# Quick Start Guide Premier 48-W

INS531



CE

# Contents

Contents2
1. Introduction
System Design Considerations
2 System Overview A
System Architecture
Control Panel Features4
3. Installation5
Installation Sequence5
Control Panel5
Control Panel Layout6
Control Panel PCB Layout7
4. Learning Devices9
5. Expander Engineer Keypad Functions
Walktest Mode12
6. Attributes & Operation Modes13
Polling13
System Devices13
Premier SmartKey™13
Commission Mode14
Battery Considerations14
Power Loss14
7. Other Hardwired Devices
Zone Expanders15
Premier COM300/COM240015
8. Specifications16
Control Panel16
Standards17
Warranty17
Notes
Notes19

# 1. Introduction

Texecom has developed a new method of wireless security signalling based on the concept of mesh networking. Mesh-networking is the process whereby every single wireless device is capable of receiving and retransmitting any signal from any other wireless device on the network. The size, scalability and range of the entire system are extended as wireless signalling is no longer limited by point-to point communications. The range of a **RICOCHET**<sup>™</sup> enabled wireless system is greater than previous systems, with multiple devices capable of relaying messages to and from even the most remote locations in a building. Each RICOCHET™ enabled device provides signalling routes to and from Premier control panels. If the wireless communication between devices weakens, the RICOCHET<sup>TM</sup> network 'self-heals' and automatically re-routes communications via alternate RICOCHET<sup>TM</sup> enabled devices. The reliability of the wireless system increases as more RICOCHET<sup>TM</sup> devices are installed. SignalSecurity ™ further enhances network reliability with each device already aware of the number of communication paths available to it.

# System Design Considerations

To ensure correct setup and operation of the Wireless Network it is important that the following procedures are used when learning and placing devices.

# **Learning Devices**

All devices should be learnt before they are placed in their final location. The expander should be in commission mode, (see page 14). This will ensure that they are registered on the receiver or control panel, and that Mesh Networks and routing are established correctly. Please refer to the relevant section in this document to Learn Devices to the system.

NOTE Devices should be at least 30cm's away from the receiver when being learned.

# **Placing Devices**

Once all of the devices have been learnt, they will need placing in their desired location, this should be done by installing devices closest to the Premier 48-W first and then working outwards so that the last devices installed are those furthest away from the control panel.

Make sure to install devices with the receiver in Commission mode. (see page 14).

Devices also have a commission mode which will indicate a secure and valid path of communication to the receiver. (see page 14).

You should wait at least 15 minutes after installing the last device to make sure routing has been correctly established between all system devices.



 $\mathbb{N}$  NOTE For maximum reliability and system integrity avoid long and thin set-ups.



NOTE Devices are capable of hopping through up to two other devices, or a maximum of three hops.

# 2. System Overview

# **System Architecture**



# **Control Panel Features**

### Premier 48-W

- 32 wireless device *Ricochet*<sup>™</sup> enabled receiver onboard
- Expandable to 48 zones via keypads and zone expanders
- 1 x 4-wire data network (standard 7/0.2 alarm cable)
- Up to 4 keypads and 3 zone expanders
- Up to 2 output modules
- 4 independent areas each with 3 part arms
- 4 area arm suites
- 25 programmable User codes
- 500 Event Log (time & date stamped)
- 2 programmable panel outputs (2 x 500mA )
- 1.0 Amp power supply
- 32 Event Alarm Log
- 500 Event Mandatory Log
- 8 programmable digicom outputs (100mA each)
- 32 character zone text
- Facility for Plug-on Digimodem (Com300/2400/)
- Facility for Plug-on Paknet RP9 Radio-Pad
- Facility for Plug-on GSM Module
- Facility for Plug-on IP Module (ComIP/Chiron/WebWayOne/Emizon) or any supported device
- PC-Com/printer port

# **Power Supply Ratings**

System Standby Times	7 Ah Standby Battery		
Grade 2	Max Power Available from control panel	Grade 2 – Rating	
12 Hours	600mA	580mA	

The "Rated Power" of the control panel will depend on the size of the standby battery, standby time and the installation grade:

When calculating the current consumption of the system you must include the current taken by the control panel and all the devices that it powers. If the total current exceeds the "Rated Output" for the grade you are installing to then an additional power supply is required.

