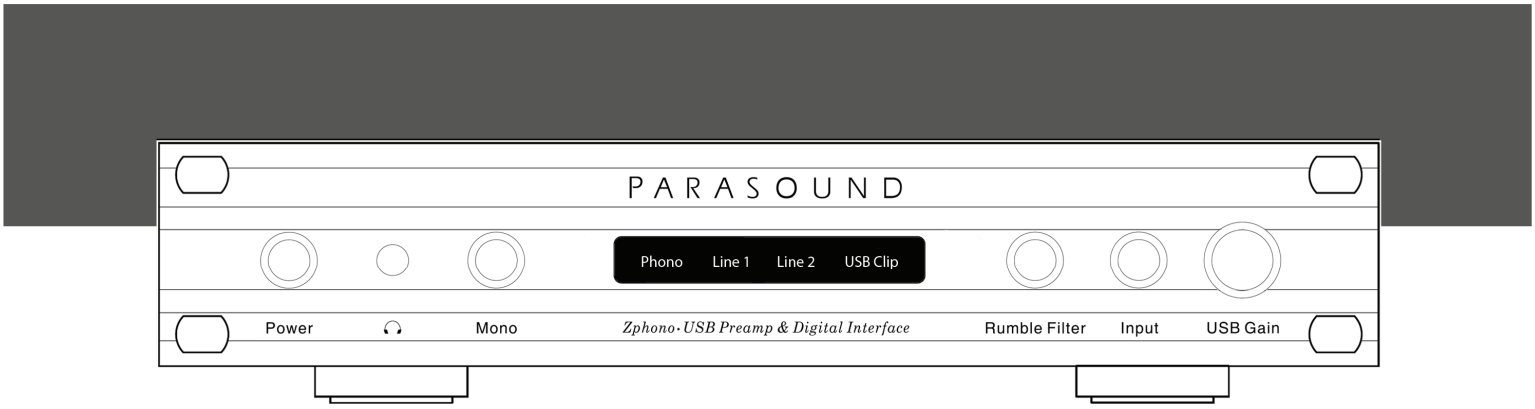
PARASOUND



Zphono·USB

Phono Preamplifier & Digital Interface

OWNER'S GUIDE

INTRODUCTION

Thank You for Choosing Parasound

Congratulations on your purchase of this precision component and thank you for your selection of Parasound. We are proud to offer you this versatile audio component, knowing that it will bring you many years of enjoyment and dependability.

Please take a few moments to review this manual so you may enjoy all the benefits of your new Zphono•USB's unique features and capabilities.

Enjoy.

The Parasound Staff
www.parasound.com

Keep you Purchase Receipt/Bill of Sale and Keep the Carton for Future Reference

Record the 5 digit serial number located on the bottom side of your Zphono•USB in the space below. Also note your Parasound dealer's name and telephone number. Your purchase receipt/bill of sale is required to determine if your Zphono•USB is eligible for Parasound warranty service. We recommend that you make an extra copy of your original purchase receipt/bill of sale and store it inside the Zphono•USB's carton. If the Zphono•USB should require warranty repair you will need its original carton and foam packing inserts to ship it.
Please do not throw away the carton or foam packing inserts.

Parasound Zphono•USB Serial # _____

Parasound Dealer: _____

Parasound Dealer Phone Number: _____

Date of Purchase: _____

Important Warranty information

There is no Parasound warranty for this unit if it was not purchased from an Authorized Parasound Dealer. Investigate warranty coverage statements made by *unauthorized* dealers very carefully, as Parasound will not provide service under our warranty and you will need to depend entirely upon the unauthorized dealer for warranty service. A list of Authorized Parasound Dealers and detailed warranty information is available at ***www.parasound.com*** or you can call **(415) 397-7100** between 8:30 am and 4 pm Pacific time.

A missing or altered serial number could indicate that this unit was re-sold by an unauthorized dealer or is stolen merchandise. If this unit is missing its serial number or the serial number has been altered, you should return it to your dealer immediately for a full refund.

