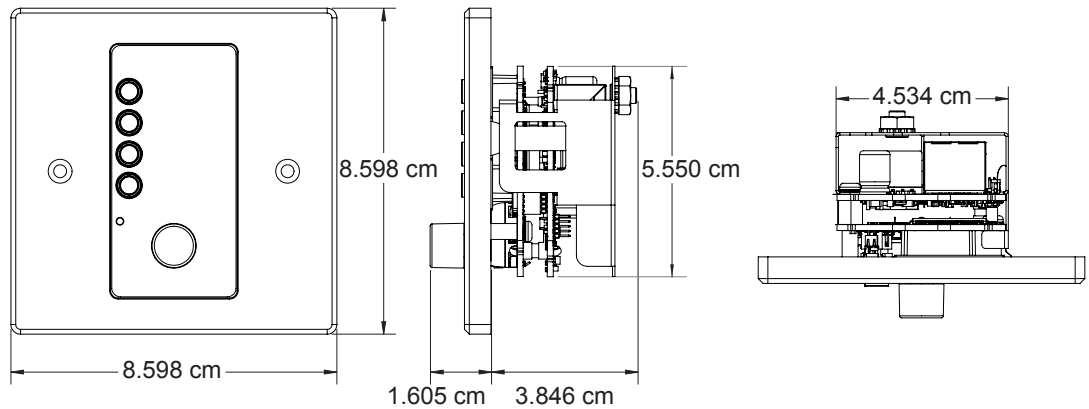
4. **LCD display**
   This RGB display is broken up into four sections to correspond with the selector buttons. The display can be programmed to display text or graphic icons and supports selection between eight different colors.

Mechanical Installation

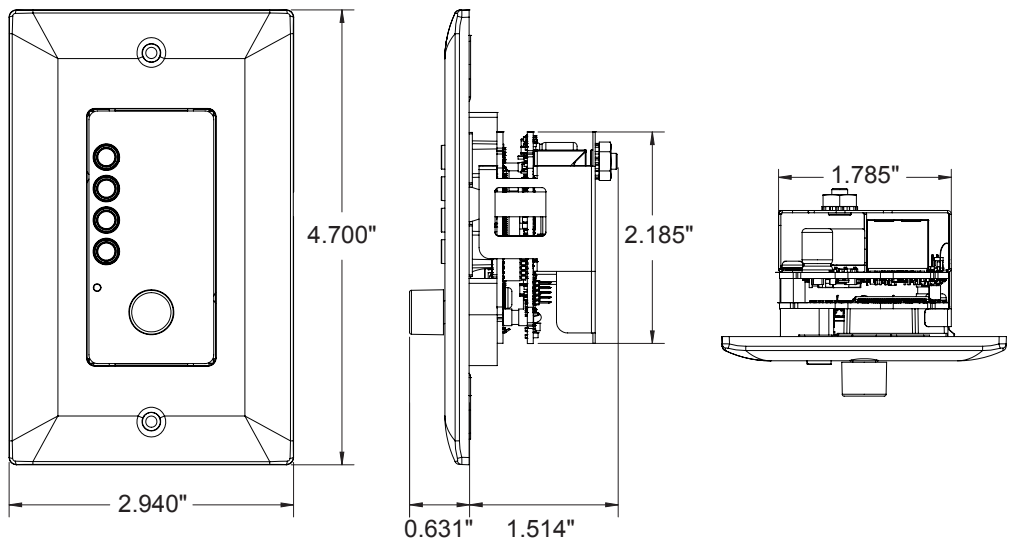
The US versions of the Contrio wall controllers were designed to fit into standard 1-gang or 2-gang US wall boxes. The EU versions were designed to fit into standard EU 1-gang or 2-gang square and round boxes. Screws are provided with each controller to fix them in place. Both 3mm and 3.5mm screws are provided with EU versions for mounting as required.

Dimensions of each Ethernet wall controller model are shown below.

