

MacroAir Local Override Remote User Manual

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Introduction

Caution and Safety

△ **ATTENTION:** Safety. READ THE ENTIRE MANUAL BEFORE OPERATING THE FAN. Ensure that all safety practices and instructions are followed during the installation, operation, and servicing of the fan. Failure to apply these safety practices could result in death or serious injury. If you do not understand the instructions, please call our Technical Department for guidance.

△ **ATTENTION:** Qualified Technicians. All fan controls and incoming power should only be installed by qualified technicians familiar with the requirements of the National Electrical Code (NEC) and local codes. Refer to appropriate portions of this manual for other important requirements. Failure to follow these guidelines will void the manufacturer's warranty.

△ ATTENTION: Damp and Corrosive Environments. MacroAir provides a stainless-steel fan alternative, especially for excessively damp, caustic, or corrosive environments. It is recommended that the environmental conditions acting on a fan installation be reviewed to ensure the proper choice of a fan purchase and special warranty considerations.

△ **ATTENTION:** Code Compliance. Installation is to be in accordance with the NEC, ANSI/NFPA 70-1999, and local codes.

Hazard of Electrical Shock, Explosion, or Arc Flash:

△ **ATTENTION:** Read. Read and understand this manual before installing or operating a fan unit. Installation, adjustment, repair, and maintenance must be performed by qualified personnel.

△ **ATTENTION:** Code Compliance. The user is responsible for compliance with all international and National Electrical Code requirements with respect to the grounding of all equipment.

△ **WARNING:** Do Not Touch. Many of the parts of this unit operate at line voltage. DO NOT TOUCH.

△ WARNING: Covers. Install all covers before applying power or starting and stopping the unit. Installation and Service

△ WARNING: Damage. Do not operate or install any fans or fan accessories that appear to be damaged.

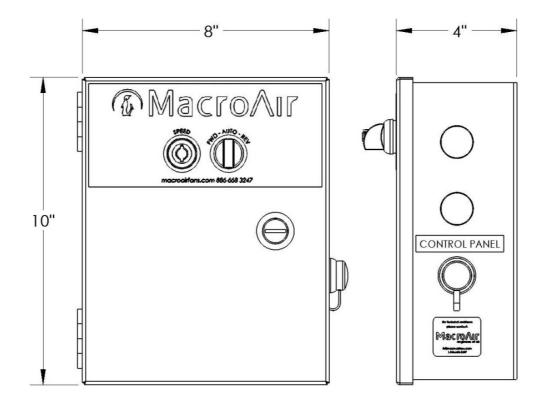
△ **WARNING:** Death and Injury. Failure to follow this instruction can result in death, serious injury, or equipment damage.

△ **WARNING:** Disconnect Power. If the fan does not operate properly using the procedures in this manual. BE CERTAIN TO REMOVE ALL POWER TO THE UNIT and contact our technical department for further assistance.

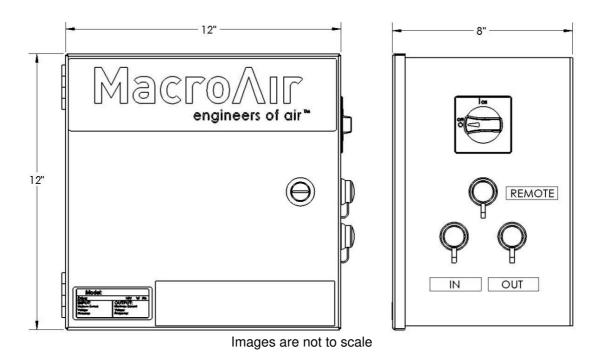
△ CAUTION: Moving Parts. Keep all body parts clear of moving parts at all times.

△ **ATTENTION:** Qualified Technicians. All electrical troubleshooting and repair must be done by a qualified technician and meet all applicable codes.

