

# FIRE ALARM PANEL

# FAPN104N SERIES

## FEATURES

- Conventional type available for 30,40,50,60,70,80,90 and 100 fire zones
- Alarm verification type (Verification time : 60 seconds)
- Various test functions: fire indication test, alarm verification time test, battery test, automatic after-test resetting
- Self-diagnosis system
- Misoperation inhibit function
- Built-in telephone system
- Back-up power supply (Ni-Cd battery, 24VDC)
- Large fire alarm symbol for easy visual recognition
- Fire zone indication by both zone nameplates and a digital display
- History list for last 10,000 events
- 5 auxiliary LED indicators
- General fire alarm cut-off switch
- Functions programmable at site
- Arrow keys for easy database setting
- 5 programmable option switches for signal cut-off
- Built-in surge arrester for power lines
- 25 programmable dry contacts interlocked by zone alarm signals
- Serial output unit (RS485) is available as option unit

## DESCRIPTION

The FAPN104N series fire alarm panel was developed to improve panel-front recognize-ability and functional operability from the viewpoint of users.

### <Alarm inputs>

Conventional fire detectors and manual alarm boxes are connected to alarm receiving circuits to produce visual and audible alarms on the panel and to actuate alarm bells. The FAPN104N series fire alarm panel has a line-up of 30,40,50,60,70,80,90 and 100 alarm receiving circuits (zones). Each alarm receiving circuit has an alarm verification function.

### <Auxiliary inputs>

Five system signals can be received by five auxiliary receiving circuits to be indicated by three auxiliary LED indicators on the panel. These signals should be non-alarm supervisory signals such as sprinkler water tank water level indication and low-air pressure switch activation on dry-pipe sprinkler system.

### <Signal outputs>

25 programmable contacts are available for signal output. A group of signals for a hydrant pump starting relay box and a group of signals for an annunciator panel are also available.

### <Digital display>

The 3-digit digital indicator displays not only alarm-activated zones but also trouble signals and system event history list.



### <Alarm bell activation>

There are 2 alarm bell activation modes. One actuates all alarm bells at the same time, called All Local Alarm ON. The other actuates a group of alarm bells depending on the location of a fire, called localized alarm.

One pair of terminals is available for the general alarm. The programmable contacts are used for the localized alarm.

### <Self-diagnosis>

The followings are monitored at all times:

- Open circuit of detector wiring
- Connection of the battery and fuse blown-out
- Circuit voltage trouble
- Fuse blowout
- Transmission fault
- Open/short alarms of local bells silencing circuit interlocked with emergency PA system
- Connection fault (speaker)
- Memory trouble
- Database trouble
- CPU error

The fire alarm receiving circuits are tested once a week and the test results are recorded in the history list.