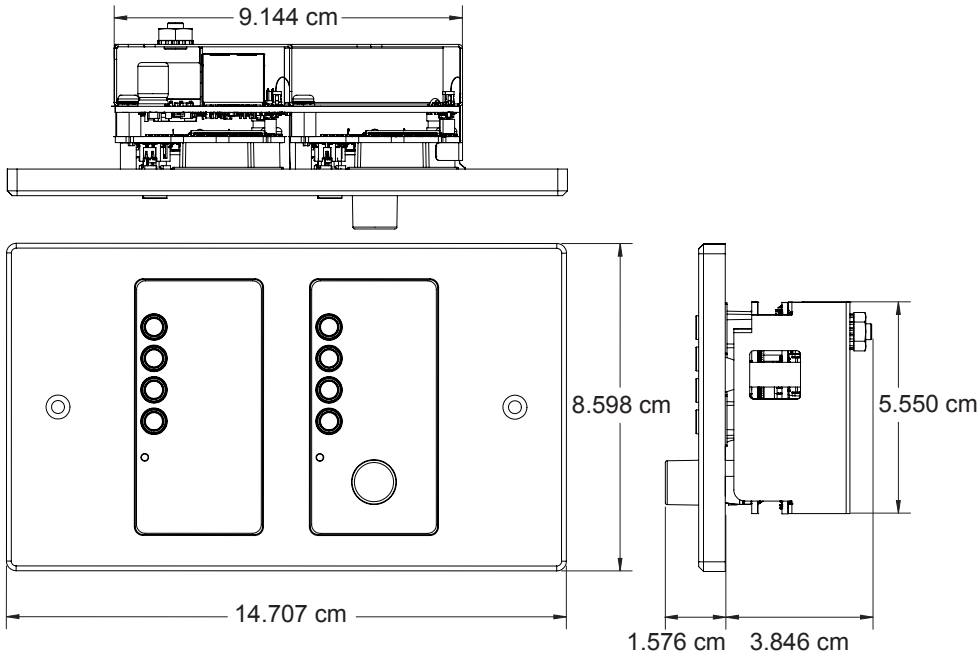
EC-V-EU, EC-4B-EU, EC-4BV-EU (EU Versions)



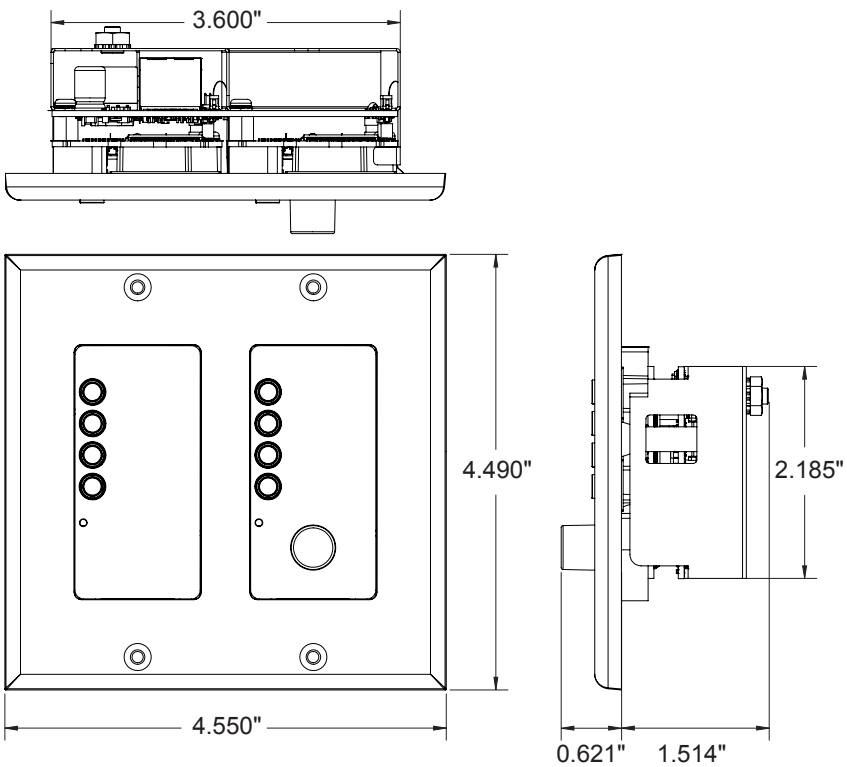
EC-V, EC-4B, EC-4BV (US Versions)



EC-8BV-EU (EU Version)



EC-8BV (US Version)



Connections

Both power and network connectivity are supplied to the Ethernet Contrio controllers via their RJ-45 Ethernet ports. Power must be supplied to the controllers via an IEEE802.3af compliant Power over Ethernet (PoE) device. Note that PoE+ (IEEE802.3at compliant) devices can also be used with the Contrio controllers as they are backwards compatible with the IEEE802.3af standard. There are two types of PoE devices which can be used to supply power to the Contrio controllers, they are:

- An in-line IEEE802.3af compliant power injector (referred to as a 'midspan').
- An IEEE802.3af compliant PoE enabled network switch (referred to as an 'endspan' or 'endpoint').

