Turbo Fan

Operator's Manual

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Note: Please read entire manual before operating the Turbo Fan

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Warning

Important Safety Instructions:

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Safety Precautions

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Technical Specifications

Model: Turbbo Fan

Part Number:
	CLF-2850	Turbo Fan 110V/220V (Wireless)
	CLF-2851	Turbo Fan 110V/220V (Non-Wireless)
	CLS-7300	Turbo Fan Snow Machine 110V
	CLS-7301	Turbo Fan Snow Machine Sleeve Assy
	CLS-7303	Turbo Fan Snow Machine 220V

Length: 23in 58.42cm

Width: 21in 53.34cm

Height: 10in 25.4cm

Weight: 51 lb. (61 lbs. with snow front option)

Output: 2500 cfm @ 1800 Ft/min

Power: 3 / 1.5 amps (.3 KW or .4 HP)

Noise level: 70 dB

Technical Drawings

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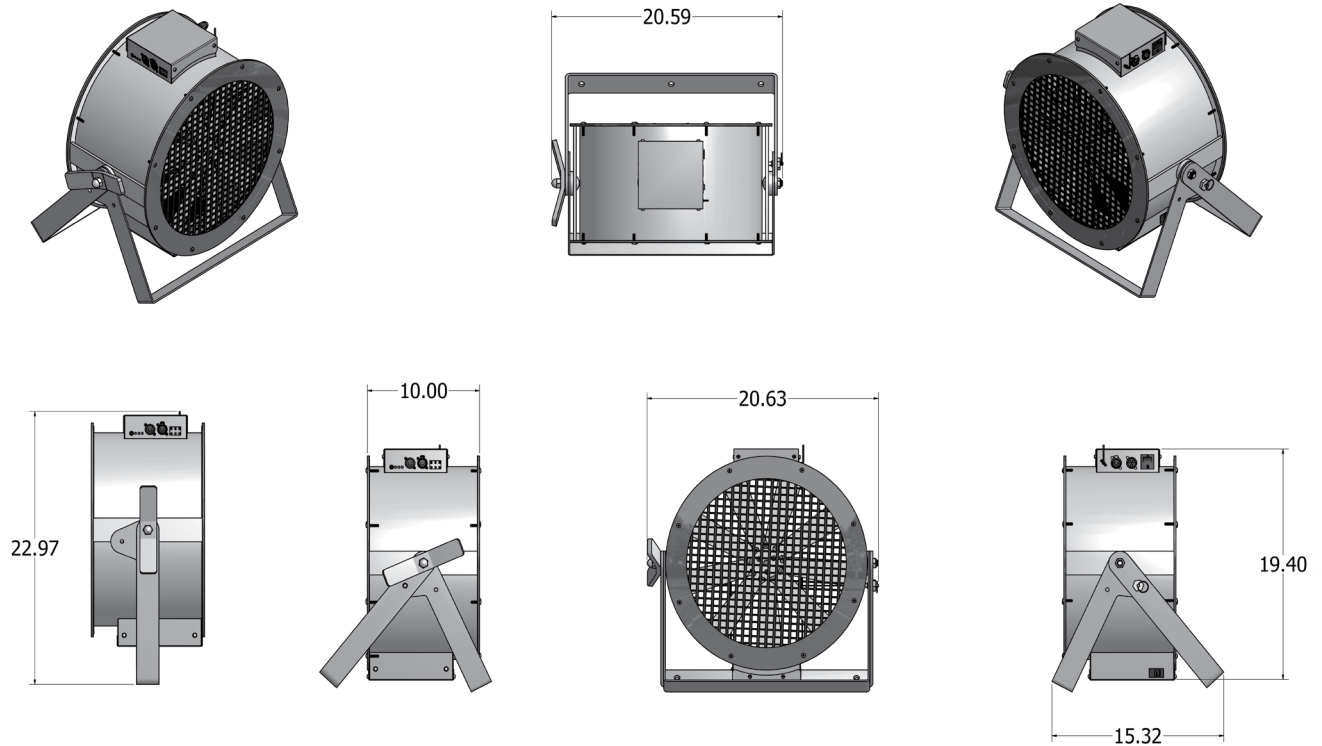
Turbo Fan

The Turbo Fan is a heavy duty stainless steel constructed machine that is, quiet, durable and powerful. It incorporates a ratchet, positive locking positioning base for quick and easy use. It comes with a built-in variable speed control and can also be controlled by an optional DMX/W-DMX with RDM mode interface for powerful, fast and secure control. The dual voltage selector switch allows operation in either 110V/220V making it very versatile.

