



User Manual

Whispr G4

Revision 01.3

July 2018

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Approvals – North America



This is to certify that the following products:

56.xxx.US Series Whispr G4 Projector Enclosures

Have been tested and approved to standards UL 508 (electrical) and UL 50 (environmental), as NEMA 3R enclosures, for use in the United States and Canada.

This declaration is made by the manufacturer

Tempest Lighting, Inc.

11845 Wicks Street, Sun Valley, CA 91352, USA

This declaration is based on tests that were conducted on the submitted samples of the above mentioned products.

Listing Report No. 3198609LAX-001a refers.

Dated: July 1st, 2016

Signature . 

Tempest Lighting Inc

Approvals – Europe



CERTIFICATE AND DECLARATION OF CONFORMITY
FOR CE MARKING

Tempest Lighting, Inc.

11845 Wicks Street, Sun Valley, CA 91352, USA

t: +1 818 787 8984 f: +1 818 252 7101 e: info@tempest.biz

www.tempest.biz

Tempest Lighting, Inc. declares that their

Whispr G4 Projector Enclosure Series 56.xxx.xx

complies with the Essential Requirements of the following EU Directives:

Low Voltage Directive 2006/95/EC

Test Report G4.51.LVD

Electromagnetic Compatibility Directive 2004/108/EC

Test Report G4.51.EMC

and further conforms with the following EU Harmonized Standards:

EN 60065 : 2002

Test Report 60065.G4.51.01

EN 60529:2001-2002

Test Report 60529.G4.51.02

EN 61000-6-3:2007+A1:2011

Test Report 61000.G4.51.03

EN61000-6-1:2007

Test Report 61000.G4.51.03

EN55015:2006+A2:2009

Test Report 61000.G4.51.03

Dated: 1st July 2016

Position of signatory: President

Name of Signatory: Tim Burnham

Signed below:

on behalf of Tempest Lighting, Inc.



.....

Approvals – China



强制性认证目录外产品确认书
**Confirmation Letter for Products
 Outside the Scope of China Compulsory Certificate**

Ref. No: CL-TEMPEST-160818-1

申请人: Applicant: Tempest Lighting Inc.		地址: Address: 11845 Wicks St., Los Angeles, CA 91352 United States
生产厂名称: Factory: Tempest Lighting, Inc.		地址: Address: 11845 Wicks St., Los Angeles, CA 91352, USA
产品名称: Product Name: 投影仪外壳, 灯具外壳 Projector Enclosures Moving Light Enclosures Lighting Enclosures	型号: Model: 18xx.IN, 19xx.IN, 2xxx.IN, 66xx.IN, 52.xxx.IN, 53.xxx.IN, 54.xxx.IN, 55.xxx.IN, 56.xxx.IN	商标: Trademark: Tornado, Twister, Thunder, Blizzard, Whispr, Typhoon, Cyclone, Tacit
产品标准: Standard: /		HS code: 9405.99.0000
产品描述(包括使用场所) Product Description (utilization of product) : Enclosures for high-powered luminaires and video projectors for outdoor use and indoor noise attenuation. For professional use only. 产品为用于户外和室内噪声衰减大功率灯具和视频投影仪的外壳。仅供专业使用。		
确认意见 Conclusion: According to the product description, the models above are out of CCC scope 基于产品描述, 如上型号的产品在中国强制性产品目录之外。 本确认书的有效有效期至: August 18th, 2017 Validity Period		



Introduction

Thank you for purchasing a Tempest enclosure! We have worked hard to provide you with the very best product available for its purpose, and we shall continue to do everything possible to ensure that it works well for you for many years to come.

Please read this manual before starting work!

In the event of difficulty, please contact your Tempest reseller or Tempest direct:

info@tempest.biz

+1 818 787 8984

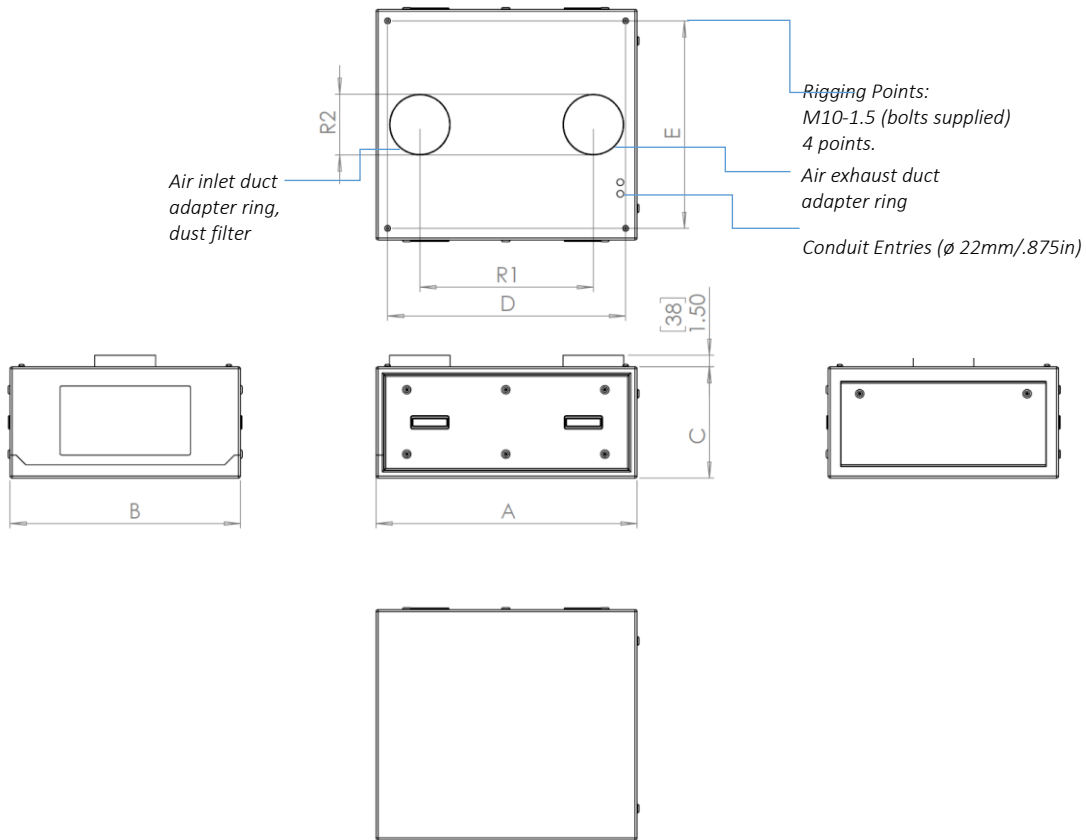
We will do everything we can to help you get the very best results from your Tempest enclosure.

