

Installation Manual

Odyssey X Series

INS627-2



Texecom

Introduction

Odyssey X is a new range of modular external warning devices available in standard or backlit variants. The modular design allows for a choice of front covers to be installed on the common backplate. Please see the specification table for full details of each model. Features include:-

- Modular design - Common backplate
- Backlit variants available
- High Intensity White Comfort LED's
- Single or twin piezo versions (Grade 2 or 3 respectively)
- Integral spirit level
- Clip on hinged lid with two "park" positions for easier installation
- Combined inner lid and removal from mounting tamper with adjustable sensitivity
- Adjustable mounting plates allowing "In situ" drilling
- Choice of **Odyssey X1** or **X3** front covers
- Backlight may be wired to panel outputs for increased functionality
- Optional Graphic inserts for company branding

Backplate Variants

Several models are available, all are the same size and use the same covers.

Model	Features
Odyssey X	Grade 3 Sounder & Strobe Unit Twin Piezo
Odyssey X-B	Grade 3 Sounder & Strobe Unit with Backlight Twin Piezo
Odyssey X-E	Grade 2 Sounder & Strobe Unit Single Piezo
Odyssey X-BE	Grade 2 Sounder & Strobe Unit with Backlight Single Piezo
Odyssey X-W (<i>Premier Elite V2.11 or later</i>)	Grade 2 Wireless Sounder & Strobe Unit Single Piezo
Odyssey X-D	Decoy backplate without electronics

Covers Options

Outer Colour & Infill	Lens Colour
Black Frame+ White Insert	Blue, Red, Opaque White & Green
White Frame + White Insert	
Compatible covers	X1 Cover or X3 Cover

Graphic Inserts

Odyssey X sounders can accommodate a graphic insert, rather than traditional screen printed lids. Graphic inserts can be ordered directly from Texecom.

Simply follow the instructions and submit your artwork at the following web address. <http://www.texecom.com/uk/branding.php>

Once you have approved and paid for the artwork, inserts will be delivered directly to you.

Installation Workflow

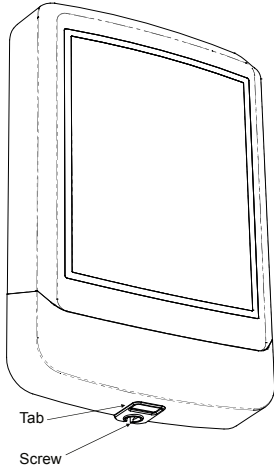
Wired and Wireless **Odyssey X** have slightly different installation procedures, please make sure to adhere to the following workflow to ensure trouble free installation and commissioning of your new sounder.

Wired	Wireless
<ol style="list-style-type: none">1. Select the desired location for the sounder2. Install 8 core alarm cable from the sounder location back to the control panel or expander.3. Install the sounder4. Commission system	<ol style="list-style-type: none">1. Install control panel and/or wireless receiver2. Learn all other wireless devices, and install them in their desired location3. Learn wireless sounder4. Install wireless sounder in desired location5. Commission system6. Check signal security of all wireless devices

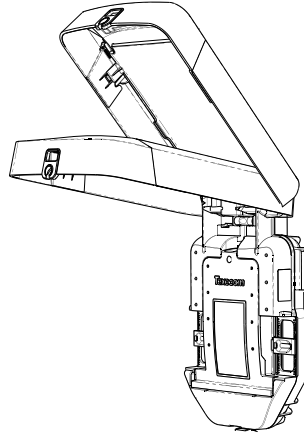
Accessing the Unit

Odyssey X1 Shown, all models are the same.

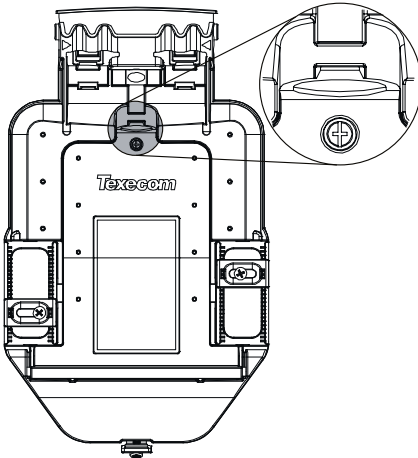
Undo the screw (no need to remove it completely) and depress the tab to open the lid



