



Operators Manual
Series I Pyxi Phono Stage

**PLEASE READ THE INSTRUCTIONS COMPLETELY BEFORE
BEGINNING SET UP AND OPERATION!**

You will find the following parts included with your Pyxi Phono Preamplifier:

- (1) 14 volt AC adapter for use in the USA/North America
- (1) External ground wire
- (1) Operators manual

You will also need one pair of RCA to RCA phono interconnects of suitable length (not supplied) to connect the phono preamplifier to your receiver or existing amplifier.

Note: Save all packing material for reuse, should the unit ever need to be shipped.

CAUTION: Before making any connections ensure the phono preamplifier and your existing receiver or amplifier are disconnected from their power source.

Also, do not operate the unit in MM mode without a cartridge attached and the input load set to 47k ohms. This is not harmful to the unit, but it could cause potentially speaker damaging voltages to appear at the outputs.

Connect the tonearm signal leads to the input of the phono preamplifier, observing proper left/right channel orientation. The right channel connection is marked in red; the left channel is marked in white. Connect the output of the phono preamplifier to a line input (such as AUX, CD, Tuner, or Video) on your receiver or amplifier.

Generally, the best grounding approach is to have the turntable cartridge connections not connected to the turntable chassis ground, and for the phono stage circuitry to be grounded through the following amplifier's ground via the output phono cables.

If you experience hum, you may connect the supplied ground wire between the ground terminal on the phono preamplifier and the ground connection on your amplifier.

Connect the low voltage plug from the supplied AC adapter to the 14 VAC socket of the preamplifier before connecting the power supply to the wall outlet.

Do not replace the supplied AC adapter with an after-market type. The Pyxi is designed to operate with this specific adapter and substitutions may reduce the performance or the reliability of the unit and void the warranty.

MM/MC Settings

The Pyxi phono preamp has two input gain settings, moving magnet (MM) or moving coil (MC) selectable from the front panel. Selection is made dependent upon the output level/type of the phono cartridge being used. See the accompanying literature that came with your phono cartridge to determine what type of cartridge you have.

Do not operate the unit in MM mode without a cartridge attached.

Loading Settings

Note: Down is 'on'; up is 'off'. Switches should be set the same for right and left channels.

Loading settings for impedance and capacitance can be adjusted via the rear panel DIP switches. If in doubt, contact your SOTA dealer.

RES LOADING	1	2
47K	OFF	OFF
470R	OFF	ON
220R	ON	OFF
150R	ON	ON

CAP LOADING	3	4
47P	OFF	OFF
147P	OFF	ON
267P	ON	OFF
367P	ON	ON

After all connections and settings are made, power up the phono preamp by pressing the power button on the front panel. Approximately four seconds after power up, the phono preamp will be operational and the output relays will connect. You may power your main amplifier on or off at any time as turn on and off transients from the phono preamp are eliminated by the output relay control circuit.

However, do power down the phono preamp before changing any settings or connections. It is not necessary to power down the main amplifier during this process.

SPECIFICATIONS

MC

Input sensitivity: 250 μ V rms @ 1 kHz, 5 cm/sec.

Rated output specified at 12 dB above sensitivity (1 mV rms, 1 kHz) to capture signal dynamics.

Gain: 65 dB @ 1 kHz.

Rated output: 1.8 V rms. Rated peak 3dB higher.

THD: < 0.0002% @ 1 kHz, 1 mV rms input, <0.0003% @ 10 kHz, 10 mV rms input.

IMD: < 0.002% CCIF 20 kHz/19 kHz 1:1 measured at rated output.

S/N ratio: 82 dBA, relative to 1 mV rms @ 1 kHz. Shorted input.

Hum levels: > 96 dB below rated output, shorted inputs.

RIAA compliance: 20 Hz - 20 kHz: within 0.15 dB p-p.

Input overload levels, nominal gain @ 1 kHz: 5.5 mV rms (27 dB relative to input sensitivity)

MM

Input sensitivity: 2.5 mV rms @ 1 kHz, 5 cm/sec.

Rated output specified at 12 dB above sensitivity (10 mV rms, 1 kHz) to capture signal dynamics.

