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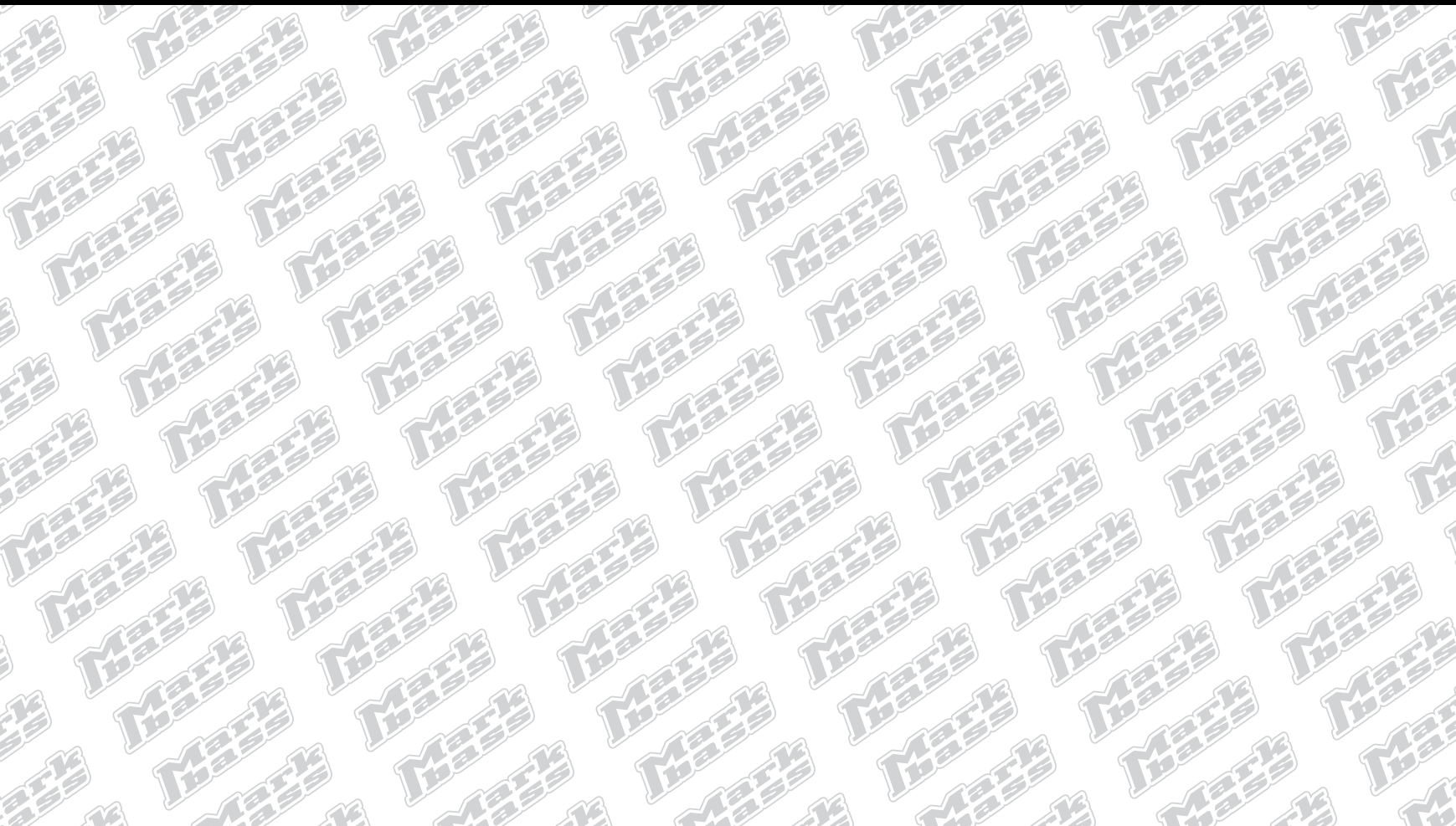
Mark bass

BASS at its **BEST**

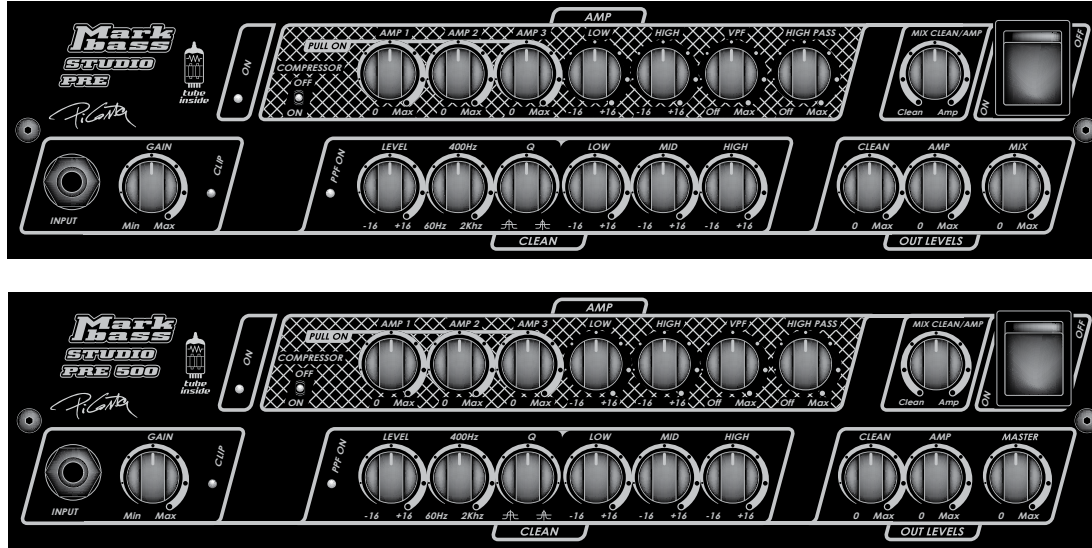
www.markbass.it

OWNER'S MANUAL

STUDIO PRE ~ STUDIO PRE 500



STUDIO PRE & STUDIO PRE 500 OWNER'S MANUAL



1. INTRODUCTION

Congratulations on purchasing one of the world's best bass amplifiers! Markbass amps are built to the highest standards by a small team of skilled technicians in San Giovanni Teatino, Italy. We have spent many years researching not only the highest-quality technologies for bass amp design and construction, but also the practical needs of the working bassist. The end result is a product that combines outstanding sound quality with intuitive features, attractive design and extreme reliability—all in one impossibly lightweight unit. This amp will allow your instrument to speak in its natural voice, faithfully conveying your musical ideas to your audience with stunning clarity.

Your amplifier has passed rigorous product testing and should survive even the toughest of environments on the road, in clubs, recording studios, rehearsal halls and concert stages.

Nonetheless, please treat it with care and you will be rewarded with many, many years of glorious, rich, powerful bass tone!

If the clarity and power of this amp inspire you to play better music, we will have succeeded in our mission. Good luck and enjoy your new best friend!

Sincerely, Markbass

1.1 A WORD FROM MARCO DE VIRGILIIS

When I began to develop the Markbass concept in Italy several years ago I had one objective in mind: to produce a top-quality bass amp that would meet the needs of professional bass players everywhere. I wanted my amps to be compact and lightweight, yet able to handle the low frequencies that today's four, five and six string passive and active basses are capable of producing. Thanks to modern technology and the availability of high-quality components like low-profile toroidal transformers, neodymium speakers and so on, I was able to accomplish this.

