



# Jazz FANS

Installation  
& Operation  
*User Guide*

**ENVIRA-NORTH**  
SYSTEMS LIMITED

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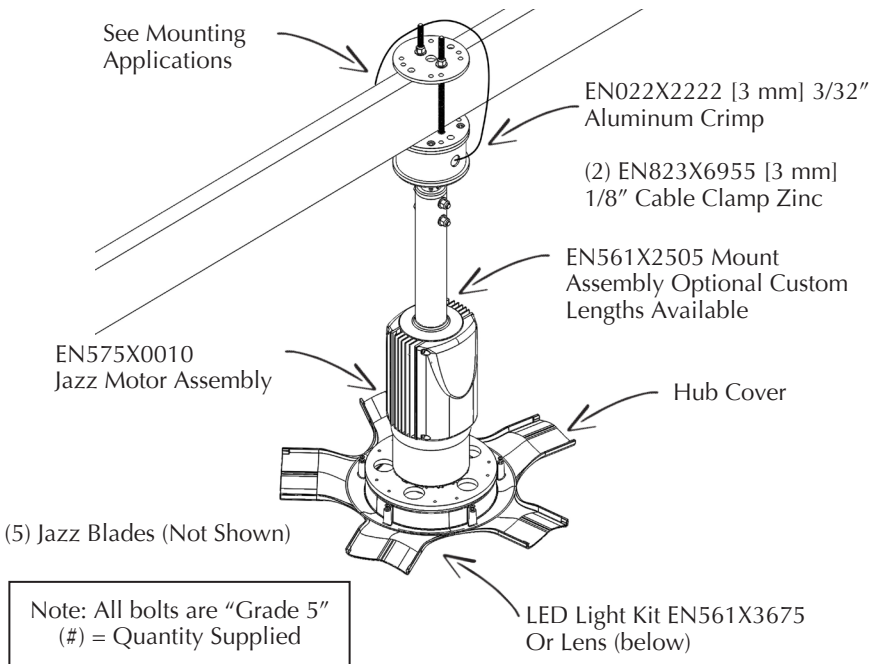
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# Overview

## COMPONENTS

Illustrations may be changed without notice. All dimensions and specifications are approximate, and drawings are not to scale. Sales are subject to prevailing terms and conditions of sale. Specifications are subject to change without notice.



# Technical Data

Conformity	CE	Low Voltage (2006/95/EC) & EMC (2004/108/EC) Directives EN61000-6-2:2005, EN61000-6-4:2007 IEC 60335-2-80:2015 IEC 60335-1:2015
Approvals	UL61800-5-1 CSA C22.2 No113	
Input Voltage Phase Imbalance	≤2%	
Input Voltage	120-240 VAC	
Input Current	4.6 @ 120VAC, 2.5A @ 240VAC	
Input Frequency	50-60Hz	
Supported Power Systems	TT TN	For central ground systems, operation is permitted without restrictions.
Humidity	≤ 95% Non-condensing	
Temperature Range	Transport	-40°C...+70°C
	Storage	-40°C...+70°C
	Operation	-40°C...+50°C (with speed derating above +40°C)
Installation Height	0 – 4000 a.m.s.l	(with 5%/1000m current derating above 1000m a.m.s.l)
Earth Leakage Current	<=9 mA to PE	
Power Conductor Size (Cord)	Minimum 16AWG 3 Conductors rated 300VAC, use Copper Conductors only. For permanent connection only.	
Max. Permissible Control Cable Length	30 meters unshielded	
Enclosure	IP54/ NEMA 3	
Protection Measures Against	Short circuit, earth fault, phase loss, over voltage, under voltage, motor stalling, over temperature, motor over-load, communication loss	
Environment	For indoor use only	
Thermal Overload Protection	Drive provides internal overload protection for the motor	
Pollution Degree	2	
Overvoltage Category	Category III	
Supply Earthing System	TN-S	
Impulse Voltage	2500V	
Working System Voltage	150V	
Packaged Fan Weight	98 lbs (44.5 kgs)	
Overall Fan Weight (no mount)	85 lbs (38.5 kgs)	
LED Light Kit Weight	1.542 lbs (0.669 kgs)	

# *Fusing & Thermal Limiting*

## **FUSES**

It is recommended that the following fuses for protecting the equipment and subject to local authority:

For 220-240 VAC use a fast blow fuse rated 5 Amps.

For 110-120 VAC use a fast blow fuse rated 10 Amps.

## **THERMAL LIMITING**

The Jazz Fan System is designed to monitor motor and controller temperatures and in the event, that operating temperatures exceed control limits, fan speed will automatically reduce until the system is within temperature limits. No user intervention is required.



# Safety

## ELECTRICAL SAFETY



**WARNING! IGNORING THE FOLLOWING INSTRUCTIONS CAN CAUSE PHYSICAL INJURY OR DEATH, OR DAMAGE TO THE EQUIPMENT.**



**WARNING! ONLY QUALIFIED ELECTRICIANS ARE ALLOWED TO INSTALL THE DRIVE AND CONNECTIONS TO THE MOTOR!**

Never work on the drive, motor cable or motor when input power is applied. After disconnecting the input power, always wait 5 minutes to let the intermediate circuit capacitors discharge before you start working on the drive, motor or motor cable.

Do not work on the control cables when power is applied to the drive or to the external control circuits. Externally supplied control circuits may carry dangerous voltage even when the input power for the drive is switched off.

**The Touch Current of the Protective Earthing Conductor could reach up to 9mA AC.**

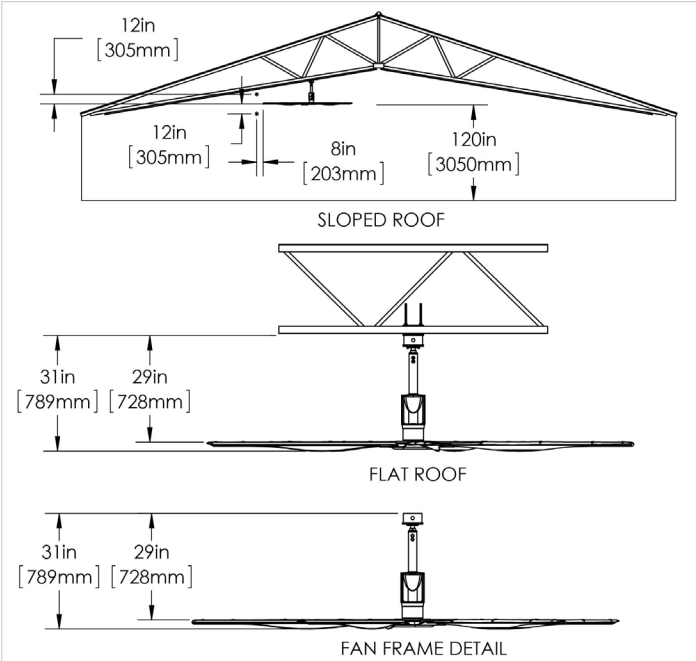
## GENERAL SAFETY



**WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- Installation work and electrical work must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- The installation is to be in accordance with the National Electrical Code, CSA C22.1, ANSI/NFPA 70, and local codes.

