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# **SYMPHONY POWER AMPLIFIER OWNER'S MANUAL**

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**P/N: 91-symphonymanual**

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## IMPORTANT SAFETY INSTRUCTIONS

Please read all of the following instructions carefully before operating your power amplifier.

1. The VIOLA Symphony weighs approximately 120lbs (54kg). **NEVER** try to move it on your own. Always use two people to move or unpack the unit. Take care to lift using your legs and avoid straining your back.
2. This product contains no user serviceable parts. **NEVER** attempt to repair the unit yourself. Refer all servicing to a VIOLA approved technician.
3. This product must be connected to the mains supply with a three-conductor AC mains power cord that includes a ground connection. To prevent shock hazard, all three connections must **ALWAYS** be used. **NEVER** defeat the ground connection.
4. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
5. **NEVER** operate this unit with any covers removed. Dangerous voltages may exist within the unit even when it is disconnected from the mains supply.
6. We do not recommend the use AC extension cords with this product. If it is necessary to use an extension cord, please ensure that it meets safety standards in your country and has sufficient current capacity. (100V to 120V – 15A minimum, 220V to 240V 10A minimum).
7. **NEVER** use flammable chemicals for cleaning this product.
8. **NEVER** wet the inside of this product with any liquid, or operate the unit in a wet environment.
8. **NEVER** block airflow through the ventilation slots on either the top or the bottom of the unit.
9. **NEVER** bypass any fuses.
10. **NEVER** replace any fuse with a value or type other than those specified. Suitable replacements are available from your local VIOLA dealer, national distributor or directly from VIOLA.
11. **NEVER** expose this product to temperatures outside the range 0°C

to 55°C non-condensing.

12. **ALWAYS** disconnect the unit from the mains supply during lightning storms, or if the unit will not be used for a prolonged period.

## INTRODUCTION

Thank you for choosing the VIOLA Symphony Amplifier. Great care has gone into the design and manufacture of the Symphony and if properly used, it will give a lifetime of musical enjoyment. We strongly recommend that you read these instructions before you attempt to use the unit, so that you can be sure it is set up to give optimum performance.

## UNPACKING

The VIOLA Symphony Power Amplifier is heavy - the shipping weight is approximately 120 pounds (55 kilograms). To avoid the risk of both personal injury and damage to the product, do not attempt to lift it from its packing carton alone. We recommend you use two people to unpack this amplifier safely.

Never attempt to lift the unit while bending from the waist. Always stand as straight as possible and use your leg muscles to lift.

Please keep all of the packing materials in case you ever need to ship the unit. Should you need to return the unit to the factory, you must use the original, shipping carton. The use of any other packing may result in the product sustaining damage in transit. Such damage is not covered by the warranty. Replacement shipping cartons may be obtained via your VIOLA dealer, or directly from the factory.

After unpacking the unit, please confirm that the following items are present:

- 1 Viola Symphony power amplifier
- 1 user manual
- 1 three-conductor mains cord

If any of the above items are missing, or if the amplifier shows any signs of damage, please contact your VIOLA dealer immediately.

## VOLTAGE SETTING

Before going any further please, confirm that the unit is set to operate on the mains voltage you plan to use. The setting is marked on the unit's rear panel above the right hand fuse. If the setting on your unit is not correct, contact your VIOLA dealer. Only a VIOLA approved technician should change the voltage setting. Do not attempt to do this yourself. Should you set the unit to the wrong voltage, you risk

personal injury and you may also cause serious damage to the unit which will void the warranty.

## LOCATION

We recommend that you place the amplifier as close to the loudspeakers as possible, as this reduces the length of speaker cable required. Whilst this makes it necessary to use longer interconnect cables, long interconnects cause less sonic degradation than long speaker cables.

The unit may be placed on a stand or shelf, provided it is strong enough. Alternatively it may be placed directly onto the floor. In this case, please ensure that the ventilation slots on the base of the unit are not obstructed by carpeting or other floor covering.

