

The Tasty Blender V2

USER MANUAL



The Tasty Blender V2
A compact 3-channel mixer
with Advanced DSP Limiting
Designed for In-ear Monitoring

Made in the USA
By Rock On Audio
Lafayette, Colorado

Thank you for purchasing The Tasty Blender V2! We hope that you will enjoy using our product, and it will help you get the best audio experience possible.

Please read through this manual and take note on some of our suggestions. We hope that it will help you better understand the many features of The Tasty Blender and have the best experience possible using your new piece of gear. Thanks again and rock on!

Table Of contents:

Warnings	Page 3
Threshold settings	Page 3
Ringing after use	Page 3
Notes on isolation	Page 3
Introduction	Page 4
Power	Page 4
The Inputs	Page 5
The Outputs	Page 5
The four control knobs	Page 6
The knobs are also buttons	Page 6
The Home Screen	Page 7
Adjusting the Main Mix Volume	Page 7
Viewing/adjusting Channels 1, 2 and 3 volume settings	Page 8
Navigating to other parameters (i.e. Stereo/mono mode)	Page 9
Parameter Navigation Map	Page 10
Audio Signal Chain	Page 11
Display output definition and notes	Page 12-17
3-Year Limited Warrantee	Page 18
Repairs	Page 18
Contact Information	Page 18

Warnings: be careful.

Although this product has very sophisticated limiting that is designed to protect your hearing, please always use caution when using this product in any audio environment. It is always a good idea to start with your volumes low, and gradually increase your levels to the desired settings. Also, please avoid hasty adjustments. Always try to make slow and precise adjustments.

Threshold settings

We recommend using the factory preset thresholds:

1L: 99

2L: 99

3L: 99

SL: 37

SF: 57

SS: 63

These settings are designed to provide the optimal amount of limiting for a loud audio environment (i.e. a rock band at rehearsal or during a live performance).

These settings were chosen using a set of Westone UM1s. If you use different IEMs, you may consider changing these settings to better compliment your IEMs. However, we advise using caution when adjusting threshold settings. Please do so in a controlled environment (i.e. a studio or rehearsal space). It is not ideal to adjust these settings during a sound check or during a live performance, as these situations are more prone to having feedback and other harmful sounds.

Ringling after use

Ringling in your ears after use is a clear indication that your volumes are too loud and will lead to long term hearing loss. If you hear ringling in your ears after any amount of use, then please consider lowering your main mix volume and thresholds to keep your volume at a lower level.

Notes on isolation

If you are having trouble hearing your mix at a lower level, then please consider using some sort of better isolation. Here are some recommendations to help with isolation:

-Custom molded IEMs.

-Ensure that your IEMs are positioned properly in your ear canal, and that they are as snug as possible.

-If you are using universal fit IEMs with foam plugs, then make sure that they are in good condition and the foam still has plenty of expansion after you compress them each time. If there is too much earwax build up on them, then they will fail to expand inside your ear canal, and therefore fail to form the best isolation possible.

Introduction

The Tasty Blender is a versatile little box. It has lots of features, and some of them are only accessible once you understand how the control interface works. Please read through this manual and get a chance to navigate to and adjust every feature. This will help you become comfortable with the interface and make for a much smoother integration into your sound setup.

Power

The Tasty Blender can accept a DC power supply of 9V (pin + or pin -). During normal use, it requires 110-115 mA of current.

It can accept either polarity of power (either pin-positive or pin-negative). This allows you to daisy-chain power from a variety of other DC powered devices such as guitar effects pedals.

The power supply that is included with the product is 9V pin-negative, capable of supplying 650mA of current.



When you first power up, you should see that the center screen lights up red and the 4 control knobs light up green.

If you are having trouble with power, please verify that the plug mates properly with the Tasty Blender.

Also, please verify that the unit does work with the supplied power supply.

The Inputs

There are three 1/4" TRS phono plug type inputs. They can accept a variety of signal types and levels.

