

LCD Terminal Programming

Commissioning an LCD Terminal.

1. When installation is complete & checked, power-up the module.

2. The display may show a normal Diary, Area status, or Alarm message,etc.
e.g. **Happy New Year**
This means that the default Terminal number (*Set to 99 at the factory*) has been accepted. To change the Terminal no. &/or configure the “LED 4” and “Pulse Beeper” options, **go to step 3.**

Alternatively, one of the messages opposite may be displayed if:
-There is already an LCD Terminal with the same address number.
-The module number is too high for the memory size / configuration.
If this is the case, go straight to step 4.

Module Exists.
Module Too Big.

3. Enable Terminal configuration mode. Hold down the <HELP> key; Short LK2 (RESET); Wait 2 seconds; then release the <HELP> key.
OR
Remove power from the Terminal and hold down the <HELP> key while power is re-applied.

4. **Terminal Number.** Select an LCD Terminal number that isn't already used in the system, then set the module number by entering the required number on the keypad, followed by <OK> to save.

5. **LED 4 Control.** To control LED 4 via an auxiliary (T?:X02), Use Right Arrow key to select “Aux2”, then press <OK>. Auxiliary control of LEDs 1 to 3 is already available. *See table under “LED Mode” options.*

6. **Pulse Beep Option.** To enable pulsing beeper whenever Auxiliary 4 (T?:X04) is ON, use Right Arrow key to select “Aux4”, then press <OK>. DO NOT connect any Input or Output device to Zone 2/Aux 4 if this option is selected. *See “LCD Terminal Beeper activation” at the end of this chapter for more information.*

7. Use the Left Arrow key at any time to scroll back through the questions. Press the <END> key when finished. Other LCD Terminal options are set in “LCD Terminal Programming”, <MENU>, 7, 2, 1.

Module Number
Change No: 99

LED 4 >
Off

Pulse Beep >
Off

Programming an LCD Terminal.

LCD Terminal to
Alter: T01

T01 Present-002
but not secure

This screen allows an LCD Terminal to be selected for programming. Pressing the “ON” key to change modes tells the Installer whether this module is currently in the network. If the module is not in the network it will display the word “Absent” following the Terminal number. If the module is present, the Terminal number is followed by the words “Present-nnn but not secure”, or “Present-nnn and secure”, depending on LAN security status. The number (nnn) in the message indicates the number of times the module has failed to acknowledge a poll from the Control Module since the last LAN Initialisation or LAN Secure operation.

See “The LAN system” in the Overview and Introduction section and “Secure LAN” (MENU, 7, 8, 1) for details of LAN Security.

T01 Poll
Time: 060 sec

This screen allows the Installer to specify the maximum time a module can remain out of communication with the Control Module. Only modules in unprotected Areas should be selected with short times. Modules in protected Areas can have times set up to 255 seconds maximum. If too many modules are programmed for short times then this may slow down LAN communications.

Note: Poll Time should not be set to 000.

T01 LAN
Priority: 0

Pressing the ON key allows the LAN Priority to be programmed between 0 and 3 for this module. LAN Priority can be used to give certain modules priority over other modules when sending information to the Control Module. Priority 0 is the highest priority and priority 3 is the lowest. For example, if a module was programmed for priority 0 and another module was programmed for priority 1 and both modules were sending information at *exactly the same time*, then the module with priority 0 would be sent first.

When programming small systems the priority of all modules are most commonly set to 0. In larger systems with many Terminals and Zone Expanders, Zone Expanders may be set to Priority 1 and Terminals may be set to priority 0, giving Terminals a faster response than Expanders during heavy LAN traffic.

T01 12345678
Alarms: Ynnnnnnn

Alarm Message Types. This option sets which alarm message types will be displayed on this Terminal. Every Input alarm can create an alarm message. The alarm message type is determined by the Process Group assigned to the Input. This allows certain alarm message types to only be displayed on certain Terminals.

eg. Only alarms on Inputs that specify Message type 1 in their Process Group will be displayed on this Terminal.

See "Process Group Programming" for more details on the use of Message Types.

T01 SMDLIA.0
Msgs: nYYnnYnn

This option sets the default message display on this Terminal when the Terminal is "logged off". Listed below are the various options.

S Single Area

Only display the status of a Single Area defined below as the Associated Area.

M Multiple Area

Display a Multiple Area status screen, starting at the Associated Area, defined below.
 e.g.

