



Programming Parameter Guide

For Elite Plus and Pro Plus Models

Some features are only applicable to firmware version 5.0 or later

Rev 1

How to install Programmer:

Runs On PC or Mac running Windows 10/11

NOTE: Requires **USB 2** Port. **The programmer will not work with USB 3 - if your PC only has USB3 ports suggest you attach X10DR device via a usb patch block most are USB 2.)**

Included with the Programmer download file application are instructions on how to set-up the programmer on your Windows 10/11 PC. Please follow those instructions to install the programmer correctly onto your computer.



USER PROGRAMMER INSTALLATION GUIDE

The X10DR User Programmer requires two separate programs to be installed.

- Step 1 – Drivers :** Install BlueSuite found on the USB Flash-Drive (BlueSuite...EXE).
When given the choice of components to install please select the options shown below.
(Do not install Core, BlueTest3 or DFU tools).

How to use Programmer:

Runs On PC running Windows 10/11

Requires **USB 2** Port.

To put Handset into programming mode:

Turn off Handset, attach programming cable between device Hirose port and PC then press the Handset's Red right side button while holding PTT. The Handset's LED will light red.

To put Gateway into programming mode:

Turn off gateway. Then hold gateway ON/OFF button down while attaching the programming cable to device micro-USB port and PC USB port. The Gateway's LED will light red. *Note: The gateway's RJ45 socket should **not** be connected to the host radio.*

Always READ device before proceeding further.

We suggest you **SAVE** the file onto your PC for re-loading if required. A GREYED out feature means your device does support that capability.

Read Device

Press to load current programming parameters from device to screen.

Program Device

Press to load current screen programming parameters to a device.

Restart (important)

Press to **restart** programmed device before removing programming cable.

Lock - Unlock File

Press to lock your desired parameter configuration before undertaking batch fleet programming. This will prevent you errantly changing a parameter unknowingly during reprogramming.



Load File

Press to load a previously saved programming parameters to device from its saved PC location.

Save File

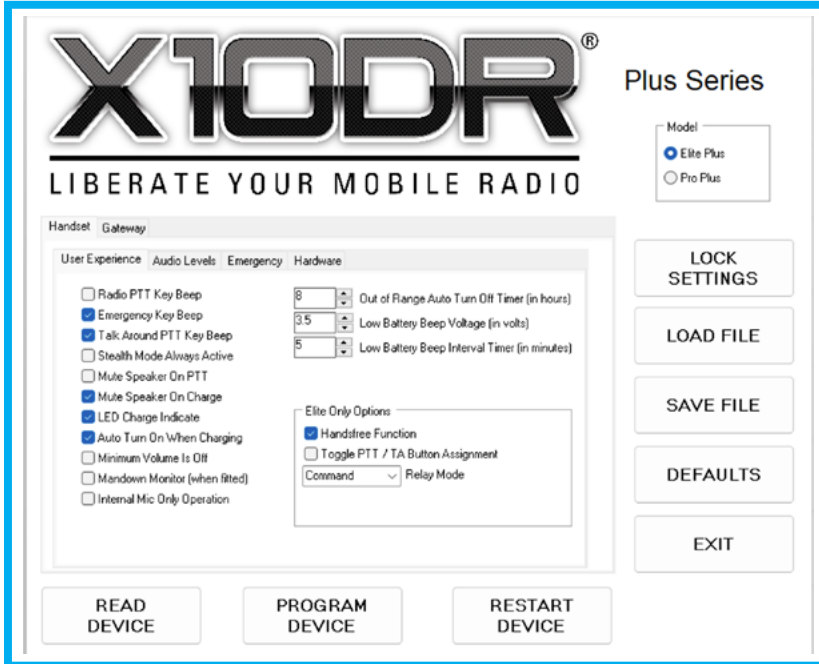
Press to save a programming parameters from screen to desired PC location saved location.

Defaults

Press to reset with default device parameters

Exit

Press to exit program.



Radio PTT key beep

Sounds talk permit two tone sequence whenever PTT is pressed and Handset is within range of its gateway.

Default - OFF

Emergency key beep

Sounds single tone whenever Emergency button is pressed and Handset is within range of its gateway.

Default - ON

Talkaround PTT key beep

Sounds talkaround triple tone sequence whenever Talkaround button is pressed and Handset is within range of its gateway.

Default - ON

Stealth mode always active

Disables all alert tones and LED status light. User can manually enable stealth mode if programmed off.

Default - OFF

Mute speaker on PTT

Disables all speaker audio whenever PTT is pressed.

Default - OFF

Mute speaker on charge

Disables speaker when Handset is in gateway or a charger.

