

Super Pre

Owner's Manual



Table of Contents

Important Safety Instructions	
Introduction	
Quick Start	
Top Panel Controls and Operation	
Rear Panel Controls and Operation	
Extended Amplifier Features	
Program Mode	
Firmware Updates	
Specifications	
Warranty Information	

All Features and specifications are subject to change without notice.

This list is subject to change without notice.

Bergantino Audio Systems

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Do not use this apparatus near water:

Never expose the pre-amplifier to rain, moisture, dripping or splashing water. Do not place objects filled with liquids on or nearby the pre-amplifier.

Do Not Open The Pre-Amplifier Enclosure:

There are no user-serviceable components inside this product. Opening the amplifier enclosure may void your warranty. If liquid enters the unit, disconnect the unit from the power source immediately and consult an authorized service station.

Unpacking:

The carton and packing materials used in shipping your new pre-amplifier were specially designed to cushion it from the shocks and vibration that occur during transport. We suggest that you save the carton and packing materials for use in shipping, in the event you move, or the pre-amplifier needs repair.

Introduction

Congratulations on your choice of the Bergantino Audio Systems' **Super Pre** and welcome to the Bergantino family! First we would like to thank you for choosing Bergantino Audio Systems as your amplifier company. This is something we never take for granted. We are confident that your new pre-amp will bring you many years of trouble free use and we feel that our high quality design and build standards will help you reach your creative goals.

The Bergantino Audio Systems' **Super Pre** is an incredibly flexible, state-of-the-art Bass Pre-Amplifier, designed to deliver maximum performance, yet simple to operate and includes many useful features as listed below:

- DSP, Embedded System Controlled, Bass Pre-Amplifier
- OLED Display
- Selectable and Scene Savable Input Impedance (1 Meg or 10 Meg)
- Multifunction Tone Controls; 4-Band EQ w/ Adjustable frequency range and "Q"
 - Bass: +/- 9dB Variable from 40Hz to 150Hz
 - o Lo-Mid: +/- 9dB Variable from 100Hz to 800Hz
 - Hi-Mid: +/- 9dB Variable from 400Hz to 3kHz
 - Treble: +/- 9dB Variable from 1.5kHz to 9kHz
- Programmable Filters
 - Programmable bright switch
 - Variable High-Pass Filter (VHPF)
 - Variable Low-Pass Filter (VLPF)
 - Variable Feedback filter (VFBF)
- On-Board Programmable Chromatic Tuner
- On-Board Variable Ratio Compressor (VRC). Serial or Parallel, Software selectable
- On-Board Multi-Effects for Overdrive, Distortion, and Fuzz
- On-Board Drive Blend % for Clean/Effects blend feature
- On-Board DLPF (Drive Low Pass Filter)
- On-Board Crossover filter for Drive Effects
- Scene Gain Adjust Savable and adjustable from -6dB to + 6dB
- Software Adjustable output gain for optimum gain matching of connected amp.
- Speaker-Files → Intelligent Equalization for connected amp and speakers.
- Auxiliary input and headphone jack for personal monitor and practice use
- Effects Loop Scene savable
- Studio quality Direct Outputs (Pre and Post)
- Software adjustable Line Out level (0dB to +6dB 0.707Vrms to 1.41Vrms) for optimum gain matching with associated gear.
- UPS Universal power supply 9-12VAC/DC, Center Negative or Positive, 500ma min. current requirement.
- Software selectable Phase output (Normal or Reverse)
- 21 User Programmable and Nameable Memory Settings; 7 Banks of 3 each.
- USB Port
 - Load Custom Speaker-Files
 - Software Upgradable
 - o BTFS (Blue Tooth Foot Switch) Compatible

OLED Display

Your new **Super Pre** is equipped with a high quality OLED display which will give you years of trouble free service. One of the characteristics of OLED screens of all types over time is burn in. To help maintain and get maximum life from your OLED display, it is advised to always turn your pre-amp off when not in use. This will help ensure many years of trouble free service.

⇒ For best viewing experience from your OLED display, remove protective shield before using.

Quick Start

The **Bergantino Audio Systems' Super Pre** is designed to be incredibly flexible, yet simple to operate. All controls have a well-defined purpose and are designed to be as intuitive as possible. These directions will help take you through the basics and give you a good start for setting up your sound. However, it is highly recommended to read on to learn all the features of the Super Pre in order to realize all its very useful features and benefits!

1. Plug the Super Pre in:

With the power switch in the OFF position, connect the 9-12VDC or9-12VAC power source to the Input connector of your preamp.

⇒ The minimum current requirement to ensure proper operation is 500ma. More is fine.

2. Plug in your bass:

Using an instrument cable, connect your bass to the Input jack and turn the power switch on. If you have active tone controls on your bass, turn all of the controls to the middle or flat position and adjust the volume to the maximum point you would normally use. If you have a passive bass, turn all tone and volume controls all the way up.

3. Top panel control settings:

When you first turn on the **Super Pre** the tone controls will be set flat and no Speaker-Files will be installed. Set the Instrument Gain and Master Volumes at 0 (off).