# CLEARANCES



- Open ceiling, center of fan to roof deck for ideal operating performance without compromising overall fan performance.
- Min 12" [304.8 mm] from fan blade's leading edge to obstruction above or below fan.
- Min 8" [203 mm] from side of fan to any obstruction.
- Min floor to fan leading edge height 120" [3050 mm].

Contractor is responsible for verifying all site conditions to include field dimensions where applicable. If the contractor elects to make any changes without notifying Envira-North Systems Ltd the contractor is responsible for the same. All drawings are to be used as general architectural intent unless otherwise stamped. See Engineer drawings for structural design information. Contractor to ensure that all building departments and authorities are informed in regard to the work and that all permits are attained before commencing work.



# Installation Preparation

## PREPARATION



**WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- The Jazz Fan must be installed with the proper blades to match the fan assembly that are marked to indicate their suitability with this model.
- No other blades can be substituted.
- Check to see if you have all the tools required for the installation.
- Verify that all fan components were received.
- Check drawings and layouts provided to locate where the Jazz Fan is to be installed.
- Ensure work area is safe and that all security, policies and procedures for the facility are met.
- Inspect the lift device or mobile platform.
- Each person installing the Jazz Fan must use a safety harness at all times.
- Other safety requirements may be required for installation.
- All workspace safety requirements, lock out procedures and hoarding of construction zone for the assembly and installation must be met and followed.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been supervised or received instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.
- The mounting of the suspension system shall be performed by the manufacturer, its service agent or suitably qualified persons.
- **DO NOT LIFT, CARRY OR HANG FAN BY POWER CABLE.** This could possibly cause the safety disconnect system to disconnect power to the fan.



## TOOLS REQUIRED


- Level
- Ratchet or impact gun
- 3/8", 7/16" and 9/16" Imperial socket to fit bolt heads and nuts
- 7/16" and 9/16" Imperial wrench to fit bolt heads and nuts
- #2 Phillip screwdriver
- Lifting device or scaffolding
- Appropriate personal protective equipment
- Drill & drill bit set up to 1/2" diameter (optional)

## ITEMS INCLUDED

- (1) EN575X0010 Jazz Motor Assembly
- (5) Jazz Blades (Optional Color)
- (1) EN561X3660 Jazz LF/SP Assembly
- (1) EN561X6205 Packaged Assembly Hardware
- (1) EN561X3570 Packaged HMI Control
- (1) EN561X3635 Packaged Wire Harness
- (1) EN561X3675 Jazz LED Light Kit (Or Lens)
- (1) Hub Cover (Optional Color)

## HARDWARE INCLUDED

- (1) EN562X1100 Jazz Mounting Plate
- (2) EN562X1152 Jazz Mounting Brackets
- (3) EN823X8313 3/8 x 9" B7 Threaded Rod W/ Nut
- (5) EN823X6999 3/8 Nylocks
- (10) EN823X6381 3/8 Flat Washers
- (20) EN823X6030 1/4 x 5/8 Serrated Flange Head Cap Screw
- (5) EN823X6119 #8-32 x 1 3/8 Machine Screw
- (1) EN823X6955 1/8" Cable Clamp
- (1) EN562X2510 Studded Mount Assembly
- (8) EN823X6905 1/4 Flat Washers
- (8) EN823X6312 1/4 Nylocks

- 
- (4) EN823X6031 1/4 x 1 1/4 Hex Cap Screw
  - (3) EN823X6008 3/8 x 1 1/2 Hex Cap Screw
  - (1) EN562X2540 Jazz Stand Off Ring

NOTE: Illustrations may be changed without notice. All dimensions and specifications are approximate and drawings are not to scale. Sales are subject to prevailing terms and conditions of sale. Specifications are subject to change without notice.

# Installation Procedure

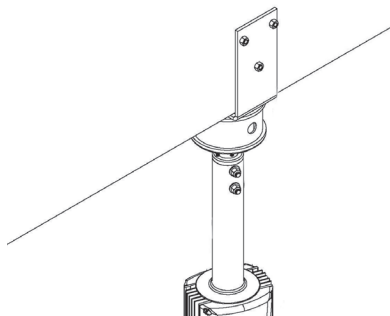
## INSTALLATION OF THE MOUNTING HARDWARE

NOTE: Consult a structural engineer before installation. Choose one of the following mounting options for your Jazz Fan and follow the corresponding steps. The mounting kits included in the Jazz Fan package are glu-lam, purlin, OWSJ and web truss.



**WARNING: USE OF ANY OTHER MOUNTING HARDWARE OR TECHNIQUE IS STRICTLY PROHIBITED.**

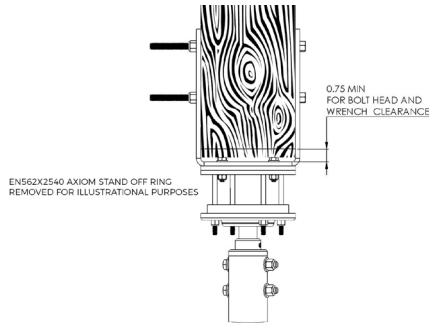
**ONLY USE MOUNTING HARDWARE/ BRACKETS SUPPLIED BY ENVIRA-NORTH.**



### ***GLU-LAM MOUNT***

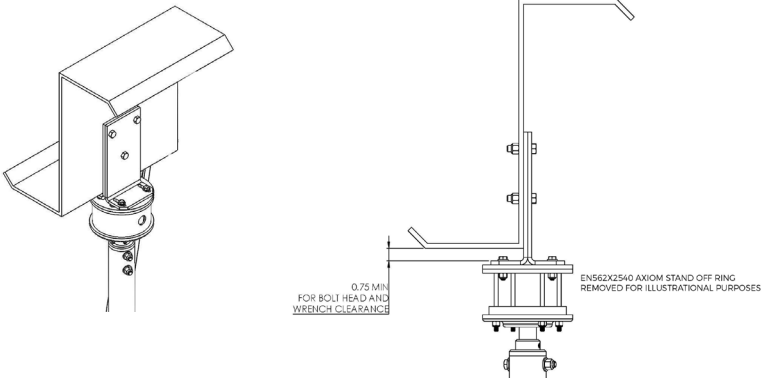
1. From an accessible landmark, on the glu-lam, measure to the centre line of the bottom centered hole of the 3 mounting holes.
2. Drill the centered bottom mounting hole with a  $\frac{1}{2}$ " drill bit, so that there will be a minimum of  $\frac{3}{4}$ " (19mm) between the top of the (EN562X1152) mounting bracket deck and the bottom of the glu-lam.
3. Place the two (EN562X1152) mounting bracket faces one on each side of the glu-lam with each mounting bracket bottom deck face inward.

