

301 & 601
Mic/Line Mixers

Operation Manual

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INTRODUCTION

The 301 & 601 are single rack space, three input & six input mic/line mixers. Each input channel uses a differentially balanced, discrete transistor mic/line preamplifier for low noise and low distortion performance. Inputs are provided to accept signals from microphones and/or line level devices. Special features, including limiters and remote level control, make the 301 & 601 extremely versatile. The 301 & 601 mixers are dependable, easy to install, simple to operate, and are covered by Biamp Systems' five-year warranty.

301 & 601 features include:

- ◆ three electronic balanced mic/line input channels (301)
- ◆ six electronic balanced mic/line input channels (601)
- ◆ 30dB rear panel Pad switch on each input channel
- ◆ 40dB screwdriver-adjust Trim on each input channel
- ◆ +10dB Peak LED indicator on each input channel
- ◆ rotary level control on each input channel
- ◆ auto-muting of one channel for "talk-over" applications
- ◆ +24 volt Phantom Power assign switch on each input
- ◆ electronic balanced main output with rotary level control
- ◆ remote control of main level from up to 2000 feet away
- ◆ main patch insert point for external processing devices
- ◆ main stacking input accepts signals from other mixers
- ◆ screwdriver-adjust tone controls & limiter on main output
- ◆ -20dB Signal Present LED indicator for main output
- ◆ all input/output/control on plug-in barrier strip connectors
- ◆ covered by Biamp Systems' five-year warranty
- ◆ **CE** marked and **UL / C-UL** listed power source

FRONT PANEL



Trim: These screwdriver adjustable controls provide 40dB of gain adjustment to compensate for different input signal levels. For best performance, adjust Trim so the +10 Indicator flashes only on occasional peaks in signal level (see +10 Indicator below).

+10 Indicator (Peak): These red LEDs indicate signal level in the channel has reached +10dB (8dB below clipping). For best performance, adjust Trim so the Peak Indicator flashes only on occasional peaks in signal level (see Pad on next page).

Channel Level: These controls adjust the level of channel signal sent to the Main Out section. Level control settings will vary from channel to channel, depending upon the desired mix. However, for best performance, higher settings should center around the 12 o'clock position (unity gain). One of the channels includes a level "ducking" feature, which can be triggered when signal is present in selected other channels (see Ch 3/6 Duck on next page). This "ducking" feature is useful in page-over-music applications.

Bass: This screwdriver-adjustable control sets the low-frequency equalization (Bass) for the Main Out section. Bass is a shelving type filter, which provides +/-10dB of gain adjustment for frequencies below 100Hz.

Treble: This screwdriver-adjustable control sets the high-frequency equalization (Treble) for the Main Out section. Treble is a shelving type filter, which provides +/-10dB of gain adjustment for frequencies above 10kHz.

Master Level: This control adjusts the overall level of signal sent to Main Out (see Rear Panel: Main Out on next page). The Master Level control is used to make adjustments in volume level. However, for best performance, higher settings should center around the 12 o'clock position (unity gain). Sound system amplifiers may then be set for the appropriate volume level. Main Out level can also be adjusted via remote control (see Remote on next page).

-20 Indicator (Signal Present): This red LED indicates signal level at the Main Out is above -20dB (normal signal level). Once the Master Level control has been adjusted, this indicator will remain lit whenever signal is present at Main Out.

Threshold: A limiter is provided at the Main Out section to help eliminate unwanted peaks in program signal level. This screwdriver adjustable control sets the threshold level, at which the limiter is activated. For most applications, set this control so the Limit Indicator flashes only on occasional peaks in signal level (see Limit Indicator below). Counter-clockwise adjustment lowers the threshold, increasing the amount of limiting. Clockwise adjustment raises the threshold, ultimately removing the limiter from operation. This control is factory set fully clockwise (limiter off).

Limit Indicator: This red LED indicates when the limiter is activated by program signal levels that exceed the threshold setting.

On Indicator: When the power transformer is plugged in, and AC power is applied to the mixer, the red On indicator remains lit.



REAR PANEL



DC Power Supply: The included power supply module provides 24 Volt DC power to the mixer. It is connected to the DC Power Jack on the rear side of the mixer. To ensure compatibility, only use a Biamp Systems' supplied power supply.

Main Out: These three terminals provide the electronically balanced Main Out from the mixer, wired with high to (+), low to (-), and ground to (▼). For unbalanced output, connect high to (+) and ground to (▼), leaving low (-) unconnected. Main Out signal is a mix of the input channel signals, plus signal from Stack In, as well as any processing which may be inserted at Patch (see Stack In & Patch below).

Stack In: These three terminals provide a line level input for signals from external devices, such as other mixers. Stack Input signal is combined with the channel signals, before being sent to the Main Out section. Connect balanced inputs with high to (+), low to (-), and ground to (▼). For unbalanced use, connect inputs with high to (+) and ground to both (-) & (▼).

Patch: These three terminals provide an insert point for connection of external processing equipment at the Main Out section. Patch is post-EQ (Bass & Treble) and pre-Master Level. The (out) terminal provides a send to the external device. The (in) terminal provides a return from the external device. Ground for both connections is supplied by the (▼) terminal. Patch may also be used as an unbalanced, pre-Master Level output, with the (out) terminal as the send and the (▼) terminal as ground. Depress the Patch Enable switch only when Patch is used as an insert, and release the Patch Enable switch when Patch is used as an output (see Enable Switches below).

Remote: These three terminals allow remote control of the Main Out level. Remote controls can be level pots and/or mute switches. Controls may be wired up to 2000 feet from the mixer, using 2-conductor shielded cable (see Remote Control on page 4). Potentiometers should be 5k-50k ohms (linear taper). Switches may be used alone (on/off) or with variable resistors (adjustable mute). An external ramp voltage may also be used. Depress the Remote Enable switch only when using remote controls (see Enable Switches below).