# **Connecting AC Mains**

The AC Mains supply is connected to a 3 way 'Euro Type' fused terminal block, which is fitted with a 125mA fuse.



After connecting the AC Mains, fit the mains cover, this can be found in the spares bag.



# **3. Installation**

This manual is a quick start guide and details how to learn Ricochet<sup>™</sup> devices to the system, full programming details for all other system features and functions can be found in the Premier 48 installation manual INS176 contained on the enclose CD or available as a hard copy from your distributor.

# Installation Sequence

Before attempting to install the alarm system, read this section. Once you have an overall understanding of the installation sequence, carefully work through each step.

#### 1: Design the Layout

Make a rough sketch of the premises to get an idea of where the alarm detection devices, keypads, zone expanders etc. are to be located.

#### 2: Mounting the Panel

The control panel should be mounted in a dry area close to an unswitched AC power source and the incoming telephone line (if using a communicator).

NOTE You must complete all wiring before connecting the battery or applying AC mains to the control panel.

#### 3: Install the Keypads and Zone Expanders

Mount and connect the keypads, zone expanders and output modules to the control panel.

NOTE If using a hardwired expander in addition to the wireless devices, numbering should start at address 2.

#### 4: Install the External Sounder

Install the external sounder and connect to the control panel.

#### 5: Other Wiring

Complete all other wiring including speakers, telephone line and output connections etc.

#### 6: Applying Power to the Control Panel

Once steps 1 to 5 are completed, power can be applied to the control panel.

When applying power for the first time, the factory default settings must be loaded. Power should always be connected in the following order:

Connect the red battery lead to the positive terminal of the battery and then connect the black battery lead to the negative terminal

NOTE The panel will only become 'live' when the AC Mains is connected or the 'Battery Kick-start' button is pressed.

Connect the AC mains

For a complete list of factory default settings, see the Premier Quick Reference supplied with your panel.

# 8: Learn Ricochet<sup>™</sup> Devices

Learn devices to the system and place them in their desired location.

# 9: Programming the Control Panel

Please refer to INS176 for instructions on programming the control panel.

#### 10: Testing the System

Test the system thoroughly to ensure that all features and functions operate as required.

# **Control Panel**

#### Mounting

Mount the control panel on a flat, plumb wall using at least three screws of appropriate size.

NOTE It is essential to ensure that none of the fixing slots or cable entries are accessible after fixing.

NOTE Mains cabling must be secured (e.g. with a cable tie) to one of the anchor points provided.

# Wiring the Control Panel

# WARNING: ELECTRICITY CAN KILL

**BEFORE connecting the control panel ALWAYS** disconnect the supply at the consumer unit. If in ANY doubt consult a qualified electrician.



IMPORTANT SAFETY INFORMATION. HAZARDOUS VOLTAGES INSIDE, NO USER SERVICEABLE PARTS, NO USER ACCESS.



NOTE ONLY connect the mains supply to the mains terminal block, NEVER connect the mains supply directly to the PCB.

ALWAYS refer to National Wiring Regulations when conducting installation.

An appropriate and readily accessible disconnection device (e.g. an unswitched fused spur) MUST be provided as part of the installation.

The disconnection device must NOT be fitted in a flexible cord.

Where identification of the neutral in the mains supply is NOT possible a two-pole disconnection device MUST be used.

The building mains supply MUST incorporate appropriate short-circuit backup protection (e.g. a fuse or circuit breaker) of High Breaking Capacity (HBC, at least 1500A).

Use mains cable of adequate carrying capacity for the rated current (i.e. at least 0.75mm<sup>2</sup>).

# **Control Panel Layout**





#### 1: AC Input

#### Connected to the 16.5V transformer.

DO NOT CONNECT THE MAINS SUPPLY TO THE AC INPUT TERMINALS ON THE PCB.