4. Before fastening the mounting brackets install four 1/4" x 1-1/4" long hex cap screws (EN823X6031) with 1/4" flat washers (EN823X6905) into mounting bracket deck facing down.
5. Using a 3/8" X 9" threaded rod with welded nut (EN823X8313) and 3/8" nylock nut (EN823X6999), suspend the mounting brackets using the center bottom hole only.
6. Level the mounting brackets and mark the centre of the top two



- mounting holes. Drill the remaining top two mounting holes.
7. Before tightening the structural nuts and bolts, ensure the bracket is plumb and level then proceed with tightening the mounting brackets to the glu-lam.
  8. Fasten studded mount assembly(EN562X2510) to four 1/4" x 1-1/4" long hex cap screws (EN823X6031) already in place using four 1/4" flat washers (EN823X6905) and four 1/4 nylocks (EN823X6312).
  9. Continue on to "Installing the Motor Assembly".

## PURLIN MOUNT



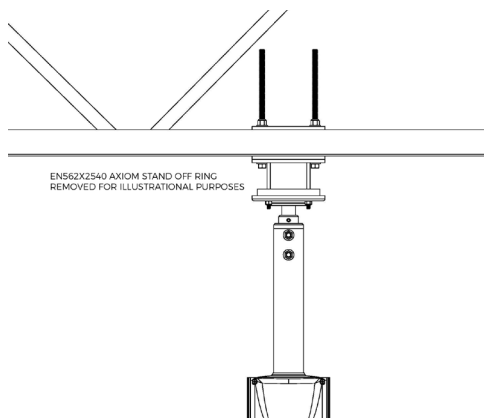
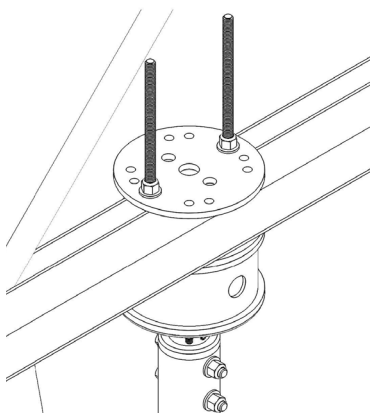
1. From an accessible landmark, on the first purlin, measure to the centre line of the bottom centered hole of the 3 mounting holes.
2. Drill the centered bottom mounting hole with a  $\frac{1}{2}$ " drill bit, so that there will be a minimum of  $\frac{3}{4}$ " (19mm) between the top of the (EN562X1152) mounting bracket deck and the bottom of the purlin.
3. Place the two mounting bracket faces together with each bracket bottom deck face outward.
4. Before fastening the mounting brackets install four  $\frac{1}{4}$ " x  $1\frac{1}{4}$ " long hex cap screws (EN823X6031) with  $\frac{1}{4}$ " flat washers (EN823X6905) into slots in mounting bracket deck facing down.
5. Using a  $\frac{3}{8}$ " X  $1\frac{1}{2}$ " hex cap screw (EN823X6008) and  $\frac{3}{8}$ " nylock nut (EN823X6999), suspend the mounting brackets using the center bottom hole only.
6. Level the mounting brackets and mark the centre of the top two mounting holes. Drill the remaining top two mounting holes.
7. Before tightening the structural nuts and bolts, ensure the bracket is plumb and level then proceed with tightening the mounting brackets to the purlin.
8. Fasten studded mount assembly(EN562X2510) to four  $\frac{1}{4}$ " x  $1\frac{1}{4}$ " long hex cap screws (EN823X6031) already in place



using four 1/4" flat washers (EN823X6905) and four 1/4 nylocks (EN823X6312).

9. Continue on to "Installing the Motor Assembly".

### ***OVSJ MOUNT***

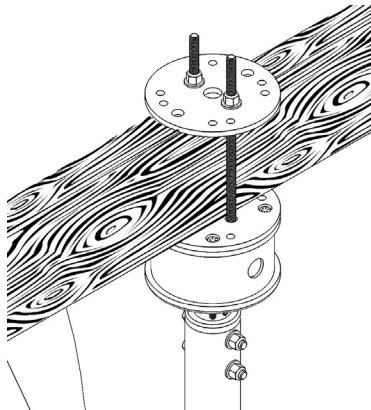


1. Insert two 3/8" X 9" long threaded rod with welded nut (EN823X8313) through the studded mounting plate pointing upward. Place the studded mounting plate against bottom face of OVSJ and place through bottom web of OVSJ directing the threaded rods between the bottom web angles.
2. Place the other mounting plate (EN562X1100) over top of the bottom web angles and thread two 3/8" nylock nuts (EN823X6999) onto threaded rod with welded nuts.
3. Tighten to sandwich assembly to bottom web of the OVSJ.
4. Continue on to "Installing the Motor Assembly".

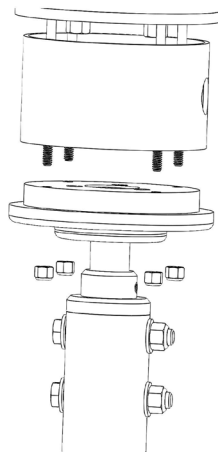
## WOOD TRUSS MOUNT



1. Insert two 3/8" X 9" long threaded rod with welded nut (EN823X8313) through the studded mounting plate pointing upward. Place the studded mounting plate against bottom face of the truss straddling the threaded rods around the bottom chord.
2. Place the other mounting plate (EN562X1100) over top of the bottom chord and thread two 3/8" nylock nuts (EN823X6999) onto threaded rod with welded nuts.
3. Tighten to sandwich assembly to bottom web of the wood truss.
4. Continue on to "Installing the Motor Assembly".



