

Sonic Studios™ DSM Mic Preamp

Model PA-3SX Owners Manual

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INTRODUCTION

Model PA-3SX is precision designed to solely power and amplify DSM-1S/6S series microphones for optimum performance using small portable recorder LINE inputs.

The PA-3SX is very compact, low noise/distortion, long running, high quality mic - to - line level preamplifier using the most precision surface mount and through-hole components available.



R-09 DECK WITH PA-3SX PREAMP VELCRO ATTACHED TO BACK

Belt clip and Velcro adhesive patch facilitates attachment to shirt pocket size and larger portable recorders.

PA-3SX-U version has miniXLR input/output professional locking connectors fitting DSM mics with optional miniXLR plug, and output patch adapters fitting any style of deck input jacks.

User settings are 1/2/3 toggle switch gain choice, and a slide ON/OFF power switch. A single red LED shows power on, low battery, and near clip indications.

PA-3SX MIC PRE
1.9 x 2.7 x 0.75 inches

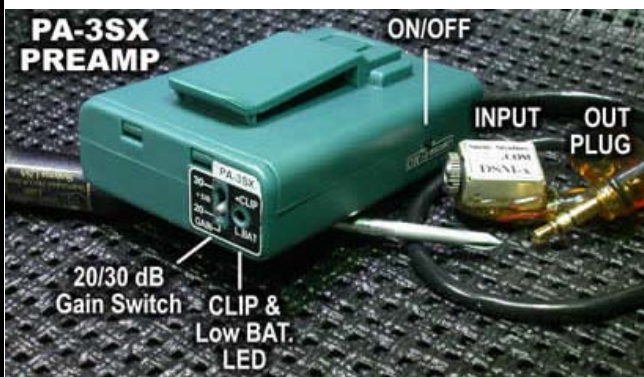


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Expect exceptional longest running time of ~ 500 hours using two AA Energizer brand L91 photo lithium cells.

(Sony OXyride AA shown above = ~200 hrs)

PA-3SX OPERATION & FEATURES



1) The PA-3SX preamplifiers output is connected to a recorder's line input.

Optional adapters from Sonic Studios connect the preamp's output to various line

2) 3.5mm or miniXLR MIC- INPUT/LINE- OUTPUT connectors on in-line short-cord length.

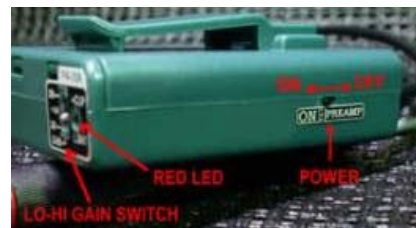
3) POWER ON-OFF slide-switch is located on the right side panel.

4) 1-2-3-position gain toggle switch is located on the front panel.

input connector types and/or provide custom extension cable lengths to 15'

5) A single red LED indicator shows:

- power ON (*very dim*) continuous display
- low battery (*very bright*) steady on
- near clip very bright flashes



The PA-3SX requires 2 AA battery cells for 100 to over 500 hours running time depending on cell type.

Shipped ready to use with long life Energizer L91 lithium cells installed.

Photo Lithium cells type are good for up to 10 years standby (*power OFF storage*), or 500+ hours of power ON recording in temperature extremes of -40F to 125F ambients.

When the red LED glows **BRIGHT** steady, the batteries need replacing.

(NOTE: Dim steady glow means only power is ON)

REPLACING THE BATTERY

Remove the screw from the top (clip side) cover with supplied Phillips screwdriver.

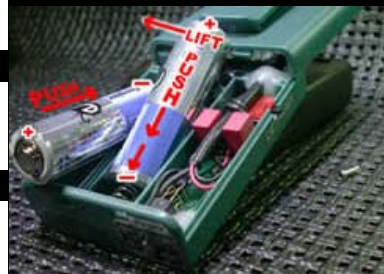
Slide the cover backwards to access the battery compartment.

(as shown at left)

Push (*using fingertip*) against each (+) battery terminal, slightly compressing the (-) NEG. contact spring. Then lift up the (+) cell end to remove as shown at right.

Suggest wiping the fresh battery ends with a clean cloth to remove lint/oils.

Replace with two fresh (L91 type is best) AA cells by inserting (-) negative battery terminal first against the spring, while inserting the cell fully into each holder.