#### **2: Battery Connections**

A 12V rechargeable battery must be connected to these terminals in order to provide continuous system operation in the event of an AC Mains failure. (protected by 1.6 Amp PTC Fuse)

#### 3: Digicom Power & Inputs

These terminals provide un-fused power; remote reset and line fault inputs and are normally used for connecting a stand-alone communicator to the control panel.

#### 4: Digicom Outputs

Outputs 1 to 8 are low current (100mA '-ve' applied) and would normally be used when connecting a stand-alone communicator to the control panel. Each output is fully programmable.

#### 5: Network Data Connections

Network 1 provides connection for the keypads and zone expanders. The '+' and '-' terminals provide power whilst the 'T' transmits data and 'R' receives data.

#### 6: Network Data Indicators

The red LED indicates that data is flowing out of the control panel and normally flashes very quickly. The green LED indicates that data is flowing into the control panel and normally flashes slowly, the green LED flashes faster as more devices are connected.

#### 7: Auxiliary 12V Power

These terminals are for connecting devices that require 12V power (protected by a 0.9A PTC fuse).

#### 8: PTC Protection Fuses

The following fuses are provided:

- PTC (0.9A) Auxiliary 12V Power fuse
- PTC (0.9 A) Network 1 fuse
- PTC (0.9 A) Bell/Strobe fuse

#### 9: External Sounder Connections

These terminals are used for connecting to an external sounder unit.

#### **10: Auxiliary Tamper Connections**

These terminals can be used for monitoring the tamper loop of an auxiliary device.

#### **11: Loudspeaker Connections**

These terminals can be used for connecting up to one  $8\Omega$  or two  $16\Omega$  loudspeakers.

#### 12: Panel Outputs

Outputs 1 & 2 are 500mA '-ve' applied, outputs 3 & 4 are 500mA '+ve' applied and output 5 is a clean contact relay. These outputs are all fully programmable.

#### 13: Load Defaults Button

Press and hold this button whilst applying power to the control panel to load the factory default settings. Press and hold this button for 7 seconds with power already on the panel to restore just the Engineer code to the factory setting of  $(1)(2_{\text{sec}})(3_{\text{sef}})(4_{\text{sef}})$ .



NOTE Loading the factory defaults can take up to 60 seconds to complete.

Loading defaults will only be possible if the NVM has not been locked.

For a complete list of factory defaults, see the **Premier Quick Reference** supplied on the enclosed CD.

#### 14: Enable 2 wire smoke

Panel Output 1 can be used for connecting up to 10, 12V 2-Wire smoke detectors.

#### 15: Ricochet<sup>™</sup> Network LED's

Green LED = Data received by the expander from the panel Red LED = Data transmitted by the expander to the panel. (*The flash rate depends on the mode and RF activity*)

#### 16: Options Switch

Use to select the receiver functionality.

Switch 1 OFF =not used on Premier 48-W. Switch 2 OFF = Premier 48-W **RICOCHET**<sup>™</sup>Mode

ON = Not Used

Switch 3 ON = Impaq Contact-W Wired Input 2 will report as Tamper (*default*)

OFF = input 2 will report as an Alarm. Switch 4 OFF Walk test (see page 12)

#### 17: RICOCHET<sup>™</sup> Eng keypad connection

An engineer's keypad (*Premier LCD* keypad and interface lead) can be temporarily plugged onto this connector to allow system programming and testing. Set the keypad address switches to all ON.

#### 18: RICOCHET<sup>™</sup>Firmware Flash Port

Connections for flasher interface to update  $\textit{RICOCHET}^{\text{\tiny M}}$  receiver firmware.

#### 19: Commission Mode Jumper

Fit when learning and placing devices, remove once complete.

20: Antenna

RF antenna

#### 21: RF LED's

Left = RED Transmit, Middle = GREEN Receive, Right = RED Wireless Network Tick.

#### 22: Plug-on Communicator Connections

This socket provides connection for *Premier COM300/COM2400* plug-on communicators via the lead provided.

