

CATIII-12HD (12 Pad Heavy Duty Commercial System)

Package Contents:



Heavy Duty 2 Pad System (x1)

Comprising: -

CATIII Control Module (x1)
Fused Wiring Harness (x1)
Coupler Pads (x2)
2m Blue Extension Leads (x2)
Black Cable Ties
Alcohol Wipes
Spare Fuse
Fitting Instructions

2 Pad Expansion Pack (x5)

Each Comprising: -

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, machinery, air conditioners and many types of steel structures either fixed or mobile.

The CAT System will operate from a 12VDC or 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 can supply 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, machine, or structure.

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.

STEP 1: PRE-PLANNING

- 1) Remove all components from the package and extend the wiring harness. Familiarise yourself with the size and shape of each component and pay particular attention to the length of the wiring supplied which may determine the mounting sites you choose.
- 2) Locate suitable mounting sites for: -
 - a) The Control Module
 - i. For Motor Vehicles – Ideally on the same side as the vehicle battery, as far away as possible from the exhaust manifold and where the status indicator light can be seen.
 - ii. For All Other Applications – On a secure solid surface and where the status indicator light can be seen.
 - b) Coupler Pads –The systems strength is directly proportional to the number of couplers used. The more couplers

used the greater the coverage and the coverage will always be greatest close to the coupler. Couplers must be mounted on a painted and predominantly flat metal surface.

- i. It is recommended for motor vehicles that the first pair of coupler pads be mounted inside the engine bay on either the firewall, inner guard or wheel arch and spaced as far apart as possible. It is best practice to position the remaining coupler pads evenly around the vehicle. Suggested mounting sites include the chassis rails, underside of the floor pan, inner guards, inner walls behind trim, rear of utility cab.
- 3) When locations for each component have been identified (i.e., Control Module and each of the Coupler Pads) we recommend the following procedure to ensure the wiring harness will interconnect safely and efficiently with each component.
- a) Plugging together the main 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 or 12(24) VDC power source.
 - 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. (Cutting and splicing additional cable to further extend or customise the installation is permissible as long as a similar gauge multi-strand cable is used, and all joints are soldered and well-sealed.)
 - e) We also recommend enclosing all wiring in plastic split tubing for additional protection and aesthetics.
 - f) Interconnect the remaining pads on each circuit using the “Pad Wiring Splitters” and “2m extension leads” supplied.
 - g) 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 **Control Module**.
 - a. Clean the mounting area using prep sol, thinners or one of the alcohol swaps 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. Secure with an appropriate fastener. (Optional)
 - e. If you have not already done so, plug together the main connector which connects the wiring harness to the Control Module.
2. Mounting and Connecting the **Coupler Pads** (follow this procedure for each of the Coupler Pads)
 - a. Clean the mounting area using prep sol, thinners or one of the alcohol swaps 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. For extra security a bead of black automotive Sikaflex can be hand applied around the edge of each pad.
 - d. Plug-in each pad to its associated Pad Wiring Splitter and/or blue extension leads as required.
3. Connecting to the **Vehicle Battery or 12(24) VDC power source**.
 - a. Connect the black lead from the wiring harness to the (-) negative terminal.
Note: For most non-vehicular installations a 12VDC or 24VDC Converter will be required. It is important to ensure 12(24) VDC (-) negative output from the converter is grounded to the same metalwork as the coupler pads.
 - b. Connect the red lead from the wiring harness to the (+) positive 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.

Please follow the “Trouble Shooting Guide” to resolve a fault condition.

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.

YELLOW light (*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.
2. Measure the Battery voltage using a meter to determine actual voltage.

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

1. 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.
 - a. 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.
 - b. 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.
 - a. After Restoring the power 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...
4. 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 any time thereafter please contact us.

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