In all locations please allow a clearance of at least 3.5" (5cm) above the unit. You must also allow a clearance of at least 6" (15 cm) behind the unit, to enable the cables to be routed without being subject to undue strain.

Regardless of where you locate your amplifier, we advise positioning it well away from sensitive low signal level components such as pre-amplifiers and turntables. The Symphony power amplifier dissipates approximately 225 watts as heat when idling (i.e. no input signal). It is normal and perfectly safe for it to run somewhat warm to the touch.

## XLR CONNECTOR PIN ASSIGNMENT

The Symphony is fitted with XLR and Fischer type balanced inputs. The pin assignments of the Symphony's XLR input conform to the AES 14 standard, which is now commonly used throughout the audio industry. These assignments are shown below:

Pin 1:	Signal ground
Pin 2:	Signal + (non-inverting)
Pin 3:	Signal - (inverting)
Connector shell:	Chassis ground

Some equipment may have the polarity of the signals on pins 2 and 3 of the XLR connectors swapped over. Please refer to the user manuals of the other equipment in your signal chain to confirm whether this is the case.

If this is the case, it will not cause any damage, but it may reduce the quality of the stereo image, as well as the perceived attack of the bass. This situation is easily remedied by swapping the connections of pins 2 and 3 at either end of one of one set of balanced cables in the signal chain. Alternatively you can swap over the polarity of the speaker leads on both channels. Your dealer should be able to advise you on the best course of action.

If two items in the signal path have the connections to pins 2 and 3 of the XLR connector reversed with respect to the AES standard, this cancels out the problem and you need take no further action.

## SPEAKER CABLE CONNECTION

### **Caution!**

- **NEVER** connect a power amplifier's output terminals to any device other than a loudspeaker.
- **NEVER** short-circuit the amplifier's output terminals.
- **ALWAYS** switch the amplifier off before connecting or disconnecting signal or speaker cables.

## CABLES AND CONNECTORS

To realize the full potential of the Symphony, we recommend the use of a high-quality speaker cable such as the VIOLA Jazz cable. Please consult your VIOLA dealer for details.

The Symphony is equipped with two pairs of high quality binding posts on each channel. These are designed to accept cables fitted with spade lugs. The lugs should be either soldered or crimped to the speaker cable – the latter is preferred. We do not recommend the use of bare wire to connect the speaker cable to the binding post. This produces an inferior connection that degrades with time as the bare conductors become tarnished.

## SINGLE SPEAKER CABLE CONNECTION

In this case you will only use one pair of binding posts on each channel of the amplifier.

Starting with the left channel, connect upper or lower red binding post on the rear of the Symphony (which ever is convenient) to the input terminal marked +, or colored red on the left speaker.

Connect the adjacent black binding post on the rear of the Symphony to the input terminal marked -, or colored black on the left speaker.

Repeat the process for the right channel of the amplifier and the right speaker.

The connection for one channel is shown in figure 1 below.