Table of Contents

Unpacking your Zphono•USB & Placement Guidelines

Unpacking Your Zphono•USB

Carefully remove your Zphono•USB from its shipping carton and locate all the enclosed accessories:

- AC power cord
- USB cable

While you are unpacking your Zphono•USB, inspect it thoroughly for possible shipping damage and tell your Parasound dealer immediately if you find any. If possible, save and store both the inner and outer cartons and–most especially–the foam packing inserts, to protect the Zphono•USB if you have to move it or ship it. This would be a good time to make a copy of your sales receipt to store with the Zphono•USB's original packing.

Again: Do not throw away the Zphono•USB carton or foam packing inserts.

Placement Guidelines

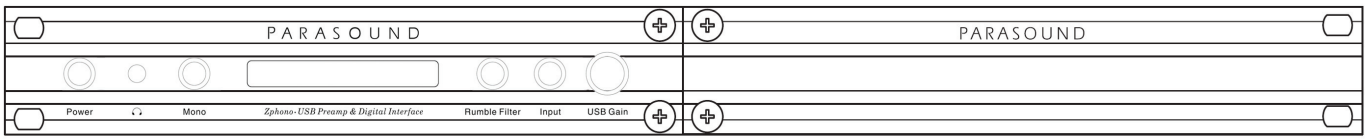
Install your Zphono•USB away from heat sources such as heating ducts, radiators, or other heat-producing components. Always position the Zphono•USB horizontally. Observe the following ventilation guidelines when installing the Zphono•USB in an equipment rack or any other enclosed space:

You should never install the Zphono•USB in an unventilated equipment cabinet or compartment because hot air will not exhaust adequately to prevent overheating. Air won't often circulate adequately in a cabinet or enclosure whose front and back sides are open; pockets of intense heat can still develop around any heat-producing equipment. Allow a few inches of empty space on each side and above the unit and try to avoid crowding or stacking the Zphono•USB tightly between other components. A ventilation fan is also recommended where other heat-producing equipment must be mounted close to the Zphono•USB.

If you're installing the Zphono•USB yourself, use input and output cables that are long enough to leave at least two feet of slack; that will enable you to pull the Zphono•USB out of a cabinet to check or to change connections without inadvertently disconnecting cables. If you're putting the Zphono•USB inside a cabinet, it needs a space that's at least 11 inches wide so you'll be able to turn it around for access to its rear panel connections.

Rack Mounting Your Parasound Zphono•USB

The Zphono•USB occupies only half the width of a single rack space in a standard 19" equipment rack. For rack mounting, you can fasten it to another Parasound Z model by using the Parasound SBS (Side-by-Side) mounting kit (Sold Separately). You can also mount a single Zphono•USB in the rack with the accessory Zblank panel extender. The SBS includes four rack mount bolts plus four pairs of plastic "shoulder washers." The washers are important because they insulate the Zphono•USB front panel (and chassis) from the metal equipment rack and from the four mounting bolts. Place these washers on both sides of the front panel before the mounting bolts are screwed into the rack rail.



Note: Tighten each bolt just enough to keep the unit secure in the rack to avoid deforming the shoulder washers. Eliminating metal-to-metal contact reduces the likelihood of creating a ground loop that might introduce hum into your system.

AC Voltage Selection

115v / 230v AC Voltage Selector Switch

This switch is found on the chassis bottom. The 115V position of this switch is correct for North America and Brazil; most other countries require setting it to 230V. If you are in doubt of your local AC voltage (sometimes referred to as “mains”) call your dealer. The following website is also helpful: http://en.wikipedia.org/wiki/Mains_electricity_by_country#Voltage_ranges