4. Input level and Master Volume settings:

For proper operation, it is **very important** to adjust **all** gain levels properly. To adjust the Input gain level, first turn the Master volume and Input Gain of the **Super Pre** all the way down (CCW). Next, put the volume controls on your instrument at the maximum level you will be using them at and play your bass like you normally would, including hard dynamic attacks. Gradually increase the Input Gain control (clockwise) until the OL (overload) indicator just begins to flash. Once flashing, reduce the Input Gain (CCW) slightly for some additional headroom before clipping.

If the OL Led doesn't come on at all with the Input gain turned all the way up, chances are you're either using a more traditional, single coil, low output, bass or enjoy playing with a lighter touch. If this is the case, select **Lo Output** for **Instrument Level** in the **Extended Amplifier's Feature** section under **Program Mode** and readjust input level as explained above.

<u>Note:</u> Some onboard preamps have internal adjustable gain controls. If you have active/passive switching capabilities on your bass, it's best to adjust these gains such that the passive and active output levels are the same with the tone controls set flat. This will ensure maximum headroom for you onboard preamp as well as best gain matching of your bass to the **Super Pre**'s input stage.

Remember, the purpose of an onboard preamp is to buffer the pickups from long cable runs and to provide active tone controls for tone shaping, **not** to increase your overall output level and volume. That is what your pre amp and amplifier are for!

Once you've matched the maximum signal from your bass without overloading the input stage of the pre-amplifier, increase the Master volume of the **Super Pre** by turning the Master volume knob in a clockwise direction to the desired level. You should be hearing your bass quite well at this point. You should now **only** use the Master volume now to achieve your desired sound level.

For clear, undistorted sound, it's very important not to overdrive the input stage of the **Super Pre**. If you increase in level any tone or volume control on your bass after adjusting the input gain, you should check to make sure the OL indicator isn't flashing.

Top Panel Controls and Operation



- **1. Input Gain:** Gain control for the Instrument input. Adjust this level to obtain maximum input gain before any flashing of the OL indicator occurs.
- 2. **OL** (**overload**) **Indicator**: Indicates the input stage of the **Super Pre** is being overdriven when flashing yellow. If an overload condition is indicated, turn the gain knob counterclockwise to reduce gain until no flashing occurs and adjust Master volume to achieve desired volume. Also learn more about properly adjusting the Input gain of the **Super Pre** in the **Instrument Level** section of the **Program Mode** part of this manual.
- 3. Master (volume): This control adjusts the Master volume of the Super Pre.
- 4. Clip (indicator): This indicator will flash yellow when the Super Pre senses an overdriven

or clipped signal at its Line output. This is an indication that the preamplifier is being driven beyond its ability to produce a clean, undistorted output. If you need more clean volume, go to the **Output Level Adjust** menu in the program mode and adjust upward for more clean output volume, if available (up to +6dB).

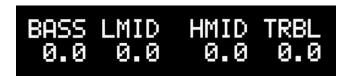
5. OLED Display: The OLED display serves many functions and displays everything from basic tone control settings (home screen) to the many levels of software based menu screens in the **Super Pre**.

6. Multi-Function Tone Controls

Mem1/BASS Control: This control has multiple functions:

As a Tone Control, turning the control Left or Right from the Home Screen will decrease or increase the level of the Bass frequencies in 0.5dB increments, from -9dB to +9dB. The level in dB will be shown above on the OLED display.

⇒ The screen below shows an example of one of the **Super Pre**'s Home Screens.



Pressing and releasing of this knob will recall, if loaded, the scene that is currently stored in that Mem1 location of the currently loaded Bank. If the memory scene is already loaded while pressing and releasing this knob, it will return to the Super Pre's Main Scene.

Mem2/LMID Control: This control has multiple functions:

As a Tone Control, turning the control Left or right from the Home Screen will decrease or increase the level of the Lo-Mid frequencies in 1dB increments, from -18dB to +12dB. The level in dB will be shown above on the OLED display.

Pressing and releasing of this knob will recall, if loaded, the scene that is currently stored in that Mem2 location of the currently loaded Bank. If the memory scene is already loaded while pressing and releasing this knob, it will return to the Super Pre's Main Scene.

Mem3/HMID Control: This control has multiple functions:

As a Tone Control, turning the control Left or Right from the home screen will decrease or increase the level of the High-Mid frequencies in 1dB increments, from -18dB to +12dB. The level in dB will be shown above on the OLED display.

Pressing and releasing of this knob will recall, if loaded, the scene that is currently stored in that Mem3 location of the currently loaded Bank. If the memory scene is already loaded while pressing and releasing this knob, it will return to the Super Pre's Main Scene.

⇒ The Super Pre's Main Scene is the default screen for all the banks when a scene is not loaded. It changes dynamically, in real time whenever a parameter is changed. Bright/TRBL Control: This control has multiple functions:

As a Tone Control, turning the control Left or Right from the home screen will decrease or increase the level of the Treble frequencies in 1dB increments, from -18dB to +12dB. The level in dB will be shown above on the OLED display.

When this control is pressed and released, it activates/deactivates the Bright Control. Use this control to add some sparkle or snap to your final tonal contour and to add or remove edge and definition. (See **Bright Adjust Menu** in program mode on how to program the frequency and gain of this filter)

7. Mute: When Mute is engaged, the red Mute LED will illuminate and the Super Pre's DI outputs, headphones and Line output will be muted.

