# CONVENTIONAL FIRE ALARM CONTROL PANEL

2PD1-10L



2PD1-10L

## Description

The 2PD1-10L is a conventional fire alarm panel with a stylish wall-mount design supplied in 10 zone format. All detector circuits will be indicated with lighting red LEDs in alarm conditions and flashing in open-circuit fault conditions. The panel has an alarm delay function on detector circuits to reduce false alarms, including a delay ON/OFF function.

The 2PD1-10L utilizes the latest modern technology to achieve a compact, sophisticated and highly reliable product. This panel is suitable for a wide range of environmental risks in industrial and commercial applications. E.g. Shops, offices, warehouses, guest houses, post-offices, mobile phone stations, etc.

The 2PD1-10L is equipped with surge absorbers on the primary side of the transformer to protect its circuit from the lightning and electrical surge.

#### Features

- Alarm delay function
  - Heat Detector : 20 sec. - Smoke Detector : 60 sec.
- Alarm delay ON/OFF switch function
- Supervision of circuit voltage and detector line open-circuit conditions
- Energy saving technology for saving running costs
- Extra compact and slim design
- Light body using flame retardant ACS resin
- High reliability minimizes maintenance costs
- Equipped with surge absorbers
- 1 output for zone alarm bells
- 1 output for common fire alarm signal transfer to an external facility
- 10 open-collector outputs for indications of a remote annunciator
- Easy wiring by Push-in terminals' one-touch connection

#### Remote Test Function

Remote test function is available for PK2B-DP-006 and 2KAD3-P detectors by using a dedicated remote tester.



#### **PK2B-DP-006**

- Distinguishes steam and smoke
- Automatic sensitivity compensation
- Suitable for Shower rooms and Kitchens



#### 2KAD3-P

- Remote-test available
- Automatic sensitivity compensation
- Suitable for Condominiums

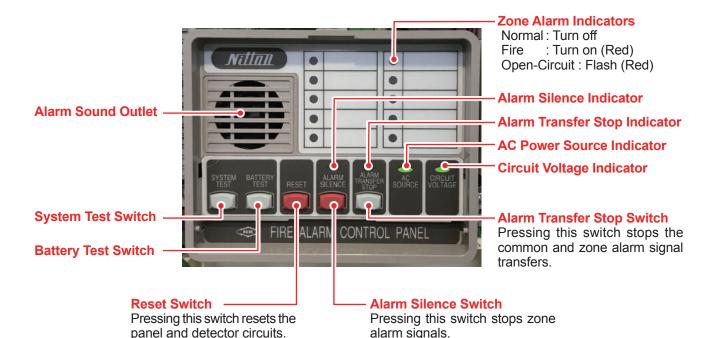


#### **MTT**

- Remote tester
- Smoke sensitivity test
- Dirty device test
- Remote activation test



## Indicators and switches on the operation panel



#### Functions

#### **Alarm Delay ON/OFF switch**

This switch enables/disables the alarm delay function. In alarm delay mode, an alarm signal from a detector will be verified for a real alarm to avoid false alarms.



#### **Push-in type terminals**

Push-in type terminals are provided for easy connection of field wiring and servicing. AWG14 to 22 conductors are connectable to the terminals.



#### Surge absobers

Lightning surge protection devices are equipped as standard to the primary side of the transformer to protect semiconductor components.



## System Test/ Battery Test switches

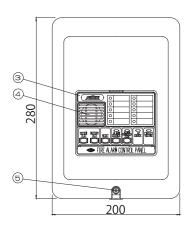
Pressing System Test switch activates all zones for test without bell sounding. Battery Test switch provides a voltage check for the standby battery.

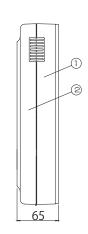


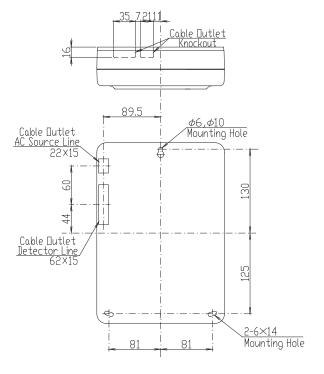


### Dimensions

- 1 Body
- 2 Cover
- ③ Operation Panel
- 4 Alarm Sound Outlet
- (5) Screw

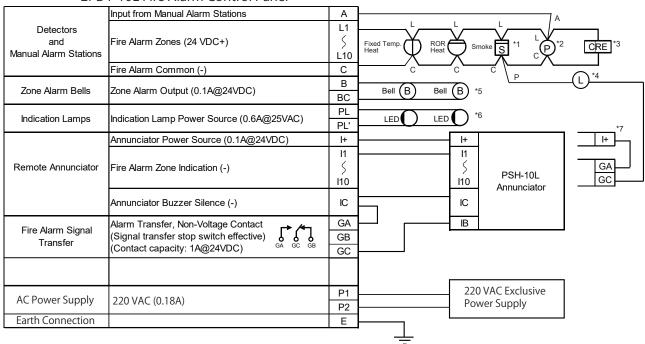






# Typical Wiring Diagram

#### 2PD1-10L Fire Alarm Control Panel



- \*1: Max. number of smoke detectors is 20 pcs. per zone.
- \*2: P = Manual Alarm Station
- \*3: The CRE is a dedicated end-of-line device which comes with the 2PD1-10L fire alarm control panel.
- \*4: L = Remote Indication Lamp. Use I+ and GA, GC' terminals when use remote indication lamps.
- \*5: Max. number of bells is 10 pcs. when using motor bells rated at 10mA, 24VDC.
- \*6: Max. number of indication lamps is 60 pcs. when using indication lamps rated at 9mA, 24VDC/AC.
- \*7: When using the PSH-10L remote annunciator, this wiring is not available.



# ■ Specifications

Specifications	2PD1-10L
AC Power	220VAC ±10% 50/60 Hz
Standby Battery	24VDC / 0.45 Ah, Sealed Type Ni-Cd battery
Nominal Delay Time	60 sec. (For smoke detector: 60 sec. For heat detector: 20 sec.)
Dimensions	W200 x H280 x D65 mm
LED Indicators	Zone alarm, Detector line open-circuit, AC source, Circuit voltage, Alarm silence, Alarm transfer stop
Functions	Circuit voltage monitoring, Open-circuit monitoring
External Line Resistance	50 Ω and less
End of Line Device	CRE
Panel Alarm Sounder	Piezoelectric buzzer
Fire Alarm Signal Transfer	GA, GB, GC (Form-C) Contact Capacity: 1A 24VDC
Zone Alarm Signal Transfer	I1 — I10 (Open collectors) 0.05A per circuit
Output for Zone Alarm Bells	0.1A @ 24VDC (B, BC)
Output for Indication Lamps	0.6A @ 25VAC (PL, PL')
Output for External Power Supply	0.1A @ 24VDC (I+, IC)
Number of Connectable Detectors	Standard type Smoke (2KH series): Max. 20 per zone Heat (2SC series): As required Thermistor type Heat (2SJ series): Max. 15 per zone
Compatible Manual Alarm Station	2ME1A 2MH1A
Compatible Annunciator Panel	PSH-10L x 1 unit
Operating Environment	0°C to +40°C, non-condensation
Terminals	Push-In type, AWG14 to 22
Primary Materials	Flame retardant ACS resin
Body Color	Semi-gloss (off-white)

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All specifications are subject to change without any notice. For more information, contact with NITTAN.



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