

Protect electrical equipment from poor power quality caused by internal and external forces.



## **Wavecrest Power Protector**

The Wavecrest Power Protector protects electrical equipment from volatile power conditions and disturbances. This unit is used best to pinpoint specific equipment from power problems such as:

- Harmonics
- RFI
- Surge
- · Over/Under Voltage
- Transients
- Brownouts
- Saq
- Notching
- Noise
- Flicker
- Poor power factor



Patent Pending

### **Sensitive Electronics are Everywhere**

Protecting electronic equipment is recommended by electric utilities because of unplanned disturbances. Wavecrest's patent pending design is the first to cover all harmful and annoyance power disturbances, protecting all equipment on a dedicated circuit. That includes, but is not limited to:

- · LED lighting
- · Heat pumps
- · Hot water circulators
- Phone systems
- · Electrical outlets
- Door operators
- And more...

## One-of-a-Kind Overvoltage Protection

No other product monitors the voltage to ensure correct voltage is supplied. If a mishap of over or undervoltage occurs, the Wavecrest opens the circuit, protecting all equipment from failing due to the voltage condition. This is a common problem with power coming back online after an outage.

## Innovation in Cost and Function

Wavecrest's innovation is in its capabilities as well as its low cost. It is now economical to have this level of protection for all types of power quality problems.

#### **Display Diagnostics**

- Voltage and Amperage Readout Screen
- Operational Indicator LEDs

Ratings		
Continuous Current	30-Amps	
Spike Current	12,000 Amps, 10-Rep	
Voltage	120v, 208v, 240v, 277v, 480Y (3-units)	
Hi Volt Disconnect	Above 310-VAC	
Volt Max	500-VAC	
Spike Max	120,000 Amps, 1-Time	
Low Volt Disconnect	Below 200-VAC	
Volt Min	240-VAC	
Reactive Current Compensation	2-Amps	
Power Consumption	3 Watts	
EMI	-3db @ 1-Khz	
EMI	-80db @ 10-Khz	
Passive Harmonic Filter	10%	
Case Material	1.3mm Steel	
Diagnostic Lights	Green = Load On, Yellow = Low Voltage, Red = High Voltage	

Model Number	Dimension (inches)	Voltage	Amperage
MIC-WC-01-120	7.3 x 3.3 x 7.15	120v	30a
MIC-WC-01-208	7.3 x 3.3 x 7.15	208v	30a
MIC-WC-01-240	7.3 x 3.3 x 7.15	240v	30a
MIC-WC-01-277	7.3 x 3.3 x 7.15	277v	30a
MIC-WC-01-480	7.3 x 3.3 x 7.15	480Y, 3-phase plus neutral	30a

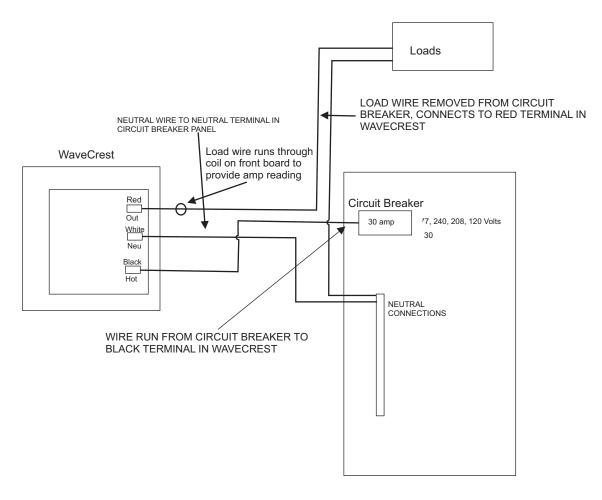
# **Wavecrest Wiring Instructions**

**WARNING:** Do not disconnect or loosen any White neutral wires inside circuit breaker panel

For any questions about Wavecrest please call 732-842-8889.

- 1. Turn power off to the circuit breaker of the load to be protected.
- Remove the load wire from the circuit breaker. This wire connects to the Wavecrest terminal marked RED/OUT.
- 3. Run a white wire from the Wavecrest terminal marked WHITE/NEU to its own neutral buss connection in the circuit breaker panel.
- Run a wire from the circuit breaker to the Wavecrest terminal marked BLACK/HOT.
- 5. Connect the ground wire to ground in the circuit breaker panel.
- 6. Turn circuit breaker back on to energize the load circuit





## **Power Quality Events the Wavecrest Protects Against**

The following power disturbances can affect any and all electronics in a building. Electric utilities recommend protecting against these occurrences.

<ul> <li>Flickering LED lights</li> <li>Equipment malfunction, decreased efficiency, shortened lifespan</li> <li>Strain on electrical connections, causing overheating and fire risk</li> </ul>
<ul> <li>Less efficient electrical systems</li> <li>Interference with communication systems, control circuits, sensitive electrical equipment</li> <li>Nuisance tripping</li> <li>Poor power factor</li> </ul>
<ul> <li>Flicker</li> <li>Poor operation and malfunction of electronics</li> <li>System stoppage</li> <li>Data loss</li> </ul>
Highly destructive to all equipment connected to the circuit
<ul> <li>Reduced life of electrical equipment</li> <li>Device error or crashing</li> <li>Nuisance tripping</li> </ul>
<ul> <li>Impulsive – loss of data, electronic component damage, system stoppages</li> <li>Oscillatory – VFD, DC link overvoltage tripping, reduced equipment life, timing errors on electronic circuits</li> </ul>

#### Interruptions/ Brownouts



- Loss of data, loss of production, system stoppages, damage shutdown
- VFD, compressor, refrigeration system failure

\*Does not prevent brownouts like a UPS, only protects against the disturbances associated with them\*