The Markbass amplifier circuitry is designed specifically not to color the sound of the bass but to faithfully reproduce the unique tonal qualities of whatever instrument is played through it. I have worked very closely with many high-profile professional bass players around the world to fine-tune the Markbass product line.

I am confident that the Markbass line of amps and cabinets is now ready to satisfy the needs of bass players all over the world.

Thanks for choosing Markbass; I hope you will find your new amp to be an inspiring upgrade to your sound!

We encourage you to use your Markbass gear in all kinds of musical situations-and please help us to continue developing our products by sending your comments to info@markbass.it.

And above all, enjoy the music.

Marco De Virgiliis



MARKBASS - ITALY

www.markbass.it



2. IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions;
- 2) Keep these instructions;
- 3) Heed all warnings;
- 4) Follow all instructions;
- 5) Do not use this apparatus near water;
- 6) Clean only with dry cloth;
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions;
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat;
- 9) Do not defeat the safety purpose of the polarized or ground-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet;
- 10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus;
- 11) Only use attachments/accessories specified by the manufacturer;
- 12) Unplug this apparatus during lightning storms or when unused for long periods of time;
- 13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or when the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped;
- 14) "Warning: to reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture; and objects filled with liquids, such as vases, should not be placed on this apparatus";
- 15) The socket outlet shall be installed near the equipment and shall be easily accessible;
- 16) The power cord must be unplugged prior to servicing.

2. PRÉCAUTIONS D'EMPLOI

- 1) Lire ces instructions;
- 2) Conserver ces instructions;
- 3) Suivre tous les conseils d'utilisations;
- 4) Suivre toutes les instructions;
- 5) Ne pas utiliser cet appareil au bord de l'eau;
- 6) Nettoyer uniquement avec un chiffon humide;
- 7) Ne pas bloquer le système de ventilation. Installer conformément aux instructions du fabricant;
- 8) Ne pas installer l'appareil près d'une source de chaleur tel qu'un radiateur, un fourneau, ou bien un autre appareil qui produit de la chaleur;
- 9) Ne pas modifier le système de sécurité de la fiche polarisée ou de la fiche pour les prises de terre. Une fiche polarisée a deux broches, l'une étant plus distante de l'autre. Une fiche pour prise de terre a deux broches et une pointe pour la masse. La broche plus distante et la pointe pour la masse ont été installées pour votre sécurité. Si la fiche fournie ne rentre pas dans votre prise de courant consulter un électricien pour la substitution;
- 10) Protéger le cordon d'alimentation afin qu'il ne soit pas piétiné ou écrasé tout particulièrement au niveau des fiches, des prises de courant femelles, et des parties qui sortent de l'appareil;
- 11) Utiliser uniquement les accessoires recommandés par le fabricant;
- 12) Ne pas brancher l'appareil en cas d'orage accompagné d'éclairs. Le débrancher en cas de non utilisation prolongée;
- 13) S'adresser à un service assistance agréé si l'appareil a subi des dommages, si le cordon d'alimentation ou la fiche a été endommagé, si un liquide a été renversé sur l'appareil ou bien si un objet est tombé dans l'appareil, si ce dernier a été exposé à la pluie ou à l'humidité, s'il ne fonctionne pas correctement ou s'il est tombé;
- 14) "Avertissement: pour réduire le risque de feu ou de décharge électrique, n'exposez pas cet appareil à la pluie ou l'humidité et les objets remplis de liquides; tels que des vases, ne devraient pas être placés sur cet appareil";
- 15) La prise de courant doit être installée près de l'appareil et doit être facilement accessible;
- 16) La fiche principale doit être débranchée avant toute opération d'entretien.

MORE INFORMATION

For warranty and service information, please contact your local Markbass distributor (contact information available at www.markbass.it). For more technical information, please visit us at www.markbass.it and fill out the form on the Contact Us page. We hope you enjoy your amp and use it to make great music!



"The Lightning Flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product enclosure that may be of sufficient magnitude to constitute a risk of shock to persons."



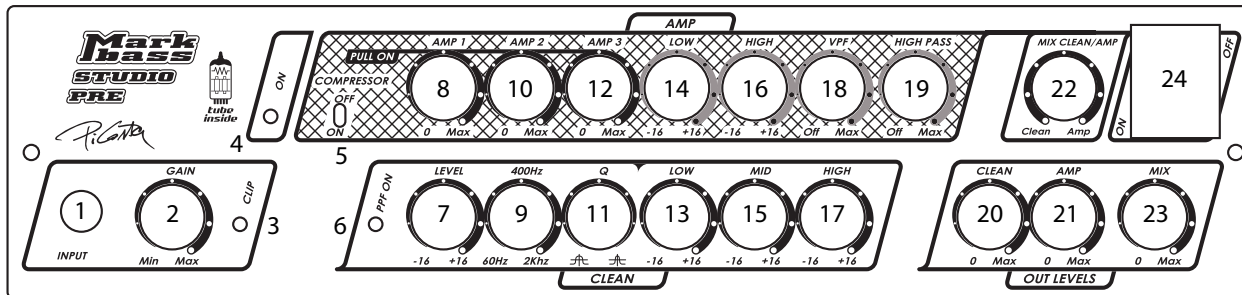
"The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product."



3. STUDIO PRE PRODUCT OVERVIEW

The Markbass STUDIO PRE is a high-end, dual-channel preamp for bass, with both a solid-state preamp and a tube preamp.

3.1 STUDIO PRE FRONT PANEL



INPUT

The input jack (1) accepts an unbalanced signal from your bass via a standard 1/4" instrument cable.

CLEAN CHANNEL

GAIN

The GAIN (2) control determines how much signal is passed through the clean section of the preamp. If playing through the amp causes the red CLIP (3) light to turn on at all, you should turn down the GAIN (2) control to avoid distortion.

PURE PARAMETRIC FILTER

The PURE PARAMETRIC FILTER (7, 9, 11) is a true parametric EQ control that allows you to cut or boost a frequency of your choice between 60 Hz and 2 kHz, to accurately tweak your sound to perfection.

The LEVEL (7) knob boosts or cuts the frequency of your choice by up to 16 decibels.

The FREQ (9) knob determines the center frequency of the range to be controlled.

The Q (11) knob controls the range or width of frequency controlled from 0.5 to 8.

EQUALIZATION

Markbass gear is designed to faithfully reproduce the natural sound of your bass. If you have a good instrument, very little equalization (EQ)—if any—should be required. Bass guitars produces a surprisingly wide range of frequencies—from extremely low frequencies that are more felt than heard, to extremely high frequencies that pass through your cabinet's tweeter and are barely audible to the human ear.

As you experiment with your EQ settings, you will notice that all the different frequency ranges play essential roles in making up your bass tone:

LOW frequencies constitute music's sonic foundation—they give power to your sound, physically resonating your listeners' bodies (and yours!), sometimes even causing people to move and dance! MIDs make your bass sound loud, projecting the sound over long distances, "filling the room," and they convey the pitch of the notes that you play. Clarity of this range ensures that the melodies in your bass lines are heard. If detail is missing in this range, your melodic contribution to the music will suffer.

HIGH frequencies carry the percussive content of your playing—the attack of your notes, the sound of your finger or pick passing over the string, fret noise, and in the case of slap bass, the "tick" noise produced when the strings bounce off the frets.

If any one of these frequency ranges is neglected or poorly represented by your amp, you are not hearing an accurate representation of the sound that your bass is generating.

Since the STUDIO PRE has been designed to give you clear, detailed and musical sound at all frequencies, when the amp is set "flat"—with all EQ knobs at 12 o'clock—you should hear a very true mirror of the sound of your bass.

