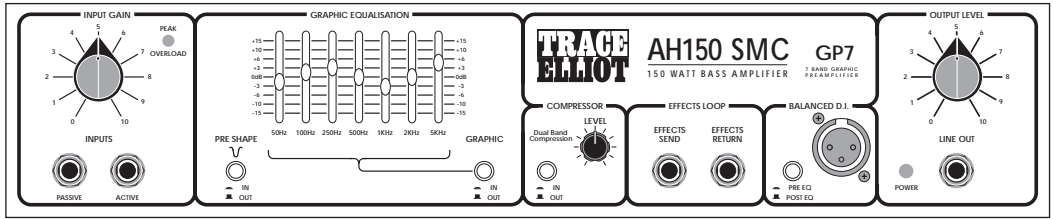


# SMC RANGE

OPERATING  
INSTRUCTIONS





## FAST TRACK GUIDE

For those familiar with TRACE ELLIOT graphic preamplifiers here is a quick run through the facilities to get you plugged in and playing as soon as possible. With the correct mains power connected to the mains inlet of your amplifier, and your choice of speaker or speakers connected to the speaker output sockets, turn on the power to the unit with the rear panel power switch.

If all is well the POWER LED on the front panel should light to indicate that the unit is ready for use.

Plug your bass into the appropriate INPUT socket, and with the OUTPUT LEVEL control set on ZERO adjust the INPUT GAIN control until the OVERLOAD LED flashes on with playing peaks. It is important to set this to the correct level so that when switching in the Dual Band COMPRESSOR you do not get a large change in volume.

Turn up the OUTPUT LEVEL control to your desired playing level and adjust your sound using the MID PRE SHAPE, the GRAPHIC EQUALISATION, and the COMPRESSOR.

*N.B. The sound is FLAT with the MID PRE SHAPE, GRAPHIC and the COMPRESSOR switches 'OUT'.*

*It may be necessary to re-adjust the INPUT GAIN control after altering the GRAPHIC or MID PRE SHAPE.*

The Dual Band COMPRESSOR is a new addition to the GP7 preamplifier and as such deserves a short mention in this section of the instructions. This is based on the principle used in the GP12SMX range of products where the bass signal is split into its High frequency and Low frequency components. Each of these are then passed through separate compressors with appropriate Attack and Decay characteristics. The two signals are then re-combined back into a single full range signal to be passed to the rest of the preamplifier.

The compressor is placed after the SHAPE and GRAPHIC sections to allow EQ changes to modify the ratios of the High and Low compression.

## FULL OPERATING INSTRUCTIONS

### *Input Sockets*

There are two INPUT sockets, one for PASSIVE instruments i.e. those that have no internal preamp or battery and one for ACTIVE instruments.

The PASSIVE socket has a very high input impedance to perfectly match the output signal from a passive instrument. This allows the full tonal range of the instrument to be reproduced without the loss of top end that can be caused by an impedance mismatch.

This input is far more sensitive than the ACTIVE input. This is necessary because PASSIVE basses generally have a much smaller output signal.

The ACTIVE input is suitable for the lower impedance outputs from instruments that have their own internally powered pre amp. This input can also cope with the much higher level of signal that some of these instruments can produce. However should you be using an active instrument that does not have a very large signal output, then it is perfectly acceptable to plug this into the PASSIVE input.

### *Input Gain*

To get the best from your amplifier it is important to understand fully the correct use of the INPUT GAIN and the OUTPUT LEVEL controls.

The optimum setting is achieved when the INPUT GAIN control is set as high as possible without lighting the red OVERLOAD LED too often. The OUTPUT LEVEL control should always be set as low as possible to achieve the required playing volume, i.e. the INPUT GAIN is adjusted for the instrument and left set at the optimum level whilst the OUTPUT LEVEL is used to make any changes to the overall amplifier volume.

To set these two controls correctly use the following procedure:-

1. First turn the OUTPUT LEVEL control to zero.
2. Plug your bass into the appropriate ACTIVE or PASSIVE socket.
3. Turn all volume controls on your bass up full.
4. Gradually turn up the INPUT GAIN control while playing your bass as hard as you are likely to during your performance.
5. Adjust the INPUT GAIN control so that the red OVERLOAD LED lights up on playing peaks only.
6. Now turn up the OUTPUT LEVEL control to give the desired volume.

Please note that if the GRAPHIC EQUALISATION is altered it may be necessary to re-adjust the INPUT GAIN control.

*N.B. Playing PASSIVE basses with the instruments own volume control turned back will reduce the upper frequency response of the instrument, so try to keep this control well advanced, using the amplifiers OUTPUT LEVEL control to provide for larger changes in volume.*

### **Mid Pre Shape**

The MID PRE SHAPE facility is like a preset graphic equaliser built into the unit that you can switch in or out to modify the sound of the bass.

This will add extra punch to your sound and may be used with or without the graphic equalisation section being switched in.

The MID PRE SHAPE may be switched IN and OUT with the MID PRE SHAPE push button switch on the front panel.

### **Graphic Equalisation**

A GRAPHIC EQUALISER is a very flexible way of altering the sound of a bass guitar, and if properly used will provide an extremely powerful method of tone shaping for your instrument.

The GP7 graphic equaliser has been specially designed for the tone shaping of a bass, and is more powerful and very different to the kind of graphic equaliser found for instance on a Hi-Fi. Because of this there are a few rules to observe in its use.