#### 23: Ricochet<sup>™</sup> Comm. Port Connection

Serial communications port for connecting to a PC via PC Com/USB Com or Com IP for use with **RICOCHET™ Monitor** Software.

#### 24: Cover Tamper Disable

Disables the lid tamper

25: Cover Tamper

Provides tamper protection for the control panel.

#### 26: Heartbeat LED/Power Light

Flashes steadily to indicate that the control panel is functioning correctly. If the light is ON or OFF all the time, then there could be a problem.

#### 27: Flash Programming Port

For upgrading the panel firmware.

#### 28: Expansion

The Expansion Port can be used for connecting a *60XiD* Zone Expander or an AV Module.

#### 29: Current Reading Pads

To calculate the current draw of the control panel, measure the voltage across the two pads and multiply by 10 i.e. Reading = 34mV (x10) = 340mV = 340mA.

#### 30: Communication Ports

**Com Port 1** is a serial communications port and can be used for connecting a PC running *Wintex* or any supported serial device to the control panel.

**Com Port 2** is a serial communications port and can be used for connecting a PC running *Wintex* or any supported serial device to the control panel.

#### 31: Battery Kick-start Button

When powering up the panel without AC Mains present, this button must be pressed in order to connect the battery. If AC Mains is present this button does not need to be pressed.

#### 32: Engineers Keypad

A portable Engineers keypad can be plugged on here to allow easier access for programming and testing.



When using a keypad as an Engineers keypad, the address must be set to '10'. The keypad zones and lid tamper are not monitored.

# **4. Learning Devices**

# **Option Switch Settings**

Option switches 1, 2 & 4 should be OFF.

# **Configuring Radio devices**

Up to 32 wireless devices of any combination can be learnt on to the system. The expander should be in Commission Mode (see page 14)

Note The maximum number of **Premier SmartKey™** is limited to the number of users available, and is NOT in addition to the 32 devices.

Wireless devices can be mapped on to the system along with any conventional detectors being used.

The top line on the display shows the serial number of the device and also the status i.e. Active, Tamper etc.

The bottom line of the display shows the signal strength and also which zone/user the device is mapped to.

Signal strength should be greater than 30.

Note Signal strength is only displayed when in commission mode. When not in commission mode the keypad will display 255.

The signal range is between 0 and 99

Note In the case of devices that are hopping the display on the panel keypad shows the average of the hopped signal strengths.

Follow the instructions opposite to learn devices to the system, once complete follow the instructions in the relevant control panel manual to programme zone type, attributes and user permissions. Place devices in their final location ONLY after they have been learned to the system.

# **Deleting Devices**

To delete radio devices, select the device number to be deleted then follow the procedure for learning a new device but press the reset 🕥 button on the keypad when prompted to activate device instead of pressing the learn switch and inserting the battery.



# **5. Expander Engineer Keypad Functions**

The Engineers Keypad can be connected directly to the expander, and has the following features & functions.



### **Change Device attributes**

Device attribute changes should be saved by either pressing the  $\sqrt[]{66}$  key after each device change or by pressing the  $\sqrt[]{66}$  key after scrolling through the devices and making multiple changes.

Once changed device attributes will be updated on the next successful poll with the receiver, if however you wish to update the devices immediately please see Update Devices on page 11.



# Change Premier SmartKey™ attributes

**Premier SmartKey**<sup>™</sup> attribute changes should be saved by either pressing the <sup>™</sup> key after each **Premier SmartKey**<sup>™</sup> change or by pressing the <sup>™</sup> key after scrolling through the devices and making multiple changes.



Once changed **Premier SmartKey™** attributes will be updated the next time the **Premier SmartKey™** is powered on.

# (Area) Key Functions

When in Commission Mode (see page 14) pressing the ()/(key will display further information about the device's routing information and signal strength.

#### No Hops

In this example the device is "Home Running"

#### 1 Hop

In this example the device is hopping through device 16 and the relevant signal strengths are shown

#### 2 Hops

In this example the device is hopping through device 18 & 6 and the relevant signal strength is shown.





