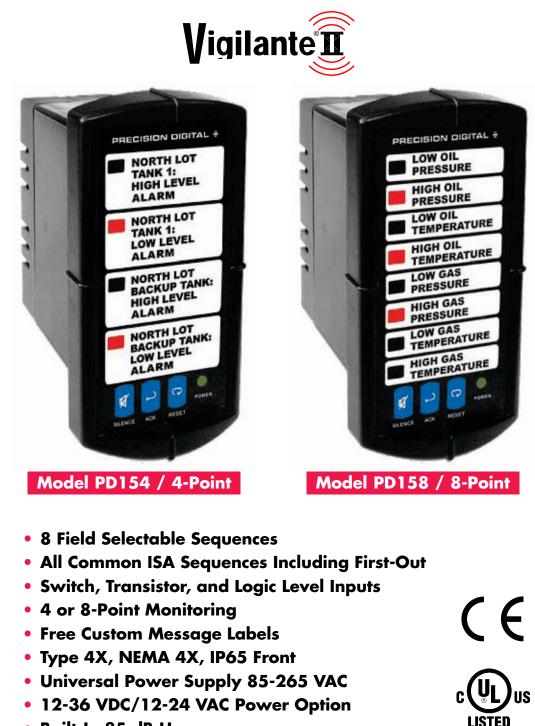
# **VIGILANTE® II ALARM ANNUNCIATORS**



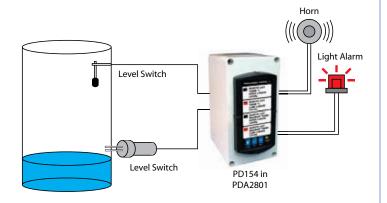
- Built-In 85 dB Horn
- 2 SPDT Relays for Alarm Activated Devices
- 24 VDC Isolated Power Supply (AC Models)
- Multiple-Unit First-Out Indication
- Silence, Acknowledge, and Reset Functions
- Sunlight Readable Indication
- Shallow Depth 1/8 DIN Case



#### PRECISION DIGITAL CORPORATION

# **APPLICATIONS**

## Level Monitoring with Level Switches



The Vigilante® II is ideal for tank level switch monitoring.

- Up to 8 Individually Labeled Level Switch Inputs
- 24 VDC Level Switch Power Supply
- Relays for External Horns and Light Alarms
- Easy NEMA 4X Mounting Enclosures
- Sunlight Readable Indication

## **Temp Monitoring with Trident Meters**



Connect PD765 Trident alarm relays to the Vigilante II for temperature alarm monitoring.

- First-Out Indication for Heating/Cooling Systems
- Multiple Unit First-Out Indication
- Remote Silence, Acknowledge, and Reset
- Internal 85 dB Horn
- Fail-Safe Relays for Critical Applications

#### **First-Out Alarm Indication**

The Vigilante II can be programmed for multiple sequences with first-out alarm indication. This feature indicates the first point of failure of a system when multiple alarms occur.

# **Multiple Unit First-Out Alarm Indication**



**Multiple Unit First-Out Indication** 

If multiple Vigilante II annunciators are connected for multiple unit first-out indication, only one input from all connected devices will display as a first-out alarm.

# **ALARM SEQUENCES**

The Vigilante II Alarm Annunciator can be programmed for all common ISA sequences including A, F1A, F2A, F3A, M, F1M. Selectable ISA -1 (Silence Button), -4 (No Lock-In), and horn disable options. Two popular sequences are detailed below.

#### **ISA Alarm Sequence A**

Acknowledgement and Automatic Reset

#### **Momentary Alarm**

Maintained Alarm

Condition	LED	Horn	
Normal	Off	Off	
Alert	Flash	On	
Normal	Flash	On	
User Acknowledged			
Acknowledge	Off	Off	

Maintaineu Alarin			
Condition	LED	Horn	
Normal	Off	Off	
Alert	Flash	On	
User Acknowledged			
Acknowledge	Steady	Off	
Normal	Off	Off	

