

VoiceNET

High Rise Multiplex System

Operations Manual



FNV PRODUCT OVERVIEW

The Hochiki FNV High Rise Evacuation System operates in conjunction with the Fire Alarm Control Panel (FACP) in a building to provide automatic audio response to life safety emergencies.

The Hochiki FNV includes all necessary features to provide an effective voice evacuation system. The Hochiki FNV can be custom configured to satisfy the needs of any high rise application.

Fire department authorities can easily take command of evacuation or relocation procedures and emergencies. Building management and fire brigades can monitor and control emergency response even before the professionals arrive.

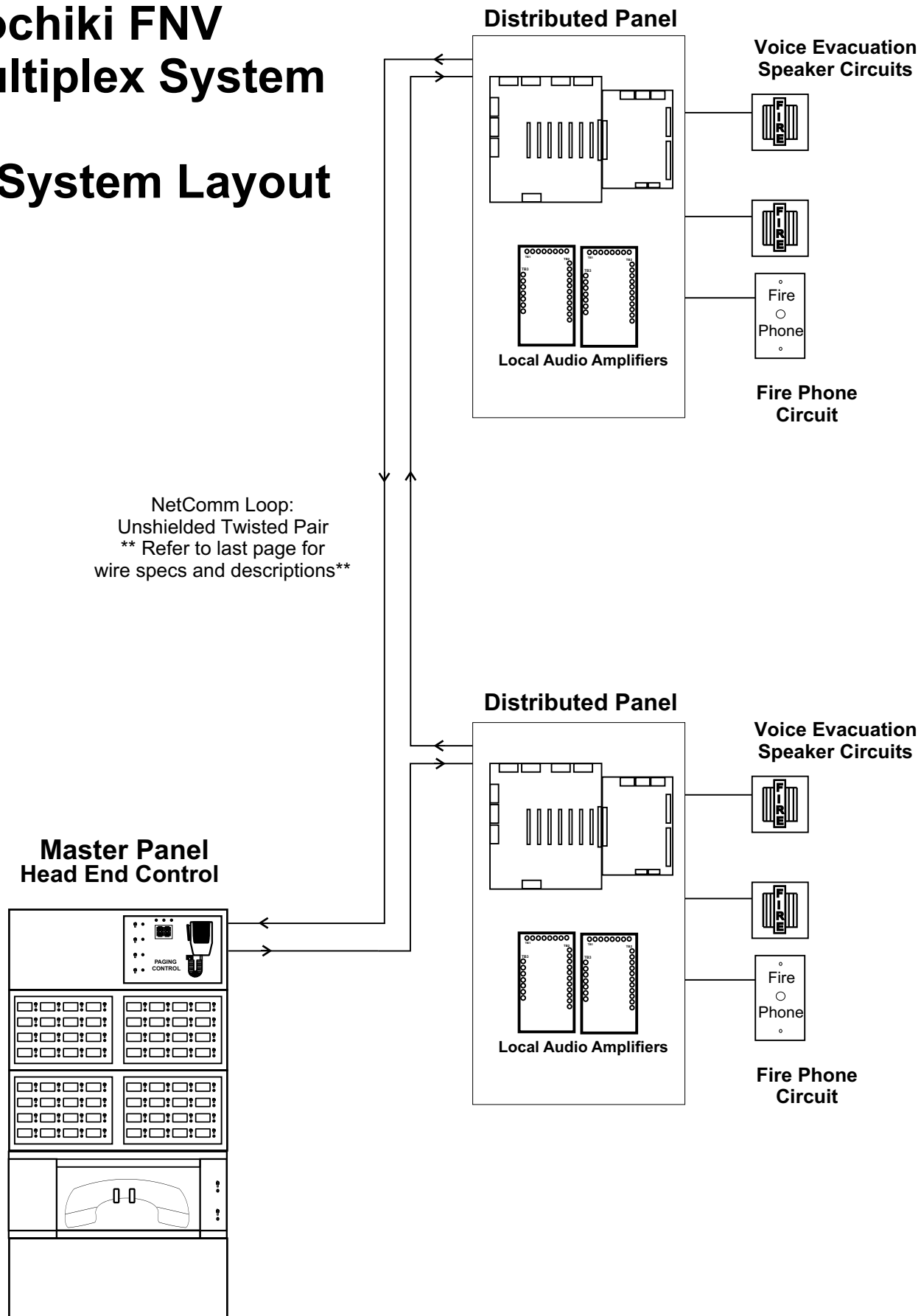
The FNV system includes capacity for 6 channels of simultaneous audio. This provides for evacuation, stay-in-place, or other public address announcements and automatic messages.