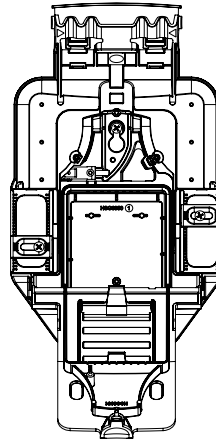
The Lid has two parked positions



Undo the screw and press the tab to access Wiring & Tamper

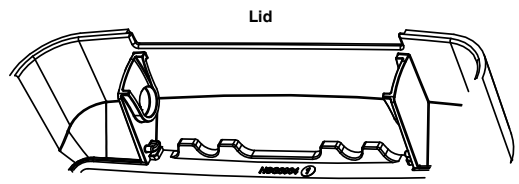
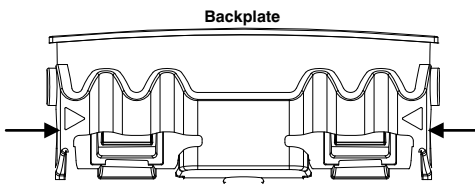


Inner cover open



Removing the lid completely

To completely remove the lid pull the lid to the left or right at the hinge points shown and then lift off.



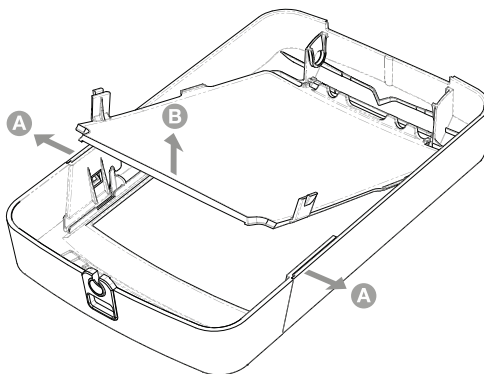
Inserting the Odyssey X1 graphic (available separately, see page 2)

1. Removing the light diffuser

- A. Gently flex the two sides of the lid outwards so that the tabs release from the lid.
- B. Lift the light diffuser upwards to release.

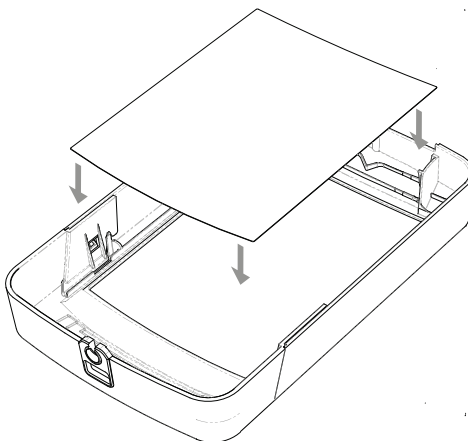


Please make sure this operation is done in a clean dry environment, where the diffuser and lid are not likely to be scratched or damaged.



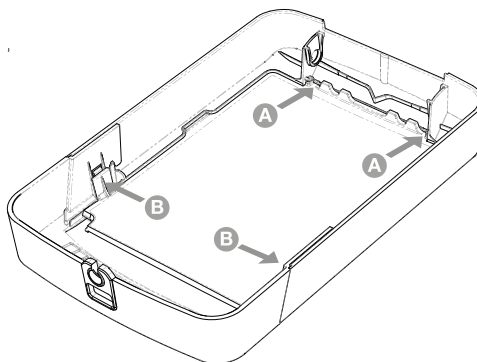
2. Insert the Graphic

- A. Place the graphic face down in the window recess as shown.



3. Replace the light diffuser

- A. Insert the light diffuser at the top edge underneath the lugs as shown.
- B. Lower the light diffuser ensuring the two bottom side clips are engaged.



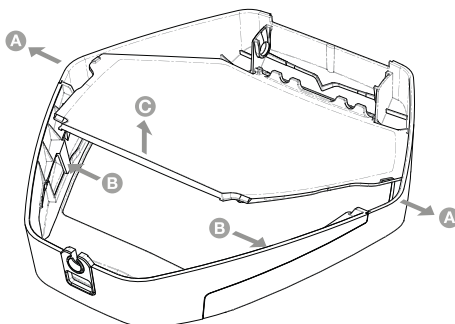
Inserting the Odyssey X3 graphic (available separately, see page 2)

1. Removing the light diffuser

- A. Gently flex the two sides of the lid outwards to release the light diffuser at point A.
- B. Push the lens tabs inwards to disengage the light diffuser.
- C. Lift the light diffuser upwards to release.