1. Do not fully boost just one frequency band as this will tend to emphasize a small range of notes on the bass producing a PEAKY and not very usable sound.
2. Do not boost or cut all frequency bands as this will just produce an overall change in volume with very little tonal alteration.
3. Do not use excessive bottom (50Hz) boost unless your speakers can handle it (very few speaker systems are capable of handling frequencies as low as this with any degree of efficiency).
4. Do not use excessive top boost; this will tend to add a lot of hiss to the sound (especially with ACTIVE instruments).

### **Useful Observations**

The fundamental frequency range of a 4 string bass guitar is from 41.2Hz (bottom E string) to around 392Hz (two octaves up on the G string) not a very wide range.

Obviously a lot of harmonics are produced when playing and these can extend up to 5Hz or more.

Other frequencies are produced by the attack portion of the note when the string is first struck. This attack can be emphasized by boosting the top end.

However because of the fairly small range of frequencies produced by a bass, by top end we mean between 2 and 5 kHz. You will find by boosting at 5kHz the ATTACK will be emphasized whereas by boosting at 1kHz and 2kHz you will bring out the harmonics in the note.

Use the 50Hz slider sparingly unless you have a stack of speakers available, and the power amps to drive them. Rolling off the bottom end by using this slider to give a degree of cut will allow you to play at a far greater volume level without the speakers complaining. You will find that boosting at 100Hz will give a greater perceived increase in bottom end than boosting at 50Hz.

### ***Using The Graphic***

Try to keep the slider settings balanced around the 0dB (centre) line on the graphic. Set the sliders in a smooth, gentle curve, as setting adjacent sliders at opposite extremes will give sharp peaks and troughs in the sound.

Switch the graphic IN and experiment with the available sounds but remember TOP end means 1kHz to 5kHz, BOTTOM end means 50Hz and 100Hz and MID range means 250Hz and 500Hz.

*N.B. Don't forget to re-adjust the INPUT GAIN setting once you have altered the graphic. This is necessary because altering the graphic will change the overall gain. The level indicating circuit monitors the signal to ensure that clipping or distortion is not occurring at any stage. Consequently changing the gain will change the reading on the LED and you will have to re-adjust the INPUT GAIN control to compensate.*

The GRAPHIC may be switched IN and OUT with the GRAPHIC push button switch on the front panel.

### ***Compression***

TRACE ELLIOT have always avoided including compression in any of their previous amplifiers as the integrity of the signal has always been paramount in all designs. The reason for this is simply that any kind of FULL RANGE compression used in bass is always an unacceptable compromise. It cannot act fast enough to catch attack transients, and if it does then it distorts the low frequency signals. If you have used any full range compression then you will know what we mean.

That was before the TRACE ELLIOT SMX series of amplifiers where we developed a compressor in which the bass signal is split into its HIGH and LOW frequency components, and each passes through its own compressor, one optimized for LOW frequencies and one optimized for HIGH frequencies.

The signals from these two compressors are then recombined into a single bass signal providing FULL RANGE compression without the drawbacks of a single compressor.

This principle has been used in the SMC series of amplifiers i.e. two compressors are used, however the controls for these two compressors have now been simplified to one rotary control that adjusts the compression level for both the HIGH and LOW frequency compressors simultaneously.

Separate attack and release characteristics are used for the HIGH and LOW compression, fast for the HIGH compression and medium to slow for the LOW. Fast is needed on the HIGH compression in order to catch the initial high frequency transients on striking the string, if however this speed of attack is used for the LOW compression it produces distortion on low bass notes.

If the slower attack is used on the high frequencies then any initial transient will get through unchecked and subsequent transients will disappear as the low bass compression would not have had time to recover, i.e. the release is too slow for the high frequencies.

### ***Use Of Compression***

Adding a small amount of compression gives a fat bottom end to the sound and allows a greater volume of amplification to be used without the playing peaks distorting the sound.

You will also find that this will add definition to your playing bringing out notes within a run more clearly as it evens out the dynamics of your playing.

A large amount of compression can be used as an effect but it will tend to reduce the dynamics in your playing to such an extent that the volume of the note will almost be the same no matter how hard or soft you hit the string.

Compression also adds sustain to notes making them longer before they die away. The Compressor may be switched IN or OUT with the compression push button switch on the front panel.

### ***Effects Send And Return***

The SMC preamp is provided with a serial effects loop and the sockets for this are located on the front panel.

The EFFECTS SEND socket is for linking the preamp sound into your effects unit and the EFFECTS RETURN socket for returning the signal back to the preamp.

As this is a SERIAL effects loop then you will need to adjust the balance of direct to effects sound within your effects unit (i.e. dry/wet mix).

The signal path through the preamp is only broken when a jack plug is inserted into the EFFECTS RETURN socket, so the EFFECTS SEND signal may be used as a pre master volume LINE OUT socket or connected to a tuner. This will allow silent tuning by turning the OUTPUT LEVEL to zero, tuning up and returning the OUTPUT LEVEL control back to its original setting.

The EFFECTS SEND socket is located after all EQ and after the compressors

### ***Balanced DI***

A balanced DI output is provided on the SMC preamp for direct connection to a balanced 'Mic' input on a mixing desk. This may be used for either Direct Injection of the bass into a PA system or for recording purposes.

The balanced DI is provided on a standard Male XLR socket located on the front panel. The signal from the preamp fed to this output socket is selectable between PRE EQ and POST EQ.

PRE EQ takes its signal from before the graphic equalizer but after the mid pre shape. POST EQ takes its signal from after all equalisation, after the compressors, and after the effects loop, but before the output level control.

The level of the DI output is fixed at a suitable level to suit the low impedance 'Mic' input on a mixing desk. This level is dependant on the setting of the INPUT GAIN control and it is important to have this set correctly (see INPUT GAIN section).