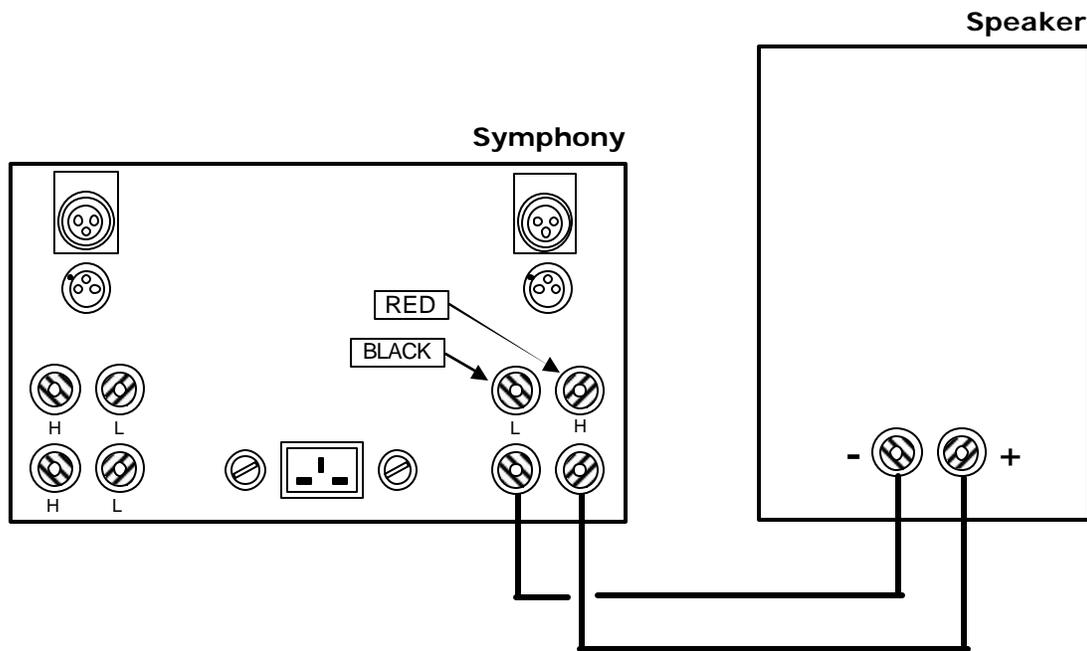


Figure 1. Single speaker cable connection.

## BI-WIRE CONNECTION

Bi-wireable speakers have separate inputs for the high frequency (HF) and low frequency (LF) sections of their cross-overs and these are connected to the power amplifier with separate speaker cables. This form of connection is regarded as superior to single wiring, as it avoids interactions between the low and high frequencies that may occur when a single speaker cable is used. In this case you will use both pairs of binding posts on each channel of the amplifier. You will also require two sets of speaker cables.

Starting with the left channel, connect lower red binding post on the rear of the Symphony to the input terminal marked +, or colored red on the left speaker's LF input.

Connect the lower black binding post on the rear of the Symphony to the input terminal marked -, or colored black on the left speaker's LF input.

Connect upper red binding post on the rear of the Symphony to the input terminal marked +, or colored red on the left speaker's HF input.

Connect the upper black binding post on the rear of the Symphony to the input terminal marked -, or colored black on the left speaker's HF input.

Repeat the process for the right channel of the amplifier and the right speaker.

The connection for one channel is shown in figure 2 below.