IMPORTANT: Safety Advisories

- All installation and rigging work done must where applicable be designed and built in accordance with norms and standards of the local authority having jurisdiction of the installation site. It is the responsibility of the installer to obtain such approvals as may be required to achieve full compliance.
- All electrical work must be carried out by a suitably licensed electrical contractor in full compliance with local electrical standards.
- Lifting: some enclosures and the equipment inside them may be heavy. Use properly rated lifting equipment where appropriate and never attempt to carry out work with fewer than the number of workers needed to lift safely.
- It is the responsibility of the installer to ensure that all local building, safety and electrical codes are strictly adhered to in the installation of this enclosure. Tempest Lighting, Inc., its employees and agents are in no way responsible for damage arising from failure to follow either the instructions in this manual or building, safety and electrical codes prevailing at the installation location.
- Do not attempt to install or operate the enclosure before fully reading and understanding this manual
- Never allow anyone who has not read this manual to open the enclosure or perform maintenance on the projector within.
- Never leave the enclosure unattended when open.
- Always make sure all bolts and latches are tight and safety locks are in place after performing any form of maintenance on the unit.
- Do not open any electrical boxes until power has been shut off to all supply lines to the enclosure (including the one powering the projector).
- Do not open the enclosure in wet weather.

Installation

Dimensions, Rigging Points, and Projector Dimensions



Model	Format	DIM A	DIM B	DIM C	DIM D	DIM E	R1	R2	Weight	Projector Max: Size (LWH) **	Projector Max Power
53.050	Landscape	737 29in	711 28in	343 13.5in	660 26in	584 23in	447 17.6in	201 7.9in	27kg 59lb	610x571x225 24x22.5x9in	800W
53.050P	Portrait	737 29in	432 17in	686 27in	660 26in	356 14in	447 17.6in	201 7.9in	30kg 65lb	595x571x225 23.5x22.5x9in	800W
53.050U	Short Throw	tbd*	tbd*	tbd*	tbd*	tbd*			tbd*	tbd*	800W
53.100	Landscape	864 34in	762 30in	368 14.5in	787 31in	686 27in	574 22.6in	201 7.9in	32kg 70lb	695x595x275 27.5x23.5x11in	1,200W
53.100P	Portrait	864 34in	432 17in	686 27in	787 31in	356 14in	574 22.6in	201 7.9in	36kg 78lb	695x595x275 27.5x23.5x11in	1,200W
53.100U	Short Throw	tbd*	tbd*	tbd*	tbd*	tbd*			tbd*	tbd*	1,200W
53.150	Landscape	1067 42in	762 30in	419 16.5	991 39in	686 27in	726 28.6in	252 9.9in	42kg 92lb	1095x595x355 41.5x23.5x14in	1,800W
53.150P	Portrait	1067 42in	483 19in	762 30in	991 39in	406 16in	726 28.6in	252 9.9in	47kg 104lb	1095x595x355 41.5x23.5x14in	1,800W
53.150U	Short Throw	tbd*	tbd*	tbd*	tbd*	tbd*			tbd*	tbd*	1,800W

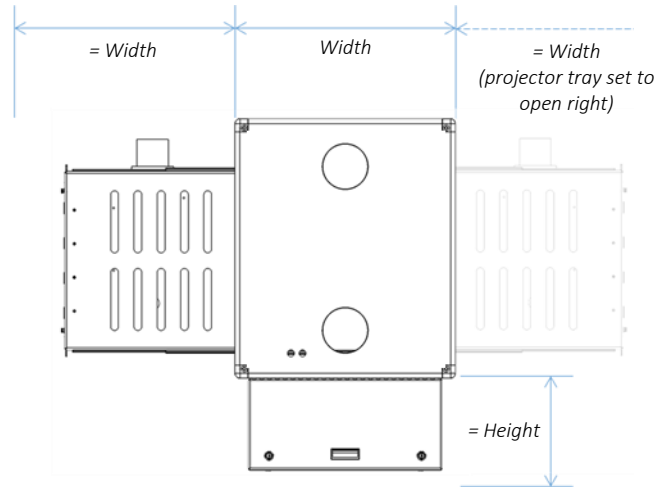
*tbd – please consult factory

** Be sure to allow for the length of the lens and for connectors, cables and cable bend radii when calculating dimensions

Access Clearance

Observe these minimum access clearances shown around your enclosure, for comfortable access.

Illustration shows projector slide option, but sides should be kept clear for both slide and fixed projector mounting versions.



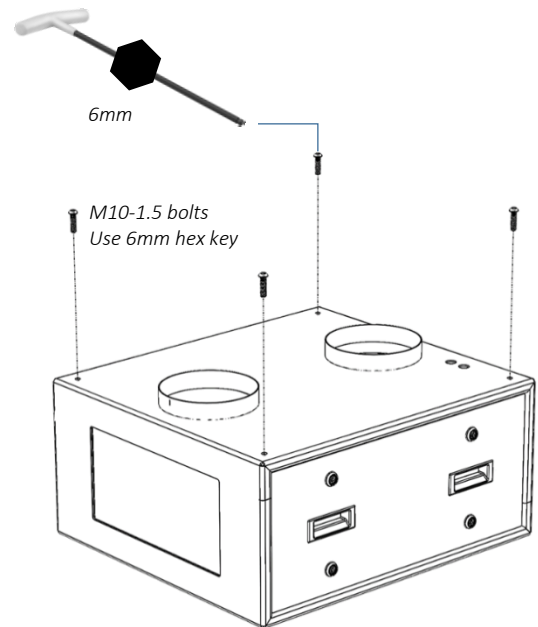
Mounting Hardware Options

IMPORTANT SAFETY NOTICE

Installer must ensure that all mounting points are secure and conform to local safety regulations. Tempest Lighting Inc. accepts no responsibility for damage or injury arising from inappropriate or unsafe installation.

Mounting Bolts

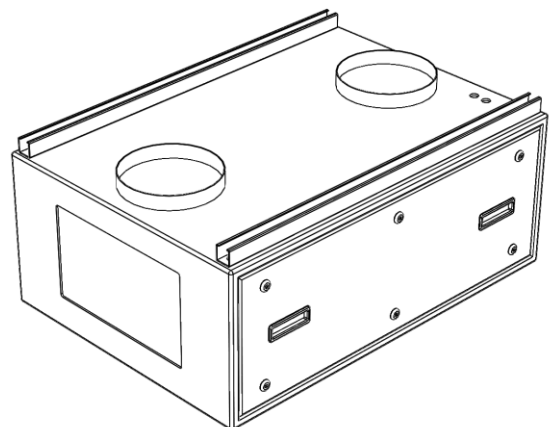
- Each Enclosure must be mounted with at least FOUR M10 bolts (supplied).
- All mountings must be made using the M10 threaded holes on the top of the enclosure.
- Use a 6mm hex key to secure the M10 socket cap screws provided.
- Tempest recommends the use of stainless steel mounting hardware.



