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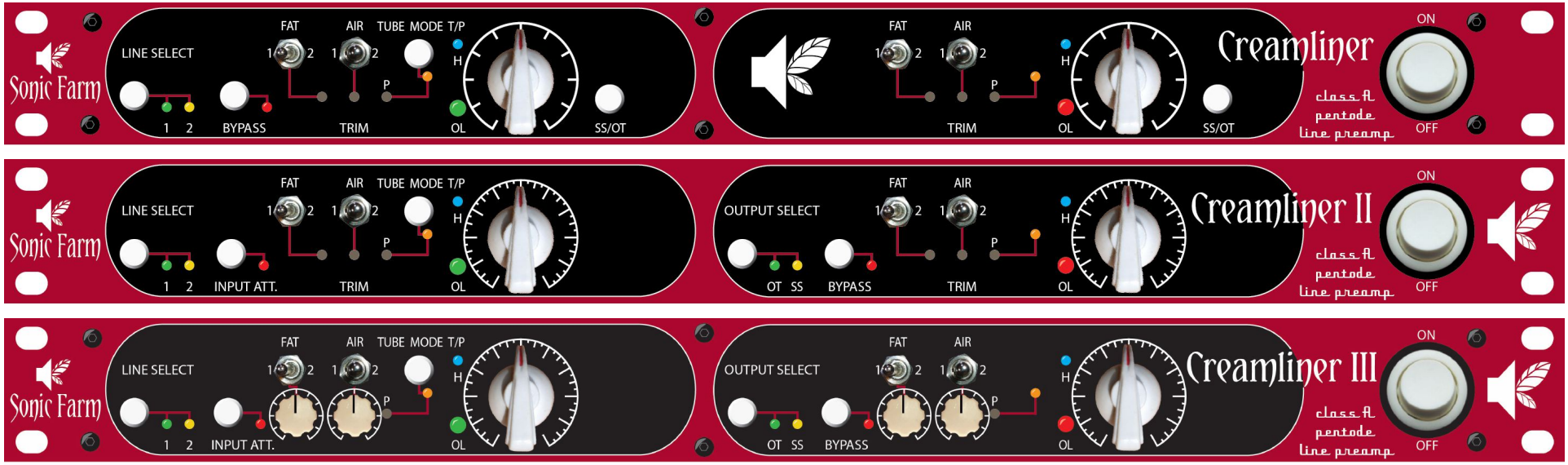
Sonic Farm Creamliner / Creamliner II/ Creamliner III

Pentode Line Preamplifier/Signal Conditioner

USER MANUAL



Dear Audio Professional,
Thank you for purchasing the Creamliner. We hope it will deliver exceptional performance for many years into the future.
Please take the time to read this manual. It describes Creamliner's design philosophy as well as its most important functions.

DESIGN PHILOSOPHY

Our intention behind the Creamliner was to create a unique device, to the moment unavailable on the market, that could favorably change the sound of music mixed or produced with digital audio gear.

Since the inception of digital audio, Recording Engineers have been commenting on its lack of warmth and weight. It always left something to be desired. Many plugins have been designed to remedy this condition, but none has been 100% effective.
We hope that the Creamliner will change all that. It can be inserted into the mixing or mastering chain during a live performance or a studio session to "glue" those nasty digital artifacts and impart warmth and softness to the mix.

To achieve this, the Creamliner uses a pentode, an input and an output transformer. The latter can be bypassed and replaced with a solid state balanced driver. The pentode tube has a purpose to impart pleasant even-order harmonics to the sound, while the transformers tame down the fast digital overshoots and thereby yield "warmth" to the sound.

An EF86 pentode operating in class A is Creamliner's only active gain stage. It can be configured to work in either triode or pentode mode. Bypassing cathode selectively using inductors and capacitors yields a subtle, but very musical tone control.
This circuit exhibits a certain non-linearity (coloration); the harmonic distortion may exceed 1% before the actual clipping occurs.
To preserve it, we purposely refrained from using transformer tap negative feedback, found in many circuits. Instead, the tube stage is followed by a solid-state buffer and the output level control. Finally, a modern discrete transistor complementary buffer with extremely low distortion is used to drive the output transformer and the load.

The standard output transformer has 100% Fe cores. This, along with a switchable solid- state balanced output, gives the final tone coloring.