Optional Features

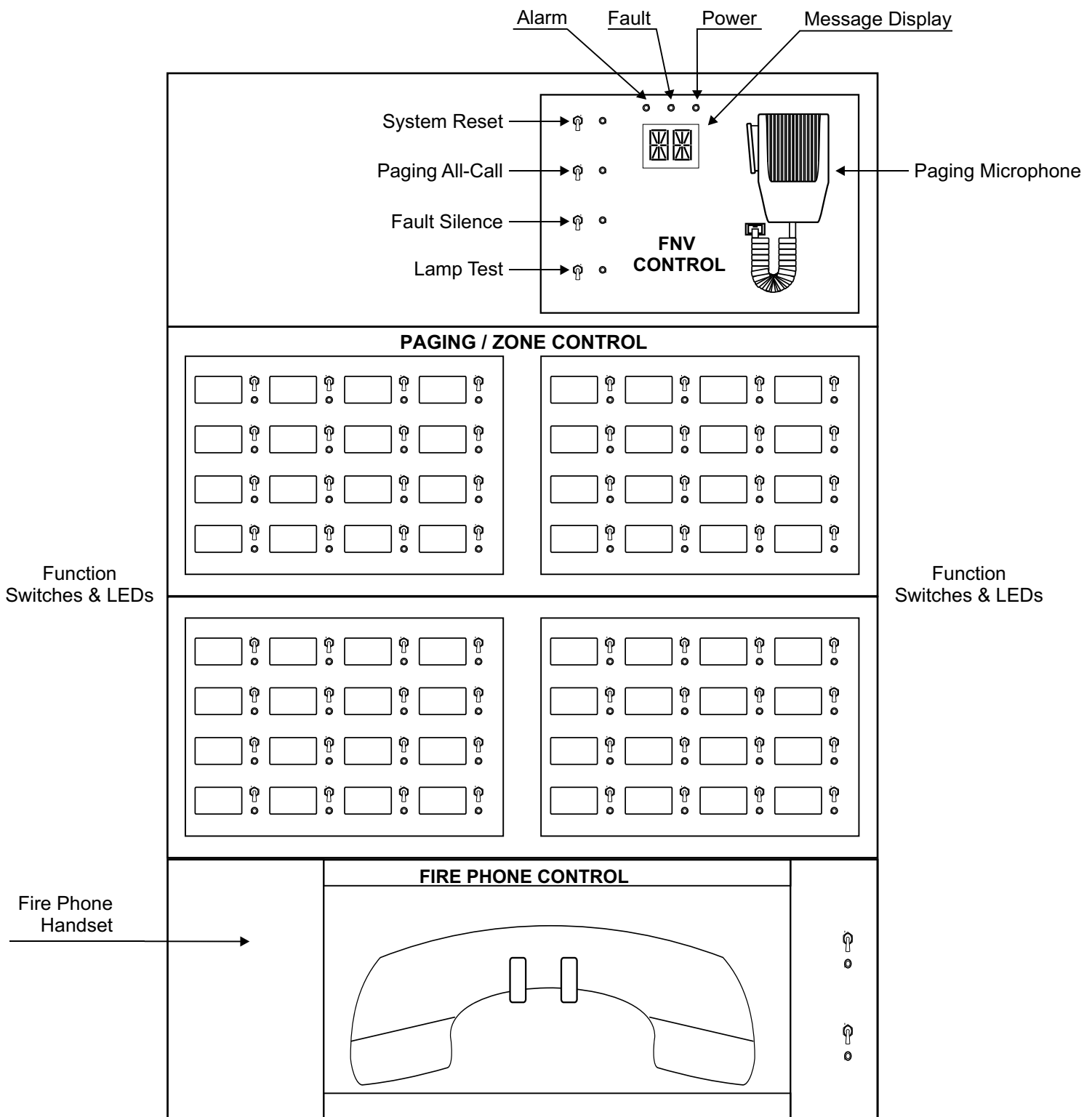
Optional features may include Fire Fighter Phones or Warden Stations as required by local code. Custom messages and tones may be incorporated into the system.