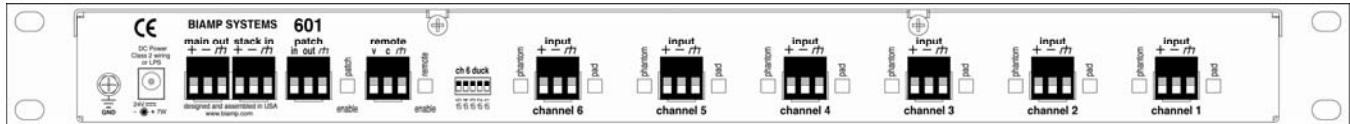
Enable Switches: These switches activate the normal functions of the Patch & Remote terminals (see above). Patch terminals may still be used as an unbalanced output even when disabled. Remote terminals do nothing unless enabled. If Remote is enabled, but no control is connected, signal will be muted (off) at the Main Out.

Ch 3 / Ch 6 Duck switches: These DIP switches assign which input signals (Channels 1 & 2 on 301; Channels 1-5 on 601) will automatically trigger ducking (-15dB attenuation) on the last channel (Channel 3 on 301; Channel 6 on 601) for talk-over applications.

Phntm Switches: These switches assign +24V Phantom Power to the Inputs (for condenser mics). Do not assign Phantom Power for inputs other than condenser mics. Always turn Channel Level controls down before switching Phantom Power.

Inputs: These terminals provide electronically balanced input to the channels, and will accept either microphone or line-level signals. Connect balanced inputs with high to (+), low to (-), and ground to (▼). For unbalanced use, connect inputs with high to (+) and ground to both (-) & (▼). Phantom Power is available for operation of condenser microphones (see Phntm Switches above).

Pad Switches: These switches reduce the channel input signal level by 30dB. Depress this switch when channel input signal levels exceed the normal operating range of the front panel Trim control. Pad is typically released for mic input and depressed for line input.

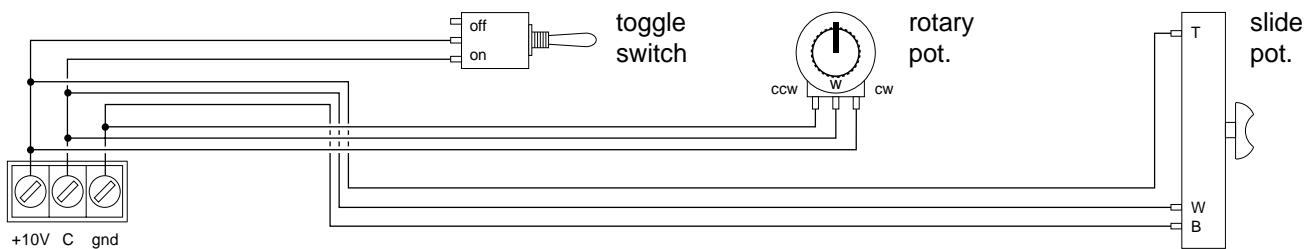


REMOTE CONTROL

Remote Control: When using a slide potentiometer as a remote control, wire with High (T) to the voltage terminal ('V'), Wiper (W) to the control terminal ("C"), and Low (B) to the ground terminal ('▼'). When using a rotary potentiometer, wire with High (CW) to the voltage terminal ("V"), Wiper (W) to the control terminal ("C"), and Low (CCW) to the ground terminal ("▼"). Potentiometers should be linear taper, of any value from 5k ohms to 50k ohms, and may be wired up to 2000 feet from the mixer. Cable should be 2-conductor with shield. A remote level control wall-plate, model **RP-L1**, is available. If an on/off switch is utilized, "ON" position should connect the voltage terminal ("V") to the control terminal ("C"). Different wiring techniques, using both a potentiometer and a switch, can provide either level and mute functions or adjustable muting attenuation.

NOTE: The rear panel Remote Enable switch must be depressed for remote controls to function (see Enable Switches on page 3).