T01 12345678
Alarms: Ynnnnnnn

n = Area Off Y = Area On
 T = Area Timed On W = Area Defer On Warning

D Diary Messages

Display Diary messages if defined. Note that if Diary messages are defined with no date and time specified (always valid), the Multiple Area status screen (Area Array), if selected, will not be displayed as the Diary message takes priority.
See "Logoff Terminal Messages" at the end of this chapter for further details.

- L

Level Messages

Show system status Level messages at this Terminal.
See “Level Messages” and “Logoff Terminal Messages” at the end of this chapter for further details.
- I

Single Area Alarms

Show only alarm messages from the associated Area defined below.
- A

All Area Alarms

Show alarms from ALL Areas. If set to “n”, only alarm from the Associated Area below will be displayed at this Terminal.
- N

No Code Status
(V2 or earlier only)

A new “Logged Off Options” screen was added in V3 making this option redundant. See the “A” & “T” options in the “Log Opt’s” screen.
V2 or earlier: Allows any User to use the Up/Down Arrow keys to display all possible Area Arrays so that the status of all Areas in the system can be inspected easily. The User does not have to logon to the Terminal first.
- O

One Diary Message

Only show One Custom Diary message that matches the associated Area number. Eg. If the associated Area is A003, then the Diary message number must be the same. ie. DA003.
See “Logoff Terminal Messages” at the end of this chapter for further details.

T01 LED Mode
None

This screen allows the Installer to determine the functionality of the LEDs on the Elite LCD Terminal. (V2 or later)

- None

LEDs will only be controlled via the Terminal Auxiliary assigned to them.
LED 1 Txx:X06
LED 2 Txx:X07
LED 3 Txx:X08
LED 4 Txx:X02 (If enabled in LCD Terminal commissioning. *See page 1*)
- Area Array

LEDs will display the status of four sequential Areas beginning with the Associated Area.

T01 Assoc. Area->
House

This screen allows an Associated Area to be selected for this LCD Terminal for use with the other options above. Pressing the right arrow key will cycle through all Areas alphabetically. Pressing a letter jumps to that Area (if defined) and pushing the OFF key sets the Associated Area to None.

T01 Keypad
Time: 000 sec

This screen allows the Installer to programme the keypad “Dual Code” time. Set the maximum time between dual entry codes at this Terminal. When a dual PIN provider code is entered, a subsequent PIN code must be entered within this time for it to be recognised.

T01 Door D000

This screen allows an associated Door to be selected for this LCD Terminal. Setting D000 means there is no Door associated with this Terminal. When a Door is associated with the Terminal then access options at this Terminal will control and monitor the nominated Door.

When a Door is associated with an LCD Terminal, the System Inputs; “Door Forced” (T??:S03) and “Door Open Too Long” (T??:S04) may be used.

Door Forced will occur if Zone 1 on the Terminal is unsealed and Auxiliary 1 on the Terminal is off, providing the Door is not still open after a valid unlock.

Door Open Too Long (Door Held) will occur if Zone 1 remains unsealed longer than the Maximum Open Time following a valid unlock.

NOTE: In either case, the Door contact must be wired to Zone 1 (Txx:Z01) on the Terminal (no End-Of-Line resistors necessary) and Auxiliary 1 on the Terminal must be programmed as the Lock Auxiliary (Txx:X01).

T01 Access IOA.ZS options-> nnnnnn

This screen allows the Installer to programme a number of access options applicable to the use of this LCD Terminal.

- | | | |
|---|----------------------|---|
| I | Terminal Inside | Set this option to “Y” if the Terminal is located on the Inside of the Door or to “n” if the Terminal is located on the outside of the Door. |
| O | OK key REX/REN | Set this option to “Y” if you wish the OK key to be used as a REX or REN button when the Terminal is logged off. |
| A | Access Control Only | Set this option to “Y” if the Terminal is to be used for Access Control functions ONLY. When this option is enabled, the Terminal can be used to unlock doors but cannot be used for Area ON/OFF control or Menu Access. |
| Caution: Do not set this option to “Y” on any Terminal that you intend to use for programming. | | |
| . | Spare | This option has been left spare for future development. Set to “n”. |
| Z | Zone 2 REX on inside | Set this option to “Y” if you wish Zone 2 on the Terminal to be used as a REX button on the inside (opposite side) of the door. (Zone 2 REX on inside must also be set to Yes in Extra Options to enable Zone 2). Available on Elite LCD Terminals only. (V2 or later) |
| S | Single Area | Set this option to “Y” for Single Area operation. When set to YES this Terminal will only allow operations to be performed on the Associated Area. Status of other Areas can still be viewed. (V2 or later)
Also disables access to Area List selection. (V4 or later) |

T01 Extra .LNZ options nnnn

This screen allows the Installer to programme a number of extra options.

