Touchpoint 4

Honeywell

The Touchpoint 4 controller provides protection of personnel and plant from flammable, toxic and Oxygen gas hazards

Touchpoint 4 Controller

User Friendly
- Self-contained, wall mounted enclosure
- Ultra-clear backlit display
- Intuitive, icon driven, menu system
- Simple push button operation

Easy to Install
- Unobtrusive slimline profile
- Mounting bracket included
- Easy access to all terminals
- Pre-formed knockouts for cable entry

Flexible Operation
- Fully user programmable for scale, units and calibration
- Fully configurable relays
- Compatible with all Honeywell Analytics gas detectors

Common Module
- System status indication
- Built-in audiovisual alarms
- AC and / or DC power distribution
- Common gas and fault alarm relays
- Dedicated drive for up to three remote audible and visual alarms
- Input for remote reset push button

Input Modules
- Accepts up to four channels
- mA and mV inputs for wide range of gas detectors
- Individual channel display
- Gas, range, reading and alarm status
- Two user programmable alarm relays
- Isolated 4-20mA output

The Touchpoint 4 controller provides protection of personnel and plant from flammable, toxic and Oxygen gas hazards when used with up to four Sensepoint gas detectors. Self-contained, fully user configurable and wall mounted, a Touchpoint 4 gas detection system can monitor gas hazards in a large area or several discrete locations from a convenient central site.

Touchpoint 4 may be driven from AC and / or DC supplies and comprises a common display module with up to four individual channel modules. The common module, with backlit display, details the overall system status and includes common alarm relays, remote reset push button input and dedicated drives for up to three field mounted audible and visual alarms. A panel mounted audible and visual alarm is also included.

Input modules are available for use with 4-20mA and mV type gas detectors. Each channel includes a backlit display detailing gas type, measuring range, actual gas reading in both numeric and bar graph format as well as alarm status. Two user programmable alarm relays and a repeated 4-20mA signal proportional to the gas level monitored are included per channel.

The system is fully user programmable via the ultra-clear backlit displays and intuitive menu system. For example, relays may be configured as 'non-latching' (default is 'latching') so that outputs clear automatically on remote unmanned sites. Buttons used for configuration are hidden behind access panels to prevent tampering. A single button is available to all users on the front of the modules to perform a simple self-test or to reset alarms when needed.

The shallow profile is designed for easy location in corridors or reception areas where some larger controllers may be obtrusive. A wall mounting bracket is included to which the controller is attached to simplify installation. All cable entries are made using pre-formed knockouts at the bottom of the enclosure. The hinged front cover latches open to enable full and unhindered access to the terminal compartment for installers.

Event history is recorded as standard on all Touchpoint systems. Times and dates of alarms and power interruptions can be reviewed via the display to provide useful diagnostic information for service engineers and plant operators.

The Touchpoint 4 gas detection system provides comprehensive control of all your gas detection needs.

General Description

Touchpoint 4 is designed for use in safe areas. Electrical installation should follow national guidelines using suitably approved cable and glands (M20 or ¾" NPT) or conduit (¾" NPT). Screened 0.5mm² (20AWG) to 2.5mm² (14AWG) cross sectional area cable should be used where appropriate to minimize unwanted effects from RF sources.
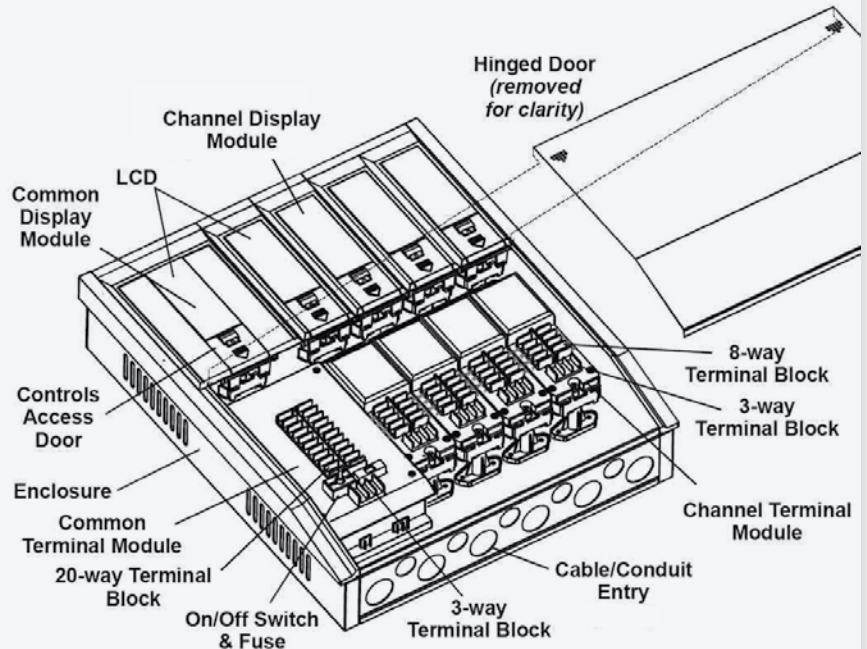
The Touchpoint 4 controller is designed to offer easy and convenient installation. The wall mounting bracket provided serves as a drilling template and enables the controller to be mounted without assistance.