Default - ON

LED charge indicate

Disables "momentary blink" charge indicate when Handset is placed into gateway or a charger and device is charging.

Default - ON

Auto turn on when charging

Causes Handset to automatically turn on whenever it is placed in gateway or a charger.

Default - ON

Minimum volume is off

Allows user to turn the speaker audio off instead of level 1.

Default - OFF

Mandown Monitor*

Enables/disables Mandown function via programmer

Default - OFF

Internal Mic Only Operation

Maintains operation via internal microphone when accessory attached to Hirose port required for when WPEH-X10/WPTEP-X10 earpieces connect via Hirose headset port rather than the 3.5 audio jack.

Default - OFF

* (when fitted)

Handset Programming:

Basic functions

Out of range turn off time

Sets time in hours that a Handset that is not actively connected to a gateway will remain powered on before turning itself off.

Default - 8 hours

Low battery beep voltage

Sets the remaining battery voltage that will cause the low battery alert tones to be generated. (for longer shift life you may set voltage lower but you may get less warning before device automatically shuts off.

Default - 3.5V

Low battery beep interval timer

Sets the interval that the low battery alert tones are sounded in the Handset.

Default - 5 minutes

Handsfree Function

Enables user selectable handsfree intercom function in Plus Handsets.

Default - ON

Toggle PTT/TA Button Assignment

Configures Handset so that pressing the side Grey button toggles the side PTT button assignment between host radio PTT and Talkaround or 2nd Radio device(Legacy Mode) PTT /PA Mode when used with XSJB or similar.

Default - OFF

Automatic Relay Mode / Command Relay Mode

Selects the Relay Mode type in Plus Handsets.

Default - Command Relay ON



We recommend you use the **XGALA Gateway Audio Level Adjustment software tool for setting levels between host radio and X10DR gateway.** It can be downloaded at <https://www.x10dr.com/supports> for setting audio in and out between the gateway and the host mobile radio.

The following Handset adjustments are designed to cater for different audio accessories and/or user applications requiring alternate audio sensitivities to suit different operating conditions.

Internal Mic Gain

Sets the internal microphone's transmit audio level sensitivity.

Default - 3

Internal Mic High Gain Boost

Sets the internal microphone's sensitivity when "Live Mic" is active.

Default - 6

External Mic Gain

Sets the external microphone's transmit audio level sensitivity.

Default - 6

External Mic High Gain Boost

Sets the external microphone's sensitivity when the X10DR's "Live Mic" is active or when user manually selects high gain by powering up microphone with blue volume up button pressed.

Default - 6

Remote PTT Gain Boost

Increases sensitivity of internal microphone when remote/handlebar PTT is pressed.

Default - 9

Fixed Alert Tone Volume

Limits all user monitored alert tones to level set below rather than being controlled by Handset volume controls.

Default - OFF

Alert Tone Volume

Sets the value of the "Fixed Alert Tone" when enabled that a user will hear from their Handset.

Default - 5

When Handset is configured for press & hold Emergency

Audio link active time

Sets the duration the transmit audio is active after Emergency button is released. Feature is intended for those **mobiles that activate their own** internal "Live Mic" functionality whenever emergency is triggered. This allows the Handset's Tx audio to be broadcast over the radio's transmit channel, (Note: This assumes mobile sources "Live Mic audio" from its external mic input). **Default - 0**

When Handset is configured for short/long press Advanced Emergency

Transmit Time

Sets the time duration that X10DR's internal "Live Mic" functionality Tx audio is active when Emergency activated.

Default - 0

Receive Time

Sets the time duration that X10DR's internal "Live Mic" function enables radio receive audio to be heard by the user, before transmitting further "Live Mic" audio over the host mobile radio when Emergency repeat cycles is greater than zero.