Typical midspan Ethernet powering devices include:

3Com® Single-Port 802.3at Gigabit PoE Midspan Solution - P/N: 3CNJPSE

3Com® Power over Ethernet Multiport Midspan Solution - P/N: 3CNJPSE24

Typical endspans (Ethernet switches) with PoE enabled ports include:

Netgear® ProSafe™ 24-Port Gigabit Smart Switch - P/N: GS728TP

Dell® PowerConnect™ 3524P 24-Port PoE Switch - P/N: 3524P

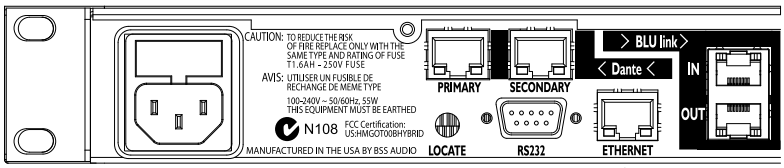
An Ethernet Contrio wall controller connects to a Soundweb London network via its Ethernet port, either through a midspan then into the rear of a rackmount device (e.g., BLU-806) or through a PoE compliant Ethernet switch (endspan) using either straight-through or crossover Cat 5 cables (see connection diagarms on next page).

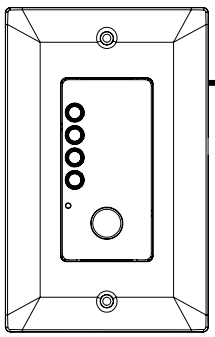
If a DHCP enabled switch has been implemented on the network, the Contrio contollers will be assigned IP addresses from the DHCP server. If no DHCP server is present, an Auto-IP compliant IP address will be assigned. Static IP addressing is also supported via Audio Architect. See the important note about DHCP in the Audio Architect help file for further information.

Connection Diagrams

Using A Midspan

Soundweb London Device (e.g., BLU-806)





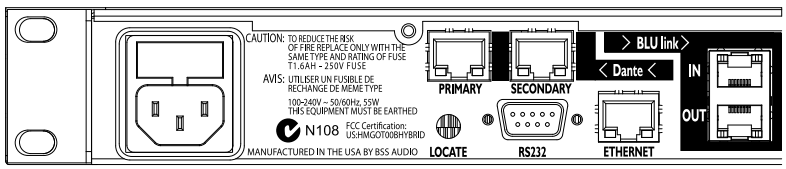
PoE Midspan

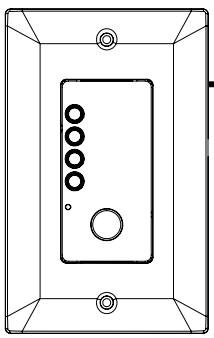
Power Adapter

Ethernet Contrio Controller

Using An Endspan

Soundweb London Device (e.g., BLU-806)





PoE Endspan (Switch)