## **ISA Alarm Sequence F2A**

First-Out Alarm Indication with Acknowledgement and Automatic Reset

#### **Momentary Alarm**

Condition	LED		Horn
	1 <sup>st</sup> Pt	Next Pt	
Normal	Off	Off	Off
Alert	Flash	Steady	On
Normal	Flash	Steady	On
User Acknowledged			
Ack	Off	Off	Off

Condition	LE	Horn	
	1 <sup>st</sup> Pt	Next Pt	
Normal	Off	Off	Off
Alert	Flash	Steady	On
User Acknowledged			
Ack	Steady	Steady	Off
Normal	Off	Off	Off

**Maintained Alarm** 

# **MODEL PD154 & PD158 VIGILANTE® II ANNUNCIATORS**

## FRONT PANEL

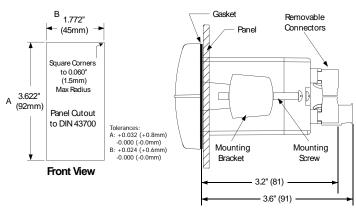
Button	Ŕ	t	9
Description	Silence Horn	Acknowlege Alarm	Reset Inputs
LED	Description		
	Point status indicators		
	Indicates power is on		

**LED Test:** Press and release the SILENCE and ACK pushbuttons to flash the channel indicator LEDs for an LED function test.

**Full Function Test:** Press and hold the SILENCE and ACK pushbuttons for 3 seconds to initiate a full function test.

**External Connections:** All three pushbuttons may be activated remotely via rear terminal connections.

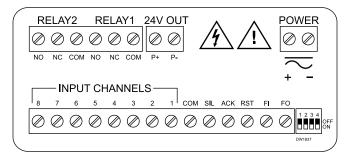
## **MOUNTING DIMENSIONS**



Top View

# CONNECTIONS

PD158 connections for 85-265 VAC powered model.



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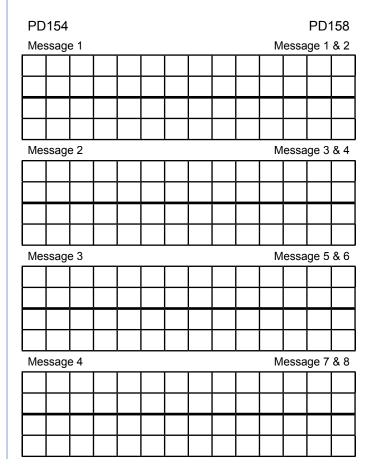
# MESSAGE LABELS

Alarm message labels for the alarm annunciator may be factory printed at no charge, or field printed using a laser printer with clear self-adhesive labels.

Factory printed message labels may be ordered at any time by completing the following form.

Please include label with my order
I have the Annunciator, please send label
Quantity
Name
Title
Company
Mailing Address
City, St., Zip
Phone
Fax
E-Mail
PO#

Area available per message: PD154, 1.25" x 0.60" (32 mm x 15 mm); PD158, 1.25" x 0.25" (32 mm x 6 mm); user may specify any size and length that will fit in this area. Lines of 14 characters max at 9 point type will fit.



## **SPECIFICATIONS**

Except where noted all specifications apply to operation at +25°C.

#### General

**Display:** PD154; Four red LED channel indicators. PD158; Eight red LED channel indicators. One green LED power indicator. **Alarm Messages:** Custom printed adhesive clear labels. Area: PD154, 1.25" x .60" (32 mm x 15 mm), 4 messages

PD158, 1.25" x .25" (32 mm x 6 mm), 8 messages User specified size and length, up to 4 lines (PD154) or 2 lines

(PD158) of 14 characters of size 9 pt fonts.

**Programming Methods:** Rear 4-position switch for sequence selection and horn operation. Three front panel pushbuttons for NO/NC input selection, sequence option, and operation.

Audible Alarm: 85 dB internal horn.

**Noise Filter:** 40 ms debounce on inputs, including external silence, acknowledge and reset.

**Shared First-Out Systems:** 1 ms unit-to-unit delay. Maximum of 200 units in the shared first-out system.

**Non-Volatile Memory:** All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost. **Power Options:** 85-265 VAC, 50/60 Hz; 90-265 VDC, 20 W max; or 12-36 VDC, 12-24 VAC, 6 W max.