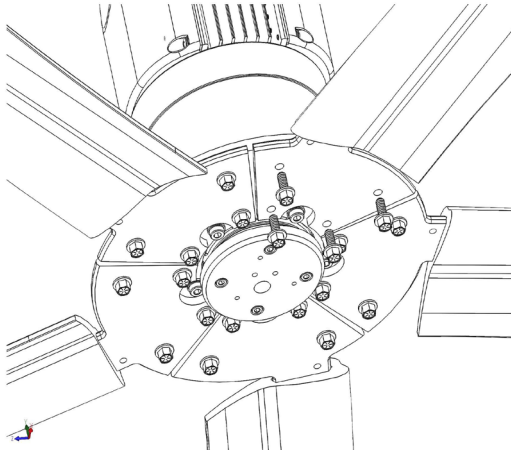
## INSTALLING THE MOTOR ASSEMBLY



1. Place round stand-off (EN562X2540) on top of flange of fan assembly.
2. Ensure power wire, communication wire and safety cable are directed through either a hole on side of stand-off ring (EN562X2540) or up through the centre of the studded mount assembly (EN562X2510).
3. Lift motor assembly to bottom of the studded mounting assembly at ceiling and position with round stand-off on fan assembly so the four 1/4" studs are inserted through the clearance holes in the flange of fan assembly.
4. Thread four 1/4" nylock nuts (EN823X6312) on each of the studs to sandwich fan assembly with round stand-off to the bottom mounting plate of studded mount assembly.
5. Ensure wires are not compromised and tighten 1/4" nylock nuts to secure the motor assembly to the studded mounting assembly.
6. Anchor the safety cable, allowing 3/4" (19mm) of slack cable, and secure to solid point of the glu-lam, purlin, OWSJ, wood truss or building structure using supplied cable clamps (EN823X6955).

7. The power cable must be secured to a solid point of the glulam, purlin, OWSJ, wood truss or building structure. The power cable is to be fastened so there is absolutely no slack in line, in order to allow the safety disconnect to function as designed. (see “Electrical Installation” section of manual.
8. Level the fan assembly and tighten the set screw on the ball joint/swivel point.

## INSTALLING BLADES



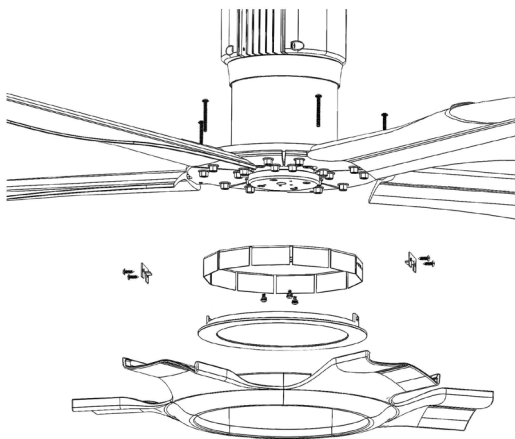
1. Using 3/8" socket fasten Jazz blade (EN501X2000) to hub plate on the bottom of the motor assembly (EN571X0010).
2. Insert four 1/4" x 5/8" serrated flange hex cap screws (EN823X6031) through all four holes in blade.
3. Thread hex cap screw into hub plate until blade is fastened tightly.
4. Repeat first 3 steps for each of the remaining blades.
5. Turn fan by hand to ensure that there are no obstructions with the blades.

## INSTALLING THE OPTIONAL LED LIGHT KIT



**CAUTION! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, DISCONNECT THE ELECTRICAL SUPPLY CIRCUIT TO THE FAN BEFORE INSTALLING LIGHT KIT.**

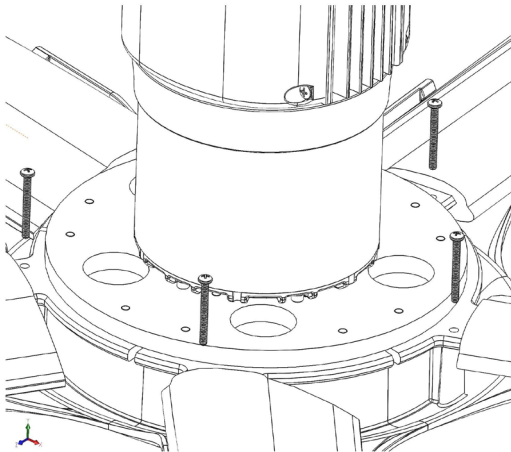
The light kit is pre-assembled for visual understanding of assembly and will need to be disassembled to install.



1. Remove light kit from box.
2. Using a Phillips screwdriver, remove the four - #6 x 3/8 screws (EN022X0402) and the two electrical box clips (EN562X2490) to free the LED panel light (EN562X2475) from the electrical box (EN562X2480). Inside, there will be three #8 x 3/8 pan head machine screws (EN823X6121).
3. Direct the LED power wire on the bottom of the motor assembly through the electrical box (EN562X2480). Mount the electrical box (EN562X2480) to the bottom of the motor assembly using the three #8 x 3/8 pan head machine screws (EN823X6121) ensuring wiring is not compromised.

4. Plug the LED panel light into the power wire.
5. Install the four - #6 x 3/8 screws (EN022X0402) and the two electrical box clips (EN562X2490) to secure the LED panel light (EN562X2475) to the electrical box (EN562X2480) in the same manner it was packaged.

## INSTALLING THE HUB COVER (WITH LENS)



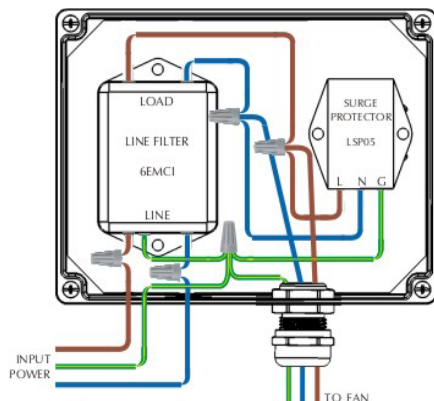
1. Take hub cover (with optional lens if applicable), and place over the center hub and blade profiles. Align the hole pattern up with clearance holes on each of the five blades.
2. Fasten hub cover with insert to fan assembly by threading five #8-32 X 1-3/8" long machine screws through the clearance hole into each blade and tighten to secure.
3. Turn fan by hand to ensure that there are no obstructions with the hub cover.



# *Electrical Installation*

## WIRING THE FAN

- A means of disconnect must be incorporated in the fixed wiring in accordance with electrical codes and standards.
- **DO NOT LIFT, CARRY, OR HANG FAN BY POWER CABLE.** This could possibly cause the safety disconnect system to disconnect power to the fan.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- **CE:** For compliance with EMC standards, the Jazz LF/SP Assembly (EN561X3660), is mandatory and must be installed as directed in the installation manual. The EMC requirements apply to the final installation in its entirety, not to the individual components used. As every installation is different, the recommended installation should follow these guidelines as a minimum.
- **UL/CSA:** The Jazz LF/SP Assembly (EN561X3660) is optional equipment, available upon request. However, as the Jazz Fan EN575X0010 does not have a built-in surge suppression device, it is highly recommended to install a Jazz LF/SP Assembly (EN561X3660) or other surge suppression device on the fans input power line to protect the fans electrical system. A whole panel surge protector is recommended as a minimum.



