

# *Velocette* **twin**

O P E R A T I N G  
I N S T R U C T I O N S



V A L V E  
G U I T A R  
A M P L I F I E R

## INTRODUCTION

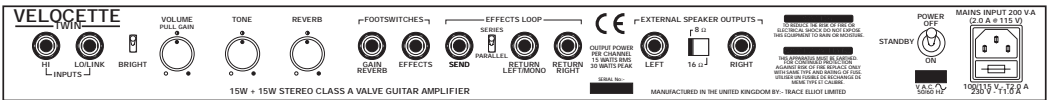
Congratulations on your purchase of a Velocette Twin.

The Velocette Twin is part of the Trace Elliot Velocette range. This is basically a range of no nonsense, compact, valve guitar amplifiers with the minimum controls necessary to produce a good range of sounds. However, with the addition of such features as a switchable gain boost, stereo effects loop, pseudo-stereo reverb, and a stereo power stage, the 'Twin' model takes the range as far as it could possibly go while still justifying a 'Velocette' badge.

The circuit topology has been based on traditional guitar amplifier designs, with new ideas incorporated where beneficial.

The main preamp and both power stage sections are 100% valve. The valves used are four ECC83/12AX7's and four EL84/6BQ5's run in Class A in stereo (two EL84's per side).

## REAR PANEL CONTROLS



### Inputs - Hi & Lo/Link

Two jack sockets are provided for connection to your instrument.

The HI input is a high impedance, high sensitivity input. This can be used with both passive and active guitars and, depending on the level of output from the guitar and the VOLUME setting, allows the amplifier to be driven hard into overdrive, if desired.

The LO/LINK socket can be used in two ways. Firstly as a lower impedance, low sensitivity input, for use with high output guitars when the user wishes to keep the overdrive under control. Alternatively this socket can be used as a LINK to chain together two or more Velocettes, simply plug your guitar into the HI socket, take an output from the LO/LINK socket and plug this into the HI input of the next amplifier in the chain.

### Bright

The BRIGHT switch adds more high frequencies when selected. It works in the traditional way, therefore it has more effect at lower VOLUME settings.

## ***Volume / Pull Gain***

This is a push/pull potentiometer. Pushed in the control acts like a normal volume control on a typical non-master volume amplifier, therefore it sets the overall volume level of the amplifier and has a huge effect on the tone and the amount of overdrive. From low to about halfway, depending on the output level of the guitar and which input socket is used, the sound should remain reasonably clean. Increasing the control further will progressively increase the level of power amp overdrive in the sound, obviously being a valve amp it will respond to the player's dynamics and use of the instrument's volume. Pulling the control out activates the additional valve preamp stage therefore effectively turning the control from a VOLUME into a GAIN control. This extra gain stage makes it possible to produce a fuller overdrive sound especially when turned up as this blends preamp distortion with power amp distortion. With the control pulled out the extra gain stage is also footswitchable. This enables the user to footswitch between clean and dirty sounds.

Setting the VOLUME at about 12 o'clock gives lovely warm clean sounds which can then be switched to a nice, not too saturated overdriven tone.

For total and instant control over a range of clean and overdriven tones we recommend turning the VOLUME control all the way up. Without the extra gain stage switched in the player can then back off the volume on their guitar for clean sounds, turn up fully for some crunchy, responsive power amp overdrive, and then kick in the extra gain stage for thick lead tones with lots of sustain.

## ***Tone***

Unlike other single tone controls on other amplifiers, which act merely as a treble roll off, this control works in a different way. It is a dual gang potentiometer which controls two functions simultaneously. In the fully anti-clockwise position the midrange is dominant in the sound, turning the control clockwise decreases the mids while at the same time increasing the higher frequencies.

Start with it in the 12 o'clock position and try different settings with or without the BRIGHT switch to find the settings that you like. Bear in mind that as the VOLUME is turned up the BRIGHT switch has less effect.

## ***Reverb***

This single control is for adjusting the amount of reverb effect in the sound. The effect is produced by a three spring reverb tray inside the cabinet. However, due to a simple but extremely effective modification to the signal between the reverb tray and the stereo power stages, what you actually hear is a huge pseudo-stereo reverb that seems to fill the whole room. It is even more noticeable when using extension cabinets.

## ***Footswitch Sockets***

These sockets are connected to latching footswitches. The first one is dual function and operates the extra gain stage (with VOLUME pulled out) and reverb. The second turns the effects loop on or off if used.

## ***Effects Loop***

This has sockets for SEND, LEFT/MONO RETURN and RIGHT RETURN as well as a switch for SERIES or PARALLEL configuration.

The SEND is for connection to the input of effects units and can drive floor type battery powered effects pedals or 19" rack type studio effects units.

The RETURN sockets are for connection to the outputs of effects units. If a mono effect unit is used then use the LEFT/MONO RETURN.

The SERIES/PARALLEL switch alters the configuration of the effects loop.