If the Super Pre's tuner is enabled (factory default), a fully digital chromatic tuner is activated and displayed on the OLED display.

The first screen indicates no signal detected by the **Super Pre**'s tuner. The second screen indicates a properly tuned **A1** string.



8. Prog (Program Button): From any **Home Screen**, press and release the **Prog** button to access and sequence thru the **Banking** menu, **Filters** menu, **VRC** compressor menu, **Effects** menu, and **Effects Blend, Xover and DLPF** menu. Press and hold the **Prog** button for 3 seconds from any **Home Screen** to enter Program Mode. The green **Prog** LED will illuminate (See **Program Mode**).

Also, to save a scene, while pressing and holding the **Prog** button, quickly press **Mem1**, **Mem2**, or **Mem3** to save a tone *scene* in that location (See **Mem1/Mem2/Mem3 Save** in Extended Amplifier Features).

- **9. Mem and Bright LED Indicators** These Green Led indicators determine if any of the Memory scenes are engaged and also if the bright filter is engaged.
- **10. Multi-Function Foot Switches.** Use these switches to recall/disengage Memory Scenes, engage/disengage the **Mute** function, **Bank Up** or **Bank Down** to access one of 7 memory banks, **A-G**, *or* sequence thru top layer menus by pressing and releasing **Mem2** and **Mem3** simultaneously.

Rear Panel Controls and Operation



- **1. Power Switch**: Turns the pre amplifier on or off.
- 2. Power Receptacle: Accepts a 2.1mm barrel connector 9-12VDC or VAC, Center Negative or Positive, 500ma min. *The Super Pre will not operate if less than 500ma is supplied!
- **3. USB Port**: This port will support a FAT32 formatted thumb drive to load speaker-files into program memory and also perform firmware updates when or if they become available.
- 4: Headphone (output): 1/8" Stereo headphone jack designed to drive full-range headphones.
- **5. Line (output):** This connecter is a ½" unbalanced output and serves as a pre-amp out, post Master volume.

- **6. Effects Loop**: Unbalanced 1/4" connector used when sending a full range, instrument level, to an external device. The Effects loop is software programmable
- **7. Pre Direct Out**: This Studio quality DI sends an electronically balanced output signal of your raw bass signal only. The Pre DI is 48V phantom power protected and latency compensated.
- **8. Ground Lift:** This switch disconnects the ground on both of the balanced Direct XLR Outs, to eliminate hum and buzz when the amplifier is connected to equipment that is running on a different ground system.
- **9. Post Direct Out**: This Studio quality DI sends an electronically balanced output signal of all your Preamps selected features, including the effects loop, if engaged. It also can be selected to include Speaker-Files if desired. The Post DI out is 48V phantom power protected.
- **10. Aux Input:** A standard 1/8" mini stereo jack to plug in an external sound source (iPod, MP3 player, etc.). Maximum, unclipped input level is 2Vrms.
- **11. Instrument Input:** A 1/4" unbalanced input jack to plug in an active or passive bass into a studio quality, high impedance, input buffer.

Extended Amplifier Features

Banking Screen



The Banking Screen displays the status of which Memory Bank you're in along with any recalled scene. If no saved scene is loaded, it will display "**Main Scene**". It also allows you to scroll thru the 7 Banks and name scenes.

- ⇒ If you desire to name a scene, do so before saving using the **HMid** and **Trbl** knobs as explained below.
 - Turn the Bass/Mem1 knob to select Bank you want to load scene into
 - Turn the HMid/Mem3 knob to move curser for naming scene
 - Turn the Trbl/Bright knob to choose alpha-numeric character

Once you have selected the Bank to store the scene in, and have named it, while pressing and holding the Prog button, quickly push and release the desired memory location within that Bank you want to store the scene (Mem1, Mem2, or Mem3). The corresponding green LED will illuminate once saved.

⇒ If you decide to edit or change the name of a scene, an * will appear next to the current name until the new name is saved along with the scene.

Banking

The Super Pre allows several ways to Bank Up or Bank Down thru the 7 available banks (A-G). You can change Banks by accessing the Banking Screen (mentioned above) and use the Bass/Mem1 knob to select the desired Bank you would like to go to, or by pressing a combination of foot switches you can either Bank Up or Bank Down. The Banks are in a circular orientation meaning you can be in Bank G and Bank Up to get back to Bank A, or be in Bank A and Bank Down to get to Bank G. This can help save time when wanting to get to a desired bank as quickly as possible.

Also when banking, if a memory scene is currently loaded in the bank you're in, and its corresponding green LED is illuminated, it will remain active even when changing banks. The Green Led above the recalled scene will turn off, indicating you're no longer in that bank. However it will still continue to be played thru your preamp until another scene is loaded, regardless of which bank you're in. This will prevent the user from experiencing scene changes while Banking to the desired bank seeking out a different stored scene.

⇒ If you have a current memory location recalled and end up banking all the way back to the bank the memory scene was stored in, the green LED above the corresponding memory knob will re-illuminate, indicating you are back in the Bank of which the scene that is currently playing, is part of.