SOME REMINDERS REGARDING TUBES

Tubes work with very high supply voltages. There are points inside Creamliner that measure in excess of 350V DC. If touched, those voltages could be lethal!
Make sure that no pointed objects (especially metal) or liquids penetrate the inside of the unit through its cooling grilles or otherwise. If that accidentally occurs, immediately pull the plug out of the power socket and wait for the unit to discharge. Creamliner must not be operated if moisture penetrates inside.
Before opening the unit (to change tube, wipe off moisture, etc) one must disconnect the mains cord and then wait several minutes for the internal capacitors to discharge.

When mounting in a rack enclosure, always leave an empty space above the Creamliner to ensure proper cooling.
Please do not replace the mains fuse with one of a higher value: use only 600mA@115V (500mA also works fine)
(250 to 300mA@220-240V)

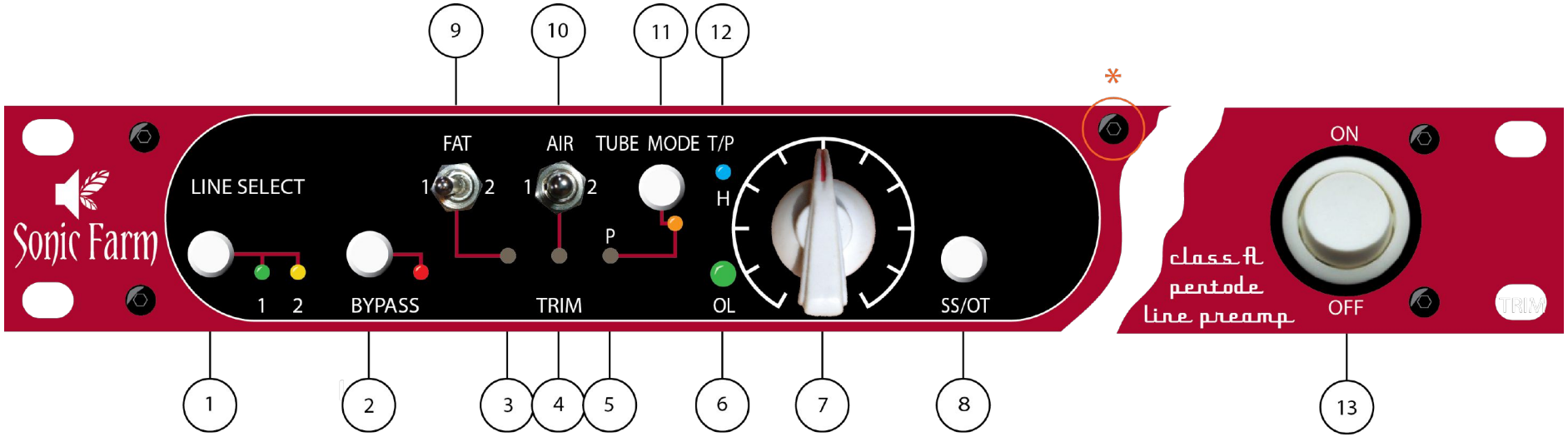
Legal Disclaimer: Neither Sonic Farm nor anybody associated with it can take any liability for damage to persons or property caused by either use, modification or servicing this unit.

HOW TO CHANGE TUBES

This only applies to a functional unit. Please entrust any repairs to qualified service personnel.
Only an EF-86 (or equivalent, like 6267, 6CF8 or Russian 6J32P) pentode can be used.
Pull out the power cord. Wait for at least 10 minutes for all the capacitors to discharge.

Remove Creamliner's cover by loosening screws encircled red and marked with an asterisk (3 on the rear panel and one on the front one) as well as all side screws (4 on either side). You will need an Allen wrench (some models will have Phillips screws).
While pressing on the edge of the vertical PC board (the one containing the tube) with you right hand, pull out the tube with your left hand. Small, but fast forward-reverse motion may be needed to loosen the tube from a tight socket. Do not bend the tube much out of the axis because you can break the pins or cause air to enter the tube and destroy it. Paying attention to the pin alignment, push the replacement tube into the socket using same motions but in the opposite direction. Make sure it goes in all the way. Due to electric shock danger, testing the preamp with the lid removed is not recommended. Screw the cover back in place and you're done.

CREAMLINER'S FRONT PANEL CONTROLS:



1 Line select tactile switch. Selects between stereo line input pairs 1 and 2. Corresponding LED lights. This is useful in a live setting to switch between 2 consoles, one in operation and the other in preparation. Always plug the first line signal into Line 1.

2 Bypass tactile switch. If engaged, red LED will be on. With power off, the unit will automatically go into hardware bypass and select line 1.

3 and **4** Trimpots used to adjust the level of fat and air boost. See **9** and **10**

5 Trimpot used to adjust the output level in Pentode mode to be equal to the level in Triode mode. Adjust after changing tubes.