Input details:

Channel 1: Line level (bal/un-bal) tip-ring-sleeve (TRS)

Channel 2: Line level (bal/un-bal) tip-ring-sleeve (TRS)

Channel 3 (when type is set to MONO): Line level (un-bal) tip-sleeve (TS)

Channel 3 (when type is set to SPEAKER): Speaker level (un-bal) tip-sleeve (TS)

Channel 3 (when type is set to STEREO): Line level (dual un-bal) tip-ring-sleeve (TRS) as stereo left/right. This is like something that you would get from the headphone output of a mixer, headphone amp, MP3 player, laptop output, or click track metronome.

*Although all three channels can be panned left or right, when channel 3 is set to type STEREO, channel 3 can only be set to a left/right pan mode or center/center pan mode.

The Outputs

The stereo output is designed to drive IEMs or over-the-ear headphones that have an impedance of 16 ohms or greater.

When using different types of IEMs or headphones, the user may need to adjust the thresholds of limiting and the output volume to find their desired output volume settings.

***Warning, NEVER plug a guitar cable into the output of the Tasty Blender.** This will damage the output driver. The TS type connector itself causes a short on the ring channel to ground and will burn out the ring channel driver.

If you wish to plug the Tasty Blender into something other than a set of headphones or IEMs, then please use an insert patch cable (aka "Y-Cable" or TRS to split-TS). This way you can access the left and right channels individually.

The 4 control knobs

The four knobs on the Tasty Blender will spin endlessly in either direction. This type of knob is known as an encoder. It allows you to use a single knob for more than one purpose. Sometimes you will use the encoders to adjust volume, and other times you may adjust threshold settings or bass EQ. The onboard microprocessor stores your settings in memory and recalls those settings each time it boots up. In this way, the Tasty Blender is very similar to a digital mixing soundboard.

The knobs are also buttons

The knobs are also buttons. You can press them in, and this will change the display option or navigate to different menu options. You can press them quickly or hold them down for a few seconds.

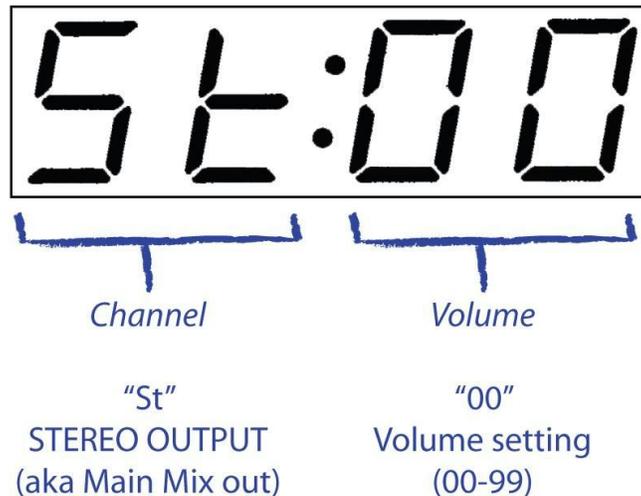
Press a knob in for a quick instant (a short press) and this will show you your setting for a particular parameter.

Press the knob and hold for 2 seconds (a long press) and this will navigate you to a new parameter.

The Home Screen

When you first turn on the Tasty Blender, it first flashes a "0000" in the display. This is to indicate that the screen is working properly.