Mounting Options – Unistrut Kit

If mounting positions for the corner bolts are not convenient, use the Unistrut Kit (52.UR.xxx) to add two Unistrut rails and Unistrut spring nuts to the top of the enclosure.

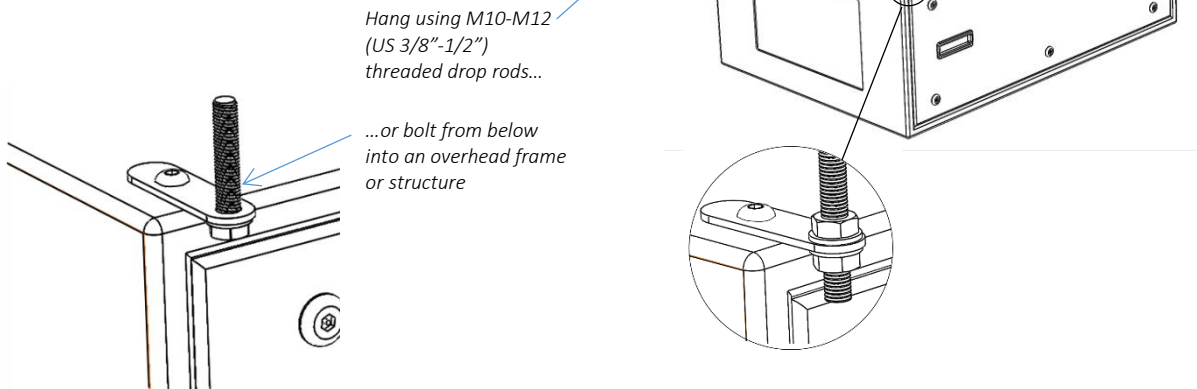
Using standard Unistrut hardware, the enclosure may now be attached at any point along the Unistrut rails.



Mounting Tabs

Use the four mounting tabs supplied if you need to fix UP into a structure from below, using bolts or lag bolts (not supplied).

May also be used to hang using threaded drop rods.



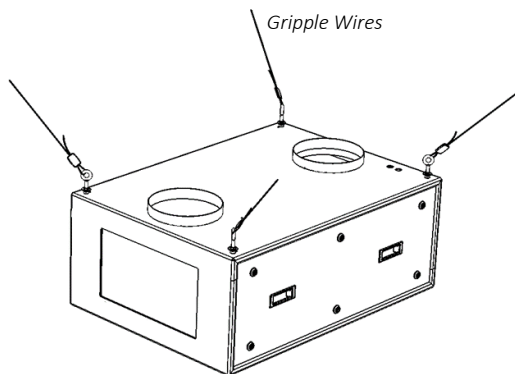
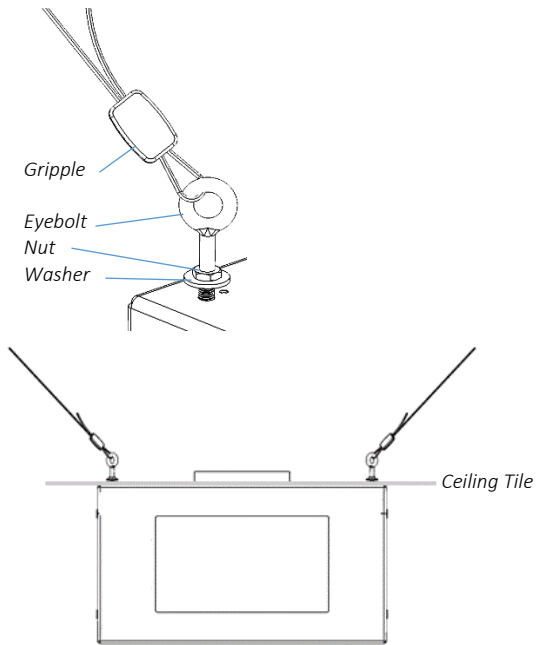
Mounting Options – Gripple Kit

Use the Gripple Kit (53.GR) to quickly hang Whispr in a drop ceiling.

Remove the four M10 Rigging bolts and replace with the four M10 eyebolts, nuts and washers, as shown here:

IMPORTANT – hang so that the Gripple wires stretch out from the enclosure at approximately 45° - this will prevent movement once you have leveled the Gripple wires.

If desired, you may drill the tile for the hoses and eyebolts, using the washers and nuts to secure the tile to the top of the Whispr enclosure



Installing Duct Hoses and Fans

The excellent noise attenuation levels you can achieve using Whispr enclosures depend on the acoustic separation of the audience from the enclosure's exhaust fan.

Tempest recommends locating the exhaust fan in a separate location, ideally on the other side of a wall from the audience space. Where this is not possible, it will be necessary to install acoustic insulation between the exhaust fan and the audience space.

Tempest supplies two flexible padded hoses with each Whispr enclosure:

8m (25') Exhaust hose, with fan cable pre-installed

4m (12') Inlet hose

Whispr 53.050-100 are supplied with 8"/200mm Hose

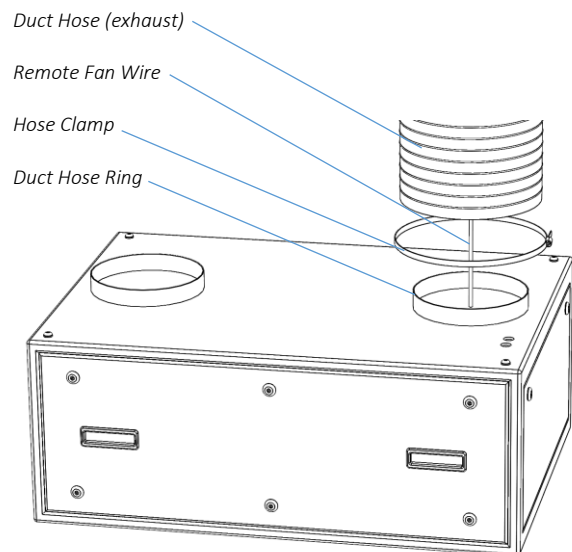
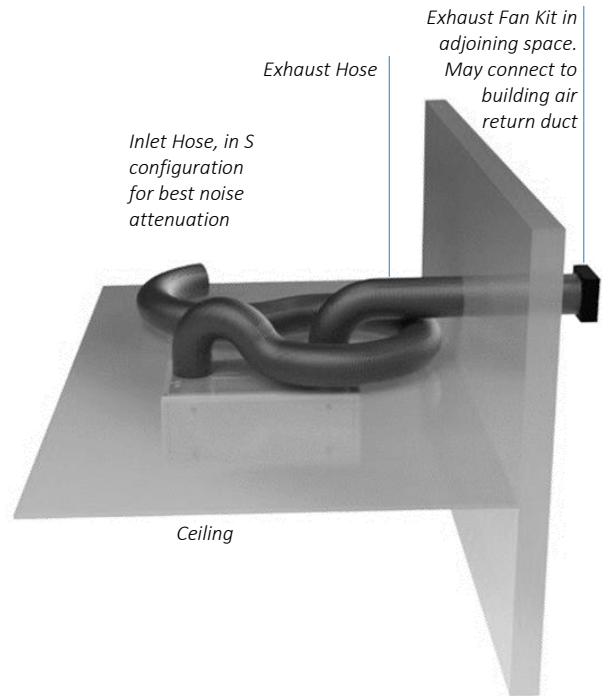
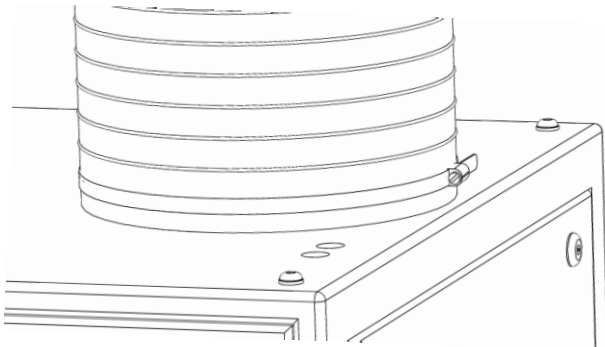
Whispr 150 is supplied with 10"/250mm Hose

