

**Parts and functions**

**Description**

**Wear here for best performance**

### Plus Handset

Antenna  
Status  
Control  
Emergency  
Microphone  
PTT  
Volume Up/Down  
DC Charging  
Accessory port (3.5 jack)

Off/On/Search

#### Status LED

- Default - Transmit over radio
- ✕ Flashing - not connected
- Talkaround transmit locally
- Handsfree mode active
- Relay mode - GW connected
- ✕ Flashing - Relay mode - no GW
- Remote handset mode
- Remote PTT active
- Alternating - Find Me active

#### HANDSET

**Off/On:** Press ~2 seconds to turn on/5 secs to turn off. Tones sound.  
**Search:** Short press to connect to another paired gateway/handset.  
**Status light:** Glows solid when operational. Flashes when "out of range" or gateway is off. See color scheme.  
**Volume up:** Short press adjusts speaker louder.  
**Volume down:** Short press adjusts speaker softer.  
**Microphone:** Talk at normal strength about 1- 3cm (~1").  
**PTT:** Radio Press to talk\*# - May also be configured for **Talkaround PTT**.  
**Emergency:** A confirmation beep sounds when pressed\*# and then triggers host radio's emergency function. Press button as per mobile radio's emergency operating instructions or as advised by your supplier.  
**Control:** Configured as **Talkaround PTT**\*# button as default. Can also be configured to toggle Side PTT button assignment\*\* between radio and talkaround, or alternatively for Radio PTT, 2nd radio PTT or PA talk. Confirmation tones will sound when pressed\*.  
**Handsfree\*\*:** double press the **assigned** Talkaround button to enable. A reminder beep will sound every 30 seconds. Single press to disable. Use with headset or earpiece.  
**DC charging:** Handset beeps to notify correct seating when handset first placed in gateway, desktop or wireless charger. The handset's status LED will blink every 10 secs to indicate "charging" status. Solid blue means complete. Handset sounds **3 short beeps** every 5 minutes when charging is required.  
**Speaker:** Delivers received speaker audio - Handset normally mutes when inserted into gateway, mobile or desktop charger.\*  
**Headset connector:** Use with X10DR optional headsets/accessories fitted with Hirose HR10 Plus connectors. Use disable internal speaker. External battery connects here.



#### WIRELESS PTT BUTTON

Emulates pressing the X10DR handset **side** PTT button. Short press to power on or wake from sleep. Triple press to power off when not in use. Device sleeps when not used to preserve battery life. (approx 2-3 months) Handset will sound **2 beeps** every 5 mins when battery requires replacement. (CR2032)



**Pairing Devices:** Refer user manual - [www.x10dr.com](http://www.x10dr.com) - Scan QR Code

### Plus Gateway Charger

Function Button  
Status Light  
3.5mm jack (180mV)  
XIC Interface connector  
Antenna port

#### XWPB

Wireless PTT Button

#### XRTG-EX2

Elite Plus External Rooftop Gateway

#### XIVG

Internal gateway

- Active
- Find Me

#### XEBC

external battery cable  
90cm Hirose to USB-A (use with powerbank).

#### GATEWAY

**Function Button:** Long Press used to manually auto Off/On. Fast double press for Find Me™ - Short press to reset. Fast triple press to enable gateway Touchless pairing.  
**Status light:** Glows solid when operational. Flashes when handsets are "out of range" or off. Flashes blue/Red when Find me is activated.  
**Antenna Connector:** Connect long-range external or short range internal.  
**3.5 Audio Out:** Provides either line level 180mV RMS. When X10W option is fitted provides up to 10W RMS @ 8 ohms up/down buttons on the base adjust volume. Intended for in-vehicle monitor or use as a PA system. The handset Control button is usually configured to make public address broadcasts.

#### OTHER HANDSET FEATURES

**Mandown Biometric Monitor Mode:** When fitted and activated, the Mandown function turns on automatically whenever you remove the handset from its charger. If there is no user movement or transmit activity for 2 minutes, quickening alert tones will sound for 30 seconds. If there is still no user activity, the radio's emergency input will be triggered. To temporarily disable Mandown operation, either power up the handset or remove it from its charger while pressing the top grey Control button until a 4 beep "pause" confirmation sounds. A gentle reminder beep will sound every 2 minutes until re-enabled. To re-enable Mandown, either power off/on the handset or place the handset into a charger and then remove. Mandown is disabled when the handset is placed into any charger/gateway.

**External battery:** Simply plug in a USB cellphone style external battery power bank via the optional **XEBC** battery adaptor cable to the handset & external battery port. The handset LED will 'blink' every 10 seconds to indicate it is being re-charged. You can continue to use the handset as normal. Replace or remove exhausted power banks when re-charged as desired.

\*See Programming Parameters for configurations. Some tones can be enabled/disabled by programming or user selection.  
 \*\* Elite Plus model feature only.  
 #- When out of range the unit will sound a low frequency tone alert when pressed.

**Warning:** Product contains Neodmium, rare earth magnets, keep away from credit cards or like items that can be damaged by strong magnetic fields.

