

Installation, Operations and Performance Manual

prioAIR®

Inline Duct Fan

PARTS IN THE BOX

Inline Fan prioAIR®, 1 pc
Mounting Bracket, 1 pc
Hardware, 1 pack
Operation and Installation Manual, 1 pc



Systemair certifies that all models shown are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

prioAIR® 6
prioAIR® 6-EC



prioAIR® 8
prioAIR® 8-EC
prioAIR® 10
prioAIR® 10-EC

United States
Canada
Latinoamérica

Tel.: 800 747 1762
Tel.: 800 565 3548
Tel.: +52 55 1328 7328



fantech®
a systemair company

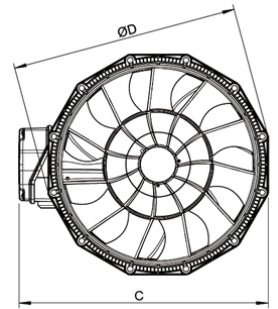
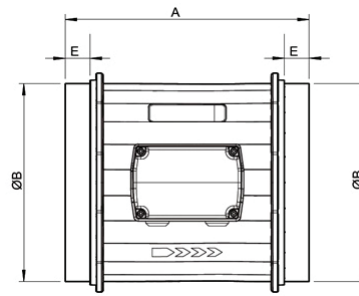
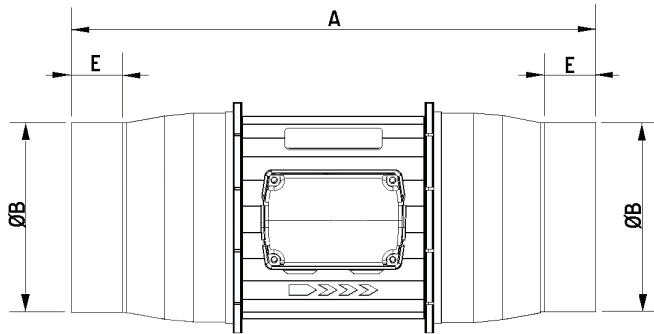
Note	Warning / Important note	Information	Technical information	Practical tip



Warnings

1. prio**AIR**® is an axial duct fan intended for installation in ventilation systems. Stand alone versions were not evaluated by UL and would void their marking.
 2. CAUTION: This duct fan shall be installed at minimum of 1 m (3 ft) from any accessible opening of the duct."
 3. CAUTION: For General Ventilation Use Only. Do Not Use To Exhaust Hazardous Or Explosive Material and Vapors. prio**AIR**® is suitable for clean air, air with low dust and grease content, and media up to max. density of 0.081 lb/ft³ (or 1.3 kg/m³).
 4. CAUTION: prio**AIR**® is suitable for temperature ranges between -13°F to +131°F (-25°C to +55°C).
 5. Remove unit from packaging and inspect within 15 days after receipt. If damaged, report damage to carrier. Do NOT operate this unit with visible damage to the blower or impeller assembly.
 6. Cordless units are NOT to be used with rigid conduit. Flex conduit (1/2 inch) is recommended for permanent installations.
 7. Corded models are available and are factory wired. If using a corded model the following installations are required:
 - a. Do NOT Use in junction with an extension cord.
 - b. Do NOT operate any fan with a damaged cord or plug.
 - c. Do NOT run cord under carpeting.
 - d. Do NOT cover cord with throw rugs, runners, or similar coverings.
 - e. Arrange cord away from traffic areas to avoid tripping hazards.
 8. An appropriate duct termination device (roof cap, wall cap, louvered shutters, etc.) are to be used with this fan.
1. **TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**
 - a. Use this unit in the manner intended by the manufacturer. If you have any questions, contact your manufacturer's representative.
 - b. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. If the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel. For corded models, unplug the fan from the power supply.
 - c. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
 - d. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), as well as you local code authorities.
 - e. When cutting or drilling into the wall and ceiling, do not damage electrical wiring or other hidden utilities.
 - f. Ducted fans must always be vented to the outdoors.
 - g. NEVER place a switch where it can be reached from a tub or shower.
 2. **WARNING! Check the voltage on the fan faceplate to verify it corresponds to the motor name plate rating.**