**Fuse:** Required external fuse: UL Recognized, 5 A max, slow blow. Up to 6 annunciators may share one 5 A fuse

**Isolated Power Supply:** 24 VDC ± 10% @ 200 mA max Standard on 85-265 VAC powered units only.

**Isolation:** 4 kV input/output-to-power line.

**Overvoltage Category:** Installation Overvoltage Category II: Local level with smaller transient overvoltages than Installation Overvoltage Category III.

**Environmental:** Operating temperature range: -40 to 65°C. Storage temperature range: -40 to 85°C. Relative humidity: 0 to 90% non-condensing.

**Connections:** Removable screw terminal blocks accept 12 to 22 AWG wire.

**Enclosure:** 1/8 DIN, high impact plastic, UL 94V-0, front color: black **Mounting:** 1/8 DIN panel cutout required. Two panel mounting brackets included.

**Tightening Torque:** Screw terminal connectors: Gray: 4.5 lb-in (0.5 Nm). Green: 5 lb-in (0.5 Nm)

**Overall Dimensions:** 4.68" x 2.45" x 4.19" (62 mm x 119 mm x 106 mm) (H x W x D)

Weight: 9.6 oz (272 g)

**UL File Number:** E160849; 508 Industrial Control Equipment **Warranty:** 3 years parts & labor

#### Your Local Distributor is:

#### Inputs

Input Types: NO or NC switches: No external excitation required. Open collector transistor (NPN): Open circuit voltage approx. 3.3 VDC. Logic Levels: LOW = 0 to 0.9 VDC, HIGH = 2.4 to 28 VDC Update Rate: 41 ms following alarm state; 1 ms for alarm state clear.

**Sequences:** Input follower, ISA Sequences A, F1A, F2A, F3A, M, F1M, and F3M per ISA Standard ISA-18.1-1979 R2004. **Sequence Options:** A, F1A, F2A, F3A, M, F1M, F2M, and input follower with selectable options -1 (silence pushbutton), -4 (no lock-in), and -6 (no horn) per ISA Standard ISA-18.1-1979 R2004.

#### Relays

**Rating:** 2 SPDT (Form C); rated 3 A @ 30 VDC or 3 A @ 250 VAC resistive load; 1/14 HP @ 125/250 VAC for inductive loads. **Electrical Noise Suppression:** A suppressor (snubber) should be connected to each relay contact switching inductive loads to prevent disruption to the microprocessor's operation. Recommended suppressor value: 0.01  $\mu$ F/470  $\Omega$ , 250 VAC (PDX6901).

**Relay Operation:** Relay 1: Alarm state until alarm is acknowledged. Relay 2: Alarm state if any channel indicating alarm condition.

**Fail-Safe Operation:** Programmable independent for each relay. *Note:* In fail-safe mode, relay coil is energized in non-alarm condition. In case of power failure, relay will go to alarm state.

# **ORDERING INFORMATION**

Vigilante II • Alarm Annunciator			
85-265 VAC** 12-36 VDC** Model Model Description			
PD154-6R2-1*	PD154-7R2-0	Vigilante II 4-Point Annunciator	
PD158-6R2-1*	PD158-7R2-0	Vigilante II 8-Point Annunciator	

\*\* All models may be powered from AC or DC, see Specifications for details. \* Quick Shipment Program product, typically shipped within 2 working days

Enclosures and Accessories			
Model	# of Units	Description	Mounting
PDA25 <mark>XX</mark> -V	1-10 <sup>†</sup>	Plastic NEMA 4X Enclosure	Through Door
PDA26 <mark>XX</mark> -V	1-6†	Stainless Steel NEMA 4X	Through Door
PDA27 <mark>XX</mark> -V	1-6†	Steel NEMA 4 Enclosure	Through Door
PDA2801*	1	Low-Cost Plastic NEMA 4X	Through Cover
PDX6901		Snubber 0.01 $\mu$ F, 470 $\Omega$ , Flexible Leads	

Note: XX = the last two digits of the model number

<sup>+</sup> Go to www.predig.com to find individual model numbers.

\* Quick Shipment Program product, typically shipped within 2 working days



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