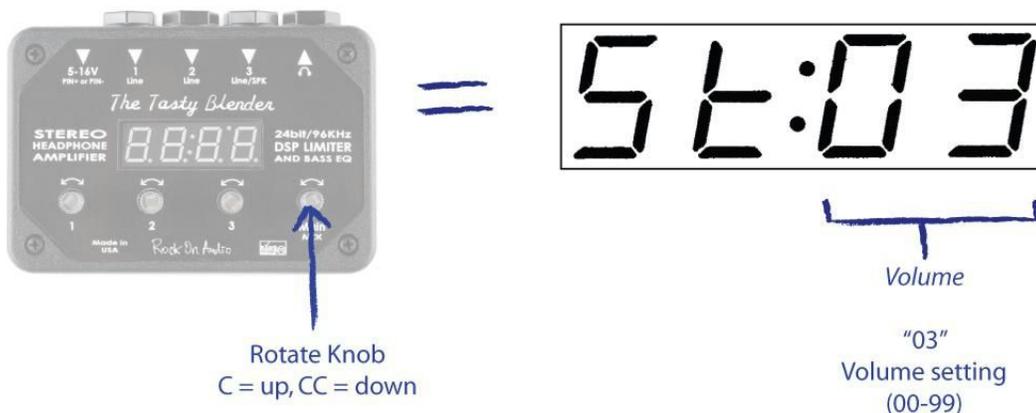
It then jumps to the home screen and displays, "St:00". In the home screen, the display will show you your stereo output volume. In my example below the display is showing me that my STEREO OUTPUT volume is at zero. Note yours may be set to a different volume setting.



Adjusting the Main Mix Volume

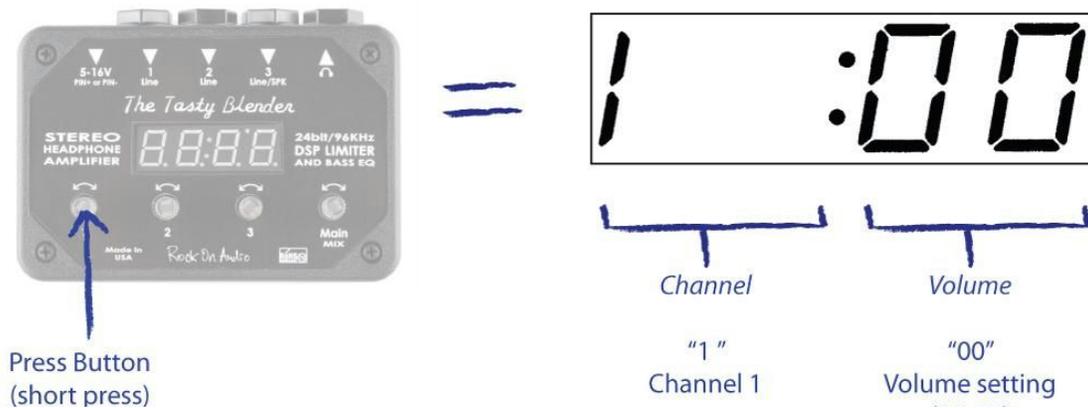
Try rotating the "Main MIX" knob in either direction. It will allow you to adjust your volume setting from 0 (minimum) up to 99 (maximum).

In the example below, I turned my main mix knob 3 clicks clockwise, and so increased the volume to 3. Note, the knob does not physically click each time the setting is adjusted. It does, however, digitally increment the setting in either direction.

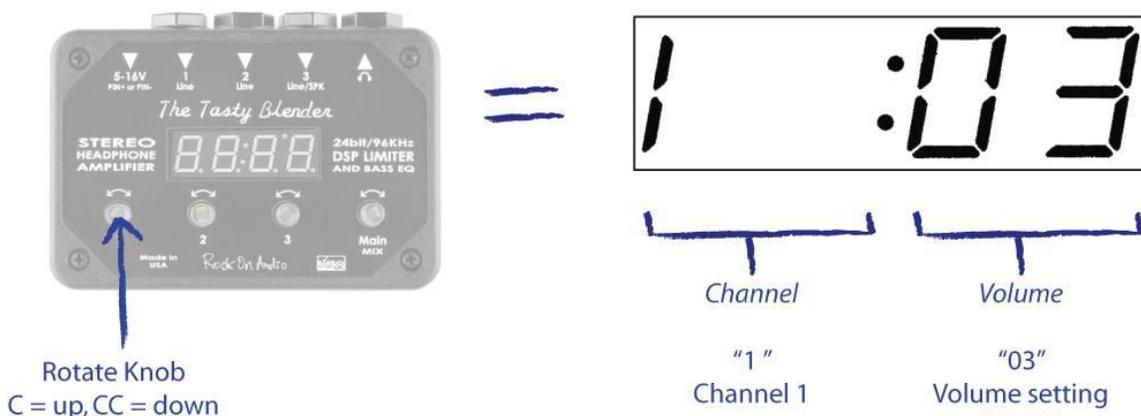


Viewing/adjusting Channels 1, 2 and 3 volume settings

Try pressing knob 1 like a button. Make sure to press it quickly (i.e. don't hold it down for more than 1 second). You will notice that the display changes to show you that particular channel's volume. In my screen example below, you can see that my volume for channel 1 is set to "00":