REMOTE CONTROL WIRING DIAGRAM

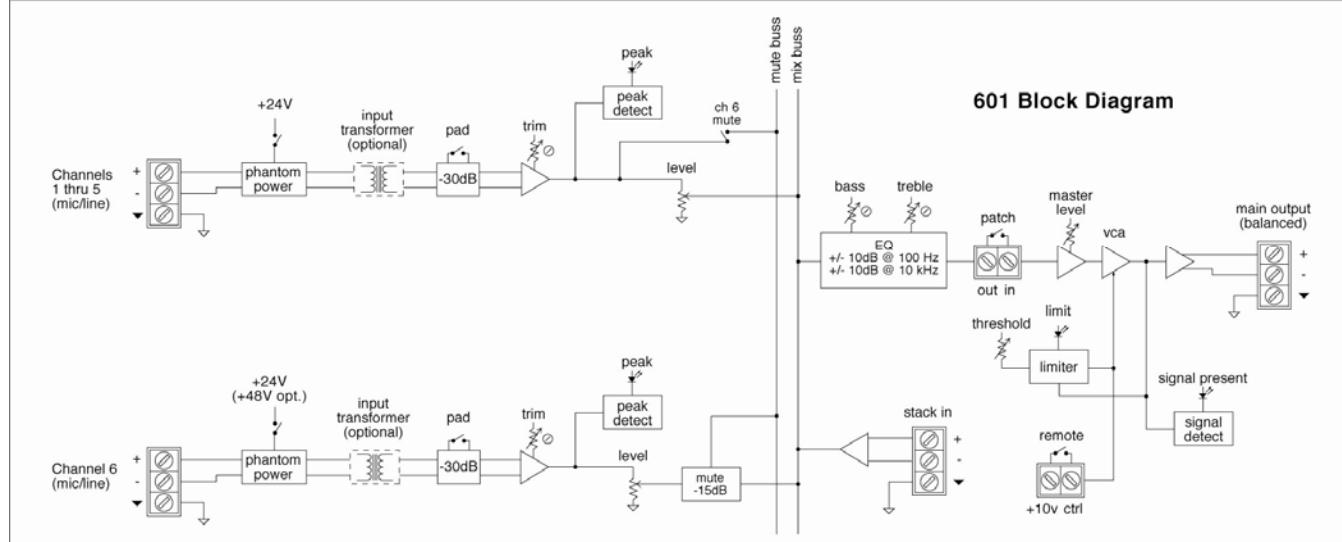


SPECIFICATIONS & BLOCK DIAGRAM

301 & 601 SPECIFICATIONS

Frequency Response (20Hz~20kHz @ +4dBu):	+0/-1dB	Remote Control Attenuation (0~+10VDC):	-80dB ~ 0dB
THD+Noise (20Hz~20kHz @ +4dBu):	< 0.02%	Input Trim Control Range:	50dB
Equivalent Input Noise (20Hz~20kHz, 150Ω term.):	-125dBu	Input Pad Switch Attenuation:	30dB
Output Noise (20Hz~20kHz):		Input Impedance:	
master level control down	< -86dB	mic/line inputs (balanced)	2.7k ohms
master level & one channel at nominal	< -78dB	main patch (unbalanced)	> 7k ohms
Maximum Gain:		main stack (balanced)	30k ohms
mic input to main output	78dB	Maximum Input:	
main patch to main output	16dB	mic/line input	+30dBu
main stack to main output	10dB	main patch	+30dBu
Crosstalk (channel-to-channel @ 1kHz):	-60dB	main stack	+24dBu
Output Impedance:		Power Requirements:	115/230VAC 50/60Hz
main output (balanced)	200 ohms	Power Consumption:	< 7 watts
main patch (unbalanced)	100 ohms	Dimensions:	
Maximum Output:		height (1 rack space)	1.75 inches (44mm)
main patch	+18dBu	width	19 inches (483mm)
main output	+24dBu	depth	7 inches (178mm)
Output Limiter:		Weight:	6 lbs. (2.72kg)
attack time	1~2 mS (program dependent)	Compliance:	AES48-2005 Grounding & EMC practices
release time	100~500 mS (program dependent)		EU Directive 2002/95/EC, RoHS directive
threshold range	-4dBu ~ +24dBu		CE marked
Output Tone Controls:			UL listed power source
Bass & Treble	±10dB @ 100Hz & 10kHz		

601 BLOCK DIAGRAM



WARRANTY

BIAMP SYSTEMS IS PLEASED TO EXTEND THE FOLLOWING 5-YEAR LIMITED WARRANTY TO THE ORIGINAL PURCHASER OF THE PROFESSIONAL SOUND EQUIPMENT DESCRIBED IN THIS MANUAL

1. BIAMP Systems warrants to the original purchaser of new products that the product will be free from defects in material and workmanship for a period of 5 YEARS from the date of purchase from an authorized BIAMP Systems dealer, subject to the terms and conditions set forth below.
2. If you notify BIAMP during the warranty period that a BIAMP Systems product fails to comply with the warranty, BIAMP Systems will repair or replace, at BIAMP Systems' option, the nonconforming product. As a condition to receiving the benefits of this warranty, you must provide BIAMP Systems with documentation that establishes that you were the original purchaser of the products. Such evidence may consist of your sales receipt from an authorized BIAMP Systems dealer. Transportation and insurance charges to and from the BIAMP Systems factory for warranty service shall be your responsibility.
3. This warranty will be VOID if the serial number has been removed or defaced; or if the product has been altered, subjected to damage, abuse or rental usage, repaired by any person not authorized by BIAMP Systems to make repairs; or installed in any manner that does not comply with BIAMP Systems' recommendations.
4. Electro-mechanical fans, electrolytic capacitors, and normal wear and tear of items such as paint, knobs, handles, and covers are not covered under this warranty.
5. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. BIAMP SYSTEMS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
6. The remedies set forth herein shall be the purchaser's sole and exclusive remedies with respect to any defective product.
7. No agent, employee, distributor or dealer of Biamp Systems is authorized to modify this warranty or to make additional warranties on behalf of Biamp Systems. statements, representations or warranties made by any dealer do not constitute warranties by Biamp Systems. Biamp Systems shall not be responsible or liable for any statement, representation or warranty made by any dealer or other person.
8. No action for breach of this warranty may be commenced more than one year after the expiration of this warranty.
9. BIAMP SYSTEMS SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS OR LOSS OF USE ARISING OUT OF THE PURCHASE, SALE, OR USE OF THE PRODUCTS, EVEN IF BIAMP SYSTEMS WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Biamp Systems
9300 S.W. Gemini Drive
Beaverton, Oregon 97008
(503) 641-7287



EC Declaration of Conformity

Biamp Systems Corporation, as manufacturer having sole responsibility, hereby declares that the following described product complies with the applicable provisions of the DIRECTIVES below except as noted herein. Any alterations to the product not agreed upon and directed by Biamp Systems Corporation will invalidate this declaration.

Product Models: 301, 601, 801i

Product Description: Mic/Line Mixers

Applicable EC Directives: Applicable Harmonized Standards:

LVD Directive (2006/95/EC) Safety EN 60065:2002

EMC Directive (2004/108/EC) Emissions EN 55103-1:1996, Environment E2
Immunity EN 55103-2:1996

Special Considerations for Product Environment or Compliance:

Use only Biamp Systems supplied 24 VDC External Power Supply Adaptor.

Shielded cabling must be used for system connections.