### ***Power LED***

This LED indicates when the unit is connected to the mains supply and switched on.

### ***Line Output***

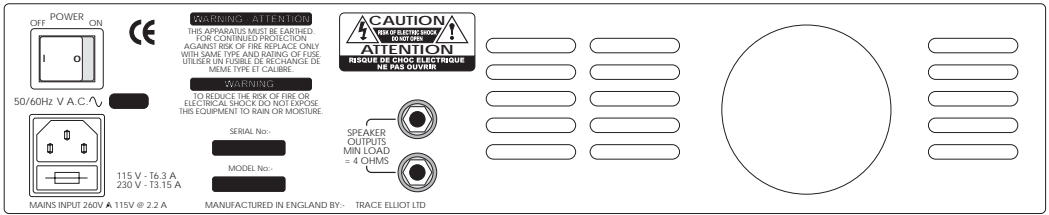
The LINE OUTPUT jack socket can be used for connection to further power amplifiers to allow the building of a higher powered bass system. The signal on this socket is taken from after the OUTPUT LEVEL control so that a single control will increase or decrease the volume of the entire system simultaneously.

The LINE OUT socket is configured such that it may also be used as a LINE INPUT. This may be used to interconnect or LINK two preamps together so that both preamps will drive both sets of power amplifiers and speakers with the volume of each preamp still being set by its own OUTPUT LEVEL control. i.e. two combos could be linked in this way with each preamp driving both sets of speakers.

### ***Output Level***

The OUTPUT LEVEL control is used to set the overall volume of the amplifier. As stated earlier set the INPUT GAIN control as high as possible so that the overload LED lights on playing peaks and set the OUTPUT LEVEL control as low as possible to achieve the required playing level.

In this way you will have the best possible sound with the minimum of background noise, the compression will operate at its optimum and you will also have the correct output level from the DI socket.



## BACK PANEL FACILITIES

### Mains Inlet Socket

For connection to your countries mains supply. Ensure that the amplifier has the correct voltage marked on the back for your country prior to connecting the mains power cable to the supply.

For your own safety be sure that the power supply socket that you are plugging into is adequately earthed.

The MAINS INLET also contains the fuse carrier beneath it that holds the 20mm supply fuse for the unit. In the event of failure of this fuse always replace it with the same rating and type as marked on the rear panel (see Warnings and Safety Instructions section).

### Power Switch

This is used for turning the power to the unit ON or OFF. The POWER LED on the front panel will light to indicate when the power to the unit is turned ON.

Always make a habit of reducing the OUTPUT LEVEL control to zero before turning the unit on or off. This is just good sense really as any bass connected to the input of the amplifier could cause hum pick up or start feeding back if left unattended when the unit is switched on.

### Ventilation Slots

Ventilation slots are provided on the back of the unit to allow the free flow of air over the heatsink to cool the output stage. **Do not block or impede the airflow through these slots or the amplifier will fail in use when the internal thermal trip cuts off your signal to the speakers because of over temperature.**

## SMC SERIES PREAMP SPECIFICATIONS

<b>Inputs</b>	Passive Bass	Input Impedance 2 M $\Omega$ Signal Range 50mV to 10V peak to peak
	Active Bass	Input Impedance 100k $\Omega$ Signal Range 100mV to 20V peak to peak
	Effects Return	Impedance 22k $\Omega$ Signal Level -10dBv
<b>Outputs</b>	Effects Send	Impedance 22k $\Omega$ Nominal Level -10dBv
	Line Out	Impedance 1k $\Omega$ Nominal Level 0dBv
	DI Output	Impedance 600 $\Omega$ Balanced Nominal Level 600mV peak to peak
<b>EQ</b>	Graphic	+/- 15dB at 7 centre frequencies
	Mid Pre Shape	+6dB @ 50Hz & 2kHz, -6dB @ 400Hz
<b>Compression</b>		Dual Band Compression, Crossover point 350Hz Maximum compression ratio 20:1
<b>Frequency Response</b>		-3dB @ 20Hz & 22kHz
<b>Signal/Noise Ratio</b>		Better than 80dB (EQ flat, mid & comp out)
<b>Distortion</b>		Less than 0.05% THD

## SAFETY INSTRUCTIONS



### Warning

For continued protection against the risk of fire, replace fuses only with fuses of the same type and rating.

To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture. In the event of a suspected malfunction, always refer this equipment to a qualified service engineer.

This apparatus must be earthed. The wires in this mains are coloured in accordance with the following code:-

**Green & Yellow - Earth**

**Blue - Neutral**

**Brown - Live**

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:-

The wire which is coloured Green & Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol or coloured green or Green and Yellow. The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Red.

If a 13 amp (BS1363) plug is used a 13 amp fuse must be fitted, or if any other type of plug is used a 15 amp fuse must be fitted either in the plug or adaptor or at the distribution board.

### EMC Warning

It is inherent in the design of a loudspeaker and in the design of guitar pickups that they should emit or be affected by electro magnetic fields. Trace Elliot loudspeaker enclosures should not be used less than 2 metres away from equipment which is likely to be affected by electro magnetic interference.

Likewise, guitars fitted with electro magnetic pickups should not be used less than 2 metres away from any source of electro magnetic emissions such as loudspeakers.

Emissions from loudspeakers are dependent on the frequency characteristic of the drive unit. Levels were measured direct from the drivers of 30 dBuV.

These levels are reduced to a safe level at a distance of 1.27 metres from the drivers.

## SICHERHEITS-ANWEISUNGEN



### Warnung

Zum fortwährenden Schutz gegen Feuerisiken die Sicherungen nur durch Sicherungen desselben Typs und derselben Nennleistung austauschen.