Gain: 45 dB @ 1 kHz.

Rated output: 1.8 V rms. Rated peak 3dB higher.

THD: < 0.0002% @ 1 kHz, 10 mV rms input, < 0.001% @ 10 kHz, 100 mV rms input

IMD: < 0.003% CCIF 20 kHz/19 kHz 1:1 measured at rated output.

S/N ratio: 98 dBA, relative to 10 mV rms @ 1 kHz input. Shorted input.

78 dBA, relative to 10 mV rms @ 1 kHz, 1.3 k Ω in series with 500 mH across input. Load representative of typical (e.g Shure V15 III) MM cartridges.

Hum levels: > 96 dB below rated output, shorted input.

RIAA compliance: 20 Hz - 20 kHz: within 0.15 dB p-p.

Input overload level, nominal gain @ 1 kHz: 55 mV rms (27 dB relative to input sensitivity)

Other Features

Output impedance: 50 Ω single ended.

Channel matching: better than 0.1 dB @ 1 kHz.

Channel separation: better than 80 dB @ 1 kHz.

DC offset: < 10 mV.

Bandwidth: 0 to -3 dB: < 1 Hz - 150 kHz.

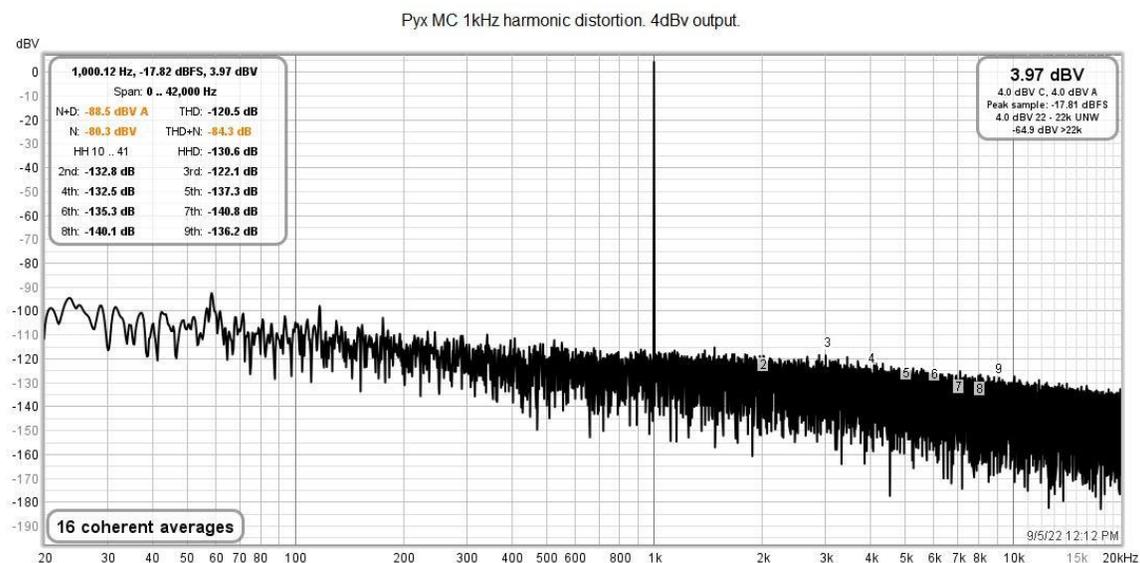
1% metal film resistors used throughout, with 0.1% in the critical gain and RIAA stages, together with 1% capacitors.

C0G capacitors used in the signal path- with measured distortion and dielectric absorption equivalent to Polypropylene capacitors.