(dimension is internal – add 2"/50mm for external diameter)

Installing Flexible Hoses

It is important to stretch the hoses during installation to minimize the turbulence caused by the internal wall corrugations. They will relax slightly, but this will greatly improve airflow and minimize noise.

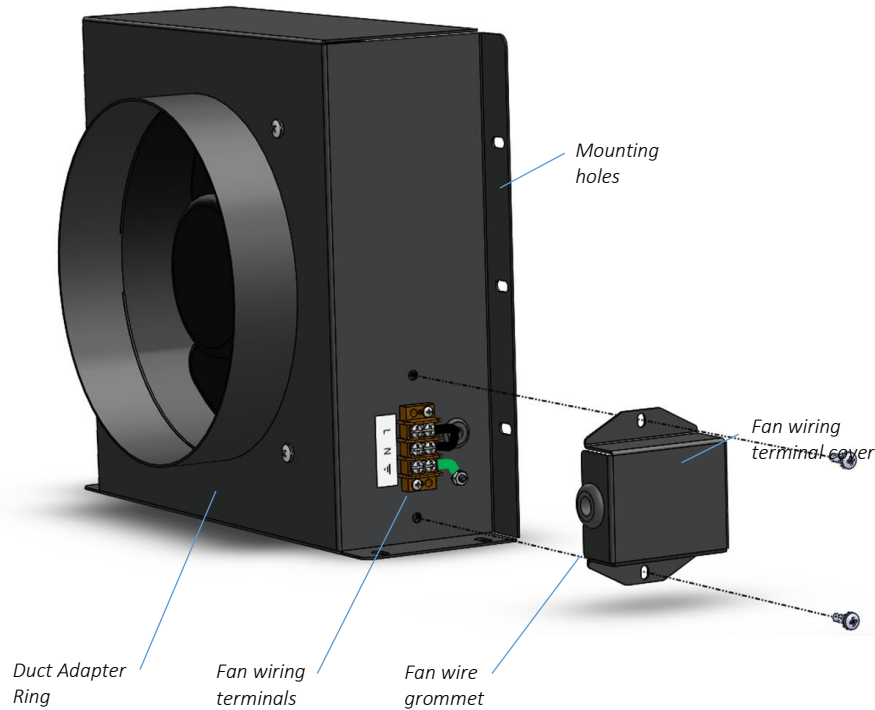
Fix the hoses to the enclosure duct hose rings using the hose clamps supplied:



Whispr Fan Kit

Your Whispr enclosure is supplied with a fan assembly to be mounted at a remote location (described above).

1. Mount the fan kit either on the side of a building return air duct, or blowing into an open space such as a roof void.
2. Connect the enclosure exhaust hose adapter to the fan kit using the supplied hose clamp
3. Trim to length by cutting the enclosure end of the hose and trimming the fan cable to suit.
4. Connect the enclosure end to the fan terminals in the Whispr wiring compartment (see below)



Wiring and Fan Speed Setup

SAFETY NOTICE

All power wiring must be performed by a competent electrician, appropriately licensed in the jurisdiction where the installation takes place. All electrical work must be done in full compliance with all electrical and safety norms applicable to the installation site. Isolate all power feeds before opening the enclosure.

Tempest Lighting, Inc., its employees and agents will not be held responsible for damage or injury caused by disregarding this notice.

Electrical Standards

Important:

Enclosure model numbers including **.US** are for use in countries using US and Japanese style electrical systems:

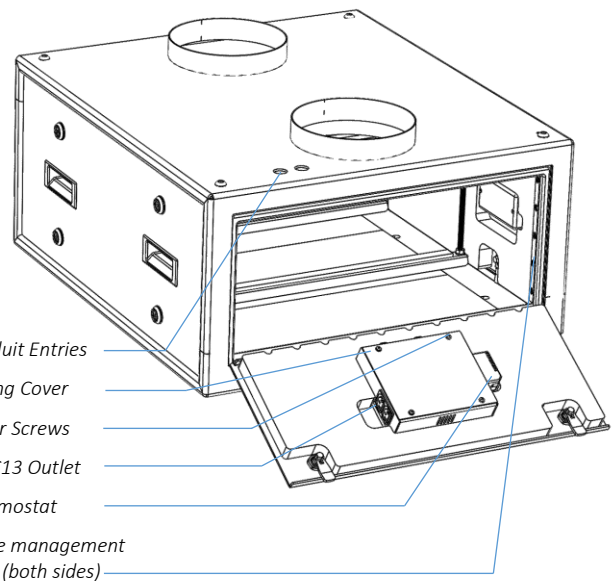
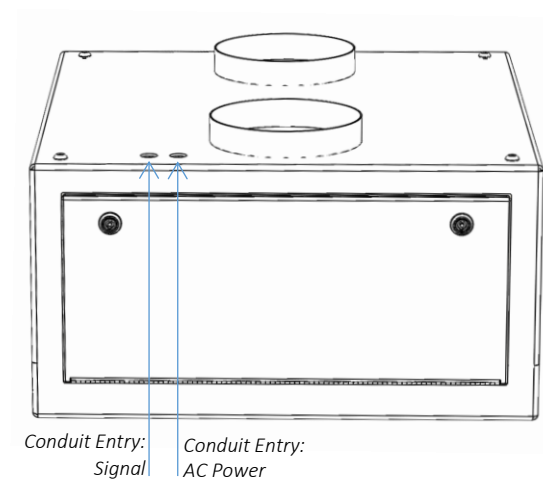
100-125VAC 50/60Hz (208V to special order)

Enclosure model numbers including **.IN** are for use in countries using European style electrical systems:

220-250VAC 50/60Hz

Wiring Access

Locate the two Conduit entry holes on the top panel of the enclosure:



Conduit openings accept PG16 (International) and ½" NPT (North America) conduit fittings.

