



# Generation Signalling Device (GSD) Installer's Manual

ELECTRICAL+INDUSTRIAL | TOOLS+TECHNOLOGIES  
**TMAC**<sup>TM</sup>  
THEW &  
McCANN  
GROUP

ACTIVE INNOVATION



## BEFORE YOU START

### SAFETY SYMBOLS USED IN THE GUIDE



**Mandatory Action** - This symbol indicates the action must be taken to avoid a hazard. Any information that follows this symbol must be obeyed to avoid possible harm.

### QUALIFIED PERSON

This is a Type 1 DRED according to AS4755.1 and as such shall only be installed by a qualified person i.e. electrician. A qualified person is one who is familiar with the installation, construction, operation or maintenance of the equipment and the hazards involved. In addition, this person is competent, trained and authorized to undertake the work involved in accordance with established safety and working procedures.

### GENERAL PRECAUTIONS



**Read and understand this guide before operating this equipment.**

Read and understand this guide before operating this equipment. The TMAC Generation Signalling Device (GSD) is to be used only by qualified personnel and must be used in conjunction with the user's own working and safety procedures, without compromising the integrity of the TMAC product supplied.

Follow all safety instructions contained within this guide.

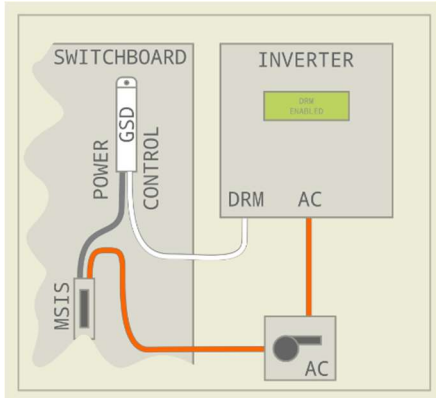
## DESCRIPTION

The TMAC GSD receives control signals via the mains power input from the electricity supplier and allows the electricity distributor to maintain a stable electricity supply system by instructing the connected Inverter to control its electrical generation output (compliant with Australian Standard AS4777.2:2015 or later).

## INSTALLATION INSTRUCTIONS

- The TMAC GSD shall be mounted within the switchboard adjacent to the Inverter.
- The TMAC GSD's "POWER CABLE" is connected to the Mains Switch Inverter Supply (MSIS) and in accordance with the wiring rules (AS/NZS 3000).
- The TMAC GSD's "CONTROL CABLE" connects between the GSD and the Inverter's dedicated Demand Response Mode (DRM) connection terminals. If this cable requires extending it must be joined within the switchboard using a suitable Cat5e (or better) extension cable. The method of extension must comply with the requirements of AS/NZ4755.1 and RJ45 pin assignment in this standard must be maintained.
- The product is intended to be connected to the fixed wiring.
- The TMAC GSD must be installed in a manner such that the cables and casing are not subject to UV, water ingress or mechanical damage.
- Each Inverter is to have a separate TMAC GSD.
- The internal components within the TMAC GSD are factory set and shall never be adjusted.

## WIRING OVERVIEW



The TMAC GSD has two cables to connect, a POWER cable and a CONTROL CABLE.

The power cable is used to supply mains power to the TMAC GSD and to receive signals from the electricity network.

The control cable is connected to a special dedicated Demand Response Mode (DRM) connection terminal on the Inverter. Consult the installer's manual for the Inverter to find the location of the DRM connection terminal.

General connection diagram applicable for residential installations only. Refer to local Electricity Distributor's documentation for large multi inverter installations.

## CONTROL CABLE WIRING DIAGRAM

The TMAC GSD "CONTROL CABLE" connects between the TMAC GSD and the Inverter's dedicated DRM connection terminals. If this cable requires extending it must be joined within the switchboard using a suitable Cat5e (or better) extension cable. The method of extension must comply with the requirements of AS/NZ4755.1 and RJ45 pin assignment in this standard must be maintained

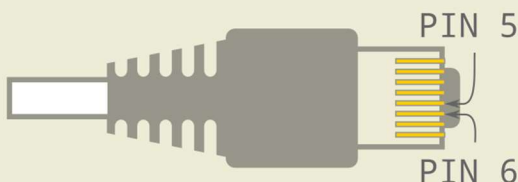
**NOTE: THE DRM CONNECTION TERMINAL IS ALWAYS SEPARATE FROM THE AC POWER CABLE CONNECTIONS**

**NOTE: NEVER CONNECT THE CONTROL CABLE TO THE AC POWER CABLE CONNECTIONS.**

### CONNECTOR & ADAPTER PINOUTS

COLOUR	PIN	FUNCTION
YELLOW	5	Ref Gen
GREY	6	COMMON

### RJ45 CONNECTOR



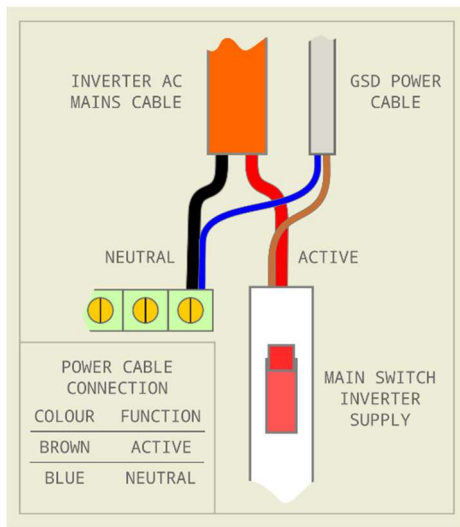
### RJ45 ADAPTER

**\*RED COLOURED SHEATH**



**\*NOTE:SIMILAR ADAPTERS WITH A BLACK COLOURED SHEATH ARE FITTED WITH FOUR WIRES AND WILL NOT WORK ON PV INVERTERS**

## POWER CABLE WIRING DIAGRAM



The TMAC GSD POWER CABLE supplies mains power to the TMAC GSD. The POWER CABLE is connected to the Main Switch Inverter Supply (MSIS) within the switchboard.

## DEFECTS / WARRANTY

### DEFECTS

Goods are warranted to be free from defects. Provided they have been used strictly as recommended and subjected only to fair wear and tear, Goods (including parts within) which are found to be defective within 90 days after delivery to the Buyer will be repaired or replaced at the option of the Seller and at its expense. Repair or replacement by the Seller is the exclusive remedies of the Buyer.

### WARRANTY

To the maximum extent permitted by law, the Seller makes no warranties, either express or implied, as to merchantability, fitness for purpose or otherwise with respect to the Goods other than in paragraph above and as required by statute. The Seller is not liable for any prospective profits or special, indirect or consequential damages or any general loss or damage, or for any expense resulting from use by the Buyer or others of defective Goods. The Seller's liability is limited to no more than the sale price of the Goods plus replacement delivery charges. Prior authority for the return of goods is required by the seller.

Please contact the seller by email [sales@tmacgroup.com.au](mailto:sales@tmacgroup.com.au), phone 07 3826 6000 or fax 07 3826 6066 for claims related to defective / warranty of goods provided.

FOR THE FULL TERMS AND CONDITIONS PLEASE REFER TO TMAC "STANDARD TERMS OF TRADE"