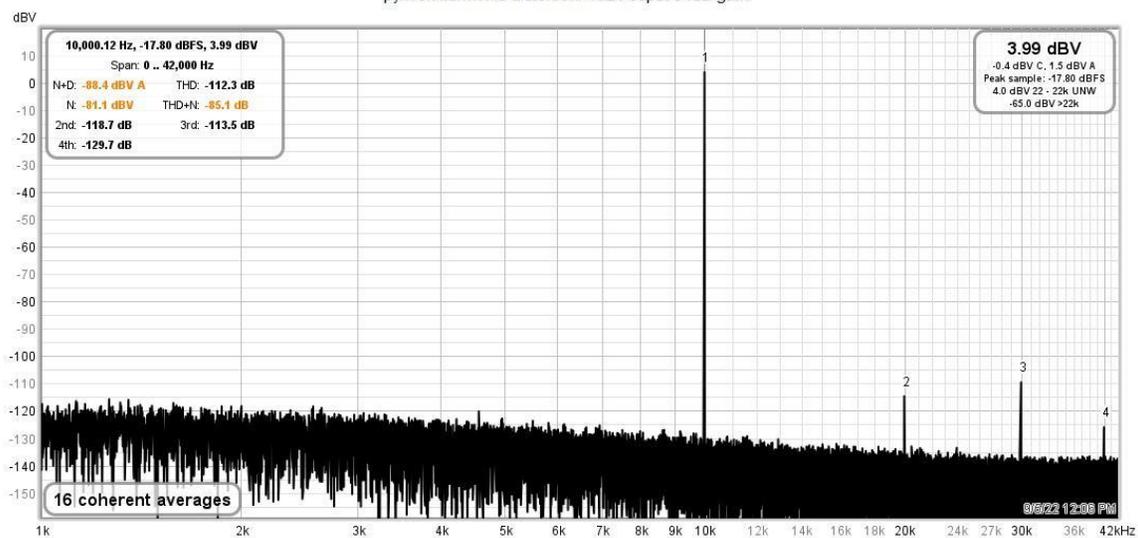
Low offset, phase corrected DC feedback loop eliminates the need for coupling capacitors while reducing DC peaking in the RIAA characteristic.

No digital. All analog implementation, including linear supply regulators.

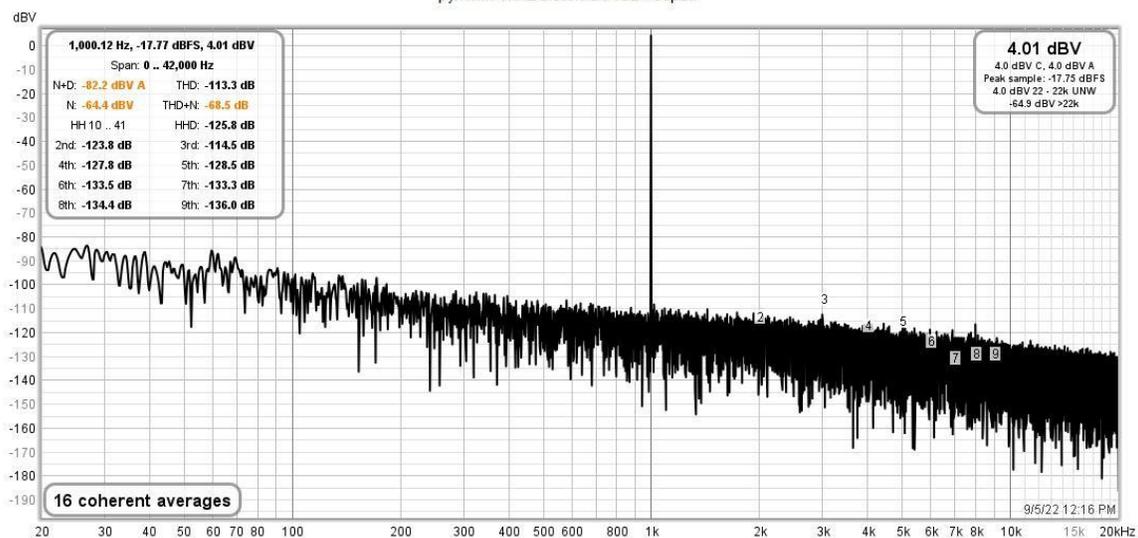
Power consumption: < 5 W active, 0.1 W in standby.