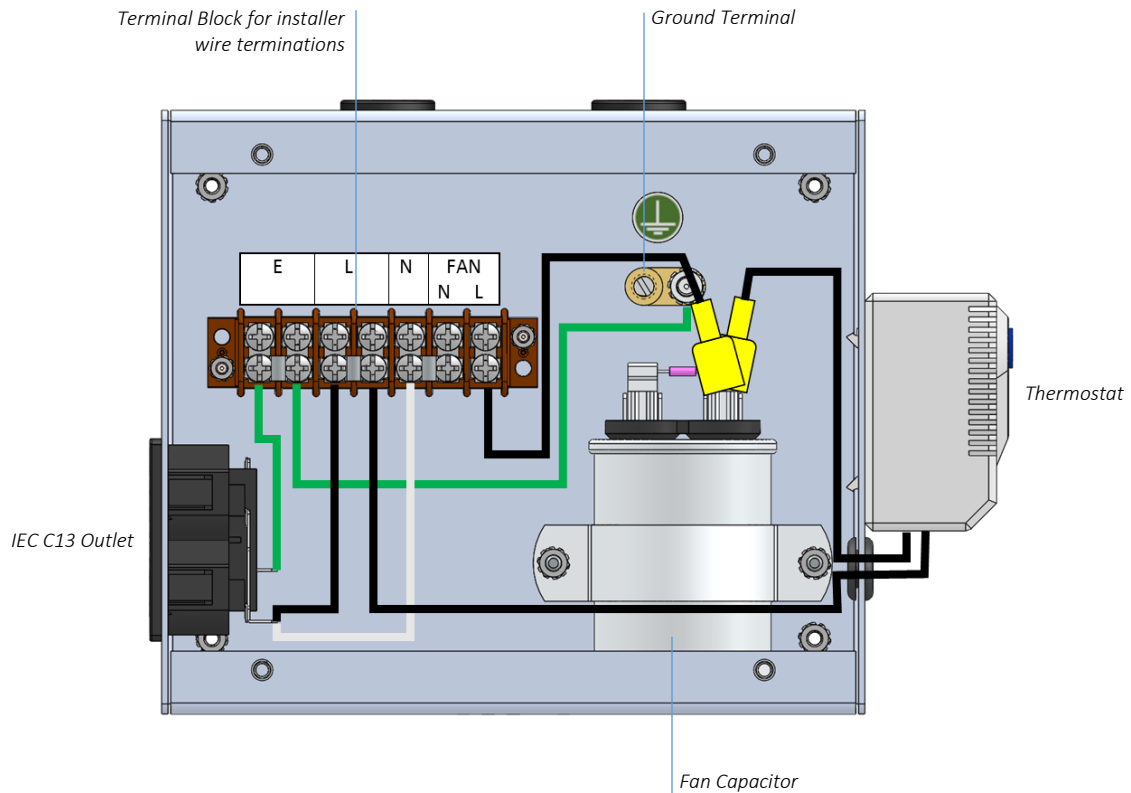
Use permanent or flexible conduit to connect power and signal cables to your Whispr enclosure.

ALWAYS RUN POWER AND SIGNAL CABLES IN SEPARATE CONDUITS.

Open the back door and remove the wiring cover. Identify the following parts:

NOTE: Layout of Whispr models may differ slightly

Wiring Compartment Layout



NOTE: Whispr enclosure is shipped with the fan capacitor out of circuit, as shown here

Power Wiring

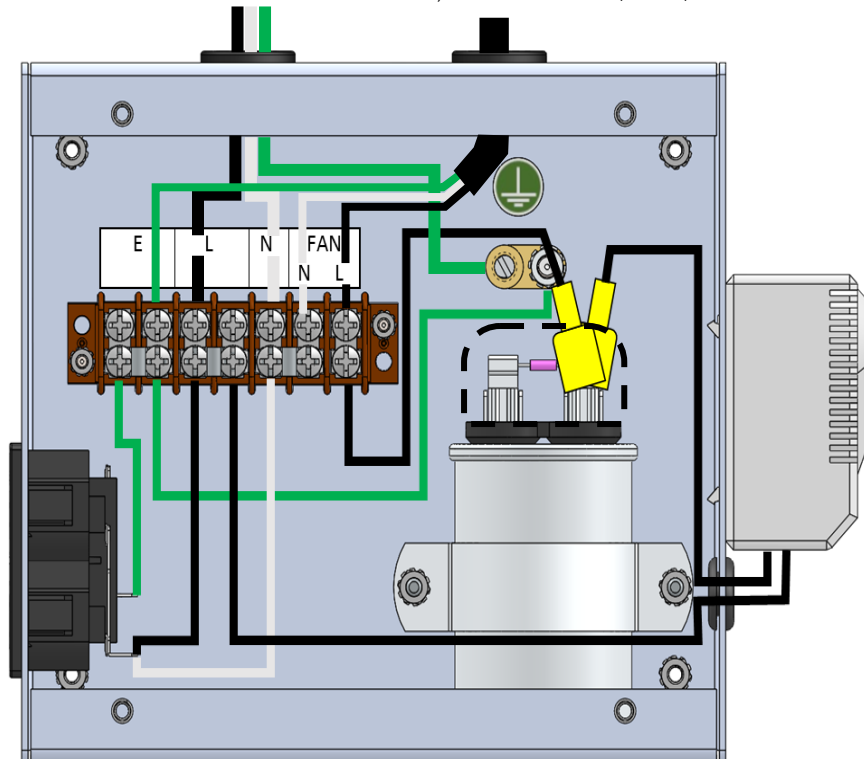
AC Supply Wires

Max projector power plus 100W

- 3) Connect AC Supply to Ground Terminal, L and N

Remote Fan Cable (supplied)

- 1) Pull remote fan wire through exhaust hose.
- 2) Connect to FAN L, FAN N, E



Note: Illustration shows North American wire colors.

Capacitor Wiring

Two capacitors are supplied with each enclosure. The capacitors provide a simple means to slow down the remote fan, and also reduce fan noise.

