Suhr®

PT-100 SIGNATURE EDITION™
USER GUIDE

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions

2. Keep these instructions

3. Heed all warnings

4. Follow all instructions

5. Do not use this apparatus near water

6. Clean only with dry cloth

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat

9. Protect the power cord from being walked on or pinched particularly at plugs and the point where they exit from the apparatus

10. Unplug this apparatus during lightning storms or when unused for long periods of time

11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled on, objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

12. **CAUTION:** To disconnect the unit completely from the MAINS, unplug the unit. Turning the power switch off does not disconnect the unit completely from the MAINS.

Thank you for purchasing the all new, completely redesigned,
Suhr PT-100 Signature Edition amplifier.

OVERVIEW

World renown guitarist Peter Thorn, is not only known for his touring/session work with legendary artists such as Chris Cornell and Melissa Etheridge, but he is also considered by the guitarist community to be one of the foremost authorities on tone.

After five years of extensive road testing and countless hours spent modifying his original PT-100 amplifier, we have created the ultimate, no compromise, multi-channel amp - now MIDI switchable.

The PT-100 Signature Edition is available in a classic black tolex and appointed with black knobs and a rich midnight anodized aluminium faceplate.

The Suhr PT-100 Signature Edition is a 100 watt, three-channel tube amplifier head lthat features a custom "Plexi-style" output transformer, four EL-34 power tubes, six 12AX7 preamp tubes, a hybrid/solid-state series/parallel effects loop, and a 4-button programmable footswitch.

OPERATING INSTRUCTIONS

POWERING INSTRUCTIONS

With the power switch (located on Back) in the O (OFF) position and the Standback/Standby switch in the Standby position O, flip the power switch to the I (ON) position. Wait sixty seconds, then flip the Standby switch to the Standback I position.

To power down, simply switch the amplifier from Standback to Standby, then flip the power switch to the O (OFF) position.

POWER SELECT SWITCH (located on Back)
I: ON, normal operation
O: Power is switched OFF

STAND BACK / STANDBY: (located on Back)
I: ON, normal operation
O: OFF, standby operation

CONNECTING YOUR INSTRUMENT
INPUT
Use this input to connect your guitar to the amplifier

CHANNEL 1 (Clean)

CRUNCH   Engaging this switch changes the character of Channel 1 from pristine clean to a thicker classic tone that breaks up when Gain 1 is set at higher settings.

BRIGHT 1   Adds brightness and sparkle.

GAIN 1   Adjusts the overall gain of Channel 1.

BASS   Adjusts the amount of bass. Turning it clockwise increases the amount of bottom-end, giving you a fuller tone. Turning it counter clockwise will reduce the bottom-end, which is useful when performing at louder volumes.

MIDDLE   Adjusts the midrange. Turning it clockwise increases the amount of mids. Turning it counter clockwise will reduce the mids and produce a mid-scooped sound.

TREBLE   Adjusts the treble. Turning it clockwise increases the amount of top-end, giving your tone clarity and brightness. Turning it counter clockwise will produce a warmer sound, ideal for dialing in smoother Jazz-like tones.

LEVEL 1   Adjusts the overall output (Master Volume) of Channel 1.
NOTE: When engaging the effects loop while in Channel 1, Level 1 becomes your send level for that channel.

CHANNEL 2 / 3 (Overdrive)

BRIGHT 2 / 3   Adds brightness to Channels 2 and 3.

GAIN 2   Adjusts the overall gain of Channel 2.

GAIN 3   Adjusts the overall gain of Channel 3.

BASS   Adjusts the amount of bass. Turning it clockwise increases the amount of bottom-end, giving you a fuller tone. Turning it counter clockwise will reduce the bottom-end, which is useful when performing at louder volumes.

MIDDLE   Adjusts the midrange. Turning it clockwise increases the amount of mids. Turning it counter clockwise will reduce the mids and produce a mid-scooped sound.

TREBLE   Adjusts the treble. Turning it clockwise increases the amount of top-end, giving your tone clarity and brightness. Turning it counter clockwise will produce a warmer sound, excellent for dialing in smooth fluid-like lead tones.

LEVEL 2   Adjusts the overall level (Master Volume) of Channel 2.
     NOTE: When engaging the effects loop while in Channel 2, Level 2 becomes your send level for that channel.

LEVEL 3   Adjusts the overall level (Master Volume) of Channel 3.
     NOTE: When engaging the effects loop while in Channel 3, Level 3 becomes your send level for that channel.

SPEAKER OUTPUTS

The PT-100 Signature Edition has individual speaker outputs. Therefore you must choose the appropriate speaker output jack(s) depending on the impedance (Ω) of your cabinet(s).

NOTE: Do not use more than one of the speaker impedance groups when connecting to more than one speaker. For example: 1-16Ω and 1-8Ω or 1-8Ω and 1-4Ω.