Banking Up Using Foot Switches

To Bank Up using the foot switches, simply simultaneously depress the Mem3 and Mute foot switches and you will go up to the next bank. The display will briefly display your current Bank information for 3 seconds as well as any loaded scene, including scene name if assigned.

Banking Down Using Foot Switches

To Bank Down using the foot switches, simply simultaneously depress the Mem1 and Mem2 foot switches and you will go down to the next bank. The display will briefly display your current Bank information for 3 seconds as well as any loaded scene, including scene name if assigned.

Filters Screen



The **VHPF** (turn Bass/Mem1 knob to adjust frequency) allows frequencies **above** the displayed frequency to pass while cutting frequencies below. Factory default is 40Hz. Turning this knob adjusts the cut-off frequency from 30Hz – 98Hz in 2Hz increments. Use this control to clean up the very low end of the bass frequencies, which can often muddy the low-end program information and needlessly stress your speaker system and waste amplifier headroom.

⇒ To help minimize needless stress on speakers and maximize amplifier and overall system headroom, it is advisable to set this control at 40Hz (factory default setting) or higher, if further low frequency attenuation is needed.

The **VLPF** (turn LMid/Mem2 knob to adjust frequency) cuts frequencies **above** the displayed frequency while passing frequencies **below**. Factory default is "**Off**". Turning this knob adjusts the cut-off frequency from 500Hz – 10kHz in 100Hz increments. Use this control to attenuate any high frequency artifacts, such as fret noise, pick attack, unwanted drive harmonics, etc. to produce a cleaner, more musical signal to both the DI and amplifier output. This filter can also serve as a useful cabinet simulator for both the DI and when using the headphone output for quiet listening.

⇒ The VLPF frequency is saved as part of a Mem save for future recall, allowing different settings for different basses or musical styles.

The **Variable Feedback Filter- VFBF** (HMid/Mem3 knob adjusts note, Trbl/Bright knob adjusts gain) is intuitively designed to help you identify and sweep the note frequencies from E1 (41Hz) – G3 (196Hz) in single note (1/2 step) increments, and adjust the gain, when engaged from -6dB to -12dB in level to help eliminate or minimize problem feedback issues with electroacoustic instruments.

To use, try to identify the note on your instrument that is feeding back the strongest <u>from the</u> <u>location in which you will be playing</u> (very important as feedback is affected by the proximity of the instrument to the boundaries and sound source in which it is near). While muting your instrument or amp, press and release the filter knob and then turn the HMID knob to the note (i.e. A2) that is feeding back the strongest. Turn the TRBL knob CCW to set the cut level between -6dB and -12dB, then un-mute the amp or instrument and go back to the same location you will be playing from and see if the feedback has been eliminated or reduced. You may need to try this a few times and adjust the amount of cut in gain accordingly.

The Variable Feedback filter's parameters are **not** saved in Memory and the gain is reset to **OFF** on power recycle, as it is an environment dependent adjustment.

Compressor Screen

To engage the Compressor Screen, from the Home Screen, tap the **Prog** button to the right of the OLED display three times. You will see the screen as shown below:



 Turn Bass/Mem1 Knob to turn VRC (Variable Ratio Compressor) On or Off

Off ⇔ On

- Turn LMid/Mem2 Knob to select compressor Type (Parallel or Serial)
 Par ⇔ Ser
- Turn HMid/Mem3 Knob to increase or decrease the drive level into the compressor. The higher the number, the more compression you should hear.

1 ⇔ 15

• Turn Trbl/Bright Knob to adjust VRC post effect Volume level to try and make the VRC On and Off volumes the same.

1 ⇔ 15

⇒ The Parallel compressor compresses only 50% of your signal and keeps the other 50% un-compressed, preserving the dynamics of your playing if that's what you desire.

Helpful Hints:

To best use the compressor, set up your input gain to the **Super Pre** such that the OL light barely flashes on your loudest peaks. Then, while on the Compressor Screen, turn the VRC On and set the Comp level so that you get the desired amount of compression during normal playing. Next turn the VRC off and compare the uncompressed volume with the On volume and adjust the Gain so they match.

- The VRC in the Super Pre can be either a serial or parallel architecture. In Serial mode the whole signal is compressed whereas when parallel is selected half your signal is uncompressed and summed with the compressed signal giving a thicker, meatier tone without losing the attack of the note. A nice starting point would be 7 and 7 on the Comp and Gain settings. Adjust to taste from there.
- ⇒ All Compressor Settings are saved as part of a memory scene.

Effects Screen (O/D, Dist, Fuzz)

To engage the effects screen, from the Home Screen, tap the **Prog** button to the right of the OLED display three times, (or once from the Compressor screen). You will see the screen as shown below:



Turn Bass/Filters Knob to turn effects On or Off

Off ⇔ On

Turn LMid/Mem1 Knob to select effect type

O/D ⇔ Dist ⇔ Fuzz

Turn HMid/Mem2 Knob to adjust Drive level into effect

1 ⇔ 15

• Turn Trbl/Bright Knob to adjust post effect Volume

1 ⇔ 15

- ⇒ It is **very** important that the **Super Pre**'s input gain is adjusted properly before adjusting Effect's Drive level
- ⇒ The effects are touch sensitive. The harder you play, the harder it drives the effect.
- ⇒ For best results, use the Drive level to first determine the desired sound from the effect. Then, using the Eff. Off/On control, compare the volume of the processed signal (On) with the clean signal (Off) and adjust the Vol level to get the same perceived volume.
- ⇒ These Effect settings are saved as part of a scene save.
- ⇒ To return to Home Screen, tap the **Prog** button twice.