### ***JAZZ LF/SP ASSEMBLY (EN561X3660)***

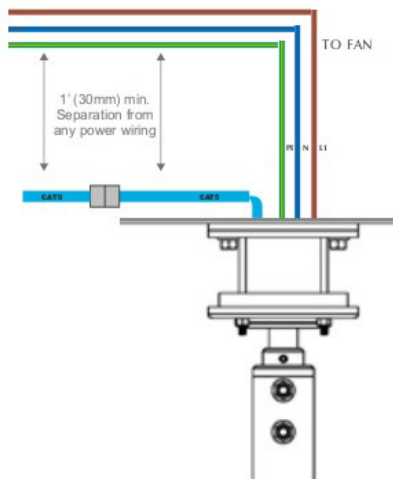
***EUROPE (CE) – REQUIRED***

***NORTH AMERICA (UL/CSA) – OPTIONAL***

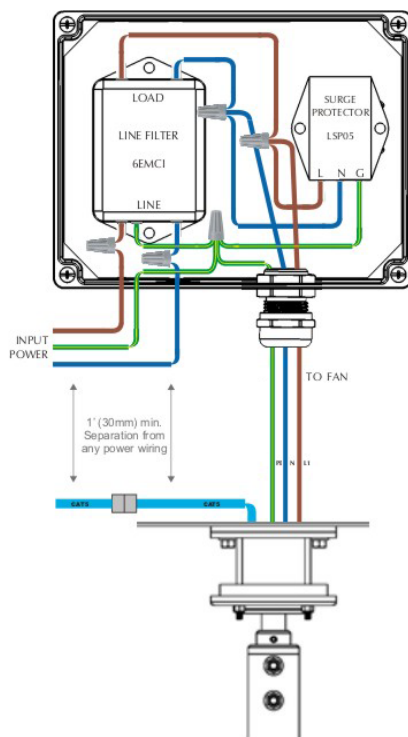
1. The power input & output cables are to be installed into the bottom of the enclosure and should be drilled to accommodate a cable gland for the appropriate gauge of wire required in accordance with applicable electrical codes and standards.
2. **Refer to the illustration for proper wire connection.**

### ***POWER WIRING – 120/240 VAC 1 PHASE INPUT***

1. Ensure all local electrical codes are met.
2. The motor is to be field-wired to a separate dedicated branch circuit.
3. The power cable must be secured to a solid point of the glu-lam, purlin, OWSJ, wood truss or building structure. The power cable is to be fastened so there is absolutely no slack in line, in order to allow the safety disconnect to function as designed.



## **WIRING – WITH JAZZ LF/SP ASSEMBLY (EN561X3660)**



# HMI Control

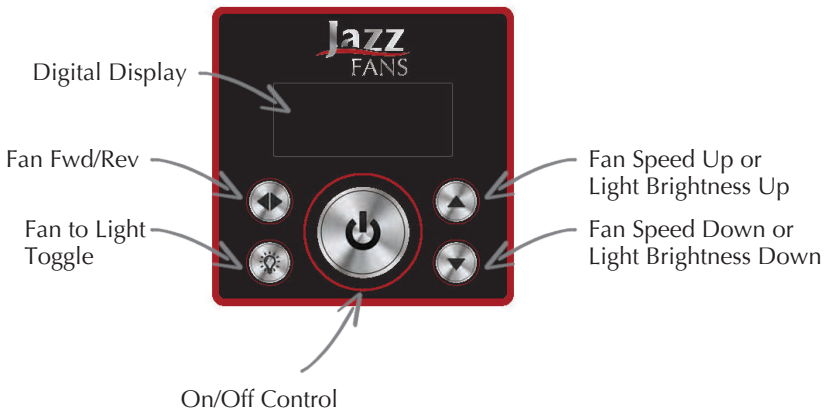
## HMI/CAT 5 CABLE CONNECTION



100' (30m) of Cat 5 cable is supplied to connect the HMI to the fan. This is a simple "plug and play" application once the cable is ran. Level and install HMI within reach of the 100' (30m) CAT 5 cable using supplied fasteners. It is recommended the fan remain in line of sight of the HMI.

## JAZZ HMI CONTROL

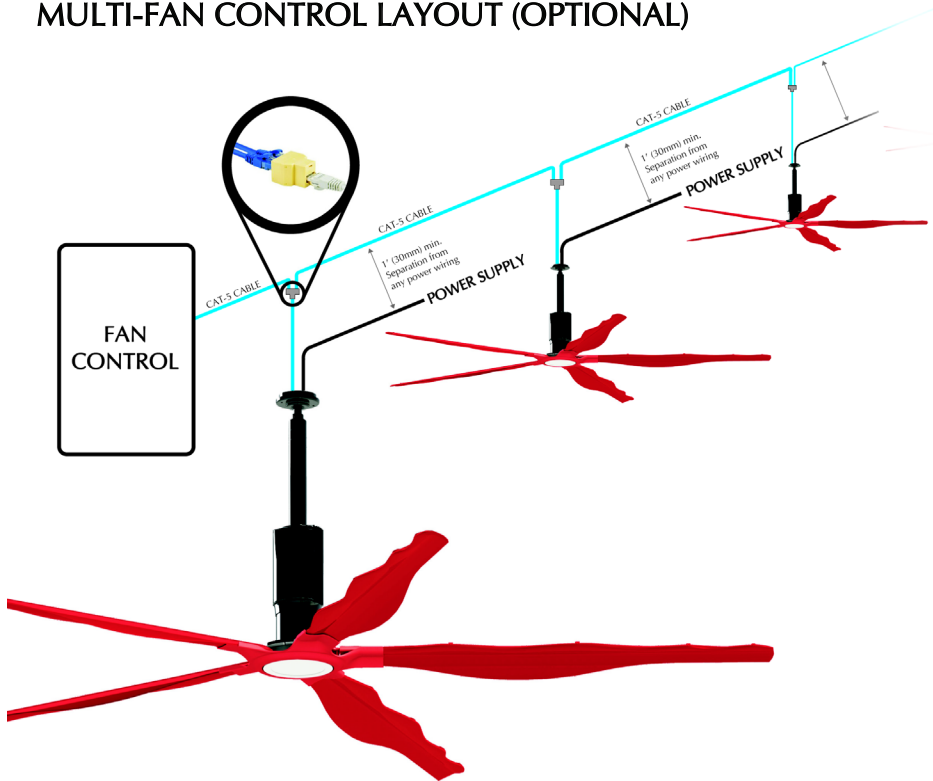
The bottom left button toggles 'Light' to 'Fan' depending on what functionality you are looking to set or adjust. When the screen says 'Fan', the remaining buttons on the keypad are controlling just the fan. When the screen says 'Light', the remaining buttons on the keypad are controlling just the light.



