Netmon

What it does

Netmon is short for Network Monitor.

The Netmon can perform many different functions according to requirements and options chosen :

- central alarm unit for Dicam network
- central clock
- central checking unit
- alarm trigger unit
- auxiliary sensors and trips
- weather station
- modem comunication
- data logging

Central alarm

The Netmon is connected to up to 29 Dicam units by a network cable. To connect to a network, each of the units must have network software and alarm software (as appropriate).

Each Dicam unit has an "address" from 1 to 30. The Netmon is usually address "30".

Every two seconds, each Dicam unit reports its alarm status. Detection of temperature or other alarms is done by the individual Dicam unit - the Netmon only reports the condiition.

Normally, they are not in alarm, so the Netmon gets an "Ok" message from each one.

If a unit detects a problem, it is signalled on the network and the Netmon indicates alarm for that unit.

If a unit stops comunicating (such as if the cable is cut), the netmon stops getting the Ok from that unit, and indicates an alarm for that unit.

When the Netmon detects an alarm condition, it shows which unit has a problem and what type.

For most types of problem, the action is to go to the unit indicated and correct the fault, which automatically resets the alarm at the Netmon.

Central Clock

Many Dicam control functions use real time and/or date - such as curves, lighting timers and so on.

The Netmon maintains a real time clock and calendar and transmits to other units on the network. So it's not necessary to set the time/date on each idividual Dicam unit.

Central checking unit

Throgh the Netmon you can take basic readings from each room being controlled - set temperature, current temperature, max and min.

Alarm Trigger unit

When an alarm condition is detected, the Netmon takes action according to requirements and set up.

The Netmon has three main devices - Siren (for on site alarm sounders), Beacon (for on site warning flashers) and Fastcall (for autodiallers of other signalling equipment).

Each of these outputs can be set up to trigger for all or any of the types of condition detected.

 For site coverage, there may be several sirens distributed around the network, and they can be set for day/night operating modes.

Auxiliary sensors and trips

Auxiliary sensors are temperature sensors not beig used for control. Trips are additional on/off inputs such as mains detectors.

These are used for sensors that are not being used for control and/or links to other detection systems.

Weather station

A Netmon with additional weather station software can connect to an outside temperature sensor, relative humidity sensor and anemometer.

This information may be used by programs on the network - for example, using outside temperature for automatic over temperature alarm triggers.

Weather data is also used in logging - ambient conditions are an important factor when asessing building peformance.

Modem communication

By connecting a modem (and telephone line) to the RS232 (serial port) connection, the Netmon - and other units on the network - can be accessed remotely by a PC.

Through the Netmon and

This is useful for technical support and data logging, as well as remote checking of alarm status and other parameters.

Data Logging

Via modem, the Netmon can be set up to record information from the network - such as settings, temperature readings and other data. It also allows data gathering from sensors not being used by Dicam units for control - for example, readings from water meters, operation of feed augers and so on.

The Netmon gathers and stores the data, which is available for regular download and processing.

Using the Netmon

Keypoint Display

This is the "normal" display - the netmon returns toi the Keypoint display after about a minute of operation.

Normal

In normal conditions (no problems detected), the Netmon shows -

```
      System Ok
    1999-04-03-10:01
```

The Date and Time are in ISO format :

yyyy-mm-dd-hh:mm

If the Date & Time value is flashing, it has not been set - see Settings.

Alarms

If a problem has been detected the display changes to:

```
      !! ALARMS !!        ⇓
    1999-04-03-10:01
```

This means a problem has been detected by one or more units on the network, or one or more units is not comunicating successfully.

Press the button to go into the alarms menu.

```
    ALARMS :
    RETURN ⇑
```

This is the exit from this menu. Turn the knob to see the problems detected. For example :

```
    ALARMS :    UNIT 2
    HIGH TEMPERATURE
```

"Unit 2" indicates the network unit concerned.

"Local" indicates it is a Netmon function - such as from Aux Sensors.

Press the button - if the unit has detected more than one alarm condition, it may indicate more than one fault for that unit.

```
    ALARMS :   SENS01
    HIGH TEMPERATURE
```

This indicates that an auxiliary sensor is above its trigger point - see Sensors menu.

For an explanation of error conditions, see later.

Turn the knob to see if there are problems from more units.

```
    ALARMS :
    CLEAR & RETURN ⇑
```

This is an alternative exit from the menu. Pressing the button exits the menu and also Resets this alarm condition.