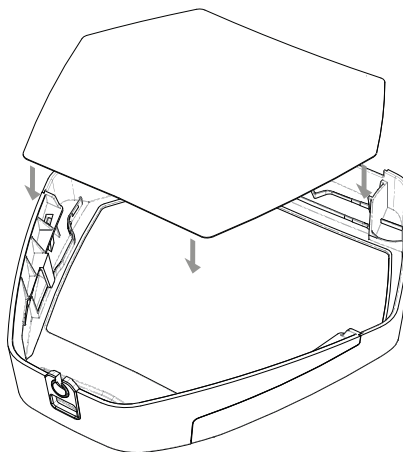


Please make sure this operation is done in a clean dry environment, where the diffuser and lid are not likely to be scratched or damaged.



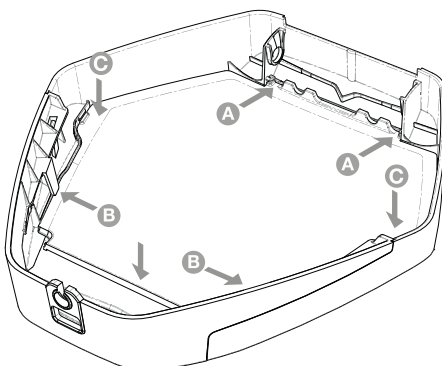
2. Insert the Graphic

- A. Place the graphic face down in the window recess as shown.



3. Replace the light diffuser

- A. Insert the light diffuser at the top edge underneath the lugs as shown.
- B. Lower the light diffuser ensuring the two lens tabs are engaged.
- C. Press down on light diffuser shown at point C to click into place.



Odyssey X-W (Premier Elite V2.11.X or later) Battery Insertion & Learning procedure

When installing a wireless sounder, the batteries should be installed and the device learned to the panel BEFORE it is mounted in the chosen location. The sounder should always be the last fixed device learned and installed.

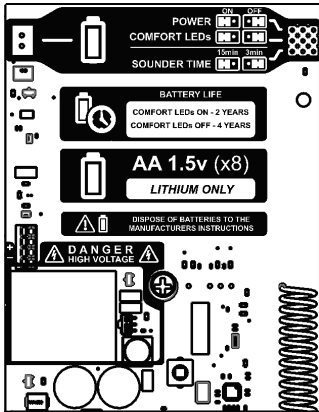


All other fixed devices should be in their desired location before learning the sounder

The following sequence should be used.

- 1. Access the device as described on the previous pages.
- 2. Install the batteries into the holder
- 3. Connect battery pack to PCB
- 4. Learn sounder to panel
- 5. Make Jumper selection for LED ON/OFF
- 6. Make Jumper Selection for Sounder Time

Odyssey X-W PCB Layout



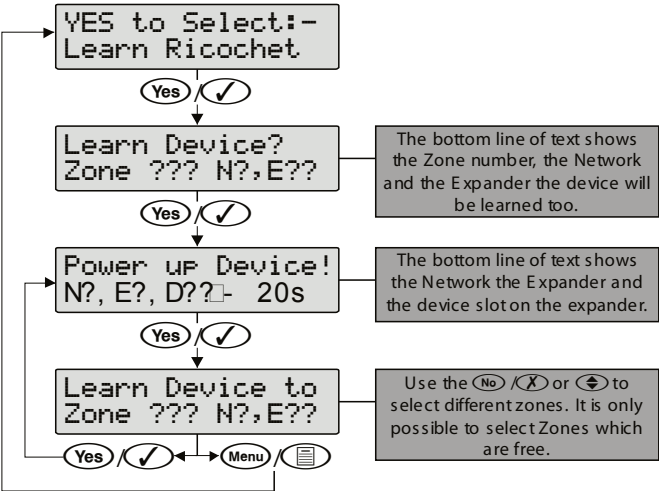
Symbol	Description
	The battery pack should be connected here after installing the batteries.
	Powering the sounder on for the first time starts the learn process. Once learned the "POWER" jumper should be left in the "ON" position. <small> If you need to relearn the sounder, the link should be moved to the OFF position for a minimum of 1 second.</small>
	Enables or disables the comfort LED's. Disabling the LED's significantly increases battery life.
	The sounder on time is dictated by this jumper position and is independent of the Bell On time in the control panel. If however the panel bell time is shorter than the jumper setting selected, the panel will over ride the jumper setting.
	Only Lithium AA 1.5V Type batteries should be used <small> Alkaline batteries should not be used, they will have a much shorter lifespan and can freeze and fail to operate at -5°</small>
	Used Batteries should be disposed of according to the manufacturer's instructions.
	The quoted battery life is an estimate and will depend on the site conditions.

Learning the Sounder (Odyssey X-W only)

As with all **Ricochet** enabled devices, the sounder should be learned to the control panel along with all other devices BEFORE it is installed in its final location.