Default - 0

Emergency repeat cycles

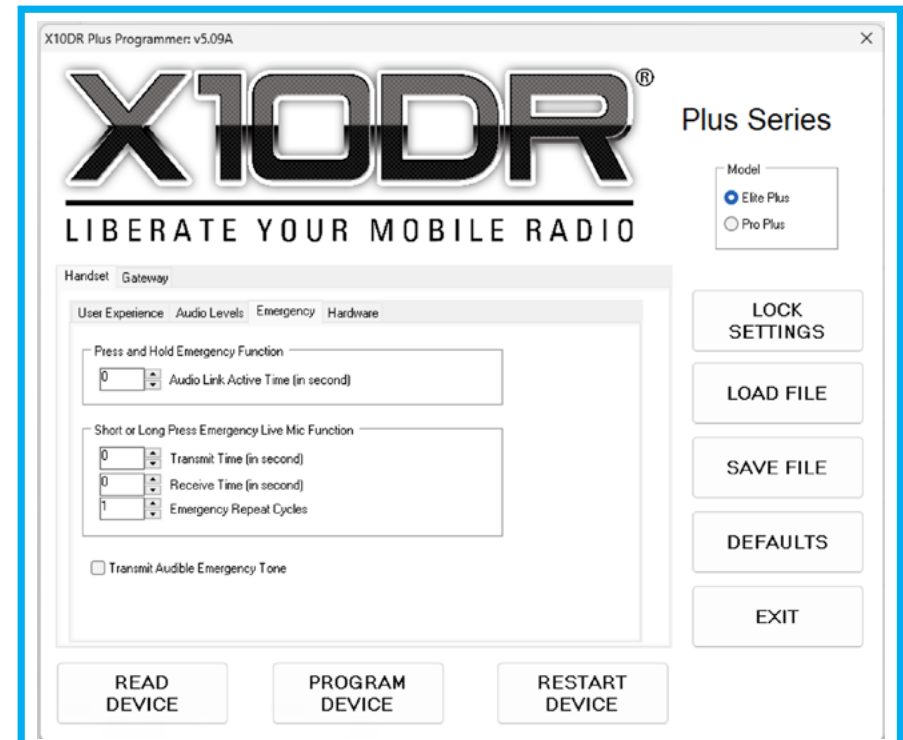
Sets the number of "Live Mic", Tx and Rx cycles when Advanced Emergency is triggered.

Default - 1

Transmit audible emergency tone

Causes an audible emergency warble tone to be transmitted over the host mobile radio channel when emergency is activated.

Default - Off



Handset Programming: Hardware

Hirose Pin 2 function

Sets Hirose pin 2 to be either BAT+ (~3.3VDC) to power external accessories or bridged output speaker audio when pin 2 is set for speaker negative.

Default - Speaker -VE

Acc PTT

Sets whether Hirose PTT input generates Talkaround or Radio PTT.

Default - Radio PTT

PTT

Sets function of main large PTT button. Choose from drop down box.

Default - Radio PTT

Top 1

Sets function of top left Orange button. Choose from drop down box.

Default - Emergency

Top 2

Sets function of top right Grey button. Choose from drop down box.

Default - Talkaround PTT

Left 1

Sets function of top left button.

Default - SP: Volume up / LP: Relay mode ON/OFF

Left 2

Sets function of bottom left button.

Default - SP: Volume down

Right 1

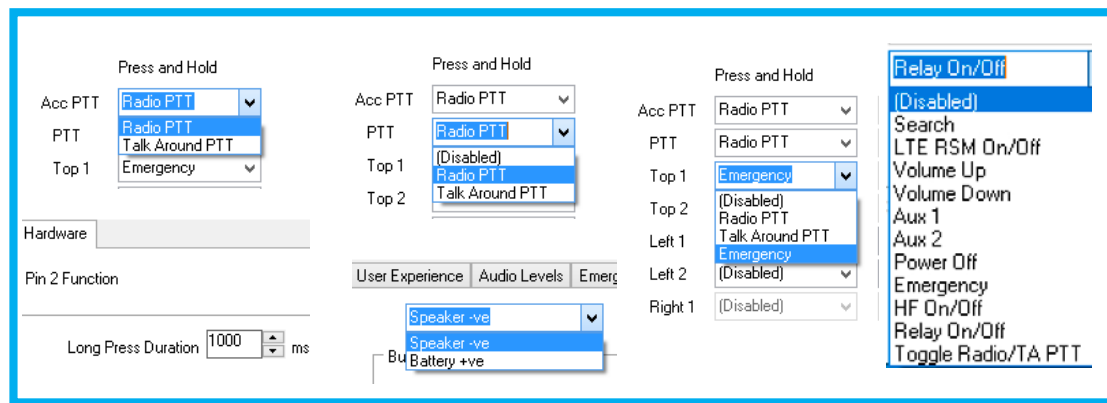
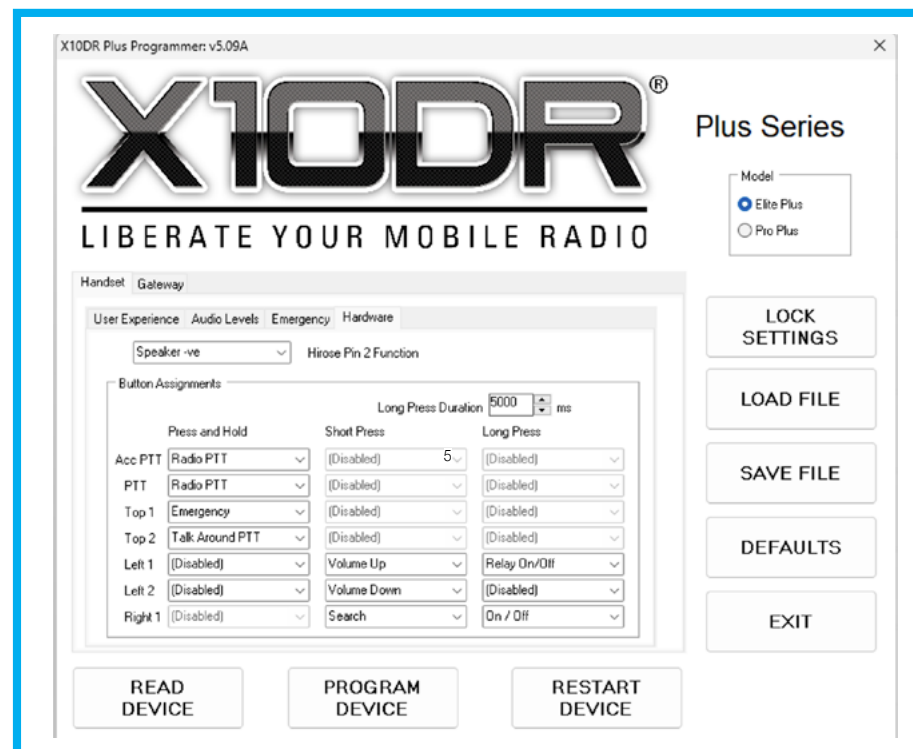
Sets the function of right side button. Re-assigning requires hardware modifications.