Dimensions



Model	A	B	C	D	E
prioAIR® 6	16 ³ / ₁₆	5 ⁷ / ₈	8 ¹ / ₄	7 ³ / ₈	1 ⁵ / ₈
prioAIR® 6-EC	16 ³ / ₁₆	5 ⁷ / ₈	8 ¹ / ₄	7 ³ / ₈	1 ⁵ / ₈
prioAIR® 8	9 ¹¹ / ₁₆	7 ⁷ / ₈	9 ³ / ₄	9	1
prioAIR® 8-EC	9 ¹¹ / ₁₆	7 ⁷ / ₈	9 ³ / ₄	9	1
prioAIR® 10	11 ¹³ / ₁₆	9 ¹³ / ₁₆	11 ¹⁵ / ₁₆	11 ¹³ / ₁₆	1 ³ / ₁₆
prioAIR® 10-EC	11 ¹³ / ₁₆	9 ¹³ / ₁₆	11 ¹⁵ / ₁₆	11 ¹³ / ₁₆	1 ³ / ₁₆

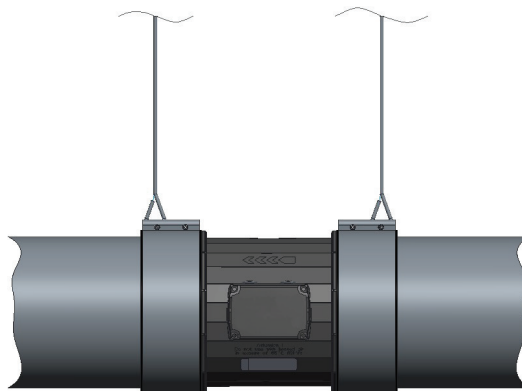
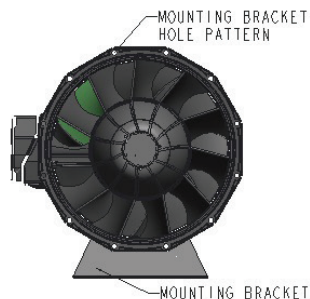
All dimensions in inches

Installation

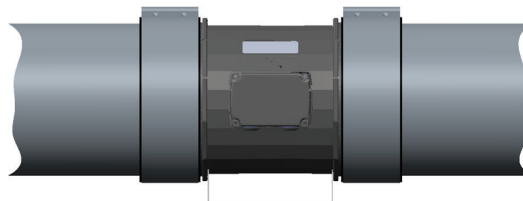
The prio**AIR**® ventilation fan may be mounted in either the horizontal or vertical orientation. Each fan is designed with a series of mounting holes, patterned around the center axis of the fan which provides optimum control of the electrical box orientation during installation.

All prio**AIR**® units come standard with a mounting bracket (shown below) and mounting hardware.

Mounting options

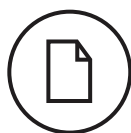
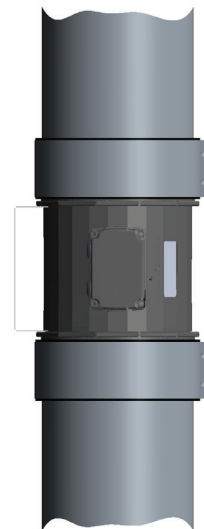


Horizontal Installation
Suspended



Horizontal Installation
Mounting Bracket

Vertical Installation
Mounting Bracket

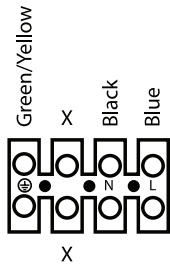


1. When installing, keep the number of elbows and bends to a minimum. If necessary, long radius elbows or bends are recommended.
2. Duct Sealant, caulk, or tape should be applied to all seams to prevent air leakage and maximize air performance.
3. Flex, spiral, or snap lock ducting may be used. If using rigid duct, Fantech FC clamps are recommended to connect duct work to the fan (see above illustrations).
4. To minimize static pressure losses and promote adequate airflow, minimize duct run lengths where possible. If using flex duct, keep duct runs straight and taut.
5. If installing in an unconditioned space, covering the fan with insulation is recommended to prevent condensation from forming.
6. For general ventilation applications, at least 8 ft of insulated flexible duct shall be installed between the exhaust or supply grille(s) and the fan.