TIP: After replacing, check that battery holder spring contacts are centered on cell's - end. To insure good contact, give each cell a rotational spin in the holder. Then replace sliding cover and screw secured only snug, not over-tight.

RECORDING TIPS

Set the deck for analog LINE input recording. Turn ON preamplifier power after connecting to the recorder's LINE input. (NOTE: Newer models now show dim RED LED as power ON indication)

Select highest preamplifier GAIN setting NOT showing bright RED 'near' CLIP LED flash indications. Remember to monitor both preamp near clip LED, and deck's VU for best chance of avoiding clipping distortions by turning down gain when necessary.

After setting preamplifier gain, then adjust deck's recording level for VU average peaks at no more than -12 dB VU for 24 bit depth mode recording, or no more than -6dB absolute peak if recording at 16 bit depth mode. Conservative VU levels allows for headroom (*overload margin*) for louder than expected sounds, and using 24 bit depth mode (when available) preserves a much higher resolution of very low VU level recorded sounds.

PA-3SX SPECIFICATIONS

INPUT: ~2K Ohm impedance with 1.6 Volt mic powering specific for [DSM-1S/6S](#) stereo mic models. Preamp also works with other condenser/dynamic low output impedance self-powered type mics.

OUTPUT: +2.2 dBv (~1Vrms), 50 W drives full output into to >250 W load.

-3 dB BANDWIDTH: 10-to-75,000 cycles #1 lowest gain setting (20 dB), 10-55,000 cycles #2/#3 (28/36 dB Gain) medium/high settings

NOISE: <-106 dBu = <4mv (unweighted) 10-50,000 cycles

CHANNEL SEPARATION: > 110 dB 10-30,000 cycles

CHANNEL GAIN MATCH: ~0.03 dB precision preserves stereo-surround image

BATTERY POWER: (2) AA cells, Supplied with L91 type (*Energizer photo lithium*).

RUN TIME: 500+ hours (*two L91 MAIN cells*), ~100+ with regular Alkaline. NOTE: DO NOT USE RECHARGEABLE TYPES as 1.25 volt cell voltage is too low.

LOW BATTERY: 2.70 volts = ~1.35Volts/cell; BRIGHT LED continuous indication

NEAR CLIP: -2.5 dBv below maximum clip distorted output; BRIGHT LED flash indication

WARRANTY & SERVICE

Full 2 year limited warranty for repair/replacement. *Shipping cost not included.*



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DSM™

Patented Stereo-Surround Microphone
Technology

Passive DSM™ Mic Powering/Bass Filters



DSM Stereo Mic

Eye-gear/Headband/HRTF Baffle mountable matched omni mics



DSM MIC+WHB/N FOR INSIDE/OUTSIDE SOUND RECORDING

Stops wind blast noise; transparent acoustic design; records real wind sounds

4 Channel Surround DSM™ Microphone System
Headworn or HRTF LiteGUY Baffle Mounted



1 (Front Left) 2 (Front Right) 3 (Back Left) 4 (Back Right)



PA-10XP DSM Mic Powering Adapter
(for MicroTrack 24/96)
Model PA-10XP
miniXLR Input (option)

for MD, DAT, CF, HD, and Video Field/Event/Studio Recording

Battery Powered-Portable Mic Preamplifiers

High-definition, low noise, very wide bandwidth preamp designs to fit any field/event/studio application using DSM™ stereo-surround mics.



FIELD-READY For Marantz PMB-670/671
(DSM mic, model RWHB/N Windscreens, PA-24N1-P Model Preamp)

HRTF RECORDING

Stereo-Surround Omni Mic Baffle for Stand, Fishpole, Studio Boom, and Ceiling



MONO ONLY 'Lombardo' Lapel Mic for interview, Narration, Lecture, and clip-on acoustic instrument Recording



LitGUY HRTF Mic Baffle
(shown w/optional Windscreens)
(Shown Atlas 36W boom is not supplied)

RECORDING ACCESSORIES



Patch/Adapter Cables



20+ hours using 6 C alkaline cells
50+ hours using 6 D alkaline cells
BC-ME #1-1P
Microtrack 24/96 external batteries

Portable Deck Power Solutions

BD-8 Ruggedized Power Sled



Long Running Power for Edinol R-4, Fostex FR2, Marantz 670/671



Short cord + included extension

Field/Studio Monitoring Headphones, Reviews

DSM™ Magazine Reviews



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