The **Odyssey X-W** are learned to a Zone on the control panel in the same way that **Ricochet** enabled detection devices are. The Zone type and **Ricochet** Device Mode is automatically assigned based on the type of device being learned. In the case of the sounder the Zone Type is set to "Custom" and the **Ricochet** Device Mode is set to Device Specific. These should not be changed. Zone attributes 1 & 2 and Chime options will be ignored for **Ricochet** enabled Sounders.

- You can learn the device from first power up following "**Confirm Devices**" or from the dedicated **Ricochet** Learn menu.
- The **Odyssey X-W** has no Learn Switch, learning is initiated by connecting the batteries via the Power Jumper
- To learn the Odyssey X-W to the system follow the diagram below.



LED Indications (Odyssey X-W only)

The **Odyssey X-W** LED,s aid in the installation of the device and act as status indicators. The table below details the status of each LED indicator.

NOTE The LED jumper has no effect on the status described below.

Leds	Status
Left LED flashing quickly	Device is attempting to communicate with receiver after power up.
Left LED flashing slowly	Device has learnt or re-connected to receiver and is waiting for the tamper to be closed.
Both LEDs off	Device has failed to learn or failed to communicate after tamper has been closed.
Right LED flashing quickly	Device is attempting to communicate with receiver after tamper has been closed.
Right LED on solid (for 3 seconds)	Device has successfully connected with receiver after tamper closed.
Right LED flashing slowly	Holdoff mode has been requested from the panel but the tamper is closed. Bell will not self-activate. Cancels after 20 minutes.
LEDs alternating quickly.	Device has successfully connected with receiver after tamper closed and self-activation on tamper will re-activate in 2 minutes.

Mounting the Unit (all models)

Select a suitable position to mount the unit, which satisfies the following criteria:

- Highly prominent for maximum deterrence
- Additional shelter (e.g. under the eaves) is an advantage
- High enough to be out of normal reach to deter tampering
- Safe ladder access
- Good cable access

In addition to the two adjustable screw fixing points, the unit also has a central keyhole & spirit level to simplify mounting and aid levelling.

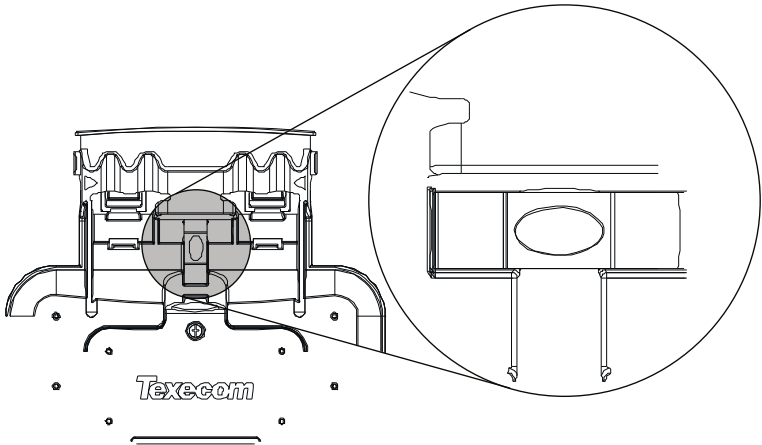
Three screws and wall plugs are required for mounting the backplate to an even surface. An additional screw may be required to adjust the wall tamper by fitting through the screw hole next to the dual tamper microswitch. In doing so, care must be taken to leave the screw head slightly proud to ensure that the microswitch remains level and closes correctly when the inner cover is fitted.



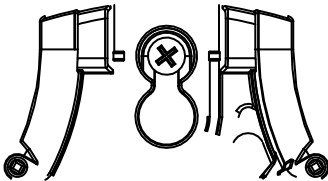
For maximum weatherproofing the unit should be flat to the wall.

Spirit Level

All units come with an integral spirit level to aid installation, the spirit level may be mounted vertically or horizontally in the backplate. By default the level will be mounted horizontally.



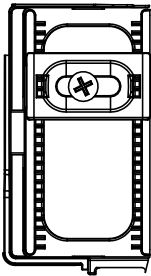
Keyhole fixing



The keyhole fixing is accessed by opening the inner cover as described in the previous section.

Make sure to adjust the tamper screw correctly before fully tightening this screw.

Side fixings



The two side fixings will lock into place when the screw is tightened.

With the unit in place and hung from the keyhole fixing, you can drill anywhere in the open area to obtain the optimum fixing point.

