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High End Systems Lonestar

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The High End Systems Lonestar is smaller, lighter, and brighter than its predecessors.

If you had told me in 2000 that, in 2022, automated lighting fixtures would still be getting smaller, brighter, and lighter in weight, I would have said your Go button had got up and gone. Yet, here we are, and not only is the new High End Systems Lonestar all that but, at a retail price of \$6,250, it also has a smaller and lighter invoice.

The fixture stands less than 19" tall when the head is in the horizontal position (23.6" in the vertical position), and the base is 8.7" square and 4.3" tall. The whole fixture would almost fit in my carry-on, and at 50lb, it weighs about the same as my fully loaded Pelican case. It also has light engine that uses about 7% more power than the SolaFrame 750, but it makes it roughly 27% brighter. The result is that the Lonestar produces 53 lumens per watt versus the 42 lumens per watt produced by the SolaFrame 750. That's progress.

The beam produced by the Lonestar has a peaked center to make it easier to create a uniform wash across a large stage. I was told this was a design decision made to appeal to users at schools and theatres who want to make the most of their lighting rigs. In practical terms, it means it can be used in place of an ellipsoidal stage wash as well as a moving light rig, making it more economical to use.

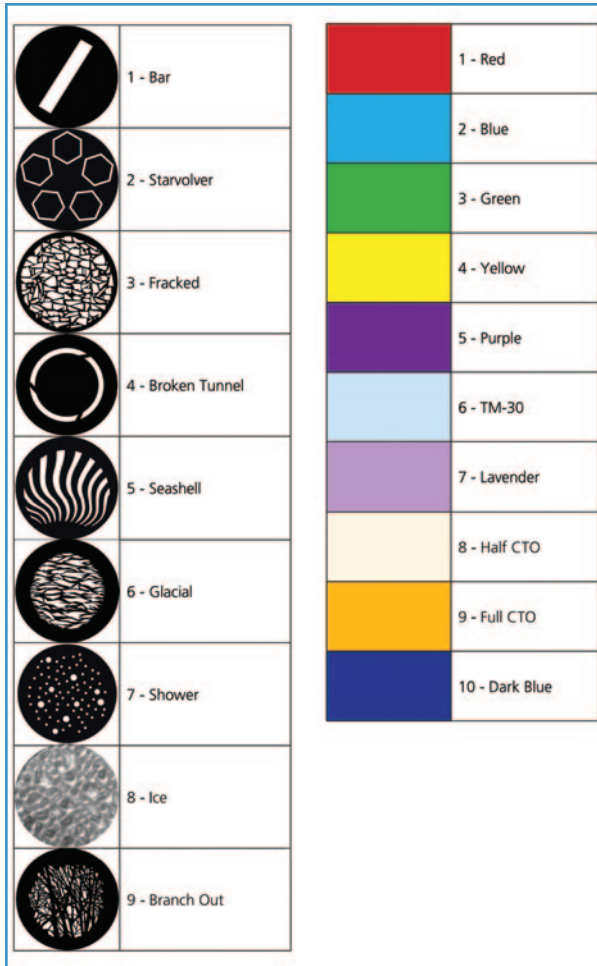
It has a 290W white light LED engine with a native correlated color temperature (CCT) of 7,000K. (I measured 7,346K using a Sekonic C-800 spectrometer.) At the center of the beam, I measured 482fc (5,188 lux) with about a 30' throw, which produced a beam about 7' in diameter. That was with the zoom in the middle position, which is about 20°, and the zoom ranges from 3.8° to 55°. I'm still amazed that any fixture can have such a wide zoom range, and the widest setting is impressive.

The fixture has a full CTO dichroic filter and a ½ CTO filter for fixed color correction (I measured 3,251K and 4,299K, respectively), plus a "magic channel" that uses CYM color mixing to approximate variable color correction and goes all the way down to 2,200K. At ½ CTO, I measured 300fc (3,229 lux) and with full CTO I measured 225fc (2,422 lux) at the same 30' throw.

The CRI (Ra) with no color correction measured 75.6, although the color wheel includes a "TM-30 chip" that takes it to a CRI of 85. So, while I'm not sure I would use this fixture for key light on a big-budget film shoot, it looks fine to the human eye and it's spectacular for effects and color wash.



At a throw distance of about 30', it produced a spot about 7' in diameter with an illuminance of 482fc (5188 lux).



In addition to nine glass and metal rotating gobos plus open, it has CMY color mixing, two prisms—one five-facet star prism and one four-facet linear prism—a bidirectional animation wheel, framing shutters, a 16-leaf iris, and two diffusers (light and medium with an option to replace the prisms with a heavier diffusion).

The CMY color mixing system is extremely uniform and smooth. The mixing system was redesigned to be less saturated and to reduce “color tearing” (the non-uniformity that sometimes appears when moving from one mixed color to another). There is also a color wheel with ten dichroic colors (including the aforementioned CTO and TM-30 filters) plus open.

In addition to nine glass and metal rotating gobos plus open, there are two prisms—one five-facet star prism and one four-facet linear prism—both of which can be used at the same time, creating a beautiful mess of a projection. The bidirectional animation wheel, combined with three-dimensional gobos, remote focus, and color mixing, allows you to create some really great water, fire, and abstract effects.

The four framing shutters are each capable of a complete wipe (full curtain) and the framing module can be rotated 120°. There is also a 16-leaf iris and two diffusers—a light diffusion and a medium diffusion—plus an option to



The connection panel has both XLR (DMX in and thru) and Ethernet (in the thru) connectors, and the fixture can accept Art-Net or sACN. It can also act as a gateway (or node) with an Art-Net or sACN input and DMX output, and it works with RDM.

replace the prisms with a heavier diffusion. Even with the standard diffusion, the fixture plays well as a color wash fixture. I didn’t get a chance to see the heavy diffusion. The dimming is very smooth and uniform, as one has come to expect from ETC, and the pulse-width modulation frequency can be set to either 2.4kHz or 16kHz, which is plenty high enough to avoid flicker on camera.

I didn’t get a chance to measure the current draw but according to the specs it draws 5.1A at 120V, and because it has PowerCon in and through, you can daisy-chain the power. Although it’s right on the cusp of allowing three fixtures to be connected to a single 20A circuit, the documentation says you should only connect two unless you are powering it through an ETC R20 relay module, in which case you can connect three fixtures on a single 20A circuit. It can operate from 100V to 240V at 50Hz or 60Hz, and it is power factor corrected (PF ranges from 0.95 at 240V/60Hz to 0.99 at 120V/60Hz).

The connection panel has both XLR (DMX in and thru) and Ethernet (in the thru) connectors, and the fixture can accept Art-Net or sACN. It can also act as a gateway (or node) with an Art-Net or sACN input and DMX output. The Ethernet connectors are passive so they will pass a signal even if the fixture loses power. And, no, the fixtures are not self-terminating, so be sure to terminate the last fixture in each DMX link. It does, however, understand RDM, so bring your RDM controller of choice to the party.

The fixture comes with a two-year warranty for fixture and a five-year warranty for light engine. When the warranty is up, will there be fixtures that are smaller, brighter, lighter in weight, and less expensive (adjusted for inflation) than this one? I would be surprised but I wouldn’t bet against it. 📶