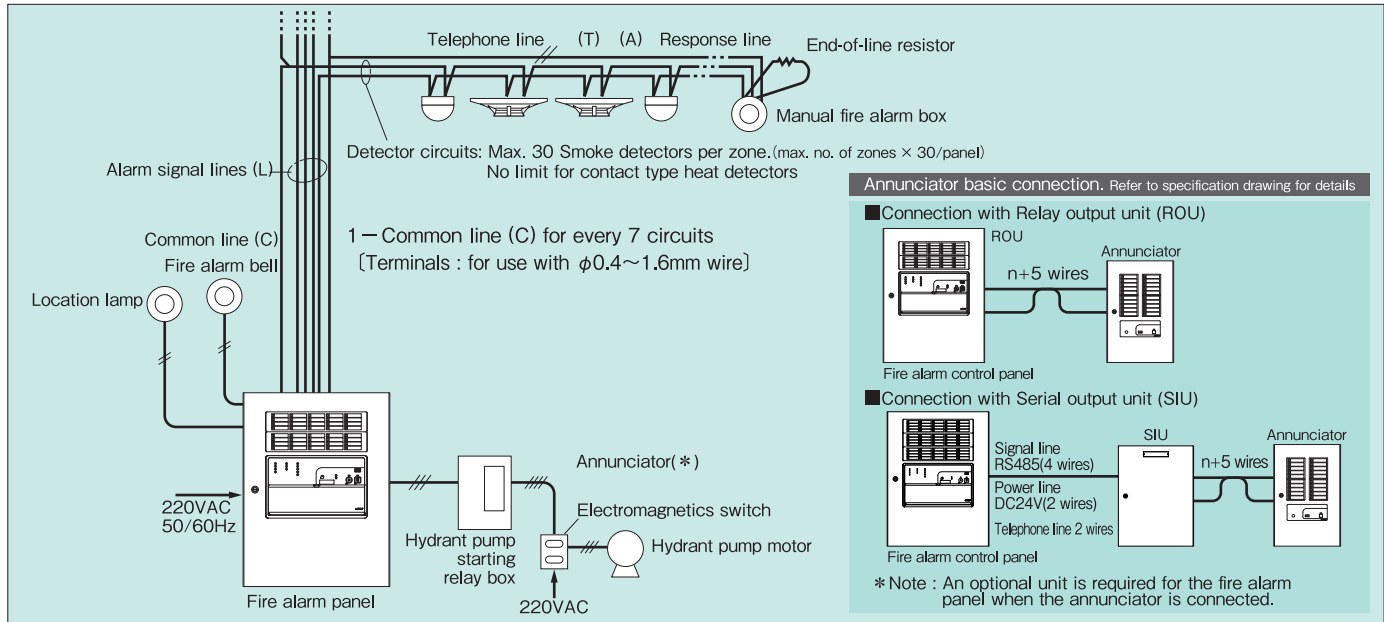
### <Programming>

The following settings are programmable in database setting mode:

- Unused alarm receiving circuits do not need end of line
- Alarm verification on alarm receiving circuits
- Five customizable LED indicators for auxiliary input signals
- Interlocking of 25 dry contacts for zone alarm signals
- Option switches on panel front

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## TYPICAL WIRING DIAGRAM



## SPECIFICATIONS

MODEL NO.	FAPN104N SERIES
TYPE	Conventional type
POWER SUPPLY	220VAC 50/60Hz
AUXILIARY POWER SUPPLY	Ni-Cd battery (24VDC, 1.2Ah (30-50L), 1.65Ah (60-100L))
CIRCUITS VOLTAGE	5, 24, 48VDC, 24VAC
ALARM VERIFICATION TIME	Thermal detector: 10sec.; Smoke detector: 60sec.
POWER CONSUMPTION	Monitoring: approx. 40VA (30-60L), 60VA (70-100L) Alarm: approx. 100VA (30-60L), 210VA (70-100L)
MAXIMUM NUMBER OF DEVICES SUPPORTED	Spot type smoke detectors: 30/zone (max. no. of zones × 30/panel) Alarm bells : 45 (30-50L), 60 (60-100L) (24VDC, 10mA/bell) Location lamps: 14 (30V, 2W/lamp); 56 (24VDC, 15mA/lamp)
AMBIENT TEMPERATURE AND HUMIDITY	0 to 40°C, 20~85% (RH)
ALARM INPUT CIRCUIT LOOP RESISTANCE	Less than 50Ω/loop
END-OF-LINE RESISTOR	10kΩ, 1/2W
MATERIALS (ENCLOSURE)	Steel sheet (t1.2 Front Panel, t1.6 Body)
COLOR	Off-White (Nohmi white): approximating Munsell no. N8.7 or equivalent
WEIGHT	Approx. 22kg (30,40L), 24kg (50,60L), 37kg (70-100L)
DIMENSIONS	700mm (H) × 530mm (W) × 125mm (D) (30-60L) 1,000mm (H) × 530mm (W) × 160mm (D) (70-100L)

## ORDERING INFORMATION

Fire alarm panel	30-zones FAPN104N-B1-30L	40-zones FAPN104N-B1-40L	50-zones FAPN104N-B1-50L	60-zones FAPN104N-B1-60L
	70-zones FAPN104N-B34-70L	80-zones FAPN104N-B34-80L	90-zones FAPN104N-B34-90L	100-zones FAPN104N-B34-100L

## NOTE

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to Nohmi or your nearest distributor.

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