DMX Control:

The DMX control will occupy 3 consecutive channels. The first channel controls the fan speed from 0-100%. The second channel determines direction of flow where a setting above 50% provides reverse flow. The third channel will provide snow volume if the fan is in the reverse direction and the fan speed is over 10%, this requires the optional snow machine. The base DMX address can be selected from 1 – 510 with 3 consecutive addresses occupied. The arrow keys below each address digit increases that digit. The "Valid DMX" LED indicates the presence of a stable DMX signal.

DMX Channel	Control
Base Displayed	Fan speed from 0 to 100%
Base + 1	Fan direction (0 - 49% Forward / 50% - 100% - Reverse)
Base + 2	Snow Volume from 0 to 100% (Base must = 10% or higher, Base + 1 must = 50% or higher)

RDM

The wired DMX connection is also RDM enabled. Basic instruction set includes identification and DMX re-addressing.

Local Operation:

The fan can be controlled locally by using higher numbers in the DMX display.

700-799 will give forward fan speed settings of 0-99 which equates to OFF to 100%

800-899 will give reverse fan speed settings of 0-99 which equates to OFF to 100%

6xy-699 will give (x = 0-9) reverse fan speed and (y = 0-9) snow volume. There is a 5 second delay before the snow starts.

Wireless Option:

Optional wireless control is provided by a WDMX radio transceiver. In DMX mode the fan can be used as a drop point to other equipment. The function switch is used to unlink the radio (By pressing and holding for 3 seconds only). The link status is displayed on the blue Led. Solid blue indicates linked, fast flashing indicates linking, Slow flashing indicates searching for a linked transmitter and off indicates unlinked. A Yellow LED will indicate signal strength when receiving DMX data. When receiving valid DMX data the red valid DMX Led will be on solid.

Note: if wireless RDM features are implemented (user must program them) the fan will no longer be usable as a drop point.

Note: wireless and wired DMX can't both be actively present.
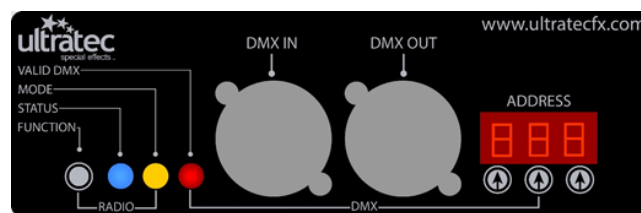
Before applying power verify that the voltage selector switch is set for the voltage to be applied. This switch is located beneath the lower compartment lid. Hang securely or place the fan on the legs in a stable location.

Select the correct line cord for local conditions and connect to the fan. If the optional snow machine is used connect it before powering the fan. Verify both ends of the fan are clear of possible obstructions and personal. Power on the fan with care as it will start in the last mode it was used. Use the address switch buttons to select the desired setting. If under DMX control the red valid DMX Led will be on if a signal is present. If the optional WDMX radio is used it will light the blue Led when linked to a transmitter and the red DMX Led with show signal.

Note: Do not supply both wired and wireless DMX to the fan at the same time.

Snow Machine Option:

The snow machine option consists of 2 parts. The first part is the ring that attaches to the back side of the fan, this is the directional flow end. The grill retaining screws are used to attach this ring. The second part of the option is the blow box. This will have the air hose and fluid tube from the snow ring attached to the front end. A control cable connects to the fan's control box. The power for the blower connects to an appropriate power source. **Note: the blower in the blow box is not dual voltage, so the appropriate voltage model must be purchased for the power source being supplied.** The blower box can hold a 4 liter jug of fluid. If a pail is to be used the jug holder can be removed. If the blower is to be hung an optional truss bracket will be required. If a pail is to be used there is also an option truss mount for this purpose.