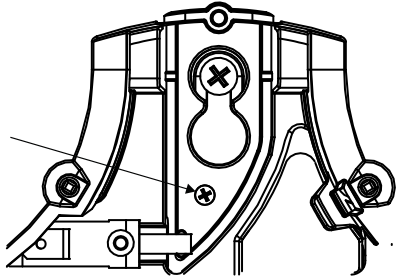
Adjusting removal from mounting tamper

The removal from mounting tamper screw must be used on all surfaces; on uneven surfaces it will prevent the keyhole screw from damaging the tamper breakout .

The screw should be driven in until it makes contact with the wall.

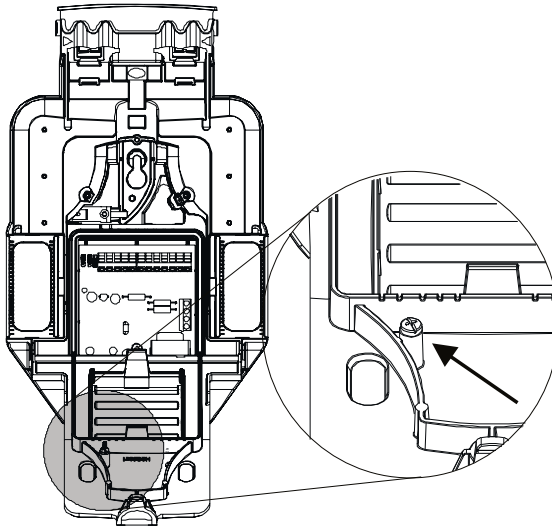


Failure to do this may result in incorrect operation of the tamper circuit.



Internal Lid Tamper

The **Odyssey X** is fitted with an internal lid tamper to prevent access to the electronics and wiring of the unit. The screw located on the inside of the internal hinged lid should be adjusted so that the tamper switch closes correctly when the lid is screwed into place.



Wiring the Unit

Connect the unit to the control panel as follows:

A (12V)	Permanent Positive Supply
B (BELL)	Negative Applied Output to Activate Siren
C (TAMP)	Negative Removed on Tamper Input
D (0V)	Permanent Negative Supply
S (STRB)	Negative Applied Output to Activate Strobe

T (Test)	Test input for enabling remote test via Maintex or Wintex*
Tamper Relay	Negative Removed on Tamper Input*
Fault Relay	Reports Faults from the sounder*



** Not applicable to Odyssey X-E & X-BE*

Although the unit has been designed to be compatible with a wide range of control panels, for optimum performance, it is highly recommended that the unit should be used with Texecom's range of control panels.

For safety reasons, each Texecom sounder and strobe unit incorporates a unique patented engineer Hold-Off mode. This mode prevents the unit from self-activating during installation and maintenance, thereby allowing only bona fide engineers access to the unit without any loss of tamper protection.

When connecting the unit to the control panel, it is recommended that wiring should be connected to the unit **first** and the control panel **second**. The unit should then be initially powered from the control panel. If the tamper circuit is open the siren will sound for 5 seconds after which it will automatically enter Hold-Off mode and disable Self-Activate (S/A) on tamper. This will prevent the unit from self-activating as long as the tamper circuit remains open. An open tamper circuit is indicated by only the left-hand side LED flashing. Connect the battery either using the jumper included on some models or by moving the red battery wire from the "N/C" (No Connect) terminal to the "Battery +" terminal. Fit the outer cover and secure with the M6 screw(s) provided.

When the outer cover is replaced and the tamper circuit is closed, the LEDs will alternate rapidly, confirming that the tamper circuit is secure and signalling that S/A on tamper will be re-enabled within 2 minutes, after which the LEDs will alternate slowly to signal normal operation. If the tamper circuit is re-opened within the 2 minute period, then Hold-Off mode will be restored.



NOTE

If the unit is powered up with the tamper circuit closed it will NOT sound for 5 seconds and will NOT enter Hold-Off mode. In order to disable the S/A function, before the cover is removed, Hold-Off mode should be invoked as for servicing (see Section 0).



NOTE

For safety reasons the strobe is disabled during Hold-Off mode.



NOTE

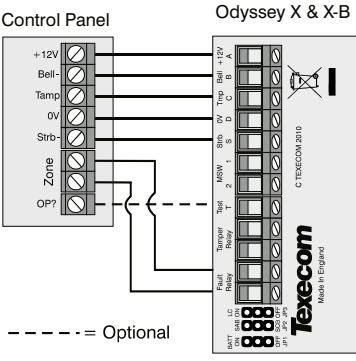
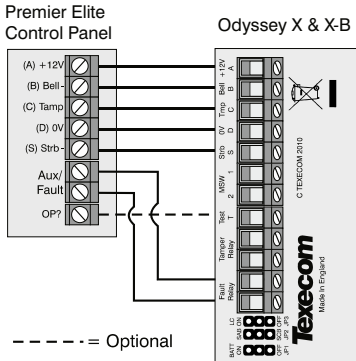
Hold-Off mode is immediately cancelled when the sounder is activated from the control panel.