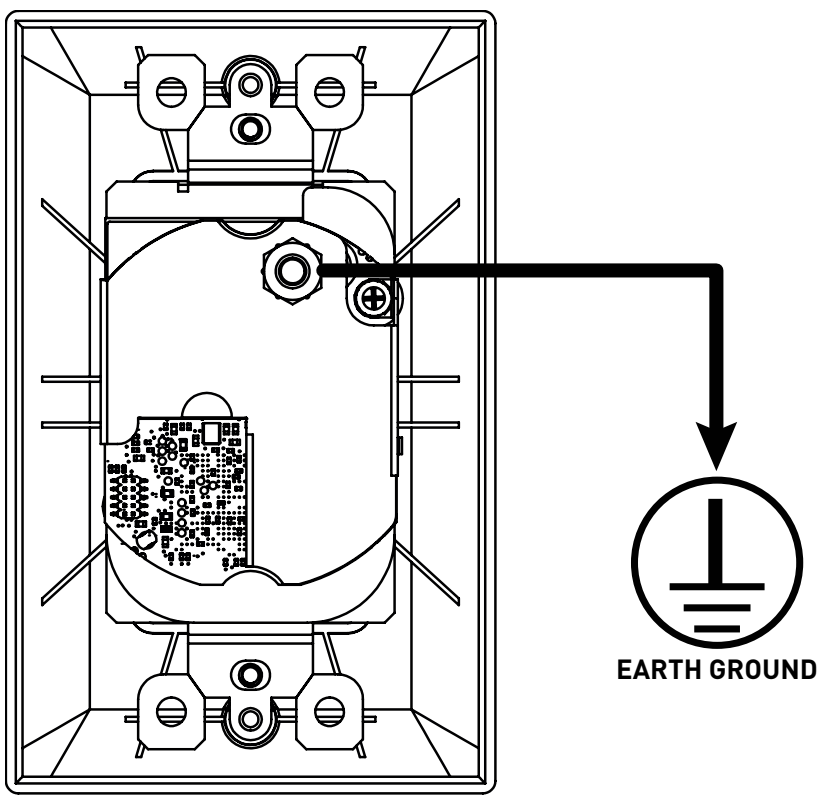


Power Cord

Ethernet Contrio Controller

Ground Lug Connection (Optional)

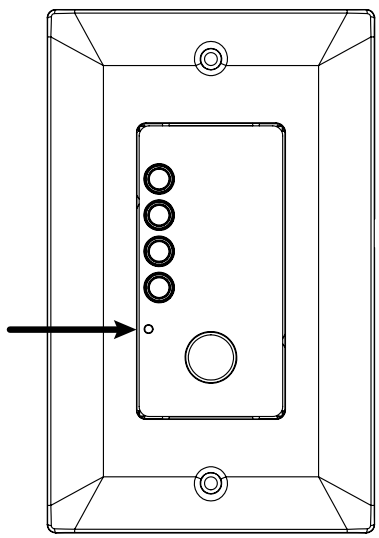
A ground lug is provided on all Contrio controllers for connecting to an earth ground. This can provide further protection against ESD (Electrostatic Discharge). In most cases this connection should not be necessary. However, if you experience irregular behavior when testing a Contrio controller, connecting this lug to an earth ground may resolve the issue.



Locate

Each Ethernet Contrio controller has a pinhole Locate pushbutton on the faceplate that will trigger the locate function.

Pressing the Locate button using a small, long object, such as a paperclip, will cause a controller's front panel LEDs to flash. If the controller is programmed and online with Audio Architect, the corresponding controller icon will also flash in the Audio Architect design file to identify it.



NOTE: Wall controllers can also be located using Netsetter from within Audio Architect. When the locate function is activated in Audio Architect, the controller's LEDs will flash to indicate that the wall controller is being located from the software.

Boot Menu Mode

On controllers with a display, controller information such as IP address and subnet mask can be displayed by entering Boot Menu Mode. This information can be used for installation and troubleshooting purposes and, once installation is complete, can be locked out from within Audio Architect to keep network address information private.

<u>To access and use the Boot Menu:</u>

1. Power off the controller.
2. Apply power to the controller while pressing and holding the **Locate** button. Keep the **Locate** button held for about 30 seconds.
3. Press the corresponding button to select the desired menu option.

NOTE: The Ethernet Contrio controllers (with the exception of the EC-V model) also have available Demo Modes which can be used to simulate each controller's control capability. In the event you find the controller behaving strangely after accidentally entering this mode, simply power cycle the device to exit Demo Mode. This mode is generally reserved for sales associates and serves no practical purpose during installation.

Factory Reset & Restart

Factory Reset

The Factory Reset will revert an Ethernet Contrio controller back to its unconfigured, factory-default state by deleting its configuration and clearing any set IP address information.

To Factory Reset a controller:

1. Power off the controller.
2. Apply power to the controller while pressing and holding the **Locate** button. Keep the **Locate** button held for about 30 seconds.
3. If using an EC-V, the controller will now perform the Factory Reset and you don't need to perform any of the following steps. If using the EC-4B, EC-4BV, or EC-8BV, the Boot Menu options should now be displayed and you can continue to step 4.
4. Select the 'Factory Reset' option by pressing the corresponding button. Note that selecting the 'Restart' option will restart the controller without clearing the configuration and IP address.
5. The Factory Reset will now be performed.

Restart

Perform the Restart procedure if an Ethernet Contrio controller becomes unresponsive. This procedure will restart a controller without having to disconnect power to the device. Confguration and IP address information will not be lost when performing the Restart procedure.

To Restart a controller:

1. With the controller powered on, press and hold any button or encoder for approximately 20 seconds.
2. The controller will now power cycle and reboot with the current configuration and IP settings.

> **NOTE:** There is no Restart procedure for the EC-V controller. To Restart an EC-V controller, power must be disconnected from the controller then reconnected, or the PoE device supplying power must be power cycled.

Other Functions

The following functions are configured using the Contrio Default Control Panel from within Audio Architect.