Xover, DLPF, Blend Screen

The **Xover** adjustment determines where the clean Low Pass part of your Bass' signal ends and the Drive High Pass part of your Bass' signal begins. It is scene savable and is adjustable from 100Hz to 1kHz in 50Hz increments.



The **DLPF** (Drive Low Pass Filter) determines the upper frequency limit of your bass signal going into the Drive circuits. It's scene savable and adjustable from 1kHz – 3kHz in 100Hz increments.

⇒ The **DLPF** filter along with the High Pass leg of the **Xover** filter forms a Band Pass filter into the Drive circuits. So above, the **Xover** is set at 350hz and the **DLPF** is set at 1.5khz, which yields a bandwidth of 350hz to 1.5khz going into the Drive circuit.

The **Blend** % determines the ratio of the selected effects signal (O/D, Dist, or Fuzz) blended into the clean signal. Above indicates a 70% Effect and 30% clean blend.

For best Drive Blend results, adjust the Drive volume using the 100% Drive Blend setting for the selected Effect (i.e. O/D, Dist, or Fuzz) and check for it to be the same as the clean volume using the On/Off and Vol control as explained above. This will ensure an accurate blend % between the Drive and clean signal.

Mem1 Mem2 and Mem3 Save

You can save and store up to 7 Banks of 3 independent memory scenes, for a total of 21 scenes for future recall. The parameters that are saved are the BASS, LMID, HMID, TRBL gain settings, center frequency, and Q, **Bright** settings (center frequency and gain), **Effects Loop** (On or Off), Effect **Type** (O/D, Dist, or Fuzz), **Drive** level and post effect **Volume**, **Drive Blend** %, **DLPF**, **Xover Freq**, **Scene Gain**, **VRC** compressor (On or Off), Compressor **Type** (**Serial** or **Parallel**), **Comp** level, compressor post **Gain** level, and **Input Impedance**.

To save a scene to **Mem1**, **Mem2**, or **Mem3**, once you've determined the scene you would like to save, go to the Banking Screen and determine which Bank you would like to store the Scene in by turning the Bass/Mem1 knob. If you would like to name the scene, use the HMid/Mem3 knob to move the curser and the Treble knob to select the alpha-numeric character. Once done, while pressing and holding the **Prog** button, press and release the desired Mem knob in the location where you would like to store that scene to (**Mem1**, **Mem2**, **or Mem3**). The LED over that memory location will illuminate indicating the desired scene is now saved in that Mem location and the Banking Screen will update to reflect this scene save.

To recall these settings at a later time, just push and release the appropriate Mem control knob while in the appropriate Bank. The saved settings will now be loaded into the DSP and the green LED for that Mem location will illuminate. To go back to the current Main Scene, just push the same Mem control knob again.

- ⇒ When making any parameter adjustment while in either of the Mem locations, the green LED will remain lit for that location indicating you are still in a Mem recall state. However, if you exit that Mem location without saving the new settings, the next time it is recalled it will load its previously saved state.
- ⇒ Recalling an empty memory location will result in no action taken by the preamp.

Program Mode

Many of the **Super Pre**'s extended and unique features are accessed in the program mode. To enter program mode, press and hold the **Prog** button for 3 seconds from the Home Screen. The green **Prog** LED will turn on and the first menu screen will appear on the OLED display (**Instrument Level** Menu). The green Prog LED will stay on for the duration of the time you're in program mode. By quickly pressing and releasing the program button while in program mode, you will be able to cycle through the various program menus until you reach the desired menu(s). To leave program mode and go back to the previous Home Screen, press and hold the **Prog** button again for 3 seconds, or the Program mode will eventually time after approx. 15 seconds of no activity. You can also press **Mute** 2 consecutive times to quickly return to the previous **Home Screen**.

<u>Screen 1 - Instrument Level menu</u>

This menu allows you to select between using a **Hi Output** instrument and a **Lo Output** instrument. When **Lo Output** is selected, an increase in gain is programmed into the **Super Pre** to compensate.

Turn the **Bass/Filters Knob** to select the desired Instrument output level: **Hi Output** ⇔ **Lo Output**

→ Note: Some active basses may have outputs comparable to a single coil, passive bass while some passive basses may have outputs comparable to a more traditional active bass. Be sure to select Instrument Level accordingly.



Properly Adjusting Input Gain

Start with the **Hi Output** setting (Factory default setting), and with the input gain fully off, play your bass like you normally would, including hard dynamic attacks. Gradually turn the input gain up until you can see the OL led flash on the top panel of the Super Pre. Once the OL Led flashes, back the gain off slightly for additional headroom before clipping. This is the optimal input level for your bass and playing style. Keep the **Instrument Level** in **Hi Output** mode for this instrument.

