Installation Manual

Premier 24iXD

Issue 1

CE

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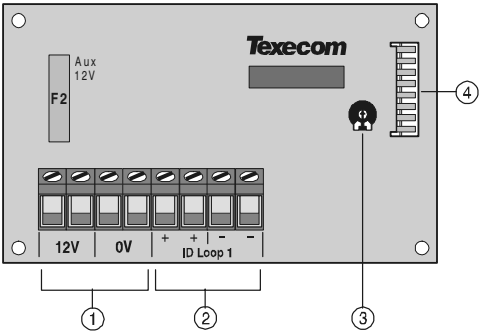
Introduction

The 24*IXD* expander module can be connected to the *Premier 24* control panel to provide the following facilities:

- One iD loop supporting up to 24 biscuits
- Fused 12V output for powering detectors

NOTE The *24IXD* expander module is only supported on *Premier 24* control panels from version 1.8 and above

PCB Layout



① Auxiliary 12V for powering detectors (protected by F2)

② iD Loop (maximum 24 biscuits)

③ Mid Voltage Adjustment Pot (see page 6 for details)

④ Connector for plugging on to JP6 on the control panel

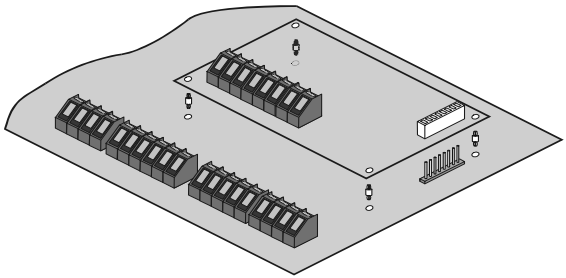
'iD' is a registered trademark of Chloride Safety Systems Ltd.

Installation

Before connecting the 24*IXD* expander module, isolate ALL power from the control panel (AC mains and battery), do not continue if there is still power present on the control panel.

1. Plug the expander onto the control panel, see 24*XID* installation manual for details.
2. Push the four support pillars (supplied) into the four locating holes on the control panel PCB.

3. Align the local expander connector with the 8 way plug (JP6) on the control panel. Push expander into place, ensuring that all four pillars clip into the four locating holes on the local expander.

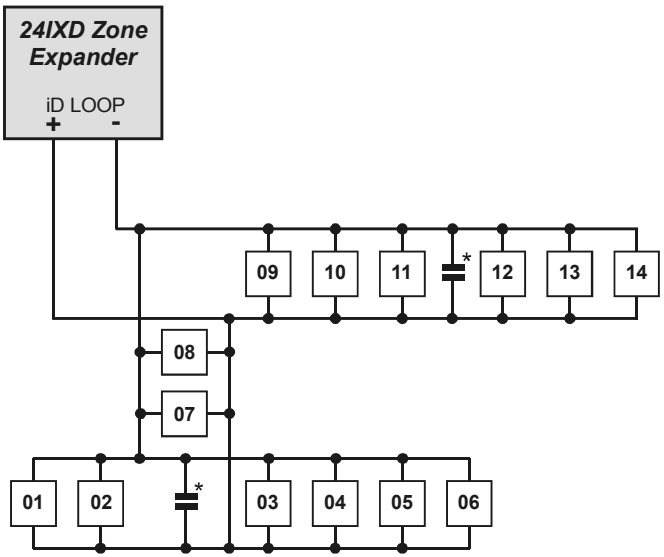


4. Connect the iD devices to the expander module, see “iD Connections”.

5. Reapply power to the control panel and program the necessary options on the panel see page 6 for details.

iD Connections

Each iD biscuit is connected across a two-wire detector loop. Apart from observing the correct polarity, any wiring configuration can be used, as shown in the diagram below:



***** See Note on page over.

Cabling Considerations

The iD loop can be wired using standard 4-core alarm cable; however it is highly recommended that screened cable is used to improve RF/false alarm immunity.

The use of 4-core cable allows 2 cores to be used for the iD biscuit and 2 cores for supplying 12V power for PIR's etc.