In SERIES mode the whole signal comes out of the amp, into the effects unit and then back into the amp, whereas in PARALLEL mode the effected signal is mixed in with the original dry signal, thus retaining tonal purity of the dry signal.

The choice of which mode to use will depend on what kind of effects unit is used and what overall effect is desired. Generally if time delay effects are used, such as delay (echo), chorus, flanging, phasing, etc., then the PARALLEL setting is usually preferred. If volume or EQ related effects are used, such as overdrive/distortion, compression, graphic equalisation, wah-wah or volume pedals, or if a multi-effects unit is used with a combination of time delay and volume related effects, then it is usually best to set the switch to SERIES. There are no rules, it is best to experiment and see what you prefer. If PARALLEL configuration is used then, if possible, it is recommended that dry/direct signal from the effects unit is turned off.

The effects loop is not activated unless a jack plug is inserted into the LEFT/MONO RETURN socket. The loop is then footswitchable if a suitable latching footswitch is connected to the appropriate footswitch socket.

It is also possible to use the Velocette Twin purely as a stand alone mono/stereo power amp. To do this set the loop to SERIES configuration, this will effectively eliminate the preamp and plug signal source(s) into the RETURN socket(s).

## ***External Speaker Outputs***

These have been provided throughout the Velocette range so that the user can connect them to external 16 $\Omega$  speaker cabinets, such as 4 x 12's, for different sounds. This is useful for both live and studio use and will radically change the sound and volume of the amplifier.

As the Velocette Twin has two power stages, two external speaker outputs are provided, as is a 8 $\Omega$  or 16 $\Omega$  impedance selector switch which sets the output impedance for both sockets.

(N.B. This does not change the impedance of the internal speaker connection)

When a jack is inserted into each socket the corresponding internal speaker is disconnected, either or both can be used at once.

However, always ensure that the amplifier is correctly loaded when in use and never plug both power sections into the same speaker cabinet unless it is a stereo cabinet and you are sure that the speakers are separately addressed.

Probably the most popular way to use these outputs is to sit the unit on top of a stereo 4 x 12 cabinet, such as our GSC412, set the switch on the Velocette Twin to  $8\Omega$ , the cabinet to  $8\Omega$  STEREO and connect the two speaker outputs to the two cabinet inputs for a big stereo sound.

Alternatively if you really want to create an impression set the Velocette Twin to  $16\Omega$  and get TWO 4 x 12's, set to  $16\Omega$  MONO, to plug into. With the cabinets spaced apart a reasonable distance the sound is huge! Especially considering that the cabs are being driven by two fifteen watt amps. Adding a stereo chorus or delay to the effects loop at this stage is quite simply more than a poor boy can take!

### ***Power Switch (Off/Standby/On)***

As the name implies, this switches the amplifier from OFF to STANDBY mode, where only the valve heaters are on, to ON for actual use. This should be used correctly every time the unit is used to prevent problems with valves and to increase their life.

Before mains is applied to the unit, check that is the correct voltage and make sure the POWER switch is in the OFF position. Connect power lead to mains outlet then switch to STANDBY and wait about a minute before switching to ON. This ensures that the valves have time to warm up before large voltages are applied to the plates. During short breaks the amplifier can be switched to standby and will therefore be ready to play when next needed.

After switching off it is recommended, as with all valve amplifiers, that it does not receive any sudden physical shocks while the valves are still hot, i.e through moving the unit. If possible try to give the amplifier a few minutes to cool down before transporting it.

### ***IEC Socket/Mains Fuse***

The IEC socket is for connection to universally used IEC mains leads to connect to appropriate domestic mains supply.

In the event of having to replace the mains fuse always use the same rating and type as marked on the unit's rear panel. Using one of higher rating will invalidate the guarantee. If after replacement the mains fuse should blow a second time, immediately refer the unit to a TRACE ELLIOT approved service engineer for checking.

## ***Orientation Of Valves***

Looking at the VELOCETTE TWIN from the rear with the rear panel removed you will see eight valves, the four on the left (V1, V2, V3 & V4) should be ECC83/12AX7's while the four on the right (V5, V6, V7 & V8) should be EL84/6BQ5's.

V1 is used for the input gain stage and 2nd gain stage

V2 is used for the 3rd gain stage and cathode follower that drives the tone network

V3 is used for the left side phase splitter

V4 is used for the right side phase splitter

V5/V6 are left side power stage valves

V7/V8 are right side power stage valves

If the need should arise to replace any of the valves we recommend the following types:-

V1, V2, V3 & V4

Sovtek 12AX7**WB** or 12AX7**WA**

V5, V6, V7 & V8

Tesla EL84 or Sovtek EL84

For improved performance and reliability V5 & V6 and V7 & V8 should be matched pairs respectively.