However, the following circumstances will require you to use equalization:

1. The signal from your bass is lacking output level in one of the frequency ranges described above;
2. The musical context of your recording dictates that the sound of your bass be altered to better suit the style of music or the song, or to blend better with the other sounds on the recording;
3. In live applications, if the room or venue you're playing in has poor acoustics and excites a certain frequency. For example, if you're playing on a hollow stage, certain low frequencies may sound disproportionately loud or out-of-control, and you may notice that every time you play a certain note, it sounds much louder than all the others. In these cases the offending frequency needs to be identified and reduced.

Equalization should be treated as fine-tuning. Spend some time listening to your bass through the amp with all the EQ controls in the neutral (12 o'clock) position before you start changing the settings. You're likely to need little or no equalization!

However, if and when equalization is required, you will find this amp's EQ to be powerful and impressively detailed.

In addition to the PURE PARAMETRIC FILTER EQ, the STUDIO PRE CLEAN SECTION features three bands of EQ:

The LOW EQ control (13) is set to a center frequency of 100 Hz. This means that it either boosts or cuts the volume of the frequencies around 100 Hz, to a maximum of 16 decibels.

The MID EQ control (15) boosts or cuts the frequencies around 800 Hz, by as much as 16 decibels.

The HIGH EQ control (17) boosts or cuts the frequencies around 4 kHz, by as much as 16 decibels.

CLEAN OUT LEVEL

Turning the CLEAN OUT LEVEL (20) control adjusts the level of signal coming from the balanced CLEAN XLR OUT (27).

AMP CHANNEL

COMPRESSOR

The COMPRESSOR (5) switch engages a simple but professional compressor circuit, optimized for bass guitar, which allows you to control the dynamics of your sound. This is especially helpful when using distorted sounds.

AMP 1, AMP 2, AMP 3

The AMP CHANNEL runs your signal in parallel through three signal paths (two tube-driven and one solid state) that can be engaged in whichever combination you want. The AMP 1 (8) signal passes through two ECC83S tubes for heavy tube distortion. The AMP 2 (10) signal passes through one ECC83S tube for a softer tube distortion. The AMP 3 (12) signal passes through a FET to create solid state distortion. Simply turn on the channel(s) you want by pulling the knob(s) out, and adjust the level(s) to taste. Turn any distortion channel off by pressing in its knob.

EQUALIZATION

The STUDIO PRE AMP CHANNEL features two bands of EQ:

The LOW EQ control (14) is set to a center frequency of 100 Hz. This means that it either boosts or cuts the volume of the frequencies around 100 Hz, to a maximum of 16 decibels.

The HIGH EQ (16) control boosts or cuts the frequencies around 4 kHz, by as much as 16 decibels.

VPF FILTER

The VPF (18) (Variable Pre-shape Filter) boosts lows (around 35 Hz) and highs (around 10 kHz), and cuts mids at 380 Hz. This filter sounds great for rock music and is also a favorite of many slap players. At higher volumes, turning the VPF up high will result in more output limiting due to the increase in low frequencies.

HIGH PASS FILTER

The HIGH PASS FILTER (19) cuts low frequencies from your signal, passing only high frequencies. This creates a clearer signal when using distortion, because distorting bass frequencies can create a very muddy sound!

As you turn this knob up, a wider and wider range of low frequencies gets cut.

AMP OUT LEVEL

The AMP OUT LEVEL (21) control adjusts the level of signal that comes from the balanced AMP XLR OUT (26).

MIX

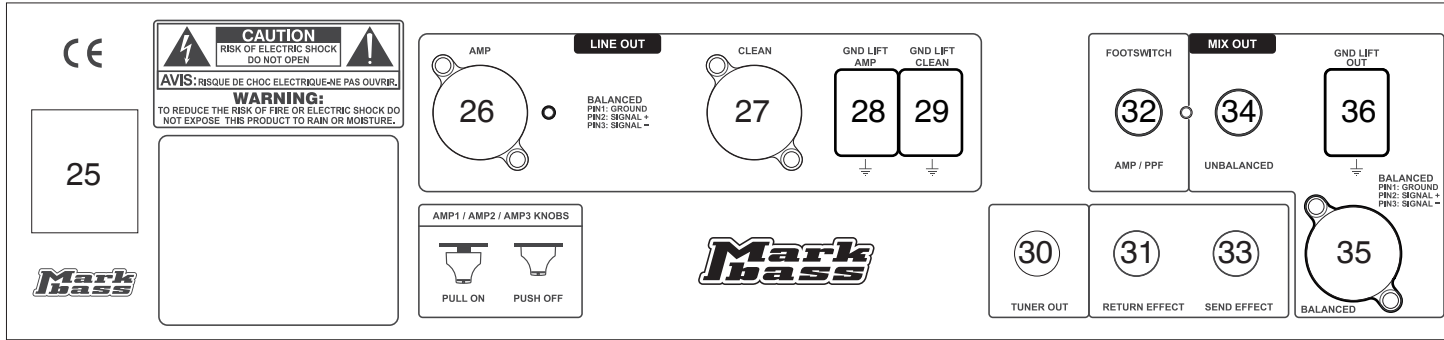
MIX CLEAN/AMP

The MIX CLEAN/AMP control determines the balance between the CLEAN CHANNEL and AMP CHANNEL signals that are sent to the MIX OUT outputs (34, 35).

MIX OUT LEVEL

The MIX OUT LEVEL (23) controls the level of signal sent out of the balanced MIX XLR OUT (35) and the unbalanced MIX OUT (34).

3.2 STUDIO PRE REAR PANEL



AMP CHANNEL OUT

This balanced XLR (26) output allows you to send the AMP CHANNEL directly to a mixing console (either in recording or live situations) or soundcard (with XLR inputs) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard XLR input. If the engineer needs more or less signal from the AMP SECTION, simply turn the front panel AMP OUT LEVEL (21) control up or down as necessary.

CLEAN CHANNEL OUT

This balanced XLR (27) output allows you to send the CLEAN CHANNEL directly to a mixing console (either in recording or live situations) or soundcard (with XLR inputs) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard XLR input. If the engineer needs more or less signal from the CLEAN SECTION, simply turn the front panel CLEAN OUT LEVEL (20) control up or down as necessary.

GROUND LIFT AMP

Occasionally when using the AMP LINE OUT (26), the engineer will detect a hum from your signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT AMP (28) switch.

GROUND LIFT CLEAN

Occasionally when using the CLEAN LINE OUT (21), the engineer will detect a hum from your signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT CLEAN (29) switch.

TUNER OUT

The TUNER OUT (30) is an unbalanced signal that can be sent to a tuner, allowing you to tune as you play without passing your signal through pedals, which can degrade the quality of your signal.

EFFECT SEND AND RETURN

If you use effect pedals or rack gear, you can route them through the SEND EFFECT (33) and RETURN EFFECT (31) jacks on the rear panel of the amp. The effects loop is wired in parallel with the CLEAN CHANNEL—this means that if something happens to your effects chain (a battery dies or a cable gives out, for example) while you're playing, you will not lose your main signal.

FOOTSWITCH

The STUDIO PRE's optional footswitch has two on/off switches. One bypasses the AMP CHANNEL, removing any distortion you have added to your signal, as well as any equalization and filtering dialed on this channel. The other switches the PURE PARAMETRIC FILTER in the CLEAN CHANNEL on and off. Red LED (6) on the front panel illuminate when the footswitch (PPF) is activated.