The number of biscuits that can be connected per cable run is determined by the impedance of the cable used. Standard 4-core alarm cable (7/0.2mm) has a resistance of approximately 8 Ohms per 100 metres. The table below shows the maximum number of biscuits that can be connected at the end of a single cable run using standard 4-core alarm cable:

Cable Length	Maximum Number of Biscuits
100m	30
200m	15
400m	7
800m	3

If a different type of cable is used, the distances should be re-calculated. e.g., if 7/0.4mm cable is used, a single run of 200m would support 24 devices on the end as the resistance of the cable is halved.

When installing the iD loop it is usually more practical to run several cables from the expander module to the different areas of protection. This effectively reduces any distance problems and makes fault finding much easier.

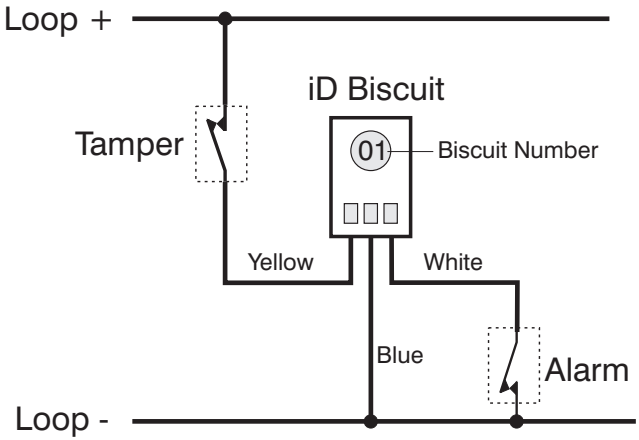
To reduce the risk of induced interference and wherever possible, cables should not be positioned along side mains power, telephone or other data transmission cables, or run within the same ducting or trunking as any other cables.

The wiring for the system's internal sounders (loudspeakers) should not be connected in the same multi-core as the iD loop.

The *24IXD* expander module is supplied with 2 off 10nF capacitors in the spares pack. It is recommended that you connect a 10nF capacitor approximately at the half way point of each iD spur. It is especially important to do this on iD spurs that are less than 30 metres.

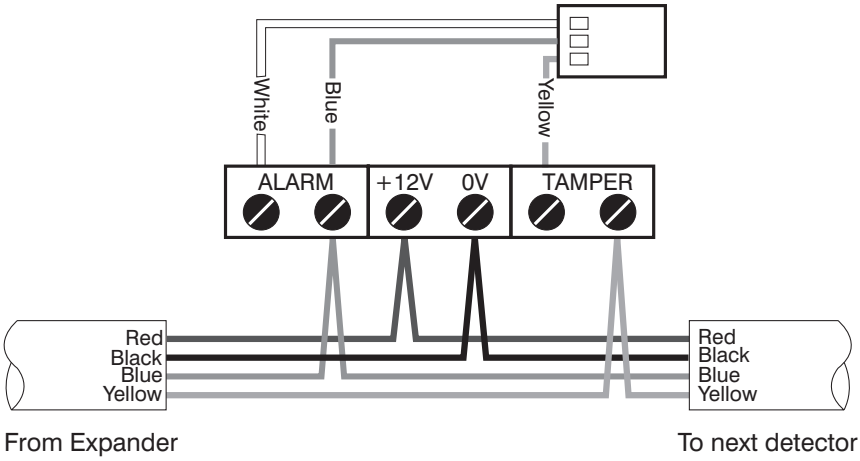
Biscuit Connections

Each iD biscuit is identified by its own number 01 to 24 and contains its own internal sensor which is continuously monitored by the expander module. The diagram below shows the connections to the biscuit for monitoring both tamper and alarm contacts.



When the tamper switch is opened, the iD biscuit is taken offline and a tamper condition is generated by the control panel. If the alarm switch is opened the biscuit's internal sensor changes state and the control panel will see this as an active condition and will respond as appropriate.

The diagram below shows the typical wiring of a biscuit to a standard PIR.