Technical Construction File, Location and Contact:

Biamp Systems, Inc. phone: (503) 641.7287
9300 S.W. Gemini Drive fax: (503) 626.0281
Beaverton, OR USA 97008 e-mail: biamp@biamp.com

Authorized Representative: Larry Copley, Compliance Engineer

Authorized Signature:

A handwritten signature in black ink that reads "Larry Copley".

Issued: March, 2010

SAFETY INFORMATION

The words **WARNING** and **CAUTION** throughout the manual, and on the device, call attention to important safety information. These words have the following meanings.

WARNING: The related information alerts you to conditions that could result in serious injury or damage to property if the instructions are not followed properly.

CAUTION: The related information instructs you on how to prevent damage to the equipment or how to avoid conditions that could result in minor injury if proper steps are not followed.

Product labelling and the operation manual may use the internationally recognized symbols defined below to note safety messages.



The lightning flash with arrowhead symbol, enclosed within a triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the apparatus's enclosure or at connection terminals that may be of sufficient magnitude to constitute a risk of electrical shock.



The exclamation point, enclosed within a triangle, is intended to alert the user to important installation, operation, and maintenance (servicing) instructions in the literature accompanying the apparatus.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: Installation of this apparatus should be made by a qualified installation person and should conform to all applicable local codes.



Modification and optional equipment information referenced in this manual is for use by qualified installation and service personnel only.



INFORMATION CONCERNANT VOTRE SECURITE

Les mots **WARNING** et **CAUTION** dans le manuel d'utilisation et sur les appareils attirent votre attention sur les plus importantes informations concernant votre sécurité. Ces mots ont la signification suivante:

WARNING: Ce mot vous indique les circonstances dans lesquelles vous pourriez être blessé ou endommager votre équipement si les instructions ne sont pas suivies correctement.

CAUTION: Ce mot vous indique comment éviter d'endommager votre matériel et comment éviter de vous blesser si vous ne suivez pas les instructions.

Vous trouverez peut-être les symboles suivants sur votre appareil ou dans le manuel d'utilisation.



L'éclair se terminant en flèche dans un triangle permet de prévenir l'utilisateur d'un voltage dangereux non isolé dans l'appareil ou d'une connexion d'une amplitude suffisante pour constituer un risque de choc électrique.



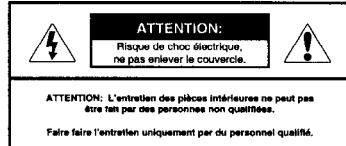
Le point d'exclamation dans un triangle permet de prévenir l'utilisateur des points importants concernant l'installation, le fonctionnement et l'entretien de l'appareil figurant dans le manuel d'utilisation.

WARNING: POUR REDUIRE LES RISQUES DE FEU OU DE CHOC ELECTRIQUE, NE PAS METTRE L'APPAREIL SOUS LA PLUIE OU DANS L'HUMIDITE.

CAUTION: L'installation de cet appareil doit être faite par un installateur qualifié et doit être en conformité avec toutes les lois locales en application.



Les informations concernant une modification ou un équipement en option dans le manuel doivent être effectuées par du personnel qualifié.



"INFORMACIÓN DE SEGURIDAD"

Las palabras **PELIGRO** (**WARNING**) y **PRECAUCIÓN** (**CAUTION**) a lo largo del manual y en el dispositivo (sistema), llaman la atención acerca de una importante información de seguridad. Estas palabras tienen los siguientes significados :

PELIGRO : la información relata las condiciones en que podría ser dañada seriamente la propiedad si no se siguen adecuadamente las instrucciones.

PRECAUCIÓN : la información que se relata te instruye en cómo prevenir daños al equipo o evitar condiciones que podrían resultar en perjuicio menor si los pasos adecuados no son seguidos correctamente.

El etiquetado del producto y el manual de operación pueden hacer uso de los símbolos reconocidos internacionalmente y cuyos mensajes están definidos a continuación para modificar mensajes de seguridad:



El símbolo del rayo encerrado en un triángulo pretende alertar al usuario de la presencia de un peligroso voltaje no aislado dentro de la caja del aparato o a un terminal de conexión y que podría ser de suficiente magnitud como para constituir un grave riesgo de descarga eléctrica.



El punto de exclamación dentro de un triángulo pretende alertar al usuario de la importancia de las instrucciones de instalación, operación y mantenimiento (servicio) que acompañan al aparato.

PELIGRO : para reducir el riesgo de fuego o una descarga eléctrica, no exponer este aparato a la lluvia o la humedad.

PRECAUCIÓN : la instalación de este aparato debería hacerse por una persona cualificada en la instalación, y debería conformar todos los códigos locales aplicables.



La modificación y la información opcional del equipo referenciada en este manual es para ser utilizada únicamente por personal cualificado en instalación y servicio.



INFORMAZIONI PER LA SICUREZZA

Le parole **AVVERTENZA** (**WARNING**) e **PRUDENZA** (**CAUTION**) poste sul manuale d'uso e sul dispositivo richiamano la vostra attenzione su delle importanti informazioni per la vostra sicurezza. Queste parole hanno il seguente significato.

AVVERTENZA: La suddetta indicazione vi avvisa sul rischio di incorrere in danni a cose o a persone, se le procedure d'uso e installazione non saranno seguite correttamente.

PRUDENZA: La suddetta indicazione vi instruisce su come prevenire e ridurre al minimo, il rischio di danni agli apparati e alle persone se le istruzioni saranno seguite correttamente.

Le apparecchiature e i manuali di istruzioni riporteranno la simbologia standard riportata qui sotto, accompagnata dalle relative informazioni per la sicurezza.