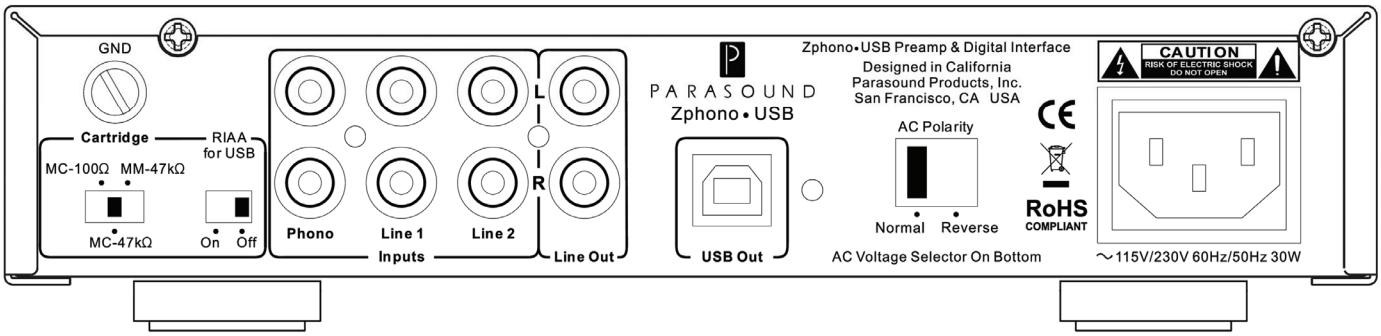
Make sure the 115/230V switch on its bottom side is set for the correct AC line (mains) voltage before you plug in the Zphono•USB’s power cord and before you install it. The unit could be seriously damaged if this switch is set incorrectly.

The 115V setting is correct for North America where the Zphono•USB can operate safely with AC line voltages between 110-120V. Most other countries will require the switch to be set to 230V. With the 230V setting the Zphono•USB can operate safely with AC line voltages between 220V-240V.

Note: The Zphono•USB could be seriously damaged if the AC Voltage Selector switch is set incorrectly. Prior to plugging your Zphono•USB into an AC power source, check the position of the 115v/230v switch on the Zphono•USB’s chassis bottom and do not depend on the 115v or 230v markings on the outside of its cardboard carton.

Connecting your Zphono•USB

Always disconnect the AC cords to your Zphono•USB and power amplifier(s) before making or changing any input, output or trigger wire connections. Inserting or removing an input or output cable while the Zphono•USB or power amplifiers are turned on can result in a blast of sound that can damage your loudspeakers. Make sure there is no strain or tension on any cables that could cause them to pull loose. The Zphono•USB has a few connectors with which you might not be familiar. Please read this section thoroughly before making connections.



Audio Input Connections

Phono Input Jacks and GND

Connect your turntable's signal cables to the Phono Input jacks on the Zphono•USB. The Phono Input jacks should only be used with a record player. Any other source such as a tuner or CD player should be plugged into the Line 1 or Line 2 Input jacks. The turntable's ground wire attaches to the GND (Ground) terminal.

Choose the Correct Cartridge Setting

The Cartridge Switch has 3 settings to select the gain/loading for the type of cartridge you are using. There are three positions for the cartridge switch: MC-100Ω, MC-47kΩ and MM-47kΩ. Choose the setting that best matches your cartridge type:

- The **MC-100Ω** setting is for most moving coil (MC) cartridges. It provides the higher gain required for MC cartridges and a 100 ohm load that is recommended for most MC cartridges.
- The **MC-47kΩ** setting provides appropriate gain for MC cartridges and a 47k ohm load that you might prefer for your MC cartridge. You can try the MC-100Ω or MC-47kΩ to see which setting sounds better in your system.
- The **MC-47kΩ** setting is also appropriate for moving iron (MI) cartridges such as Grados.
- The **MM-47kΩ** setting is for all moving magnet cartridges. It provides appropriate gain for MM cartridges and a 47k ohm load that is recommended for most MM cartridges.
- Some very high output MC cartridges will sound better with the **MM-47kΩ** setting.

If you are unsure which setting is best for your cartridge we recommend that you contact your dealer or the manufacturer of your cartridge. You can also experiment and simply use the setting which sounds best in your system. The majority of turntables use MM type cartridges so start with this setting first.

Line 1 and Line 2 Input Jacks

Connect the audio output jacks of line level sources such as a CD player, tuner or other audio device to one pair of the Zphono•USB Line Input jacks. These are included so you can conveniently record sources other than a turntable to your PC. The line inputs are not affected by the settings of the Cartridge switch or the RIAA switch.