01 Pir D18:-91 D06:-71 WXP:-55

# **Update Devices**

Used to immediately update devices (**NOT Premier SmartKey™**) attributes when changed in the Device List menu.



If the Update Devices broadcast message fails the following will be seen



In this case the system has not had time to synchronise properly; if you are in Commission Mode (see page 14) you should wait 4 minutes and try again. If not in commission mode you should wait 15 minutes and try again.

# Walktest Mode

Used to initiate & stop Walktest Mode



If the Walktest broadcast message fails the following will be seen



In this case the system has not had time to synchronise properly; if you are in Commission Mode (see page 14) you should wait 4 minutes and try again. If not in commission mode you should wait 15 minutes and try again.

# Walktest Mode

Walktest Mode can be initiated from the Control Panel, Engineers Keypad, and RICOCHET™ Monitor or directly on the expander.

When in Walktest mode LED's are enabled and the response time for devices between activations is reduced to 10 seconds. Walktest will last for 1 hour.

# **Control Panel**

Please refer to the Control Panel installation instructions to enter Walktest mode. The countdown timer does NOT appear on the panel's keypad.

### Expander

Option switch 4 toggles Walktest mode on and off. To enable Walktest mode from the expander switch Option switch 4 to the ON position. To leave Walktest mode turn option switch 4 OFF. The countdown timer will be visible on the engineer's keypad or **RICOCHET™** Monitor.

# **Engineers Keypad**

See page 12. The countdown timer will appear.

# **RICOCHET™** Monitor

Press the will appear.

# **System Status**

Shows various System Details

- Sus: OK = Receiver connected to Premier Network 1. correctly NC = Not Connected
- 2. U:?.?. = Firmware version of the Expander
- JAM = Receiver is being Jammed 3.
- 4. CM = Commission Mode
- 5. Nw: xx = the Wireless Network. (not the Premier Network)
- 6. RIC = **RICOCHET**<sup>™</sup> Panel Firmware
- 7. LEG = Not shown on Premier 48-W



### **Device Status Indications**

On the top line of the display the following may be seen depending on the device and status:-

Ft. = all devices Front Tamper	xx Ft Poll:00 IDxxxxx
Rt = all devices Rear Tamper	xxRt Poll:00 IDxxxxxx
Act = Pir is Active	xx Act Poll:00 IDxxxxxx
R = Impaq Mag & Impaq Plus Reed Switch Open	xx R Poll:00 IDxxxxx
1 = Impaq Mag Input 1 Active	xx1 Poll:00 IDxxxxxx
2 = Impaq Mag Input 2 Active	xx2 Poll:00 IDxxxxxx
5 = Impaq Plus Shock Sensor Active	xxS Poll:00 IDxxxxxx
On the bottom line of the keypad when circu	mstances dictate th

( е following messages may be seen:-

Low Bat. = Low Battery	01 Pir Poll:00 Low Bat
No Info = Receiver has just power and has not heard from the device	red up Ø1 Pir Poll:00 No Info
Dev Flt = Device Fault	01 Pir Poll:00 Dev Flt
Ud Attr = Shows when Device Att have been updated on the receiver b device has not polled in or been upda the Update Devices menu. This displa shows which devices are still out of the Update Devices broadcast messag	ributes 01 Pir put the Poll:00 Ud Attr tted by ay also date if te fails.
Ball Ennand Device her not colled	in and later

Poll Error= Device has not polled in and has been lost on the system.

01	Pi	r.				
Po1	1	Err	0	r.		

# **6. Attributes & Operation Modes**

# Polling

Polling occurs between the devices and the receiver at a predetermined interval of 15 minutes. This helps to conserve battery life. Poll intervals are set to 4 minutes when the system is in Commission Mode. (see page 14). The standard poll time is not adjustable. If the system is powered down for more than 1 hour, the devices will go into an Offline Mode to conserve battery life, in this case it can take up to 2 hours for all devices to come back online, alternatively each device should have its tamper circuit opened to force communications. When forcing the devices to come back online the same setup principles should be used and devices closest to the receiver should be activated first, this will again allow the mesh network to be established.