MIX LINE OUT

The balanced XLR (35) output allows you to send the blend of the CLEAN and AMP channels directly to a mixing console (either in live or studio situations) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard with XLR inputs. If the engineer needs more or less signal from the MIX SECTION, simply turn the front panel MIX OUT LEVEL (23) control up or down as necessary.

The unbalanced 1/4" jack (34) output allows you to connect the preamp to an amplifier, soundcard or any recording hardware that accepts unbalanced signals.

GROUND LIFT OUT

Occasionally when using the MIX LINE OUT (26), the engineer will detect a hum from your amp's signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT OUT (36) switch.

4. STUDIO PRE TECHNICAL DETAILS

INPUT	impedance: 500 Kohms, max. voltage: 10Vpp
CLEAN CHANNEL	
GAIN section	TUBE: 1x ECC83S gain: 50dB
SEND/RETURN section	return impedance: 50 Kohms send output impedance: 1 Kohm effect loop type: parallel
Pure Parametric Filter section	frequency range: 60 Hz - 2 KHz level: +/- 16dB Q: 0.5 - 8 bypass option: footswitch-controlled
Equalizer section	filter frequency: 100 Hz (Low), 800 Hz (Mid), 4 KHz (High) level: +/- 16dB

AMP CHANNELS

AMP1	TUBE: 2x ECC83S
AMP2	TUBE: 1x ECC83S
AMP3	SOLID STATE
COMPRESSOR	switch on front panel
Equalizer section	filter center frequency: 100 Hz (Low), 4 KHz (High) level: +/- 16dB
VPF (Variable Pre-shape Filter)	center frequency 380 Hz (cut)
High Pass Filter	frequency range: 20 Hz - 1 KHz level: -3dB

OUTPUTS

AMP LINE OUT	balanced XLR, max. voltage 10 Vpp
CLEAN LINE OUT	balanced XLR, max. voltage 10 Vpp
MIX LINE OUT	balanced XLR, max. voltage 10 Vpp unbalanced 1/4" jack, max voltage 2.5 Vpp
TUNER OUT	unbalanced 1/4" jack, max voltage 2.5 Vpp
FOOTSWITCH	AMP channel (on/off) / Pure Parametric Filter (on/off)

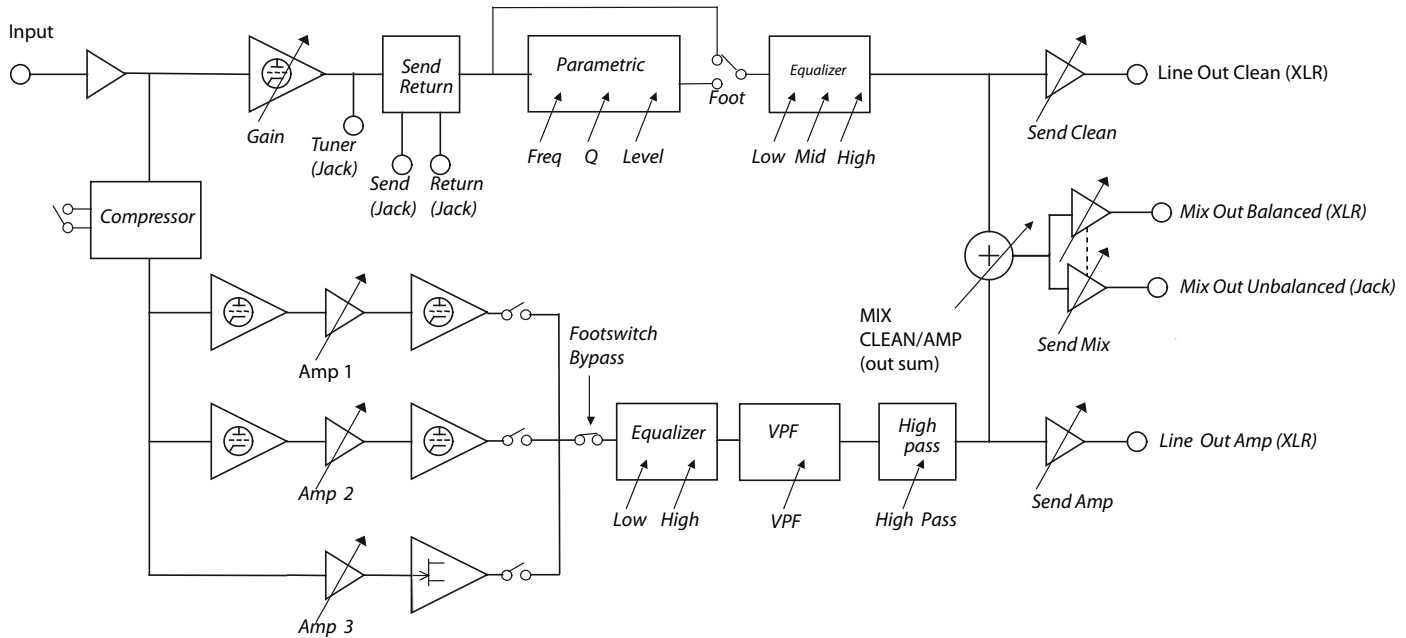
OTHER

HEIGHT	2 rack units (3.36 in. / 86 mm)
WIDTH	14.21 in. / 36.8 cm (19 in. / 48.3 cm with rack ears)
DEPTH	11.89 in. / 30.2 cm
WEIGHT	5.85 lbs / 2.7 kg
POWER CONSUMPTION	60W
POWER REQUIREMENT	100V/120V; 230V; 240V 50/60 Hz (Voltage in factory preset according to the region of sale)