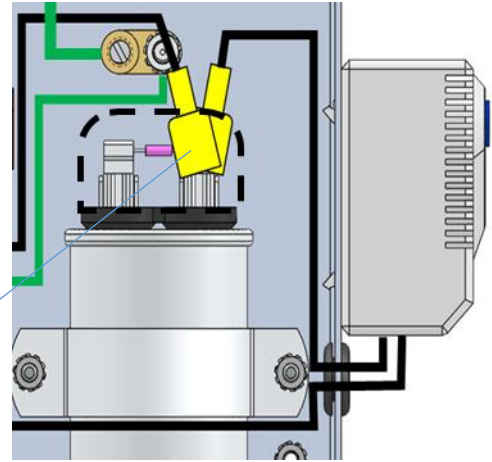
Capacitor values vary depending on enclosure model and supply voltage. Generally:

- CAP A (supplied fitted but out of circuit) will slow the fan approximately 20%
- CAP B (supplied loose) will slow the fan approximately 40%

CAP A is supplied installed, but out of circuit,

(both CAP wires are connected to the same CAP terminal):

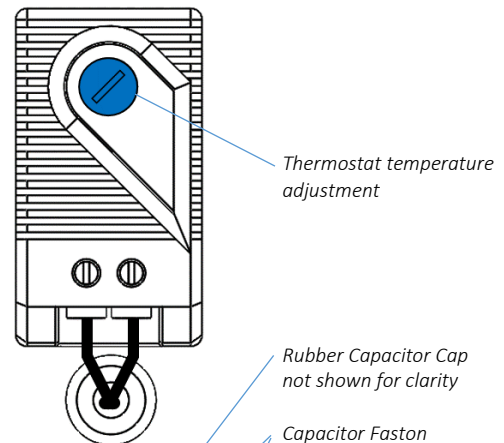
Both capacitor wires should be on the same terminal at installation. This provides maximum voltage to the remote fan



Adjusting Thermostat

When your installation is complete,

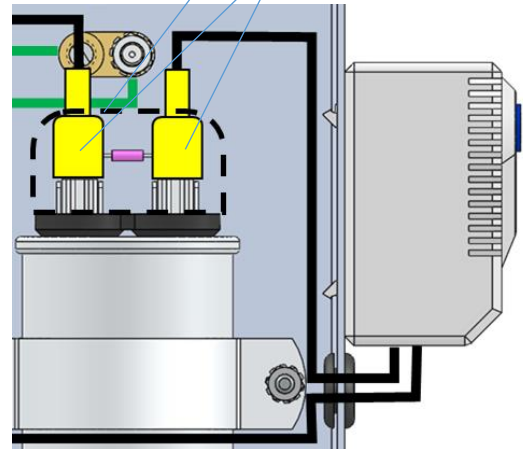
- 1) Set the thermostat temperature to approximately 90°F, or 30°C, using the *blue temperature adjustment dial*
- 2) *Adjust so that the fan does not run when the projector lamp is off, but starts soon after the lamp turns on*



Adjusting Fan Speed

Run the projector for approximately 30 minutes, and check that it is not overheating:

- 1) If the projector is running cool, it is a good idea to reduce fan speed. This improves filter effectiveness and fan life, and reduces fan noise.
 - a. Isolate enclosure from AC Power supply
 - b. Move one of the capacitor *Faston* connectors to the opposite capacitor terminal.
 - c. Restore power and retest. The fan will now run approximately 20% slower
- 2) If the projector is still running cool:
 - a. Isolate enclosure from AC Power supply
 - b. Replace fan capacitor with the spare capacitor supplied
 - c. Restore power. The fan will now run approximately 40% slower than original speed.



Projector and Aux Power

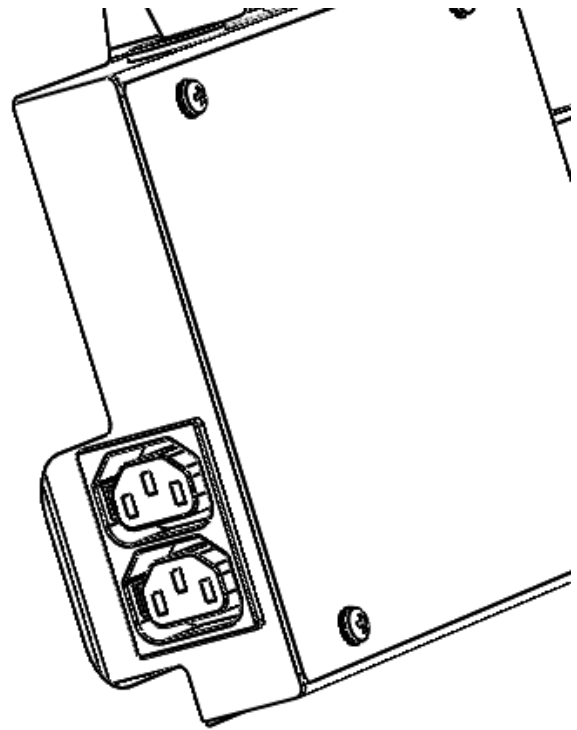
Connect the projector and any additional equipment to be included in the enclosure to the two IEC C13 outlets on the side of the wiring box.

Rewireable C14 plugs are supplied as needed.



The C13/14 connectors are rated as follows:

100-120VAC	15 Amp
200-250VAC	10 Amp



Whispr Operation

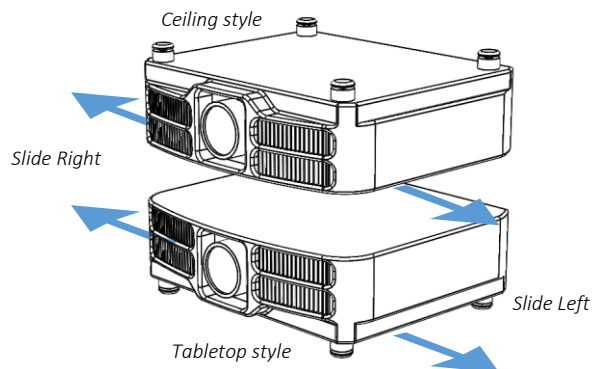
Whispr operation is automatic, controlled by the thermostat described above.

Mounting the Projector

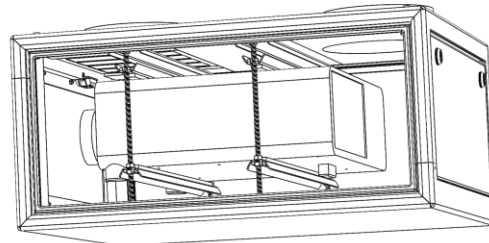
Projector Mount – Fixed or Slide?

Whispr enclosures may be specified with either fixed or sliding projector mounts.

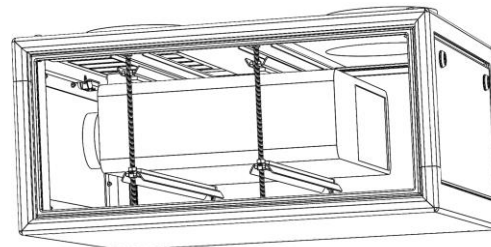
- Fixed mounts clamp the projector firmly in place, with pan, tilt, and roll adjustment. Good choice for lamp-based projectors with rear lamp doors, or laser projectors with infrequent service access needs.
- Projector may be installed in either tabletop or ceiling orientation.