**For technical assistance please contact
your installing dealer or
Hochiki Technical Assistance - 800.845.6692**

Hochiki FNV True Multiplex System Typical System Layout



Master Panel Controls and Displays



SYSTEM FUNCTIONS

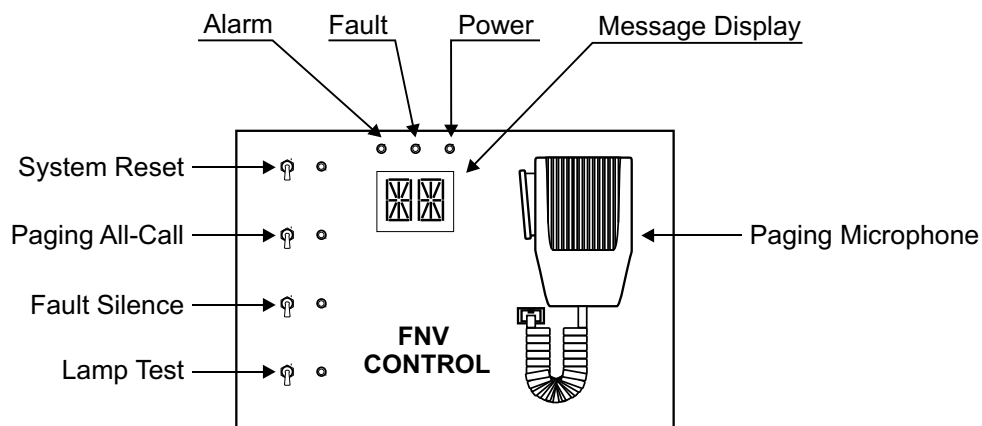
The Control Panel status indicators are "**Alarm**", "**Fault**" and "**Power**".

During "Power On Diagnostics", the system is scanned for active Distributed Panels and peripherals. The Message Display indicates how many Distributed Panels have been found and all event buffers are cleared.

- The green "Power" indicator is on as long as there is power available to the FNV Master Panel.
- The red "Alarm" indicator will be on whenever an Alarm condition exists.
- The yellow "Fault" indicator will be on (blinking) whenever a fault has occurred in the FNV system.

While the fault is active an audible indicator will sound and the Message display will indicate a code for the fault that has occurred. A list of these Fault codes is on page #9. These Fault conditions are not serviceable by the user - please contact your installer. In addition, the audible fault signal will be active (beep tone) as long as the fault persists. The "Fault Silence" switch can be used to silence the audible fault indication, but the visual indicator can only be cleared by an FNV System Reset, a single click will clear the flashing LED if the fault condition no longer exists. The FACP will also indicate a fault as long as an active fault condition exists. It may return to normal or remain in fault depending on the Fire Panels own operational guidelines.

The "All-Call" switch will select all available Evacuation/Paging zones on the Paging/Zone Control panel when clicked. Individual paging zones may be deselected using the Paging/Zone Control switches, but a second click of the "All-Call" switch will deselect the remainder.



SYSTEM FUNCTIONS

Paging / Zone Control Panel Switch/led Status

All switches are three position and rest at the center position. They may be momentarily clicked up or down.

If Configured For Speaker Zones and Manual Message Playback

(LED solid red) Zone selected (click switch up to select, up again to deselect)

(LED flashing red) Alarm condition reported

(LED yellow) Fault detected - audible tone will also be present

(LED solid green) Zone selected for message playback (click switch down to select, down again to deselect)

If Configured For Fire Phone Zones

(LED flashing red) call in - a fireman's phone is plugged in at that location. Audible ring in tone will be active until Call is acknowledged and connected.

(LED solid red) connected (click switch up to connect, up again to disconnect)

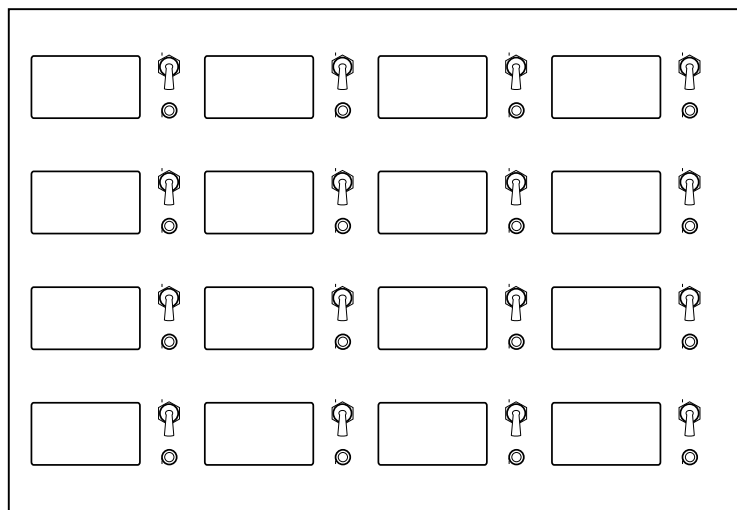
(LED yellow) fault detected - audible tone will also be present