Audio Output Connections

There are 2 audio outputs on the rear panel of the Zphono•USB, one is a standard analog audio output and one is a digital USB output for recording to your computer.

Line Out Jacks (Analog)

The Line Out jacks are for connecting your Zphono•USB to your stereo system. The L and R Analog Out jacks carry the analog audio signal at a fixed level that is comparable to the analog output level on a typical CD player or tape deck. The Line Out jacks are not affected by the RIAA switch.

USB Out Connector (Digital)

The USB Out connection is used to record music to your computer. Use the included USB cable and connect the USB Out to one of the free USB connections on your computer. This cable is a standard computer cable. If you need a longer cable you can find one in any store that sells computers. The audio level of the USB Output is determined by the USB Gain control located on the front panel. See the USB Gain instructions on page 11 for information on how to correctly set the USB Gain. The RIAA EQ can be turned on and off for the USB output. A further explanation of the RIAA EQ is on page 8.

Other Connections

GND (Ground) Connector

The ground wire of your turntable should be connected to the GND connector. If it is not connected you will most likely hear a loud hum in your speakers.

AC Line Cord

Connect the AC cord only after you have connected all of the other wires. The power cord supplied with your Zphono•USB is an IEC standard AC cord. If possible, plug your Zphono•USB into the same AC outlet into which your accompanying audio components (particularly your preamp and power amplifiers) are plugged. If different AC outlets are used the ground potential may be higher or lower between the outlets, resulting in audible hum in the speakers.

Rear Panel Controls

Phono Cartridge Switch

The Cartridge switch on the rear panel selects both gain and load impedance. It should be set to match your turntable's cartridge type. If you are unsure which setting is appropriate for your equipment you can search online for the cartridge specifications or you can contact the cartridge manufacturer. You may also try all three settings on the Zphono•USB and use the setting which sounds the best.

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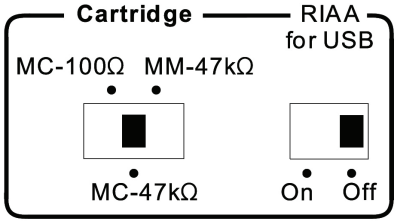


- The **MM-47kΩ** setting is for moving magnet cartridges. It provides a 47k ohm load and the appropriate gain for all MM cartridges.
- The **MC-100Ω** setting is for most moving coil cartridges. It provides the higher gain required for even very low output MC cartridges with a 100 ohm load that is ideal for nearly all MC cartridges.
- The **MC-47kΩ** setting provides the appropriate gain for MC cartridges with an alternative 47k ohm load. You can try both the 100 Ω and 47k Ω settings to see which sounds best in your system. The MC 47k Ω setting is also recommended for MI (moving iron) cartridges, such as Grados.

Note: In some cases a very high output MC cartridge will sound better with the MM setting.

Still not sure which setting to use? The majority of turntables use MM type cartridges. Start with this setting first. Try playing a record, if you cannot achieve high enough volume then you are probably using an MC type cartridge. Try both of the MC settings to see which sounds better.

RIAA Switch

RIAA equalization (EQ) is a standardized specification for the correct playback of LP records established by the Recording Industry Association of America (RIAA) in the 1950s. Phono preamplifiers since the mid-1950s include the RIAA EQ. The Zphono•USB is unique in that it allows you to turn off the RIAA EQ and use the digital RIAA EQ in your recording software. More advanced users might wish to take advantage of this feature. Unless you know how to use the RIAA in your recording software please leave the Zphono•USB RIAA switch in the ON position. If you were to listen to a recording with no RIAA eq you would hear very thin bass and exaggerated treble.

Note: The RIAA switch affects only the USB output. RIAA EQ is always *on* for the Line Output jacks and always *off* for the Line Input jacks.