The hinged front cover may be latched open to ensure free and unhindered access to the large terminal compartment.
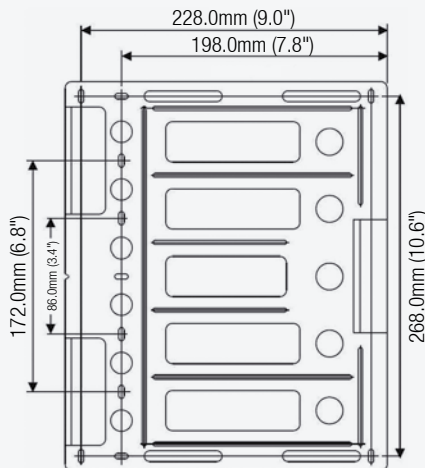
The pre-formed knockouts in the base offer both M20 and ¾" NPT fittings enabling cable glands or conduit to be used during installation.

Dedicated audible/visual alarm drives are powered by the system thereby removing any need for secondary supplies.
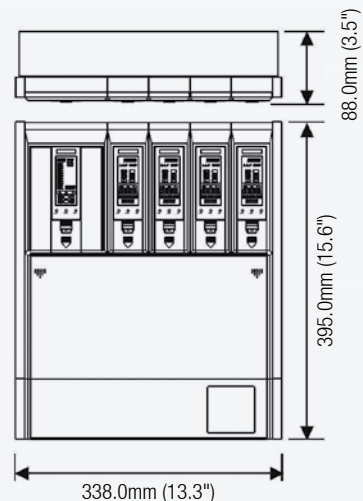
Mechanical

- Hinged Door *(removed for clarity)*
- Channel Display Module
- LCD
- Common Display Module
- 8-way Terminal Block
- 3-way Terminal Block
- Channel Terminal Module
- Controls Access Door
- Enclosure
- Common Terminal Module
- 20-way Terminal Block
- On/Off Switch & Fuse
- 3-way Terminal Block
- Cable/Conduit Entry

Mounting Bracket

228.0mm (9.0")
198.0mm (7.8")
172.0mm (6.8")
86.0mm (3.4")
268.0mm (10.6")

Dimensions

88.0mm (3.5")
395.0mm (15.6")
338.0mm (13.3")

Common Module

Display

- LCD
- History Records - Alarms and Fault, Power On/Off
- Active Channel Number Indicator
- Local Address, Alarms Total
- Menu Icons
- Alarm/Fault Status
- Date
- Time
- Status LEDs
  - ALARM POWER FAULT

Terminal Layout

Connections

1	(L)ive	AC Supply 85-265Vac, 50 / 60Hz 160Wac Maximum
2	(N)eutral	
3	(E)arth	
4	NO	Alarm Relay 1
5	C	
6	NC	
7	NO	Alarm Relay 2
8	C	
9	NC	
10	NO	Fault Relay
11	C	
12	NC	
13	DC +	DC Supply 19-32Vdc 63 Wac Maximum
23	DC -	
14	D +	Unused
15	D -	
16	R1	Remote Reset
17	R2	
18	S1	Dedicated Audible / Visual Alarm Drive
19	S1	
20	S3	
21	VIS	
22	+24Vdc	

