

## INSTALLATION GUIDE

## **CATIII-4HD (4 Pad Heavy Duty System)**



Package Contents:

Heavy Duty 2 Pad System (x1)

Comprisina:

CATIII Control Module (x1)

Fused Wiring Harness (x1)

Coupler Pads (x2) Black Cable Ties

Alcohol Wipes

Spare Fuse and Accessories Warranty and Fitting Instructions 2 Pad Expansion Pack (x1)

Comprisina: -

Coupler Pads (x2)

Pad Wiring Splitters (x2)

2m Blue Extension Leads (x2)

Black Cable Ties

Alcohol Wipes

Fitting Instructions

## INTRODUCTION:

The CAT Electronic Anti-Corrosion System is designed to aid in the suppression of rust in motor vehicles, trucks, buses, air conditioners and many other types of plant and machinery.

The CAT System will operate from either a 12VDC and 24VDC battery or power source and the unit will automatically detect the input voltage and adjust its function and diagnostic accordingly.

The system consists of a Main Control (Generator) Module and 2 or more coupler pads which are interconnected via fused wiring harness.

The Main Generator Module has 2 output circuits (blue wires). Each output circuit is capable of supplying up to 6 coupler pads linked in series (or a total of 12 Coupler Pads for both circuits). Additional coupler pads can be added at any time to boost the operation of the system.

Coupler pads are wired like a daisy chain starting at the main module using the main harness, extension cables and pad wiring splitters supplied. Although not critical, it is best practice to have the same number of coupler pads on each output circuit. It is also suggested where possible to use separate output circuits on either side of the vehicle or machine.

We highly recommended that you familiarise yourself with the size and shape of each component and pay particular attention to the length of the wiring supplied.

Please read these instructions carefully prior to commencing installation.

Please feel free to contact us if you need any assistance.

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#### STEP 1: PRE-PLANNING:

- 1. Remove all components from the package and extend all wiring.
- 2. Locate suitable mounting sites for:
  - a. The Main Control Module
    - i. For Motor Vehicles, Trucks, Buses and Machinery Ideally close to the vehicle battery, away from excessive heat sources and where the status indictor light can be seen (inside engine bay where applicable).
  - b. Coupler Pads 1+2 (must be mounted on a predominantly flat painted metal surface)
    - i. For Motor Vehicles In side the engine bay and spaced as far apart as possible. Some suggested locations for the coupler pads include; On the side walls or rear fire wall, panel behind the headlights, the shock absorber tower, the inside surface of the front fenders if accessible, inside the windscreen wiper chamber (will normally require removal of the wiper arms and plastic cover).
    - ii. For Trucks, Buses and Machinery Either side of the cab, under the floor pan or on each chassis rail towards the front.
  - c. Coupler Pads (3+4)
    - For Motor Vehicles, Trucks, Buses and Machinery Pads are best mounted on the vertical surface of each chassis rail closer to the middle or rear of the vehicle.
- 3. When locations for each component have been identified (i.e. Main Control Module and each of the Coupler Pads) we recommend the following procedure to ensure that all wiring will interconnect safely and efficiently with each component. (Use the Diagram
  - a. Plugging together the main multi-pin connector which connects the harness to the Control Module.
  - b. Loosely place the Control Module into position.
  - c. Separate the Black (-ve) and Red (+ve) power wires and ensure they can be routed all the way to the vehicle battery.
  - d. Likewise separate the 2 blue Coupler Pad wires in the main harness and identify a suitable route to the first 2 pads. (utilising the 2m blue extension leads where required)
  - e. Interconnect the remaining pads on each circuit using the "Pad Wiring Splitters" and "2m extension leads" supplied.
  - f. Be sure to check that all wiring is clear of any moving parts and high temperature fittings.

#### NOW YOU'RE READY MOUNT EACH OF THE COMPONENTS

## STEP 2: FINAL MOUNTING AND CONNECTION

- 1. Mounting and Connecting the Main Control Module.
  - a. Clean the mounting area using prepsol, thinners or one of the alcohol wipes provided.
  - b. Attach the velcro strip provided to the rear of the Control Module.
  - c. Remove the self-adhesive backing then press the Control Module squarely and firmly onto the cleaned surface. (The velcro strip enables removal of the module if required later).
  - d. Optional Secure with an appropriate fastener.
  - e. If you have not already done so, plug together the main multi-pin connector which connects the fused wiring harness to the Main Control Module.
- 2. Mounting and Connecting the Coupler Pads (follow this procedure for each coupler Pads)
  - a. Clean the mounting area using prepsol, thinners or one of the alcohol wipes provided.
  - b. Remove the backing from the coupler pad adhesive and rolling the pad into position from one edge so as to avoid any air bubbles. Press and rub firmly to ensure complete adhesion and to remove any trapped air bubbles.
  - c. Plug-in each pad to its associated Pad Wiring Splitter and/or blue extension leads where required.
- 3. Connecting to the Vehicle Battery.
  - a. Connect the black lead from the fused wiring harness to the (-) negative battery terminal.
  - b. Connect the red lead from the fused wiring harness to the (+) positive battery terminal.
  - c. The Green LED on the Control Module will shine solid when first connected then flash or show solid green indicating normal operation.
- 4. Ensure all connections are secure and fix all loose wiring using cable ties provided.