Wiring

Models prio**AIR**® 6, prio**AIR**® 8, and prio**AIR**® 10

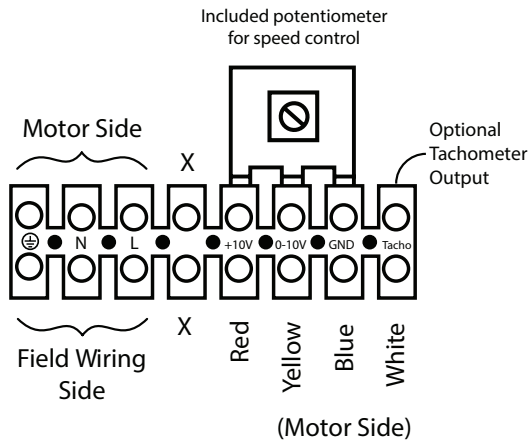
Motor Side



Field Wiring Side

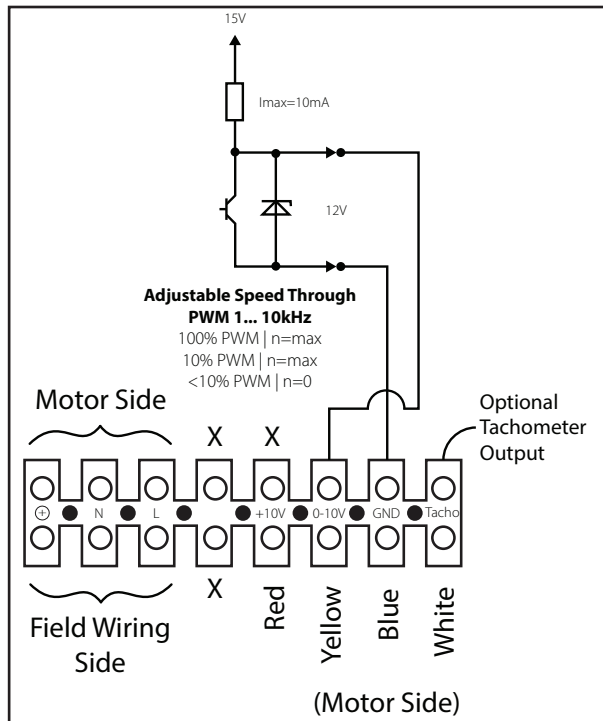
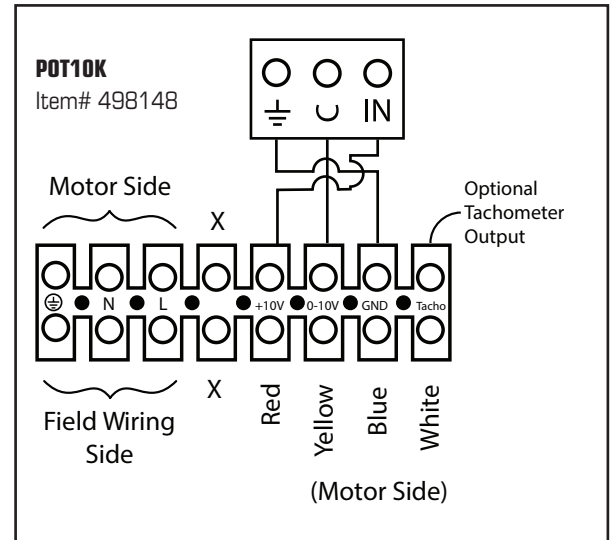
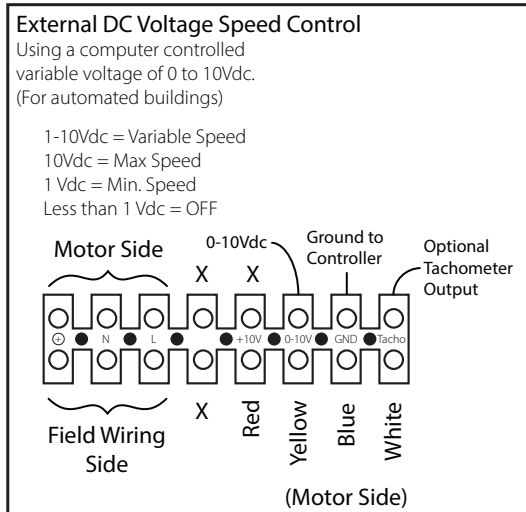
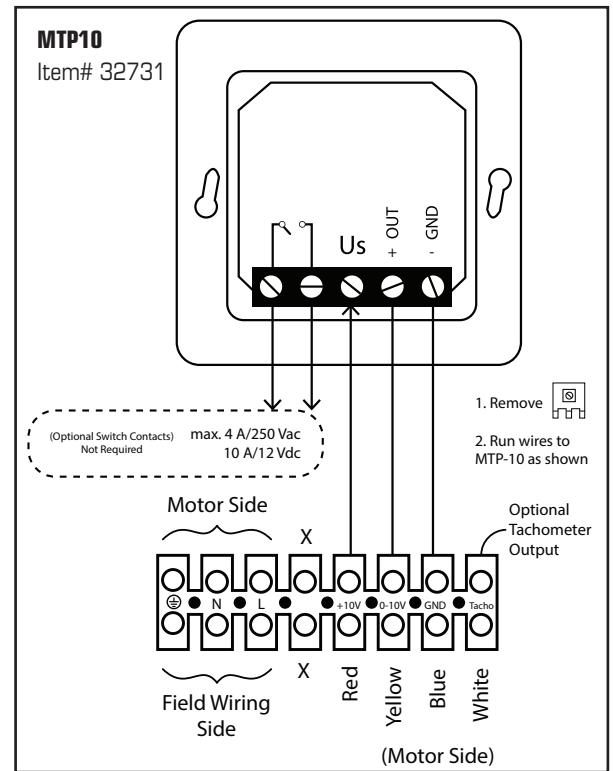
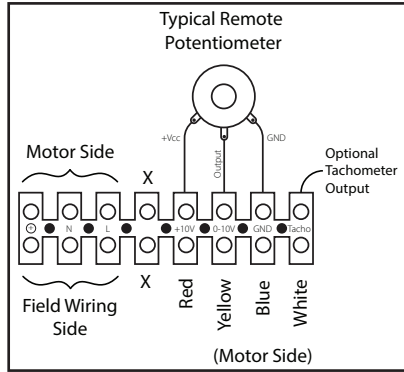
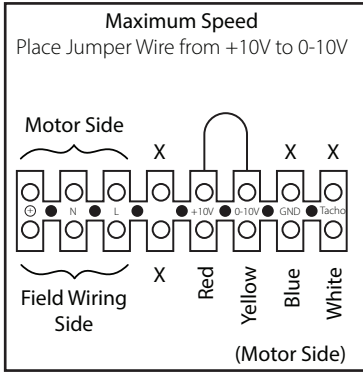
Factory Motor Wiring (For reference only)	Terminal Marking	Field Wiring to be Completed by Installer
Color		Function
blue	L	Power supply 120VAC, 50/60 Hz
black	N	Neutral conductor
green/yellow	PE	Protective conductor

