





# IECEx / ATEX Intrinsically Safe Model: X10DR-AU2/AX2 Secure Wireless Mic.

The Intrinsically safe version of the X10DR has been tested and confirmed to comply with the requirements of IEC standards IEC60079-0 and IEC60079-11 for intrinsically safe apparatus. ATEX certification is granted based on compliance with these standards.

The type of protection, Ex ib IIA T4, means that the X10DRSM-AU2 and only its associated **approved** accessories can be used in many hazardous environments containing explosive materials and gases. Check with your Site Manager/ Safety Officer regarding classification of your specific area of operation.

**Do not** open or disassemble the X10DR in hazardous areas.

Do not charge the X10DR in hazardous areas.

Only use the approved X10DR IS Accessories (see page 24)

The use of non WP approved accessories will **invalidate** your ATEX Intrinsically Safe approval.

**Only** the **X10DRSM-AU2** Speaker Microphone and its ATEX approved accessories can be used in Intrinsically Safe defined hazardous locations. Note: The X10DRMD-AU2 Gateway is **not IS certified**.

**ATEX X10DR repairs:** Repairs to the IS approved Secure Mic can only be undertaken at the X10DR IECEx approved service centre. Opening the device at any other location voids the Intrinsically safe approval. See Page 26 for repair procedure.



This product is designed to radiate low levels of radio energy in accordance with global government approved regulatory standards. It features Adaptive Power Output. APO automatically adjusts the RF power output in accordance with signal required. This features limits and reduces extraneous radiated radio energy. This also helps minimize battery consumption and extends battery shift life.



# **Table of Contents**

ATEX Model information	2
Nomenclature, Parts & Functions	4
Wearing the X10DR Secure Mic	7
How it works	8
Basic Operation	8
<ul> <li>Power On &amp; Off, Volume Control</li> <li>Transmitting/Receiving, Talkaround</li> <li>Talk permit tone, Emergency, Secondary PTT</li> </ul>	8
<ul> <li>Earpiece, Out of Range, Charging confirmation</li> <li>Find Me<sup>TM</sup> operation</li> <li>Stealth, Remote monitor, Mic boost operation</li> </ul>	9 9
Multiple unit, Motorcycle, Covert, Headset operation	12
Battery Charging	14
Audio adjustment, Device pairing	
Antennas	17
Installation & Connections	18
Accessories and Parts	24
Service Support	25
IECEx ATEX Service Support, *Coverage Info	26
Regulatory, Warranty	
Important safety and handling	
Type Approvals Specifications	21



# Nomenclature

Product Name

X10DR

# **SM** = Secure Microphone

MD = X-Ponder Mobile Gateway Charger

- **E** = Elite Series Model
- P = Pro Series Model
- X = Classic Model
- A = Intrinsically Safe Model

### U = Standard Model

X = Advanced AES 128 Model

# Parts and functions



Pro series shown with talkaround button

> Control Emergency

Microphone PTT

Volume up

Volume down

DC charging Earpiece jack Headset connector

XIDOR



# X-Ponder Mobile Gateway Charger

Charging contacts



Connector

Connector Interface

WIRELESS PACIFIC

Antenna

Off/On

Status light

Loudspeaker

# Description

Volume up: adjusts speaker audio louder.

Volume down: adjusts speaker audio softer - minimum setting.

**Microphone:** talk in a normal strength voice about 3 to 5cm (2") from microphone port-always talk in a normal level voice.

PTT: press to talk - 3 quick beeps when pressed\*. - When out of range the unit will sound a slow beeping tone alert.

**Emergency:** A quick beep sounds when pressed\* and then triggers host radio's emergency function. Hold down button as per mobile radio's emergency button operating instructions or as advised by your supplier - When out of range the unit will sound a slow beeping tone alert when the button is pressed.

**Control:** Can be configured as Secondary PTT button on dual control installations or as Talkaround button. Two pips will sound when pressed.

**Off/On:** hold for 5 seconds to turn on/off. The Secure mic will sound various intuitive tones to advise status.

**DC charging:** Secure Mic beeps to notify correct seating when placed in X-Ponder gateway for charging.

**Headset connector:** use with associated\*\* headsets/accessories with Hirose HR10 series connectors.

**Earpiece jack:** allows private listening via 3.5mm earpieces while muting the speaker.

**Speaker:** Delivers received speaker audio - Automatically mutes when inserted into X-Ponder gateway.\*

**Status light:** glows blue\* when fully operational. Flashes when "out of range" or when one unit is off.

**Antenna Connector:** Allows connection of long range external antenna or replacement of short range internal type.

**Function Button:** used for manual Off/On, Find Me or as master reset to erase current device pairing.

3.5 PA Audio Out: provides low level audio for connection to PA system.

\*Normal configuration see installation section for alternatives. Some tones can be disabled by programming or user selection. \*\*Buy separately as needed.

Note: Neodium, rare earth magnets, are fragile and can easily break. Keep away from credit cards or like items, that can be damaged by strong magnetic fields.

# Introduction

Thankyou for choosing the revolutionary X10DR ("extender") Secure Wireless Microphone. This incredibly compact, lightweight personal accessory extends the power of the mobile radio to the palm of your hand, whether in and out of the vehicle. X10DR stands ready to re-define mobile network design by increasing user functionality and mobility whilst dramatically improving the effectiveness of your infrastructure investment. This visionary solution provides users out of vehicle communications with the power and performance of their mobile radio.

X10DR cuts the cord and for the first time puts the microphone and radio system access into the palm of your hand when away from the vehicle, delivering true mobility without system compromise. Users can feel totally confident their private communications are kept secure with up to AES128 encryption (model dependent) functionality. X10DR uniquely incorporates HLC™ "Hard Line Coding" connection protocol that virtually eliminates any possibility of outside intrusion between the X10DR and your vehicle's mobile. When the mission is critical, X10DR delivers.

X10DR unleashes the power of your mobile radio allowing wireless communication with a fixed located or vehicle radio: up to 500 meters or more.\* Our EVR<sup>TM</sup> enhanced voice resilience audio ensures users can communicate with clean clear audio, with the power and range of their mobile radio, whilst not being tied to the vehicle allowing the user to be truly mobile in every operational environment. This ability to now communicate whilst outside your vehicle significantly enhances a safer and more secure work environment for everyone who carries an X10DR Secure Wireless Microphone.



# Wearing the X10DR Secure Mic

Note: Your X10DR will perform best when worn with the antenna protruding above your shoulder. Different types of carry clips are available. Rare earth magnets lock secure microphones into the X-Ponder gateway mobile charging cradle.

# XLMC Long mount clip

(default) Replacement part No: XLMC-RK

This general purpose type features a strong large spring belt clip which allows the X10DR Secure Wireless Microphone to be securely clipped to all types of industrial work vests, jackets, leather clothing, thick epaulettes and winter clothing etc.

# XSMC Short mount clip

Replacement part No: XSMC-RK

Designed for electrical utilities working amongst high tension power lines. Except for minimal metal components, it features all polymer parts to prevent high voltage spark leakage while allowing the X10DR Microphone to be safely clipped to lightweight safety vests, work attire, uniforms and epaulettes, etc.