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## TROUBLESHOOTING

To assist in resolving a fault condition with your CATIII installation please follow the "Trouble Shooting Guide" below.

Firstly, determine the status of the LED light on the CATIII Control Module – A Green light (Flashing or Solid) is normal and indicates "No Fault"

NO light indicates either there is no power getting to the CATIII Control Module or the module is possibly faulty.

- 1) Firstly, check the condition of the battery by starting the vehicle.
  - a) If it doesn't start normally then you will need to resolve that issue first.
  - b) If it does start normally then leave the vehicle running whilst you re-check the status of the LED on the CAT module if its green (flashing or solid) then all is ok.
- 2) Check battery connections. (Red and Black Wires).
- 3) Check In-line Fuse (on Red Wire to CAT Module.)
- 4) Check vehicle isolator switch is on (if fitted).
- 5) Check complete power wiring harness to CAT Module. (Red & Black Wires).
- 6) Check main multi-pin connector is inserted fully.

<u>YELLOW light</u> (Solid or Flashing) indicates the DC voltage supply to the CAT System is outside its normal operating range of 12.0V to 15.1V for 12V systems or 23.9V to 28.1V for 24V systems.

- 1) Check the condition of the battery by starting the vehicle.
  - a) If it doesn't start, then you will need to resolve that issue first.
  - b) If it does start normally then leave the vehicle running whilst you re-check the status of the LED on the CAT module if its green (flashing or solid) then all is ok, but it is likely your battery is failing and should be checked by a qualified auto electrician.
  - c) Measure the Battery voltage using a meter to determine actual voltage.

<u>RED Light</u> (Solid or Flashing) indicates a possible fault condition with either the CATIII Control Module, Sensor Pads or Pad wiring (Blue Wires).

- a) Firstly, check the condition of the battery by starting the vehicle. If it doesn't start normally then you will need to resolve that issue first.
- b) If it does start normally then leave the vehicle running whilst you re-check the status of the LED on the CAT module if its green (flashing or solid) then all is ok.
- c) If the LED is still Red, then you can stop the vehicle before proceeding further.
- 2) Check that each blue wire which connects the Sensor Pads to the unit have not been damaged or broken and each Sensor Pad is securely attached check for any lifting around the edges or any evidence of bubbles under the pads. (this will need to be significant to be a problem)
- 3) Reset the CAT System To do this, momentarily disconnect the power to the CAT Control Module by either removing the in-line fuse or unplugging the CAT module for a few seconds.
- After Restoring the power:
  - a) If the LED indicator is Red (Solid or Flashing) either immediately or soon after it indicates a fault with the Control Module. Please contact us.
  - b) If the LED indicator is Green (Solid or Flashing) then it is recommended the system be re-calibrated using the steps below...
- 5) To Re-Calibrate the CAT System
  - a) Disconnect the power to the CAT Control Module by either removing the in-line fuse or unplugging the CAT Control Module - leave it unplugged!
  - b) Isolate ALL sensor pads by unplugging them at the black connector closest to each pad.
  - c) Restore power to the Control Module The LED indicator should be Green (Solid or Flashing)
  - d) Reconnect ALL sensor pads. The LED indicator should remain Green (Solid or Flashing)
  - e) If the LED indicator is Red (Solid or Flashing) at anytime thereafter please contact us.

If the suspected fault does not clear, then please re-check all items above before contacting us....

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## **WARRANTY DETAILS**



## 10 YEAR PRODUCT WARRANTY

## **Terms and Conditions**

This CATIII product is guaranteed for 10 years from date of purchase against faults in manufacture or materials used, provided that it has been fitted in accordance with the standard installation instructions and the serial number has not been defaced.

This warranty does not apply to any defect, deterioration, loss, injury or damage caused by or as a result of the misuse or abuse of this product. Our obligation in the event of a valid claim is limited to repair or, at our discretion, replacement of the product. All claims under this warranty should be made by contacting the supplier: CAT Systems Australia.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

#### **Owners Record**

Date of Purchase:	Purchased From:
Invoice Number:	Serial Number:

## Please register your warranty online - www.catsystemsaustralia.com.au/register

Failure to register your product warranty will not affect your rights under any Consumer Protection Warranty, however registration may help us deal with any warranty claim more efficiently - Thank you for choosing CAT

## **LED Status Light Functions:**

LED Status	What Does This Mean?	What Should I Do?
Green Light (Flashing)	Normal Operation	Nothing
Green Light (Solid)	Normal Operation – Batt Voltage Very Good	Nothing
Yellow Light (Flashing)	Battery Voltage Low / High	Follow Troubleshooting Guide
Red Light (Flashing or Solid)	Fault Condition Detected	Follow Troubleshooting Guide
No Light	No Power to System	Follow Troubleshooting Guide

#### **OPERATING SPECIFICATIONS:**

Input Voltage: DC 12V/24V
Operating Voltage: 9V-32V
Max Current Draw: 25mA
Operating Temperature: -30°C~85°C

Low Voltage Cut-Out: 11.9V/23.9V High Voltage Cut-Out: 15.1V/28.1V Cut-Out Current Draw: 9mA







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