

Marketing Content

JAZZ FAN

BLADE DESIGN

Envira-North Systems has been working with HVLS fans since 2003. Over that time, we've worked with flat blades, extruded blades, bigger extruded blades, pitched blades, and irregular edge blades. Each one of those blade designs has strengths and weaknesses that designers will and will not admit to.

What we've accomplished with the Jazz Fan Blade is based on 14 years of knowledge and experience. Using the strengths of each previous iteration while digging even deeper into conceptual low revolution rotors allowed us to create this high-performance blade.



Minimal Noise

Traditional airfoils (or blades) are linear in design and produce greater noise at a frequency. Using varying points on the leading edge of the blade spreads the noise or acoustic signature over a greater range of frequencies, virtually eliminating any noise.

Evenly Dispersed Air

As a fan rotates, the tip of a blade spins faster than the fixed point (or center hub), creating pockets of minimal air movement directly underneath the fan. The Jazz Fan blade design tackles this challenge with a varying degree angle of attack, never seen in our industry.

Maximum Efficiency

Ranging from 6° (tip) to 14° at its greatest point, the Jazz Fan diminishes the resistance against each blade maximizing air movement, yet minimizing power consumption.

Industrial Strength

The zinc coated steel mounting plate is formed and surrounded by injection mold fibre filled polypropylene. The rugged industrial strength composition provides a light weight yet heavy-duty blade that measures 58.5" from tip-to-tip.

Visually Appealing

The sleek, ultra-modern design is available in any custom color or in six standard colors; Alabaster, Cobalt, Onyx, Radiance, Slate, and Sterling. Also available with a magnitude of customizable textured finishes from rich Carbon Fibre to soft Leather, deep Mahogany and rustic Barn Board.

The Jazz Fan's unique blade design makes it possible to move more air; quietly, efficiently and in style. The essential point of any fan is its airfoil and it allows the Jazz fan to move up to 45,000cfm.

GEARLESS MOVER

By eliminating the mechanical components, the Jazz Fan drastically reduces the sound signature created by typical HVLS Fans. The whisper quiet motor performance leaves only the sound of the breeze itself aural.



Unlike a typical DC motor in which copper is wrapped around the poles, the Jazz Fan's gearless mover utilizes a simple ring of coil, with ultra low resistance. This motor technology features a transverse flux brushless DC motor specifically designed for low speed high torque applications.

The compact motor housing is made of rigid and lightweight AISI 383 (ADC12) aluminum alloy, keeping the motor assembly under 15lbs. All 60 poles provide the Jazz Fan with a continuous 52lbf of torque across a broad operating speed and load window. And it provides zero backlash.

This Ultra-high continuous torque density motor is patented and proven. The motor adopted smart voltage technology is capable of accepting any single phase voltage in the range of 104-277V, either 50 or 60 Hz.



The hollow shaft throughout the motor assembly and mounting allows access for power and fan/light control wires to be installed out of sight. This speeds up the installation process and provides a much more visually appealing finished product without sacrificing durability.

The Jazz Fan's direct drive (gearless) mover can be over 92% efficient and rotates at speeds between 20 and 120RPM. Efficient and quiet, yet somehow light weight, this gearless mover is magnificently reliable for every application.

LIGHT

Designed to provide replacement level lighting, the Jazz Fan LED eliminates the strobing effect created by installing HVLS fans below the lighting level in any building.



Included with every fan shipped is the Jazz Fan LED Light. Seamlessly integrated, the built-in dimmable LED lighting system is purposely designed to adjust to any application. From 0 up to 1980 lumens, your space will be as bright or as dark as you need.

Separately controlled from the speed of the fan, the dimmable LED has twenty (20) different brightness levels purposely designed for every application; from commercial restaurants and showrooms to residential great rooms and gazebos.

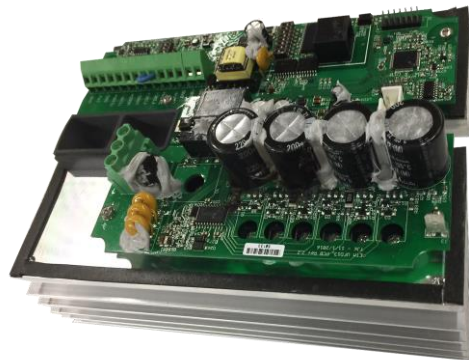
Don't want a light included? No problem, the seamless integrated design disguises the light as a part of the fan. Don't turn it on – and you won't even know its there.