If Configured for Speaker Zones and Zone Expansion is on:

Zone is ready for alarm zone expansion.

If System is in Alarm (click switch down to select, LED will flash red.)

FUNCTION SWITCH PANEL - LOCATED ON FNV Master Panel



SYSTEM FUNCTIONS

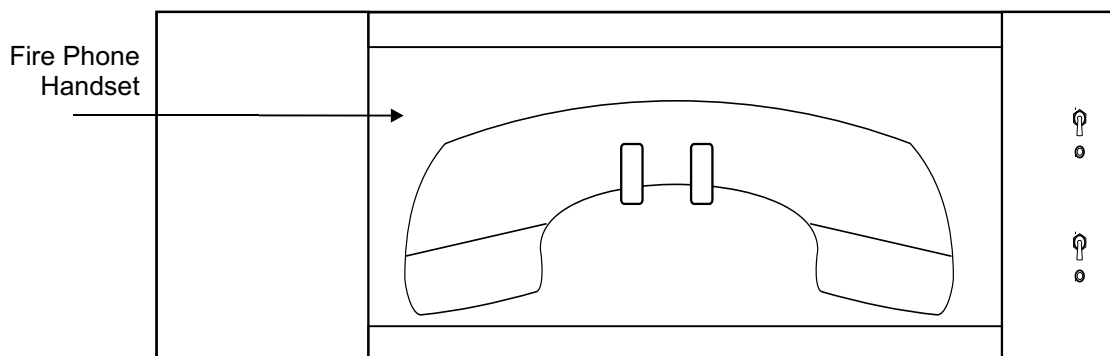
Fire Phone

Fire Phone Handset - When a Fire Phone Handset is plugged into a Fire Phone Jack, the LED on the Zone Control panel associated with that Fire Phone zone will start flashing. A ringing signal will be heard to indicate that a handset has been jacked in. The ringing signal will cease when that Fire Phone Zone is selected (click switch up) . You may then communicate with the emergency worker by picking up the red fire phone handset.

Fire Phone Zone - Normally, only one Fire Phone Zone is selected at a time. Selecting another zone where a handset is jacked in will deselect the other zone(s). Where more than one zone is to be selected at a time, Party Line mode must be selected.

Fire Phone Circuit - If a fault is detected on any Fire Phone circuit, the LED will change to yellow and the audible fault tone will be present.

FirePhone Control - Located on FNV MasterPanel



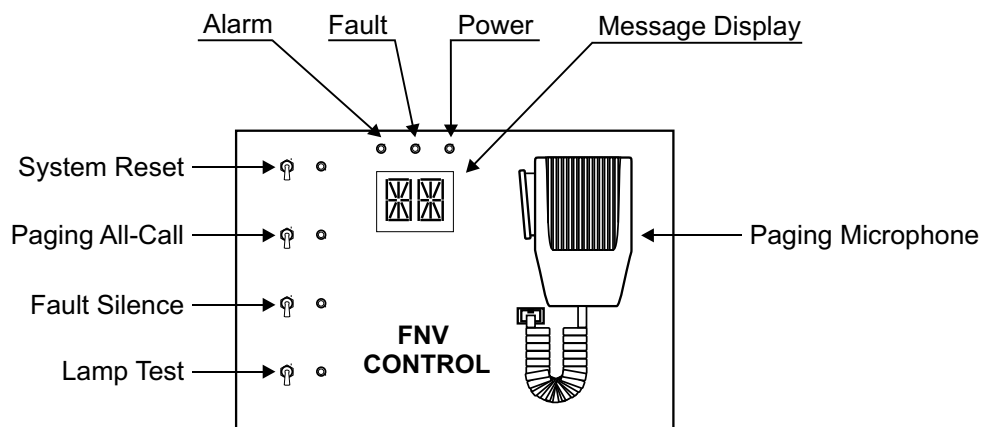
SYSTEM FUNCTIONS

Trouble Codes Reported On Message Display

Unit will flash “-F” and then the two letter code every 2.5 seconds. Multiple codes will alternate every five seconds, display in order and then resume at the beginning..