Fixed Mount



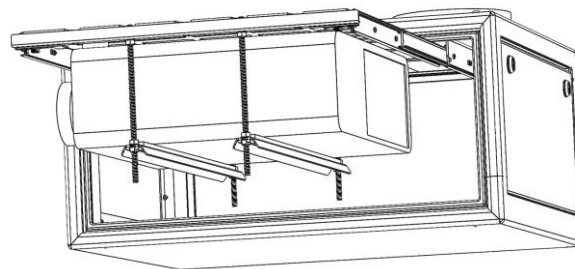
Projector feet-down/tabletop



Projector feet-up/ceiling

- The Slide Mount option is a projector tray, with clamps to hold the projector firmly in place. Easier install, and good for access to lamp-based projectors needing more frequent service access.
- Slide Mounts may be supplied in either tabletop or ceiling orientation, and to slide out of either right or left side.
- Factory Default Orientation is ceiling (feet up), left slide, as shown here. ***Different orientations may be specified at time of ordering.***

Slide Mount



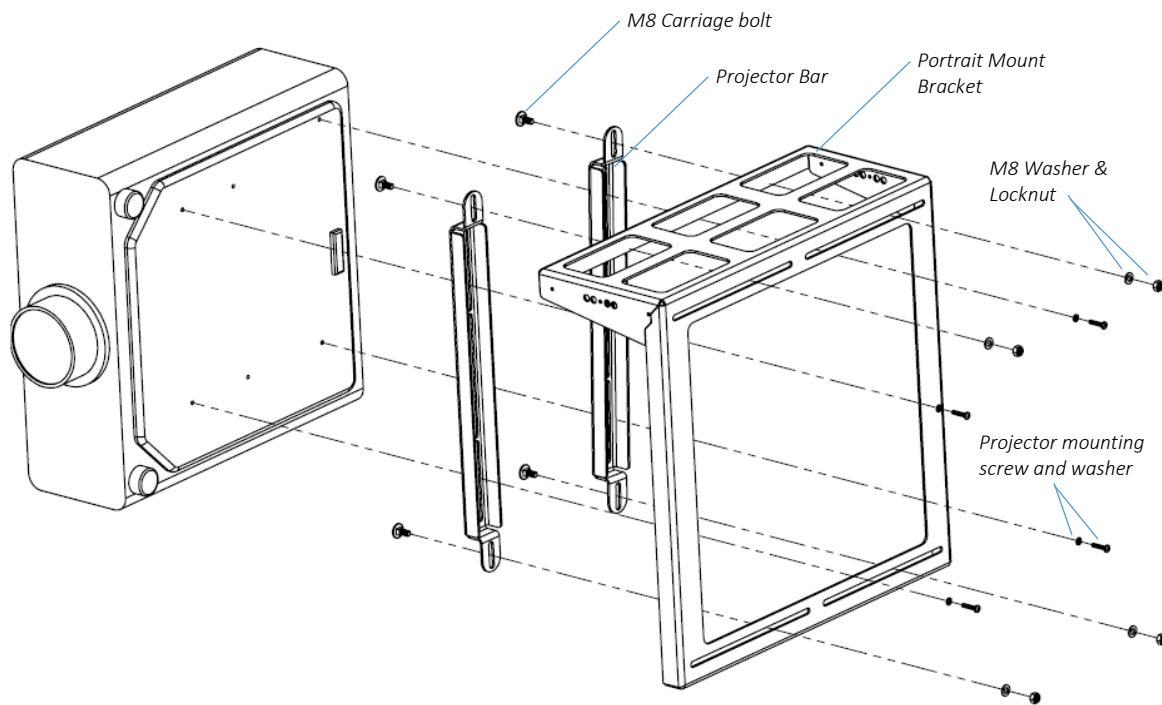
Projector Mount - Portrait Enclosures

Portrait format Whispr enclosures may be ordered in either fixed or slide mount versions.

In either case the projector mounts on two bars, using screws and washers provided.

The projector bars mount to an L-shaped bracket, using carriage bolts and locknuts.

Note: it may be helpful to remove the projector feet.

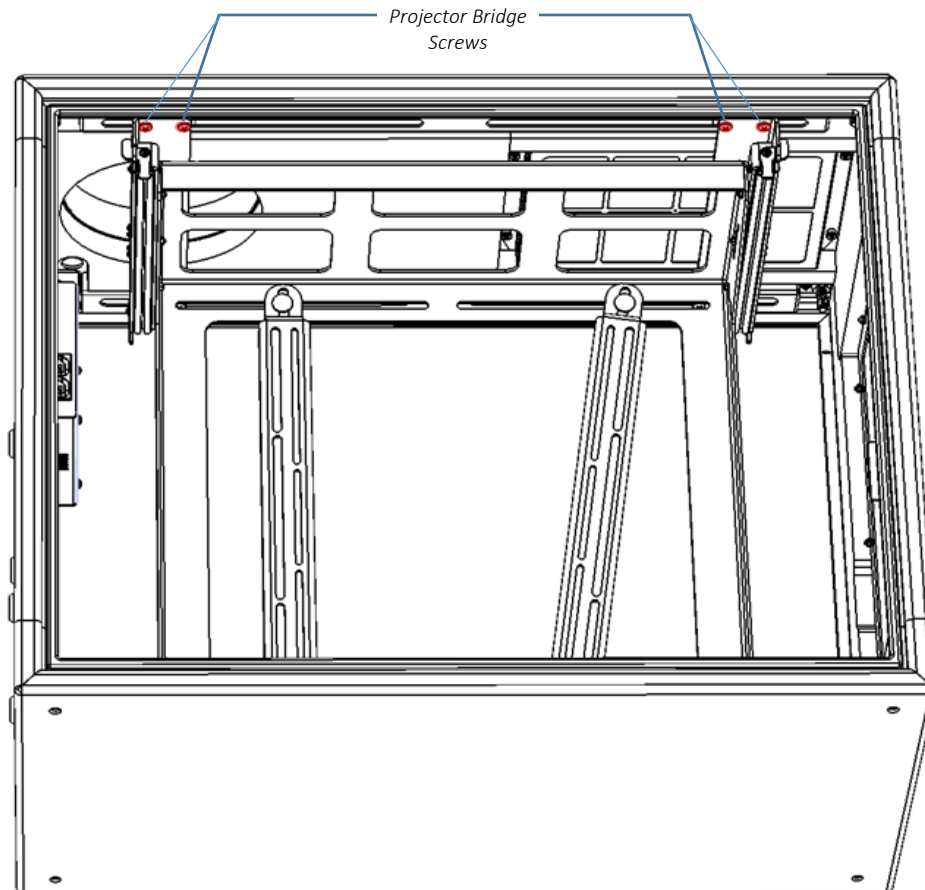


For clarity, the portrait mount is shown here outside the enclosure

Flipping the Portrait Orientation

Some projectors may only be used in portrait mode in one orientation – feet left or feet right. You can flip the projector mount to accommodate either type.