# XVMC Velcro® mount clip

Replacement part No: XVMC-RK

The Velcro mount type features a Velcro "hook" disc on the back of the microphone. A matching supplied Velcro "loop" patch should be ideally sewn or pinned to the users work attire/vest in the shoulder area to allow the antenna to protrude above.





**XLMC Back Cover** 



**XSMC Back Cover** 



**XVMC Back Cover** 







# **Basic Operation**

### Power On & Off

The X10DR will power off & on in synch with the host mobile radio or by a manual switch fitted by your installation mechanic. You can manually turn off the X-Ponder mobile charger by pressing the front grey button for 5 seconds and the blue LED will extinguish. You can do the same on the Secure Wireless Microphone by pressing the red button. The Secure Mic will sound a de-escalating tone. To power On, do the same, releasing the button once the LED lights. The secure mic will sound an escalating tone. The blue LED on both units will flash momentarily and then go solid once they're connected.

# **Volume Control**

When you first activate the unit you should first adjust the Secure Wireless Microphone volume to a comfortable listening level. You may adjust the volume by pressing the top blue button to increase or the bottom to decrease. There are 5 listening levels. The minimum level is not zero but is designed so you can still quietly hear radio traffic and not inadvertently turn off the audio.

# **Transmitting/Receiving**

Use like any two way radio speaker microphone i.e. press the large PTT button to talk and release to listen. Speak with a normal strong clear voice about 3-5cm (2") from the microphone port. Do not yell as this causes loss of clarity.

# ( WIRELESS PACIFIC\*

### **Talkaround**

Your X10DR can be configured so that up to eight X10DR devices can be connected to the one mobile radio. Use Talkaround to talk to other users sharing your mobile radio without the audio being transmitted over the radio channel whilst continuing to be able to monitor all communications over the radio system. Both handsfree and Press to talk operation is available. Handsfree requires use of either an earpiece connected to the 3.5mm audio jack but preferabley with a noise cancelling headset with boom mic connected to the Hirose® accessory port.

# **Secondary PTT**

In some applications your X10DR may be connected to two mobile radios, or a mobile radio and a smartphone with LTE, a satellite link or perhaps your vehicle's Public Address systems. In these situations the top centre button can be used as a secondary PTT button to communicate over the secondary device.

### **Talk Permit tones**

X10DR can provide talk permit tones\* so users know when to start speaking so that words are not lost at the start of a transmission. The tones can be enabled individually, 3 short chirps when you press the main PTT, 2 chirps for Secondary or Talkaround PTT. If you are out of range of your vehicle, the user will hear the X10DR's Out of Range tone.

# **Out of Range Indication**

X10DR provides the user with audible feedback should the user move out of range from their vehicle. Note: if you walk out of range the blue status LED will flash. If you then push the PTT an alert tone will sound to let you know your call is not getting though. Pressing the Talkaround Function or Emergency button when Out of Range will provide a similar indication. Depending on your location, you may find you need to walk back several meters closer to your vehicle to re-connect and the blue status light will then glow solid again.

# **Charging Confirmation Tone**

X10DR provides the user with a discrete tone whenever the X10DR Secure Mic is returned to the charging cradle. This discrete alert ensures the user has a positive indication that the X10DR Secure Mic is charging and seated correctly in the cradle. The X10DR microphone blue LED momentary flashes every 10 seconds while charging inside the cradle. The LED remains constant when fully charged.

# **Emergency**

The emergency button can be used to trigger and reset the emergency function in your suitably equipped mobile radio. The time you hold the button is the time your mobile radio registers the emergency command. So if your radio requires you to hold the front panel emergency button for 2 secs, then you should hold the Wireless Microphone emergency button for 2 seconds. A short beep\* will sound when the emergency (orange) button is pressed. See pg. 20 for other Emergency information.

# **Advanced Emergency Operation (Elite Models only)**

X10DR Elite models provide additional emergency signalling capability including sending alert tones locally to other units in multi-unit installations and over the network withor without optional Live Mic. Live Mic sends user Mic audio for a pre-programmed duration with higher audio gain so others monitoring can ascertain the nature of the emergency. This is followed by a receive wait time before repeating the cycle however many times was desired. Alternatively, where the console operator is able to remotely monitor a mobile, the X10DR Mic can be programmed to facilitate this remote audio monitoring for a pre-determined time. Emergency can be reset by pressing the emergency button for another two seconds.

## **Earpiece Operation**

X10DR provides the user with a weather protected (Elite models waterproof) 3.5mm earpiece jack to allow use of a range of earpiece styles to suit individual user preferences while ensuring call privacy. Plugging in an earpiece disables the internal loudspeaker. Elite models are not waterproof with the protective cap removed or if damaged.

# Find Me™

X10DR's Find Me feature allows a lost unit or its user to be audibly located by sounding a loud continuous alert tone thru the Secure Mic. To activate press the X-Ponder function button for 2 seconds. The loud alert tone will immediately start to sound. it can be deactivated by the user momentarily pressing any button on the Secure Mic or at the vehicle by momentarily pressing the X-Ponder gateway's function button. Note if the Secure Mic is out of range it will immediately sound the alert tone once it reconnects. Function can be enabled/disabled by field programmer.

# **Radio Off Alert**

Once the X10DR is powered on should the attached host mobile radio be turned off for any reason the user will be alerted as soon as the secure mic is removed from the cradle with an out of range tone. This automatic alerting ensures users know there mobile radio is active when away from the vehicle.



### Stealth Mode

For special applications the secure Mic's Blue LED on the front of the Secure Mic can be temporarily disabled along with all audible alert tones. This is achieved by holding down the VOLUME UP/DOWN (both) while powering up the unit. To turn the LED back on, simply power down and power back up. The feature may be of particular use to "Law Enforcement Users" who may prudently prefer in some situations to not be walking around at night with a blue light glowing on their shoulder. Alternatively, Stealth mode can be permanently enabled via re-programming the X10DR Secure Mic.

## **Accessory Mic Boost**

Users can choose to increase an audio accessory's microphone sensitivity on X10DR models fitted with the Hirose accessory port to cater for sensitivity requirements or variations in headset manufacturer's specifications. To activate the higher sensitivity, the X10DR's blue VOLUME UP button should be held down while powering up. The user will thereafter hear 2 short confirmation beeps at the end of each start up tone sequence. To revert to standard operation, the unit should be powered up with the VOLUME DOWN blue button held down.

NOTE: Enabling the mic boost does NOT effect the I internal front cover microphone. The default sensitivity can be adjusted using the XPK Field Programmer.

# Remote Monitor (Elite Models only)

A unique input is provided on Elite series X10DR installations which allows that users audio to be remotely activated. The activation may be from a manual switch installed in the vehicle (supplied by others) or it may connect to a mobile radio suitably equipped to allow a despatcher to remotely send a command to the users vehicle mobile that can be used in turn to activate the remote monitor function. Depending on the specific application a XSJB special function may be required.