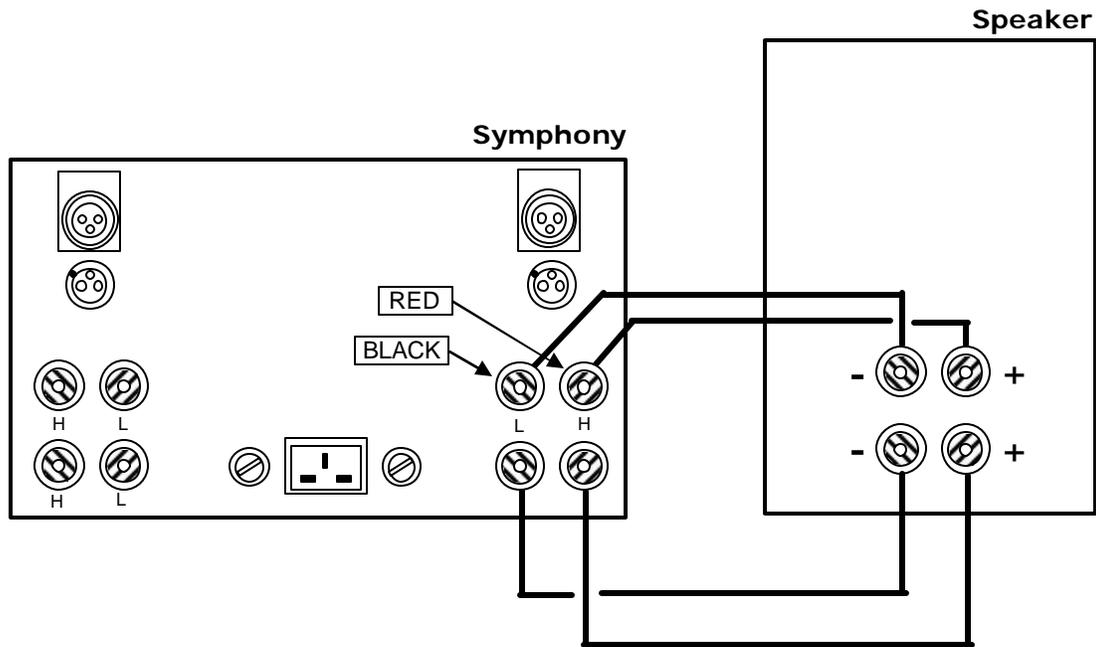


Figure 2. Bi-wire connection.

**Note:** Bi-wireable speakers are often shipped with links between the inputs to the two sections of the cross-over. Ensure that these links are removed, or the benefits of bi-wiring will not be realized.

## BRIDGE CONNECTION

The two channels of the Symphony may be connected in what is called "Bridge Connection" to form a mono amplifier that can deliver approximately 4 times the output power of the individual channels. This allows the Symphony to be converted from a stereo power amplifier that can deliver 200W per channel into 8 ohms, into a mono power amplifier that can deliver 800W into 8 ohms.

This works by feeding the input signal directly into one channel whilst feeding an anti-phase version of the same signal to the input of the other channel. The speaker is connected between the High terminals of the two outputs.

Producing the anti-phase signal for the second channel is easy as the input connectors of each channel are wired in parallel. It simply involves connecting a cable from the unused input connector of the first channel to either input of the second channel. The anti-phase signal is produced by wiring the cable so that the connection between pins 2 and 3 either connector on this cable are swapped over. Suitable cables may be obtained from your VIOLA dealer, or directly from VIOLA.

The following instructions are for the most common case where the main input is connected to the XLR input of the first channel.

Connect the bridging cable between the Fischer input connector on the right channel and the XLR input connector on the left channel.

Connect right channel upper or lower red binding post on the rear of the Symphony (which ever is convenient) to the input terminal marked +, or colored red on the speaker.

Connect left channel upper or lower red binding post on the rear of the Symphony (which ever is convenient) to the input terminal marked -, or colored black on the speaker.

These connections are shown in figure 3 below.