Um das Risiko von Feuer oder Elektroschock zu reduzieren, dieses Gerät keinem Regen und keiner Feuchtigkeit aussetzen.

Im Fall eines vermuteten Defekts muß dieses Gerät einem qualifizierten Service-Techniker übergeben werden.

Dieses Gerät muß geerdet werden. Die Drähte im Stromkabel wurden dem folgende Code nach koloriert:

**Grün & Gelb - Erde**

**Blau - Neutral**

**Braun - Stromführend**

Da die Farben der Drähte dieses Geräts nicht notwendigerweise den Farbmarkierungen der Pole in Ihrem Stecker entsprechen, sollten Sie wie folgt vorgehen:

Der grün/gelbe Draht muß an den Pol im Stecker angeschlossen werden, der mit dem Buchstaben E oder dem Erde-Symbol oder der Farbe Grün oder Grün/Gelb markiert ist.

Der blaue Draht muß an den Pol angeschlossen werden, der mit dem Buchstaben N oder schwarz markiert ist.

Der braune Draht muß an den Pol angeschlossen werden, der mit dem Buchstaben L oder rot markiert ist.

Falls ein 13 amp (BS1363) Stecker benutzt wird, muß eine 13 amp Sicherung eingesetzt werden; und falls ein Stecker anderer Art benutzt wird, muß eine 15 amp Sicherung entweder im Stecker selbst oder an der Verteilertafel eingesetzt werden.

### EMC Warnung

Es liegt im Design eines Lautsprechers und im Design von Gitarrenaufnehmern, daß sie elektromagnetische Felder abgeben oder von solchen beeinflusst werden. Trace Elliot Lautsprechergehäuse sollten daher nicht in unter 2 Metern Entfernung von Geräten benutzt werden, die durch elektromagnetische Störungen beeinflusst werden könnten.

Auch sollten Gitarren, die mit elektromagnetischen Aufnehmern ausgestattet sind, nicht in unter 2 Metern Entfernung von Quellen elektromagnetischer Emissionen, wie z.B. Lautsprechern, benutzt werden.

Die Lautsprecheremissionen sind von der Frequenzcharakteristik der Treiber-Einheit abhängig. Die Werte wurden direkt von den Treibern von 30 dBuV gemessen.

Diese Werte reduzieren sich in einer Entfernung von 1,27 Metern von den Treibern auf ein sicheres Maß.

## CONSIGNES DE SECURITE



### Attention

Pour une protection continue contre les incendies, ne remplacez les fusibles que par des fusibles du même type et du même courant nominal.

Pour réduire le risque d'incendie ou de décharge électrique, n'exposez jamais cet équipement à la pluie ou à l'humidité.

Si vous soupçonnez une défaillance, faites toujours appel à un ingénieur qualifié.

Cet appareil doit être mis à la masse. Les fils de cette conduite diaménée de secteur sont colorés selon le code suivant:

**Vert & Jaune - Masse**

**Bleu - Neutre**

**Marron - Tension**

Etant donné que les couleurs des fils de la conduite diaménée de secteur de cet appareil risquent parfois de ne pas correspondre aux couleurs identifiant les bornes de votre fiche, procédez comme suit:

Le fil Vert & Jaune doit être relié à la borne de la fiche marquée de la lettre E, du symbole de terre ou colorée en Vert et Jaune.

Le fil Bleu doit être relié à la borne marquée de la lettre N ou colorée en Noir.

Le fil Marron doit être relié à la borne marquée de la lettre L ou colorée en Rouge.

Si vous utilisez une fiche 13 amp (BS1363) vous devez utiliser un fusible 13 amp. Si vous utilisez un autre type de prise, installez un fusible 15 amp dans la prise, dans l'adaptateur ou dans le tableau de distribution.

### Compatibilité électromagnétique - avertissement

La conception d'un haut-parleur et des pickups de guitare est telle qu'ils sont affectés par des champs électromagnétiques ou en émettent. Les enceintes de haut-parleur Trace Elliot ne devraient pas être utilisées à moins de 2 mètres de l'équipement susceptible d'être affecté par les parasites électromagnétiques.

Les émissions en provenance de haut-parleurs dépendent de la caractéristique fréquentielle de l'émetteur piloté.

De même, les guitares équipées de pickups électromagnétiques ne devraient pas être utilisées à moins de 2 mètres de toute source d'émissions électromagnétiques telles que des haut-parleurs.

Les niveaux ont été mesurés directement à partir des drivers de 30 dBuV.

Ces niveaux sont réduites à un niveau sûr à une distance de 1,27 mètre des drivers.

## INSTRUCCIONES DE SEGURIDAD



### Advertencia

Para una protección continua contra el riesgo de incendio, reemplace siempre los fusibles con otros del mismo tipo y valor.

Para reducir el riesgo de incendio o descarga eléctrica, no exponga este equipo a la lluvia o a la humedad.

En caso de que sospeche que exista un desperfecto, refiera siempre este equipo a un ingeniero de servicio calificado.

Este aparato debe tener conexión a tierra. Los cables de esta toma se colorean según el código siguiente:-

**Verde & Amarillo - Tierra**

**Azul - Neutro**

**Marrón - Vivo**

Como los colores de los cables de la toma principal de este aparato pueden no corresponder con los colores marcados que identifican los terminales en su enchufe, proceda como se indica a continuación:-

El cable verde y amarillo debe conectarse al terminal del enchufe marcado con la letra E, por el símbolo de tierra, o pintado de verde o verde y amarillo.

El cable azul debe conectarse al terminal marcado con la letra N o pintado de negro.