# Public Address /In-Car Monitor (Elite Models only)

The X10DR Elite model provides a low level audio output to allow a secure microphone user's transmissions to be be connected to an external public address system. Press buttons on the base of the gateway allows the audio volume to be adjusted up or down. Audio connection is via a 3.5mm mono socket in the base of the gateway.

## In-out of cradle remote sensing (Elite Models only)

The Elite gateway cradle provides an externally accessible indication of when the secure mic is in the gateway cradle or not. This can be used for automatic enabling of functions such as lone worker or other remote electronic devices.

# Multiple Unit Operation

Multiple X10DR Secure Wireless Microphones may be connected to one radio device by use of the optional XJB junction box accessory. Operation is identical to single user operation with the added benefit that, each party also hears each other talk when they transmit. This functionality is ideal for police: where two officers are assigned to a patrol van, or ambulance: where 3 paramedics can communicate at a scene as well as with their control room. It is also ideal for office use allowing a number of personnel to access a local base or control station or remote control console while moving around a building, shop or warehouse. Note: communication between X10DR users is always routed back through their respective X-ponder mobile chargers and not direct between units. Ask your dealer for more information on this unique and highly regarded operational capability. Elite Users see page 20

# Motorcycle Operation

The X10DR Secure Wireless Microphone is especially suitable for motorcycle use. Models fitted with a 6 pin Hirose industrial connector allow easy connection to a helmet microphone and dual earpiece fit out. Making use of the handlebar PTT input, a bike can be configured so that, when the rider is on the bike and presses the handle bar PTT, their headset microphone audio is sent out over the radio. Off the bike but still wearing the helmet, the user can press the Secure Wireless Microphone PTT to talk,. Finally, if the user removes their helmet, they can unplug from the Hirose connector on the base of the unit and just use the Secure Wireless Microphone like standard.

# Headset Operation

(note headset warnings later in this manual)

X10DR provides the user with a IP67 rated waterproof Hirose HR10 audio port to allow use of a wide range of motorcycle headsets, industrial hearing protection heavy duty headsets besides a range of lightweight noise cancelling headsets and other traditional two way radio audio accesories to be connected to aid in achieving your communications objective on a clear and effective manner. Plugging in a headset disables the internal loudspeaker.

# ( WIRELESS PACIFIC

### Covert Operation

The small size of the X10DR unit allow for its selective use in covert short range applications. The remote monitor PTT function means someone else can enable "listening" without the covert operative having to touch anything. As audio is duplex (bi-directional) you can also talk to them at the same time allowing vital messages to be passed on even when an operative is transmitting. The mission critical focused Elite model provides AES128 encryption version to ensure the highest levels of voice security. To further enhance its security it automatically updates its encryption key continuously throughout the day, making its operational far more tactically secure than the highest top end AES256 portable radios available in the world today.

# Handsfree Operation

The X10DR has been specifically designed for outside high noise environments and incorporates advanced noise and echo cancelling technology to significant limit background noise. Hands free operation will require as a minimum use of a plug-in earpiece and locating the X10DR handset device on the users shoulder, close to their mouth for acceptable operation. For best hands free operation, we would recommend use of noise cancelling headset with a boom microphone which can be located very close to the users lips to significantly reduce background noise. The X10DR naturally provides programmable external microphone sensitivity so just about any available audio headset device can be supported. Notwithstanding, while understanding the operational necessity at times for hands free operation, we would suggest that limited members use hands-free as multiple users in this mode could create chaos, confusion etc. Suggestion would be default operation is PTT command and control style with limited users in full hands-free chat mode at any one time. While up to eight users could be equipped connected to the ione vehicle we recommend no more that four do the additive nature of back ground noise. Careful attention should me made to setting the Gateways vox sensitivity so as to limit transmission of background noise when a user is not speaking. This may require field trials to find the optimum settings for both clarity and operational effectiveness.

# Battery - Charging

The X10DR Secure Wireless Microphone should be charged overnight before initial use. Thereafter it may be left in the charger unit between calls, or may be worn all day and placed back at the end of the work day. The unit is designed to provide about 15-24 hours operation between charges even on the busiest radio channels. On quiet channels it can last up to 3-4 days. When the battery does start to go flat, a short beep will sound once every 2 minutes. It will then automatically power down after about 30 minutes, so you should plan to re-charge the unit as soon as is practical once the chirps are heard.

A fully discharged battery will typically recharge in less than 3-4 hours, or less if only partially discharged. The battery will re-charge even if the mobile charger unit has been turned off. The microphone's blue status light will indicate charging by a momentary double flash every 10 seconds. When complete the blue LED will remain solid.



Simply place handset into pocket. X10DR will beep to show correct placement.

NB: do not allow debris to fill the pocket as it may prevent the microphone from making contact with the charging pins. Keep all liquids well away from the charging cradle at all times.

When you notice the X10DR sounding a small chirp every couple of minutes, it indicates the battery is nearly flat and should be re-charged. The unit will self power down after about 30 minutes when voltage drops to the minumum level. When you notice this occurring far more often than usual, it may mean it is time for the battery to be replaced.

Like all re-chargeable products, periodic replacement of the internal battery is required. The Secure Wireless Microphone features a high capacity Lithium Ion battery. To maximize the life of a Lithium battery its is better to keep it topped up by returning it to the charger often rather than waiting for it to first go flat - which was the opposite case with older nickel based batteries. Typically you can expect to get about 500 complete re-charge cycles before requiring replacement.



# **IMPORTANT**

# Audio adjustments

See the **Service Section** for use of the field programmer.

Typically the X10DR's default audio levels settings are suitable for a variety of today's professional mobile radios, when used with the Wireless Pacific model specific XIA series X10DR Interface Adaptors. However in some cases, when first installing your X10DR system you may need to adjust the transmit and receive audio levels using the field programmer for optimum audio quality.

### TRANSMIT:

To verify the transmit microphone level is set correctly, first talk on the host mobile radios curly cord microphone while monitoring the communication with another radio or communications analyzer. Speak in a normal voice about 2-3cm (1") from the microphone, now do the same with the X10DR Secure Microphone; the audio levels should be about the same. If the Secure Mic audio is lower or is distorted you will need to adjust the level by reprogramming the device with the field programmer so that levels and audio quality are about the same.

**RECEIVE:** Using another radio, talk into its microphone while listening to the audio received thru the X10DR speaker. It should be loud and clear with the X10DR Volume turned up near maximum. If not, use the field programmer to adjust to the desired level. On some model radios, the radio's volume control effects the Rx audio that is passed to teh X10DR, for these situations first set the host mobile to a normal listening level before then programming the receive audio level for desired loudness. In such cases, users should note if you adjust the host mobile radio's audio up or down the X10DR speaker audio will be effected likewise.

# Device Pairing

Each X10DR Secure Wireless Microphone is uniquely connected to a specific X-Ponder mobile charger in the factory. This ensures that all communications between the two units are secure and cannot be compromised or interfered with by a third party. In the event of a Secure Wireless Microphone being lost, it can be permanently disconnected from the X-Ponder mobile charger by connecting with a new replacement unit. **How to pair**: hold the speaker mic while pressing both the blue volume controls until the blue LED flashes and the secure mic beeps. (after 5-8 secs.) Now place the speaker mic back into the gateway charger. After a few seconds the secure mic will sound a confirmation two tone and the

blue LED on both units will glow solid to indicate completion.