Dedicated Audible/Visual Alarm Drive

Maximum Supply
= 3 x 450mA
= 1350mA @ 24VDC

Common Module		
Dedicated Audible/Visual Alarm Drive		
NO	S1	18
NO	S2	19
NO	S3	20
NO	VIS	21
+ 24VDC	+ 24VDC	22
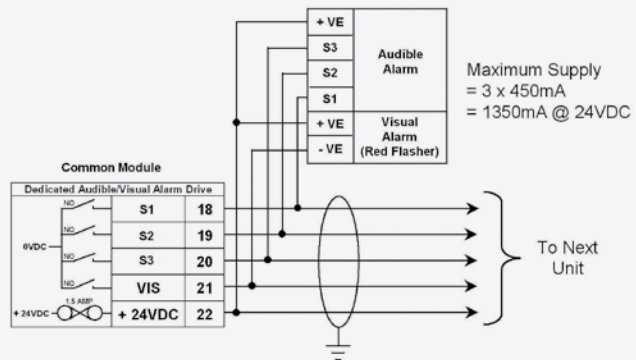
Typical Audible & Visual Alarms

Channel Module (mV or mA)

Display

- LCD
- Range
- Units — kppm %LEL %v/v
- Bar Graph
- Alarm/Fault Status — A1 A2 F
- Gas Reading/Value
- Menu Icons
- Status LEDs — ALARM POWER FAULT

Terminal Layout & Connections

Label

Module
Channel

4	Alarm 1	NO	NO	Alarm 2	8
5		C	C		9
6		NC	NC		10
7		+I	−I		11

Isolated 4-20mA Output

Detector I/P
1 2 3

Sensepoint - Flammable (mV)

Controller — Detector

+VE (1) — (1) +VE — Active
Signal (2) — (2) Signal — Non active
-VE (3) — (3) -VE

Max cable loop resistance 180ohms
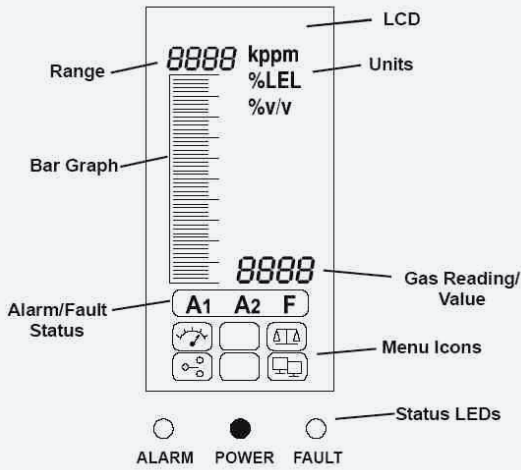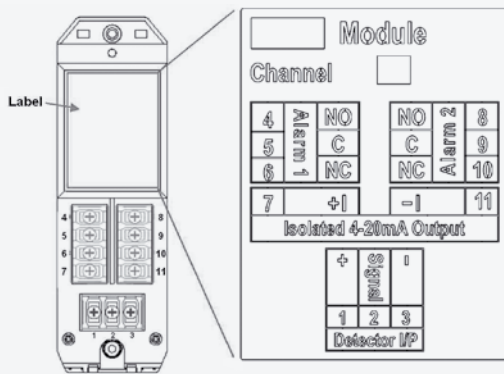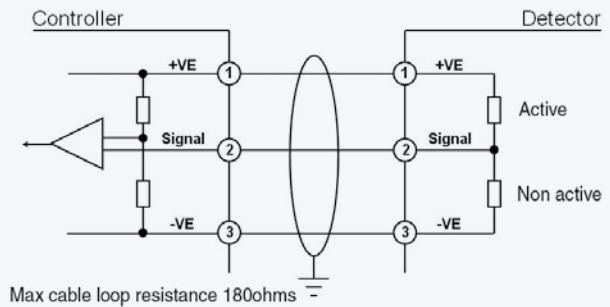
Sensepoint - Toxic & Oxygen (mA)