# **System Devices**

# Auto Mode

Auto Mode is the default device setting for the *Prestige XT-W QD-W*, and should be used for all devices where possible. When in Auto Mode, devices poll at 15 minute intervals. Following activation, devices will not transmit the same activation again for a period of 3 minutes.

# **Always Awake**

This mode should only be used on devices which are required to signal at all times and is the default setting for the *Impaq Contact-W* and *Impaq Plus-W*. For example a *Impaq Contac-W* on a door which you need to know is opened, regardless of system state; or devices such as PA buttons & smoke detectors which have been connected to the inputs of the Magnetic Contact. The number of devices on a system in this mode should be kept to a minimum.

NOTE As this is a dynamic bi-directional system any device which is Always Awake has the capability to shorten the battery life of other devices. Please see the Battery Considerations section on page 14

# **Impaq Contact-W**

The *Impaq Contact-W* has 3 additional inputs labelled MAG 1 COM MAG 2; these inputs can be used for any N/C device. If the Reed switch is disabled the device can be used as a transmitter for any device wired into one of the two inputs.

The two additional inputs are NOT independently programmable of the reed switch, when mapped to a panel zone if either the reed switch or any of the inputs are triggered the zone which the device is mapped too will go active.

**Switch 3** on the expander controls how MAG 2/COM reports to the control panel. By default the switch is on and anything connected to MAG 2/COM will report as a tamper. When switch 3 is OFF MAG 2/COM will report as alarm.

In the case of the *Impaq Contact –W* being used to trigger 24 hour circuits, or where the zone is required to chime, the device attributes should be changed to Always Awake as detailed previously.

The two additional inputs may also be used to transmit N/C signals from any other locally powered or self powered device, depending on the type of device used you should choose the device attributes to suit.

# Premier SmartKey™

### **LED Indications**

#### Premier SmartKey™ Status LED

The Status LED has four colours. This LED cannot be disabled.

- 1. Pink = Power Up or Down
- 2. Green = Successful communication with the system
- 3. Flashing Blue = communication with system.
- 4. Red = Out of Range
- 5. Turquoise = Function Mode



# **PA Activation**

By default PA activation is enabled on the **Premier SmartKey™**; however the control panel should be programmed to enable Radio PA. Please refer to your Control Panel manual for details.

# Enable/Disable Alarm Status LED's

The Alarm Status LED's can be enabled or disabled either from the Engineers Keypad (see page 10), or **RICOCHET™ Monitor**.

# **Auxiliary Functions**

The **Premier SmartKey**<sup>TM</sup> can also be used to activate auxiliary devices from the control panel outputs. The function keys should first be enabled either from the Engineers Keypad (see page 10), or **RICOCHET**<sup>TM</sup> **Monitor**. Once enabled the user can enter Auxiliary mode by pressing the power button when the **SmartKey**<sup>TM</sup> is powered up, the status LED will change from blue to turquoise to indicate Function mode.

Once enabled the outputs should be programmed in the control panel to activate the desired function. Please refer to the Control Panel manual for details on how to programme the outputs.

#### **Instant Disarm**

Pressing the DISARM button without powering up the **Premier SmartKey**<sup>™</sup> will disarm the system, or all areas allocated to the user, whilst the disarming process is taking place the alarm status LED's will change from the ARMED to the DISARMED state.

# **Alarm Status LED's**

The alarm status LED's when enabled will indicate the system status to the user, however considerations need to be given when the user is allocated to more than one area.

In the case of multiple areas being assigned to a **Premier SmartKey**<sup>™</sup> user the alarm status LED's will indicate the status of all areas the user has access too.

For example in a two area system where one area is ARMED and one is DISARMED, both the ARMED & DISARMED LED's will be on. If the user then presses the DISARM button, the area which is currently ARMED will be DISARMED, and vice versa.