Models prio**AIR**® 6-EC, prio**AIR**® 8-EC, and prio**AIR**® 10-EC

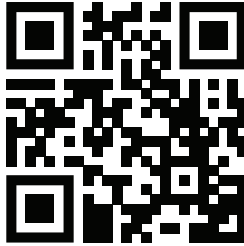


Factory Motor Wiring (For reference only)	Terminal Marking	Field Wiring to be Completed by Installer
Color		Function
Brown	L	Power supply 120VAC, 50/60 Hz
Blue	N	Neutral Conductor
Green/Yellow	PE	Protective Conductor
Red	+10V	Voltage Output 10V/1.1mA, Electrically Isolated
Yellow	10V/PWM	Controller Input 0...10V or PWM, Electrically Isolated
Blue	GND	GND- Connection to the Controller Interface
White	Tacho	Speed Output: Open Collector; 1 Impulse per revolution, electrically isolated Isink_max=10mA

Control Options (for prioAIR® 6EC, PrioAIR® 8EC, and PrioAIR® 10EC models)



Warranty



Make a scan of the QR code above to access Fantech's warranty in English, French, or Spanish. Includes a 5y warranty.

If additional support is needed to retrieve the warranty, visit fantech.net; call (800) 747-1762 (US), (800) 565-3548 (Canada), or +52 55 1328-7328 (Latin America); email support@fantech.net; or mail us at 10048 Industrial Blvd, Lenexa, KS 66215 United States or at 50 Kanalläkt Way, Bouctouche, NB E4S 3M5 Canada.

For Customer/Technical Support call (800) 747-1762

Fantech reserves the right to make technical changes.
For updated documentation please refer to www.fantech.net

Fantech®