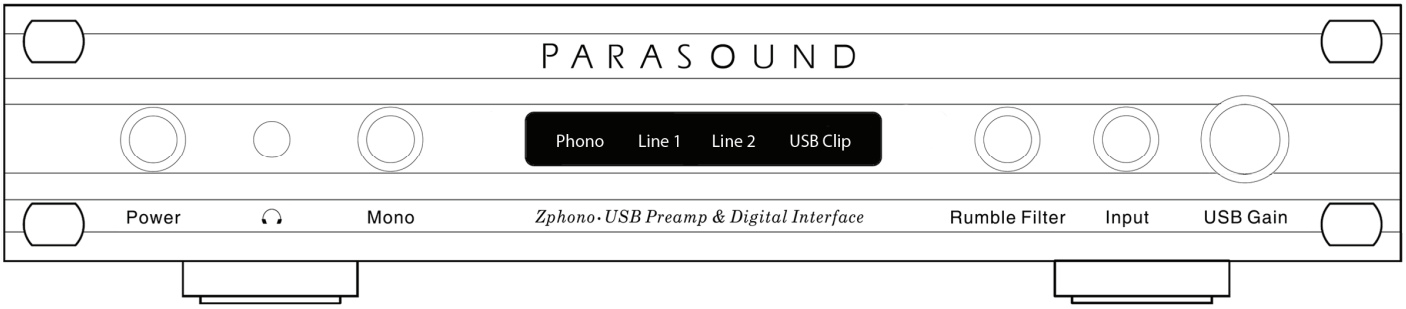
You can learn more about this subject at http://en.wikipedia.org/wiki/RIAA_equalization .

AC Polarity Switch

The Zphono•USB AC Polarity switch reverses (inverts) the "hot" and "neutral" conductors of the incoming AC (mains) power. In most cases, the AC Polarity switch should be set to Normal. In some systems the only way to eliminate persistent hum is to set the AC Polarity switch to Reverse, to invert the phase of the Zphono•USB's hot and neutral AC conductors. The Zphono•USB Polarity switch does not affect the 3rd pin ground connection.

Note: Turn off the Zphono•USB and unplug its AC cord before moving the AC Polarity switch.

Operating your Zphono•USB



Front Panel Display and Controls

Power Button

Pressing the Power button turns on the Zphono•USB.

Pressing the Power button a second time turns off the Zphono•USB.

(Headphone) Jack

The headphone jack offers an easy way to monitor your source while recording or simply to listen privately. The headphone volume is fixed at a medium level.

Note: The Line Out jacks are muted when a headphone plug is inserted into the headphone jack. The USB output is not muted when a headphone plug is inserted into the headphone jack.

Input Indicator

The selected input illuminates green. Available inputs are Phono, Line 1 and Line 2.

Mono Button

Press the Mono button to select the mono mode. When mono is selected the Left and Right channels are combined into a mono signal at both the USB and the Line Out L and R jacks. All mono records and older stereo records with high levels of rumble will sound cleaner when you select mono. The Mono button illuminates red when Mono is selected.

Press the Mono button a second time to return to the stereo mode.

Note: The front panel Mono button affects both the Phono and Line inputs.

Rumble Filter Button

The rumble filter can help to reduce low frequency noise. Rumble is an objectionable low frequency sound that usually causes excessive woofer cone movement which makes your amplifier waste power amplifying this low frequency noise and adding distortion. The Rumble Filter button illuminates green when the rumble filter is engaged.

Rumble is caused primarily by vibration of the turntable's motor and imperfections in its main bearing design and manufacture. Rumble can also be present in some LPs that were originally mastered on a noisy cutting lathe.

Note: The rumble filter can also be useful to reduce the audibility of footsteps on a spongy floor while playing a record.

Input Button

Press the Input button to select the desired input. There are three inputs, Phono, Line 1 and Line 2. This will change both the analog Line Out and the digital USB Out to the selected input.

USB Clip Indicator

USB Clip will flash red when the input level to the analog to digital (A-D) converter for the USB is overdriven. If USB Clip illuminates while you are recording to your computer the recording will sound very distorted. When the USB gain is set correctly USB Clip should not light at all, or flash very infrequently only for the loudest musical peaks. Instructions for correctly setting the USB gain are on page 11. Please note that the USB Clip indicator is only active when you have connected the Zphono•USB to a computer using the included USB cable.