## ***Technical Specifications***

<i>Input Impedance</i>	Hi-1M $\Omega$ Lo/Link-136K $\Omega$
<i>Tone Control</i>	Single dual function passive control
<i>Reverb</i>	3 spring tray with modified output to produce pseudo stereo reverb effect
<i>Send</i>	Impedance 10K $\Omega$ Nominal signal level -20dBu
<i>Left/Mono Return</i>	Impedance 470K $\Omega$ Nominal signal level -20dbu
<i>Right Return</i>	Impedance 470K $\Omega$ Nominal signal level -20dBu
<i>Circuit Topology</i>	Preamp and power stages 100% valve Reverb and effects loop sections driven by integrated circuits
<i>Speaker</i>	Two 10" Celestion Vintage 10's
<i>Power Rating</i>	~2 x 15WRMS per side stereo (~30 WRMS total)

## 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 dBu.

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

## SICHERHEITS-ANWEISUNGEN



### Warnung

Zum fort dauernden Schutz gegen Feuerrisiken 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 dBu 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 diamentée 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 diamentée 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 pilote.

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 dBu.

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 dBu.

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-symbol, eller fargen grønn og gul. Den blå ledningen må kobles til terminalen merket N eller fargen sort. Den brune ledningen må kobles til terminalen merket L eller fargen 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 utgangene.

## 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. Evenzo 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 åvbruttet skydd mot brandrisk, byta ut sikringer endast med samma typ av säkring och styrka.

For ått minska risken för brand eller elektriska stötar, utsätt inte utrustningen för regn eller fukt. I händelse av en oförutsett 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 fargerna 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 säkring användas eller om någon annan sorts stickpropp används måste en 15 amp säkring användas i stickproppen eller i en förgreningspropp 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.

Vahentäkeksi tulipalo- ja sähköiskuvaaraa pitää tämä laite poistaa aetasta aiäkä altista sitä kosteudelle.

Jos epäilet laitteen toimivan virheellisesti, ota aina yhteys ammattitaitoiseen huoltohenkilöön. Tämä laite täytyy maattaa. Tämän laitteen johdot on koodattua 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 maattosymbolilla tai joka on väritään vihreä tai vihreä ja keltainen.

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

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

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

**Sähkömagneettista virtaa koskeva varoitus**

Kaluttimien ja kitaran mikrofonin suunnitteluun kuuluu lunnostaan se, että niiden tulee säteillä sähkömagneettista kenttää tai tämän tulee vaikuttaa niihin. Trace Elliot -kaluttimia 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 kaluttinta.

Kaluttimien päästöjen voimakkuudet ovat riippuvaisia teholähteen tajuudesta.

Voimakkuustasot mitattiin suoraan 30 dBuV:n lähteestä.

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

## 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 reproduzores 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 reproduzores 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.

## 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 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 Elliott 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.

## 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 - Nulleder

Brun - Spændingsførende

For di 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 strømfordelingstavlen.

### 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 guitarer, 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 drivaggregatet på 30 dBuV.

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

## ÖRYGGISRÁÐSTAFANIR.



### Aðvörun.

Viðvarandi vernd gegn eldhættu gerir nauðsynlegt að endurnýja öryggi einvörðungu með nákvæmlega samskonar öryggjum.

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

Ef grunur leikur á bilun ber jafnan að leita til löggiltis viðgerðarmanns.

Tækið verður að vera jarðlengt. Leiðslurnar í rafmagníð eru litadar samkvæmt eftirfarandi kerfi:

Grænar og gular - jörð

Bláar - núll

Brúnar - straumur

Með því litirnir á leiðslum 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 svart.

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 innstungu gerð er notuð ber að hafa 15 amp. öryggi annað hvort á innstungunni eða millistykkinu í toftunni.

### EMC aðvörun.

Það er fóst regla við hönnu hátalara og gítargripa að þeir gefi frá sér eða verði fyrir áhrifum af rafsegulviðmi. Trace Elliot hátalarakerfi ætli ekki að nota í innan við 2 metra fjarlægð frá tækjum, sem kynnu að verða fyrir áhrifum rafsegulruflana.

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

Útsendingar frá hátölurum fara eftir tíðniekennum drifstækisins.

Hávaðmörkin voru mæld beinlínis frá drifum 30 BuV.

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

**Προειδοποίηση**

Για συνεχή προστασία από τον κίνδυνο φωτιάς, αββικαταστήστε τις ασφάλειες μόνο με ασφαλείες 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 υπονιάζετε 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 σημειωμένος 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 σημειωμένος με το γράμμα N ή το Μαύρο χρώμα.

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

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

**Προειδοποίηση της EMC**

Εί'ναι αναγκαίο όπως στο σχέδιο του μηχανήου και στο σχέδιο πικάπ κιθάρας πρέπει να εκπέμπουν ή να επηρεάζονται από τα ηλεκτρομαγνητικά πεδία. Τα εσάκλειστα μελαφάνου 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 ηλεκτρομαγνητικό πικάπ 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 τά επίπεδα μειώνονται για ασφαλές επίπεδο σε ασφαλή βαθμό απόσταση 1,27 μέτρα από τους οδηγούς.