## X10DR<sup>®</sup> Advanced Elite Plus Range Extender Features (Important : Please read User Manual before operating these feature)

To significantly enhance in-to-building coverage, Elite Plus handsets are all capable of "relay" mode. This unique X10DR Elite Plus capability means that a handset, when out of range from the vehicle's gateway, can still communicate via a still in-range 'relay' handset. There are two available operational relay modes: Command Relay and Automatic Dynamic Relay mode. Command Relay is enabled by default in all Elite Plus handsets but requires user to activate . Automatic mode needs to be enabled by the XFPK programmer but then is active in all handsets unless manually disabled.

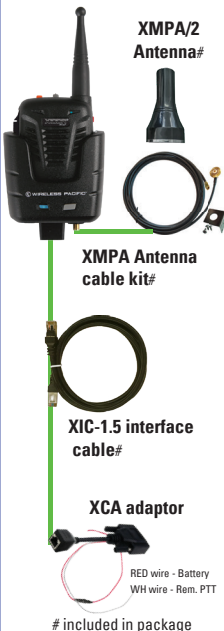
**Command Relay Mode Operation:** (handsets should be paired together - usually done at time of vehicle installation.) First walk to where you require extended coverage (e.g. inside building lobby). After first confirming a **reliable vehicle gateway connection\*1**, then activate relay mode by a long press (~5 secs) of handset's **Volume Up** button. When you hear three beeps, release button and handset LED will change to yellow with a periodic blue flash indicating connection to gateway (flashing yellow=gateway out of range). In-range, previously paired "Remote" handsets, will automatically connect with Command Relay handset, once their connection to the vehicle's gateway is lost. Alternatively, you can immediately connect to the Command Relay Mode handset by a short press of the red colored "search" button - **Note:** the "Remote" handset LED will then change to yellow to indicate its new connection status. When desired re-press red "search" button to reconnect back to the "in-range" vehicle's gateway. **Note:** LED will glow blue when transmitting on host mobile, or green when only talking locally, or purple if handsfree mode is activated. To **deactivate** Relay mode: Long press handset's **Volume Up** button - you hear one beep. Handset status LEDs will now change back to default color. **\*1Note:** If vehicle connection is lost, handsets can still communicate with each other until back into range of the vehicle.

**Automatic Relay Mode Operation:** (handsets should be paired together - usually done at time of vehicle installation.) This mode, when activated by programming, is always on and should the handset lose connection with vehicle's gateway device, the handset will automatically search for a "pre-paired" second or third handset. The status LED of an Auto Relay enabled handset glows yellow with a periodic blue flash when connected to their gateway. When connect via a 'relay' handset the status LED will glow solid yellow. All operation is automatic and users simply operate their handsets as usual.

If desired, deactivate Automatic mode by long pressing the **Volume up** button until you hear one beep. Re-activation occurs by either long pressing the **Volume up** button again, or by powering off and on the handset. Should two or three handsets lose connection with the vehicle gateway, then they will automatically re-configure themselves into a private off-network AES secure, exclusive, talkgroup so those users can communicate freely amongst themselves until back in range of the host vehicle. When back at the vehicle, users should short press the red "search" button in the event their status LED doesn't revert to yellow with a periodic blue flash. **See user manual for use with dual or triple gateways.**

## BASIC INSTALLATION

### X10DR-EX2/PU2#



### IMPORTANT

Please refer to [www.x10dr.com](http://www.x10dr.com) for installations instructions, programming and other supporting documents before installation commences. Always refer to your mobile radio's service and programming manuals as **some radio types need minor programming or internal reconfiguration** to ensure correct X10DR operation or connectivity.

### PROGRAM AUDIO LEVELS

For optimum performance each gateway should be programmed to suit your particular mobile radio. Use the XGALA Gateway Audio Level Adjustment software tool\* to set the **gateway output level** to the host mobile radio, so that it matches the loudness of the mobile radio's standard wired microphone. Adjust **gateway input level** for optimum loudness from the handset's speaker. When additional gateways are connected via a junction box, then adjust the levels between gateways for optimum balanced levels. \*download at [www.x10dr.com](http://www.x10dr.com).

### ANTENNA PLACEMENT

Multi-polarity antennas provide optimum coverage at 2.4GHz especially in non-line of sight situations. Mount on a vehicle roof or a roof rack using the supplied L Bracket - **clear of obstructions** in the direction you wish to predominately communicate when vehicle is parked. The coax cable supplied is the lowest loss RG58 type available. **Never use other antenna/coax types** as they may dramatically limit coverage.

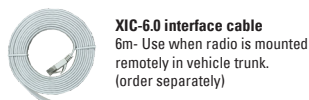
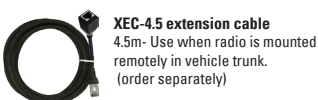
### XCA RADIO SPECIFIC ADAPTOR

The XCA adaptors connect to the rear interface connector on your mobile radio. Connect RED wire to vehicle's **permanent battery** supply. White wire, if supplied, is for Remote PTT - **only connect** when required.

### XRTG-EX2



### Alternate installation accessories



**XTBM Talk Back Mic**  
Allows a vehicle based user to communicate with partner using a wireless X10DR handset when away from the vehicle. (order separately)