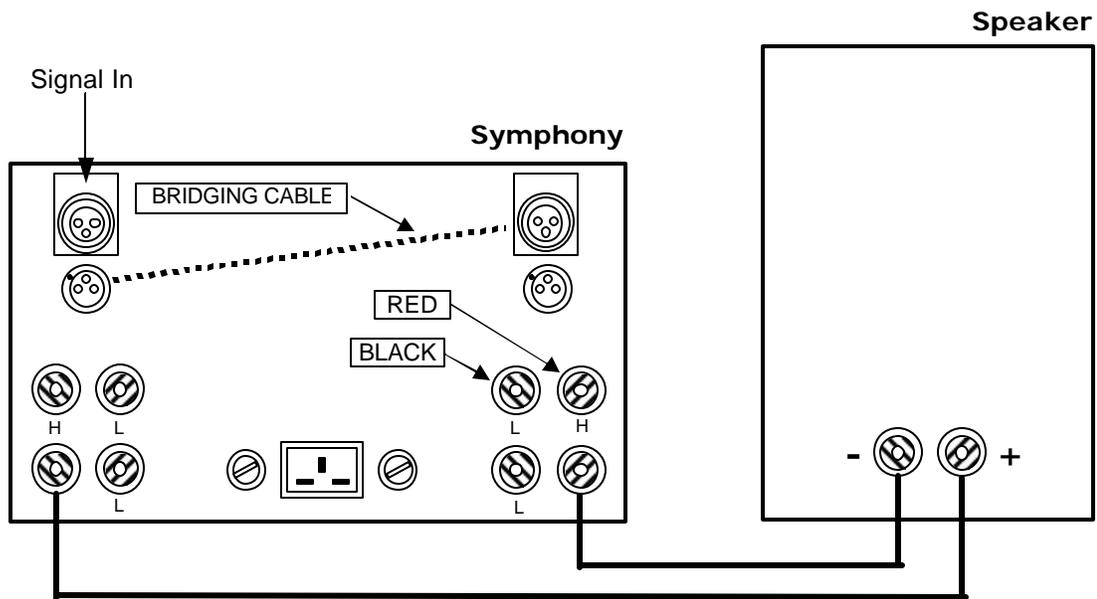


Figure 3. Bridge mode connection.

## BI-AMPLIFICATION

Bi-amplification uses two stereo amplifiers to power a single pair of loudspeakers. One amplifier is used for each loudspeaker, with one channel driving the L.F. unit and the other the mid/H.F. unit. Bi-amplification reduces the interaction not only between the upper and lower frequencies, but also between the left and right channels.

## AC POWER CABLE CONNECTION

If the wall outlet you plan to use for the Symphony has an on/off switch, check that it is switched off.

Insert the supplied AC mains cord into the receptacle on the rear of the Symphony and ensure that it is pushed securely home.

Insert the other end of the mains cable securely into the mains outlet. Take care to arrange the cable so that it is not bent sharply and that its weight will not pull it out of either the mains outlet, or the receptacle on the rear of the Symphony.

Do not switch the unit on yet.

## SWITCHING ON FOR THE FIRST TIME

Check that all the signal cables in the system are correctly connected.

Select the appropriate input on the pre-amplifier and set the volume to minimum.

Switch on the pre-amplifier and your signal source. We will assume is a CD player.

Allow the system to stabilize for 2 minutes, then put a CD into the player and press play.

If the wall outlet you are using for the Symphony is switchable, switch it on now.

Press the power switch on the front panel. When the unit starts, this will glow green.

Allow the unit to stabilize for 2 minutes, then slowly increase the volume on the pre-amplifier to a comfortable level. The unit is now ready for use.

If you experience any problems, please refer to the TROUBLE SHOOTING section of this manual.

## BREAKING IN

Although your VIOLA Symphony power amplifier will deliver outstanding performance straight out of the box, you may expect to hear it continue to improve as it reaches its normal operating temperature and its various components "break-in." It has been our experience that the greatest changes occur within the first 25-50 hours. The amplifier will continue to improve in sound quality for about 300 hours from the start of use.

The only exception to this rule is if the unit is switched off, allowing it to cool down. In this case, a brief warm-up period will be required before the amplifier's sound quality reaches its best. It is not necessary to repeat the initial 300 hour break-in.

## CARE AND CLEANING

### **Caution!**

- **ALWAYS** switch the amplifier off and disconnect it from the mains supply before attempting to clean it.
- **NEVER** apply cleaning products directly to the amplifier as they may enter the unit and cause damage.
- **NEVER** use any of the following cleaning products as they may damage the finish:
  - Wax polish
  - Spirit or alcohol based cleaners
  - Corrosive or abrasive cleaners

In most cases wiping the unit with a slightly damp soft cloth will give satisfactory results. Non-abrasive glass cleaners containing ammonia or vinegar, applied with a soft cloth may also be used. If you have concerns about the suitability of a cleaner, first try it out on a part of the unit that is less visible such as the rear panel.

## MAINS FUSES

Two fuses are located on the unit's rear panel – one for each side of the mains supply. If you suspect that either of the fuses has blown, follow the procedure below:

- Disconnect the amplifier from the mains supply.
- Remove the fuses.
- Check the fuses with a continuity tester and replace any blown fuses with one of the rating and type shown below. Using a fuse of the incorrect type or rating may create a safety hazard or cause damage to the unit and may also result in the warranty being voided.