Repeat procedure if you require other secure mics paired to the one X-Ponder gateway. Up to five mics may be paired to the same gateway but only one can be operational at any one time\*. If multiple secure mics are powered on and paired, should the currently operational mic be turned off or go out of range for longer than 30 seconds then the gateway will then try and automatically connect with the next stored powered paired mic.

Note: X10DR Elite models can uniquely have two active operational secure mics operation thru the one X-Ponder gateway at any one time. In this configuration there is about 25% reduced maximum range. Also note that this unique capability is not available with handsfree operation.

# \*Additional Coverage Information

X10DR performs best when worn with the antenna protruding up above your shoulder. This helps reduce the effects of body shielding and enhances overall coverage. Coverage is always dependent on the local terrain, obstacles and the overall communications environment. For longer distances, an external antenna should always be fitted to the vehicle. For best performance we recommend you use our multi-polarity antennas.

A choice of vehicle antennas are available to enhance into-building penetration or, to simply extend the overall communication zone around your vehicle. Ask your dealer which configuration best suits your specific application. Units operating in the 2.4GHz unlicensed band may be subject to external interferences from others at times. The quoted expected coverage distances in this manual and other advertizing material are for X10DR installations using specified our multi-polarity antennas and low loss cable feeds and assume operation is undertaken in normal everyday city /urban/rural outside environments where obstacles to the radio signals are minimal and the spectrum is devoid of high levels of RF interference from other devices operational in the area on same or related frequencies.

# Mic Antenna

The XSMA2 antenna has been especially designed to perfectly meet the radiation requirements of the X10DR Secure Microphone. Do not use alternatives as they will void regulatory type approval and generally always reduce overall performance.



# Vehicle Antennas

The X-Ponder gateway output has a reverse polarity SMA female antenna connector designed for connection of a variety of approved Wireless Pacific 2.4GHz external antennas.

The **XMPA** multi-polarity antenna provides improved coverage in multipath - non line of sight - situations. It should be mounted onto an unobstructed area on or above the vehicle's roof line and should always be connected via the supplied low loss coax cable to the X10DR cradle connector. **MAKE SURE YOU FULLY TIGHTEN!** 

The **XMMA** magnetic mount antenna is intended for use in temporary installations or for initial demonstration purposes or use with an office location where it may provide greater flexibility provides enhanced coverage when placed on an unobstructed area of a vehicle's roof and should be connected via its low loss coax cable to the RP-SMA-F output on the mobile charger. **MAKE SURE YOU FULLY TIGHTEN!** 

In user applications where maximum range coverage is not a key requirement, the standard secure mic's **XSMA2** antenna can be attached directly to the base of the X-Ponder gateway. It will typically provide a solid 50-100m coverage bubble around the vehicle or office installation.



# Warning:

Keep your body at least 20cm (8") away from vehicle mounted external antenna.

See page 21 for other important details.

In the event of a damaged or lost antenna, only **original replacements** should be used so as to not **void the unit's FCC/IC/CE type approval** certification or performance. The speaker microphone uses a unity gain ground independent antenna for maximum multi-directional range.

## Installation & Connections



Front View

# Receptacle Shielded RJ45

Talkaround audio - Remote/Handle bar PTT 8 Ext PTT to radio 7 COR/ Audio unmute from radio 6 Mic Lo 5 Ext Mic Hi Output/Radio On detect 4 Radio Receive audio 3 2 Emergency output to radio Power nominal +12VDC shield/drain DC Ground

- 1. Power: connected via a 1 amp in-line fuse preferably direct to a vehicle's 12V battery but can be any voltage from about 6-16VDC. Current consumption is typically 60mA/Max current 420mA@6V. (12V = <200mA)
- 2. Emergency: Output intended to connect to the host mobile radio's emergency input. It is normally provides an active switched ground but can be configured to be active open circuit. The time held low (or high) is the exact time that the user presses the Emergency button. This output could be used for other functions such as to trigger the panic function of a car alarm system, providing it is correctly "buffered".
- **3. Gateway audio in:** Receive audio from the host mobile radio that you wish to be sent to the Wireless Microphone. Ideally, it should be sourced pre-volume control but can be post, as long as the host mobile radio's speaker audio has first been sent for a comfortable listening level in the vehicle.
- 4. Gateway audio out: Audio from the Wireless Microphone that is to be transmitted over the host mobile radios transmitter. It is factory set for 100mV RMS. Also used to automatically turn on/off Secure Wireless Microphone when connected to host radio biased Mic hi input, if not, the user should supply manual on/off switch.
- 5. Mic audio grd: This should connect to microphone audio ground.
- **6. COR/audio unmute:** Input designed to monitor the receive status of the host mobile radio. Ideally, it is driven by an "audio unmute" switched ground command in the host mobile. i.e. when the radio's speaker unmutes to pass audio then the COR input should toggle in sync. Alternatively, it could be driven by the radio's unsquelch command that factors in reception of required correct CTCSS tones, etc. Where COR is not available the X10DR's audio detect capability in almost every case allows satisfactory operation.



- 7. Ext. PTT output: Switched grd output designed to drive the host mobile radio PTT.
- **8. Talkaround audio bus:** passes fixed audio level between multiple X10DR gateways connected to XJB (Junction Box). The line is also used for Remote PTT\*.
- **9.Shield.** DC /Digital ground connection.
- \* Remote PTT: This provides an alternative remote PTT to transmit secure microphone audio via the host mobile radio. You may choose to connect to a motorbike handle bar PTT, a hidden palm or footswitch, a wireless PTT device, or even to an output from the host mobile equipped to provide remote radio monitoring of the secure microphones users audio. In such remote monitoring cases, use of the remote PTT input causes the sensitivity of the INTERNAL secure microphone to be greatly increased, so a control room operator can more easily monitor the health or safety of the user. There is no increased audio gain when a headset is connected to the audio port at the base of the secure microphone.







# **Audio Accessories:**

WPSHC-X10

IECEx/ATEX Intrinsically Safe approved shown in blue.



WPiTRQ-X10 Advanced ear mic (requires TL earpiece).
WPEH-TL Large black "across ear" earpiece for iTRQ.

**WPTEH-TL** Acoustic tube earhook "quick disconnect" for iTRQ.

WPTEP-TL Acoustic tube "quick disconnect" for iTRQ.
WPEB-TL Black earbud "in ear style" earpiece for iTRQ.
WPBEH-TL Black earhook - small earpiece for iTRQ.
WPCEH-TL Translucent earhook - small earpiece for iTRQ.

**WP3WS-X10** 3 wire covert surv. audio accessory.

WPLWH-X10 Lightweight headset noise cancel, in-line PTT.
WPPTT-X10 Spare In -Line PTT interface cable for WPLWH.

**WPSHD** Noise canceling heavy duty headset for X10DR.

(requires either WPSHC-X10 or WPSHC-NEX interf. cable). X10DR interf. cable for direct WPSHD use.