If you can't get the OL led to flash when the input gain is turned all the way up, select **Lo Output** for **Instrument Level** and re-adjust input gain as explained above.

- ⇒ It is very important to adjust the **Super Pre**'s input gain properly, as the DSP is designed around a specific input level.
- ➡ If the output of your active bass is very hot, you could unnecessarily and unknowingly be clipping your onboard preamp, introducing a distorted signal to your amplification system right out of the gate! Try to adjust your bass' active output level to be the same as its passive level (if you have an active/passive switch) to ensure maximum dynamic

Screen 2 - Center Frequency adjust menu

BASS LMID HMID TRBL 60 250 1.0k 4.0k

- Turn Bass/Mem1 Knob to select desired center frequency for Bass Tone Control
- Turn LMID/Mem2 Knob to select desired center frequency for Lmid Tone Control
- Turn HMid/Mem3 Knob to select desired center frequency for HMid Tone Control
- Turn Trbl/Bright Knob to select desired center frequency for Treble tone control

Screen 3 - Tone Control Q Select menu

This menu allows you to select between **Wide**, **Med**, **Narrow**, **or Notch** (LMID and HMID only) for each tone control's Q. These Q's will be saved as part of a memory scene.



- Turn Bass/Mem1 Knob to select the desired Q for Bass tone control
 Wide ⇔ Med ⇔ Narrow
- Turn LMid/Mem2 Knob to select the desired Q for LMid tone control
 Wide ⇔ Med ⇔ Narrow ⇔ Notch
- Turn HMid/Mem3 Knob to select the desired Q for HMid tone control
 Wide ⇔ Med ⇔ Narrow ⇔ Notch
- Turn Trbl/Bright Knob to select the desired Q for Treble tone control
 Wide ⇔ Med ⇔ Narrow

<u>Screen 4 - Bright Filter Adjust Menu</u>

This menu allows you to adjust the center frequency and gain parameters of the Bright filter. When the bright function is engaged from the Home Screen by pushing the Bright control knob, the parameters you adjust in this menu will be loaded into the DSP's Bright filter.

- ⇒ Be sure to engage the Bright function while in the home screen before entering program mode so you can hear the results of your adjustments in real time while in this screen.
 - Turn the Bass/Mem1 knob to adjust frequency from 2 kHz to 10 kHz in increments of 100Hz.
 - Turn the Trbl/Bright knob to adjust gain in increments of 1dB from +1dB

to +12dB.

Below shows the Bright filter adjusted to a center frequency of 7.0kHz and a gain of +8db. Whenever the Bright function is engaged from the Home Screen, these parameters will be loaded into the **Super Pre**'s Bright filter EQ. The currently loaded Bright Filter parameters will also be saved as part of a scene save if the Bright function is engaged during the save.



<u>Screen 5 - POST DI Select menu</u>

This menu allows you to select whether the Pre-Profile or Post-Profile signal is sent to the Post DI output.

 Turn the Bass/Mem1 Knob to select DI Output: Pre-Profile ⇔ Post- Profile



Pre-Profile: This does not include the loaded Speaker-File in the Post DI signal path. **Post-Profile:** This includes the loaded Speaker-Files in the Post DI signal Path.

Screen 6 - Scene Gain Adjust menu

This menu allows you to adjust and save the overall volume of a particular scene relative to your baseline volume. It will allow you to have some scenes more forward in the mix for things like soloing, or maybe to help compensate for an overly driven sound whose relative volume may need to be tamed a bit. This parameter is saved as part of a scene save.



• Turn the Bass/Mem1 knob to select desired output level from -6dB to +6dB in 1dB increments

<u>Screen 7 - Output Level Adjust menu</u>

This menu allows you to adjust the Super Pre's output to get maximum resolution from its Master Volume control and best match its output to the connected amp's input sensitivity. It's adjustable from 0dB to +6dB (1V to 2V peak or 0.707V to 1.41Vrms) in 1 dB increments.



• Turn the Bass/Mem1 knob to select desired output level.

Screen 8 - Effects Loop menu

This menu determines if the effects loop is part of the signal path. Selecting "On" means it's included in the signal path, "Off" means it's not in the signal path. This parameter is also part of a scene save.



Turn the Bass/Mem1 knob to the desired setting.

Screen 9- Input Impedance menu

This menu allows you to change the Super Pre's input impedance between 1 Meg and 10 Meg ohms. This parameter is also part of a scene save.



Turn the Bass/Mem1 knob to select desired input impedance.

<u>Screen 10 – Profile Select menu</u>

This menu allows you to select one of the Super Pre's stored Speaker-Files and load it into the Profile EQ section of the Super Pre's DSP processor.

Turn the **Bass/Mem1** knob (Left or Right) until the desired Speaker-File appears on the OLED display. Once displayed, the selected file will be loaded into the Speaker-File EQ section of the Super Pre's DSP processor.

The screen below shows the HDN212 profile being selected and loaded into the **Super Pre**'s Speaker-Files EQ section.