REFER TO FAN INSTALLATION MANUAL(S) FOR FURTHER MAINTENANCE INFORMATION. Remote Enclosure

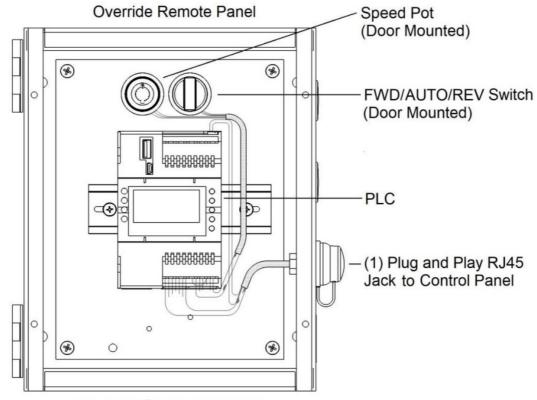


Control Panel Enclosure



Wiring the Fan

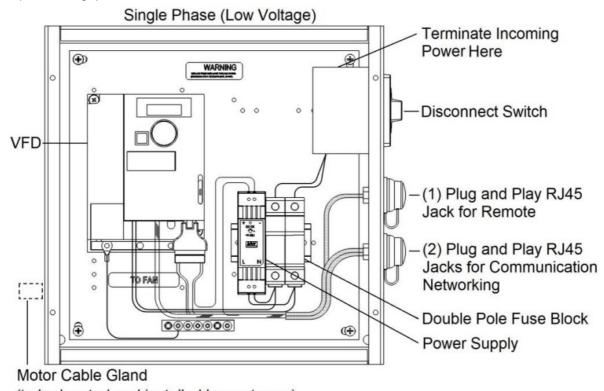
Remote Panel Overview



Door Not Shown This View

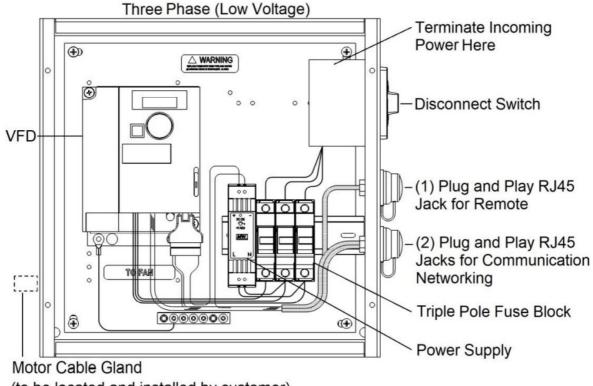
Schneider Control Panels Overview

1 Phase (Low Voltage)



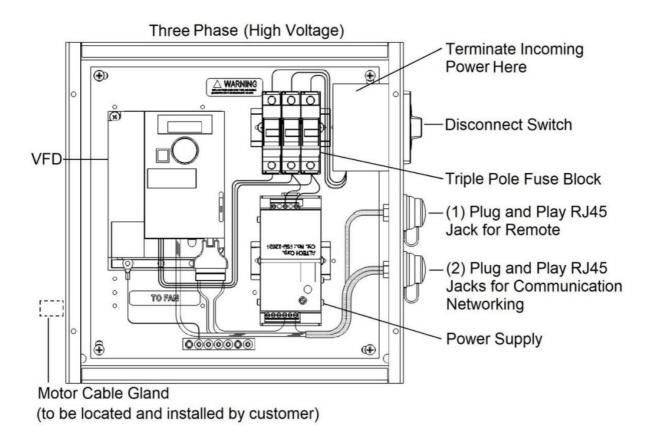
(to be located and installed by customer)

3 Phase (Low Voltage)



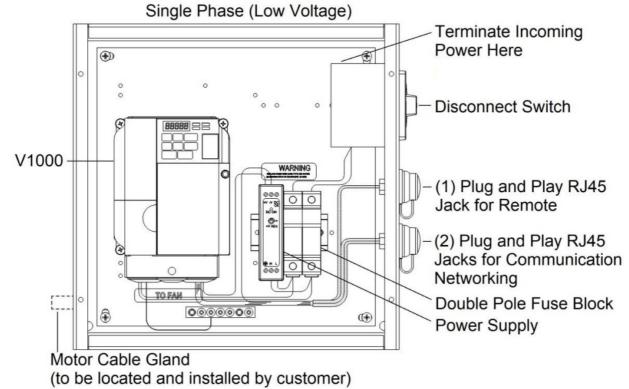
(to be located and installed by customer)

