

# SIGNALINK Signalink Technologies Inc FIRE-LINK® II

## BUILDING MANAGER'S GUIDE

**INTRODUCTION:** This Guide briefly describes the operation and use of the NMC Panel of the Fire-Link® II System. It illustrates certain conditions that may occur, how to interpret those conditions and actions that should be taken. It does not explain how to program, alter or make changes to the Fire-Link® II System. Nor does it explain the operation of the building's fire alarm control panel or any other accessory connected to fire alarm control panel. A technician will make those changes.

### ALARM SILENCE LIGHT (amber)

#### NOT NORMALLY USED

Normally an alarm cannot be disabled from the NMC panel (only from the fire alarm panel) and **this light is not used**. This light is only used in the "stand-alone" mode which is very uncommon (see separate technical note), and it flashes when an alarm has been disabled.

**FIRE ALARM LIGHT (red)**  
Off - NORMAL, no Fire Alarm  
On - FIRE ALARM



**LIQUID CRYSTAL DISPLAY (LCD) SCREEN** has 4 lines of 16 characters each and provides feedback and status to the building manager or installer.

### BUZZER

The Buzzer may beep as follows:

- NORMAL - OFF**
- TROUBLE - BEEPING**
- FIRE ALARM - ON Steady**

**Press the "ACK" key to silence the buzzer.**

**The NMC panel buzzer cannot be silenced during a Fire Alarm (except if stand-alone).**

**LAMP/DISPLAY TEST FEATURE:** Press both **SHIFT AND SPACE** buttons at the same time to test all lights, the buzzer, and the display

### SYSTEM TROUBLE LIGHT (amber)

Off - NORMAL, no trouble conditions exist.

On (blinking & buzzing) - **TROUBLE** - a minor trouble condition exists on the System. Examples include:

1. An ISD is unplugged or has been removed, or
2. An ISD is experiencing a power or battery fault, or
3. The NMC panel has lost AC power, or
4. The NMC panel has a fault

**Press the "ACK" key to silence the "Trouble" buzzer (light stops blinking).**



### AC POWER LIGHT (green)

On - NORMAL - NMC AC Power is on.  
Off - when NMC panel AC Power is off

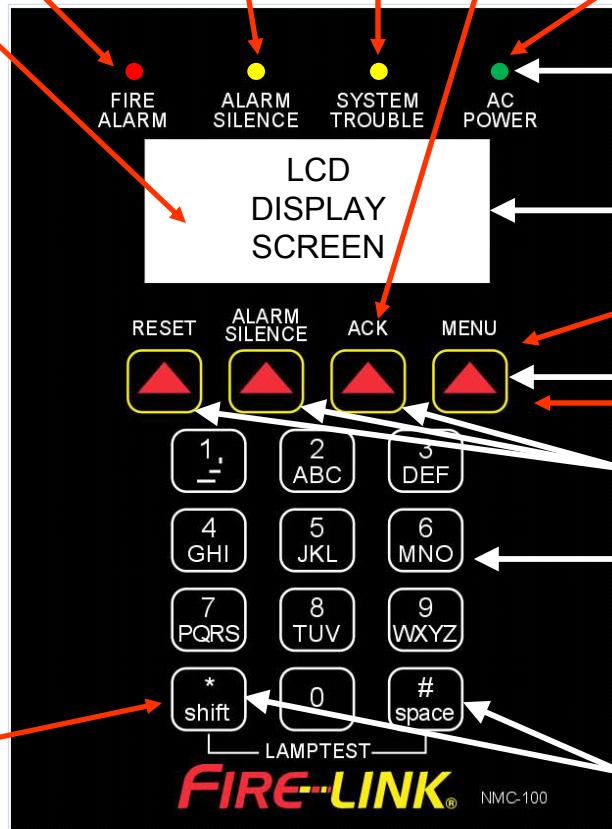


Figure 1

Network Monitoring Controller (NMC Panel) User Interface

Status Indicator LEDs

### MENU KEY

The menu key allows the user to view certain system information, or to enter passcode-protected access levels to change parameters

LCD Status Display

Menu Key

Control Keys

**INPUT KEYS**  
Allow building manager and technician to input numbers and letters

LED and LCD Test Keys

### CONTROL KEYS

Control keys only act as labeled (Reset, Alarm Silence, Ack) when in "stand-alone" mode which is very uncommon.