XMCH-C Closed face headset for Motorcycle helmet.

XMCH-O Open face headset for Motorcycle helmet.

XIPB In-line PTT for WPSHC-X10 & XMCH M/Cycle headsets.

WPEH
3.5mm Large black "across ear" earpiece for X10DR.
WPTEH
3.5mm Acoustic tube earhook "quick disc" for X10DR.
WPTEP
3.5mm Acoustic tube "quick disconnect" for X10DR.
WPEB
3.5mm Black earbud "in ear style" earpiece for X10DR.
WPBEH
3.5mm Black earhook -small earpiece for X10DR.
WPCEH
3.5mm Translucent earhook - small earpiece for X10DR.

**WPWLP-X10** Large red in-line Nexus PTT adaptor w/ wireless ring PTT.

(use with Peltor J11 headsets or WPSHD with WPSHC-NEX - requires program mic).

WPSHC-NEX WPSHD headset to Nexus plug for use with WPWLP-X10.
WPNEX-X10 WPSHD headset to Nexus plug for use with WPWLP-X10.
Nexus to Hirose adaptor: Peltor J11headset use with XIPB.

**XMAD-X10** "Breeze style lightweight headset (no in-line PTT).

# Radio Cable Adaptors

XCA-APX Suits Motorola APX/XTL XCA-H26 Suits Hytera MD68/78X XCA-H37 Suits Harris M7100 XCA-M26 Suits Mot 26 pin(Trbo) XCA-HXG Suits Harris XGT/M7300 XCA-M26T Suits Mot MTM5400 XCA-i15 Suits Icom DB15HD XCA-M16 Suits Motorola 16 pin XCA-i25A Suits Icom DB25 XCA-R15 Suits RELM G/DMH Suits RFLM DB25 XCA-K15 Suits Kenwood KCT19 XCA-R25 Suits Sepura SRG3900 XCA-K15D Suits Kenwood DB15 XCA-SRG XCA-SDM Suits Simoco SDM600 XCA-K25 Suits Kenwood DB25 XCA-V15 Suits Vertex DB15HD Suits Simoco SRM9000 XCA-SRM XCA-T15 Suits Tait DB15 XCA-V25 Suits Vertex DB25 Suits Teltronic DB26 XCA-VM9 Suits EFJ VM900 DB25 XCA-T26 XCA-CUS\* Custom configurations XCA-C26 Suits Airbus TMR DB26 \*MOQ 200 - Call for pricing and delivery. XCA-G25 Suits GMF DB25

**Options:** (replaces/modfies standard item)

XSMC. Alternate short clip back cover (suits electrical utilities). **XVMC** Alternate velcro® mount back cover & sew-on patch. **XCFC** Alternate color spk mic front cover & logo (MOQ 500)

Option to add Motorola APX/XTL operation XAPX

Elite Model Accessories: (order options as required)

X10DRSM-EX2 Spare Elite speaker mic for dual mic operation.

X10DRMC Mobile charger for X10DR speaker mic incl. DC cable.

XFB-MR2 X10DR Dual radio box & interface cables.

Also order XIC cables and additional XCA-\* for 2nd mobile XFB-LTE

X10DR Dual device Mobile radio/Smartphone PTT App box

Includes Smartphone 4 pole 3.5mm interface cable. Also order XIC cables and XCA-\* for mobile radio

Install Accessories:

XPB-C14B 1450mA "after hours" re-charge power bank includes cables. XMPA

Shark Fin multi-polarity NMO roof or rack mount 2dBi antenna kit

Includes 5.2m LMR200 type coax w/fitted RP SMA-M.

**XMMA** Magnetic mount 1/4 wave antenna for temporary fit-ups.

Includes 3.5m LMR200 type coax w/fitted RP SMA-M. XCA-\* Spare Radio Interface cable adaptor. (\*see next page) XCA-APX Spare Radio Interface cable adaptor for XTL/APX radios

XIC-0.5 50cm shielded Cat 6 cable, Black M-M. XIC-1.5 1.5m shielded Cat 6 cable, Black M-M. XIC-6.2 6.2m shielded Cat 6 cable, Black M-M.

XIE-4.5 4.5m shielded Cat 6 extension cable, Black M-molded F.

XJB 6 way junction box for multi-interface installations.

Includes 50cm12VDC cable. Order XIC cables as required. **XSJB** 

Special Function 4 way junction box for multi-interface installations.

Includes 50cm12VDC cable. Order XIC cables as required.

XRDR Cross-band repeater radio adaptor for LiteTalk™ or X10DR UHF

**Desktop Chargers:** 

XDTC\* Desktop charger includes AC/DC plug pack.

X6WC\* Desktop 6 way multi charaer includes AC power cable.

Service Accessories:

XPTB\* -X10DR Field Programmming and Test Box Kit XTK2 -X10DR Field Tracking Kit (NFC reader/writer)

XATB2\* -X10DR Advanced Service Test Set

\* indicate AC plug type US/EU/UK/AU









Mobile Charger



X6WC 6 Way Charger

Desktop Charger (shown with X10DR)

XPB-C14B

XFB-\*\*



Replacement

XSMB-C14 Li-Po Battery



XJB/ XSJB

& screи



Includes labels

Velcro hook (sow on) XVMC-RK Velcro® mount back cover retrofit kit



Includes labels renlacement cradle cup & screws & clip

XLMC-RK Long mount back cover retrofit kit incl: maanet, new cradle cup (for original X10DR devices)

(for XLMC fitted devices) **Spares:** (order options as required)

XSMC-RK Short mount

back cover retrofit kit

X10DRSM-PU2 Spare Standard Mobile Spk Mic.

X10DRMD-PU2 Spare Mobile X-Ponder gateway charger.

X10DRSM-EX2 Spare Elite Mobile Spk Mic.

X10DRMD-EX2 Spare Elite Mobile X-Ponder gateway charger.

X10DRSM-AU2 Spare ATEX Mobile Spk Mic. X10DRMD-AU2

Spare ATEX Mobile X-Ponder gateway charger. XLMC-RK Retrofit X10DR Long mic clip kit. (for original X10DR only)

XSMC-RK Retrofit X10DR Short mic clip back cover kit.

(for XLMC fitted devices)

XVMC-RK Retrofit X10DR Velcro® mic clip back cover kit. XSMA2 Spare X10DR Speaker Mic/local gateway antenna.

XSMB-C14 Spare X10DR 1450mA battery.

\*\* feature specific



# Service Support

While your X10DR has been designed to the highest engineering practices and meticulously manufactured to mission critical standards, like all electronic devices s failures can and will occur. To provide you with a seamless level of support each X10DR is supported throughout the product's life by a changeover replacement pool. The pool is intended to ensure minimal downtime in the event of a failure.

