# Field Notes



TECHNICAL SUPPORT BULLETIN

FNN MANOTE-TS0843 • ISS 24AUG09

## TS0843 4-Way Buffered Relay Card

#### Issue

Certain products, including TS0870x-series Smart Card Readers and TS0862 Smart Door Controllers, may fail to recover from a partial loss of supply voltage in a rare combination of circumstances.

This condition may occur when the system has been running on batteries, the batteries are almost fully-depleted (the supply voltage falls to approximately 2 V), and the power supply does not have an under-voltage cut out.

Devices that do not have an under-voltage cut out include:

- TS0073 2A 12 VDC Power Supply
- TS0820 or TS0824 Standard DGPs (AC or DC versions)
- TS0810 Access Manager
- TS0868 High-Level Lift Protocol Controller
- TS0867 Intelligent 4-Door Controller manufactured prior to 2002\*
- TS0869 Intelligent 4-Lift Controller manufactured prior to 2002\*
- TS0816 Challenger panels manufactured prior to 2002
- any other (third-party) 12 VDC power supply that does not have an under-voltage cut out

\* Ensure that current does not exceed 2 A when using TS0843 relay modules.

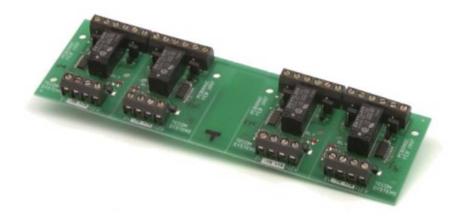
#### **Resolution**

If a rare combination of circumstances results in a device that fails to respond after power has been restored to the system (e.g. a reader does not respond to a card), you must completely power down the reader and then repower it.

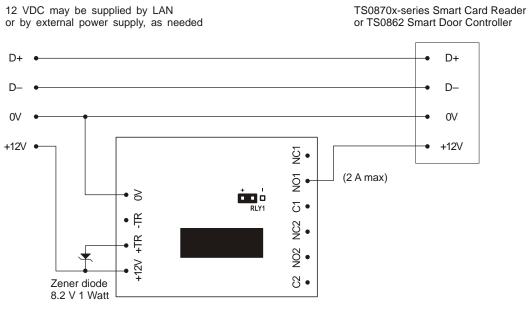
#### **Prevention**

A TS0843 relay module may be used as an under-voltage cut out and can be wired into the affected device's power supply (maximum current 2 A) with a zener diode. Refer to the diagram on the next page for connections and relay link settings. Use an 8.2 V 1 Watt zener diode, such as a Jaycar ZR1408 8.2V 1N4738 1 Watt Zener Diode, not supplied with TS0843.

The cut out voltage is  $11 \text{ V} \pm 0.2$ . TS0843 is sold as a strip of 4 snap-off relay modules.



TS0843 shown connected between power supply and reader



TS0843 relay module (set RLY1 link to +)

### **Contacting support**

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