Grade 3 Wiring (Odyssey X & X-B only)

To meet the requirements of EN50131-1 & EN50131-4 additional wiring is required at Grade 3 to monitor the status of the battery, the supply voltage and the integrity of the trigger wire. The two diagrams below show wiring configurations for Texecom control panels, and other manufacturers, you should however ensure that your chosen control panel can support the additional requirements.

Texecom Premier Elite Panel

Other Control Panel



Optional "Battery First" Connection Method (wired units only)

Hold-Off mode automatically cancels when both the tamper circuit is closed and power is supplied from the control panel. This allows installation engineers to power the unit from the internal battery and fit the outer cover, knowing that the unit cannot self-activate until after power has been supplied from the control panel.



NOTE

If the tamper circuit is closed and the unit is powered by the battery only, the right LED will flash quickly to signal that the unit cannot self-activate until power has been supplied from the control panel.



Prolonged "battery first" connection without power from the control panel may cause permanent damage to the internal battery. Texecom recommend that the unit is initially powered on battery only for no longer than 24 hours.

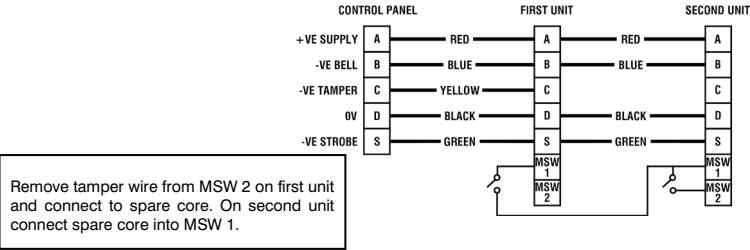
Backlight Wiring Options

The backlight is wired for constant use from the factory; It is also possible to wire the backlight to the control panels outputs for different operation; for example,

- the Backlight could be wired to activate with the strobe,
- or could be wired to a timer so that it only operates at certain times of the day or night. Many options are available depending on the capability of the control equipment.

Installing Multiple Wired Units

The following diagram illustrates how to wire multiple units together:



If the first unit is opened it will self-activate and a tamper will be signalled to the control panel. If the second unit is opened both units will self-activate and a tamper will be signalled to the control panel.

If more than one unit is connected to an installation, the current demand may exceed the rated current output of the control panel. This can be avoided by selecting Low Current (LC) or SCB mode on one or more of the connected units.

Low Current Mode (wired units only)

Low current mode* allows the sounder current draw from the control panel to be reduced whilst maintaining significant alarm volume. To select low current mode, ensure the SAB/SCB jumper is in the SAB position and move the LC jumper to the Low Current on position. Details on current draw can be found in the technical specification (section 4).

* Not available on all models

SCB Mode (wired units only)

In SCB mode the unit draws the majority of its sounding current from the built-in battery rather than from the control panel. Although volume is somewhat reduced, lowering the current demand on the control panel will enable the connection of additional sounder units.

To select SCB Mode, the unit should first be powered from the built-in battery by either using the jumper included on some models or by connecting the red battery wire from the "N/C" (No Connect) terminal to the "Battery +" terminal. The unit will automatically enter Hold-Off mode to disable Self-Activate (S/A) on tamper, this will prevent the unit from self-activating until both the tamper circuit is closed and power is supplied from the control panel. Move the SAB/SCB jumper to the SCB position before the unit is connected to the control panel.



If the tamper circuit is closed and the unit is powered by the battery only, the right LED will flash quickly to signal that the unit cannot self-activate until power has been supplied from the control panel. This



When selecting SCB mode the battery must be connected before power is supplied from the control panel. If a unit is powered from a control panel with SCB mode selected but without the battery connected, the unit will not operate correctly due to the lack of power provided.



The built-in battery will only be partially charged on delivery.

Commissioning

Most control panels have a method of testing the siren and strobe, which should be utilised for final testing. Failing this, simply arm the system and cause an alarm to confirm correct operation. Temporarily disconnect the positive supply to the unit at the control panel to confirm that the sounder self-activates.



The strobe does not self-activate.