In the next example, I have turned knob 1 clockwise three clicks:



You can do the same thing for channels 2 and 3. Just remember the two following things:

Short press = *View* setting

Rotate Knob = *Adjust* setting.

*Special note: You can also begin adjusting a channel immediately by simply rotating that knob. The screen will automatically jump to that channel. But remember, if you only want to see volume, just press the knob like a button.

Navigating to other parameters (limiter thresholds, pan, bass, etc.)

In the home parameter (aka "home screen"), the knobs adjust volume. In order to adjust other parameters, there is a three-step process:

1) **Navigate** to the parameter by pressing a knob like a button for more than 2 seconds. This is what we call a "long press". Doing a "long press" on different knobs will take you to different parameters. Use the table (pg. 10) to find the correct navigation actions.

2) **Adjust the setting** by rotating a knob. Just like adjusting volume, when you rotate a knob, it will make an adjustment on the active parameter.

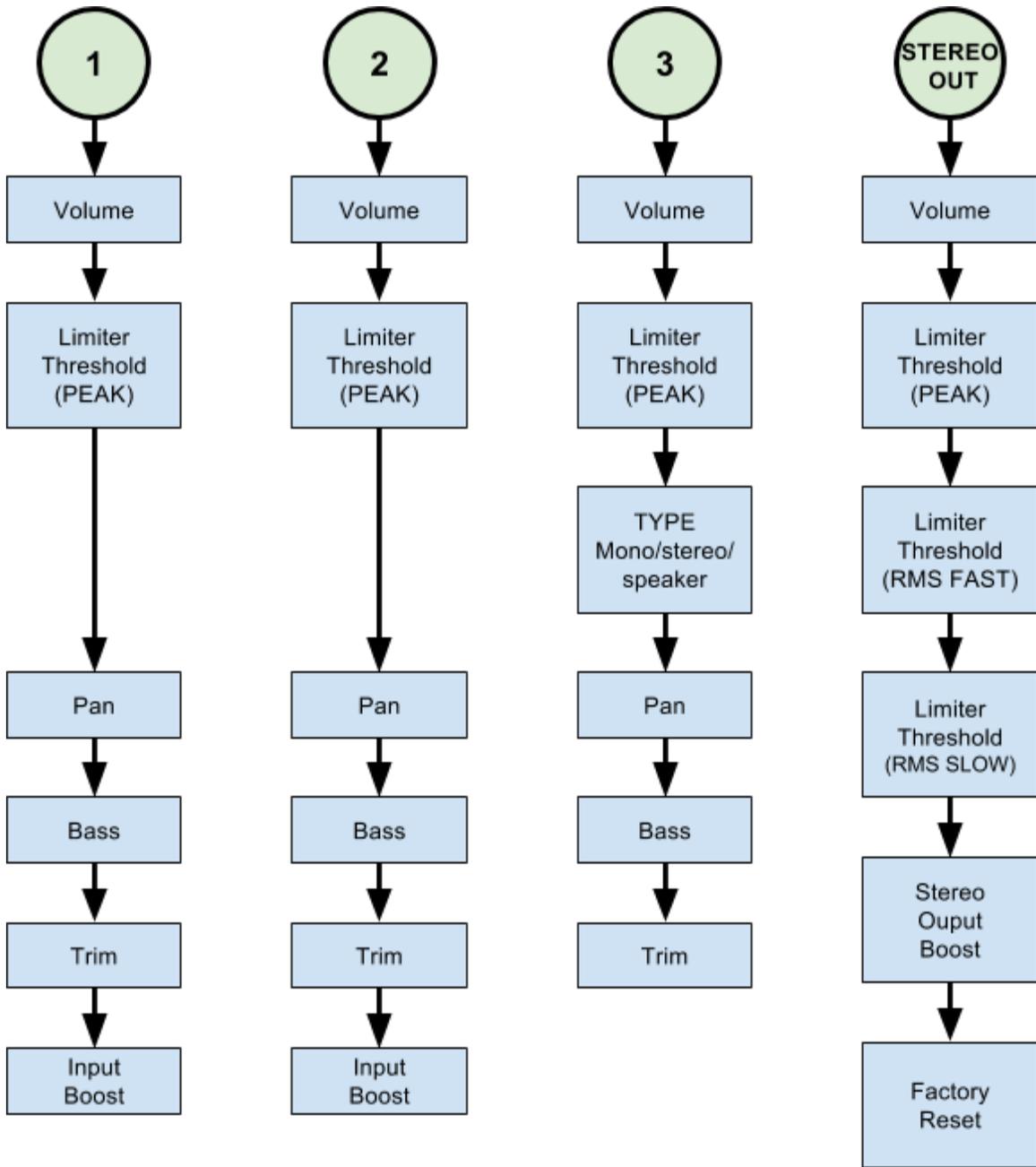
*Note some parameters are simply "ON" or "OFF". For example, the input boosts. In this case, you rotate the knob clockwise to engage and Counter-clockwise to disengage.