Controller — Detector

+VE (1) — (1) +VE
Signal (2) — (2) Signal
R_L 100ohms
-VE (3) — (3)
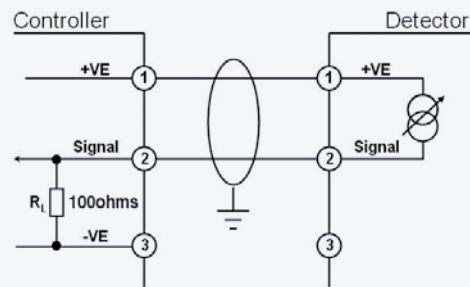
Sensepoint Plus & Pro – All Versions (mA)

Controller — Detector

+VE (1) — (1) +VE
Signal (2) — (2) Signal
R_L 100ohms
-VE (3) — (3) -VE
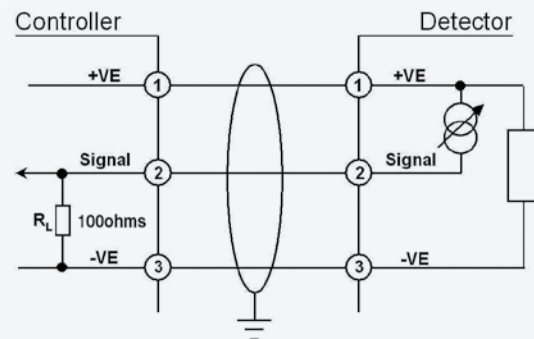
Refer to detector datasheets for full specification of field devices

Technical Summary

General Specification

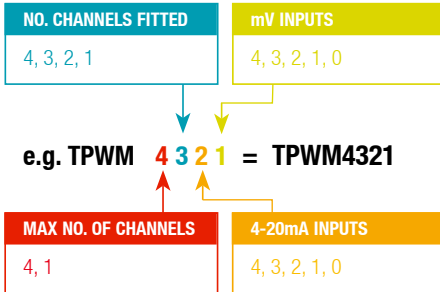|	
Use	Wall mounted 1 to 4 channel control panel for the local annunciation of gas hazards as detected by the Sensepoint range of gas detectors. Suitable for use as an indoor stand-alone, self-contained installation or as part of a larger distributed control system.

Common Operation of Modules

Operation	Single 'Test / Accept / Reset' push button for normal use. Three further hidden push buttons per module for configuration via intuitive menu system.
Backlit Display	System and channel status including gas type, measuring range, units of measure, digital gas reading, bar graph display 0-100% FSD, system status indicators including alarm set point, alarm activated and power health.
Other Indication	Ultra-bright LEDs: Alarm (red), power (green), fault (amber)
Audible Alarm	85dBA at 1m / 90dBA at 1ft, user hush facility, re-activated on next event
Termination	Accessed via hinged front cover (latch to hold open as required). All cable / conduit entry via pre-formed knockouts at bottom of controller. Screw terminals suitable for 0.5mm^2 (20AWG) to 2.5mm^2 (14AWG). Crimped connection recommended.

Environmental

IP Rating	Indoor use, IP44 in accordance with EN60529:1992	
Weight	6kg (13.2lbs)	
Operational	Temperature	-10°C to +40°C / 14°F to 104°F
	Humidity	10 to 90%RH (non condensing)
	Pressure	90-110kPa
Storage	-40°C to +80°C / -40°F to +176°F, 20 to 80% RH (non condensing)	

Common Module

	Common Alarm 1 (A1)	Common Alarm 2 (A2)	System Fault (F)
Supply	85-265Vac, 50 / 60Hz auto-sensing 19-32Vdc Maximum power 160 Wac and / or 63Wdc		
Other	Remote accept / reset push button, normally open, momentary close to activate		
Relays	Common Alarm 1 (A1)	Common Alarm 2 (A2)	System Fault (F)
Rating	SPCO / 3A, 240Vac (non inductive load)	SPCO / 3A, 240Vac (non inductive load)	SPCO / 3A, 240Vac (non inductive load)
Default Setting	Latching Normally de-energised Energised on any A1 alarm	Latching Normally de-energised Energised on any A2 alarm	Latching Normally energised De-energise on fault / power loss
User Configurable Options	Latching / non-latching Energised / de-energised	Latching / non-latching Energised / de-energised	Latching / non-latching Energised / de-energised