El cable pintado de marrón debe conectarse al terminal marcado con la letra L o pintado de Rojo. Si se usa un enchufe de 13 amperios (BS 1363), se deberá poner un fusible de 13 amperios, o un fusible de 15 amperios si se usa cualquier otro tipo de enchufe, ya sea en el enchufe, en el adaptador o en la placa de distribución.

### Advertencia EMC (de compatibilidad electromagnética)

Es inherente en el diseño de un altavoz y en el de las pastillas de guitarra que emitan o se vean afectados por campos electro magnéticos. Los recintos de los altavoces Trace Elliot no deberán usarse a menos de 2 metros de distancia de cualquier equipo que pueda ser afectado por interferencias electromagnéticas.

Asimismo, las guitarras que tienen pastillas electromagnéticas no deberán usarse a menos de 2 metros de distancia de ninguna fuente de emisiones electromagnéticas tales como los altavoces. Las emisiones de los altavoces dependen de la característica de frecuencia del equipo de accionamiento.

Los niveles se midieron directamente desde unidades de accionamiento de 30 dBuV.

Estos niveles se reducen a un nivel seguro a una distancia de 1,27 metros desde las unidades de accionamiento.

**Advarsel!**

For å hindre fare for brann må du alltid skifte en røket sikring ut med en av samme type og størrelse.

For å redusere faren for brann eller støt må høyttaleren ikke utsettes for regn eller fuktighet. Hvis du har den minste mistanke om feil må høyttaleren repareres av en kvalifisert tekniker. Høyttaleren må jordes. Ledningene har følgende fargekode:

**Grønn og gul - jord**      **Blå - nøytral**      **Brun - strømførende.**

Hvis fargekoden ikke stemmer overens med støpselets fargekoder, går du frem slik: Den grønne og gule ledningen må kobles til støpselets terminal merket E eller med jord-symbolot, eller farget grønn og gul. Den blå ledningen må kobles til terminalen merket N eller farget sort. Den brune ledningen må kobles til terminalen merket L eller farget rød. Høyttaleren må kobles til en 16 ampere krets.

**Advarsel – elektromagnetisk forenlighet**

Alle høyttalere og pick-up'er til gitarer gir nødvendigvis fra seg eller påvirkes av elektromagnetiske felter. Trace Elliot-høyttalerkabinetter må ikke brukes mindre enn 2 m fra utstyr som trolig kan påvirkes av elektromagnetisk støy.

Gitarer med elektromagnetisk pick-up må likeledes ikke brukes mindre enn 2 m fra en elektromagnetisk kilde, som f.eks. høyttalere. Utstrålingen fra en høyttaler avhenger av frekvenskarakteristikken til driver-enheten. Nivåene ble målt direkte fra utganger på 30 dBuV. Disse nivåene faller til et trygt nivå i en avstand av 1,27 m fra utgangen.

## VEILIGHEDSVOORSCHRIFTEN

**Waarschuwing**

Voor bestendige bescherming tegen het gevaar van brand dienen zekeringen alleen vervangen te worden met zekeringen van hetzelfde type en van dezelfde waarde.

Om het risico van brand of elektrische schok te verminderen, wordt aanbevolen dat de uitrusting niet wordt blootgesteld aan regen of vocht.

In het geval van een verdacht defect dient altijd de hulp ingeroepen te worden van een bevoegde onderhoudsmonteur.

Deze apparatuur moet geaard worden. De draden in deze netspanning zijn gekleurd in overeenstemming met de volgende code:

**Groen & Geel - Aardverbinding**      **Blauw - Neutraal**      **Brown - Stroomvoerende**

Daar de kleuren van de draden in de netspanning niet overeenkomen met de gekleurde markeringen van de klemmen in uw stekker, dient u als volgt te werk te gaan:

De Groen & Geel gekleurde draad dient verbonden te worden met de klem in de stekker die gemarkeerd is met de letter E of met het aardesymbool of groen of Groen en Geel gekleurd is. De Blauwe draad dient verbonden te worden met de klem die gemarkeerd is met de letter N of zwart gekleurd is.

De Bruine Draad dient verbonden te worden met de klem die met de letter L gemarkeerd of Rood gekleurd is.

Wanneer 13 amp. (BS1363) stekker gebruikt wordt dient een 13 amp. zekering aangebracht te worden, wanneer een ander type stekker wordt gebruikt dient een 15 amp. zekering aangebracht te worden in de stekker of adapter of in de verdeelkast.

**EMC (Electromagnetic compatibility) [bestendigheid tegen elektromagnetische storingen]****Waarschuwing**

Het is inherent in het ontwerp van een luidspreker en in het ontwerp van gitaar tastelementen dat zij elektromagnetische velden emitteren of er door beïnvloed worden. Trace Elliot luidspreker omkastingen dienen niet gebruikt te worden op een afstand van minder dan 2 meter van de uitrusting, daar deze beïnvloed zouden kunnen worden door elektromagnetische storing.

Evensz dienen gitaren uitgerust met elektromagnetische tastelementen niet gebruikt te worden op een afstand van minder dan 2 meter van een bron van elektromagnetische emissies, zoals luidsprekers.

Emissies van luidsprekers zijn afhankelijk van de frequentie die kenmerkend is voor de aandrijfinrichting.

Niveaus van 30 dBuV werden rechtstreeks van de aandrijvers gemeten. Deze niveaus zijn vermindert tot een veilig niveau op een afstand van 1.27m van de aandrijvers.

**Varning**

For å hindre ubøytet skydd mot brandrisk, byta ut sikringer endast med samma typ av sikring och styrka.