Operating Voltage	Fuse Rating	Fuse Size
100V, 110V or 120V	T15A	1 <sup>1</sup> / <sub>4</sub> inch
220V or 240V	T10A	5 x 20mm

Suitable replacements may be obtained from your VIOLA dealer or directly from VIOLA.

- After replacing the fuse or fuses, switch the amplifier on and check whether it operates normally. If the fuses blow again, switch the unit off immediately, disconnect it from the mains supply and get in touch with your VIOLA dealer, national VIOLA distributor or VIOLA directly for technical support. Contact details for VIOLA are given in the **GETTING IN TOUCH** section of this manual.

## TROUBLE SHOOTING

Most problems may be resolved by following the steps below. If these fail, please contact your VIOLA dealer, national VIOLA distributor or VIOLA directly.

1. No sound and the front panel LED is not lit?

- Press the front panel power switch to confirm that the unit is not switched off. If there has been a temporary interruption to the mains supply, or the supply voltage has dropped below certain limits, the unit will automatically shut down and cannot be restarted until the mains voltage returns within the normal operating range. The drop-out voltage and normal operating range for 120V and 240V units are shown below.

Mains Setting	Drop Out Voltage	Normal Operating Range
120V	90V	90V – 140V
240V	180V	180V – 280V

- Check that the power lead is fully home in the AC input receptacle on the rear panel, the other end is plugged into the AC wall socket and if applicable, that the wall socket is switched on.
- Check that there is power on the AC wall socket by connecting another piece of equipment that is known to work to the socket.
- Check the mains fuses as shown in the **MAINS FUSES** section of this manual.

2. No sound and the front panel LED is lit?

- Check all the signal wiring in the system.
- Check that all the units feeding the amplifier are switched on.
- Check that any input selector and other relevant switches are set appropriately.
- Check that the signal source is playing.
- Check that the pre-amplifier and or signal source volume control(s) are set at a level that is loud enough to hear.

3. The amplifier keeps shutting down?

- Disconnect the inputs to both channels and also the speaker cables.
- Try to switch the amplifier on. If it starts but then shuts down, contact your VIOLA dealer, national VIOLA distributor or VIOLA for assistance. If it starts (front panel LED comes on) and it stays on, there is either a fault with the signal source such as a DC voltage on one or both channels, or a short circuit in the speaker cables or speaker. This may be isolated in the following steps.
- Switch the amplifier off and reconnect one channel from the signal source. Switch the amplifier on. If it starts (front panel LED comes on)

and stays on proceed to the next step. If it shuts down there is a fault with the signal source and you should contact the dealer or maker directly for assistance.

- Switch the amplifier off and reconnect the other channel from the signal source. Switch the amplifier on. If it starts (front panel LED comes on) and stays on proceed to the next step. If it shuts down there is a fault with the signal source and you should contact the dealer or maker directly for assistance.
- Switch the amplifier off and reconnect one of the speakers. Switch the amplifier on. If it starts (front panel LED comes on) and stays on proceed to the next step. If it shuts down check the speaker cables for a short. If these appear to be OK there may be a fault with the speaker and you should contact the dealer or maker directly for assistance.
- Switch the amplifier off and reconnect the other speaker. Switch the amplifier on. If it starts (front panel LED comes on) and stays on, the fault was most likely due to an intermittent short on either channel's speaker cables and these should be inspected carefully to ensure that there is no danger of this re-occurring. If it the amplifier shuts down check the speaker cables for a short. If these appear to be OK there may be a fault with the speaker and you should contact the dealer or maker directly for assistance.

## WARRANTY

VIOLA Audio Labs products are warranted to be free from defects if used under normal conditions for a period of 5 years from the date of shipment from the factory. This warranty is transferable to subsequent owners.

Repairs or modifications carried out by the factory, or by an authorized repair agent, shall be guaranteed for the remaining portion of the warranty, or for 1 year, which ever is greater.