USB Gain Adjustment Knob

The USB Gain control sets the volume level for the USB output. It has no effect on the analog Line outputs. In order to get the best recording quality it is very important to properly set the USB Gain every time you record an album. Instructions for setting the correct USB gain are in the following section. Once the USB Gain is set for a particular album it should not be touched again until recording for that album is finished.

Setting the USB Gain for Successful Recording

The Zphono•USB front panel USB Gain control knob adjusts the audio level that is converted by the A-D converter into digital information for the USB connection used for computer recording. In order to make the best recordings, special attention must be paid to this setting just like when you used to record on a blank cassette tape. If the USB Gain is set too high, the louder portions of the musical waveform will be cut off or clipped resulting in audibly distorted playback. If the USB Gain is set too low, your recording level will be too quiet and the recording will reflect a poor signal to noise ratio with an audible background "hiss" sound. A recording made with too high or low of a USB Gain setting will need to be deleted and recorded again with the USB Gain knob adjusted to a more appropriate level.

The optimum USB gain setting can be found by turning the USB Gain control knob up (clockwise) just before the point at which the USB Clip light illuminates red (where clipping occurs). This will take some experimentation. Whenever possible, you should play the loudest passages in your LP (or line level source) to find the proper USB gain setting *before* you start to record. Once the proper setting is found and recording has begun the USB Gain knob should not be touched again until you are ready to start the next album.

Note: The USB Clip indicator is active only when the Zphono•USB is connected to a computer using the included USB cable.

Follow these steps to set the correct USB Gain.

1) Verify that you have selected the correct cartridge type. The Cartridge switch is located on the rear panel. See page 8 for information on cartridge types.
2) Turn on and connect the Zphono to your computer and open your recording software (not included). Most computer recording software programs allow you to monitor the recording levels prior to recording. If your recording software includes this feature then open this window. The audio level is typically represented by a separate record level "meter" for each left and right channel.
3) Play your LP or other source and skip ahead to the section of music that you think is the loudest. This is easiest if your Zphono•USB is connected to a stereo system or a pair of headphones so that you will be able to hear the music playing.
4) Turn the Zphono•USB's USB Gain knob up (clockwise) until the red USB Clip indicator flashes red with the music. (If the Clip indicator is solid red then the gain knob is turned much too high)
5) Next, slowly turn the USB Gain level knob down (counter-clockwise) just to the point where the red USB Clip indicator **never** lights up.
6) *Optional:* If your recording software has a monitor feature, verify that the recording level meter stays in the green range and does not go into the red. The trick is to record as high as possible in the green range and into the red range as little as possible.
7) Continue to play the music and see if the USB Clip indicator illuminates. If it does, turn the USB Gain level knob down a very small amount and check the same track again.
8) Try a different track on the album and follow the same procedure to make sure that the USB Clip light never illuminates. Since some songs may be louder than others it is best to check a number of songs on the same album.

The proper USB gain level is now set and you are ready to record! The USB Gain setting should not be touched again until recording is completed. Ideally, the USB Clip indicator would never illuminate when the USB gain is set correctly. But it is realistic to expect the USB Clip indicator to flash briefly, but only very infrequently and only for the very loudest musical peaks.

Note: The volume level will change from one album to another so you will need to repeat the above process for the next album you want to record.

Software for Recording to Your Computer

Recording software for your computer is not included with the Zphono•USB. There are a number of good programs available and no doubt some we do not know about. Some of the best recording software we found as of the date we prepared this manual are:

"Spin It Again" by Acoustica®
http://www.acoustica.com/spinitagain/

"Vinyl Studio" by Alpinesoft®
http://www.alpinesoft.co.uk/

"Audacity"® (free shareware)
http://audacity.sourceforge.net/

We recommend that you visit each of these web sites to see which software will work best for your particular system and needs.

Note: Parasound has no affiliation with any software company and does not offer any warranty for use of any software. Please direct your questions directly to the software company whose product you are using or considering. **Parasound does not offer support for software or computer-related issues.** Parasound has no responsibility for the software you use or for your computer.