- L

Limited Messages

This option forces the terminal to only accept broadcasts of level message 6 and diary broadcasts for diary number 1. This option should be used with all other logoff display options set to No. (V3 or later)
- N

No Key Beep

Set this option to “Y” if you wish to disable the beeper from sounding whenever a key is pressed. Beeper will still operate normally for other functions. (V2 or later)
- Z

Zone 2 is REX

Set this option to “Y” if you wish Zone 2 on the Terminal to be used as a REX button (If Terminal on “Inside” of Door) or REX button (If Terminal on “Outside” of Door). (V2 or later)
The button is wired in Normally Closed configuration with no End-of-line resistors required.

This feature is available on Elite LCD Terminal only.

T01 Log ATLRHC.. Opts -> nnnnnnnn

This screen allows the Installer to programme operations that are allowed whilst the Terminal is logged off. (V3 or later only)

- A

Area Array

This option allows the up/down arrow to display the status of all Areas as Area array screens. (This is over-ridden if latched alarms are present and allowed).
- T

Text

This option allows the up/down arrow keys to display the status of 8 Areas as text, beginning at the associated Area for this Terminal.
The “A” option above must be set to No.
- L

Latch Alarms

This option allows the up/down arrow keys to display all alarms currently latched.
See Input Types in Process Group Programming [MENU 2,4,3]
- R

Quick Alarm Review

This option allows access to quick review via the MENU, 1 keys whilst logged off. This allows any User to view the latest alarm and search Review for past alarms using the Up and Down Arrow Keys. Only alarms are displayed.
- H

Home Auxiliary

This option allows access to home auxiliary control via the right arrow key.
- C

Air Conditioning

This option allows access to air conditioning control via the left arrow key.

T01 M.Group -> None

This option allows a Menu Group to be associated with this Terminal. If the Menu Group is left at None (MG000), then Menu options will be controlled entirely by the Menu Group allocated to the User Type using the Terminal. If the Menu Group allocated to the Terminal is non-zero, then Menu Group options will only be allowed if options are set to “Y” in both the Menu Group allocated to the User Type AND the Menu Group allocated to the Terminal.

T01 Menu Group: MG002

For example, if the MG001 was allocated to User Type “FACTORY WORKER” and was allowed review access and MG002 was allocated to LCD Terminal 6 which denied review access, then any User assigned as a “FACTORY WORKER” could not use review at Terminal 6.

T01 Area Filter > None

This screen allows the Installer to specify an Area List Filter. Any Area controlled from this Terminal must also be in this Area List. (V3 or later)

Press the Right Arrow Key to scroll through the available options alphabetically or press the ON Key to select the Area List by number.

Terminal Lockout.

Normal operation. The Terminal Lockout function will be activated if 5 sequential illegal PIN code entries are attempted at the same LCD Terminal over any period of time. Five attempts is the factory default setting which can be altered by the installer to any number of attempts between 00 (no lockout) and 15.
(Note that prior to V4 this was 6 attempts and could not be edited)

Too Many Tries Wait 60 seconds

When Terminal Lockout is activated, the Terminal keypad will be locked out for 60 seconds and the LCD will display the message shown opposite.

In addition to the LCD Terminal message:

-A "Module Lockout" entry will be logged into Review.

e.g. Jun07 07:23:42.7 Module Lockout: LCD Term. #003

-System Input Txx:S07 "Too many tries" will go into alarm.

The System Input, S07, will reset when the next valid PIN code is entered.

T01 Enhanced Lockout? n

This screen, when set to Yes, enables Enhanced Terminal Lockout. (V4 or later)

Enhanced Lockout provides two additional lockout features using the status of the LCD Terminal Auxiliaries X07 and X08:

1) An Auxiliary Timer can be programmed for Txx:X07 to define the period in which the number of sequential illegal PINs must be reached.

Any valid PIN code will reset the timer and the illegal PIN count.

2) An Auxiliary Timer can be programmed for Txx:X08 to define the period in which the Terminal will remain locked out.

This feature provides enormous flexibility for Terminal lockout operation allowing:
-The time periods for these functions to be defined independently for each Terminal in the system.