FUSE

EUROPE	3.15 A 250V T 5x20
AUSTRALIA/UK	3.15 A 250V T 5x20
USA/CANADA	3.15 A 250V T 5x20
JAPAN	3.15 A 250V T 5x20

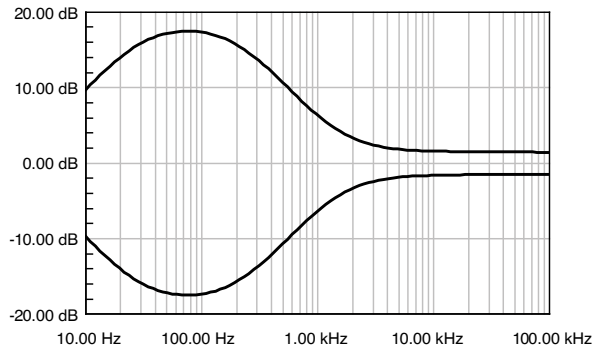
5. STUDIO PRE SCHEMATICS



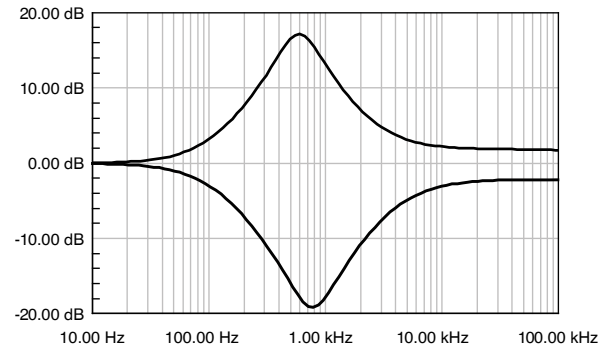
SCHEMATICS - STUDIO PRE

6. STUDIO PRE FILTER AND EQ GRAPHS

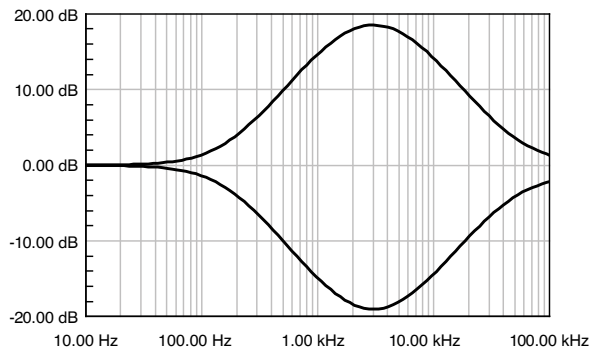
LOW



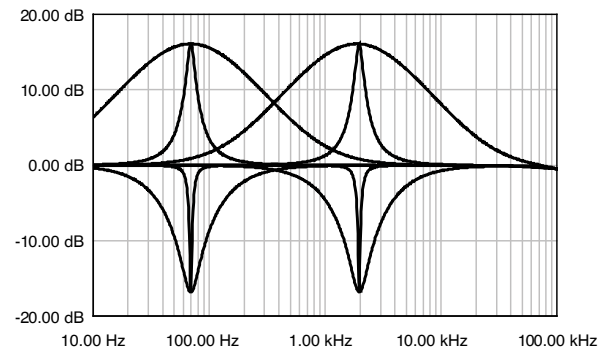
MID



HIGH



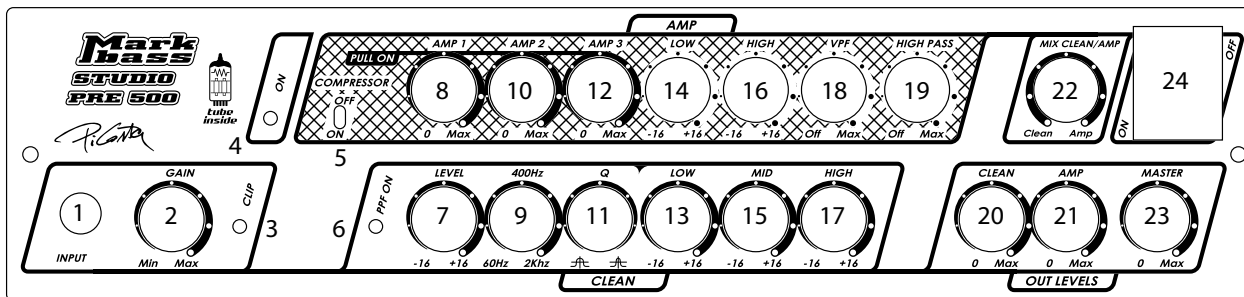
PPF



7. STUDIO PRE 500 PRODUCT OVERVIEW

The Markbass STUDIO PRE 500 is a high-end, dual-channel amplifier for bass, with both a solid-state preamp and a tube preamp, and with an analog power amp.

7.1 STUDIO PRE 500 FRONT PANEL



INPUT

The input jack (1) accepts an unbalanced signal from your bass via a standard 1/4" instrument cable.

CLEAN CHANNEL

GAIN

The GAIN (2) control determines how much signal is passed through the clean section of the preamp. If playing through the amp causes the red CLIP (3) light to turn on at all, you should turn down the GAIN (2) control to avoid distortion.

PURE PARAMETRIC FILTER

The PURE PARAMETRIC FILTER (7, 9, 11) is a true parametric EQ control that allows you to cut or boost a frequency of your choice between 60 Hz and 2 kHz, to accurately tweak your sound to perfection.

The LEVEL (7) knob boosts or cuts the frequency of your choice by up to 16 decibels.

The FREQ (9) knob determines the center frequency of the range to be controlled.

The Q (11) knob controls the range or width of frequency controlled from 0.5 to 8.

EQUALIZATION

Markbass gear is designed to faithfully reproduce the natural sound of your bass. If you have a good instrument, very little equalization (EQ)—if any—should be required. Bass guitars produces a surprisingly wide range of frequencies—from extremely low frequencies that are more felt than heard, to extremely high frequencies that pass through your cabinet's tweeter and are barely audible to the human ear.

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LOW frequencies constitute music's sonic foundation—they give power to your sound, physically resonating your listeners' bodies (and yours!), sometimes even causing people to move and dance! MIDs make your bass sound loud, projecting the sound over long distances, "filling the room," and they convey the pitch of the notes that you play. Clarity of this range ensures that the melodies in your bass lines are heard. If detail is missing in this range, your melodic contribution to the music will suffer. HIGH frequencies carry the percussive content of your playing—the attack of your notes, the sound of your finger or pick passing over the string, fret noise, and in the case of slap bass, the "tick" noise produced when the strings bounce off the frets.

If any one of these frequency ranges is neglected or poorly represented by your amp, you are not hearing an accurate representation of the sound that your bass is generating.

Since the STUDIO PRE has been designed to give you clear, detailed and musical sound at all frequencies, when the amp is set "flat"—with all EQ knobs at 12 o'clock—you should hear a very true mirror of the sound of your bass.

However, the following circumstances will require you to use equalization:

1. The signal from your bass is lacking output level in one of the frequency ranges described above;
2. The musical context of your recording dictates that the sound of your bass be altered to better suit the style of music or the song, or to blend better with the other sounds on the recording;
3. In live applications, if the room or venue you're playing in has poor acoustics and excites a certain frequency. For example, if you're playing on a hollow stage, certain low frequencies may sound disproportionately loud or out-of-control, and you may notice that every time you play a certain note, it sounds much louder than all the others. In these cases the offending frequency needs to be identified and reduced.

Equalization should be treated as fine-tuning. Spend some time listening to your bass through the amp with all the EQ controls in the neutral (12 o'clock) position before you start changing the settings. You're likely to need little or no equalization!

However, if and when equalization is required, you will find this amp's EQ to be powerful and impressively detailed.

In addition to the PURE PARAMETRIC FILTER EQ, the STUDIO PRE CLEAN SECTION features three bands of EQ:

The LOW EQ control (13) is set to a center frequency of 100 Hz. This means that it either boosts or cuts the volume of the frequencies around 100 Hz, to a maximum of 16 decibels.

The MID EQ control (15) boosts or cuts the frequencies around 800 Hz, by as much as 16 decibels.

The HIGH EQ control (17) boosts or cuts the frequencies around 4 kHz, by as much as 16 decibels.

CLEAN OUT LEVEL

Turning the CLEAN OUT LEVEL (20) control adjusts the level of signal coming from the balanced CLEAN XLR OUT (28).

AMP CHANNEL

COMPRESSOR

The COMPRESSOR (5) switch engages a simple but professional compressor circuit, optimized for bass guitar, which allows you to control the dynamics of your sound. This is especially helpful when using distorted sounds. It can be switched on and off in real time.

AMP 1, AMP 2, AMP 3

The AMP CHANNEL runs your signal in parallel through three signal paths (two tube-driven and one solid state) that can be engaged in whichever combination you want. The AMP 1 (8) signal passes through two ECC83S tubes for heavy tube distortion. The AMP 2 (10) signal passes through one ECC83S tube for a softer tube distortion. The AMP 3 (12) signal passes through a FET to create solid state distortion. Simply turn on the channel(s) you want by pulling the knob(s) out, and adjust the level(s) to taste. Turn any distortion channel off by pressing in its knob.

EQUALIZATION

The STUDIO PRE AMP CHANNEL features two bands of EQ:

The LOW EQ control (14) is set to a center frequency of 100 Hz. This means that it either boosts or cuts the volume of the frequencies around 100 Hz, to a maximum of 16 decibels.