3 Phase (High Voltage)

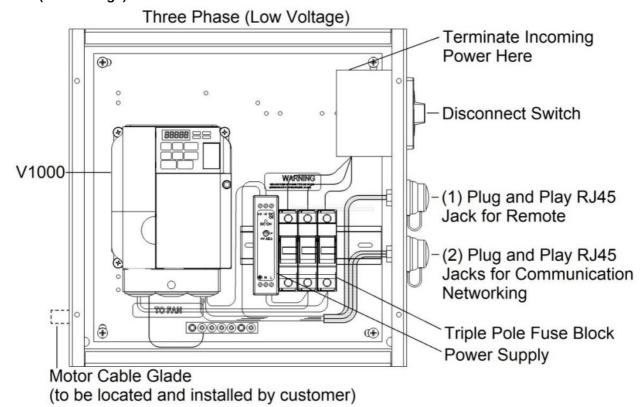


Yaskawa Control Panels Overview

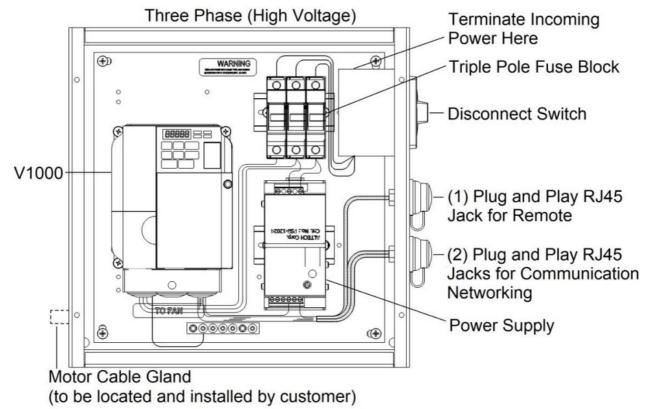
1 Phase (Low Voltage)



3 Phase (Low Voltage)



3 Phase (High Voltage)



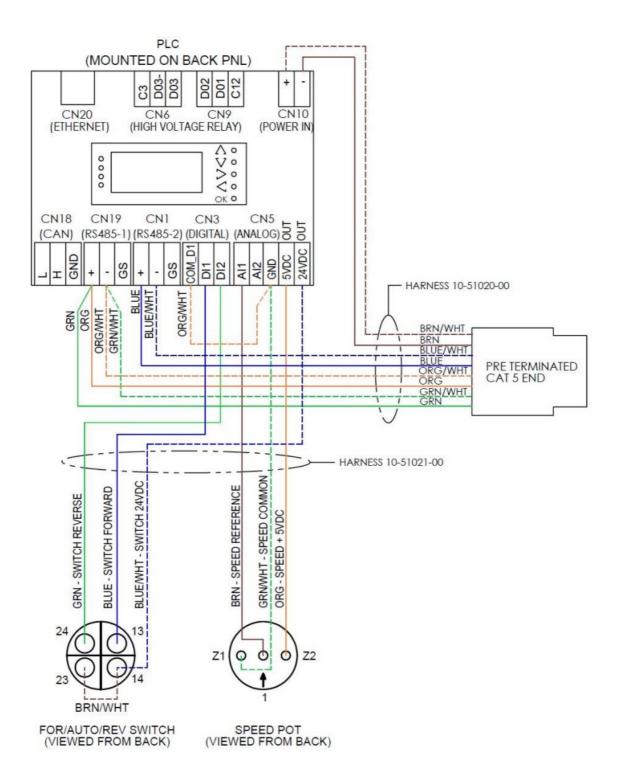
Control Panels Overview

- 1. Control Panels come pre-wired, as illustrated on pages 4-7.
- 2. Make sure the control wiring is CAT5e shielded, stranded, or greater.
- 3. If removed from the enclosure, the disconnect switch must be in the OFF position when removed, and in the OFF position when reinstalled to prevent misalignment of a switch.
- 4. The Motor Cable Gland and the Cable Gland for Analog Control do not come pre-installed. Use a unit to drill installation holes.
- 5. A shielded motor cable is provided and must be used with no additional cable to maintain the factory warranty.
- 6. Mounting hardware for mounting enclosure to an I-beam, Glulam, or wall is not supplied by MacroAir. The physical enclosure of the Control Panel is 12"x12"x8".
- 7. Connect CAT5e to RJ45 labeled "Remote" for a single touchpad controller.

