Dark Storm

Microphone & Instrument Preamplifier



Operator's Manual Seventh Edition 11/2023 By Mike Congilosi II

Warnings:

- Please don't try to get inside of the Dark Storm unless you have a good understanding of
 electronic components and electricity. If you remove the cover, do it with the Dark Storm
 turned off and not plugged in. No licking the circuit board. Harmful and/or toxic substances
 may be found inside of this device, such as lead (solder). Proceed with caution and at your own
 risk should you choose to do this. Non-LBA-licensed servicing or modifications will void the 2year warranty. Lightning Boy Audio holds no responsibility for end user neglect.
- Avoid water. Keep drinks and other sources of potential liquid spills away from your Dark Storm. Do not wash it. If cleaning is required, I use a PEK Pad with a few drops of lens cleaner (Eclipse Optic Cleaning Fluid) applied to the pad. It's gentle on the graphics and removes finger prints.
- Avoid dropping. Please do not drop the Dark Storm. It's probably not going to break, but there is a risk that it could.
- You'll go mad reading this Operator's Manual if what you seek is super technical geek information. See https://www.lightningboyaudio.com/darkstorm.html for the Technical Data.

Helpful tips:

- If you need more volume, but the gain is already high, use the Old switch.
- You want instant color? Old switch.
- You'll probably get obvious distortion from the gain control when it's set in the colored bands near the end of its clockwise rotation. The gain knob may add a small bit of "hair" to the sound as you turn it up. The cleanest sound is gain all the way down, trim all the way up. I recommend starting there if your source-signal permits, and adjusting gain to taste from there.

Product Activation:

First you'll need to connect a suitable 48V DC power adapter to either of the Dark Storm's DC PWR input jacks. The center of the barrel jack is positive. These jacks are wired in parallel for daisy-chaining the power to multiple Dark Storms. Once powered on, begin with the **Gain** knob all the way

down and the **Trim** knob up about half way with a source connected. Turn up the trim if more volume is needed. Turn up the Gain if you need more. If you have a microphone plugged in, phantom power is available via front panel switch. If you're working on a recording project where you want a very clean and articulate recording of a microphone, try to keep the gain knob as low as possible and be sure the "Old" switch is off (unlit). Of course, not all sources need to sound spankin' clean. As you turn up the gain knob, the sound will become thicker and louder. When you get to the colored bands at the end of the clockwise rotation, distortion will likely appear. At this point you will enter into a *Storm of Distortion*. That sounded a lot better than Distormtion, right? If you find yourself hanging out in the Storm, you're definitely being creative. Considering how creative you're being, try engaging the "**Old**" switch. This'll shove the volume up a whole bunch, along with coloring the sound in a vintage-audio-transformers sort of way. To really grasp what is happening with this control, you'll want to try it with the Gain knob turned down. I hear it as a rounding of the tone and focusing of it, with a big splash of color to finish it. The Old feature will not have the same frequency response in the sub bass region and the upper top-end, as it gets rolled off a little bit.

You'll probably notice around backside there's a ¼" unbalanced output. "Secret weapon!" You can use this a few different ways, considering it can used at the same time as the XLR output and is fully isolatable. If your DAW is giving you that pesky latency while recording, you can bypass it with the Dark Storm. The XLR output can go to your A/D converter and/or interface and you could simultaneously send the \(\%'' \) out to a mixer/headphone amp for zero latency monitoring. You'll probably need to run it through a DI and mic preamp to get the impedances grooving, but the signal will be very hot coming out of that jack. It's hot enough to run it into a power amp and now you have a bass amp. Well, one without EQ. Just wait until I offer the Dark Storm EQ. That's next on the product development table. Speaking of amps, you could use the Dark Storm sort of like an FX pedal right into an existing amp to create overdrive or just to alter the tone in pleasing ways. The 1/2" front panel DI input doesn't need to be the starting point. You could use the Dark Storm to feed a microphone signal into a guitar amp. There's a lot of possibilities, but that DI input is something special to me. Let's get back to recording. When you plug an instrument into the front panel DI jack, the mic input is automatically bypassed. Your instrument is fed directly into a dedicated circuit that starts with a JFET transistor input. The qualities of the JFET give it a sound that's similar to vacuum tubes, but with a much faster transient response. This feeds right into an LBA MC15 transformer, which then feeds into the mic input transformer and the rest of the circuitry. This allows you to get creative with applying the Old switch to the DI signal if you so like. If you run an instrument through the DI input to the ¼" output, your sound will be traveling through 4 audio transformers and 3 JFET amplification stages. It's 2 and 2 for XLR to XLR connections.

There's more that you'll find along the way. Explore the Storm.

Additional Info

- Power Supply. It's 48V DC and rated at 2 Amps. The barrel type is 2.5mm and center
 positive. The power supply can easily power 24 Dark Storms if you never plan to use
 condenser microphones. However, assuming you're a rational individual, you'll surely use
 condenser mics at some point. The power supply can provide enough juice for 8 Dark
 Storm's and 8 power hungry condenser microphones.
- This statement is for those who think daisy chains are for sissies. Inside each Dark Storm is an onboard multi-voltage regulated power supply. It converts the incoming 48V to +/- 18V and to 12V. This onboard power supply isolates each Dark Storm power supply from the next in a multi Dark Storm system. The Daisy chain arrangement keeps the back side looking clean and orderly and minimizes the need for power outlets.