If the user has control over three areas and only the DISARMED LED is illuminated, it means that all areas the user is assigned too are DISARMED, pressing the ARM key will arm all three areas.

D)

Great care should be taken if the user is assigned to more than one area or subsystem. It is not possible for the user to determine from the **Premier SmartKey**<sup>™</sup> which areas are ARMED and which are DISARMED. It is important that in these situations the user has access to an alternative means of setting and unsetting the system so that the possibility of false alarms from the system are minimised.



# **Arm Fail Indication**

If the system or any area assigned to a user fails to arm, all three alarm status LED's will flash to indicate an arm failure. In the case of users assigned to multiple areas the whole system should be unset and each area investigated to determine the cause of the arm failure.

# **Commission Mode**

#### Expander

The expander has a Commission Mode, which when operated ensures secure communications with devices on the system. Commission Mode is enabled by the jumper switch on the expander (see item 19 on page 7). When in commission mode the RF signal is attenuated by -6 dB, and will reject weak signals. This means that when devices are placed into their final locations and communications are established, you can be sure that the signal path is secure, and robust.

After entering Commission Mode the expander will also instruct the devices to poll in every 4 minutes, rather than the standard 15 minute poll time. The instruction will be sent with the next available poll to the device.

#### **Device Commission Mode**

At any time, when a tamper is generated on a device it will enter commission mode, the devices will do this regardless of the state of the receiver. Closing the tamper circuit will activate the LED for a short period of time whilst communication with the receiver is established.

The LED will flash, indicating the device is trying to communicate with the receiver, once communication is successful the LED will come on solid and then go out.

If the LED does not flash but simply comes on solid when the tamper is closed, then a valid & secure communication has taken place. If the LED flashes and then goes out, without going solid communication has failed.

This method of commissioning devices ensures that valid and secure communication is taking place and that signals are reaching the receiver. It is recommended that Device Commission Mode is used in conjunction with Expander Commission Mode.

# **Battery Considerations**

Battery life for all devices will be determined by system complexity, the number of devices that hop, and the use of the Always Awake mode.

In a typical system, battery life should be up to 4 years for devices, hopping devices should achieve between 2-3 years.

Always Awake. Mode should **NOT** be used for devices which are subject to multiple activations.

Batteries should only be replaced with an equivalent of those supplied with the devices. Please see the device instructions for details of the correct battery required.

#### **Premier SmartKey™**

The **Premier SmartKey**<sup>™</sup> battery should last in excess of five years in normal use. **Premier SmartKey**<sup>™</sup> batteries are **NOT** replaceable; in the case of a **Premier SmartKey**<sup>™</sup> battery failing the device should be replaced. Please contact your distributor to arrange a replacement.

# Low Battery Warning

All devices, including **Premier SmartKey's**<sup>™</sup> will transmit a Low Battery Warning when there are three months remaining.

# **Battery Maintenance**

The system should be checked for low battery warnings at each service interval or a minimum of 12 months whichever is sooner.

# **Power Loss**

If the power to the receiver is lost for more than one hour, all devices on the system will enter an "Offline" mode to preserve battery life.

When power is replied to the receiver it can take up to two hours for all devices to be recognised by the system.

To resolve this issue quickly each device on the system should be tampered to force communication with the receiver.

The same principles apply to the learning & placing of devices, and as such tampering should start with the device closest to the receiver and working outwards, allowing for the mesh network to be re-established.

# 7. Other Hardwired Devices

# **Zone Expanders**

The **Premier 48-W** can use hardwired expanders in addition to the onboard wireless. When using the **Premier 8XP** or the **PSU200XP** the address of the first additional expander used should be set to 2 or higher.

Expander zones are preset depending on the network address assigned, it is therefore crucial that consideration is given when mapping wireless zones, or zones being used on keypads.

NOTE The onboard wireless expander occupies address 1.

Details are given for the available zones in the associated product manuals. Care should be taken to make sure hardwired zones on expanders are used correctly and any wireless devices or keypad zones are NOT using the zone numbers associated with the expander address.