## Warranty/Non-Warranty Repair Procedure

- 1: X10DR DOA (Dead on arrival) failures that occur at time of delivery/initial operation will be replaced with a new item by the Distributor.
- 2: X10DR failures that occur at any time after this initial delivery and the expiration of the standard or purchased extended warranty period, will be replaced free of charge from **changeover pool** stock. Nominally 2-3 business day turnaround is anticipated from the Distributor being presented with a validated warranty claim and the paid return of the faulty device to the advised service center.
- 3: Customers with X10DR failures deemed due to tampering, misuse, neglect, etc., will be advised of the determination. The customer may then choose to have the failed device replaced from the changeover pool for a service **changeover fee** at the current published rate or have the device returned to them. The cost to return the faulty goods and for evaluating a non-valid warranty claim may be charged back to the customer at the Distributor's discretion.
- 4:All returned equipment requires a pre-approved Returned Materials Authorization to be electronically submitted to the Distributor and then a hard copy to be attached to returned devices.

### **Changeover Pool Inventory**

To minimize repair turnaround times and user inconvenience, a X10DR changeover pool inventory is provided to allow changeover factory verified devices as being fully operational and meeting the published specifications. These units will appear as new, or near new condition with clean exterior housings (minor blemishes only) and pristine internal circuitry.

The remaining warranty of any returned faulty device will apply to its replacement unit, or in the case of units replaced for a service fee, a new 6 months factory warranty will apply.

- Customer must return the faulty device at time of changeover (one for one basis).
- Spare X10DR devices may be purchased for those who prefer to maintain their own inventory for 24 hour operational redundancy.

### **IECEX/ATEX Service**

All intrinsically Safe X10DR devices are likewise supported by a changeover pool of factory refurbished, as new, replacements. Due to strict IS regulatory approval requirements, faulty batteries can only be replaced at their original manufacturing location and subsequently need to be replaced from the changeover support pool. The applicable battery replacement fee will be payable for devices requiring such service. Note: only the replaced battery will be covered by the associated warranty.

# Replacing the battery pack

The process is simple and should only take your radio service supplier less than 5 minutes to replace and test. Replacement of the battery should be ONLY undertaken by a qualified service technician so as to



ensure no damage occurs to internal circuitry and to ensure the housing's weatherproof integrity is not compromised. The replacement battery part number is: XSMB-C14 1450mA.

NB: Intrinsically Safe radios use a special variation of the battery. The stringent mandatory compliance requirements means the battery can only be replaces in an accredited X10DR Intrinsically Safe service center an as such are NOT field replacable - see above.



# Field Programmer



The XPK2 and XPTB programmer and test box allows you to adjust a number of parameters on both the X10DR Secure mic and X-Ponder gateway. The kit includes a Mic programming cable that plugs between your PC's USB port the and the Mic's Hirose connector port. The Gateway is reprogrammed using a USB-A to Micro USB cable that plugs into the gateway's micro USB connector. The programmer allows both parameter setting and field reflashing of future firmware releases as they become available or for upgrading the device with additional functionality as your operations needs evolve.

# Programmable parameters include:

Mic audio out. Receive audio in, Advanced emergency enable, Multicolor LED indicators, Talk permit tones, Emergency tone, PTT speaker, mute, Fixed alert tone volume, Internal mic volume, External mic volume, User Selectable mic sensitivity, Remote monitor volume, Vox sensitivity, Vox disable, hands free enable, Stealth enabled and many other customizable features to allow the X10DR to be address your communications needs.

The kit also includes a compact test box allowing you to verify the units operation quickly and effortlessly and is ideal for self maintained users and X10DR resellers alike.



#### RADIO AND TELEVISION INTERFERENCE

The equipment described in this manual generates, uses, and radiates radio-frequency energy. If it is not installed and used correctly—it may cause interference with radio and television reception.

#### CE DECLARATION

This equipment has been tested and found to comply with the following harmonised European Norms:

EN300328 (radio and telecommunications terminal equipment)

•EN55024 (electromagnetic immunity) •EN55022 Class B (electromagnetic emissions) •EN 60950 (electrical safety) •EN301489 (electromagnetic compatibility and radio spectrum matters) Based on the results of these tests, Wireless Corporation declares that the above mentioned devices conform to Article 10.1 of the European Council Directive 89/336/EEC, and their amendment Directive 93/68/EEC, and to the Directive 1999/5/EC and indicates this conformity by the CE-sian on each device. The device must be installed and operated in strict accordance with the instructions given in this user manual. Any changes or modifications to this product that were not specifically authorised will invalidate this declaration.

#### INDUSTRY CANADA:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular

You can determine whether the equipment is causing interference by disconnecting power. If the interference stops, it was probably caused by the equipment. If the equipment does cause interference to radio or television reception, you may be able to correct the interference by using one or more of the following measures:

- Rotate the television or radio's antenna until the interference stops.
- •Move the Wireless Microphone farther away from the television or radio.

If necessary, consult your two way radio dealer or an experienced radio/television technician for help. Changes or modifications to this product not authorized by Wireless Corporation Ltd could void the FCC Certification and negate your authority to operate the product.

Notice: Changes or modifications not expressly approved by the party for compliance could void the user's authority to operate the equipment.

# IMPORTANT NOTE:

To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

### Warrantv

Wireless Corporation Ltd (WCL) warrants each new product sold by WCL to be free from defects in material and workmanship under normal use and service. The obligation and liability of WCL under this warranty is limited to the repair or replacement at its factory, at the option of WCL, of any such product which proves defective within the quoted warranty period, twelve (12) months for Wireless Pacific products after delivery, and is found to be defective in material and workmanship by WCL inspection. Products of warranty consideration shall be returned with all transportation charges prepaid to WCL or our nominated local service supplier in shipping containers which are adequate to prevent loss or damage in shipment. WCL will pay the return carriage costs for Wireless Pacific products. Products repaired or replaced under this warranty are warranted for the unexpired portion of the original warranty. This warranty is invalid if the factory-applied serial number, date code label, or product label has been altered or removed from this product. WCL shall not be obligated or liable under the warranty for apparent defects which examination discloses are due to tampering, misuse, neglect, improper storage, acts of nature, physical abuse, normal wear and all cases where the products are disassembled by other than authorised WCL representatives. In addition, WCL shall not be obligated or liable under this warranty unless the date of delivery to the first end user shall be within one (1) month from the date of delivery to the original purchaser, if different from the first end user, and further provided that written notice of any defect shall be given to WCL within thirty (30) days from the date such defect is first discovered. In no event will WCL accept consequential damages for products supplied and are then found to have become defective.

### Repairing or Modifying X10DR:

Never attempt to repair or modify X10DR yourself. X10DR does not contain any user-serviceable parts, Disassembling an X10DR, including the removal of external screws and back cover, may cause damage that is not covered under the warranty. If an X10DR has been submerged in water, punctured, or subjected to a severe fall, do not use it until you take it to an WCL Authorized Service Provider. Service should only be provided by WCL or an WCL Authorized Service Provider. If you have questions or for service information, contact WCL or an WCL Authorized Service Provider.

NOTE: IECEx / ATEX model repairs may only be performed at a X10DR IECEx/ATEX approved service center.



# Important Safety and Handling Information



**WARNING:** Failure to follow these safety instructions could result in fire, electric shock, or other injury or damage to X10DR or other property. Read all safety instructions for any products and accessories before using with X10DR. WCL is not responsible for the operation of, or any damage caused by, third-party accessories or their compliance with safety and regulatory standards.

