

System Options Programming

General System Options

These screens are used to programme general purpose options associated with the Model 3000/4000 Control Module and the System.

Power Fail Delay
Time: 000 min

This screen sets the time that the **Control Module** “AC fail” System Input must stay in alarm before the Control Module will recognise an AC fail alarm. For example, setting a period of around 15 minutes would prevent an AC fail report being sent to the Central Station on brief interruptions to the AC supply. Setting the time to 000 will result in no delay and therefore instant reporting of the alarm (depending on the input programming).

Note: Power Fail Delay Time for a Universal Expander Module is set via a DIPswitch on the Expander’s board. This allows the Installer to select a Delay Time of between 20 and 255 seconds.

Site Code Type->
Standard

This screen sets the type of Cards that will be used whenever a Site Code type of Reader is defined.

For 26 bit Wiegand formats, this type expects the Site Code from bit 2 to bit 9 and the Card ID being from bit 10 to bit 25. The start bit (bit 1) and the stop bit (bit 26) are ignored. The Site Code is stored in the first 2 digits only in the Site Code programming.

For 34 bit Wiegand formats, this type expects the Site Code from bit 2 to bit 17 and the Card ID being from bit 18 to bit 33. The start bit (bit 1) and the stop bit (bit 34) are ignored. The Site Code is stored in the first 4 digits only in Site Code programming.

There is no issue number with this type, **Standard** is the only type used.

Real Time Clock Adjustment Options

The real time clock in the panel is crystal controlled but because the crystal frequency is not trimmed in production, the clock may drift with time. Later version PCBs allow the use of AC mains frequency to correct for drift, resulting in a better long term accuracy. Older style PCBs without AC mains frequency synchronisation can be identified by the words “PCB: 0” when the MENU key is pushed whilst logged off. Newer style PCBs can be identified with the words “PCB: 1” instead.

Some communication formats such as IRfast and EarthNet can automatically correct the clock when communication with the Central Station.

The Model 3000 and Access 4000 both allow the clock to be trimmed under general options by the Installer, if desired. Both the older style and newer style PCBs can be trimmed, however it is desirable with newer PCBs to allow the AC power frequency to trim the clock automatically.

Clock Adj
Options-> 6NF
nnn

This screen sets the Clock adjust options:

6 60 Hertz Mains

Set this option to “Y” to adjust the clock synchronisation for countries where the AC mains frequency is 60 Hertz. Leave set to the default “n” for countries where the AC mains frequency is 50 Hertz.
Note: Must not be set to “Y”es on Type 1 Control Modules.

- N** No mains sync Set this option to "Y" to prevent synchronisation with AC mains frequency. Only recognised for Type 1 Control Module boards or later. This option should only be set to "Y" if the AC power frequency is inaccurate as is the case with some un-interruptible power supplies. If this option is set to "Y", a System Reset (MENU, 7, 8, 9) must be performed before the change will take effect.
- F** Clock is Fast Set this option to "Y" if you wish the clock to run slower. Leave set to "n" if you wish the clock to run faster or maintain the same speed.

**Clock Error in
100ms/24Hr: 000**

This screen is used to correct for drift in the real time clock. This screen should be left at 000 for newer style PCBs if the "N" option above is set to "n", in which case the AC power frequency will automatically correct the clock.

The number depicted above is the clock error in 1/10th of a second in a 24 hour period. The clock will be made to run either faster or slower, depending on the setting of the "F" option above.

After adjusting this screen you should reset the time accurately on the time/date screen. This will cause the above changes to be recognised and the clock adjusted accordingly.

Example for older style PCBs (or newer style with "N" option set to "Y")

1. Check the current Clock error is set to 000 (Units are in 100ms/24Hrs)
2. Set the time accurately by pushing the OK key at the exact second.
3. Check the time is set accurately by logging in and inspecting review for the exact time the OK key was pushed when logging in. Adjust if required.
4. Wait at least 24 Hours.
5. Check the time again by logging in and inspecting review for the exact time the OK key was pushed when logging in.
6. Calculate the correction required
Correction = (error in seconds)*240/(Hours since clock set)
7. Enter the correction as above and set the "F" flag to "Y" if the clock was running fast and leave at "n" if the clock was running slow.
8. Set the time accurately again by pushing the OK key at the exact second.

Eg. If the clock was running slow by 5.6 seconds in 28 hours, the correction will be: $5.6 * 240 / 28 = 048$ and the "F" flag should be set to "No" to make the clock run faster.

**Panel NDFRf+I.
Opts-> nnnnnnnn**

The first Options screen sets a number of common panel options:

- N** No Aux off on Reset Set this option to "Y" to cause the state of **all** auxiliaries to be retained in the event of a system reset. (The setting of the "Off on Reset" option in Auxiliary Timer Programming [MENU 5, 5] will be ignored).
- D** Detailed Review Set this option to "Y" to enable detailed review mode. This allows more comprehensive review messages when required for debugging programming problems, communication problems and input problems etc.