For å minske risiken for brand eller elektriske støtar, utsatt inte utrustningen for regn eller fukt. I händelse av en oförutsedd felaktig funktion så vand er alltid en behörig serviceingenjör. Denna apparat måste vara jordad. Ledningarna i stickproppen har färger enligt följande kod:

**Grön og gul - Jordning**      **Blå - Neutral**      **Brun - Spänningsförande**

Eftersom färgerna i apparatens sladd kanske inte överensstämmer med färgmarkeringarna som identifierar terminalerna i stickproppen, gör enligt följande:

Den ledning som är grön og gul måste anslutas till den terminal i stickproppen som markeras med bokstaven E eller genom jordsymbolen eller grön og gul färg.

Den ledning som är blå måste anslutas till den terminal som är markerad med bokstaven N eller svart färg.

Den ledning som är brun måste anslutas till den terminal som är markerad med bokstaven L eller röd färg.

Om en A 13 amp (BS1363) stickpropp används måste en 13 amp sikring användas eller om någon annan sorts stickpropp används måste en 15 amp sikring användas i stickproppen eller i en förgröningsspropp eller i fördelningstavla.

**Emissionsströmsvarning**

Det är ingår i konstruktionen på högtalare og gitarers pick-uper att de skall påverkas av elektromagnetiska fält. Trace Elliots högtalarlådor skall inte användas närmare än 2 meter från utrustning som kan påverkas av elektromagnetiska störningar.

Gitarer som har elektromagnetiska pick-uper monterade skall heller inte användas mindre än två meter bort från någon källa med elektromagnetisk emission, som t ex högtalare.

Emissionen från högtalare beror på drivenhetens frekvensfunktion.

Nivåer uppmätta direkt från drivenheten var på 30 dBuV.

Dessa nivåer reduceras till en säker nivå på ett avstånd av 1,27 meter från drivenheterna.

## TURVAOHJEET

**Varoitus**

Palvoaaran vältämiseksi käytä aina samantyyppisiä ja -tehoisia sulakkeita.

Vähentääksesi tulipalo- ja sähköiskuvaaraa pidä tämä laite poissa esteestä aläkä altista sitä kosteudelle.

Jos epäilet laitteen toimivan virheellisesti, ota aina yhteys ammattilaittoisen huoltohenkilöön. Tämä laite täytyy maattaa. Tämän laitteen johdot on koodattu seuraavasti:

**Vihreä & keltainen - maa**      **Sininen - neutraali**      **Ruskea - jännitteinen**

Koska tämän laitteen verkkojohdon värit saattavat erota liittimen värimerkinnöistä, toimi seuraavasti:

Vihreä & keltainen johto täytyy yhdistää pistokkeen liittimeen, joka on merkattu E:llä tai maatosymbolilla tai joka on väriällään vihreä tai vihreä ja keltainen.

Sininen johto täytyy yhdistää liittimeen, joka on merkattu N-kirjaimella tai joka on väriällään musta.

Ruskea johto täytyy yhdistää liittimeen, joka on merkattu L-kirjaimella tai joka on punainen.

Käytettäessä 13 ampeerin (BS1363) pistoketta täytyy siihen laittaa 13 ampeerin sulake. Jonkin muun tyyppistä pistoketta käytettäessä täytyy 15 ampeerin sulake laittaa joko pistokkeeseen, adapteriin tai jakelutaluuun.

**Sähkömagneettista virtaa koskeva varoitus**

Kaiuttimien ja kitaran mikrofonin suunnitteluun kuuluu lunnostaan se, että niiden tulee säteillä sähkömagneettista kenttää tai tämän tulee vaikuttaa niihin. Trace Elliot -kaiuttimia ei saisi käyttää 2 metriä lähempänä sellaisia laitteita joihin sähkömagneettinen kenttä vaikuttaa häiritsevästi.

Myöskään kitaroita, joissa on sähkömagneettiset mikrofonit ei saisi käyttää 2 metriä lähempänä mitään sähkömagneettista lähettä, kuten kaiutinta.

Kaiuttimien päästöjen voimakkuudet ovat riippuvaisia teholaitteen taajuudesta.

Voimakkuuslasket mitattiin suoraan 30 dBuV:n lähteestä.

Nämä tasot laskevat turvalliselle tasolle oltaessa 1, 27 metrin etäisyydellä teholaitteesta.

## INSTRUÇÕES DE SEGURANÇA



### Aviso

Para protecção contínua contra o risco de fogo, substitua os fusíveis só com fusíveis do mesmo tipo e taxação.

Para reduzir o risco de fogo ou de choque eléctrico, não exponha este equipamento a chuva ou humidade.

No caso de suspeita de mau funcionamento, consulte sempre um mecânico de serviço devidamente qualificado.

Este aparelho deve ser ligado à terra. Os fios neste sector são coloridos em conformidade com o seguinte código:-

Verde e Amarelo - Terra

Azul - Neutro

Castanho - Vivo

No caso das cores dos fios no cabo deste aparelho não corresponderem com as marcações em cor que identificam os terminais na ficha proceda como se segue:-

O fio Verde e Amarelo deve ser ligado ao terminal na ficha marcado com a letra E ou pelo símbolo à terra ou com a cor verde ou Verde e Amarela.

O fio Azul deve ser ligado ao terminal marcado com a letra N ou com a cor Preta.

O fio castanho deve ser ligado ao terminal marcado com a letra L ou com a cor Vermelha.

Se for usada uma ficha de 13 amp (BS1363) deve ser montado um fusível de 13 amp, se for usada qualquer outro tipo de ficha tem de ser montado um fusível de 15 amp ou na ficha, ou no adaptador ou no quadro de distribuição.