Depending on the type of problem, this may "Clear" the fault.

In most cases, it is necessary to go to the Unit indicated and correct the problem.

Bypasses present

If a unit or sensor is bypassed (see later), the display shows :

```
      !! BYPASSES !!
    1999-04-03-10:01
```

- as a reminder. This does not indicate a fault - but it does indicate the system is not fully functional.

If your system has a "Bypass" beacon or buzzer installed, it will be operating now.

To clear all Bypasses, go to Settings and use "Clear Bypasses".

Data Level

If your unit is configured for data logging, it shows the current "data level" in the Netmon's memory.

A Netmon may hold from a few days to a few weeks of data, depending on how much and how often data is being recorded.

If the reading is high - such as 80% - a download is urgently needed. Contact your data service centre immediately.

If Data Level is high, the Beacon is triggered.

Units

This menu gives access to individual units and rooms. Use this menu regularly.

Only the "installed" units are shown.

```
UNIT1    ACT    SET
```

Turn the knob to get to the unit you want and press the button to get readings :

```
UNIT1    ACT    SET
A1       27.9   26.5C
```

This shows readings for "Airspace 1" in Unit 1 - corresponding to the first room or control zone as shown in the Keypoint display on that unit.

The reading is C (ºCelsius) or F (ºFahrenheit).

```
UNIT1    MAX    MIN
A1       27.9   24.5C
```

This shows the Max Min readings for this air space - as in the Information display on that unit.

Press the button again, and you will see readings for the second "Air Space" such as :

```
UNIT1    ACT    SET
A2       23.9   24.2C
```

Each press of the button sows a successive air space and/or max-min reading.

The display may show :

```
UNIT1    ACT    SET
READING....
```

This shows while the Netmon is waiting for a reading from the unit. A brief pause is normal.

A long delay means a problem - the unit is not communicating. It may be "dead". Go to that unit immediately.

The unit may return to a clear line :

```
UNIT1    ACT    SET
```

This indicates that you have shown all the air spaces. Some units - such as Slave units - do not have any air spaces and therefore return to this display immediately.

At the end of the menu is :

```
UNIT1    MAX    MIN
CLEAR MAX/MINS
```

This will clear the max - min readings on all units on the network.

Sensors Menu

This shows readings and settings for Netmon Aux sensors and Trips, if installed.

Aux Sensors are sensors used by the Netmon for alarm, but not used for control - for example, sensoirs in rooms without Dicam control.

```
SENS01   HIGH   LOW
25.4C    25C    5C
```

This shows the current reading and High/Low trigger settings for this sensor. In the example, shown, Sensor 1 is above the High limit, so the Netmon will show a High Temperature alarm.

Aux Trips are used for Yes/No detection - for example, mains detectors, or links to other alarm systems, overloads and so on.

```
TRIP01
OK
```

This shows that Trip 1 is satisfactory. If it has a problem, it shows FAIL.

Usually, there is a 1 minute Trip Delay Normally, the Netmon is set up so that Trip failures don't trigger an alarm until after a delay - such as 1 minute.

Aux sensors and Trips are usually connected to inputs on other Dicam units on the network, rather than directly to Netmon sensor inputs. The Netmon gets a reading from these inputs through the network.

If communication is lost with such a unit - the Netmon may indicate "Sensor Failure" or "Trip Failure" because it cannot get a reading.

EXT1 and EXT2 are outside temperature sensors. They are shown in this menu, but there are no trigger settings.

Weather menu

This menu shows readings from the weather station factors such as Wind, Light level, Relative Humidity and so on. There are no settings or adjustments in this menu.

Settings menu

The Settings menu is used for many adjustments such as trigger settings, setting time and data and so on.

Suppress Siren

```
SETTINGS :
SUPPRESS SIREN
```

This option is only shown when the unit is in alarm.

If your siren is sounding (the system is in alarm), you can use this function to "suppress" (quiet) the siren -

Press the button and adjust to the desired time (for example - for 10 minutes). Adjust to desired suppression time and press the button again.

This will quiet the sirens controlled by the Netmon, but does not affect other "outputs" such as Beacons or Fastcall.

Some sirens may be connected on Dicam outputs elsewhere on the network. These will be suppressed

- including remote sirens - as long as communication to the remote sirens is functional.

The display now changes to RELEASE SIREN - press the button to return the siren to full automatic function.