Some control panels have an option to select the sounder cut-off time. The unit will sound for either 15 minutes or for the panel cut-off time, whichever is the shorter.

Please note, it cannot be guaranteed that the battery is fully charged on installation. When commissioning, the unit may require to be powered from the control panel for a period of time before the battery is sufficiently charged for self-activation.

Servicing

CAUTION: BEFORE OPENING THE COVER ALLOW AT
LEAST 3 MINUTES AFTER THE LAST STROBE FLASH

Most control panels have a method of testing the siren and strobe, which should be utilised. Failing this, simply arm the system and cause an alarm to confirm correct operation. Temporarily disconnect the positive supply to the unit at the control panel to confirm that the sounder self-activates.



The strobe does not self-activate.



Some control panels have an option to select the sounder cut-off time. The unit will sound for either 15 minutes or for the panel cut-off time, whichever is the shorter.

For safety reasons if it is necessary to inspect the unit, the Self-Activate (S/A) function should be disabled before the cover is opened or remote power removed. This is achieved by using the unit's unique patented engineer Hold-Off mode. This is invoked either by activating and de-activating the strobe three times within 30 seconds, or by pressing the **(On/Off)** key when in the bell test menu. Most control panels have a method of testing the strobe, which should be utilised. Failing this the strobe can be manually activated by connecting the S (STRB) wire to 0V at the control panel. Hold-Off mode is shown to be active with the tamper circuit secure by the right LED only flashing.

If the tamper circuit is not opened or remote power not removed, then Hold-Off mode will automatically start to cancel after 15 minutes, indicated by the LEDs alternating rapidly to signal that S/A on tamper and remote power loss will be re-enabled within a further 2 minutes.

Once the outer cover is removed the left LED only will flash to indicate that the tamper circuit is open. If remote power is removed, and the tamper circuit is left closed, the right LED with flash rapidly to indicate that the unit is on standby battery power.

When the tamper circuit is closed or remote power re-applied, the LEDs will alternate rapidly, confirming that the tamper circuit is secure, remote power is present and signalling that the self activating S/A function will be re-enabled within 2 minutes, after which the LEDs will alternate slowly to signal normal operation. If the tamper circuit is re-opened or remote power removed within the 2 minute period, then Hold-Off mode will be restored.

Summary of LED States Wired Units	
Slow flashing LEDs	Normal operation
Left LED flashing only	Hold-Off active, tamper circuit open
Right LED flashing only	Hold-Off active, tamper circuit closed
Fast flashing Right LED	Hold-Off active, remote power removed
Fast flashing LEDs	Hold-Off active but will cancel within 2 minutes



If Hold-Off mode is invoked but the tamper circuit is not opened or remote power is not removed within 15 minutes then Hold-Off will automatically start to cancel, indicated by the LEDs alternating rapidly for a further 2 minutes.



For safety reasons the strobe is disabled during Hold-Off mode.



Hold-Off mode is immediately cancelled when the sounder is activated from the control panel unless the system is powered down.

Safety

INSTALLATION AND MAINTENANCE BY
QUALIFIED SERVICE PERSONNEL ONLY

All strobes produce hazardous voltages. However, the unit includes dual circuit safety interlocks. When the strobe is de-activated it invokes a final flash to discharge the high voltage. Back-up circuitry guarantees discharge of the high voltage within 3 minutes.

For your own safety be sure to observe the following precautions when installing and servicing the unit:



NEVER remove the cover when the strobe is flashing



WAIT 3 minutes after the strobe stops flashing before removing the cover



AVOID touching the part of the PCB labelled "Warning High Voltage"



The unit incorporates software which disables the strobe whilst the tamper switch remains open. This is a safety feature and cannot be disabled.



The piezo drive produces high voltages when the siren is sounding. While not directly hazardous, these voltages will cause discomfort and should be avoided, particularly when using tools or a ladder.



The piezo transformer TF1 and surrounding components will be hot during and after sounding. While not directly hazardous, contact when hot will cause discomfort and should be avoided, particularly when using tools or a ladder.