### Aviso CEM

É inerente ao design de alto-falantes e ao design de reprodutores de guitarras que devem emitir ou ser afectados por campos electromagnéticos. As coberturas dos alto-falantes Trace Elliot não devem ser usadas a menos de 2 metros do equipamento que pode ser afectado pela interferência electromagnética.

Igualmente, as guitarras equipadas com reprodutores electromagnéticos não devem ser usadas a menos de 2 metros da fonte de emissões electromagnéticas tais como alto-falantes.

As emissões dos alto-falantes dependem da característica de frequência da unidade accionadora. Os níveis foram medidos directamente de accionadores de 30 dBuV.

Estes níveis são reduzidos para um nível seguro a uma distância de 1,27m dos accionadores.

## SIKKERHEDSINSTRUKTIONER



### Advarsel

For vedvarende beskyttelse imod risikoen for brand, må sikringerne kun udskiftes med sikringer af samme type og størrelse.

For at reducere risikoen for brand og elektrisk chok må dette udstyr ikke udsættes for regn eller fugt.

Hvis man har mistanke om, at der er en fejl i udstyret, skal man altid henvende sig til en faguddannet servicetekniker.

Dette apparat skal have jordforbindelse. Lederne i el-ledningen er farvet efter følgende kode:

Grøn og gul - Jord

Blå - Nulleader

Brun - Spændingsførende

Fordi ledernes farver i dette apparats el-ledning evt. ikke svarer til de farvede afmærkninger, der identificerer klemmerne i stikket, skal man gå frem på følgende måde:

Den leder, som er farvet grøn/gul, skal forbindes med klemmen i stikket, der er afmærket med bogstavet E eller med jordsymbolet eller som er grøn eller grøn/gul.

Den blå ledning skal forbindes med den klemme, der er afmærket med bogstavet N eller som er sort.

Den brune ledning skal forbindes med den klemme, der er afmærket med bogstavet L eller som er rød.

Hvis der anvendes et 13A (BS1363) stik, skal der monteres en 13A sikring. Hvis der anvendes en anden type stik, skal der sættes en 15A sikring i stikket eller snydeproppen eller på strømfordelingsstavlen.

### EMC advarsel

Højttalere og guitar-pickups er konstrueret således, at de udsender eller påvirkes af elektromagnetiske felter. Trace Elliot højttalerkabinetter må ikke placeres mindre end 2 meter fra udstyr, der sandsynligvis vil blive påvirket af elektromagnetiske forstyrrelser.

Ligeledes bør guitare, som er udstyret med elektromagnetiske pickups, ikke anvendes mindre end 2 meter væk fra en kilde til elektromagnetiske emissioner som f.eks. højttalere. Emissioner fra højttalere afhænger af drivaggregatets frekvens. Niveauer måles direkte fra drivaggregater på 30 dBuV.

Disse niveauer reduceres til et sikkert niveau i en afstand af 1,27 m fra drivaggregaterne.

## ISTRUZIONI PER LA SICUREZZA



### Avvertenza

Per assicurarsi di essere sempre protetti contro il rischio di incendi, sostituire i fusibili soltanto con altri dello stesso tipo e potenza.

Non esporre l'attrezzatura alla pioggia o umidità per ridurre il rischio di incendi o shock elettrici. Se si sospetta una malfunzione, consultare sempre un tecnico esperto in questo settore.

L'attrezzatura deve essere messa a terra. I fili sono stati colorati secondo il codice seguente:

Giallo e verde - Terra

Blu - Neutro

Marrone - Sotto tensione

Dato che i colori dei fili nel cavo elettrico del prodotto possono non corrispondere ai segni colorati che identificano i terminali della spina, procedere come segue:-

Il filo di color giallo e verde deve essere collegato al terminale nella spina marcata con la lettera E o con il simbolo terra, oppure di colore verde o verde e giallo.

Il filo di colore blu deve essere collegato al terminale che mostra la lettera N oppure di color nero.

Il filo di color marrone deve essere collegato al terminale che mostra la lettera L oppure di color rosso.

Con una una spina di 13 amp (BS1363), si deve usare un fusibile di 13 amp. Con qualsiasi altro tipo di spina inserire un fusibile di 15 amp nella spina, nell'adattatore o nel quadro di distribuzione.

### Avvertenza EMC (per la compatibilità elettromagnetica)

Nel design di altoparlanti o di fonorivelatori di una chitarra, è inerente il fatto che raccoglieranno o saranno influenzati da campi elettromagnetici. Le custodie per altoparlanti Trace Elliot non dovrebbero essere poste lontano meno di 2 metri dall'attrezzatura che potrebbe risentire dell'interferenza elettromagnetica.

Allo stesso modo, non usare le chitarre con fonorivelatori elettromagnetici ad una lontananza inferiore a 2 metri da qualsiasi sorgente di emissioni elettromagnetiche come altoparlanti.

Le emissioni da altoparlanti dipendono dalla caratteristica di frequenza dell'unità di comando.

I livelli sono stati misurati direttamente da unità di comando di 30 dBuV; il livello sicuro è ad una distanza di 1,27 metri dalle unità.

## ÖRYGGISRÁÐSTAFANIR.



### Aðvarun.

Víðvarandi vernd gegn eldhættu gerir nauðsynlegt að endurnýja öryggi einvörðungu með nákvæmlega samsonar öryggjum.

Til að draga úr eldhættu eða því að fá rafstraum ber að gæta þess að rigning eða komist ekki að tækinu.