The registered trademarks for the mentioned software programs belong to their respective owners.

Parasound encourages you never to use pirated software.

Recording Tips

Make sure your Windows 7® PC is set up to record in stereo by following these steps:

1) Make sure the Zphono•USB is turned on and its USB is connected to your computer's USB
2) Right click on the speaker/volume symbol on your task bar and select "Sounds"
3) Click on the "Recording" tab
4) Click on "Microphone-USB Audio Codec" and then "Properties"
5) Click on the "Advanced" tab
6) Verify that the "Default Format" is set to "2 channel, 16 bit, 44100 Hz (CD Quality)"
7) If you changed the setting, make sure you click "OK"

Achieving the best recording quality:

1) Ensure that you have selected the correct phono cartridge type
2) Follow the USB Gain setting procedure on page 11 before recording
3) Ensure that Windows 7® is set to 2 channel,16 bit, 44100 Hz (CD Quality) – *see above*
4) Ensure that your recording software is set to record in WAV 44k/16 bit (CD Quality)
5) Carefully clean your records and your cartridge's stylus

Frequently Asked Questions

How do I record to my computer?
- Recording software is not included with the Zphono•USB. You will need to purchase or download recording software. See page 12 for some recommended programs. Follow the instructions supplied with the recording software.

When I plug the Zphono•USB into my computer it is identified as a "USB Audio CODEC." Is this ok?
- Yes, this is a Windows® generic term for any connected USB audio device.

I don't know how to use the recording software. Where do I go for help?
- Please contact the company that made the recording software. Parasound does not offer support for software or computer-related issues.

My recordings are too quiet or there is a hissing sound in the background.
- The Zphono•USB USB gain is set too low. Follow the USB gain setting procedure on page 11. Also, make sure the Cartridge switch on the Zphono•USB is set correctly.

My recordings are too loud and sound fuzzy or distorted.
- The Zphono•USB's USB gain is set too high. Make sure the front panel red USB Clip indicator never illuminates during recording. Follow the USB gain setting procedure on page 11. Also, make sure the Cartridge switch on the Zphono•USB is set correctly.

My recordings have very little bass and too much treble.
- Check the RIAA EQ switch on the rear panel, for most recordings this should be set to "On". This should only be set to "Off" if you plan to digitally "add" the RIAA EQ after recording. See page 8 for more information on the RIAA EQ. Also, make sure the Cartridge switch on the rear panel is set correctly.

I am using Windows 7® and my recordings ended up in mono. Why?
- Follow the recording tips on page 12 to ensure you are recording in stereo (2 channel).

The USB Clip indicator flashed briefly a few times during a track. Do I need to re-record the song or album?
- If the red USB Clip indicator flashed only once or twice for a second or two you will most likely not hear any problem in the recording. Play the recording and listen for any distortion during loud sections of the music.

The USB Clip indicator never comes on, even if I turn the USB Gain knob all the way up.
- The USB Clip indicator will only come on when the Zphono•USB is connected to a computer with the supplied USB cable. There must also be an active source playing music and the correct input must be selected. Use a pair of headphones to make sure that music is playing.

Why is there no sound from the speakers?
- Check that input and output cables are plugged in all the way at both ends.
- Make sure you have selected the correct input (Phono, Line 1 or Line 2)

I can hear a background hum from my speakers or headphones
- Check that you have attached your turntable's ground wire to the ground terminal on the back panel of the Zphono•USB.
- Try Changing the position of the AC Polarity switch on the back of the Zphono•USB. **Move this switch only after the Zphono•USB AC cord is disconnected.**
- Move audio cables and AC cords away from each other (while power is off).
- Make sure insulating shoulder washers are used if the unit is rack mounted.
- Check that the power amps and the Zphono•USB are plugged into the same AC outlet.

The sound is distorted and too loud

Are you using an MM cartridge with the Zphono•USB Cartridge switch set to the **MC-100Ω** or **MC-47kΩ** position? Change the Cartridge switch setting to **MM-47kΩ**.