**Normally they have the function displayed on the lowest line of the display, i.e. they are "function" keys, and may be used for navigation (see later)**

**OPERATING THE NMC PANEL:** The NMC panel can be in one of three operational states:

- **NORMAL State:** There are no trouble or fire alarm conditions present.
- **TROUBLE State:** A (minor) system trouble condition has been detected with either the NMC panel or one or more In-Suite-Devices (ISD's), or with the AC Power. **Press the "ACK" key to silence the "trouble" buzzer.**
- **FIRE ALARM State:** A fire alarm condition exists. **Normally only the Fire Department can silence the fire alarm and buzzer from the Fire Alarm Control Panel (non-Signalink panel)**

**A TROUBLE State and FIRE ALARM State may occur at the same time but the FIRE ALARM state is the highest priority.** The NORMAL State cannot exist if a fire alarm condition or a trouble condition is present.

## NMC PANEL DISPLAY SCREEN—TYPICAL NORMAL DISPLAY

The display has two functions: first it is able to show the building manager and technician the status of the system; secondly, along the bottom line of the display, it shows the function of the Control Keys directly below. Although these keys are marked RESET, ALARM SILENCE, ACK, and MENU, the keys actually change function at different times, as shown on the bottom line of the display immediately above the keys. ***It is recommended that users ignore the key function (RESET etc) marked on the display bezel, and look at the bottom line of the display for key functions.***

```

FireLink NMC-101
System Normal
2010-01-02 15:30
Log      Menu
```

**Line 1: NMC Panel information**  
**Line 2: System Status**  
**Line 3: Date & Time**  
**Line 4: Function of Control Keys at this point**



**Control Keys**

### A typical normal Display is shown above

Normally from this screen::

- The left-most control key has no function
- The second-left *Log* key allows the operator to view the trouble logs
- The second-right key has no function at this menu level
- The right-most *Menu* key accesses the rest of the menu functions

### NOTES REGARDING TROUBLE LOGS

Whenever a “trouble” is encountered (e.g. when a resident trips his or her circuit breaker) a “trouble” is caused, and an entry is made into the internal “Trouble Log”. The Building Manager may view the trouble log history at any time, without entering a passcode, by pressing the Log function control key (second key from left). If the trouble goes away before the alarm is acknowledged, the Log display will change to an **alternating display of the words *New and Log***, indicating to the manager that a trouble had been present and has gone away.



## TROUBLES

The following is a list of the most common troubles, their most likely cause, and possible solutions. Please note: “troubles” are system issues that need to be addressed in a timely fashion. ***Even if the Panel or ISD is in “trouble” the system will still respond properly to a fire alarm, except for suites where the ISD is not plugged into the AC receptacle.***

In-Suite-Device (ISD) Troubles	Likely Cause	Solution
AC Loss	1) Tripped circuit breaker 2) Poor connection with receptacle 3) ISD is unplugged but is close enough to the receptacle or other wiring to communicate, or is plugged into a switched receptacle	1) Reset the circuit breaker 2) Ensure ISD is securely fastened to wall, ensure receptacle is in good working order, replace receptacle. 3) Ensure ISD is plugged in and securely fastened or not on a switched receptacle.
ISD Missing	1) ISD is unplugged 2) Tripped circuit breaker 3) Poor connection with receptacle Note: if a device is causing continuous “missing ISD” troubles, it could be caused by a permanently turned-off breaker.	1) Ensure ISD is plugged in and securely fastened 2) Reset the circuit breaker 3) Ensure ISD is securely fastened to the wall, ensure receptacle is in good working order, replace receptacle 4) Bypass the ISD if suite is vacant & inaccessible
ISD Battery Fail	1) ISD battery is unplugged 2) ISD battery is faulty	1) Ensure ISD battery is plugged in 2) Replace ISD battery (*)
ISD Strobe Fail	1) ISD Strobe failure (Strobe option only)	1) Replace ISD (*)
ISD Buzzer Fail	1) ISD Buzzer is obstructed 2) ISD Buzzer is faulty	1) Ensure the buzzer opening is not obstructed or has any foreign object stuck in it. 2) Replace ISD (*)
NMC Troubles	Likely Cause	Solution
AC Loss	1) Tripped circuit breaker	1) Reset the circuit breaker
Missing Battery	1) NMC Panel battery has become unplugged 2) NMC Panel battery is faulty	1) Ensure NMC Panel battery is plugged in 2) Replace NMC Panel battery (*)
Date/time loss	1) NMC Panel has been powered down	1) Reset Date and Time—see later