- DF** Display Fault - One or more of the system zones is in trouble. Associated zone LED will be flashing Yellow. This may be on any Page, Phone, or Control circuit. *(Note 2)*
- AC** AC Power Fault
- BF** Battery Failure
- GF** Ground Fault
- MF** Microphone Fault
- BI** Bus Interface Fault - System communication is compromised
- SF** Scan Card Fault - Switch Interface is in trouble
- RF** Remote Distributed Panel Fault - Will be followed by a # designating which panel is in trouble. *(Note 1)*
- SI** Secondary (Style 7) FNV Bus Fault
- AF** External Audio Fault
- TO** Time Out, system does not see complete data loop, no data on return line

**In the event of any fault condition,
please contact your installing dealer or
Hochiki Technical Assistance - (888) 382-9835**



The Fault LED will flash when a fault has occurred in the system and the audible trouble Annunciator will sound. The specific fault will be displayed on the MMC and, if the fault is associated with a switch, on the SLC (Switch/LED Card) as well.

If the fault is cleared the Fault Message and the audible will reset, but the fault Status LED will continue to flash until the system is reset.

The Fault Messages are displayed one at a time and change every 2.5 Seconds. A complete message is displayed every 5 Seconds (or 7.5 - 10 Seconds if there are numbers or codes to display) in the following sequence.

Displayed	Description
-F	Indicates the start of a Fault Message
cc	One or two character Fault Code
nn	Optional numeric code (indicates # of remote Dist Panel)
nn	Optional numeric code if number exceeds 99

Thus, if the fault were a battery failure, the sequence would be;

```
-F
BF
-F
BF    (repeat until cleared)
```

If this were accompanied by a microphone fault, the sequence would be;

```
-F
BF
-F
MF
-F
BF    (repeat until cleared)
```

If the fault were a failure in a Remote Panel (e.g. Amp Failure in DP#3), the message would be;

```
-F
RF
+0
03
-F
RF
+0
03 (repeat until cleared)
```

Faults associated with a given switch, such as a Speaker Loop would cause the following message with the accompanying switch on the SLC flashing yellow (e.g. an open speaker loop on switch #6).

```
(Switch #6 flashing yellow)
-F
DF
-F
DF    (repeat until cleared)
```

Note 1: The first character of the numeric code displayed (left character, after the the "F" code is displayed) indicates the nature of the Remote Fault. If the Remote Panel has stopped responding the character will be an asterisk (*). If the Remote Panel is trying to indicate a fault that has no associated switch or fault code, the character will be a plus sign (+). This indicates that there may be a ground fault, an amplifier module fault, or other fault condition in that Remote Panel. This must then be investigated at the specific panel in fault.

Note 2: The specific fault location is displayed on the SLC. If the LED for a speaker loop is flashing, it indicates a fault with that speaker loop (open or short). The same applies for a Fire Phone circuit.

FNV SYSTEM OPERATION

All controls are conveniently located on the FNV-MP Master Panel. Refer to the diagram on page 4 for visual identification. There are no user controls on the FNV-DP Distributed Panels.

Using The FNV System For Paging

The FNV Voice Evac System can be used for normal paging functions.

Paging To All Zones:

Click the ALL CALL switch UP.

The LED next to the switch should illuminate Red. The LED for each paging zone should also illuminate Red to indicate that the zones are selected. Press the PTT (Push To Talk) button on the microphone and hold it in while speaking. A second click UP of the ALL CALL switch will de-select all zones and return the unit to normal stand by operation.

Paging To Specific Zones:

For each zone you wish to page to, click its corresponding switch UP.

The LED should illuminate Red to indicate the zone is selected. Press the PTT button on the microphone and hold it in while speaking. Click the switch UP again to de-select the zone. You can also select multiple zones using two different methods. You can simply select each zone manually by clicking the switch for each zone desired UP. The alternate method is to click the ALL CALL switch up, and then de-select those zones you do not wish to page to by clicking their corresponding switches. The LED for those zones will shut off to indicate the zones are inactive. A second click UP of the ALL CALL switch will de-select the remaining zones.