ON-BOARD CONTROLS

The Jazz Fan's advanced smart voltage on-board controls automatically detects input power when it applied. Now the purchaser doesn't need to have an electrician onsite to determine what is needed prior to ordering.

Not only that, but the Jazz Fan's on-board controls constantly measures fan loads and makes real-time energy efficient adjustments, minimizing the environmental footprint while saving money on already minimal operating costs.

Because the controls are located on-board the fan assembly, all the connections are pre-wired before shipping to ensure a smooth and hassle-free installation. This minimizes electrical installation error, streamlines operation, and greatly diminishes the maintenance requirements.



The Jazz Fan can connect to standard building automation and fire suppression systems using the built-in Modbus 485 signal (other signals optional). The simple and compact design is hidden above the motor and completely invisible to the untrained eye.

WALL CONTROL

Placing all those finicky electronics inside the fan assembly means the bulk of the work is already done. No more reading wiring diagrams, ensuring the proper wiring is purchased/installed, incorrect wire connections being made... or lengthy troubleshooting with technician.

Once power is applied, a simple Cat5 cable connection to the provided control enables any user access to fan on/off, speed up/down, fan forward/reverse, light on/off and brightness up/down commands.

The compact design is light weight, compact and intuitive to all users. Simply knowing what you want the fan to do, is enough to operate the buttons and built-in LCD screen.



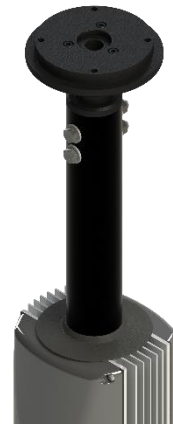
UNIVERSAL MOUNTING SYSTEM

Ever tried to purchase an HVLS fan before? Chances are you've been asked a ton of questions before you can even get a purchase price? How big is the space? How tall is your ceiling? What voltage do you have available? What type of structure do you have? All these questions have been eliminated with the Jazz Fan.

Each Jazz Fan comes complete with the Universal Mounting System. It doesn't matter what structural members are in the ceiling, the hardware included with the fan allows any do-it-yourself handyman to install the Jazz Fan. Capable of installation on I-Beams, Open Web Steel Joists, Wooden Structures, Purlins or Concrete ceilings – every Jazz fan installs seamlessly. It's a total redesign of the traditional mounting systems provides a robust yet sleek appearance.

The re-design didn't stop there – the entire mounting kit is intended to act as a housing for the electric wiring – meaning the power and control wires are now invisible to eyes below. The robust design has also deemed the traditional unsightly guy wires unnecessary. These two features are key to not only improving appearance, but to speeding up the installation process significantly.

Best yet, the Universal Mounting System also allows for the Jazz Fan to be located on any sloped ceilings from 0-18.5° with a complete 360° swivel.



SAFETY SYSTEMS

Hanging eighty-plus pounds of air movement technology in the ceiling is simple and straightforward. Ensuring its there forever is more important. Each Jazz Fan is supplied with superior harnessing systems to maintain an integral safety status and give the customer peace of mind.

The Jazz Fan motor, LED Light and onboard controls have all been integrated to included current limits, motor overload sensors, thermal protection, acceleration/deceleration limits and minimum/maximum speeds.

The industrial strength construction includes;

- Four 1/4" studs with nylon-inserted lock nuts attach the fan assembly to the mounting hardware.
- The oversized heavy duty motor cap is bolted directly to the hub, via four M5 fasteners
- An additional four 1 1/4" x 1/4" hex head bolts with serrated washers lock each blade tightly to the fan assembly.
- All other components are pre-fastened during the manufacturing process to minimize installation error.

The entire assembly, from the mounting system to the blades was designed with safety as the main priority. The fail-safe 3/32 braided stainless steel cable is secured to the structure during the installation process and runs the length of the assembly, tying all components back to the building.