The control will remember the last speed & light values and will automatically resume those settings once the fan is turned back on.

NOTE: The Jazz Fan System is designed to monitor motor and controller temperatures and in the event that operating temperatures exceed control limits, fan speed will reduce until the system is within temperature limits. No user intervention is needed.

MULTI-FAN CONTROL LAYOUT (OPTIONAL)



## ADVANCED CONTROLS (SmartAIR/TouchAIR)

- For full integration instructions with Modbus controls, refer to the manual included with the controller ordered.

For ease of installation, the Modbus controls utilize Cat5 cables to facilitate the integration of the VFDs with the control.

Under ideal conditions, the controls can support:

Controller	Number of Fans	Max Cable Length *	Power Supply
SmartAIR (Single Fan)	1	100'	VFD
SmartAIR Multi-Fan	10	1000'	External
TouchAIR	20	4000'	Internal Power Supply

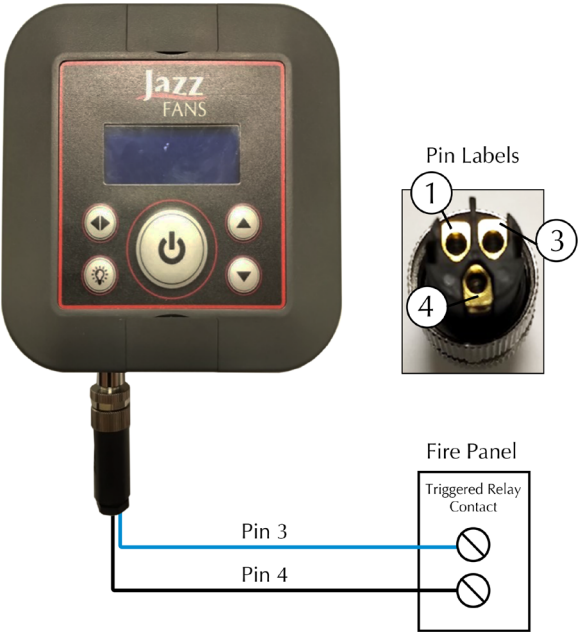
\* Local environmental conditions such as electro-magnetic interference may reduce these lengths. These conditions may require the use of other equipment such as shielded cable or signal repeaters in order to mitigate this interference. The VFDs include a 100' (30m) length of Cat5 cable. This cable may not be adequate for all installations.

If cable lengths between devices exceeds 100' (30m), bulk cable must be used to create uninterrupted cables between the devices. The only permitted junctions in the network are couplers or splitters at each device.



# FIRE SHUTDOWN CONNECTION (OPTIONAL)

To integrate fan controls with a fire detection / suppression system use supplied connector to wire to a relay contact in fire system enclosure as shown below.



# Maintenance



**WARNING! RISK OF SHOCK!**  
**ONLY QUALIFIED PERSONNEL TO REMOVE DRIVE COVER! THERE IS NO ADJUSTMENTS OR REPLACEMENT PARTS FOR THE USE!**



## TERMINALS:

Power Terminal: 3A, 300V, 10-30 AWG Torque = 0.5-0.6 Nm

I/O Terminal: 17.5A, 300V, 12-30 AWG Torque = 0.6-0.8 Nm

## POWER CORD:


Minimum 16AWG 3 Conductors rated 300VAC, use Copper Conductors only. For permanent connection only.



**WARNING! IF UNUSUAL OSCILLATING MOVEMENT IS OBSERVED, IMMEDIATELY STOP USING THE CEILING FAN AND CONTACT THE MANUFACTURER, ITS SERVICE AGENT OR SUITABLY QUALIFIED PERSONS.**

## RECOMMENDED MAINTENANCE SCHEDULE

1. No maintenance shall be done on the fan, mount or guy wires while it is in operation or powered.
2. No maintenance shall be done on the fan controller while powered unless the task involves reprogramming or troubleshooting the electrical system.
3. No maintenance shall be done within a 6m (20ft) horizontal radius of the fan and 1.2m (4ft) below and none above the blade level while it is in operation.
4. While doing maintenance on the fan, mount, or guy wires, a safety barrier shall be erected at a radius of 6m of the centre of the fan.
5. The fan controller shall be locked out while maintenance is ongoing on the fan, mount, or guy wires.

- 
6. All personnel working on the fan, mount, or guy wires, shall wear the appropriate personal safety equipment as mandated by local, provincial, and national regulations.
  7. A risk assessment shall be performed before any maintenance is done on the fan, mount, guy wires and fan controller.
  8. A tailboard meeting shall be performed before any work is done. A checklist shall be completed and shall include any emergency contacts for the area.

#### Initial Six Months

- Check for hot spots
- Re-tighten all loose electrical connections
- Check all nuts/bolts/clamps (missing/loose/damaged)
- Physical check of safety cable, re-tightening of clamps if required

Repeat Every Eighteen Months Thereafter

# *Limitation of Warranty & Liability*

## **THREE YEAR LIMITED WARRANTY**

Jazz Fans should provide many years of virtually maintenance-free use. Warranty duration is as follows:

a)	Blades	3 year Limited Warranty
b)	Mount	3 year Limited Warranty
c)	Motor	3 year Limited Warranty
d)	Driver	3 year Limited Warranty
e)	HMI Control Panel	3 year Limited Warranty
f)	Labour	1 year Limited Warranty
g)	Fan Wraps/Paint	1 year Limited Warranty

Envira-North warrants that this Product will under normal use and service as specified by Envira-North, operate properly and be free of defects in materials and workmanship for a period of three years from the date of purchase by customer. The term “operate properly” in this context applies to mechanical, electrical and structural functions only. No guarantee, unless and except by separate written agreement, is made regarding dimensions of air movement generated or the effectiveness of this Product for its intended purpose.

Labour Warranty will cover all reasonable costs paid by the customer to an independent contractor (including dealers) to remove, dismantle, reassemble or reinstall any of the warranted Products during the first year that the Product is in service. All pre-approved receipts are to be submitted to Envira-North which will be paid upon completion of the installation of the Product and after the return of the failed unit. Envira-North will only issue a credit/cheque to the customer/dealer and will not be held responsible for paying the independent contractor.



## WARRANTY EXCLUSIONS


Please note that the following may or could void any or all of the above listed Warranties.

- Not following required installation procedures as in installation guide and all other documentation supplied with the fans and related equipment, supplied by manufacturers of individual fan and control components.
- Not following all relevant codes and ordinances, not limited to National Electrical Code, provincial or state and local building codes.
- Not following electrical engineering industry standards regarding approved method of installing solid-state electrical equipment having characteristics of fans and all components included in this product.
- Any modification to installation, product and/or controls without written authorization from Envira-North, even if attempting to diagnose and/or repair a problem.
- Misuse, abuse, accidents, unreasonable use or Acts of God.
- Incorrect electrical current, voltage or supply.
- Failure to use all installation and mounting hardware supplied by Envira-North.
- Failure to perform periodic maintenance as detailed in the Envira-North installation guide.