3) **Wait 10 seconds** for the adjustment to be saved and for you to be automatically returned to the home screen.

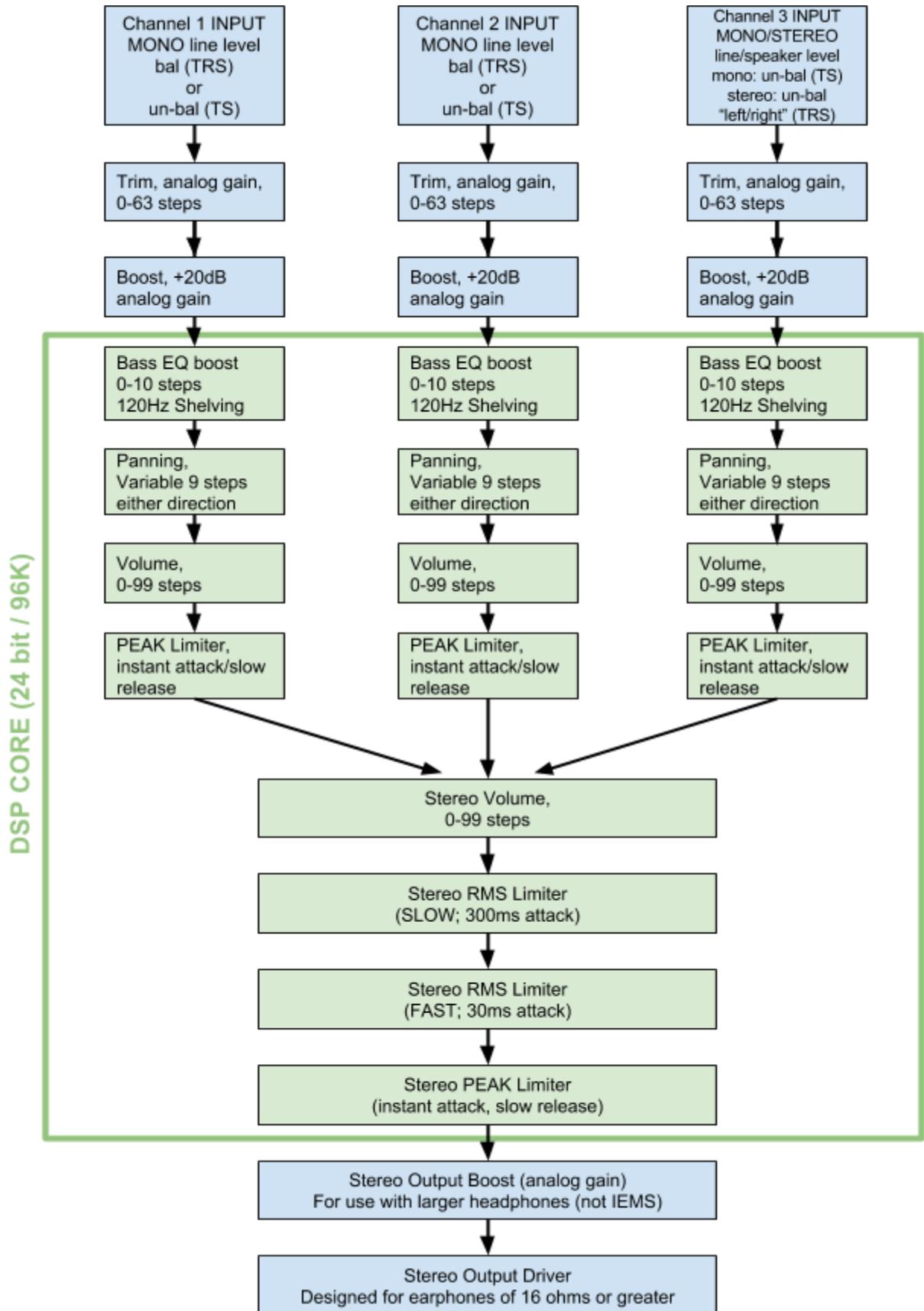
Use the map on the next page to navigate to and adjust specific parameters.