The sound is weak.

Are you using an MC cartridge with the Zphono•USB Cartridge switch set to **MM-47kΩ**? Change the Cartridge switch setting to **MC-100Ω** or **MC-47kΩ**.

Maintaining Your Zphono•USB

Your Zphono•USB requires no periodic maintenance and has no user serviceable parts inside. To avoid risk of electric shock do not remove the top cover. To keep it clean use only a soft cloth moistened with a few drops of clear water or window cleaner. Never use any solvents or abrasives.

Are You Having Difficulty?

Warranty Repair

Call your Parasound dealer first. If the dealer can't help you with your problem we encourage you to call Parasound's Technical Service Department at **415-397-7100**, Monday - Friday, 8am - 4pm Pacific time. We can suggest other diagnostic tests you can easily perform.
If we determine that your Zphono•USB should be returned to Parasound or an Authorized Parasound Warranty Center for inspection and possible servicing, we will provide the location of a warranty center near you or shipping instructions for the unit's return to Parasound.

Read your accompanying Parasound Limited Warranty carefully to understand the applicable rights and limitations. This section provides instructions for obtaining repairs, both for units covered under the Parasound Limited Warranty and for units or situations which are outside the Warranty.

Unit is not eligible for repair under the terms of the Parasound warranty if:

1. Unit was not purchased from a Parasound Authorized Dealer.
2. You do not have the original bill of sale or sales receipt from a Parasound Authorized Dealer.
3. You are not the original owner. The Parasound warranty is not transferable.
4. Unit's serial number was removed, modified, or defaced.
5. Unit shows evidence of abuse and/or misuse.
6. Unit was modified in any way.
7. A prior repair was attempted by an unauthorized repair station.

Before You Return Any Unit to Parasound for Service

Before you send your unit to Parasound, you will need to obtain a specific Return Authorization (RA) number and shipping instructions from Parasound's Technical Department. The RA number must be clearly marked on the outer carton. Use the original factory packing materials and arrange adequate insurance to cover its value. You must include a copy of your purchase receipt, since this document establishes the validity of this unit's warranty. Warranty repairs are only performed by Parasound or Parasound Authorized warranty centers when your purchase receipt is from a Parasound Authorized Dealer or Parasound Authorized Reseller.

Specifications

Frequency Response: 20 Hz - 20 kHz, ±0.5 dB

Total Harmonic Distortion: < 0.1% at 20 kHz

S/N Ratio MM:
> 74 dB, input shorted, IHF A-weighted
> 65 dB, input shorted, unweighted

S/N Ratio MC:
> 63 dB, input shorted, IHF A-weighted
> 56 dB, input shorted, unweighted

S/N Ratio Line Inputs:
> 103 dB, input shorted, IHF A-weighted
> 83 dB, input shorted, unweighted

Output Impedance: < 100 Ω

Phono Input Impedance:
MM setting: 47 kΩ
MC setting: 47 kΩ or 100 Ω

Input Sensitivity, 1 kHz:
MM: 5 mV in for 1.1 V output
MC: 0.5 mV in for 1.1V output

USB A - D Converter: 48kHz / 16 bit

AC Power Requirement:
110-130 VAC, 60 Hz
220-240 VAC, 50 Hz
(Voltage is selected on the chassis bottom side)
30 watts

Dimensions:
Width: 9.5" (242 mm)
Depth: 10" (254 mm)
Height, with feet: 2" (51 mm)
Height, without feet: 1.75" (44 mm)

Weight:
Net: 5 lbs. (2.3 kg)
Shipping: 8 lbs. (3.6 kg)

Rack Mount Accessory:
SBS – Side by Side Mounting bracket (May be purchased separately)
Blank panel extender (May be purchased separately)

Specifications and features subject to change or improvement without notice.

Rev. 1.0

We invite you to visit www.parasound.com for the most up-to-date information on your unit and to find out about other Parasound products. Learn why Parasound has been a quality and value favorite of magazine reviewers, sound professionals and listeners like you since we were founded in 1981.

PARASOUND®

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