Envira-North reserves the right to make the final determination, based on its own evaluation of the components as to whether:

- The problem in question is the result of a defect in design, workmanship or materials and not the result of error, misuse or abuse on the part of the customer as stated above.
- Whether the problem or defect is material and requires action under this Warranty.
- Whether the remedy of repair or replacement is appropriate.

Envira-North will not be responsible for remedial work necessary to correct installation procedures that do not conform to those



established by the instructions, codes and standards, regardless of when the installation occurred.


With regard to electrical and electronic components provided by Envira-North that comprise part of the Products, including motors, motor drives and variable frequency drives, Envira-North relies on the determination by the original manufacturer as to whether the failure of such component was the result of a defect. If the manufacturer of such component determines that there was no defect and therefore refuses to cover it under warranty, Envira-North likewise will not warranty such item unless Envira-North determines that the failure of such electrical or electronic component was the result of a defect of design, workmanship or material within some other part of the products.

## **WARRANTY DURATION**

With respect to replacement or repair rendered, Envira-North warrants that the parts replaced or repaired will operate properly and be free from defects in materials and workmanship for a period of 90 days from the shipment date of the replacement products to the customer, or for the remainder of the original Warranty period, whichever is longer.

## **WARRANTY CLAIM INSTRUCTIONS**

1. Contact your original dealer/salesman of the purchase when you first notice problem with the Product.
2. It will be the responsibility of the dealer or salesman to assist the customer in determining what Product is causing the problem.
3. If they cannot diagnose the problem, they are to contact Envira-North with all the necessary information.
4. The appropriate department will then be in contact with the customer to determine the cause of the problem.
5. Once diagnosed, submit a Purchase Order for a replacement component complete with price.
6. Replacement component will be shipped out upon receipt of the



PO. This PO allows for an order to be established in the Envira-North System.

7. Once the units have been changed over, submit all pre-approved costs to Envira-North for payment.
8. All items being returned for warranty consideration will be required to arrive at 139 Sparling Street, Seaforth, Ontario, Canada, N0K1W0, no later than 45 days from the date your RGA (Return Goods Authorization) is issued. If the goods do not arrive back to us within that period, the warranty coverage will be declined. Exceptions may be granted but will require written approval from Envira-North Management prior to the 45-day period expiring.
9. No credits or cheques will be issued until all original products are received back at Envira-North or unless Envira-North directs otherwise.





## **FIFTEEN YEAR SERVICE LIFE PRORATED WARRANTY**

**WARRANTOR:** The warrantor for the limited warranties set forth herein is Envira-North Systems Ltd (“Company”).

**LIMITED WARRANTY:** This prorated limited warranty (this “Warranty”) applies only to the original End-User (the “End-User”) of any Envira-North Systems’ Jazz Fan(s) (Individually and collectively, the “Product”) and cannot be transferred. This Warranty applies even in the event that the Product is initially sold by Company for resale to End-User. This Warranty applies to USA and Canada purchases only. Outside USA and Canada; standard Three-Year Warranty applies.

**WHAT THIS WARRANTY COVERS:** In addition to the standard Three-Year Limited Warranty covering all other components, the Warrantor warrants that the Product will have a service life (defined below) of Fifteen Years from the date of purchase (the “Fifteen Year Service Life”) when used in accordance with the operation and maintenance procedures prescribed in the Envira-North Systems Installation Manuals.

If Company finds, in its sole discretion, that any Product has not provided the Fifteen-Year Service Life, Company will, as its sole obligation and the End-User’s sole remedy for Company’s breach of this Warranty, repair or replace the Product, at its option, F.O.B Company’s factory, for a charge, payable to Company prorated on the following basis:

The End-User will be allowed a credit against Company’s list price of equivalent equipment at the time of return of the Product to Company, in proportion to the percentage of Fifteen-Year Service Life remaining at the time of return of the Product to the Company. The End-User will assume responsibility to pay the balance of the list price; and Company reserves the right to require payment prior to delivery of the repaired or replacement equipment.



For the avoidance of doubt, Company's responsibilities under this Warranty are as follows:

**YEAR 1-3** - Product repaired or replaced pursuant to terms if Limited Warranty applies

**YEAR 4-15** - Unit Credit (\$) =

$$\text{Current List Price} \times \frac{\text{Years of Unexpired Life}}{15 \text{ Years of Warranted Life}}$$


#### **WHAT THIS WARRANTY DOES NOT COVER:**

Any defects or damages caused by:

- Failure to properly store the Product before installation.
- Shipping and delivery of the Product if shipping is FOB Factory.
- Neglect, accident, abuse, misuse, misapplication, or incorrect installation.
- Repair or alteration not authorized in writing by Company personnel.
- Improper testing, operation, maintenance, adjustment or modification of kind not authorized in writing by Company personnel.
- Use of the Product in other than normal operating conditions or in a manner inconsistent with the Product's label or Instructions.
- Controls and/or any other external electronic controlling devices.
- Exclusions listed in the standard Three-Year Limited Warranty.
- Any products or components purchased prior to effective date of this Warranty.

#### **THIS WARRANTY IS NOT VALID:**

- Unless the End-User returns to Company the Warranty




Registration Form within thirty (30) days of purchase;  
OR

- If the Product's serial numbers have been removed or are illegible;  
OR
- If any warranted items repaired or replaced pursuant to this Warranty will be warranted for the remaining portion of the original Warranty subject to all the terms thereof. Company shall not be responsible for any charges for testing, checking, removal or installation of warranted items unless authorized in writing by Company personnel;  
OR
- If failed to submit records at time of performing Recommended Maintenance Schedule, minimum every 18 months

**LIMITATION OF LIABILITY:** The remedies of the End-User set forth herein are exclusive and are the sole remedies for any failure of Company to comply with its obligations hereunder. In no event shall Company be liable in contract, in tort (including negligence or strict liability) or otherwise for damage to property or equipment other than the Products, including loss of profits or revenue, loss of use of Products, cost of capital, claims of customers of the End-User or any special, indirect, incidental or consequential damages whatsoever. The total cumulative liability of Company hereunder whether the claims are based in contract (including indemnity), in tort (including negligence or strict liability) or otherwise, shall not exceed the price of the Product on which such liability is based. Company shall not be responsible for failure to provide service or parts due to causes beyond Company's reasonable control.