The table below details which zones are fixed for each expander network address. These cannot be changed and must be used. Radio devices and Keypad circuits can be mapped to ANY zone.

Address	Zones
2	17 - 24
3	25 - 32
4	33 - 40

Premier COM300/COM2400

Carefully lift the control panel PCB and fix the COM unit into the space provided with the connection lead attached.



The red lead should be positioned on the uppermost pin of the COM unit.

The control panel end of the connector should be attached with the red lead on the left most pin of the digi modem connector.



Programming requirements for the COM unit can be found in the Premier 48 installation manual INS176.

# 8. Specifications

# **Control Panel**

Power supply	
Mains Supply Voltage:	230VAC (±10%)
Maximum Total Current Rating	
16.5VAC, 20VA transformer:	1.0ADC
Ripple	<5%
Electrical	
Current Consumption	
Quiescent	<150mA
Alarm (with speaker)	<175mA
Fuses	
Mains (1.0ADC)	125mA, 250V, 20mm
Battery	1.6A, 250V PTC
Auxiliary	900mA, 250V PTC
Bell	900mA, 250V PTC
Network 1	900mA, 250V PTC
Rechargeable Battery Capacity	1.2Ah to 7Ah
Remote Keypads	Up to four
Expanders	3 8XP
Output Modules	2
Zones	0 expandable to 48
Panel Outputs	
8@	100mA switched to 0V
PGM X 2 @	500mA switched to 0V
Speaker Output	Minimum load $8\Omega$
Network	
+	+12V Power
-	0V Power
Т	Transmitted Data
R	Received Data
Environmental	
Operating Temperature	-10°C (+14°F) to +55°C (+132°F)
Storage Temperature	-20°C (-4°F) to +60°C (+140°F)
Maximum Humidity	95% non-condensing
EMC Environment	Residential
	Commercial
	Light Industrial
	Industrial
Physical	
Dimensions	305mm x 405mm x 100mm
Material	ABS
Battery Compartment	Up to t one 12V 7Ah battery
Packed Weight	2.6 Kg

# Standards

Conforms to European Union (EU) Electro-Magnetic Compatibility (EMC) Directive 2004/108/EC.& LVD directive 2006/95/EC & R&TTE Directive 1999/5/EC.

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

EN Standard	Premier 48-W	Premier SmartKey™	Prestige XT/QD-W	Impaq plus-W Impaq Contact -W
EN60950-1	✓	✓	✓	✓
EN61000-6-3	✓	✓	✓	✓
EN 301 489-3	✓	✓	✓	✓
EN50130-4 A1: + A2:	✓	✓	✓	✓
EN300 220-1	✓	✓	✓	✓
EN50131-1	✓	✓	✓	~
EN50131-2-2			✓	
EN 50131-2-6				✓
EN50131-3	✓	✓		
EN50130-5	✓	✓	$\checkmark$	✓
EN50131-5-3	✓	✓	$\checkmark$	✓
EN50131-6	✓	✓	✓	~
PD6662	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

# Warranty

All Texecom products are designed for reliable, trouble-free operation. Quality is carefully monitored by extensive computerised testing. As a result the *Premier 48-W* is covered by a two-year warranty against defects in material or workmanship.

As the *Premier 48-W* 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 48-W* failed to function correctly. Due to our policy of continuous improvement Texecom reserve the right to change specification without prior notice.

Premier is a trademark of Texecom Ltd.

Prestige is a trademark of Texecom Ltd.

SmartKey is a trademark of Texecom Ltd.

*Ricochet* is a trademark of Texecom Ltd.

SignalSecurity is a trademark of Texecom Ltd.

© TEXECOM LTD 2011

# **Notes**

# Notes



Texecom Limited, Bradwood Court, St. Crispin Way, Haslingden, Lancashire BB4 4PW, England.

# **Technical Support:**

UK Customers Tel: 08456 300 600 (Calls charged at local rate from a BT landline. Calls from other networks may vary.) International Customers Tel: +44 1278 686197 Email: techsupport@texe.com

© Texecom Limited 2011

INS531