*Note, when you are finished making your adjustment, you can return to the home screen by doing a "long press" on the "main mix" knob - cycling through the parameters to get home. However, the Tasty Blender will not save your settings until it has been left alone for 10 seconds. When the colon in the middle of the display turns off for a blink, this indicates that your settings have been saved.

Parameter Navigation Map



Audio Signal Chain

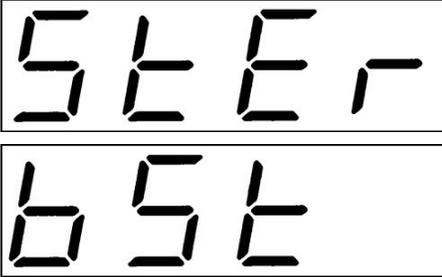


Display output definition and notes

DISPLAY OUTPUT	DEFINITION	NOTES
	Limiter Threshold	This is a "splash" screen that will only show for 3 seconds when you navigate to this setting.
	Channel 1, Limiter Threshold (PEAK), 99	Bring this down to limit channel 1. For most applications, a good starting point is around 35. "99" = no limiting "0" = max amount of limiting. Higher Threshold = less limiting. Lower Threshold = more limiting.
	Pan	This allows you to pan each channel either left or right. Note, this will only display for a few seconds to indicate you have navigated to the pan control parameter. It will then jump to the next display and show the current pan value for the channel you are viewing.
	Channel 1, Pan, "c" (centered)	
	Channel 1, Pan, "r1" (slightly panned to the right)	Note, you can pan each channel from a setting of "r1"(very little pan) to "r9" (panned very hard right)

	<p>Channel 1, Pan, "L3" (slightly more panned to the left)</p>	
	<p>Bass equalizer boost control</p>	<p>This will only display for a few seconds to indicate you have navigated to the bass eq boost control parameter.</p>
	<p>Channel 1, BASS BOOST, "00" (off)</p>	<p>Bass boost can be adjusted per channel from 0-10. It is a shelving bass boost set at 120Hz, and increments from 0 to +20db</p>
	<p>Trim</p>	<p>The first gain stage of an audio mixer is sometimes referred to as "trim". This is a gain setting on the first stage of each channel input. It is adjustable on channels 1, 2 and 3. It can be set from 0 (off) up to 64. If you are experiencing clipping at your input, it is recommended that you (1) try reducing your source signal or (2) reducing this input gain stage. The default setting of 40, is usually good to go for most signals.</p>
	<p>Channel 1, "t" (Trim), set to 40</p>	<p>While adjusting trim per channel, the first digit shows the channel you are affecting, the second digit shows that you are adjusting the trim parameter, and right most digits show the setting value (it can be from 0-64). In the example shown, the trim has been set to 40. This is the default setting and is a good setting for most line level audio signals coming</p>