Just remove the eight projector bridge screws, rotate the mounting assembly 180°, and re-install.



Routine Maintenance

Check the following every six months:

Clean Port Glass

Clean port glass using a window cleaning fluid or detergent. Use a soft, lint free cloth.

Check Filter

In most cases the filter will be good for 1-2 years, but this may vary a lot, depending on the source of inlet air and how much the projector is used.

If the filter becomes clogged the temperature inside the enclosure will start to rise. This is an indication that the filter must be cleaned or possibly replaced.

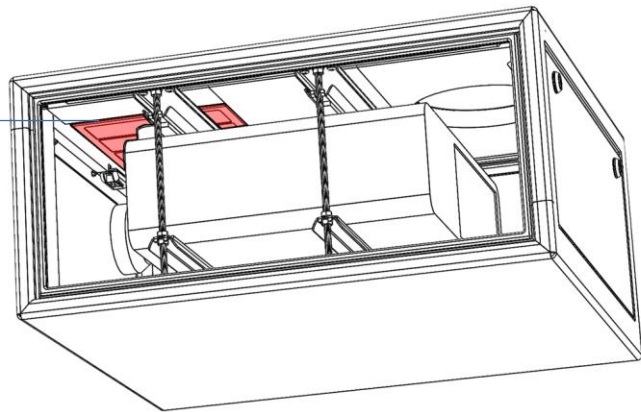
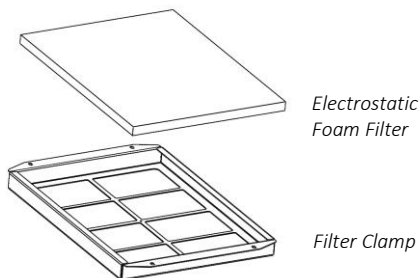
Part Numbers:

53.IFL.09 Replacement Inlet Filter Whispr 53.050/100

53.IFL.11 Replacement Inlet Filter Whispr 53.150

To clean or replace filter

1. Remove the four filter clamp thumb nuts
2. The filter clamp will drop out
3. Remove filter
4. Wash filter with warm water and mild detergent if needed
5. Dry filter
6. Replace



For After Sales Support

Contact your Tempest dealer or email

info@tempest.biz

Troubleshooting

Projector does not have power:

1. Check Projector power switch
2. Check projector is plugged into C13 projector outlet
3. Check that enclosure feed circuit is on

Enclosure overheats:

1. Is the filter clogged or obstructed?
2. Is the fan running when the projector lamp is on? If not, reduce the thermostat temperature setting

Dirt/Debris inside enclosure

1. Filter is either missing or damaged?
2. Filter is not properly seated
3. Side panels or back door not firmly latched

None of the above?

Contact info@tempest.biz

Warranty

INSPECTION/WARRANTY/RETURNS.

A. Customer, at its sole expense, shall inspect all Goods promptly upon receipt and accept all Goods that conform to the specifications or catalog. All claims for any alleged defect in or failure of the Goods or Seller's performance to conform to the Contract, capable of discovery upon reasonable inspection, must be set forth in a written rejection notice detailing the alleged non-conformity, and be received by Seller within thirty (30) calendar days of Customer's receipt of the Goods. Failure by Customer to notify Seller of the alleged non-conformity within thirty (30) days will be conclusive proof that the Goods have been received by Customer without defects or damage, and in the quantities specified on the bill of lading and shall constitute an irrevocable acceptance of the Goods and a waiver of any such claim in connection with the Goods.

B. Seller warrants to Customer only that the Goods will be free from defects in material and workmanship at the time of delivery and, subject to the exceptions and conditions set forth below, for the following period (the "Warranty Period"): twelve (12) months from the date of shipment by Seller. Seller may provide additional years of warranty coverage beyond 12 months, at the rate of 2.5% of the net sale price per year, up to a total of four additional years' coverage beyond the standard 12 month warranty period. Seller will remedy a defect as set forth in paragraph 7 D, below, (the "Warranty"). The Warranty is subject to each of the following exceptions and conditions:

1. Customer must promptly (and in all events within the Warranty Period) notify Seller of any alleged defect in a written notice (the "Notice") which shall set forth the quantity, catalog number, finish, original purchase order number, Seller's invoice number on which Goods were originally billed and a statement of the alleged defect, along with digital photographs showing such defects where feasible.

2. The Warranty shall not apply: (i) to any claimed defect that was capable of discovery upon reasonable inspection and deemed to be waived under paragraph A, above; (ii) to any Goods that have been subject to misuse, abnormal service or handling, or altered or modified in design or construction; (iii) to any Goods repaired or serviced by any person other than Seller's authorized service personnel or to Goods installed other than according to installation instructions, or (iv) with respect to normal wear and tear.

3. Seller makes no Warranty with respect to parts or components that are not the product of Seller, and specifically makes no warranty whatsoever for equipment housed inside enclosure products manufactured by Seller.

4. The Warranty is Seller's exclusive warranty with respect to the Goods. Seller makes no warranties, guarantees or representations, express or implied, to Customer except as set forth in this section. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR USE OR FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED AND DISCLAIMED.

C. Seller will accept the return of Goods properly rejected under paragraph A, above, or as to which Notice of an alleged breach of Warranty has been timely given and such Goods may be returned to Seller, freight prepaid, but only upon Customer's receipt of Seller's written return material authorization ("RMA") and shipping instructions. The RMA shall be void if the Goods are not received within 45 days after issuance of the RMA. No deduction or credit in respect of any rejected or returned Goods shall be taken until Customer has received Seller's further written deduction or credit/authorization following Seller's inspection to confirm nonconformity or defect. Seller will charge to Customer any and all costs incurred by Seller in connection with the handling, shipping, inspection and disposition of any returned Goods that are determined by Seller not to have been nonconforming upon Delivery or as to which the warranty hereunder is not applicable.

D. UPON ANY PROPER RETURN PURSUANT TO PARAGRAPH C, ABOVE, WHETHER IN CONNECTION WITH A REJECTION OF GOODS OR AN ALLEGED BREACH OF WARRANTY AND BASED UPON THE CONDITIONS SET FORTH IN THIS PARAGRAPH 7, SELLER AGREES THAT IT WILL, AS THE SOLE AND EXCLUSIVE REMEDY UNDER THE CONTRACT OR OTHERWISE, FOR ANY NONCONFORMITY OR BREACH OF WARRANTY, AND AT SELLER'S SOLE ELECTION: (i) REPAIR SUCH GOODS; OR (ii) REPLACE SUCH GOODS.