These control panel overviews supersede and replace that found in your fan Operation Manual.

Wiring Diagrams

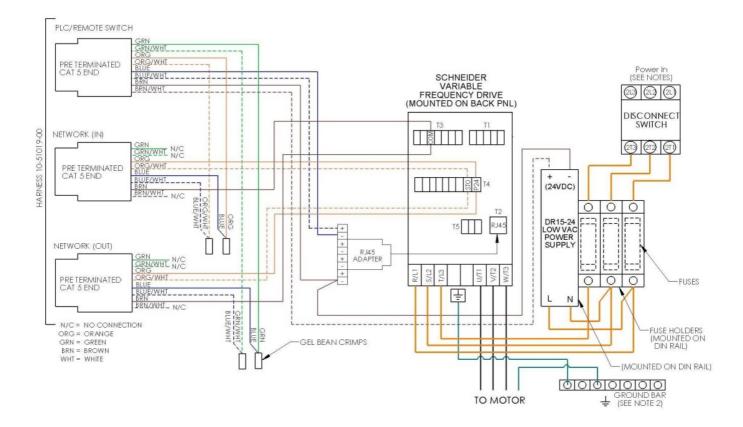
Remote Panel Schematic



- 1. FANS SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE NEC.
- 2. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 3. LENGTH OF CABLE FROM LOCAL OVERRIDE PANEL TO CONTROL PANEL TO BE 100 FEET OR LESS.
- 4. THIS DIAGRAM DESCRIBES THE WIRING OF PLC/REMOTE SWITCH PANEL 30-90315-00.

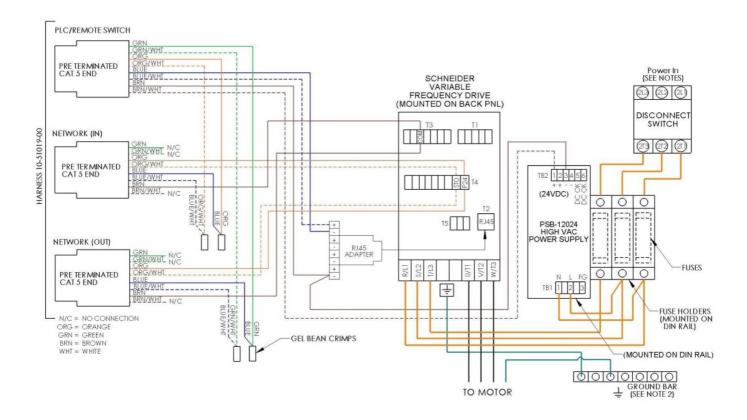
NOTES: UNLESS OTHERWISE SPECIFIED **Schneider Control Panel Schematics**

Single Phase (Low Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



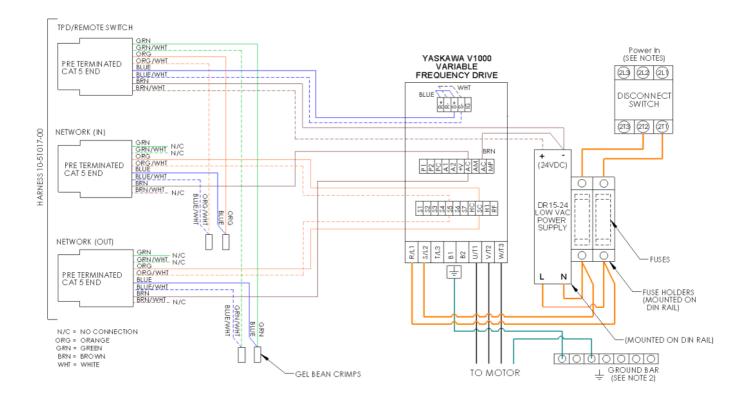
- 1. FANS SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE NEC.
- 2. PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE LOW VOLTAGE CONTROL PANELS 31-22017-01, 31-22017-02, AND 31-22017-03.