<u>Screen 11 – Profile USB Load menu</u>

This menu allows you to load new Speaker-Files from a FAT32 formatted thumb drive into one of the twelve dedicated Profile memory locations of the Super Pre. In this menu the Super Pre will read any file off the thumb drive with a **.PRF** extension. You will be able to scan and select which speaker profile you would like to import from the thumb drive and choose which dedicated profile memory location you would like to store it in for future recall. You can overwrite profiles already stored in the Super Pre with new ones, if desired. Once stored, you can load the speaker-file into the DSP's profile filters from the Profile Select menu above.

Speaker-files (formerly called profiles) are available for download at www.Bergantino.com.

To load Speaker-Files:

- Insert thumb drive loaded with .prf files into Super Pre'S USB port
- Turn the Bass/Mem1 knob to select Speaker-File on your thumb Drive you want to store in memory
- Turn the Trbl/Bright knob to select which profile memory location to store the Speaker-File in
- Press any knob to Store Speaker-Profile.

The first screen below shows the software prompting the user to insert a USB thumb drive into the **Super Pre**'s USB port in order to load a new Speaker-File (*.PRF file). The second screen shows the HDN212 profile being loaded into memory slot 3 of the **Super Pre**'s profile memory.





⇒ Once loaded into one of the twelve Super Pre's Profile memory slots, the new Speaker-File can be loaded into the Super Pre's Profile EQ filters by cycling back to the Profile Select menu and turning the Bass/Filters knob until the desired profile name is indicated on the OLED display.

Screen 12 - Main Phase Menu

This menu allows you to reverse the phase of the Super Pre's main line output to help eliminate any possible feedback or phasing issues experienced in a live or recording environment. It does not affect the phase of the DI out.

 Turning the Bass/Mem1 knob Normal ⇔ Reverse



Screen 13 - Tuner Frequency, Instrument Select and Enable Menu

This menu allows you to choose the A4 reference frequency for instrument tunings. Ranges from A432 – A448 can be selected using the **Bass/Mem1** knob. The Factory default is A=440.

A4 Instr Enabled 440Hz Bass On

It also allows you to optimize the tuner's speed and accuracy for either Bass or Guitar by turning the **LMID/Mem2** knob to the desired instrument. And, you can enable or disable the tuner function in this menu by turning the **Trbl/Bright** knob to the desired selection. If enabled, when Mute is engaged, the OLED display will turn into a fast and accurate chromatic tuner optimized for the instrument selected.

<u>Screen 14 – Scene USB Import Menu</u>

This menu allows you to import scenes from a thumb drive with a **.scn** extension into any of the 21 available memory locations across 7 banks

- Insert thumb drive with .scn named scenes into Super Pre's USB port.
- Turn the Bright/Trbl knob to scan and select a scene on thumb drive you
 wish to store in one of the 21 memory locations of the Super Pre.
- Turn the **Bass/Mem1** knob to select memory location you want to store scene into
- If there is already a scene loaded in the memory location selected, it will show Bank Letter and Mem Number (i.e. A1) and Scene name (if named). If the memory location is empty, it will display (none). This feature will help you avoid inadvertanly overwriting an existing scene you wish not to lose.
- Press any of the 4 knobs to transfer scene from thumb drive into selected memory location in Super Pre.
- If transfer is successful, **Done!** will flash momentarily on dislplay then transferred scene will now show over **Mem1/Bass** knob with Bank and Mem location designation (i.e. **A2**) and scene name.

<u>Screen 15 – Scene USB Export Menu</u>

This menu allows you to export scenes from any of the **Super Pre's** 21 memory locations which have a scene saved in it to a thumb drive.

- Insert thumb drive into Super Pre's USB port.
- Turn the **Bass/Mem1** knob to scan any of the 21 **Super Pre's** memory locations which has a scene saved in it to select which scene you wish to export to the attached thumb drive.
- Press any of the 4 knobs to transfer scene from Super Pre onto attached thumb drive.
- If transfer is successful, **Done!** will flash mometarily on display.

Screen 16 - Factory Reset Menu

This menu allows you to return to original factory settings.

FACTORY RESET 1234 &Press to reset 0000

- **Turn** Bass/Mem1 knob until a 1 appears in first position.
- Turn LMID/Mem2 knob until a 2 appears in the second position.
- Turn HMID/Mem3 knob until a 3 appears in the third position.
- **Turn** Treble/Bright knob until a 4 appears in the fourth position.
- Press any knob to return to original factory settings.

Screen 17 - Software Rev. Menu

This menu displays the current version of the software loaded into your **Super Pre**.

Firmware Updates

If new software becomes available for your **Super Pre**, you can upgrade the firmware via the USB port by doing the following:

- Load the firmware *.hex file onto a FAT32 formatted thumb drive. If you are using a Macintosh computer set the scheme to 'Master Boot Record' when you format the USB drive for FAT32.
- Rename the file to **superpre.hex** (all lower case) but do not rename the thumb drive
- With the **Super Pre**'s power off, insert the thumb drive into the USB port
- While holding in Prog button, turn pre-amp on and continue to hold Prog button until green Prog LED lights. Once illuminated, release Prog button and wait for software to install (app. 10 seconds)
- Once the Main screen appears on the OLED display, remove thumb drive. Your new firmware is ready to go!