Note : Your unit can be set up to suppress the siren automatically after a short period of operation - consult your installer.

Date & Time

Note : Date & Time set on the Netmon is normally transmitted to all units on the network. Once the time and date are correct on the Netmon, it is not necessary to adjust time and date on networked units.

(Most units don't show time and date if they have a valid reading from the netmon.)

WARNING : MAKE SURE the Netmon Date & Time are correct before starting curves and timers on other units.

WARNING : Changing date and time on the Netmon

```
SET:  YEAR-MM-DD
DATE 1999-04-07
```

Press the button, then adjust the knob as needed to set the Date.

Note - the format is ISO (International Standards Organisation). This may be unfamiliar to you, but is designed to be least likely to result,in setting errors.

```
SET:        HH:MM
            10:32
```

This uses a 24 hour clock.

Sensor Limits

This menu sets trigger values (High and Low) for auxiliary sensors (if you have any).

NOTE : Trigger values are NOT SET until you set them. The values needed may vary widely from case to case.

```
SENS01      HIGH LOW
CH:  3/2    25C   6C
```

Press the button to select the sensor and adjust as necessary.

In this example, the alarm will be triggered if Sensor 1 temperature goes over 25°C (High Temperature) or under 6°C (Low Temperature).

WARNING : The unit allows for a very wide range of adjustment to suit different circumstances.

Trigger temperatures should be ONLY JUST high (or low) enough to avoid triggering when condititions are normal.

You will have to adjust trigger temperatures according to weather conditions, and at some seasons you may have to adjust very frequently, to be sure of getting an alarm in the event of ventilation/heating equipment failure.

You can choose to NOT use one or other factor -

```
SENS01      HIGH LOW
CH:  3/2    25C   ---
```

In this example, there is no setting for Low temperature - alarm will be triggered ONLY on High temperature for this sensor.

Note : We recommend you always use both High and Low temperature trigger settings - this helps guard against alarm failure due to misreading sensors or wiring problems.

Sensor Bypasses

This menu allows you to "Bypass" an auxiliary Sensoor or Trip - i.e.take it out of operation, leaving the rest of the system in operation.

```
SENS01      BYPASS
CH:  3/2          NO
```

This is the normal situation - the sensor is in use (but please check the trigger values - see above.

To Bypass the sensor, press the button :

```
SENS01      BYPASS
CH:  3/2          YES
```

This sensor is now out of action.

WARNING : This feature should be used ONLY TEMPORARILY when absolutely necessary.

Note : CH : 3/2 (for example) shows where the sensor is connected - in this case, Unit 3, sensor input 2. If communication to Unit 2 is lost, this sensor will "Fail".

When a Bypass is in effect, the Netmon shows BY-PASSES in the keypoint menu. (Note : Earlier programs may differ.)

Unit Bypasses

As for Sensors (see above), this menu allows you to "Bypass" (ignore) a certain unit.

WARNING : This feature should be used ONLY TEMPORARILY when absolutely necessary.

It is not necessary to Bypass a unit when a room is empty - use "Deactivate" in the controller instead.

When a Bypass is in effect, the Netmon shows BY-PASSES in the keypoint menu. (Note : Earlier programs may differ.)

Clear Bypasses

If you have used either Sensor or Unit Bypasses - or if you're not sure if someone else has -
 Press the button. This clears all Bypasses.

Alarm Conditions

Please read this section carefully. It is most important to understand the meaning of the alarm warnings indicated.

Warnings are given to indicate abnormal operating conditions.

Not all of the warnings indicate a hazardous condition, and some warnings may be generated by operator actions.

For example, Manual Override is not a normal operating condition - a system is not working completely automatically - but is not necessarily hazardous.

They are not all hazardous - for example, "Manual Override" is not a normal operating condition, but is not normally hazardous.

Up to 16 warning conditions can be detected - listed below. Not all programs can detect all error condition types. For example, only units with feed measurement can detect Feed Failure.

Except for Netmon functions such as Aux sensors and Trips, the warning conditions are detected and indicated by the individual control units, and then communicated to the Netmon unit.

For example, it is individual controllers that check whether their sensors are reading correctly (and report a fault if they don't).

When an error condition is detected on a unit, the normal action is to go to the unit indicated and investigate the problem.

Clearing the problem at the individual unit resets the warning at the Netmon unit.