Commissioning and Testing

Programming the *24IXD* Expander

Once the *24XD* expander module has been installed, the following procedure can be carried out in order to view the iD Loop:

1. Enter into the Engineers Menu (1)(2)(3)(4).
2. Select the **Zone Setup** menu (1) and press (Yes).
3. Program the zone wiring for the corresponding zone and biscuit as **iD**

   NOTE An iD Biscuit can only be assigned to its corresponding zone number i.e. Biscuit 1 can only be assigned to zone 1, Biscuit 2 to zone 2 etc.

   Biscuits 25 to 30 cannot be used on this expander as zones 25 to 30 do not exist (see note above).

4. Program the zones as normal, refer to the "Zone Setup" menu in the *Premier 24* Installation Manual.
5. Select the **Engineer Utils** menu (9) and press (Yes).
6. Select the **View iD Data** menu (↕) and press (Yes).
7. Follow the flowchart on the next page for viewing and calibrating the iD Loop.

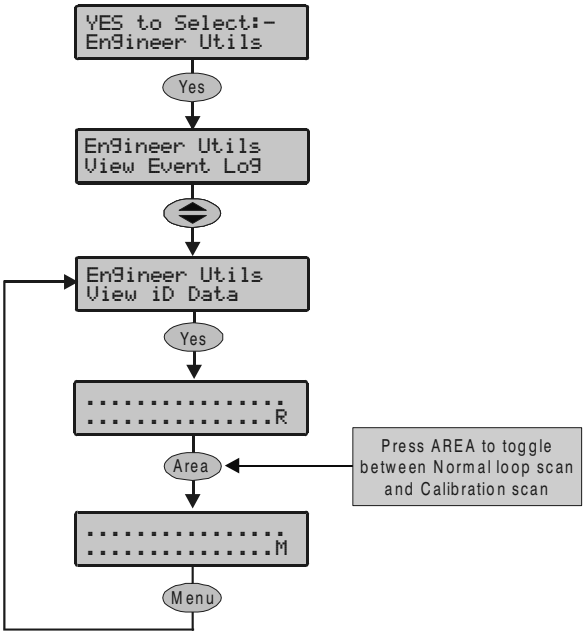
Viewing the iD Data

As shown on the flowchart on the next page you can view the iD biscuit data that expander is reporting to the control panel. There are two modes available that can be selected by pressing (Area) on the keypad:

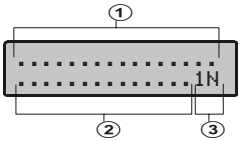
Normal Mode (N)
This is the normal operation mode of the expander and the data being displayed is the average result of 4 successive scans of the iD loop.

Midrail Calibration Mode (M)
This is the calibration mode of the expander and allows the iD loops midrail voltage to be adjusted to suit the number of biscuits connected. Connect a Voltmeter across the iD Loop terminals and adjust VR1 until the loop voltage is 6.35V.

View iD Data Menu



Notes



①Biscuits 01 to 16
②Biscuits 17 to 24
. = Not Fitted/Tamper
1 = Healthy
Ø = Active
③Scan Mode
R = Normal scan mode
M = Midrail calibration mode

Specifications

Technical

Operating Voltage	10 - 13.7VDC
Current Consumption	<100mA
Operating Temperature	-10°C (+14°F) to +50°C (+122°F)
Storage Temperature	-20°C (-4°F) to +60°C (+140°F)
Maximum Humidity	95% non-condensing
EMC Environment	Residential, Commercial, Light Industrial or Industrial

Standards

The *24IXD* conform to European Union (EU) Low Voltage Directive (LVD) 73/23/EEC (amended by 93/68/EEC) and Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC (amended by 92/31/EEC and 93/68/EEC).

The CE mark indicates that this product complies with the European requirements for safety, health, environment and customer protection.

Warranty

All Texecom products are designed for reliable, trouble-free operation. Quality is carefully monitored by extensive computerised testing. As a result the *Premier 24IXD* expander is covered by a two-year warranty against defects in material or workmanship. As the *Premier 24IXD* expander is not a complete alarm system but only a part thereof, Texecom cannot accept responsibility or liability for any damages whatsoever based on a claim that the *Premier 24IXD* expander failed to function correctly. Due to our policy of continuous improvement Texecom reserve the right to change specification without prior notice.

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