Failure to observe the following precautions regarding the batteries could lead to the danger of heating, ignition or explosion:

<ul style="list-style-type: none">• Always observe local regulations• Do not throw into a fire• Do not overcharge• Do Not Short Circuit	<ul style="list-style-type: none">• Replace only with the same type• Do not heat• Do Not Reverse Charge• Do not disassemble
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Technical Specification

Environmental

Volume (SAB mode at 13.7VDC)	
X-W	105dB Peak at 1m (A Weighting, 90°)
X-E & X-EB	109dB Peak at 1m (A Weighting, 90°)
X & X-B Models:	115dB Peak at 1m (A Weighting, 90°)
Acoustic Output	Varying Sound Output
Cut-Off Time:	≤15 minutes
Waterproof Coating:	Conformal

Environmental Protection

X-E & X-BE Models:	
X-W, X & X-B Models:	Weather Resistant
Operating Temperature:	-25°C (-13°F) to +55°C (+131°F)
Storage Temperature:	-25°C (-13°F) to +60°C (+140°F)
EMC Environment:	Residential / Commercial /Light Industrial / Industrial

Physical

Material	
Backplate All Models	3mm Polycarbonate
Covers All Models	3mm Polycarbonate/3mm PMMA
Tamper Detection	
All models	Wall & Inner cover

Lid Dimensions (h x w x d)

X3	290mm x 276mm x 58mm
X1	290mm x 186mm x 58mm

Module Dimensions (h x w x d)

	287mm x 170mm x 51
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Packed Weight

Module only (Not X-W)	791g (28oz) approx>
Module only Odyssey X-W	991g (35oz) approx>
X1 Cover	310g (11oz) approx.
X3 Cover	613g (22oz) approx.

Electrical Wired Units

Supply Voltage	12-16 VDC (13.7 nominal)		
Current Drain (typical at 13.7VDC)			
Quiescent:	18mA		With backlight 58mA
Strobe:	100mA		
Sounder	SAB	LC	SCB
X-E Models:	285mA	160mA	30mA
X-BE	325mA	200mA	70mA
X Models:	405mA	190mA	30mA
X-B Models	445mA	230mA	70mA
Standby Battery			
Type:	NiMh Stack		
Voltage:	7.2VDC (nominal)		
Capacity:	250mAh		
Flash Tube:	1Ws Xenon		

Flash Rate:	1Hz (typical)*
Discharge Time (≤60VDC):	≤180 seconds
Comfort LEDs	
High Intensity	White
Brightness:	100mcd (typical)
Flash Rate (tamper secure):	1Hz alternating (typical)

Electrical Wireless

Supply Voltage:	12V DC
Battery Type:	8 x Lithium type AA 1.5V
High Power LED Strobe:	320lm
Flash Rate:	1Hz (typical)*
Comfort LEDs:	
Brightness:	100mcd (typical)
Flash Rate (tamper secure):	1/4 sec flash at 5 sec intervals alternating (typical)
Wireless Frequency:	868.0MHz – 868.6MHz

* Wired Units The flash rate will reduce to 0.125Hz after flashing for one hour (1 flash every 8 seconds). This is a software feature to reduce power consumption and cannot be disabled.

*Wireless Units The flash rate will reduce to 0.125Hz after flashing for 20 minutes (1 flash every 8 seconds). This is a software feature to reduce power consumption and cannot be disabled. After 10 days the strobe is cancelled completely. Turning the strobe off then on again will resume normal operation. In extreme conditions where the temperature is likely to exceed the stated maximum avoid direct sunlight.



Total alarm current = Quiescent + Strobe + Sounder current.

Standards



Texecom declares that this product complies with the requirements of the following directives

- | | | |
|---|-------------|-------------------------------|
| • | 1999/5/EC | R&TTE Directive (Odyssey X-W) |
| • | 2004/108/EC | EMC Directive |
| • | 2006/95/EC | LVD Directive |
| • | 2011/65/EU | ROHS Directive |

The product therefore meets all the requirements to enable it to be CE marked.



WEEE Directive: Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.

These products are Type B Moveable devices and are suitable for use in systems designed to comply with EN 50131-1, EN50131-4, EN50131-5-3 and PD6662 at Grade 2 & 3 and Environmental Class IV. All E & W Models are Grade 2 and all non E Models are Grade 3.

Warranty

All Texecom products are designed for reliable, trouble-free operation. Quality is carefully monitored by extensive computerised testing. As a result the **Odyssey X range** is covered by a two year warranty (excludes batteries) against defects in material or workmanship (details on request).

Because the **Odyssey X** are not complete alarm systems but only a part thereof, Texecom cannot accept responsibility or liability for any damages whatsoever based on a claim that a unit failed to function correctly. Due to our policy of continuous improvement Texecom reserve the right to change specification without prior notice.

Odyssey is a trademark of Texecom Ltd.

Notes:

Texecom

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

Technical Support:

UK Customers Tel: 08456 300 600

(Calls charged at 3.36 pence per minute from a BT landline. Calls from other networks may vary.)

International Customers Tel: +44 1706 233875

Email: techsupport@texe.com

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