Sleep Function

When enabled, the Sleep function allows the Contrio controller's LEDs and displays to 'sleep' (turn off) after a specified period of operator inactivity, which can be entered in the 'Sleep Delay' field. Any button press or rotary movement by the operator will 'wake up' the controller and restore the display and LEDs to show current system status. Note that there is a 2 second delay after 'wake up' before the controls will again become active.

If the 'Lockout On Sleep' function is also enabled, then, when the controller 'wakes up', it will automatically enter its 'locked' state. Button and rotary actions on the unit will have no effect until the required security PIN number is entered, see **'Lockout Active Function (Excludes EC-V Model)' on page 18** for further information.

To wake a controller:

1. While the controller is in the 'sleep' state, either press a button or turn the rotary encoder.

NOTE: Although the EC-V controller cannot be unlocked directly from the controller, it can be unlocked by other means – such as by using Soundweb London logic or a Control Input contact closure.

Sleep Delay Time

When the Sleep function is enabled, this field allows you to enter the amount of time it will take, after no operator activity, before a Contrio controller will go to 'sleep' by extinguishing its LEDs.

Lockout On Sleep Function (Excludes EC-V Model)

When 'waking' a 'sleeping' controller, this function locks out the controller until the correct PIN has been entered, see **'Lockout Active Function (Excludes EC-V Model)' on page 18** for further information.

Lockout Active Function (Excludes EC-V Model)

The 'Lockout Active' button on the Contrio Default Control Panel provides a mechanism to disable a Contrio controller until a security PIN is entered. This might be appropriate when the controller is located in a public area and restricted access to the controller functions is required. When the unit is 'locked', any button press or rotary movement will be ignored.

The desired 4-digit security PIN for a Contrio controller may be configured in the controller's 'Properties' section from within Audio Architect and is composed of the digits 1, 2, 3, and 4. This security PIN only becomes active on the controller if the Lockout Active button is enabled and after going online and loading the design file to the controller.

To unlock a locked controller:

1. While the controller is in the 'locked' state, either press any button or turn the rotary encoder. All LEDs on the controller will flash RED, indicating it is locked and the message 'Controller Locked – Push and hold any button to enter PIN' will be displayed.
2. The numbers 1, 2, 3, and 4 will be displayed next to the buttons. Simply press the corresponding buttons to enter the PIN sequence.
3. When a correct PIN sequence is entered, all LEDs on the controller will flash GREEN twice, confirming the unit is now 'unlocked' and normal operation of the buttons and rotary control will be possible.

NOTE: If the PIN sequence entered is incorrect, the controller will flash RED twice, indicating it is still in the 'locked' state and the above procedure must be performed again.

You can use Audio Architect to unlock a currently locked Contrio controller (e.g., If you have forgotten the Lockout PIN).

To unlock a locked controller via Audio Architect:

1. Load the Audio Architect (AA) design file which matches the controller.
2. From the main AA view, left-click on the corresponding controller.
3. In the 'Properties' window select the Configuration Tab then delete all characters from the 'Lockout PIN' field.
4. In the main view, right-click on the controller and select the 'Show Default Control Panel' option.
5. Disable both the 'Lockout on Sleep' and 'Lockout Active' buttons.

6. Go online and load the design to the Contrio controller.
7. The controller will now be unlocked.

LED Maximum Brightness

There are 4 selectable brightness levels for a Contrio controller, they are: LED Maximum Brightness 1 (dim) to 4 (bright). These values can be changed in the controller's Default Control Panel, which is accessed by right-clicking on the controller from the main view in Audio Architect and selecting the 'Default Control Panel' option. Here are a few things to note about LED functionality and the Maximum Brightness parameter:

- Disabled controls, such as unavailable channels on a source selector, will be unlit.
- Inactive but selectable controls will be unlit (e.g., where a controlled parameter has gone offline).
- Active or selected controls will be shown using the currently selected 'LED Maximum Brightness' setting.
- In most cases, it is recommended that a high Maximum Brightness setting be used (e.g., 4), as this will allow a higher contrast between active and inactive LED states.

Technical Specifications

Maximum network cable length:	328 feet (100 meters)
Power consumption:	300mA max at 48VDC
Required power:	44–57VDC, 13W (certified POE power adaptor)
Recommended Ethernet cable wiring:	VW-1 Rated, 48VDC, 13W
Operating temperature range:	0º to 45º C (32º to 113º F)



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Support: bssaudio.com/en-US/support

Contrio Install Guide

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