**END-USER'S OBLIGATIONS:** In order to receive the benefits of this Warranty, the End-User must use the Product in a normal way; follow the Product's Installation Manuals; and protect against further damage to the Product if there is a covered defect. Submit records at time of performing Recommended Maintenance



Schedule, minimum every 18 months.

**OTHER LIMITATIONS:** Company's obligations under this Warranty are expressly conditioned upon receipt by Company of all payments due to it, including all applicable interest charges. During such time as Company has not received payment of any amount due to it for the Product, in accordance with the contract terms under which the Product is sold, Company shall have no obligation under this Warranty. Also during such time, the period of this Warranty shall continue to run and the expiration of this Warranty shall not be extended upon payment of any overdue or unpaid amounts.

**COSTS NOT RELATED TO WARRANTY:** The End-User shall be invoiced for, and shall pay for, all services not expressly provided for by the terms of Warranty, including without limitation, site calls involving an inspection that determines no corrective maintenance is required. Any costs for replacement equipment, installation, materials, freight charges, travel expenses or labor of Company representatives outside the terms of this Warranty will be borne by the End-User.

**OBTAIN WARRANTY SERVICE:** Call Envira-North Systems Ltd., Service 1-866-771-7766 or 1-519-527-2198. Company will not accept any product for return, credit or exchange unless expressly authorized by Company in writing and delivered FOB Company factory with proper Return Authorization Number attached to the product.



## FIFTEEN YEAR SERVICE LIFE PRORATED WARRANTY FORM

The Jazz Fan is covered by our standard Three Year Limited Warranty. To register for our extended Fifteen Year Prorated Limited Warranty, you must complete and return this form within 30 days of purchase by fax to 1(519)527-2560 OR email [bigair@enviranorth.com](mailto:bigair@enviranorth.com). See Envira-North Systems Ltd. Fifteen Year Prorated Limited Warranty for details and restrictions.

For further information on all Envira-North Systems Ltd. products, check out our website at

[www.enviranorth.com](http://www.enviranorth.com) or contact:

Envira-North Systems Ltd.

Phone: 1 (519) 527-2198 or 1 (866) 771-7766

Fax: 1 (519) 527-2560

Email: [bigair@enviranorth.com](mailto:bigair@enviranorth.com)

Name of Customer: \_\_\_\_\_

Address: \_\_\_\_\_

Phone No: (     ) \_\_\_\_\_ Fax No: (     ) \_\_\_\_\_

Name of Facility Where Fans Installed: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Phone No: (     ) \_\_\_\_\_

Address: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

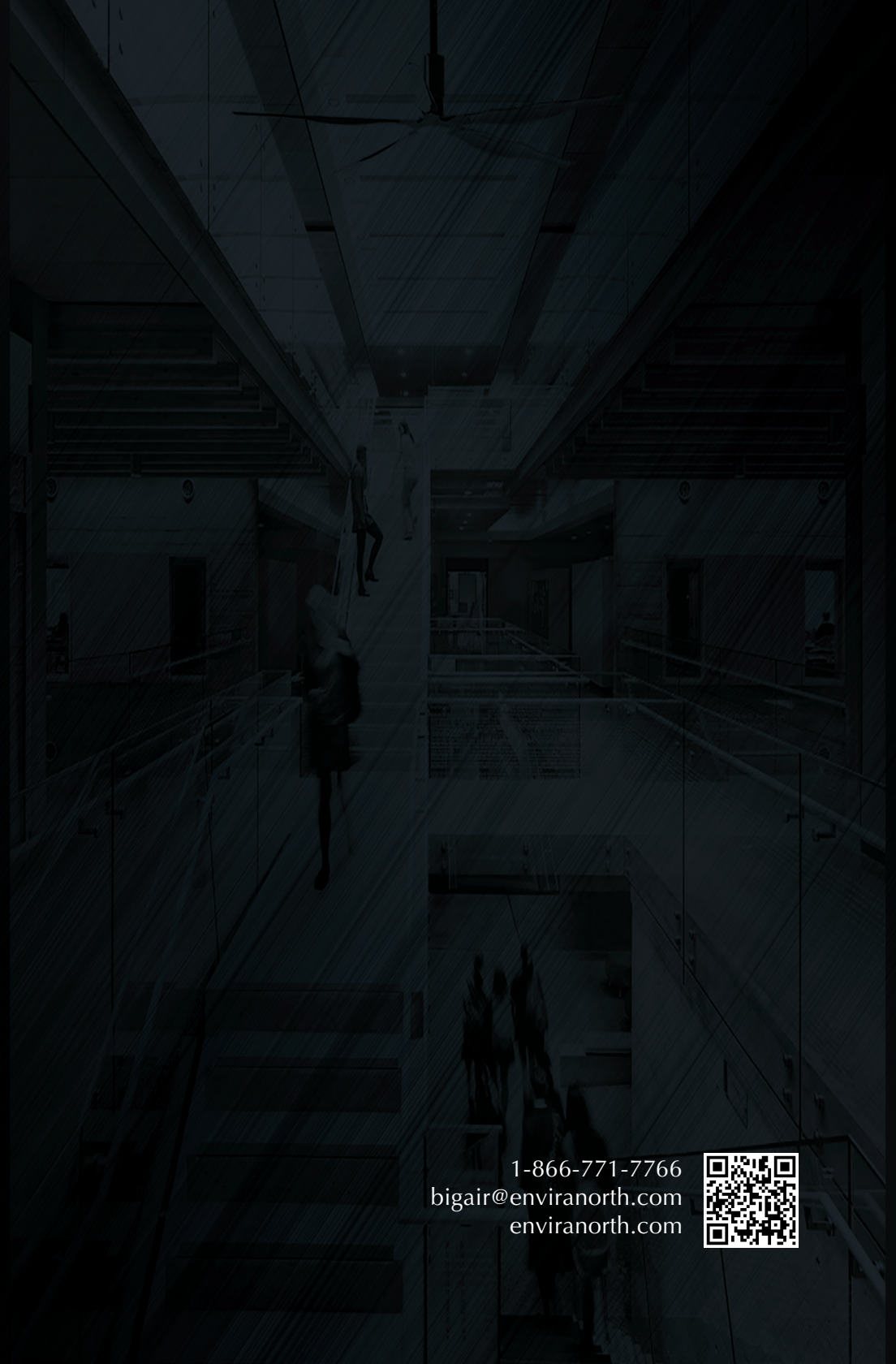
Quantity of Jazz Fans: \_\_\_\_\_

Fan Serial Number(s): \_\_\_\_\_

Special Declarations or Comments:

You must complete and return this form within 30 days of purchase by fax to 1(519)527-2560 OR email [bigair@enviranorth.com](mailto:bigair@enviranorth.com).





1-866-771-7766  
bigair@enviranorth.com  
enviranorth.com