6 Bi-color LED (green/red) signal presence/overload indicator. Red indicates clipping distortion. It means that you are driving the Creamliner way too hot. Back off a little unless you want that kind of tone.

7 Output level. Does not affect tube gain or overload level, just determines how hard the output buffer, transformer, and ultimately the load are driven. If used with a live PA system, this control will typically be set to match the level when unit is bypassed .
At the 12 O'clock or noon position, the unit will have a 0dB gain, so that no audible change of loudness will occur when bypassing or engaging it. Of course, if some equalization is applied, the output level will start picking up some extra gain, so one may need to compensate for this by rolling back the output level control.
The Creamliner may drive your next unit into clipping even though the red light doesn't indicate any distortion. In that case, reduce the output level.

8 Output select: low-distortion solid-state IC or transformer (driven by a discrete buffer). Solid-state mode will sound somewhat cleaner, and the transformer rounder and fatter. Creamliner is fitted with 100% Fe transformers. This switch affects one channel only.

9 and **10** Low and high frequency shelving boost starting at 400 or 600Hz, and 2.2kHz or 7kHz respectively. Mid position is flat. This is a subtle tone control meant for a gentle boost, adding depth or air to the signal.
It does not use a separate stage; rather, it utilizes the tube gain stage (only one in the signal chain). The boost level can be adjusted by 2 trim-pots, (marked **3** and **4**).
Use a mini slot (.098”/2.5mm Ø, .031”/0.8mm wide) or hex (.104”/2.64mm hex x .055”/1.4mm deep) screw driver to adjust pots.
The default settings are maximum: 4.5dB in triode, 9dB in pentode mode. 6dB/octave. Low boost uses a real inductor for a fat tone.

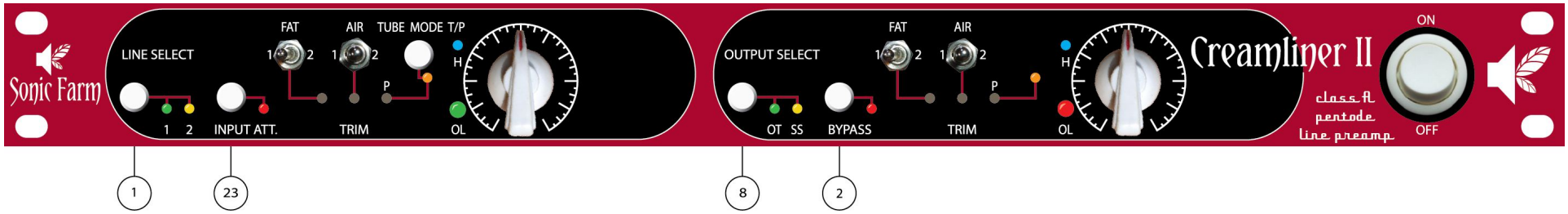
11 Triode/Pentode mode switch. Pentode mode has a somewhat different tone character, due to abundant even order harmonics.
The corresponding yellow LED indicator lights up in pentode mode. Affects both channels simultaneously.

12 Tube heater voltage indicator, should come on (blue) with the power switch.

13 Power switch.

CREAMLINER II

Most controls are the same as above. Only the differences are explained below:



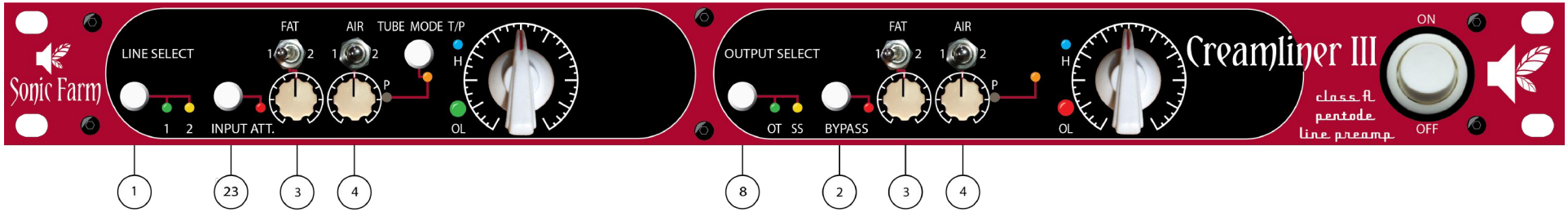
2 Bypass tactile switch is now moved to the right but has the same functionality. If engaged, red LED will be on. With power off, the unit will automatically go into hardware bypass and select line 1.

