



SW3 CntrP MemLoss How2

Revision 001

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Revision History

Version	Date	Person	Reason For Changes
001	2022-7-08	MTL	Initial

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1 AIM

The aim and goal of this .PDF document is to serve as addition help manual to rectify memory loss problems in Softcon controllers (CntrP).

2 CONTROLLER

2.1 MEMORY

CntrPs hold setup and Tag (card) data in local memory.

This data is either entered via a Handheld Programmer (HH) or sent to the CntrP from a Softcon program (typically SoftWin3).

A CntrP effectively functions in a stand-alone mode using this data, i.e., it does not have to be on-line to function.

Events are also stored in local memory and sent to the PC when online.

This event buffer is up to 10,000 transactions (CntrP type dependent).

On the PCB of a CntrP there is non-volatile memory (does not require power) for critical communication parameters. Other memory is battery backed-up via on-board battery (typically a coin 3V battery) that is used when there is no 12VDC supplied to the PCB. When used, this battery should last months.

2.2 POWER SUPPLY

The CR391 CntrP has a 12V, 3A supply with charger.

If more than 3A is required, an additional supply must be supplied to power the Readers and Locks – only the GND from these supplies must be connected to the CntrP

Additional 12V supply must not be linked to the 12V supplying the PCB from the CntrP supply.

CntrP should have battery a charged backup 12VDC supply (typically 12V 7Ah) that is used when the Mains (typically 230VAC) supply is off.

How long this supply lasts (when Mains off) depends on the current draw – by the CntrP, Readers and Locks.

Typically, 8 hours or more for non-Bio readers and strike locks.

New Mag locks typically use 500mA, older locks 1A.

2.3 MEMORY LOSS

Memory (data) loss in a CntrP occurs when there is no supply to the battery backed up memory – hence no 12V to the PCB and the onboard 3V battery is flat.

Memory can also be corrupted (lost) when there is excessive EMF noise (electronic / electrical noise).

This can be caused by:

- Sparking on the on-board relay contacts.
These relays are outputs to activate locks, barriers, lights, etc.
Sparking occurs when the load is inductive (e.g. locks, relay coils, etc.)
Note that even if the on-board relay is just a contact, the load is probably supplying power through the relay contact to energise another relay coil.
Simply add a diode over the inductive load, with cathode on the + (the stripe on diode), anode on the -.
- Reader cable and mountings not earthed.
Reader cable screens must be earthed at the CntrP.
Metal (e.g. goosenecks, door frames) that readers are mounted on, must be earthed.
If not, connect the reader cable screen to this metal.
- LAN (RS485) cables screens must be earthed at the CntrP – each segment only at one end (i.e. screens do no loop though).
- Housings earthed. All CntrP housing must be earthed.
Mains earth must be connected the provided terminals (measure that 230V is between mains positive and earth).

3 SW SETUP

Should memory loss occur (power-off and flat batteries or noise) and cause a reset (same as power-up) or CntrP switched on, the Power-up reset setting in Softwin3 will result is all setup and tag (card) info sent to the CntrP.