The HIGH EQ (16) control boosts or cuts the frequencies around 4 kHz, by as much as 16 decibels.

VPF FILTER

The VPF (18) (Variable Pre-shape Filter) boosts lows (around 35 Hz) and highs (around 10 kHz), and cuts mids at 380 Hz. This filter sounds great for rock music and is also a favorite of many slap players. At higher volumes, turning the VPF up high will result in more output limiting due to the increase in low frequencies.

HIGH PASS FILTER

The HIGH PASS FILTER (19) cuts low frequencies from your signal, passing only high frequencies. This creates a clearer signal when using distortion, because distorting bass frequencies can create a very muddy sound! As you turn this knob up, a wider and wider range of low frequencies gets cut.

AMP OUT LEVEL

The AMP OUT LEVEL (21) control adjusts the level of signal that comes from the balanced AMP XLR OUT (26).

MIX / MASTER

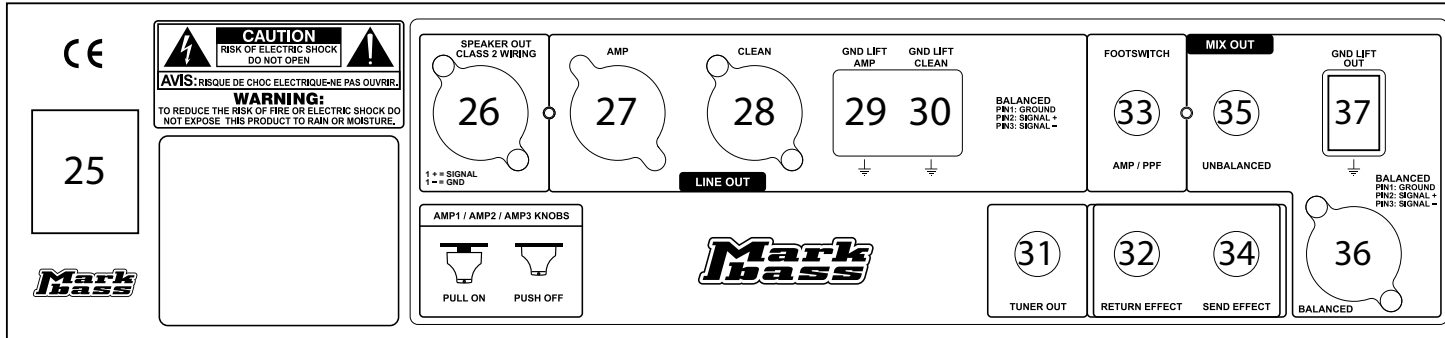
MIX CLEAN/AMP

The MIX CLEAN/AMP control determines the balance between the CLEAN CHANNEL and AMP CHANNEL signals that are sent to the MIX OUT outputs (35, 36) and to the SPEAKER OUT (26).

MASTER LEVEL

The MASTER (23) controls the level of signal sent out of the SPEAKER OUT (26).

7.2 STUDIO PRE 500 REAR PANEL



SPEAKER OUT

The STUDIO PRE 500 can be connected to a speaker cabinets using either 1/4" speaker cables (do not use instrument cables) or speakon speaker cables. When using two cabinets, simply connect the second cabinet to the first cabinet. The high-quality Neutrik SPEAKON COMBO jack (26) is designed to accept either of these connection types. The STUDIO PRE 500 delivers 300W of power into an 8 ohm cabinet, or 500W into a 4 ohm cabinet (or two 8 ohm cabinets).

AMP CHANNEL OUT

This balanced XLR (27) output allows you to send the AMP CHANNEL directly to a mixing console (either in recording or live situations) or soundcard (with XLR inputs) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard XLR input. If the engineer needs more or less signal from the AMP SECTION, simply turn the front panel AMP OUT LEVEL (21) control up or down as necessary.

CLEAN CHANNEL OUT

This balanced XLR (28) output allows you to send the CLEAN CHANNEL directly to a mixing console (either in recording or live situations) or soundcard (with XLR inputs) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard XLR input. If the engineer needs more or less signal from the CLEAN SECTION, simply turn the front panel CLEAN OUT LEVEL (20) control up or down as necessary.

GROUND LIFT AMP

Occasionally when using the AMP LINE OUT (27), the engineer will detect a hum from your signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT AMP (29) switch.

GROUND LIFT CLEAN

Occasionally when using the CLEAN LINE OUT (28), the engineer will detect a hum from your signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT CLEAN (30) switch.

TUNER OUT

The TUNER OUT (31) is an unbalanced signal that can be sent to a tuner, allowing you to tune as you play without passing your signal through pedals, which can degrade the quality of your signal.

EFFECT SEND AND RETURN

If you use effect pedals or rack gear, you can route them through the SEND EFFECT (32) and RETURN EFFECT (34) jacks on the rear panel of the amp. The effects loop is wired in parallel with the CLEAN CHANNEL—this means that if something happens to your effects chain (a battery dies or a cable gives out, for example) while you're playing, you will not lose your main signal.

FOOTSWITCH

The STUDIO PRE's optional footswitch has two on/off switches. One bypasses the AMP CHANNEL, removing any distortion you have added to your signal, as well as any equalization and filtering dialed on this channel. The other switches the PURE PARAMETRIC FILTER in the CLEAN CHANNEL on and off. Red LED (6) on the front panel illuminate when the footswitch (PPF) is activated.

MIX LINE OUT

The balanced XLR (36) output allows you to send the blend of the CLEAN and AMP channels directly to a mixing console (either in live or studio situations) without the need of a DI box. Simply connect a standard XLR cable from this output to the soundboard/mixing console, or a snake connected to the board/console, or a soundcard with XLR inputs.

The unbalanced 1/4" jack (35) output allows you to connect the preamp to an amplifier, soundcard or any recording hardware that accepts unbalanced signals.

These two OUTS have a fixed level that depends only from the GAIN level.

GROUND LIFT OUT

Occasionally when using the MIX LINE OUT (36), the engineer will detect a hum from your amp's signal. This is almost always due to a grounding problem related to your power source; you will likely eliminate this hum simply by flipping the GROUND LIFT OUT (37) switch.

8 STUDIO PRE 500 TECHNICAL DETAILS

INPUT	impedance: 500 Kohms, max. voltage: 10Vpp
CLEAN CHANNEL	
GAIN section	TUBE: 1xECC83S gain: 50dB
SEND/RETURN section	return impedance: 50 Kohms send output impedance: 1 Kohms effect loop type: parallel
Pure Parametric Filter section	frequency range: 60 Hz - 2 KHz level: +/- 16dB Q: 0.5 - 8 bypass option: footswitch-controlled
Equalizer section	filter frequency: 100 Hz (Low), 800 Hz (Mid), 4 KHz (High) level: +/-16dB

AMP CHANNELS

AMP1	TUBE: 2x ECC83S
AMP2	TUBE: 1x ECC83S
AMP3	SOLID STATE
COMPRESSOR	switch on front panel
Equalizer section	filter center frequency: 100 Hz (Low), 4 KHz (High) level: +/-16dB
VPF (Variable Pre-shape Filter)	center frequency 380 Hz (cut)
High Pass Filter	frequency range: 20 Hz - 1 KHz level: -3dB

OUTPUTS

AMP LINE OUT	balanced XLR, max. voltage 10 Vpp
CLEAN LINE OUT	balanced XLR, max. voltage 10 Vpp
MIX LINE OUT	balanced XLR, max. voltage 10 Vpp unbalanced 1/4" jack, max voltage 2.5 Vpp
TUNER OUT	unbalanced 1/4" jack, max voltage 2.5 Vpp
FOOTSWITCH	AMP channel (on/off) / Pure Parametric Filter (on/off)