To avoid injury, read all operating instructions and the following safety information before using X10DR. For downloadable versions of the latest X10DR User Guide, visit: www.x10dr.com

#### Radio Frequency Interference:

Radio frequency emissions from electronic equipment can negatively affect the operation of other electronic equipment, causing them to malfunction. Although X10DR is designed, tested and manufactured to comply with regulations governing radio frequency emission in countries such as the United States, Canada, the European Union, and Japan, the wireless transmitters and electrical circuits in the X10DR may cause interference in other electronic equipment. Therefore, please take the following precautions: i/Aircraft: Use of X10DR may be prohibited while travelling in aircraft.

ii/Vehicles: radio frequency emissions from X10DR may affect electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle.

iii/Pacemakers: The Health Industry Manufacturers Association recommends that a minimum separation of 15 cm (6 inches) be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. Persons with pacemakers:

- Should always keep X10DR more than 15 cm (6 inches) from the pacemaker when turned on.
- Should not carry X10DR in a breast pocket.
- Should use the ear opposite the pacemaker to minimize the potential
- for interference If you have any reason to suspect that interference is taking place, turn X10DR off immediately.
- X10DR may interfere with some hearing aids. If you experience interference, consult the hearing aid manufacturer or
  your physician for alternatives or remedies.

v/ Other Medical Devices: If you use any other personal medical device, consult the device manufacturer or your physician to determine if it is adequately shielded from radio frequency emissions from X10DR.

vi/Health Care Facilities: Hospitals and health care facilities may use equipment that is particularly sensitive to external radio frequency emissions. Turn X10DR off when staff or posted signs instruct you to do so.

vii/Blasting Areas and Posted Facilities: To avoid interfering with blasting operations, turn off the X10DR when in a "blasting area" or in areas posted "Turn off two-way radio." Obey all signs and instructions.

### Exposure to Radio Frequency Energy:

The unit transmits and receives radio frequency (RF) energy through its antennas. The antennas are located at the top edge of the unit. The Wireless Speaker Microphone is designed and manufactured to comply with the limits for exposure to RF energy set by international regulatory agencies, including the FCC of the United States, IC of Canada, MIC of Japan, and the Coursel of the European Union, among others. The unit has been tested and meets the FCC, IC, and European Union RF exposure guidelines for 802.15 operation. To ensure exposure levels remain at or below the maximum safe levels, when carrying the unit ONIX vas the Wireless Speaker Microphone with the manufacturer's supplied clothing clip or a non-metalic holder that ensures the antenna remains greater than 25mm (1 inch) from your body at all times. An external antenna is connected to the output connector on the mobile charger. Always keep your body at least 20cm (8") from the vehicle mounted external antenna.

#### Potentially Explosive Atmospheres:

Turn off all non-intrinsically safe (IECEx/ATEX) approved X10DR when in any area with a potentially explosive atmosphere. Do not charge any X10DR and obey all signs and instructions. Sparks in such areas could cause an explosion or fire, resulting in serious injury or even death. Areas with a potentially explosive atmosphere are often, but not always, marked clearly. Potential areas may include: fuelling areas (such as gas stations); below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles (such as grain, dust, or metal powders); and any other area where you would normally be advised to turn off your vehicle engine.

#### **Battery Replacement:**

Do not attempt to replace the rechargeable battery in X10DR yourself. The battery should be replaced only by WCL or an WCL Authorized Service Provider. The battery should be re-cycled/disposed of thoughtfully.

#### Antenna Replacement:

Only use the antennas supplied. Use of other antenna types will void type approval.

This radio transmitter (IC:11443A-XH2/XG2) was approved by Industry Canada to operate with the antenna types listed below the maximum permissible gain and required antenna impedance for each antenna type indicated. Types of antennas is not included in this list, having a higher gain than the maximum gain indicated this type are strictly prohibited for use with this device.

Cet émetteur radio (identifier le dispositif par numéro de certification ou le numéro de modèle de la catégorie II) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-après le gain maximal autorisé et de l'impédance d'antenne ne sont pas inclus dans cette liste, ayant un gain supérieur au gain maximum indiqué cet type sont strictement interdits pour une utilisation avec cet appareil.

### Informations importantes de sécurité et de manutention



AVERTISSEMENT: Le non-respect de ces consignes de sécurité peut provoquer un incendie, de choc électrique ou d'autres blessures ou de dominages à XIODR ou d'autres blens. Libez toutes les instructions de sécurité, pour tous les produits et accessoires avant d'utiliser avec XIODR. CMT n'est pas responsable de l'exploitation, ou fout dominage causé par des accessoires liers ou de leur conformité aux normes de sécurité et réglementaires.

Pour éviter toute blessure, lisez toutes les instructions et les consignes de sécurité suivantes avant d'utiliser X10DR. Pour les versions téléchargeables de la demière version du Guide de l'utilisateur de X10DR, visitez: www.wirelesscorpltd.com

#### Radio Frequency Interference:

L'émission de fréquences radio émises par les équipements électroniques peuvent affecter négativement le fonctionnement des autres appareils électroniques, les obligeant à un dysfonctionnement. Bien X,10DR est conçu, testé et fabriqué conformément aux règlements régissant l'émission de radiofréquences dans les pays comme les États-Unis, le Canada, l'Union européenne et le Japon, les émetteurs sans fil et les circuits électriques dans le X10DR peut provoquer des interférences avec d'autres équipements électroniques. Par conséquent, s'il vous plaît prendre les précautions suivantes: i / Avion: L'utilisation de X10DR peut être interdite dans les avions.

ii / Véhicules: les émissions de radiofréquences par des X10DR peuvent affecter les systèmes électroniques des véhicules à moteur. Vérifiez auprès du fabricant ou de son représentant votre véhicule.

#### L'exposition à l'énergie radioélectrique :

L'unité émet et reçoit des fréquences radio (RF) par l'intermédiaire de ses antennes. Les antennes sont situés au niveau du bord Editie effet et reçui des l'expediences rout par par miermenaire de ses diriemnes, les arriemnes des autres de supprise par supprise par les organismes de réglementation internationaux, y compris la FCC des États-Unis, du Canada IC, MIC du Japon, et l'avocat de l'Union européenne, entre autres. L'appareil a été testé et répond aux FCC, IC, et l'Union européenne eff normes d'exposition applicables 802, 15 opération. Pour assurer des niveaux d'exposition restent égales ou inférieures aux limites maximales de soutifs deux forces de l'appareil à l'appareil à de l'appareil à l'appar de sécurité , pour transporter l'appareil , utilisez uniquement le Président de microphone sans fil avec fourni des vétements clip de fabricant ou un support non métallique qui assure l'antenne reste supérieure à 25 mm (1 po) du votre corps à tout moment. Une antenne externe est connectée au connecteur de sortie du chargeur mobile ou au connecteur de sortie de l'amplificateur bidirec-tionnel XBDA. Toujours garder votre corps au moins 20 cm (8 ") de thevehicle antenne externe installée . Le XBDA n'est approuvé pour une utilisation avec l'unité X - Ponder lorsque conformément à la réglementation en matière d'homologation de chaque pays.