La simbologia con il fulmine all'interno di un triangolo, intende avvisare l'utente della presenza di alto voltaggio all'interno del dispositivo in questione, e che il suddetto dispositivo si alimenta attraverso una tensione di rete ad alto voltaggio e che dunque si potrebbe incorrere nel rischio di una possibile scossa elettrica.



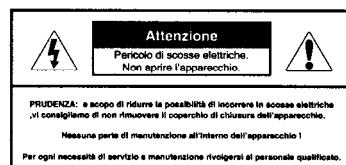
La simbologia con il punto esclamativo all'interno di un triangolo, intende avvisare l'utente di una serie di istruzioni contenute nel manuale d'uso riguardanti: operato, manutenzione e assistenza. Il suddetto manuale sarà a corredo dell'apparecchio.

AVVERTENZA: PER RIDURRE IL RISCHIO DI POSSIBILI INCENDI O SCOSSE ELETTRICHE, SCONSIGLIAMO DI ESPORRE L'APPARECCHIO ALLA PIOGGIA O ALL'UMIDITÀ.

PRUDENZA: L'installazione di questo apparato dovrà essere effettuata solo da personale qualificato e il tipo di installazione dovrà essere in regola con le norme vigenti locali.



Modifiche e ulteriori informazioni specificate in questo manuale sono solamente riservate al personale qualificato all'installazione.



Sicherheitshinweise

Die Begriffe **WARNUNG** (engl. **WARNING**) und **ACHTUNG** (engl. **CAUTION**) in der Bedienungsanleitung und auf den Geräten machen auf wichtige Sicherheitsinformationen aufmerksam. Diese Begriffe haben die folgende Bedeutung:

WARNUNG: Der folgende Text warnt Sie vor ernsthaften Verletzungen oder Beschädigungen, (WARNING) die aus einer fehlerhaften Bedienung bzw. Handhabung des Gerätes resultieren können.

ACHTUNG: Der folgende Text informiert Sie über Bedienungshinweise zum Schutz Ihres (CAUTION) Gerätes oder weist auf mögliche Schäden hin, wenn die Bedienungshinweise nicht beachtet werden.

Die Beschriftung der Geräte und die Bedienungsanleitungen weisen unter Umständen international bekannte Symbole auf, die die folgende Bedeutung haben:



Das Blitzsymbol im Dreieck warnt vor anliegender, nicht isolierter „gefährlicher Spannung“ im Inneren oder an den Anschlüssen des Gerätes. Die Berührung der unter Spannung stehenden Teile kann zu einem elektrischen Schock führen.



Das Rufzeichen im Dreieck macht auf wichtige Installations-, Bedienungs- und Servicehinweise in der zugehörigen Bedienungsanleitung aufmerksam.

WARNUNG: Zur Minderung des Risikos von Feuer und elektrischem Schock schützen Sie das (WARNING) Gerät vor Regen und Feuchtigkeit.

ACHTUNG: Die Installation des Gerätes sollte nur durch qualifiziertes Personal durchgeführt (CAUTION) werden und muß den jeweiligen Bestimmungen entsprechen.



Die Modifikationen und die Informationen zu den optionalen Erweiterungen in der Bedienungsanleitung sind nur für qualifiziertes Personal bestimmt.



VEILIGHEIDSINFORMATIE

De woorden **WAARSCHUWING** (WARNING) en **VOORZICHTIG** (CAUTION) welke in de handleiding en op het apparaat voorkomen, waarschuwen U voor belangrijke veiligheidsinformatie. Zij hebben de volgende betekenis:

WAARSCHUWING: De betreffende informatie waarschuwt U voor omstandigheden die kunnen leiden tot defecten of beschadigingen aan apparaten als de instructies niet volledig worden opgevolgd.

VOORZICHTIG: De betreffende informatie instrueert U hoe U defecten aan apparatuur kunt voorkomen of hoe U omstandigheden kunt vermijden die kunnen resulteren in schade als de juiste stappen niet worden opgevolgd.

Product informatie en handleiding hanteren onderstaande internationale erkende symbolen om veiligheidsinstructies aan te geven.



De bliksemsschicht in een driehoek wordt gebruikt om de gebruiker te attenderen op ongeïsoleerde „gevaarlijke spanning“ in het apparaat of bij de aansuilklemmen, die het risico van een elektrische schok kunnen geven.



Het uitrechteken in een driehoek wordt gebruikt om de gebruiker te attenderen op belangrijke installatie-, gebruiks- en onderhoudsinstructies in de beschrijving die bij het apparaat hoort.

WAARSCHUWING: OM HET RISICO VAN BRAND OF EEN ELECTRISCHE SCHOK TE VERMINDERN DIENT U HET APPARAAT NIET AAN VOCHT BLOOT TE STELLEN.

VOORZICHTIG: Installeer van dit apparaat dient te geschieden door gekwalificeerd personeel en dient te geschieden conform de plaatselijke voorschriften.



Modificaties en aanvullende informatie waar in de handleiding naar wordt verwezen, dient alleen voor gebruik door gekwalificeerd personeel.



Sikkerhedsinformation

Ordene **ADVARSEL** (WARNING) og **FORSIGTIG** (CAUTION), brugt i henholdsvis brugervejledning og på selve produktet, indikerer, at vigtig information omkring sikkerhed følger. Ordene betyder følgende:

ADVARSEL: Den efterfølgende information advarer Dem om forhold, der kan føre til alvorlige (WARNING) ulykker og ejendomsskader, hvis ikke vejledningen følges.

FORSIGTIG: Den efterfølgende information vejleder Dem i, hvordan De undgår skade på (CAUTION) produktet, samt undgår forhold der kan føre til mindre ulykker og ejendomsskader, hvis ikke vejledningen følges.

Produktetketter og brugervejledning kan indeholde de internationale anerkendte symboler der er vist nedenfor:



Trekanten med et lyn i midten har til hensigt at advare brugeren om, at produktet indeholder ”farlig spænding”, og at det derfor er forbundet med fare for elektrisk stød at åbne produktet.