Once detected, warning conditions are indicated on the Netmon (unless the Unit or Sensor is "Bypassed". Depending on the Netmon set up, warning conditions may or may not trigger the sirens, diallers, and so on.

Sensor Failure

This says there is no reading, or no *valid* reading from a particular sensor.

It is triggered if the sensor is disconnected or short circuit OR if there is excessive *electrical noise* on the sensor wiring.

If the loss of reading is due to excessive interference, Dicam units show a "Bad Sensors" window in their Test menu.

If a program has more than one sensor for that control function, it may still be able to control. If there are no readings or only one sensor, the unit will show "No Sensors" as well as Sensor Failure.

No Sensors

No Sensors means that there is no reading from the sensor(s) for a particular control function. For example, the controller concerned is unable to read any room temperature sensors.

In this case, the controller will be unable to function correctly, and Manual Override may be required until the sensors are corrected.

Sensor Variance

Sensor Variance detects possible sensor faults or other hardware problems.

When sensors reading the same parameter - such as room temperature - read values which differ more than the allowed amount, Sensor Variance is triggered.

The difference may be due to sensor reading problems, but it may also be due to problems in the ventilaion or heating system- for example, fan failure causing one part of a room to get much hotter than the rest.

Sensor Variance may arise because the allowed amount has not been adjusted to an adequate value for the circumstances.

Sensor Variance can only operate if there are at least two sensors for a particular control function. It cannot detect Sensor variance - for example, if

If you get a Sensor Variance warning, go to the unit indicated and check the readings of all sensors. De-

pending on how quickly you go and read the sensors, you may find that sensors have now returned to within the sensor variance band, so check the individual readings carefully.

High Temperature

High Temperature is triggered when room temperature (or whatever is being controlled) rises above the "High" or "Above" trigger setting.

Above is based on Set Temp plus a margin, or Ext Temp plus a margin (whichever is higher).

Note : When more than one sensor is installed in a room, High/Above is based on the *average* of the sensors. The system relies on Sensor Variance to detect deviations of individual sensors.

Low Temperature

Low Temperature is triggered when room temperature (or whatever is being controlled) falls below the "Low" or "Below" trigger setting.

Note : When more than one sensor is installed in a room, Low/Below are based on the *average* of the sensors. The system relies on Sensor Variance to detect deviations of individual sensors.

Mains Failure

Mains Failure indicates that mains to a Dicam unit has been off

- supplying the Netmon or a unit on the network - has been off for longer than the mains failure delay.

Trip Failure

A "Trip" is an auxiliary on-off input - used with a mains detector, or when connecting to another system such as an existing alarm system.

Trips normnally have a "delay" of 1 minute - once a unit has detected a trip failure, it waits one minute before triggering a warning.

Feed Failure

Feed Failure indicates a problem with the feed system - it has run too long (indicating a jam) or has been off for too long (indicating a trip out or problem with the level detection system).

Water

Water Failure indicates a problem with the water supply - it has run too long (indicating a leak) or has been off for too long .

Manual Override

This indicates that one or more outputs on a Dicam is set to a manual override value, instead of being controlled automatically.

This warning is shown as a reminder that systems are not operating completely automatically.

Output Failure

Indicates a network comunication problem.

If a unit is controlling a "remote" output (controlled by one Dicam unit but connected to another), Output Failure indicates that the remote unit is not working properly (such it has a mains failure), or not comunicating correctly.

System Error

A technical problem - a unit is configured wrongly, or a unit has program startup problems.

Special note : A Netmon shows this error when started for the very first time - this does not indicate a fault.

Output Timeout

Indicates a network comunication problem.

When outputs are being controlled remotely (i.e. An output on one Dicam uit is being controlled by another Dicam unit), output instructions must be received regularly - usually within 8 seconds.

If an instruction is not received in 8 seconds, a unit will show this warning.

Battery Low

Indicates that backup battery reserve has fallen to a dangerously low level - prolonged mains failure means the battery is no longer charging.

Only a short period of operation on battery is remaining. Further operation without mains will damage the battery unrepairably.

Action : If mains cannot be restored immediately, disconnect backup batteries to prevent further discharge.

Network Failure

Indicates that network communication cannot be established with the unit indicated.

This may indicate a fault with network cabling or components, but may also indicate that the unit shown is not functioning at all.

Action : Go to the unit indicated immediately - the unit may not be functioning.

System Reset

Indicates that a unit's program has stopped and then restarted.

The warning is shown only if the "interface" has not been used within a minute of the program being started - i.e. It is an "unattended" restart.