One 16 Ω cabinet, use the 16 Ω output jack.
Two 16 Ω cabinets, use both 8 Ω output jacks.
One 8 Ω cabinet, use one 8 Ω output jack.
Two 8 Ω cabinets, use both 4 Ω output jacks.
One 4 Ω cabinet, use one 4 Ω output jack.

IMPORTANT:
 • *To avoid damage to your amplifier, do not operate without connecting it a speaker or a suitable load device.*

FEEDBACK

This control has a center detent and adjusts the overall feel of the power amp section from smooth and spongy, (at lower settings) to tight and aggressive (at higher settings).

PRESENCE

Adjusts the amount of high frequencies added to your tone. Turning it clockwise will add more sparkle.

DEPTH (3-Position Switch)

Selects the amount of low-end boost added to the PT-100's power section, this will provide more bottom end while retaining clarity.

Full: + 4dB
Half: + 2dB
Off: Bypassed

EFFECTS LOOP

The PT-100 Signature Edition is equipped with a bypassable (via the In/Active button), a hybrid/solid-state series/parallel effects loop, which performs well with pedals and line-level rack gear (selected via the In/Inst.button).

NOTE: When the effects loop is engaged the return level control acts as the amp's overall master volume, and the individual channel level controls become your send levels.

MIDI

IN/FS

Use this port to connect the included four button footswitch or other MIDI enabled devices.

• When using the included PT100 footswitch, connect using a 7-pin MIDI cable.

• When using other MIDI devices, a 5-pin MIDI cable CAN be used.

THRU

This port emits a copy of everything received at the Midi input port, allowing data to be forwarded to another device in a "daisy chain arrangement".

FOOTSWITCH

The PT-100 is equipped with an anodized aluminum, four button footswitch which enables remote channel selection, and toggles the boost feature.

PROGRAMMING THE FOOTSWITCH

1. First select the desired channel on the footswitch
2. Select the Boost function (if desired)
3. Finally, hold down the selected channel on the footswitch until the LED light flashes

MIDI IMPLEMENTATION

The PT-100 ships from the factory receiving data on MIDI channel 14. It easily integrates with your favorite MIDI footswitch/system, utilizing Program/Controller messages. For detailed information, please refer to the chart below.

PT-100 SIGNATURE EDITION MIDI IMPLEMENTATION CHART

(CONTROLLER ASSIGNMENTS)			
CONTROLLER NUMBER	AMP CHANNEL	BOOST	MIDI CH
105	MUTE	-	14
106	CH2 / CH1	-	14
107	CH3 / CH1	-	14
108	CH1 / CH2 / CH3	-	14
109	CH2 / CH3	-	14
110	-	On / Off	14
111	CH1	-	14
112	CH2	-	14
113	CH3	-	14
114	CH1	Off	14
115	CH2	Off	14
116	CH3	Off	14
117	CH1	On	14
118	CH2	On	14
119	CH3	On	14

(PROGRAM ASSIGNMENTS)			
PROGRAM NUMBER	AMP CHANNEL	BOOST	MIDI CH
0	CH1	-	14
1	CH2	-	14
2	CH3	-	14
3	CH1	Off	14
4	CH2	Off	14
5	CH3	Off	14
6	CH1	On	14
7	CH2	On	14
8	CH3	On	14

TUBES

The PT-100 tube complement consists of four EL-34 power tubes and six 12AX7 preamp tubes.
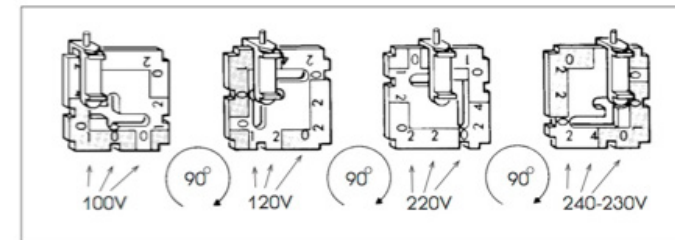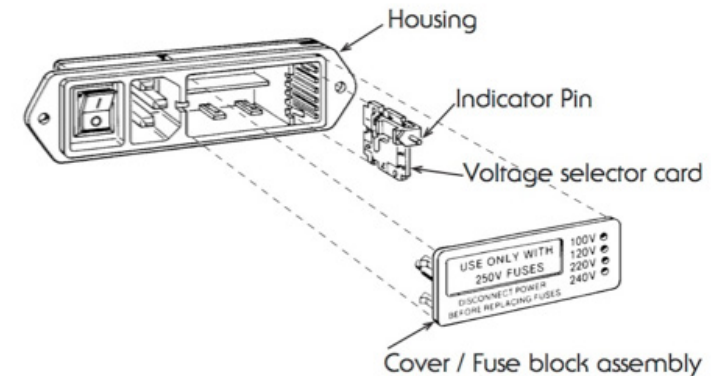
PREAMP TUBE POSITION LIST

V1 (closest to the input jack) First gain stage for Channel 1 and 2
V2 Additional gain stages for Channel 1
V3 Additional gain stage for Channel 2 / 3
V4 Additional gain stage for Channel 2 / 3 and it's tone stack
V5 Effects loop
V6 Phase inverter

FUSE AND VOLTAGE SELECTION

Voltage selection is made externally at the Power Entry Module. *See diagram **EX. 1***

Open cover using small blade screwdriver or similar tool. Set aside cover/fuse block assembly. Pull voltage selector card straight out of housing using an indicator pin, orient selector card so that the desired voltage is readable at the bottom (see below). Fix indicator pin into notch at opposite side. Insert voltage selector card into housing, printed side of card facing towards on/off switch and edge containing the desired voltage first. Replace cover and verify that the indicator pin shows the desired voltage on the cover assembly.

