

Dicam Operating System Update

Network Functions : 015/016 and 019/020

015 to 020 programs have new or updated features aimed at improving networked system robustness.

System Error

System Error is an extended alarm condition replacing the earlier "Config Error", with a wider range of trigger conditions.

System Error will be indicated if any of the following conditions occur -

- Repeated Restart
- Configuration Error (see details)
- Netmon Reset All

Repeated Restart - If a program restarts 6 times without running for 4 minutes. This may be due to severe interference or hardware faults making it impossible for the unit to through correctly. (Note : It will not occur if you simply use Test :Restart to enter Configuration menu.)

Configuration Error - Traps the potential error that an output level instruction is being sent to a channel without an Output Type configuration. Example : siren set to a channel (in Output Devices), but channel not set to a type (in Output Types).

Netmon Reset All - Netmon defaults to give System Error fault when program is run for first time. New or upgraded Netmon giving System Error when run for the first time is Ok, at any other time indicates possible loss of configuration. Traps potential problem of loss of Netmon configuration, or tampering.

Note : System Error uses the alarm flag previously used by Config Error, so an earlier program connected to a Netmon may show Config Error, whilst the Netmon will indicate System Error for that unit.

Date & Time

Networked units do not show Date & Time if they are receiving a Date and Time from a Netmon or Logger.

This is aimed at simplifying the user interface and prevent the risk of time/date function jump out (such as curves jumping to wrong days) through operators trying to set different local and network time/dates.

Note : The Netmon does not transmit Date & Time until it has been set in the Netmon. A Netmon *may* carry a valid date and time through a manual Test/Config Restart, but not through a power up restart.

If Netmon date and time transmission is lost, units revert to showing Date & Time.

Netmon Date & Time, once set and transmitted, overrides /adjusts locally set values.

Note : Netmon's have an optional set up to transmit/not transmit Date & Time (to prevent conflict between Netmin units if there are two on the same network).

019/020 programs : Date changed to ISO format yyyy-mm-dd e.g. 1999-06-03 = 3rd June 1999. Also, the setting routine indicates the required format.

Besides emphasising Y2K compatibility, this is aimed at preventing confusion over actual format, given conflict between European (dd-mm-yy) and US (mm-dd-yy) formats.

Alarm Memory

Units store alarm conditions (in the settings memory).

So if a program is restarted, it now shows the same error as existing before the restart.

Traps potential loss of error conditions when units are run on erratic mains, and is also related to repeated restart error described above.

Note : It is no longer possible to "Clear" alarm warnings simply by powering units down. Warnings can only be reset/cleared by pressing the button on Alarms window.

System Reset

System Reset warning now given 30 seconds after program restarts, if the menu is not used in the meantime.

System Reset warning can be prevented by "using the interface" after the program has started e.g. Turning the knob or pressing the button.

We strongly recommend that after restarting a program, users check readings to ensure that systems are running normally.

Traps unattended restarts.

Background : Dicam units are intended for long term continuous operation, and programs should be expected to run without interruption.

A program restart indicates some type of problem - such as power outage for an indeterminate length of time. (Units with a battery backup should not restart during a mains outage, since the battery should maintain program operation.)

The exception is when restart it is triggered by the operator or serviceman - using Test/Config Restart. Use of the knob/button is used a test for whether this is a deliberate (i.e. Attended) restart or unattended.

The time scale has been reduced to 30 seconds (previously 3 minutes) to make it easier to notice.

Netmon Updated Features

Netmon defaults to address 30.

Previously, Netmon defaulted to address 0. In the event of severe memory corruption or unauthorised tampering causing Netmon Reset All, this could cause Netmon to stop listening to the network, and potential failure to detect units in alarm.

We recommend that Netmon = address 30 is always used, so as to keep it distinct from other units.

Bypasses : Netmon indicates when Units or Sensors/Trips are bypassed.

Logging mechanisms updated to improve logging robustness on heavily loaded networks.

020-067 and above - improved modem configuration features to eliminate need for telephone line switch in most situations.

Output Channel Updates

Ram-I and Shaft-I (016-049 and greater) giving integral type control for motors which do not position correctly using dead reckoning. These channels provide for varying the effective running speed by cycle timing.

Note : Whilst this tolerates poor motors, control is more limited - e.g. Actual positions cannot be set.

Updated 016-122 and greater.

Ram Overrun - global setting (016-119 and greater) - now adjustable to provide for long stroke motors. Increases tolerance/compensation for ram/shaft run timing errors.

Pulse Size - global setting (016-144 and greater) - permits narrow pulse triac firing for speed control/dimming for situations with poorly speed controllable fans and heavily disturbed mains.