To avoid this warning, always press the button after restarting a unit.

Program restart during normal operation is not a normal condition - may indicate excessive interference or that the unit's battery backup is faulty.

Clearing Alarms at Units

In most cases, viewing an alarm warning at a Dicam unit resets the warning.

When you see the !!ALARMS!! Warning on a Dicam unit, and press the button, this indicates the type of problem.

Further presses of the button will reset the warning.

This in turn resets the warning at the Netmon unit.

If the warning condition is still present, the warning may come back immediately or after a delay. (For example, Mains failure normally has a 1 minute delay, so if you reset the warning it takes a minute to come back, even if mains is still off.)

Always take careful note of the type of warning displayed, it's essential if you need to call for technical assistance.

Test Menu

This menu contains features to help you check the unit.

Outputs

As with other Dicam units, Test : Outputs gives you direct access to the output circuits controlled by the Netmon, so you can check if they function correctly.

```
Output      CH:    1
Beacon      0%
```

This shows that "Beacon" is on Channel 1 on the Netmon and it is curently at 0% (inactive).

(Beacon is the "Device", Channel is the physical connections - the electrical terminals being used in the Netmon Dicam unit.

To check if the Beacon works -

-press the button to select it
-turn it to 100%
-press the button to Enter the value

Whilst you are using the Test : Outputs menu, automatic operation of outputs is suspended and only your setting applies.

If you leave the menu (or don't use it for about 1½ minutes), output control returns to automatic.

The menu contanis a list of "active" devices, you can operate each individually.

Devices showing CH : NONE are not active - there is no output for this device, so it's not possible to operate it.

Channels 1 to 8 mean outputs connected to the Netmon unit itself. Channels 1/1 to 29/8 mean that the netmon is controlling outputs on other Dicam units.

For example, Siren2 CH: 3/7 mean that a Netmon siren is connected to Unit 3, Output 7.

Siren2 to Siren10 are usually outputs on other Dicam units - to give extra siren coverage around your site.

You may find outputs are "set up" but not being used. For example, Beacon may show Channel 1, but you don't have a beacon installed.

Sensors

As with other Dicam units, the Test : Sensors menu shows sensors being used by the Netmon, along with the connection channel.

```
SENSOR      CH:    2/6
SENS01             25.6C
```

This shows that the Netmon's auxiliary sensor number 1 is connected to Unit 2, Input 6, with a current reading of 25.6ºC.

CH : NONE means that this sensor device is not installed or set up.

A reading of [-----] means there is no reading from this sensor.

Information

This menu contains technical information about your Dicam unit.

```
PROG   020.039-91
NETMON
```

This tells you both the program name (Netmon) and the exact program version. This is important if you call for technical support as program versions may vary in operating details.

```
PROGRAM OPTIONS
LOGGING
```

Press the button to see which program options are installed in your unit.

```
PROCESSOR          12345
ROM ID :           51234
```

Take a careful note of these - they are the serial numbers of the program and processor unit. If you call our technical helpline for advice, they are essential.

```
NETWORK  (TYPE2)
ADDRESS 30
```

This shows the networking operating protocol (Type2), and more important, the address on the network. The Netmon is usually address 30, other units show their address in the same menu posiion.

To check network comunication, press the button here, the menu changes to -

```
THRPUT      TRANSMIT
46.5        14.6/s
```

This indicates both the number of messages occurring on the network and the number being sent by the Netmon (per second). Throughput varies depending on the number of units on the network, logging set up and a number of other factors.

Throughput may be up to around 80 messages on a busy network. If the number is extremely low, it indiates network problems (such as network cable shorting or disconnection).

Press the button again to see -

```
COLLSN      TIMEOUTS
  0             0
```

These are technical factors indicatig communication problems such as interference on the network cable. Typcailly, your unit should show low numbers for both of these factors.

Input Channs

This gives the direct reading of the inputs in "raw ". For example, a temperature sensor will read a value of about 512 when the temperature is 20.0ºC (68ºF).

You can use this menu to check operation of feed or water detection, when they are being used for logging.

For example, a "water" channel shows as -

```
INPUT TYPE     LEVEL
5    PULSE     12345
```

Water inputs count the numbe of "Pulses" from a water meter, and count up. To check the water is working correctly, run water through the meter and check the counter is counting up.

Feed measures "Time" in 1/10 of a second. When the feed auger runs, you can see the "TIMED" counter going up.