***(\*) Note: These solutions marked with an asterisk should only be serviced by a qualified Fire Alarm technician. If the attempted solutions do not rectify the problem, or if other troubles occur,, contact the Alarm Installation Company for service.***

## NMC PANEL DISPLAY SCREEN—MEANING OF VARIOUS MESSAGES

### LCD Display

**The functions below do NOT need a passcode access**

```
FireLink NMC-101
System Alarm
NAC
```

#### **FIRE ALARM**

The NMC Panel Fire indication and status is controlled entirely by the existing Fire Alarm Control Panel (FACP). In this state no control keys are operational, and the FACP will eventually turn off the Alarm. If configured correctly the FACP may turn off the bells in alarm, but not the strobes.

```
FireLink NMC-101
System Normal
2010-01-02 15:30
Log Menu
```

#### **NORMAL DISPLAY**

Shows current time and date, and allows manager to view the Trouble Log history. **If New and Log alternate, it means there has been a recent trouble that has gone away.**

```
FireLink NMC-101
System Trouble
001 of 004
View Ack Menu
```

#### **ACTIVE TROUBLE (Most recent event is shown first)**

Press **Ack** to silence the buzzer. This screen shows the active trouble “number (e.g. one of 4 active troubles). The user may press View to see the trouble detail.



```
0002 102
2010-01-02 15:40
ISD Missing
<- -> Ack Back
```

#### **ACTIVE TROUBLE DETAIL (after pressing View or Log). Most recent event shows first.**

Shows the active trouble sequence number at top left, and the location (suite number) at top right. Date and time of the trouble are on the second line, The third line shows the trouble type. The <- and -> arrows allow searching backwards and forwards in chronological sequence. The **Ack** silences the buzzer, and the **Back** key takes you back to the previous screen.

```
0030 102
2010-01-02 15:50
ISD Found
<- -> Back
```

#### **INACTIVE TROUBLE DETAIL (after pressing Log after the trouble has been corrected)**

Shows the historical trouble sequence number at top left, and the location (suite number) at top right. The **Ack** button is not functional, because the trouble has gone away. Otherwise this is identical to the Active Trouble Detail.

```
FireLink NMC-101
System Normal
2010-01-02 15:30
BD Log Menu
```

#### **NORMAL DISPLAY, WITH BYPASSED DEVICE**

The BD indicator shows that one or more ISD devices has been “bypassed”, i.e. it will respond to a fire alarm (if plugged in and powered), but will not cause “Trouble” indicators. See later.

```
Loc: 102
VID: 7736AB4C
Bypass: Y
Edit Back
```

#### **DETAIL OF BYPASSED DEVICE (after pressing BD)**

Top line-location of device (suite number). Second line: VID, the permanent fixed ID number of the ISD in question, and Bypass Y = Yes. **To change to a non-bypassed device, press Edit, then press the star key \* to change Yes to No, and press Save.** Devices may only be bypassed in the first place with passcode access—see later.

## PASSCODE ACCESS CONTROL-OVERVIEW

### **LEVELS OF ACCESS**

The functions described above are available to the building manager without need for a passcode, because the functions cannot harm the system in any way. They are merely monitoring functions (except for changing a bypassed device to un-bypassed). However more serious changes require a passcode. There are four levels of access:

- **No passcode required** (system real-time monitoring)
- **First level functions** (usually the building manager’s access level)
- **Second level access** (usually the fire-alarm technician’s level)
- **Third level access**, used only by Signalink-certified staff, for trouble-shooting and passcode recovery, if required.