Three Phase (Low Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



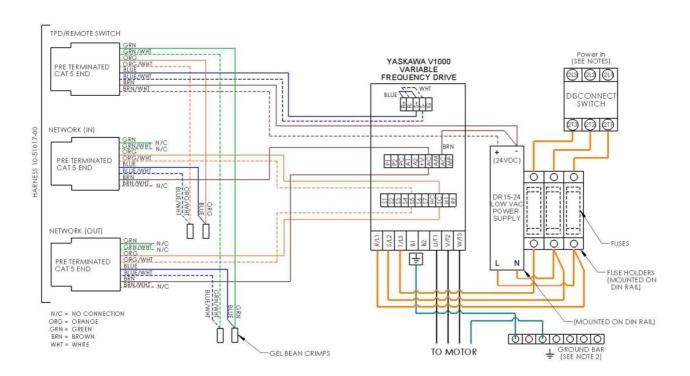
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- 2. PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE LOW VOLTAGE CONTROL PANEL 31-22038-00.

Three Phase (High Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



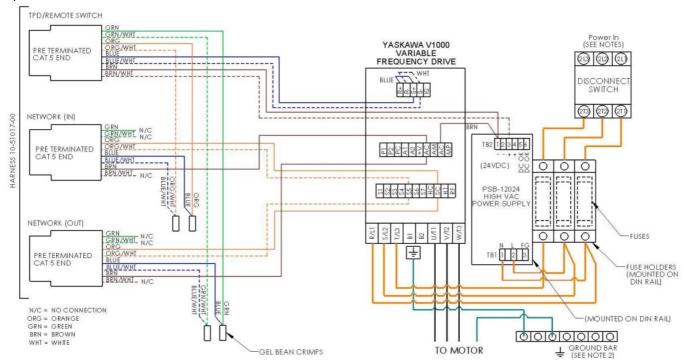
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- 2. PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE LOW VOLTAGE CONTROL PANEL 31-42039-00.

Single Phase (Low Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



- 1. FANS SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE NEC.
- 2. PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE LOW VOLTAGE YASKAWA CONTROL PANELS 31-21019-00, AND 31-22010-00.

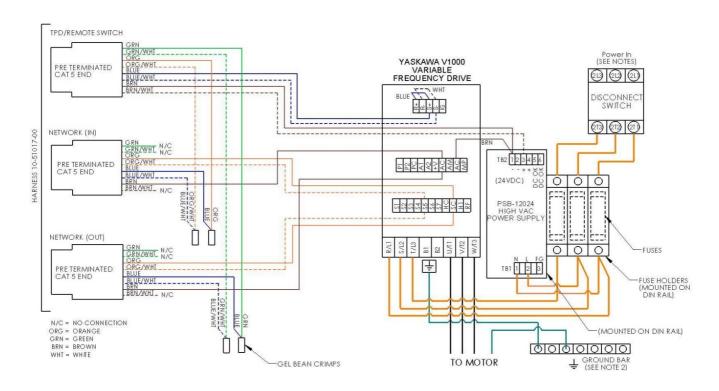
Three Phase (Low Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



- 1. FANS SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE NEC.
- PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE LOW VOLTAGE YASKAWA CONTROL PANEL 31-22030-00.

NOTES: UNLESS OTHERWISE SPECIFIED

Three Phase (High Voltage): This control panel schematic supersedes and replaces that found in your fan Operation Manual.



- 1. FANS SHOULD ONLY BE INSTALLED BY QUALIFIED PERSONNEL IN ACCORDANCE WITH THE NEC.
- 2. PROPER GROUNDING OF THE PANEL AND FAN PER THE NEC IS REQUIRED FOR SAFETY AND PROPER OPERATION.
- 3. COLOR CODE IS FOR MANUFACTURER-SUPPLIED CABLING. DO NOT USE NON-FACTORY-SUPPLIED CABLING.
- 4. LENGTH OF CABLE FROM DRIVE TO MOTOR TO BE SUFFICIENT THAT THE CONTROL PANEL WILL BE PLACED OUTSIDE THE AREA OF THE FAN BLADE SWEEP.
- 5. THIS DIAGRAM DESCRIBES THE WIRING OF THE HIGH VOLTAGE YASKAWA CONTROL PANEL 31-42030-00.