Config Status

Technical information showing the degree of configuration set up in your unit, and how long since it was last changed.

Pclink

Shows the modem/PC connection set up.

On pressing the button, you can see data communication between the Netmon and a modem, when a connection is in progress.

Restart

This function restarts the program. This function should not be used in normal operation since it may cause loss of data, and may trigger the alarm.

Installer Configuration Notes

Netmon configuration fundamentally affects the operation and safety of the alarm system.

We strongly recommend that pesons aiming to carry out Netmon configuration should attend a specialist training course.

These notes assume that configuration is carried out by an experienced Dicam installer.

IO Config

Outputs

DO NOT use outputs 5 or 6. These are reserved exclusively for the use of the RS232/modem link.

They may NOT be used, even if no modem is attached.

Standard (default) output devices Beacon, Fastcall and Siren1 should not be altered or swapped to other channels.

If a default device is not used, leave it set up but do not connect it.

To configure additional remote sirens

The Netmon allows for up to 10 Netmon sirens. These all operate simultaneously - 10 separate siren devices mean that sirens can be installed on 10 different output channels around the sire, for better siren coverage.

1. Choose a "spare" channel on a Dicam unit close to where you want the siren. Example : Unit 2, Channel 6

2. At the chosen unit (Example : Unit 2) set the chosen channel (Example Output Ch 6) to type NormOn.

(The unit will almost immediately give an Output Timeout warning - ignore it for now.)

3. At the Netmon set the chosen device (Example : Siren2) to the chosen channel e.g. 2/6.

WARNING : make sure the channel is not already beig used by something else. For example, DO NOT set both the local unit's Siren device to the Netmon's siren channel (Example : DO NOT set Unit Siren = CH:6.)

This would cause a control conflict will be NOT be announced by the system, although inconsistent operation will results.

4. Restart the Netmon and reset the Output Timeout warning at the chosen unit.

5. Test the output (Example Siren2) using Netmon : Test : Outputs.

Bypass

The Bypass output device is triggered when any Dicam unit or Sensor is set to Bypass : Yes.

We advise connecting a visible indicator or low priority warning buzzer for this device (an additional driver is required.)

To use the Bypass output

Inputs

Netmon input channnels and devices are set up using the Monitor Config menu.

Input channels

If Netmon inputs are to be used by other Dicam units, set the relevant channels to NET = YES.

Example : Inputs 1 and 2 are usually used for EXT1 and EXT2. If so, set Inputs 1 and 2 to NET = YES.

If Netmon inputs are to be used for water or feed monitoring, use only channels 5 to 8, and set to Pulse or Timed as appropriate.

Monitor Config

Units

When a unit is configured to a Network address and then connected to a Netmon, the Netmon automatically "installs" that unit.

It is not usually necessary to use this menu.

Once a unit address is "installed" the Netmon constantly looks for that unit to be present.

The Units menu permits "manual" address installation, allows a removal of a unit address which has been installed in error, and lets you check which units are installed.

Press the button to toggle between YES and NO.

Sensors/Trips

Use this menu to install aux sensors, trips and associated dropout channels.

WARNING : Before you start, make sure you draw up a detailed plan of which sensor channels are available and what they will be used for.

To set up an aux sensor

Example : Input channel 7 on unit 9 to be used as Aux Sensor 3.

|1| At Unit 9 : I/O Config : Input Channels set CH:7 Net YES. Check type = NORM

|2| In Netmon : Monitor Config : Sensors/Trips set SENSO03 = 9/7

|3| Check reading using netmon : Test Sensors

To set up an Aux Trip

Proceed exactly as for Aux Sensor

Aux Sensor/Trip Dropouts

Example : SENS03 will use output channel 9/4 as a dropout.

|1| At Unit 9 : I/O Config : Output Types set CH:4=NormOn

Unit 9 will now give Output Timeout warning. Ignore for the moment.

|2| In Netmon : Monitor Config : Sensors/Trips set SENS03 Dropout = 9/4

|3| At Unit 9, clear Output Timeout warning.

|4| At Netmon : Test Outputs : test SENS03DO.

Note : It is permissible for a single output channel to act as dropout channel for more than one aux sensor or trip as long as set only via Netmon.

Logger Config

Note : the only setting which may be required in this menu is when upgrading a Netmon program - set "Downloads" to 1 greater than the previous setting.