Levels 1, 2, and 3, each have a different passcode. **Levels 1 and 2 passcodes are shipped with industry-standard values**, and then changed on site by the installer. The default value for level 1 access is 1111, which will normally be changed by the installer and given to you as the system is made operational. Alternatively you can change your own passcode—see next page. Contact Signalink for details if required. Level 3 passcodes are not divulged outside Signalink.

This user guide describes only first-level passcode-enabled functions. The installer’s user guide describes the level 2 functions, which require a level of fire-alarm system technical knowledge not normally available to a building manager. See overleaf for the functions available to the building manager under passcode access.

## MAINTENANCE LEVEL (BUILDING MANAGER) FUNCTIONS

Passcode:

Back

### ENTERING MAINTENANCE LEVEL 1 (Building Manager Level)

In the main screen, **press Menu**. See screen at left. Enter the 4 digit passcode (default value is 1111, which the installer should change on installation).

1 Tests

2 Admin

3 Program

Exit Back

### AVAILABLE FUNCTIONS ARE LISTED AS AT LEFT

Select **1, 2 or 3** to select the desired function.

1 Tests are for a Fire Drill Test only (see below).

2 Admin gets a sub-menu selection for viewing logs, firmware version number, and to set the date and time.

3 Program allows the user to program the NMC Panel or the ISD's—see below.

1 Drill Test

Exit Back

### DRILL TEST

Select **1** to perform a fire drill test, or go Back to the previous screen, or Exit to the main screen.

1 Single ISD

2 All ISDs

Exit Back

### DRILL TEST (Note: This test causes the In-Suite-Device to sound their buzzers and flash the strobe (if fitted). Normally performed by a qualified technician.

Select **1 or 2**. If a single ISD is selected you will have to scroll through the list to find the desired suite number. If all ISDs are to be tested, follow the on-screen instructions. When you press **On** the drill tests will commence, and when you press **Off** it will be terminated. Always press **Off** at the end of the test!!

1 Log Admin

2 Version info

3 Set date/time

Exit Back

### ADMIN (if you press 2 for Admin from the available functions above)

1 Allows the user to view the trouble logs and the alarm logs—just follow the on-screen instructions

2 Provides the firmware version numbers for reference during trouble-shooting

3 Allows the building manager to set the date and time. **NOTE: ACCURATE DATE AND TIME IS ESSENTIAL.** Please **check and correct it at least every month, and after any power blackout**, or removal of AC power from the NMC Panel.

YYYY-MM-DD HH:MM

2010-01-02 16:30

<- -> Back

### SETTING THE DATE AND TIME

If you press **3** from the last screen in Admin, you will get this display at left. It shows the format on the top line and the current date and time below it. Use the <- and -> keys to select the desired value to change, enter the desired values, and then Press **Set** (the word Set appears if any digit is changed). Then press **Exit**. **Note: Use 24-hour time format.**

1 Set Passcode

Exit Back

### PROGRAM THE NMC (SET OR CHANGE LEVEL 1 PASSCODE)

If you select “**3 Program**” from the available functions screen (top of this page), you will be able to follow the on-screen instructions to either program the NMC (the only function available is to set the level one passcode), or to ADMIN ISDs—see below

Loc: 101

VID: 7736AB4C

Bypass N

<- -> Edit Back

### PROGRAM THE ISD (If ISD's are moved from one suite to another)

(Actually this is just editing the registration of the ISD to a particular suite). If you select “**3 Program**” from the available functions screen (top of this page), then select Program ISDs, you will be able to follow the on-screen instructions to program the identity of the ISD's. **Administer ISDs is not normally done by the Building Manager, unless you are well-trained and informed.** You can edit the suite number, see but not edit the VID number, and determine whether or not it is “Bypassed” e.g. when a resident turns off the circuit breaker and leaves on vacation. Use the **star (\*)** key to bypass and un-bypass ISD's.

Normally the NMC Panel is slaved to an existing Fire Alarm Control Panel. Stand-alone mode is very rare and is outside the scope of this user guide. Consult the Technical Note : “NMC Panel Stand-Alone Mode User Guide” for details.



**IT IS RECOMMENDED THAT THIS GUIDE BE PLACED IN A CONVENIENT LOCATION WHERE IT CAN BE READILY FOUND AND USED.**