Specifications

Maximum Input Levels:

Instrument Input: 3Vrms

Aux. Input: 2Vrms Effects Return: 2Vrms

Input/Output Impedances:

Input Impedance 1M or 10M Ohm (Software Selectable)

Aux. input Impedance
Send output Impedance
Return input Impedance
Line Output Impedance
DI Output Impedance
20k Ohm
20k Ohm
1.0k Ohm
600 Ohm

Tone Controls (Peaking Type – User Selectable Q in Program Mode):

Bass: +12dB/-18dB Variable from 40Hz to 150Hz in 5Hz increments LoMid: +12dB/-18dB Variable from 100Hz to 800Hz in 25Hz increments HiMid: +12dB/-18dB Variable from 400Hz to 3kHz in 100Hz increments Treble: +12dB/-18dB Variable from 1.5kHz to 9kHz in 500Hz increments

Filters:

Variable High Pass Filter (VHPF): Variable from 30Hz to 98Hz in 2Hz increments.

Variable Low Pass Filter (VLPF): Variable from 500Hz to 10kHz in 100Hz increments.

Variable Feedback Filter (VFBF): Adjustable from off (0dB) to -6dB to -12dB. Frequency range from 40Hz to 196Hz (E1- G3) in half step increments.

Bright Filter: Adjustable +1dB to +12dB. Variable from 2kHz to 10kHz in 100Hz increments.

Parameters Saved as Part of a Scene Save (up to 21Scenes → 7 Banks of 3)

Tone Controls – Gain, Center Frequency, Q Bright Filter – On/Off, Center Frequency, Gain

VLPF frequency

Compressor – On/Off, Type, Comp, Gain

Effects – On/Off, Type, Drive, Volume, Xover, DLPF, Blend%

Scene Gain Adjust – Value from -6dB to +6dB in 1 dB increments

Effects Loop – On/Off

Input Impedance – 1Meg or 10Meg

Dimensions (HxWxD): 8.5 W x 6.75"D x 3.0"H

Weight: 2.5 lbs.

Power Requirements:

9-12VDC or VAC 0.5 Amps / 500ma

Warranty Information

Bergantino Audio Systems, 1 Main Street, Whitinsville, MA 01588 U.S.A. warrants to you, the ORIGINAL PURCHASER of the Bergantino Audio Systems **SuperPre**, for a period of one (1) year from the date of purchase by the original purchaser (the "warranty period") that the new Bergantino Audio product is free of defects in materials and workmanship. We further warrant the new Bergantino Audio product regardless of the reason for failure, except as excluded in this Warranty.

ITEMS EXCLUDED FROM THIS Bergantino Audio WARRANTY

This Bergantino Audio Warranty is in effect only for failure of a new Bergantino Audio product that occurred within the Warranty Period. It does not cover any product, which has been damaged because of any intentional misuse, accident, negligence, or loss, which is covered under any of your insurance contracts. This Bergantino Audio Warranty also does not extend to the new Bergantino Audio product if the serial number has been defaced, altered, or removed.

WHAT THE WARRANTOR WILL DO

We will remedy any defect, regardless of the reason for failure (except as excluded), by repair or replacement. Warranty work can only be performed at our authorized service centers or at the factory. Warranty work for some products can only be performed at our factory. We will remedy the defect and ship the product from the service center or our factory within a reasonable time after receipt of the defective product at our authorized service center or our factory. The customer will bear the expenses of shipping the product to Bergantino Audio in remedying the defect, including surface shipping costs in the United States, while return shipment will be borne by Bergantino Audio. (You must bear the expense of shipping the product between any foreign country and the port of entry in the United States including the return shipment, and all taxes, duties, and other customs fees for such foreign shipments.)

HOW TO OBTAIN WARRANTY SERVICE

You must notify us of your need for warranty service within the warranty period. All components must be shipped in a factory pack, which, if needed, may be obtained from us for a minimal charge. Corrective action will be taken within a reasonable time of the date of receipt of the defective product by our authorized service center or us. If the repairs made by us or our authorized service centers are not satisfactory, notify our authorized service center or us immediately.

DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

YOU ARE NOT ENTITLED TO RECOVER FROM US ANY INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE NEW Bergantino Audio PRODUCT. THIS INCLUDES ANY DAMAGE TO ANOTHER PRODUCT OR PRODUCTS RESULTING FROM SUCH A DEFECT. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

WARRANTY ALTERATIONS

No person has the authority to enlarge, amend, or modify this Bergantino Audio Warranty. This Bergantino Audio Warranty is not extended by the length of time that you are deprived of the use of the new Bergantino Audio product. Repairs and replacement parts provided under the terms of this Bergantino Audio Warranty shall carry only the unexpired portion of this Bergantino Audio Warranty.

DESIGN CHANGES

We reserve the right to change the design of any product from time to time without notice and with no obligation to make corresponding changes in products previously manufactured.

LEGAL REMEDIES OF PURCHASER

THIS Bergantino Audio WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS; YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE. No action to enforce this Bergantino Audio Warranty shall be commenced after expiration of the warranty period.

THIS STATEMENT OF WARRANTY SUPERSEDES ANY OTHERS CONTAINED IN THIS MANUAL FOR Bergantino Audio PRODUCTS.