Any unauthorized modifications or repairs will result in the warranty becoming void. The warranty will also become void if VIOLA determines that the unit has been subject to misuse.

There is no other express warranty on VIOLA products. This warranty shall not extend beyond the stated warranty period. No responsibility is assumed for incidental or consequential damage.

## SERVICE

### Customers Within the USA

In the first instance please contact your local VIOLA dealer. Should they be unable to assist you, please contact VIOLA by phone on 1-203-772-0435, by fax on 1-203-772-0569, or by email at [service@Violalabs.com](mailto:service@Violalabs.com). Please supply as much information about the problem as possible, including the unit's serial number and details of all equipment in the system when the fault occurs.

If it becomes necessary to return your unit to the factory, you will be given a Return Authorization (RA) number. This number must be clearly marked on the outside of the shipping box. Returns without a RA number will not be accepted. Returns received in non-standard packing will be replaced with new packing at the owner's expense. If you need new packing, please contact your VIOLA dealer or the factory.

For units returned to the factory under warranty during the first year, VIOLA will pay for the freight charges both ways. A VIOLA approved shipping company must be used and the units will be returned to the customer using the same carrier, or an equivalent service.

For units returned to the factory under warranty during years 2 to 5, the customer is responsible for paying the shipping charges back to the factory. A VIOLA approved shipping company must be used. Providing this condition is met, VIOLA will pay the cost of shipping the units back to the customer.

VIOLA will not pay freight costs if units are returned without a RA number, or if no fault is found. Customers are responsible for all freight charges for units returned for non-warranty repairs.

### Customers Overseas

Please contact your local VIOLA dealer, or the official VIOLA distributor in your country. If they are unable to assist you, please contact VIOLA by phone on 1-203-772-0435, by fax on 1-203-772-0569, or by email at [service@Violalabs.com](mailto:service@Violalabs.com). Please supply as much information about the problem as possible, including the unit's serial number and details of all equipment in the system when the fault occurs. Should it become necessary for you to return your unit to VIOLA directly, the same conditions as apply for US customers must be observed regarding freight charges and obtaining Return Authorization numbers.

## CONTACTING VIOLA

Should you need to contact VIOLA, please note that our office hours are 8 a.m. to 4 p.m. EST and that we cannot respond to telephone enquiries outside of these hours.

<b>Address</b>	315 Peck Street New Haven, CT 06513 USA
<b>Telephone</b>	1 203 772 0435
<b>Fax</b>	1 203 772 0569
<b>Email</b>	<a href="mailto:info@Violalabs.com">info@Violalabs.com</a>

## SPECIFICATIONS

**Class of Output Operation:** AB<sub>2</sub>

**Power Rating:**

200W continuous average power into 8 ohms  
20Hz to 20kHz, both channels driven at less than 0.25% THD

400W continuous average power into 4 ohms  
20Hz to 20kHz, both channels driven at less than 0.5% THD

**IM Distortion (SMPTE):**

1W to 200W into 8 ohms <0.075%  
1W to 400W into 4 ohms <0.10%

**THD:** <0.1% @ 20 kHz/200 watts

**Frequency Response:**

1W into 8 ohms (10Hz - 20kHz) +/-0.15 db; 100k <-3 db

**Power Bandwidth:** 5 Hz to 100 kHz (-3dB points)

**SN Ratio:** -105 db at 1 kHz / 200W; C weighted

**Gain:** 26 dB

**Input Impedance:** 1M Ohm / 1M Ohm balanced

**Inputs:** Balanced - XLR and Fischer

**Output Connections:** Binding post for spade terminals

**Power Consumption:** Approximately 225W at idle. 1800W maximum

**Weight:** Amplifier: 120 lbs. (55 kg)  
Packed: 127 lbs. (57 kg)

**Dimensions:** Height including feet: 8 5/8". (21.9cm)  
Width: 17 5/8". (44.8cm)  
Depth including binding posts: 19". (48.3cm)

Specifications are subject to change without notice.