EX.1

Housing
Indicator Pin
Voltage selector card

USE ONLY WITH 250V FUSES — 100V / 120V / 220V / 240V
DISCONNECT POWER BEFORE REPLACING FUSES

Cover / Fuse block assembly

100V   90°   120V   90°   220V   90°   240-230V

Troubleshooting Notes:
- *If the amplifiers lights operate but there is no sound, we recommend checking/ replacing the HT fuse.*
- *If there are no lights, or sound, we recommend checking/replacing the Mains fuse which can be found behind the Fuse Block Assembly Plate.*

PETE THORN'S SAMPLE SETTINGS
WARM CLEAN (CHANNEL 1)

FRONT PANEL   BACK PANEL

CRUNCHY CLEAN (CHANNEL 1)

FRONT PANEL   BACK PANEL

RHYTHM CRUNCH (CHANNEL 2)

FRONT PANEL   BACK PANEL

HI-GAIN LEAD (CHANNEL 3)

FRONT PANEL   BACK PANEL

SPECIFICATIONS*

Output: 100 Watts RMS

Tubes: 4xEL34 & 6x12AX7

Mains Fuse:

6.25A/100V (Slo Blo)

5A/120V (Slo Blo)

3A/220V (Slo Blo)

2.5A/230V/240V (Slo Blo)

H.T. Fuse:

2A/250V (Fast Blo)

Front Panel: Input, (CH1) Crunch Switch, Bright Switch, Gain 1, Bass, Middle, Treble, Level 1, (CH 2/3): Bright 2/3 Switch, Gain 2, Gain 3, Bass, Middle, Treble, Level 2, Level 3, Boost Switch, Channel Select Switch

Back Panel: Power Select Switch, Fuse / Power Entry Module, Standback/Standby Switch, H.T. Fuse, Speaker Outputs, (16Ω, 8Ω, & 4Ω), Feedback, Presence, Depth Switch, Effects Loop Return Level, In/Active Switch, In Inst. Switch, Send and Return Jacks, Series/Mix Switch, MIDI IN, MIDI THRU

Head Dimensions: 28.5" (L) x 9.375" (D) x 11.25" (H)

Weight: 55 lbs.

Footswitch Dimensions: 11.5" (L) x 3.26" (D) x 1.72" (H)

ROHS Compliant: Yes

All specifications subject to change without prior notice.

WARRANTY FOR SUHR AMPLIFIERS AND ELECTRONIC PRODUCTS

JST warrants for lifetime from date of purchase by the initial retail purchaser that this product shall be free from defects in workmanship. Electronic components such as capacitors, resistors, filters, transformers, jacks, and pots are covered for 5 years. Any parts determined defective by JST within the five (5) year term shall be repaired or replaced by JST without charge for parts and labor provided the unit is returned, transportation costs prepaid, to JS Technologies, Inc., 601 Crane Street, Unit A & B, Lake Elsinore, CA 92530, or to such facility authorized by JST. JST will pay shipping costs to return the unit to its owner. Defects in workmanship will be determined by JST for limited lifetime coverage.

This warranty does not cover damage caused by accident, misuse, abuse, neglect, unauthorized or improperly performed repairs, alterations, and/or wear and tear occasioned by use of the product, and does not include any expense for inconvenience or loss of use while the product is being repaired or replaced. JST expressly disclaims any liability for consequential damaged arising from the sale, use, or inability to use the product. Any warranty implied by law, including any warranty of merchantability or fitness, is expressly limited to the one (5) year warranty term for the parts on our amplifiers and electronic products. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Workmanship lifetime warranty is limited strictly to the original retailer purchaser of the instrument registered with JST within 10 days of purchase from an authorized JST dealer or distributor. JST will pay shipping costs to return the unit to its owner within the mainland U.S.

The above warranty policy only applies to customers in USA. If you are an international customer, please check with your distributor and the dealer in your country for warranty matters. Warranty issues must be handled through your dealer or distributor. If you are an international customer who purchased (or plan to purchase) from a US dealer, we can handle warranty matters direct but you will be responsible for shipping both ways. We encourage international customers to purchase through your local distributor or dealer for this reason. Our international distributors are set up to handle warranty issues in their respective countries. If you do not have an authorized Suhr dealer in your country, please contact us direct for further details.