Channel Module

Number of Inputs	Up to four channel modules may be fitted to any system. mV and mA types available Input modules are suitable for the following types of detector		
Detector Type	3 wire mV bridge	2 wire, 4-20mA, loop powered	3 wire, 4-20mA, source output
Example	Sensepoint Flammable	Sensepoint Toxic and Oxygen	Sensepoint Plus or Sensepoint Pro
Detector Supply	mV Bridge Input Module Constant current supply: 200mA Self regulating supply voltage subject to cable resistance Maximum loop resistance: 18 Ohms	mA Input Module Maximum detector current supply: 500mA Minimum guaranteed supply voltage from the controller: 18Vdc Input impedance: 100 Ohms	
Relays	Alarm 1 (A1)	Alarm 2 (A2)	
Rating	SPCO / 3A, 240Vac (non inductive load)	SPCO / 3A, 240Vac (non inductive load)	
Default Setting	Latching, Normally de-energised Energise on alarm, Factory setting 20% FSD	Latching, Normally de-energised Energise on alarm, Factory setting 40% FSD	
User Configurable Options	Latching / non-latching, Energised / de-energised Rising / falling (Oxygen), Trip point 10-90% FSD	Latching / non-latching, Energised / de-energised Rising / falling (Oxygen), Trip point 10-90% FSD	
Other	Isolated 4-20mA output proportional 0-100% FSD		

Ordering Information

Ordering Information

NO. CHANNELS FITTED	mV INPUTS
4, 3, 2, 1	4, 3, 2, 1, 0

e.g. TPWM 4 3 2 1 = TPWM4321

MAX NO. OF CHANNELS	4-20mA INPUTS
4, 1	4, 3, 2, 1, 0

For reference only

Detector		Input Module Required	Wires
Sensepoint	Flammable	mV	3
	Toxic	mA	2
Sensepoint Plus	Flammable	mA	3
	Toxic	mA	3
Sensepoint Pro	Flammable	mA	3
	Toxic	mA	3

Notes
- No Channels Fitted Max No. Channels
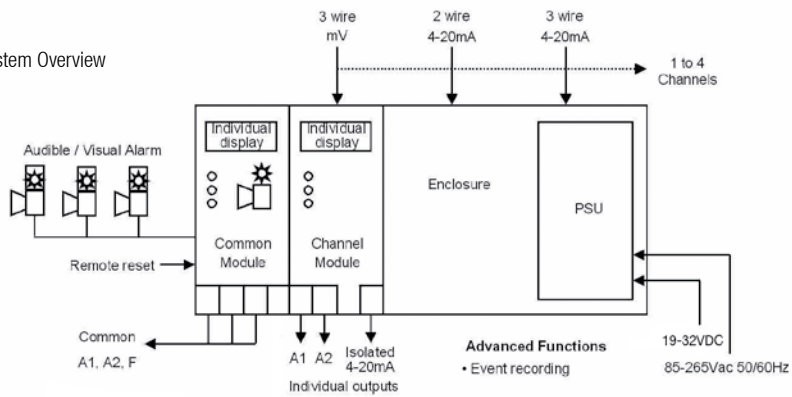- No Channels Fitted = 4-20mA Inputs + mV Inputs

Standard Supply	Each Touchpoint controller is supplied complete with mounting bracket, instruction manual and requisite number of mV and mA input modules with factory default settings
Shipping Details	Shipping carton dimensions: 446mm (17.6") (L) x 417mm (16.4") (W) x 90mm (3.5") (D) Approximate weight: 6kg (13.2lbs)

System Overview

Our Product Range

Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

» Detection of flammable, oxygen and toxic gases (including exotics)

» Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared

» Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)

» Cost effective regulatory compliance solutions

Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces. These include:

» Detection of flammable, oxygen and toxic gases

» Single gas personal monitors – worn by the individual

» Multi-gas portable gas monitors – used for confined space entry and regulatory compliance

» Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

» Full technical support

» Expert team on hand to answer questions and queries

» Fully equipped workshops to ensure quick turnaround on repairs

» Comprehensive service engineer network

» Training on product use and maintenance

» Mobile calibration service

» Customised programmes of preventative/corrective maintenance

» Extended warranties on products

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