Trekanten med udtrædstegn har til hensigt at advare brugeren om, at vigtig information omkring installation, brug, service og vedligeholdelse af produktet er indeholdt i den medfølgende brugervejledning.

ADVARSEL: Med henblik på at reducere risikoen for brand eller elektrisk stød, må produktet ikke (WARNING) udsættes for regn eller fugt.

FORSIGTIG: Installation af dette produkt skal foretages af en autoriseret installer og skal være i overensstemmelse med alle anvendelige lokale retningslinjer. (CAUTION)



Modifikationer samt alternativt udstyr beskrevet i denne brugervejledning er kun henvenndt til kvalificerede installatører og servicepersonale.



TURVALLISUUSTIEDOTE

Sanat **VAROITUS** (WARNING) ja **HUOMIO** (CAUTION), joita esitintyvät manuaalissa ja itse laitteessa, ilmoittavat tärkeää turvallisuusinformaatiota. Nämä sanoilla on seuraava merkitys:

VAROITUS: Yhteydessä oleva informaatio varoittaa olosuhteista, jotka saattavat johtaa vakavina vammoihin tai laitteen vaaritumiseen, mikäli ohjeita ei täysin noudateta.

HUOMIO: (CAUTION) Yhteydessä oleva informaatio neuvoa, milen laitteen vaarituminen voidaan ehkäistä tai miten voidaan välttää olosuhteet, jotka voivat johtaa lievien vammoihin, mikäli ohjeita ei noudateta.

Tuotteessa tai käyttöohjeessa voidaan käyttää seuraavia alla määritellyjä kansainvälisiä symbolia, joita viittavat turvallisuusinformaatioon.



Kolmiosiäliä olevan muilipäinen salarie varoittaa käyttäjää laitteen sisällä tai liittämöissä olevasta eristämätönmästä vaarallisesta jännitteestä, joka saattaa olla tarpeeksi suuri aiheuttaakseen sähköiskun varan.



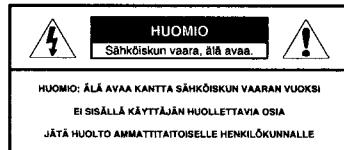
Kolmiosiäliä oleva huomioerkin tarkoitus on ilmoittaa käyttäjälle tärkeistä asennusta, käyttöä tai huoltoa koskevista ohjeista laitteen mukana seuraavassa kirjallisuudessa.

VAROITUS: (WARNING) ÄLÄ ALTISTA LAITETTA SATEEELLE TAI KOSTEUDELLE TULIPALON JA SÄHKÖISKUN VAARAN VUOKSI.

HUOMIO: (CAUTION) Laitteen asentaminen tulisi jättää ammattitaitoisien henkilöön suoritettavaksi ja asennuksessa tulee noudattaa kaikkia paikallisia säännöksiä.



Tässä manuaalissa oleva informaatio, joka koskee muutostöitä ja lisälaitteita, on tarkoitetu vain ammattitaitoisten asennus- ja huoltohenkilöiden käytöön.



SIKKERHETS INFORMASJON

Når ordene **ADVARSEL** (WARNING) og **VIKTIG** (CAUTION) blir brukt i manuelen og på produktet, gjelder det informasjon som har med brukerens sikkerhet å gjøre. Ordene har følgende mening:

ADVARSEL: Tilhørende informasjon viser til forhold som kan resultere i alvorlige skader eller ødeleggelser hvis anvisningene ikke følges nøy.

VIKTIG: (CAUTION) Tilhørende informasjon forteller deg hvordan du skal unngå feil på utstyret, eller unngå situasjoner som kan resultere i mindre skader.

Produkt merkingen og bruksanvisningen bruker internasjonale symboler for å merke punkter som er viktige for brukerens sikkerhet.



Lynet i en triangel advarer brukeren om uisolert "farlig spenning" inne i apparatet, eller tilkoblings terminaler som kan gi støt.



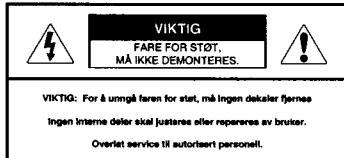
Etter utropstegetn i en triangel følger informasjon som er viktig når det gjelder installasjon, bruk og vedlikehold (service) av apparatet.

ADVARSEL: FOR Å REDUSERE FAREN FOR BRANN ELLER STØT MÅ APPARATET IKKE UTSETTES FOR VANN ELLER FUKTIGHET.

VIKTIG: (CAUTION) Installasjon av apparatet skal foretas av autorisert installatør etter gjeldende forskrifter.



Modifikasjoner og tilleggs informasjon som følger er kun for kvalifiserte installatører eller service personell.



ΠΛΗΡΟΦΟΡΙΕΣ ΑΣΦΑΛΕΙΑΣ

Οι λέξεις **ΚΙΝΑΥΝΟΣ** (WARNING) και **ΠΡΟΣΟΧΗ** (CAUTION) που αναφέρονται μέσα στο εγχειρίδιο και στη συσκευή, επικεντρώνονται την προσοχή σε σημαντικές πληροφορίες ασφαλείας. Οι λέξεις αυτές έχουν την παρακάτω σημασία.

ΚΙΝΑΥΝΟΣ: Η αναγραφόμενη πληροφορία επιστρέφει την προσοχή σας σε καταστάσεις, που θα μπορούσαν να έχουν σαν αποτέλεσμα σοβαρό τραυματισμό ή καταστροφή της ιδιοκτησίας, αν οι οδηγίες δεν ακολουθηθούν κατάλληλα.