-Auxiliary Timer programming (<MENU>, 5, 5) to define the time period to be programmed from 1 to 255 seconds, OR from 1 to 255 minutes.

Too Many Tries Wait

When Enhanced Terminal Lockout is activated, the actions are the same as for normal Terminal Lockout except that the Terminal keypad will be locked out for the programmed time period and the LCD message will not display the period.
(As shown opposite.)

T01 Maximum Attempts: 005

This screen allows the Maximum number of illegal PIN code attempts to be defined between values of 000 (no lockout) and 015. The number of Maximum Attempts programmed applies to both standard and enhanced lockout modes and has a factory default value of 5 attempts. (V4 or later)

Level Messages

System operation is continuously monitored for problems and special conditions. A “Level Message” is displayed on one or more of the LCD Terminals if such a condition exists and will remain on the LCD display until the condition is rectified.

Message	Description
Had Power Problem	One or more modules do not have AC power connected. If accessible, check AC power is connected and switched on.
Had Battery Problem	One or more modules have low battery voltage.
Had Network Problem	One or more modules have stopped communicating with the Control Module. There may be cable damage or a module problem.
Had Comms Problem	There is a problem with one or more Comms Tasks. eg. Central Station, PC, Printer etc. Alarm reporting may be compromised.
Some Inputs latched/isolated/tampered/unsealed.	See "View Input States". [MENU 1,5] in the User Manual.
Area about to turn On.	See "Turning Area/s Off". Deferred Area Option in the User Manual.
Area Name, Enter Code	See "Menu Group Options". (C)ancel Holdup [MENU 2,3,1]

Logoff Terminal Messages

Terminals which are logged off still display messages. Latest release Terminals have been designed so that they display the latest level message without the need to cancel previously displayed messages or refresh the screen. The trade-off is more LAN traffic as terminals are individually updated as required.

Messages displayed on a terminal whilst logged off come from 2 sources:

1. By a terminal accepting a broadcast from the Control Module.
2. By the terminal requesting an individual message for that terminal.

Terminal accepting broadcast

Terminal are programmed to accept certain broadcasts from the control module. These broadcasts are:

- A new area alarm message. eg. “Had alarm in .area 001”
- Change of state of a Level Message, eg “Had Power Problem”
- Change of state of Area, eg “Area is off”
- Change of state of a Diary eg “Happy New Year”

The terminal may or may not display certain broadcasts based on programming. Basically, the message shown at any time is the last message that has been accepted by that terminal. Latest elite terminal software (V1.6) divides level messages into 8 levels and applies additional logic in whether a level message will be accepted. If the level message received is a lower priority than the level message currently being displayed then it is discarded. (See section below on level message priorities.)

Level Message Priorities

Whenever a terminal logs off, or the END key is pushed, an individual message is constructed for that terminal by the control module, determined by terminal programming. The actual message displayed is determined by a simple priority scheme:

- Display any area alarm messages if present and allowed OR
- Display the highest priority Level message if present and allowed OR
- Display the highest valid Diary message if present and allowed OR
- Display an area status screen if allowed OR
- Display System Ready.

LCD Terminal Beeper Activation

The Beeper in an LCD Terminal automatically provides an audible warning or indication for many normal operations and alarms etc. The Beeper can also be switched on to provide an audible indication of additional functions by activating:

- Auxiliary 5 on that Terminal. Eg. T01:X05 on Terminal 1, T02:X05 on Terminal 2 etc.
- Auxiliary 4 on that Terminal. Eg. T01:X04 on Terminal 1 etc. for a pulsing beep.

NOTE:

“Pulse Beep” option is available on Elite Terminals only and needs to be enabled in the Terminal configuration options.

To Enter Terminal configuration mode, hold down the HELP Key, short LK2 (Reset), wait 2 seconds and then release the HELP Key.

For example, to programme the Beeper on Terminal 2 to sound during the Entry Delay period, simply assign Auxiliary T02:X05 as the “Entry Auxiliary” when programming the Area.

Auxiliary 4 on the Terminal provides a pulsing Beeper sound and may be utilised in exactly the same manner if desired.

(See “Area Programming” **MENU 7, 1** for details)

Note: An Auxiliary Timer should also be programmed for that Auxiliary with a time period in seconds to guarantee that the Beeper will turn off again.

(See “Auxiliary Timers” **MENU 5, 5** for details)

If the Entry Timer in the above example is 30 seconds, programme an Auxiliary Timer for 32 seconds.