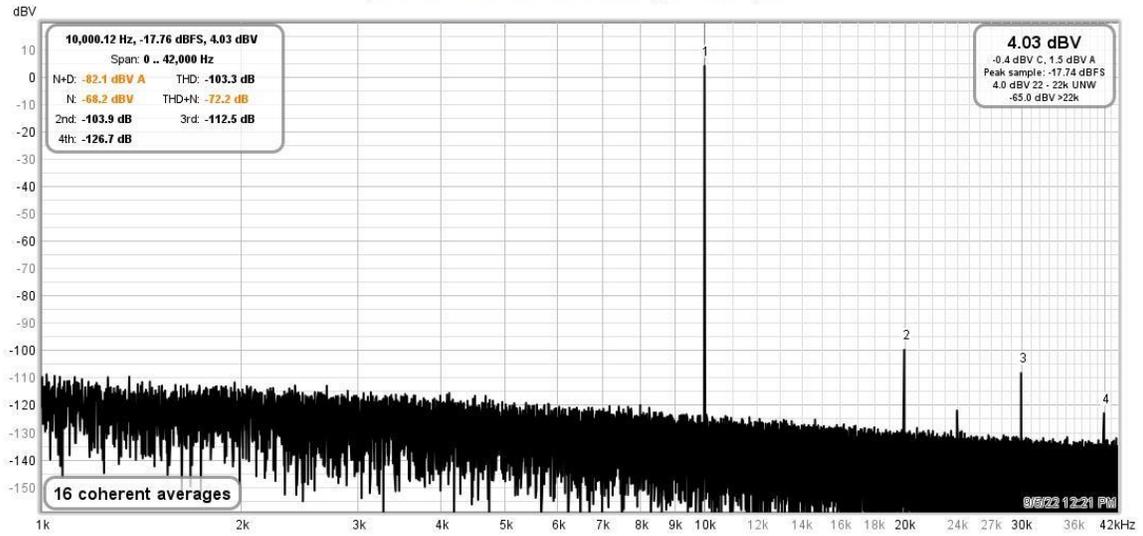
pyx10k harmonic distortion. 4dBv ouput 64dB gain.



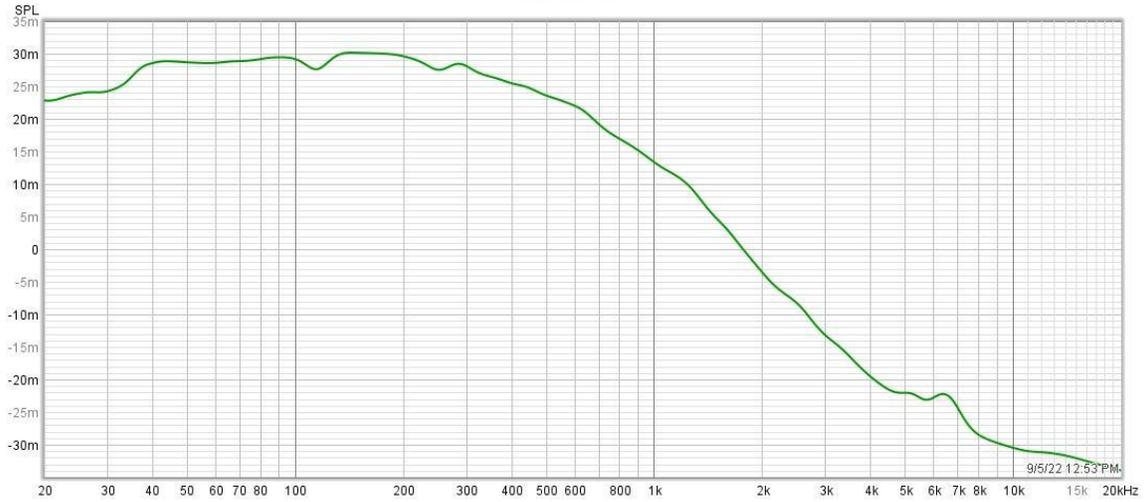
pyx MM 1kHz distortion 4dBv ouput.