ΠΡΟΣΟΧΗ: (CAUTION) Η αναγραφόμενη πληροφορία σας καθοδηγεί πώς να προλάβετε καταστροφή του εξοπλισμού ή πώς να αποφύγετε καταστάσεις που θα μπορούσαν να έχουν ως αποτέλεσμα μικροτραυματισμούς αν δεν ακολουθηθούν τα σωστά βήματα.

Στις επιγραφές των προτόντων και στο εγχειρίδιο λειτουργίας, χρησιμοποιούνται τα συδινήσια αναγνωρισμένα σύμβολα των οποίων ο σημασίας δινέται παρακάτω έστι σύντομα:



Η φωτεινή αναλαμπή με σύμβολο το βέλος, μέσα στο τρίγωνο, έχει σκοπό να επιστρέψει την προσοχή της χρήστη, στην ύπαρξη μη μονομένης «επικίνδυνής ισχύος ρεύματος» στο εσωτερικό της συσκευής ή στις άκρες σύνδεσης οι οποίες μπορεί να έχουν αρκετό μέγεθος ώστε να περιήχουν κίνδυνο ηλεκτροπληγμάτων.



Το επειγματικό σημείο, μέσα στο τρίγωνο, έχει σκοπό να επιστρέψει την προσοχή του χρήστη στις σημαντικές οδηγίες εγκατάστασης, λειτουργίας και συντήρησης (service) που περιέχονται στα φυλλάδια που συνοδεύουν την συσκευή.

ΚΙΝΑΥΝΟΣ: Για να αποφύγετε τον κίνδυνο φωτιάς ή ηλεκτροπληγμάς, μην εκθέτετε αυτή τη συσκευή σε βροχή ή σε γρούπα.

ΠΡΟΣΟΧΗ: (CAUTION) Η εγκατάσταση αυτής της συσκευής θα πρέπει να γίνει από εξειδικευμένο άτομο και θα πρέπει να προσθέτονται σε όλους τους εφαρμόσιμους τοπικούς κώδικες.

Οι τροποποιήσεις και οι προσθιακές πληροφορίες για τον εξοπλισμό, που αναφέρονται στο εγχειρίδιο, προορίζονται για χρήση μόνο από εξειδικευμένα στην εγκατάσταση και στο service, άτομα.



SÄKERHETS INFORMATION

Orden **WARNING** (WARNING) och **OBSERVERA** (CAUTION) vilka används i denna manual och på apparaten, är menade att uppmärksamma viktigt säkerhets information. Dessa ord har följande betydelse.

WARNING: (WARNING) Information som uppmärksammar på omedelbara faror som kan resultera i allvarlig personskada eller skada på egendom om instruktionerna ej följs.

OBSERVERA: (CAUTION) Information som uppmärksammar på instruktioner om hur skada på utrustning eller hur situationer där lättare personskador kan uppstå undvikas.

Följande internationellt använda ord och symboler används i handboken och på märkningar på produkten för att uppmärksamma användare på viktiga säkerhets instruktioner.



En blixт med pil, innesluten i en triangel, menad att uppmärksamma användare på närvaron av oisolerade "farliga spänningar" i apparaten eller på anslutnings kontakter vilka har tillräcklig styrka för att medföra risk för elektrisk stöt.



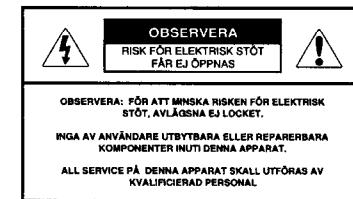
Et utropstecken, inneslutet i en triangel, menad att uppmärksamma användare på viktiga installations, handhavande eller underhålls-instruktioner i medföljande dokumentation.

WARNING: (WARNING) FÖR ATT MINSKA RISKEN FÖR BRAND ELLER ELEKTRISK STÖT, UTÅTT EJ APPARATEN FÖR FUKT ELLER VÄTSKA.

OBSERVERA: (CAUTION) Installation av denna apparat skall utföras av kvalificerad installatör samt enligt alla gällande lokala bestämmelser.



Eventuella modifierings instruktioner och annan information av teknisk art i denna manual är endast avsedda att användas av kvalificerad installations och service personal.



ΠΛΗΡΟΦΟΡΙΕΣ ΑΣΦΑΛΕΙΑΣ

Οι λέξεις **ΚΙΝΑΥΝΟΣ** (WARNING) και **ΠΡΟΣΟΧΗ** (CAUTION) που αναφέρονται μέσα στο εγχειρίδιο και στη συσκευή, επικεντρώνονται την προσοχή σε σημαντικές πληροφορίες ασφαλείας. Οι λέξεις αυτές έχουν την παρακάτω σημασία.

ΚΙΝΑΥΝΟΣ: Η αναγραφόμενη πληροφορία επιστρέφει την προσοχή σας σε καταστάσεις, που θα μπορούσαν να έχουν σαν αποτέλεσμα σοβαρό τραυματισμό ή καταστροφή της ιδιοκτησίας, αν οι οδηγίες δεν ακολουθηθούν κατάλληλα.

ΠΡΟΣΟΧΗ: (CAUTION) Η αναγραφόμενη πληροφορία σας καθοδηγεί πώς να προλάβετε καταστροφή του εξοπλισμού ή πώς να αποφύγετε καταστάσεις που θα μπορούσαν να έχουν ως αποτέλεσμα μικροτραυματισμούς αν δεν ακολουθηθούν τα σωστά βήματα.

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Η φωτεινή αναλαμπή με σύμβολο το βέλος, μέσα στο τρίγωνο, έχει σκοπό να επιστρέψει την προσοχή της χρήστη, στην ύπαρξη μη μονομένης «επικίνδυνής ισχύος ρεύματος» στο εσωτερικό της συσκευής ή στις άκρες σύνδεσης οι οποίες μπορεί να έχουν αρκετό μέγεθος ώστε να περιήχουν κίνδυνο ηλεκτροπληγμάτων.