Operation

Basic Operation



OFF: To turn off the fan set to FWD (forward) or REV (reverse) with a speed of 0.

This will turn the fan off and prevent the BMS from running the fan.

AUTO: When the fan is toggled back to "AUTO" it will resume its last command from the BMS and will start and stop automatically.

AIRLINK: Refer to the AirLink manual for information regarding the AirLink.

FAN: Refer to the fan manual for information regarding the fan.

REMOTE FAIL: If the Local Override Remote fails to operate the fan, check the wiring, and/or check the

VFD/V1000 for faults.

Appendices

Warranty

MacroAir warrants the products listed in the table below will be free from defects in materials and workmanship under normal use and maintenance for the applicable warranty period. Other than the warranty set forth in this document, no other written or oral warranties apply, and no employee, agent, dealer, or other person is authorized to give any other warranties on behalf of MacroAir.

START DATE OF WARRANTY COVERAGE

The warranty period for X Series and AVD fans with 50,000 operating hours covers the Motor, Electrical Controls, and Remote for 50,000 hours of run time. For all other fans, the warranty period begins fifteen (15) days following shipment of the product, or on the date, the product is installed (not to exceed sixty (60) days the Customer receives the product), whichever date is later. The customer should retain the necessary documentation to verify the date of receipt and installation of the product. The customer will be required to produce this documentation in order to obtain warranty services from MacroAir. The warranty specified herein applies only to products purchased on or after October 31, 2019.

PRODUCTS AND SYSTEMS COVERED BY THIS WARRANTY AND APPLICABLE WARRANTY PERIODS:

Fan Type	Mechanical: Blade s, Hub & Frame	Standard Electrical ¹ : Motor, Electrical Controls, Remote	Labor
X Series	Lifetime	50,000 Operating Hours	1 Year
Y Series	Lifetime	7 Years	1 Year
Z Series	Lifetime	5 Years	1 Year
AirVolution-D 780	Lifetime	50,000 Operating Hours	1 Year
AirVolution-D 550	Lifetime	50,000 Operating Hours	1 Year
AirVolution-D3	Lifetime	50,000 Operating Hours	1 Year
AirVolution-D 370	Lifetime	50,000 Operating Hours	1 Year
Airlite Shop Fan	Lifetime	2 Years	N/A

WARRANTY COVERAGE:

Subject to the exclusions herein, the MacroAir warranty covers any defects in workmanship or materials of the covered products under normal operation and prescribed maintenance when those defects adversely affect the ability of the product to operate properly.² The warranty only covers products that have been installed in compliance with MacroAir's written installation instructions by a MacroAir approved installation technician or licensed electrical contractor and operated and maintained by the customer in conformity with MacroAir's written instructions, and when the product is purchased directly from MacroAir or a MacroAir Authorized Dealer.

This warranty is subject to all provisions, conditions, limitations, and exclusions explained in this warranty document.

^{*} If your product is not listed on this warranty page, scan this QR code or visit <u>macroairfans.com/warranty</u> for full warranty information.



https://macroairfans.com/warranty/

1 "Standard Electrical" means any common electrical component that is utilized across more than one fan line will assume a higher warranty period.

2 "Operate properly" applies only to mechanical, electrical, and structural systems of the product.

Technical Support

Thank you for purchasing the Local Override for MacroAir Fans.

Please call MacroAir Fans for Technical Support of the Local Override product.

Support Contact Information:

MacroAir Fans

794 S. Allen Street

San Bernardino, CA. 92408

MacroAir Fans Service:

866-668-3247 option 2

Website: www.macroairfans.com/support

For Installation assistance, application questions, technical support, and any other inquiries, please contact our Technical Support team at (866) 668-3247.



794 South Allen Street

San Bernardino, CA 92408 (866) 668-3247

Macroairfans.com

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Toll-Free: 866 668-3247 Fax: 909 890-2313 www.macroairfans.com

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Documents / Resources



<u>MacroAir Local Override Remote</u> [pdf] User Manual Local Override Remote, Override Remote, Local Override, Override

References

- MA MacroAir | Engineers of Air
- MA MacroAir | Engineers of Air

- MA MacroAir | Engineers of Air
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