Snow will only be issued when the fan is in reverse direction, this prevents snow from being accidentally drawn into the fan. The rate of snow is controlled to produce the desire flake size of snow. The high volume snow sock will need to be cleaned regularly to maintain optimum performance. A lower volume sock is available that requires less cleaning. The snow machine should be flushed with water for about 1 minute when not in use to prevent clogging lines and to rinse the snow sock.

Local Mode Snow Operation:

1. Connect Blower box control cable to Turbo Fan
2. Plug Snow Blower box to appropriate power source and flip Mains power switch to ON
3. Set DMX address on Turbo Fan to 600 (Fan OFF / Snow fluid pump OFF) [Blower in box will turn ON after 5 seconds]
4. Adjust middle digit (10s column) on Turbo Fan (1- 9) to start fan in reverse at desired speed
5. Adjust far right digit (one's column) on Turbo Fan (1-9) to start producing snow.

Note: The air blower in the blow box will turn ON automatically after a few seconds when the Turbo fan is set to local mode and connected to the blow box with the control cord. This is normal and will not produce any snow until the control digits on the Turbo Fan display are in the valid range.

Fan Features:

• Constructed of a stainless steel frame and shell gives a durability and toughness to the body.
• The adjustable hanging bracket provides both clamp hanging and floor stand capabilities.
• A secondary quick set bracket allows the fan to sit without extra parts.
• Durable black powder coat paint helps to reduce visible presence and blend into the back ground.
• The turbine style blade allows for quiet blade performance that is reversible.
• Two outlet styles are included, forward for a broad spread of air and reverse for a directional flow of air.
• The self-contained design provides smaller form factor for a full 16" fan.
• Led DMX addressing and control indicators are easy to read in varying light conditions.
• The control link for an optional snow machine gives direct control of the snow machine
• Servo motor with integrated driver provides high reliability in a compact design.
• Precision speed setting gives repeatable settings for superior control performance.
• Switch-mode motor power supply gives dual voltage supply in a lightweight compact design.

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Snow Option:

- Equipped with a 6 foot remote snow head allows the snow machine to be located in a more serviceable location.
- A lower noise profile is achieved with the separated components
- Chassis is constructed from stainless steel for corrosion resistance.
- The detachable jug holder allows for the use of jugs or larger pails.
- A control link to the fan gives auto control from the fan's control signals.
- The 120 volt model draws 10 amps.
- The 230 volt model draws 5 amps.
- Max fluid consumption is 6.6 liters / hour.
- An effective snow is produced at 3.6 liters / hour rate which is about 85% on the DMX setting.
- This machine will require our optional machine hanger to be hung
- Over 60 feet of snow output.

Warnings

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Maintenance

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Warranty

Warranty:	Hardware products come with a one year warranty on parts and labor. Unless stated otherwise, this will refer to manufacturer defects only. All warranty is based on destination of the original sale. Any additional costs incurred are the responsibility of the Dealer and/ or the customer. Abuse or poor maintenance is not accepted. Proof of purchase or proof of sale must always accompany all warranty returns. An RA (Return Authorization) number must be noted on the outside of each box being returned to our facility. Any package(s) without an RA number clearly marked, will not be accepted by our receiving department. Freight on warranty items are freight prepaid to our facility and we will prepay freight back to your facility following repair. This will be done by the most economical means available. Should you require the item express-returned, the dealer is responsible for request indication and any difference in freight cost. Export Distributors are required to carry out the warranty repair, parts will be supplied by Ultratec.
Return Policy:	Return of any product must be done within 30 days of purchase. The package must be returned freight prepaid and the RA number clearly marked on the outside of the box.
Warning:	Ultratec Special Effects considers all of it's product to be safe for use in the application it was intended. Ultratec Special Effects takes no responsibility for misuse or incorrect use. Always refer to the Product Manual for proper use.

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