8 Output select switch now affects both channels at once and is a tactile switch with 2 visible LED indicators: green for the output transformer and yellow for solid state balanced output. The sound in both modes is unchanged.

23 When pressed, the new Attenuation switch reduces the tube drive by 6dB on both channels while compensating the output level by 6dB. The signal presence/overload LED's will glow less showing the attenuated signal. The output will sound a bit cleaner but with no loudness change.

CREAMLINER III

All controls are the same as with Creamliner II, except that the Fat and Air trimpots have been replaced with pots to allow for quicker and more frequent adjustment:



For the rest of the controls, please see the corresponding legend for Creamliner I.

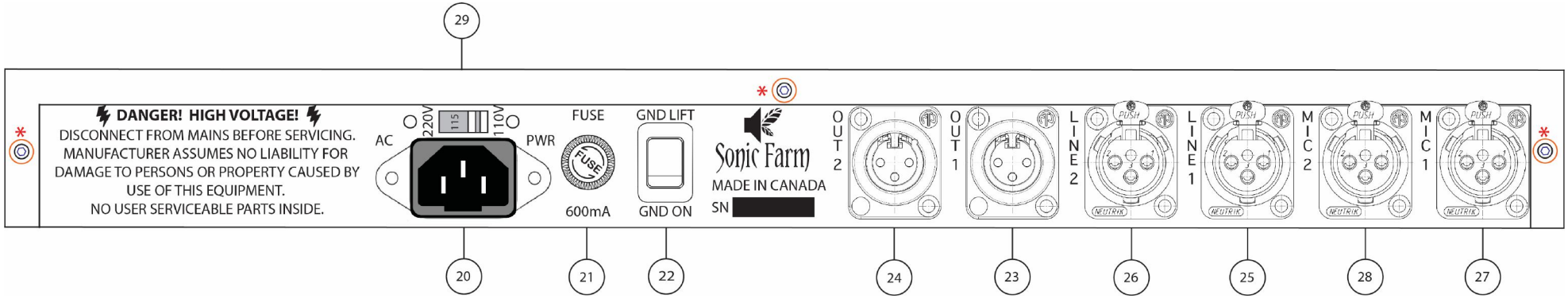
2 Bypass tactile switch. If engaged, red LED will be on. With power off, the unit will automatically go into hardware bypass and select line 1.

3 and **4** Pots used to adjust the level of fat and air boost. See **9** and **10**

8 Output select switch now affects both channels at once and is a tactile switch with 2 visible LED indicators: green for the output transformer and yellow for solid state balanced output. The sound in both modes is unchanged. From 2022 on, all Creamliners will have a fully discrete output in both modes (as opposed to only in OT mode before).

23 When pressed, the Attenuation switch reduces the tube drive by 6dB on both channels while compensating the output level by 6dB. The signal presence/overload LED's will glow less showing the attenuated signal. The output will sound a bit cleaner but with no loudness change.

CREAMLINER'S REAR PANEL CONTROLS:



20 AC power inlet. Always operate the unit on the mains voltage it was designed for (115VAC or 220-240VAC).

21 Mains fuse. Please replace it only with the one of value indicated. (600mA@115VAC, 300mA@220-240VAC)

22 Ground lift switch. It should normally be kept in "Gnd On" position. However if you encounter hum when the unit is patched into your system, switch it over to "Gnd Lift". This will remove hum due to ground loops only; it will not help eliminate hum that comes in with the signal! Do not disconnect the ground wire on your 3-prong mains plug!

23 and **24** Outputs. Balanced connection only! (XLR pin connection: 1=GND, 2=HOT, 3=COLD).

25 and **26** Line 2 inputs. Balanced connection only! (XLR pin connection: 1=GND, 2=HOT, 3=COLD)

27 and **28** Line 1 inputs. Balanced connection only! (XLR pin connection: 1=GND, 2=HOT, 3=COLD)

29 Mains AC voltage selector: push it to the right for 110-120VAC, left for 220-240V.

TECHNICAL SPECIFICATIONS:

2 channels
Frequency response: 10Hz-50kHz +/- 3dB
Operating level: +4dBu
Maximum gain: 20dB
Harmonic distortion: <2% before clipping level quickly decreases if driven less.
Maximum output level: 32dBu
Minimum output load: 600Ω
Connectors: XLR line and output, balanced only
Power consumption: 30W

WARRANTY INFORMATION

Sonic Farm gives a one-year warranty on parts and labor from the date of purchase.
Should you need to send in your unit for warranty-covered service, please contact us for an RMA number first.
We will also tell you where to send the unit.
Any Modification of the unit voids the warranty.

CONTACT INFORMATION:

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