		in.
	"BOOST" CH1,2,3: input boost of +20dB STEREO OUT: output boost of +20db	
	Channel 1, input boost on	
	Channel 1, input boost off	
	Type	Only a parameter for channel 3. Allows you to select mono, stereo, or speaker signals. This is a "splash" screen that will only show for 3 seconds when you navigate to this setting.
	"mon" for MONO	Type of input option for channel 3. MONO allows for mono un-balanced line level signal on TS connector.
	"Ster" for STEREO	Type of input option for channel 3. STEREO allows for stereo un-balanced line level signals on TRS connector.
	"SPr" for SPEAKER	Type of input option for channel 3. SPEAKER allows for mono un-balanced speaker level signal on TS connector.

	<p>Channel 3, Pan, left/right</p>	<p>Panning option for channel 3.</p> <p>LR sets the pan hard left/right for stereo signals coming into channel 3.</p> <p>Note, this option is only available, when your TYPE for channel 3 is set to STEREO.</p>
	<p>Channel 3, Pan, center/center</p>	<p>Panning option for channel 3.</p> <p>“cc” sets the pan centered for both signals coming into channel 3. It sums the tip and the ring of the input into a single mono channel.</p> <p>Note, this option is only available, when your TYPE for channel 3 is set to STEREO.</p>
	<p>Stereo boost</p>	<p>This is a “splash” screen that will only show for 3 seconds when you navigate to this setting.</p> <p>For use with larger “can-style” headphones.</p>
	<p>Stereo output boost on</p>	
	<p>Stereo output boost off</p>	
	<p>Factory Reset</p>	<p>This is a “splash” screen that will only show for 3 seconds when you navigate to this setting.</p>

		
	Factory reset yes	Confirms that you'd like to perform a factory reset. Defaults to "No"
	Factory reset no	Cancels factory reset. All current user settings will be un-effected, and you will navigate to home screen.
	Factory reset done	Confirms that a factory reset has completed. All original factory settings will be saved and you will return to home screen.
 	Limiter Threshold Fast, Stereo output limiter: RMS with fast attack (30ms).	This is a "splash" screen that will only show for 3 seconds when you navigate to this setting.
	Stereo Fast limiter threshold, 75	
 	Limiter Threshold Slow, Stereo output limiter: RMS with slow attack (300ms).	This is a "splash" screen that will only show for 3 seconds when you navigate to this setting.
	Stereo Slow Limiter threshold, 72	

5L:37

Stereo PEAK limiter
threshold, 37

3-Year Limited Warrantee

The Tasty Blender comes with a 3-year Limited Warrantee. Within the first three years of ownership from the date of purchase, if your Tasty Blender malfunctions in any way with normal use, then Rock On Audio will repair it or replace it free of labor and parts charges. However, the customer will be responsible for any shipping charges.

We expect the user to take care not to physically damage any of the outer visible components. Therefore, malfunction due to this type of damage, is not covered in this limited warrantee.

More specifically, this Limited Warrantee does not cover physical damage to the plastic enclosure, the decal, the 4 clear plastic control knobs, the screen, the input port nuts, and the power input jack.

Repairs

If your Tasty Blender is malfunctioning due do something not covered in the 3-year Warrantee, or your ownership has extended beyond 3 years and you are no longer covered, Rock On Audio is always willing to do a repair. The cost of a standard repair will be for Labor and Parts. The customer will also be responsible for any shipping charges.

To schedule a diagnosis and/or repair please contact us via our website here:

<http://www.rockonaudio.com/?page=contact>

Contact Information

You can also contact us direct via mail, email or phone.

Rock On Audio
1604 Minos Ct
Lafayette, CO
80026
USA

pete@rockonaudio.com
303-775-5053