Detailed review events at this time are:

- A selection of Comms Task messages
- Entry/exit/pulse/siren/ac hold off/low bat. timer start/expired
- Pulse Counts
- Tracing users at various menus.

F	Fast Processing	If set to “Y”, this flag enables faster Zone processing of Zones on external modules. This option is particularly suited to Button Feedback processing when used in Lift Access Control.
R	Force Review	This option overrides all “Do not save to review” flags within the programming of all other modules in the system. This option enables the installer to temporarily force all modules to save all events to review for the purposes of debugging. When debugging is complete, this flag should be reset to “n”.
f	fast Zones	If set to “Y”, this option applies a faster Zone debounce time to all zones inputs attached to the Control Module. The faster debounce time is, on average, 165ms.
+	+1 Duress Code	The +1 Duress Code option causes every PIN code to also have an associated duress code which is one digit different from the PIN number. This enables a Duress alarm report to identify the individual User. The Code length remains the same. To work out the duress version of a PIN code, simply add 1 to the last digit. If the digit is already a “9”, adding 1 causes the digit to be “0”. The code will behave exactly as if a code was entered with the User’s (D)uress flag set. IMPORTANT NOTE: When this option is used, the number of available PIN codes is effectively halved. i.e. If 4 digits are used, only 5000 combinations will be available instead of the normal 10,000 combinations. e.g. If a User’s PIN code is 2468, their Duress version will be 2469. So the system will not allow 2469 to be programmed as another User’s PIN code.
I	Ignore AC Problems	The Ignore Power problems level messages option causes all AC fail inputs to be ignored as far as “Had Power Problems” level messages are concerned.

Panel EU.....
Opts2-> nnnnnnnn

The second Options screen sets a number of additional panel options:

E	Extra Area programming denied.	Set this option to “Y” to disable the ability to assign or edit the “User Extra Area” when programming Users. Once this option is set to Yes Areas can only be assigned to a User via the Area List in their User Type and avoids the possibility of Users being assigned an Area that they should not have access to. Has particular relevance in multi-tenancy installations, etc. V3.5 or later only.
U	Use Start Bit.	Normally the First and Last Bits of a Wiegand Data string are stripped from the Card Data as these are normally parity Bits and are not required. If the system utilizes the Wiegand NBit or NBit Fast “Direct Entry” Mode for Card Data, this option can be set to “Y” to enable the First and Last Bits to be used in the Card Data. This is useful to prevent duplication of card IDs if the card data is a proprietary format that does not use parity Bits. V3.5 or later only.

**Reader for User
Prog: R00**

This screen is used to allow any Single Door or 2 Door Reader Module in the system to be used for:

- Programming User's cards by swiping. (In "Direct Entry" mode)
- Programming Backup Cards for Readers
- Reading Card Data in Test mode.

Enter in the new Reader Module ID if a Reader Module other than Module 001 is to be used.

NOTE:

- 1) The prompt screen under the Test Card menu [MENU 4,5] or when enrolling Direct Entry or Backup Cards will display "Waiting for Card at Rxx", where xx = Reader Module number specified above.
(Prior to V4 the prompt screen displays "Waiting for Card at R01" regardless of the Reader Module specified above.)
- 2) On 2 Door Reader Modules, either Reader Port can be used.

**Area Defer
Time: 000 min**

This screen allows the Installer to specify the time period in minutes for the Deferred Area Arming option. See details of the Deferred Area Arming options in "Area Programming". This time period will be used if no "Defer Time" is programmed in the individual Area options.

**C01 Battery Test
Time: 000 min**

This screen allows the Installer to programme the Battery Test Time.

Battery testing is initiated by a Diary event which allows the installer to specify the frequency of such testing, dependent on the specific requirements.

The period can be set from 0 (no test) to 255 minutes for each module to be tested.

Only the Control Module, B and E type expanders are capable of battery testing.

The battery test is activated within the Control Module when a diary with a function of "battery test" goes valid. Once completed successfully or in the event of failure the next module programmed will then start its battery testing sequence. Battery testing finishes once all modules set for testing have completed their test.

Battery test times should be set with module load in mind. It should be realized that if a battery test of 4 hours is performed and the AC supply to the premises fails shortly after the test was complete, the charge of the battery would be severely effected. This, coupled with the age of the battery, would greatly reduce the integrity of the system.

The battery test does NOT turn off the AC Mains supply to the module being tested. Instead, it turns off the Battery charge circuit allowing the module to run off the battery supply only.

As a general rule, a battery test time of between 1-10 minutes would be used to determine only that a battery was connected. A time of between 60-120 minutes would deduce that a battery should be in good working order. Periods greater than 120 minutes should only be set for deep discharge testing conditions where the reliability of the AC mains supply can be guaranteed.