3 Installation

3.1 Mount the Unit Directly to the Wall

Figure 2. Wall Mounting Points

3.1.1 Fixings Required
Screw x 4; corrosion resistant, sized according to the fixing surface:
- Screw Head dia. > 4 mm (4.1 mm recommended)
- Screw Body dia. > 5.5 mm (5.8 mm recommended)
- Screw Length > 7.6 mm (3 in) (if using concrete anchor, > 55 mm + anchor depth)

Flat Washer x 4; corrosion resistant, 19.05 mm max. OD, to fit the screws above.

3.2 Mount the Unit Using the Optional Wall Bracket

Figure 3. Wall Mounting Options

Refer to the wall mount bracket instructions (part number: TPLPDM/WB).

4 Wiring and Connections

4.1 Power Connection
The Touchpoint Plus systems are factory set to operate at a switchable voltage of 110/220 VAC, on a single phase, 50 to 60 Hz supply. They can also be wired to DC 18 — 32 V.

Every Unit has a typical peak power consumption of less than 105W, and must be directly connected to supplies via a Main Isolator Switch that leaves protective earth (ground) permanently connected.

The circuit should incorporate a Residual Current Device or Residual Current Circuit Breaker (RCD or RCCB).

Touchpoint Plus systems are not certified for connection to domestic power supplies.

4.2 Expansion Power Module
TPPL has the option to add an expansion unit that has the same power equipment and modules as the base unit except that it has no Motherboard or GUI. See Figure 5 for wiring details.

4.3 AC Power Supply
To confirm or alter the pre-set operating voltage, open the system front cover, locate the SMPS RS-150-24 transformer and, if required, change the voltage selector inserting a screwdriver at the point shown by the Voltage Selector label below.

Figure 4. Switched Mode Power Supply (SMPS) Connections

Note: Mains Earth (Ground) must only be connected to the Protective Earth (Ground) rail, and not to the SMPS.

Regional power cable wires are coloured in accordance with the following code:

<table>
<thead>
<tr>
<th>Wire</th>
<th>Europe</th>
<th>Canada</th>
<th>USA</th>
<th>Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth/Ground</td>
<td>Green/Indigo</td>
<td>Green</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Neutral</td>
<td>Blue</td>
<td>White</td>
<td>Blue</td>
<td>Blue/Indigo</td>
</tr>
<tr>
<td>Live</td>
<td>Brown</td>
<td>Red or Black</td>
<td>Blue/Red</td>
<td>Indigo/Blue</td>
</tr>
<tr>
<td>Line</td>
<td>Earth</td>
<td>Neutral</td>
<td>Black</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Regional Power Cable Colours

Before making any electrical connections or changes ensure:
- The mains supply isolator switch and backup battery switch are in the OFF position.
- The system is set up to operate at the correct voltage.
- Refer to the User Manual for further information on system electrical specifications and power requirements.
- Note 1: Input voltage of less than 20 VDC will fail to charge the backup battery, and the battery will discharge over time.
- Note 2: Remote sensors may need their own power supplies if they exceed 15W power consumption.

4.4 DC Power Supply
It is possible to power the Touchpoint Plus controller directly from a DC 24V supply without using AC supplies at all. However, batteries alone will not suffice as they must not drop below 22 volts.

Note: The system must still be connected to Protective Earth (Ground) when using an external DC supply.

4.5 Field Device Cables
Field Device cabling (sensors, lights, solenoids, etc.) should be appropriate to the zone classification, and in accordance with the device manufacturer’s recommendations. Refer to local and national regulations where appropriate, and to the device user manual.

All sensor field cables must be screened and earthed (grounded) in order to:
- Ensure correct operation of the system
- Avoid spurious signals
- Meet European Standards for RFI and EMC.

Ensure that the maximum loop resistance is not exceeded, as specified by the device manufacturer.

Take account of voltage drops due to line resistance to ensure that the correct voltage level is present at the field device, as specified by the device manufacturer.

The I/O modules will accept wire sizes to a maximum of 2.5 mm².

4.6 Main Module Connections
The Main Module controls the Touchpoint Plus and its ancillary components.

Go to www.honeywellanalytics.com to download the Technical Handbook, which contains full installation instructions.

2 General Introduction
The Touchpoint Plus is an entry level (or upgrade) touch-screen digital controller for light industrial and commercial gas detection installations.

It has eight inputs, with eight inputs available through an expansion unit. It can handle a wide range of milliamp, millivolt and catalytic sensors and analogue inputs, and it can control various outputs such as audible and visible signals and solenoid switches.

The cabinets are constructed from high–impact plastic, are rated IP65, and have fully-sealed, easy opening access. They are supplied with a wall mount bracket or can be directly mounted to any solid vertical surface or rack. Cable entry is via entry glands on the lower side.

Figure 1 shows the basic layout of the Touchpoint Plus Controller.

Figure 1. Basic System Layout

Figure 6. DC 24V Input Terminals

Table 2. Main Module Connections

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Label</th>
<th>Input</th>
<th>Field Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24VDC</td>
<td>mA input 1</td>
<td>24VDC</td>
</tr>
</tbody>
</table>
3 LED Master Indicators and 16 LED inputs, Green, Yellow for Fault/Inhibit, and Red for Alarm.

15, 18, 21, 24 NS Sensitive (–)

Audible Alarm 70 dB @ 1 metre (40 ins)

Table 5. Relay Output Module Connections

Table 6. mV Input Module Connections

Table 7. mA Output Module Connections

Table 8. mA Output Module Connections

4.10 Modbus RTU Option

This is an option that uses Modbus RTU (RS-485) control protocols.

4.11 Relay Output Module Connections

This is an optional module providing 12 relay outputs (see Technical Handbook, Ch.5.2.14)

4.12 mA Output Module

This is an optional module for providing isolation mA loop output (see Technical Handbook, Ch.5.2.13)

4.13 Field Device Circuit Diagrams

4.14 Backup Battery Option

The optional backup battery is shipped in sleep mode. You must read the manual before connecting it to the system.

6 Default Password

The default access password for all levels is “TPPL”, but it is the User’s responsibility to immediately change the passwords as to avoid unauthorized access. Full instructions are contained in the Technical Handbook, and Honeywell will not accept any liability caused by failing to follow these instructions.