Atmosphères explosibles:

Désactiver X10DR dans des zones avec une atmosphère potentiellement explosive. Ne chargez pas X10DR, et respectez tous les panneaux et instructions. Des étincelles dans de telles zones pourraient causer une explosion ou un incendie, causant des blessures

graves ou même la mort. Les zones à atmosphère potentiellement explosive sont souvent, mais pas toujours, clairement indiquées. Les zones potentielles com-Les zones à atmosphère potentiellement explosive sont souvent, mais pas toujours, clairement indiquées. Les zones potentielles comprennent: les zones de carburant (comme les stations d'essence), au dessous du pont des bateaux, de carburant ou de transfert ou au stockage de produits chimiques, les véhicules utilisant du gaz de pétrole liquéfié (comme le propane ou le butane), des zones où l'air contient des produits chimiques ou des particules (le grain, la poussière ou les poudres métalliques) et tout autre endroit où il vous serait normalement recommandé d'arrêter le moteur de votre véhicules.



### Headset use warning

Headsets and earpieces used with this product are capable of delivering sounds at loud volumes. Exposure to such sounds can result in permanent hearing loss damage. The volume level may vary based on conditions such as host radios volume settings and the environment

Please read the following safety guidelines below prior to using a headset or earpiece:

- 1. Prior to using this product follow these steps:
- ·Before putting on the headset, turn the volume control to its lowest level,
- Put the headset on, and then slowly adjust the volume control to a comfortable level.
- 2. During the use of this product:
  - •Keep the volume at the lowest level possible and avoid using the headset in noisy environments where you may be inclined to turn up the volume.
  - If increased volume is necessary, adjust the volume control slowly.
  - If you experience discomfort or ringing in your ears, immediately discontinue using the headset and consult a physician.

With continued use at high volume, your ears may become accustomed to the sound level, which may result in permanent damage to your hearing without any noticeable discomfort. Using a headset while operating a motor vehicle, motorcycle, watercraft may be dangerous, and is illegal in some jurisdictions. Check your local regulations and laws.

#### Charging your X10DR:

To charge X10DR, use only the WCL mobile or desktop chargers.

When you use the WCL desktop charger to charge X10DR, make sure that the power adapter is fully assembled before you plug it into a power outlet. Then insert the WCL AC/DC plug pack firmly into the power outlet. Do not connect or disconnect the WCL AC/DC plug pack with wet hands. The WCL AC/DC plug pack may become warm during normal use. Always allow adequate ventilation around the WCL AC/DC plug pack and use care when handling. Unplug the WCL AC/DC plug pack if any of the following conditions exist:

- 1/ The power cord or plug has become frayed or damaged.
- 2/ The adapter is exposed to rain, liquid, or excessive moisture.
- 3/ The adapter case has become damaged.
- 4/ You suspect the adapter needs service or repair.
- 5/ You want to clean the adapter.



#### Cleaning your X10DR:

Clean X10DR immediately if it comes into contact with any contaminants that may cause possible malfunctions—for example, ink. dves, makeup, dirt, food, oils, and lotions. To clean X10DR, unplug all cables and turn off X10DR (press and hold the manual On/Off button). Then use a soft, slightly damp cloth. Don't use abrasive household or industrial cleaners, aerosol sprays, solvents, alcohol, ammonia to clean X10DR.

#### Connectors and Press Buttons:

Never force a connector into a port or apply excessive pressure to a button, because this may cause damage that is not covered under the warranty. If the connector and port don't join with reasonable ease, they probably don't match. Check for obstructions and make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port. Not all Hirose 6 pin accessories are fully compatible with X10DR. Under some conditions, certain accessories may affect X10DR wireless performance. Reorienting or relocating X10DR and the connected accessory may improve wireless performance.

#### Acceptable Temperature Extremes:

X10DR is designed to be normally operated and stored in temperatures between -20° and 55°C (-4° to 122°F). Lower or higher temperature conditions might shorten battery life or cause X10DR to temporarily stop working correctly. Leaving X10DR in a parked vehicle or in direct sunlight can cause X10DR to exceed these storage or operating temperature ranges. Avoid dramatic changes in temperature or humidity when using X10DR, as condensation may form within the unit. When you're using X10DR or charging the battery, it is normal for X10DR to get warm. Battery will only charge when its ambient temperature is within safe limits.

#### Drivina Safely:

Use of X10DR while driving a vehicle or riding a motorbike may be distracting. If you find using X10DR disruptive or distracting while driving or riding, pull off the road and park before making or answering a call. Use of X10DR alone or with headphones (even if used only in one ear) while driving or riding is not recommended and is illegal in some countries. Check and obey the laws and regulations regarding the use of mobile devices like X10DR in the greas where you drive or ride.

#### Air Baa Equipped Vehicles:

An air bag inflates with great force. Do not store X10DR or any of its accessories in the area over the air bag or in the air bag deployment area.

Carrying and handling X10DR:

X10DR contains sensitive components. Do not drop, disassemble, microwave, burn, paint, or insert foreign objects into X10DR. Do not use X10DR if it has been damaged—for example, if X10DR is cracked, punctured, or damaged by water,



Encryption:

### **Radiation Exposure:**

Do not touch the antenna when operational. Keep the Secure Microphone antenna 25mm (1") or more away from your face and body to ensure exposure levels remain at or below the maximum levels. Keep your body at least 20cm/8" from external antennas connected to the X-Ponder mobile charger unit.

Ne touchez pas l'antenne lorsque opérationnel. Gardez sécurisé antenne de microphone 25mm (1") ou plus loin de votre visage et le corps pour assurer des niveaux d'exposition restent égales ou inférieures aux teneurs maximales. Gardez votre corps au moins 20cm/8 "des antennes externes connectés à l'unité de chargeur mobile X-Ponder.

## Specifications

Designed to meet the following global specifications:

88 x 28 x 63mm (Mic) 80 x 80 x 60 (chgr) Dimensions: 149 grams (Mic) 125 grams (char) Weight: 2.40-2.48GHz FH Spread Spectrum Frequency: Protocol: 802.15.4 based derivative RF Power: <100mW / X-Ponder <100mW Battery Type: 3.7V @1450mA Lithium Polymer Battery Life: >15 Hours @ 30% receive time

Proprietary/Elite model: AES128

RF Connectors: RP SMA Female >300mW @5% THD Rated Audio/Dist: Hirose Audio port: Standard Standard 3.5mm Audio port:

Operating Voltage: 7-16VDC Operating Temp: -20°C to +55°C /-4°F to +122°F

Shock & Vibration: Mil Std 810 C/D/E/F Humidity/Rain/Dust:

IEC529, IP55-std Mic/ IP67 Elite Mic CE, FCC, IC, Aust/NZ, Type Acceptance:

# pe Acceptance /Approvals



FCC ID: 5AGEY-XH2/5AGEY-XG2 IC:11443A-XH2/11443A-XG2

IFCFx / ATFX Ex ia IIC T4 X10DR-AU2 only

Location of labelling



N13187

0682 **(h** 









Please recycle thoughtfully

Subject to change or improvement without notice