FNV System Operation During An Emergency

When An Alarm Condition Exists:

The FNV Voice Evac System is put into Alarm condition by the FACP. The zones in alarm are displayed by a flashing Red LED. These may include "Floor-Above/Floor-Below", "2 Floors Above", or "Floor-Above" only as determined by local code requirements.

When the paging microphone is used and no Evacuation/Paging Zones have been manually selected, paging will automatically be routed to those zones that are in alarm. The Evacuation Signal will resume when paging is ended as will the Evacuation Message.

If any Evacuation/Paging Zone or Zones are selected manually, paging will take place in the selected zone, or zones only.

In Dual Channel Systems, if "Non-Fire Floor Alert" has been enabled, all floors not broadcasting the Evacuation Signal and Message may begin broadcasting the Alert Signal and Message if so programmed.

When FACP is Reset or Silenced, FNV will cease all Evacuation/Alert signals and resume Standby operation. Paging functions will remain active.

FNV SYSTEM OPERATION

Using The FNV System For Fire Phone Communication

The FNV Voice Evac System may be used for 2-way Fire Phone Communication

When using wall mounted jacks:

Remote handset is jacked into wall plate. The LED next to the switch for that phone circuit will flash Red. A “ring-in” tone will also be audible at the Master Panel. The Master Panel operator connects the call by clicking the switch. Once the call is connected, the Red led will turn solid, and 2 way communication is established. Up to 5 (five) phones may be connected on any circuit at any given time. Only one circuit can be connected at any given time. The call may be disconnected by the Master Panel operator by clicking the switch again. If the handsets are still jacked in, the LEDs will again flash and the ring tone will return. The call may also be disconnected by jacking out the remote handset

When using Phone/Warden Stations:

Handset at Phone/Warden Station is lifted “off hook”. The LED on the Phone/Warden Station will illuminate*. The LED next to the switch for that phone circuit will flash Red. A “ring-in” tone will also be audible at the Master Panel. The Master Panel operator connects the call by clicking the switch. Once the call is connected, the Red led will turn solid, and 2 way communication is established. Up to 5 (five) phones may be connected on any circuit at any given time. Only one circuit can be connected at any given time.

**Some jurisdictions, such as New York City, have different requirements for the LED operation of the Warden Stations, and may require modified and/or additional components. Please contact Hochiki Systems for more details.*

FNV SYSTEM OPERATION

Using The FNV System to play pre-recorded messages

The FNV Voice Evac System may be used to manually play pre-recorded messages.

When playing a message to a specific zone or zones:

The Master Panel operator clicks the switch designated for the desired message. The LED indicator for that switch will illuminate Red. Next, the output zones are selected to receive the message playback by clicking their switches DOWN. The LED indicators for these zones will now illuminate Green. To remove a zone while the message is active, click its switch UP. The LED for that zone will now shut off. To end message playback altogether, click the message playback switch. Its Red LED indicator and all Green LEDs for selected zoned will shut off.

When playing a message to ALL paging zones:

The Master Panel operator clicks the switch designated for the desired message. The LED indicator for that switch will illuminate Red. Selecting the “All-Call” switch will *NOT* send the message to all output zones. A single switch may be programmed to send the message to all zones, or all zone switches can be clicked down. For further details, please consult the Hochiki FNV Programming Manual. To remove a zone or zones while the message is active, click its switch UP. The LED for that zone will now shut off. To end message playback altogether, click the message playback switch. Its Red LED indicator and all Green LEDs for selected zoned will shut off.

When playing the “Walk Test” message:

Broadcasting the “Walk Test” message is a very useful way to test the audio output of a circuit or group of circuits. It plays a pre-recorded, specific message so that technicians and/or Inspectors can test audio output without activating an alarm, or needlessly alerting occupants to a false alarm. The message consists of a chime, followed by a message. The Master Panel operator clicks the switch designated for the Walk Test message. The LED indicator for that switch will illuminate Red. Next, the output zones are selected to receive the Walk Test message playback by clicking their switches DOWN. The LED indicators for these zones will now illuminate Green. To remove a zone or zones while the message is active, click its switch UP. The LED for that zone will now shut off. To end message playback altogether, click the message playback switch. Its Red LED indicator and all Green LEDs for the selected zones will shut off. **This function requires a switch to be programmed for “play message 18” .**