

INSTALLATION & USER MANUAL

PULSE RECOVERY SYSTEM®



Recovers Multiple Batteries At The Same Time!

The Pulse Recovery System™ (PRS) is a patented, modular system designed to desulfate multiple 6-volt and 12-volt lead-acid batteries at the same time. Each station works with two batteries, and you can keep adding stations as needed (limit of ten total stations). This unique system is not a charger, but it can be used in parallel with large charging stations. The PRS is perfect for battery shops and other facilities responsible for servicing all types of vehicles and equipment. It's also ideal for refreshing new batteries that have been sitting in storage too long, and, in some cases, recovering batteries thought to be dead and useless.



Preparation for Service & Operation

The patented Pulse Recovery System® is modular and consists of two types of units: A main or **Power Base** unit and optional **Add-On Modules**. Each unit will pulse and condition up to two lead-acid batteries at a time. The Power Base will work on it's own, but in order to add the Add-On Modules a Power Base unit must be used since it includes the main System Power switch that supplies power to all units.

Installing & Operating Power Base Unit:

- Inspect the **Power Base** for visible damage which might have occurred during delivery.
- Plug the unit into an electrical outlet (110-volt or 220-volt depending on unit). Note, if the existing 220-volt Plug on the PRS does not work with your particular configuration, cut it off and replace it with a plug that will work for your needs.)
- Insert the set of red positive (+) and black negative (-) Cables into Station Receptacles at bottom of the unit. (To remove Cables, press in the Release Button marked "Push", then pull out clamps.)
- Attach the red positive (+) PRS Cable to the red positive (+) battery post and the black negative (-) PRS Cable to the black negative battery post.
- Turn the main SYSTEM POWER switch to the ON position.
- Turn the STATION POWER switch to ON only on the stations connected to a battery. The green LED will light indicating power is on. (If the light does not come on, try replacing the fuse on the right side of the Power Base. Use ONLY a 10-amp glass fuse.)

- At this point the red LED light marked "PULSING" will light. If it does not, make sure the Clamps are all attached to the battery posts correctly. (NOTE: If the light still does not light, this means the battery has a direct short and cannot be recovered at all.)
- Let the PRS unit pulse the battery for at least two hours. After two hours, test the battery. If the battery condition has not increased by 10%, the battery is not recoverable. If it has increased, keep pulsing until the plates are clean enough to accept a charge. (NOTE: The amount of time it takes to effectively clean the battery plates will vary depending on age and/or condition of each battery. Some batteries may take as long as five days to clean. Also, not all batteries will be recoverable due to a variety of reasons including damaged plates, shorts, etc., even if they initially improved 10% after two hours.)
- Once batteries are recovered, be sure to set the STATION POWER switch to OFF, then disconnect the Clamps from the battery.

Attaching Add-On Modules:

Up to nine (9) Add-On Modules can be attached to a Power Base. Each PRS unit pulses up to two (2) batteries, so with ten units up to 20 batteries can be pulsed at the same time.

- Inspect each Add-On Module for any visible damage which might have occurred during product delivery.
- On the left of the Power Base and each Add-On Module is a Receptacle. On the right of each Add-On Module is a black Plug. To attach an Add-On Module to the Power Base remove the plastic protective cover over the Receptacle on the Power Base with a

screw driver. Then simply push the Power Base and Add-On Module together until the Plug snaps into the Receptacle. Do the same thing when attaching additional Add-On Modules. Leave the protective cover over the Receptacle on the last Add-On Module.

- To secure two units together, screw one small black Plate on top of the units and one on the bottom with each of the four (4) screws.
- To use the Add-On Modules, follow the same operating instructions as the Power Base.

PRS-12:

The PRS-12 is a Pulse Recovery System™ that comes already assembled with one (1) Power Base and five (5) Add-On Modules. If you ordered a PRS-12, simply follow the same operating instructions

listed above.

Mounting PRS To Wall:

- Locate the holes on the back of the Power Base and the last Add-On Module. Install two large screws securely into the wall (one each for the Power Base and the Add-On Module), leaving a 3/16” gap to the wall close to a 110-volt (or 220-volt) grounded electrical outlet in a well-ventilated area. Make sure the Power Base can be plugged into the outlet without an extension cord, but DO NOT plug the unit in at this time.
- Hang the PRS carefully from the screws.
- Plug the Power Base into the electrical outlet.
- Follow operating instructions.

PATENTS

The Pulse Recovery System™ is protected by the following U.S. Patents: 5,063,341 and Re 35,643. Other U.S. and international patents are pending.

What makes the pulse technology utilized by PulseTech products so unique — and so effective — is the distinct *pulse waveform* that

defines it. This patented waveform has a strictly controlled rise time, pulse width, frequency, and amplitude of current and voltage pulse.

No other battery maintenance systems in the world has this specific waveform which means no other system can provide the same exceptional benefits as PulseTech battery maintenance systems.

PRECAUTIONS

- Make sure the correct terminal attachments are connected to the correct terminals (i.e. positive on positive).
- DO NOT hold the positive and negative ends of the Cables at the same time while the unit is active. It can inflict an electric charge to

the body.

- DO NOT hold the Clamps together while the unit is active.
- Some solvents will destroy the plastic surface.

ONE-YEAR LIMITED WARRANTY

What Does This Warranty Cover? This warranty covers any defects in workmanship or materials in any circuit board in the Pulse Recovery System product under normal use and service.

How Long Does The Coverage Last? This warranty runs for one (1) year from the date of purchase.

What Will PulseTech Do? PulseTech will, at its option, replace or repair any defective circuit board with a new or rebuilt circuit board at no charge.

What Does This Warranty Not Cover? This warranty does not cover any parts other than the circuit board. In addition, PulseTech will not be responsible under this warranty if PulseTech determines that (1) upon examination that the circuit board failure was (A) caused by misuse, neglect, accident, alteration, or abnormal condition of operating or handling (including the failure to install the product in accordance with PulseTech’s instructions and observe the warnings on the product and the instruction manual), or other conditions beyond the control of PulseTech or (B) damaged in transit to PulseTech, or (2) the owner is

not the original purchaser that purchased the product through an authorized PulseTech dealer or distributor. IN NO EVENT SHALL PULSETECH BE LIABLE FOR ANY DIRECT, SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR EXEMPLARY DAMAGES, EXPENSES, LOST SAVINGS OR LOST PROFITS OR ANY OTHER DAMAGES OF ANY KIND FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE. Some states, provinces or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

How To Get Service? Send the product postage prepaid with proof of purchase (sales receipt) within the warranty period to the authorized reseller where the product was purchased or contact PulseTech directly by calling 1-800-580-7554.

How Does State, Province or Country Law Apply? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, province to province or country to country.

LIMITATIONS OF LIABILITY

THIS WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.



⚠ WARNING

Live Voltage Present. To Prevent Electrical Shock: Unplug from power before removing protective cover. Never use as power input. Avoid all contact with connector prongs. Intended for use with PRS Add-On Modules only. **Failure to heed this warning may result in injury or death.**

⚠ WARNING

To Avoid Risk of Electrical Shock or Fire: For North America use UL Listed or CSA Certified Fuse. For all Other Areas use Fuse Conforming to IEC127. Fuse Rating - 2 AMP / 250VAC.