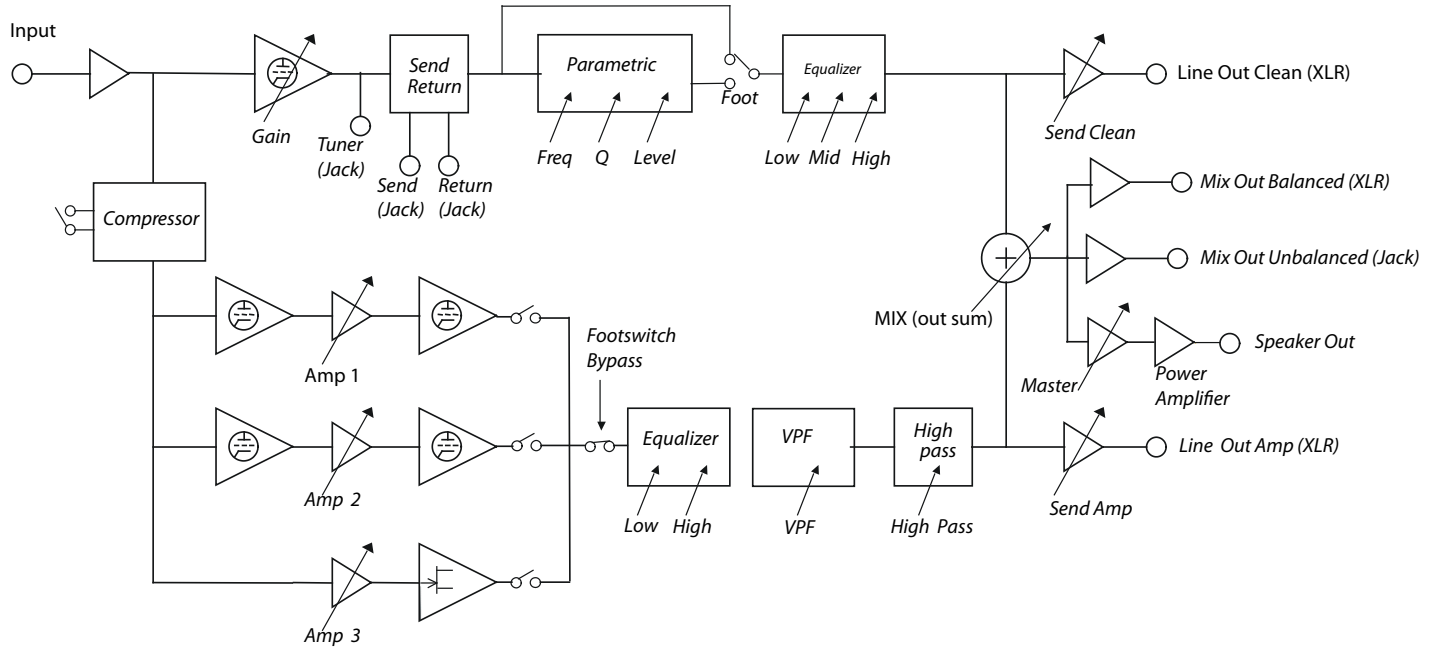
OTHER

HEIGHT	2 rack units (3.36 in. / 86 mm)
WIDTH	14.21 in. / 36.8 cm (19 in. / 48.3 cm with rack ears)
DEPTH	11.89 in. / 30.2 cm
WEIGHT	5.85 lbs / 2.7 kg
OUTPUT POWER	300W RMS @ 8 ohm, 500W RMS @ 4 ohm
POWER REQUIREMENT	100V/120V; 230V; 240V 50/60 Hz (Voltage in factory preset according to the region of sale)