Το επειγματικό σημείο, μέσα στο τρίγωνο, έχει σκοπό να επιστρέψει την προσοχή του χρήστη στις σημαντικές οδηγίες εγκατάστασης, λειτουργίας και συντήρησης (service) που περιέχονται στα φυλλάδια που συνοδεύουν την συσκευή.

ΚΙΝΑΥΝΟΣ: Για να αποφύγετε τον κίνδυνο φωτιάς ή ηλεκτροπληγμάς, μην εκθέτετε αυτή τη συσκευή σε βροχή ή σε γρούπα.

ΠΡΟΣΟΧΗ: (CAUTION) Η εγκατάσταση αυτής της συσκευής θα πρέπει να γίνει από εξειδικευμένο άτομο και θα πρέπει να προσθέτονται σε όλους τους εφαρμόσιμους τοπικούς κώδικες.

Οι τροποποιήσεις και οι προσθιακές πληροφορίες για τον εξοπλισμό, που αναφέρονται στο εγχειρίδιο, προορίζονται για χρήση μόνο από εξειδικευμένα στην εγκατάσταση και στο service, άτομα.

As palavras **ADVERTÊNCIA** (WARNING) e **PRECAUÇÃO** (CAUTION) neste manual, e no dispositivo, alertam para importantes informações sobre segurança. Estas palavras significam o seguinte:

ADVERTÊNCIA : Informação relacionada que alerta sobre condições que poderão resultar em lesões sérias ou prejuízo, se as instruções não forem seguidas adequadamente.

PRECAUÇÃO : Informação relacionada que instrui como prevenir danos no equipamento ou como evitar condições que poderão resultar em lesões leves, se os passos não forem seguidos adequadamente.

As etiquetas do produto e do manual de operações podem usar os símbolos internacionalmente reconhecidos definidos abaixo para advertir mensagens de segurança.



simbolo do relâmpago com uma seta, dentro de um triângulo, tem o fim de alertar o usuário a presença de "voltage perigoso" sem isolamento dentro da caixa isolamento do aparelho ou nos terminais de ligação que podem ter a magnitude suficiente que constitui um risco de choque elétrico.

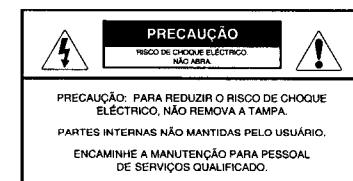


ponto de exclamação, dentro de um triângulo, tem o fim de alertar o usuário sobre instruções importantes de instalação, operação e manutenção (serviços) na literatura que acompanha o aparelho.

ADVERTÊNCIA : PARA REDUZIR O RISCO DE INCÊNDIO OU CHOQUE ELÉCTRICO, NÃO EXPOUNHA ESTE APARELHO A CHUVA OU HUMIDADE.

PRECAUÇÃO : A instalação deste aparelho deve ser feita por um profissional qualificado e deve obedecer a todos os códigos locais aplicáveis.

Modificação e informação sobre equipamento adicional citados neste manual são para o uso exclusivo do pessoal qualificado de instalação e manutenção.



有害物质表

Biamp Systems
801、601 与 301 型混音器

部件名称	有毒有害物质或元素					
	Pb (铅)	Hg (汞)	Cd (镉)	Cr+6 (六价 铬)	PBB	PBDE
801/601/301 设备	X	O	X	O	O	O
电源变压器	X	O	X	O	O	O
可插拔 Euroblock 连接器	O	O	O	O	O	O
手册和其他书面文档	O	O	O	O	O	O
包装箱和所有包装材料	O	O	O	O	O	O

O: 表示该部件所有均质材料中的这种有毒有害物质低于 SJ/T11363-2006 的限制要求

X: 表示该部件中至少有一种均质材料所含的这种有毒有害物质高于 SJ/T11363-2006 的限制要求。

除限制销售和使用某些危险物质和制剂的欧盟指令 76/769/EEC 的修正指令-欧盟指令 91/338/EEC 所禁止的用途外，在电触头和（或）镀镉所含的均质材料中，镉及其化合物的含量或许超过 0.01%。

在以下一种或多种物质所含的均质材料中，铅及其化合物的含量或许超过 0.1%：

- 1) 电子元器件中玻璃内。
- 2) 铅作为合金元素的钢材中，铅含量可高达 0.35%。
- 3) 铅作为合金元素的铝材中，铅含量可高达 0.4%。
- 4) 铅作为合金元素的铜材中，铅含量可高达 4%。
- 5) 高熔点类焊料（即含铅量 85%以上的铅基焊料）中。
- 6) 电子陶瓷部件内。
- 7) 由两种以上元素组成、用于连接管脚和微处理器封装、铅含量超过 80%但低于 85%的焊料中。
- 8) 兼容性管脚连接器系统中。
- 9) 倒装芯片封装内半导体芯片及载体之间完成可靠电子连接的焊料中。

在正常使用情况下，中国环保使用期限为 10 年，条件是：



- 环境温度为 0-40°C (32-104°F)
- 湿度为 0-95%，无凝结
- 海拔高度为 0-10,000 英尺
- 空气流通
- 没有水或其他液体进入任何部件
- 电源为 95-265V AC, 50/60Hz
- 部件没有损坏（损坏部件应立即修理）
- 由工厂授权人员使用批准的材料进行所有维修



EU RoHS COMPLIANT

This Biamp product -- including all attendant cables and accessories supplied by Biamp -- meets all requirements of EU Directives 2002/95/EC of January 27, 2003, and 2005/618/EC of August 18, 2005, the EU RoHS Directives. An EU RoHS Materials Content Declaration document may be obtained at <http://www.biamp.com>