Ef grunur leikur á bilun ber jafnan að leita til löggilts víðgerðarmanns.

Tækið verður að vera jafntengt. Leiðslurnar í rafmagnni eru litlaðar samkvæmt eftirfarandi kerfi:

Grænar og gulur - jörð

Blaár - núll

Brúnar - straumur

Með því lítirnir á leiðslu tækisins kunna að vera í ósamræmi við litamerkingar á innstungu yðar ber að fara þannig að:

Leiðsluna, sem er græn og gul, ber að tengja í innstungu þar sem merkt er E eða jörð eða er græn og gul að lit.

Leiðsluna, sem er blá, ber að tengja í klemmuna þar sem merkt er N eða sem er svört.

Leiðsluna, sem er brún, ber að tengja í klemmuna þar sem merkt er L eða sem er rauð.

Ef A 13 amp. (BS1363) innstunga er notuð ber að hafa 13 amp. öryggi eða ef önnur innstungugerð er notuð ber að hafa 15 amp. öryggi annað hvort á innstungunni eða millistykkinu í toflunni.

### EMC aðvarun.

Það er fost regl við hönnun hátalara og gítarpípa að þeir gefi frá sér eða verði fyrir áhrifum af rafsegulviðm. Trace Elliot hátalarakerfi ætli ekki að nota í innan víð 2 metra fjarlægð frá tækjum, sem kynnu að verða fyrir áhrifum rafsegultraflana.

Ekki ætli heldur að nota gítara með rafsegulgripa í innan víð 2 metra fjarlægð frá hverskyns rafsegulútsendingum eins og hátölurum.

Útsendingar frá hátölurum fara eftir tíðniskennnum drifstækisins.

Hávaðamörkin voru mæld beinlínis frá drifum 30 BuV.

Hægt er að lækka þau að öruggum mörkum í 1,27 metra fjarlægð frá drifunum.

**Προειδοποίηση**

Για συνεχή προστασία από τον κίνδυνο φωτιάς, αβιγκαταστήστε τις ασφάλειες μόνο με ασφάλειες του ίδιου τύπου και της ίδιας αναλογίας.

Για να μειώσετε τον κίνδυνο της φωτιάς ή την ηλεκτροπληξία, μην εκτίθετε τον εξοπλισμό στη βροχή ή στην υγρασία.

Σε περίπτωση που υποψιάζεστε κάποια δυσλειτουργία, πάντοτε να παραπέμπετε αυτή τη συσκευή σε καταρτισμένο μηχανικό σέρβις.

Η συσκευή αυτή πρέπει να διαθέτει γείωση. Τα σύρματα στην κεντρική παροχή ρεύματος είναι έγχρωμα σύμφωνα με τον ακόλουθο κωδικό:

**Πράσινο & Κίτρινο – Γείωση**      **Μπλέ – Ουδέτερο**      **Καφέ – Ηλεκτροφόρο**

Μια και τα χρώματα στο σύρμα της κεντρικής παροχής αυτής της συσκευής μπορεί να μην αντιστοιχούν με τα έγχρωμα σημάδια που ταυτίζουν τους ακροδέκτες στην πρίζα σας, προχωρήστε ως εξής:-

Το σύρμα που έχει χρώμα Πράσινο & Κίτρινο πρέπει να συνδέεται με τον ακροδέκτη στην πρίζα που είναι σημειωμένο με το γράμμα E ή με το σύμβολο γείωσης ή με το πράσινο χρώμα ή με το Πράσινο & Κίτρινο.

Το σύρμα που έχει χρώμα Μπλε πρέπει να συνδέεται στον ακροδέκτη που είναι σημειωμένο με το γράμμα N ή το Μαύρο χρώμα.

Το σύρμα που έχει χρώμα Καφέ πρέπει να συνδέεται με τον ακροδέκτη που είναι σημειωμένο με το γράμμα L ή το Κόκκινο χρώμα.

Εάν χρησιμοποιείται πρίζα A 13 αμπερ (BS1363) θα πρέπει να εφαρμόζεται ασφάλεια των 13 αμπερ, ή εάν χρησιμοποιείται οποιοδήποτε άλλο είδος πρίζας θα πρέπει να εφαρμόζεται ασφάλεια των 15 αμπερ είτε στην πρίζα ή στο μετασχηματιστή ή στον πίνακα διανομής.

**Προειδοποίηση της EMC**

Ει ναι αναγκαίο όπως στο σχέδιο του μεγαφώνου και στο σχέδιο πικαπ κιθάρας πρέπει να εκτέμουν ή να επηρεάζονται από τα ηλεκτρομαγνητικά πεδία. Τα εσώκλειστα μελαφώνου της TRACE ELLIOT να μην χρησιμοποιούνται λιγότερο από 2 μέτρα μακριά από τη συσκευή που πιθανόν να επηρεάζονται από ηλεκτρομαγνητική παρέμβαση.

Επίσης, οι κιθάρες που εφαρμόζονται με ηλεκτρομαγνητικά πικαπς δεσφ πρέπει να χρησιμοποιούνται λιγότερο από 2 μέτρα απόσταση από πηγή ηλεκτρομαγνητικής εκπομπής, όπως τα μεγάφωνα.

Εκπομπές από μεγάφωνα εξαρτώνται από το χαρακτηριστικό της συχνότητας της συσκευής μετάδοσης κίνησης.

Οι βαθμοί καταμετρήθηκαν απευθείας από το επίπεδο οδηγού των 30 dBuV.

Αυτα τα επίπεδα μειώνονται για ασφαλές επίπεδο σε ασφαλή βαθμό απόστασης 1,27 μέτρα από τους οδηγούς.