FUSE

EUROPE	4 A 250V T 5x20
AUSTRALIA/UK	4 A 250V T 5x20
USA/CANADA	8 A 250V T 5x20
JAPAN	10 A 250V T 5x20

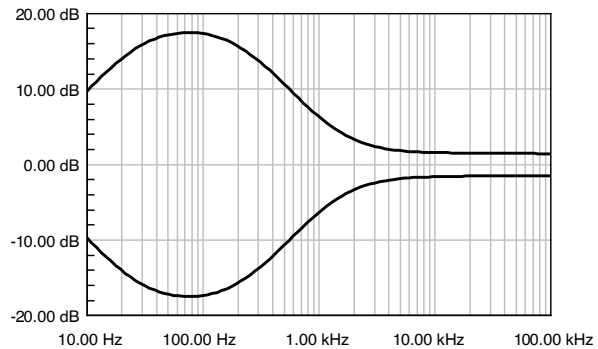
9. STUDIO PRE 500 SCHEMATICS



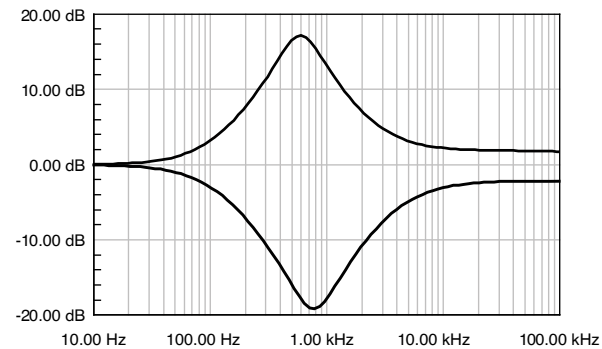
SCHEMATICS - STUDIO PRE 500

10. STUDIO PRE 500 FILTER AND EQ GRAPHS

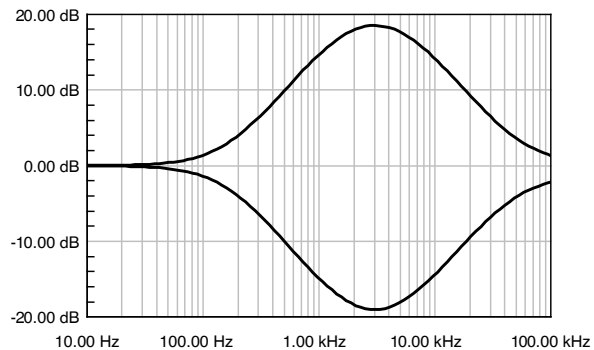
LOW



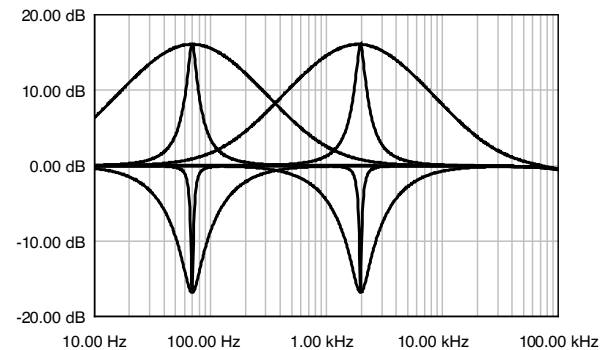
MID

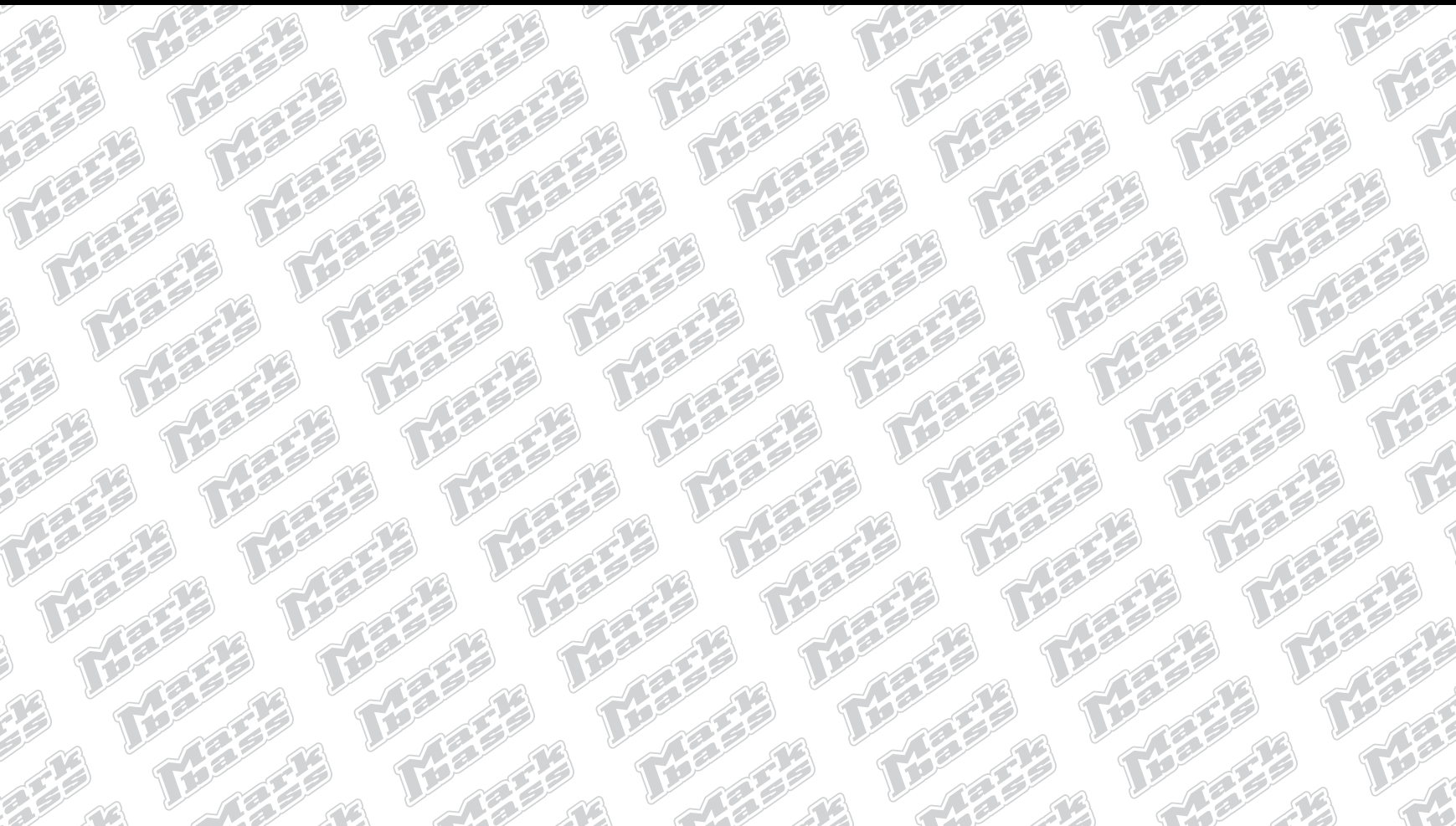


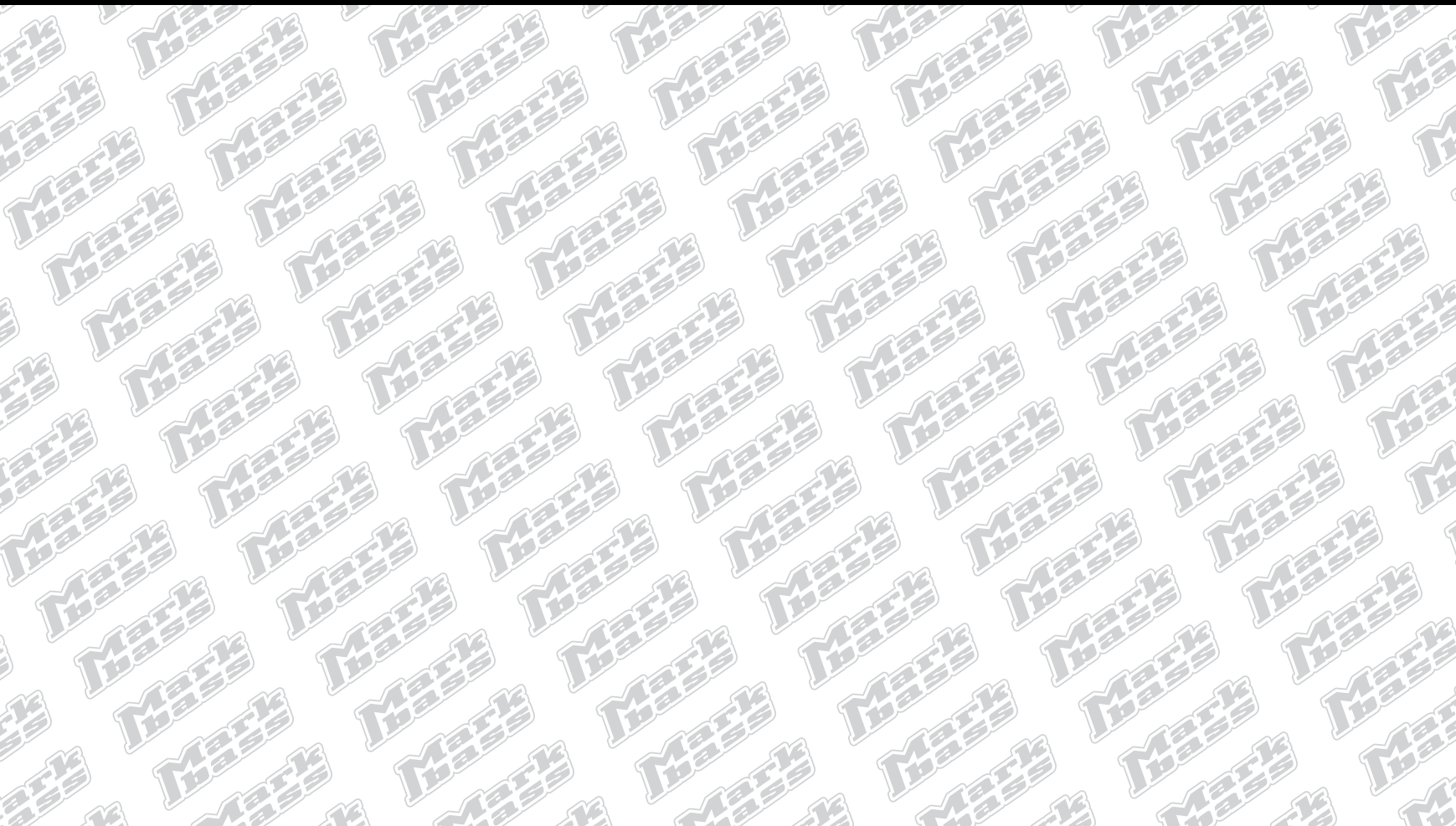
HIGH



PPF







Product specifications are subject to change without notice



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Italy - 66020 San Giovanni Teatino (Ch) - Via Aterno, 44 - Tel. +39 085 446 5705 - Fax +39 085 440 7399 -
www.markbass.it - info@markbass.it