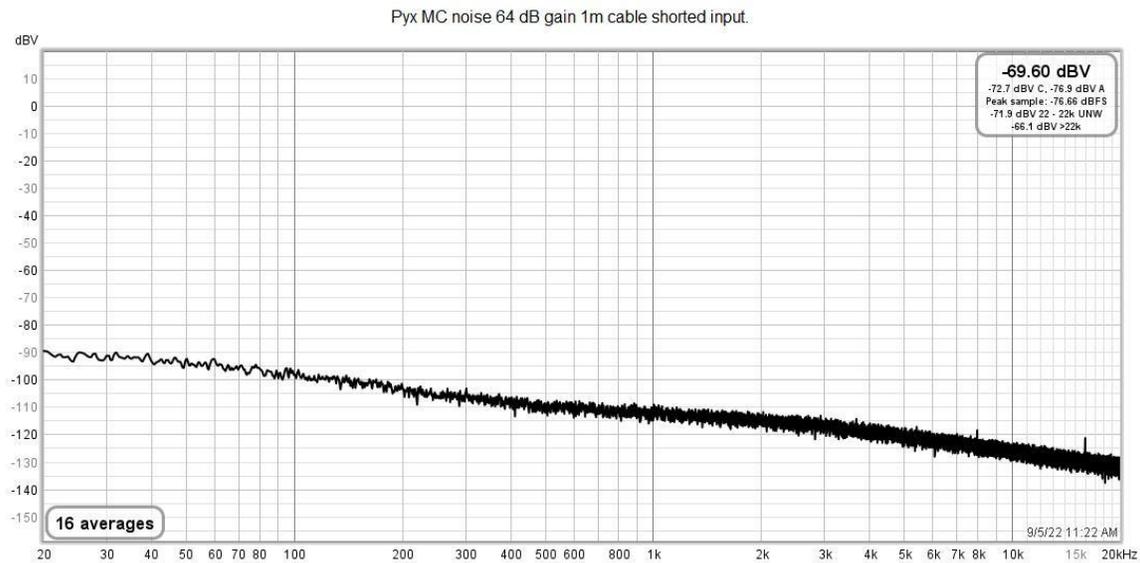
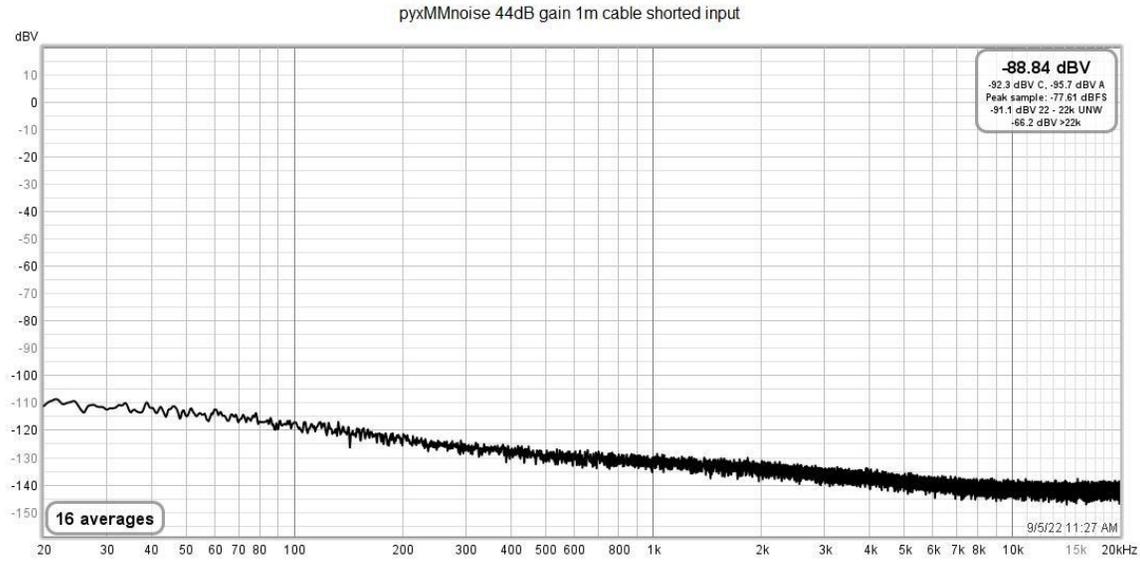


Pyx MM 10kHz harmonic distortion 44dB gain 4dBv output.



PYX RIAA





Specifications subject to alteration without notice in keeping with our continuous improvement policy.

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