Network & Alarm

Network Address, Type, Cycle

Default 30, 2, 2

Do not alter except by advice from technical support.

Date/Time

Default : Yes

Determines whether Netmon transmits date and time to other units on the network.

Warning : When installing Netmon for the first make sure individual control units are NOT running a Curve.

On current programs, individual Dicam control uits do not show Date & Time if the Netmon is supplying it.

Mains Failure Delay

Default 1 minute

Note : Do not extend this delay without specific reason - longer delays mean that operating systems is less convenient.

Trip Delay

Default 60 seconds.

Trips are generally used to monitor mains, so normally, set to same value as mains delay.

Clear Alarms All Units

Default : No

During setting up the Netmon, it may be convenient to set this to Yes temporarily. In normal operation, should be set to NO.

When set to NO, alarms must always be cleared at the individual units. Central alarm clearing is not recommended.

Temperature in Celsius

Default : Yes

In USA or other Fahrenheit only countries, set to number

Night Siren & Siren Cycle

Default : Night time : not set

　　　　Siren Cycle Delay,OnTime : 0 mins,2mins

These features are aimed to reducing nuisance to neighbours.

With default settings, siren operates in simple manner - when the siren is triggered, it runs continuously until the alarm is reset or the operator uses Suppress Siren.

If Delay is set to a value (above 0mins) then an automatic suppression cycle is activated.

Example : Delay = 10mins; On-Time= 2mins

In this case, the siren will run for 2 minutes (once triggered), and is then automatically suppressed for 10 mins.

If the problem is not cleared within 10 minutes, the siren starts again.

If Night Siren Start & End settings are used, then siren operation is reversed during night time operation.

Example : Night Start = 19:00; Night End = 06:00

With these settings (and siren cycle set as above) -

- from 6am to 7pm, the siren is on 2 minutes and supressed for 10 minutes (if triggered)

- from 7pm to 6am, the siren is off for 10 minutes, and on for 2 minutes (if triggered)

- Fastcall and Beacon outputs are not affected

Night settings should be used ONLY if there is another off-site alerting method such as autodiallers, pagers, etc.

Night settings should NOT be used if sirens are the only call out method. (But siren cycle can be.)

Modem Init, Rings

Change these settings only as advised by technical support.

Alarms : Beacon, Fastcall, Siren Alarms

Beacon : determines which conditions trigger the Netmon Beacon output.

Fastcall : determines which conditions trigger the Netmon Fastcall output. (Normally used for autodialler.)

Siren : determines which conditions trigger the Netmon siren outputs. Does not affect "Siren" devices on individual Dicam units.

Dropout : Determines which conditions trigger Dropout for Netmon Aux sensors and Trips.

For each menu, the format is e.g. :

```
FASTCALL ON:    YES
SENSOR FAILURE
```

This example shows that the Fastcall output will be triggered (to 100%) if there is a sensor failure warning.

To change it, press the button - toggles between Yes and No.

Whatever trigger set up you choose, it applies to all occurrences of that type of fault.

For example, if you set it so that Sensor Failure does NOT trigger the siren, it applies to ALL sensor failure warnings.

Warning : We advise leaving ALL conditions set to YES unless specifically requested (in writing) by the manager responsible for the site.

Default for most conditions is Yes except Dropout is default configured to fewer conditions.

Most farms request that Manual Override is NO.

In most cases, site sirens, diallers etc. Are triggered ONLY by the Netmon.

"Siren" settings in individual Dicam control units do NOT affect triggering of Netmon sirens. (Individual control unit "Siren" triggers control only their own Siren output device. This is often used to control dropouts, and may be set to fewer trigger conditions.)

Reset All

Warning : this function clears the Netmon configuration AND user settings and resets all conditions to default. Use this function only if absolutely necessary - for example, if configuration has become completely messed up and you want to start again.

Configuration Records

You MUST leave adequate records ON SITE to assist in future service and maintenance.

RS232/Serial Connection

This connection is supplied as standard with all Netmon units. It is for connection to a PC and/or modem.

If the connection is not being used, unplug the card from the Netmon apps board to reduce interference pickup.

Position and/or tape the card in place so that it does not make contact with other components. If necessary, cover the connector with a plastic bag or similar.

DO NOT REMOVE THE CARD OR CABLE.

These items are included so that it is as easy as possible to connect for remote access - either immediately or at a later date. Removal of these items may result in reduced technical support, and may incur additional charges.