Default - LP: OFF/ON

Long Press Duration

Sets time button must be pressed to action a Long Press.

Default - 5000mSec



	Press and Hold	Short Press	Long Press
Acc PTT	Radio PTT	(Disabled)	(Disabled)
PTT	Radio PTT	(Disabled)	(Disabled)
Top 1	(Disabled)	Aux 1	Search
Top 2	(Disabled)	Aux 2	Emergency
Left 1	(Disabled)	Volume Up	Relay On/Off
Left 2	(Disabled)	Volume Down	Power Off
Right 1	(Disabled)	Toggle Radio/TA PTT	On

READ DEVICE

RESTART DEVICE

	Press and Hold	Short Press	Long Press
Acc PTT	Radio PTT	(Disabled)	(Disabled)
PTT	Radio PTT	(Disabled)	(Disabled)
Top 1	(Disabled)	Aux 1	Search
Top 2	(Disabled)	Mandown Alert	Emergency
Left 1	(Disabled)	(Disabled)	Relay On/Off
Left 2	(Disabled)	Search	Power Off
Right 1	(Disabled)	LTE RSM On/Off	Power On

READ DEVICE

RESTART DEVICE

	Press and Hold	Short Press	Long Press
Acc PTT	Radio PTT	(Disabled)	(Disabled)
PTT	Radio PTT	(Disabled)	(Disabled)
Top 1	Emergency	(Disabled)	(Disabled)
Top 2	Talk Around PTT	(Disabled)	(Disabled)
Left 1	(Disabled)	Volume Up	Relay On/Off
Left 2	(Disabled)	Volume Down	(Disabled)
Right 1	(Disabled)	Search	On / Off

	Press and Hold	Short Press	Long Press
Acc PTT	Radio PTT	(Disabled)	(Disabled)
PTT	Radio PTT	(Disabled)	(Disabled)
Top 1	(Disabled)	Aux 1	Emergency
Top 2	(Disabled)	Aux 2	(Disabled)
Left 1	(Disabled)	Volume Up	Search
Left 2	(Disabled)	Volume Down	LTE RSM On/Off
Right 1	(Disabled)	Toggle Radio/TA PTT	Volume Up

READ

PROGRAM

Plus Handset Right 1 Button - Short Press Assignments:

Search - Resets connection to its paired gateway, other paired gateways or Relay Mode paired Handsets.

LTE RSM - Special Application

Aux 1 (or 2) - Special function when used with XFSB/ XSJB Smart boxes.

Relay Mode On/Off - Toggles Relay Mode ON / OFF to allow Handsets to talk directly or mesh back to vehicle when one Handset is out of vehicle gateway range **Default - Toggle Radio/ TA PTT**

Toggle Radio PTT - Toggles Side PTT button between Network or Local transmit (Talkaround)

Dual Radio - Toggles top Yellow button between Radio One and Radio two (requires use of XSJB/ XFSB)

Plus Handset Top 1/2, Left 1/2 Button - Short Press Assignments:

Search - Resets connection to its paired gateway, other paired gateways or Relay Mode paired Handsets.

Volume Up - Increases Handset speaker audio volume in 7 steps.

Volume Down - Decreases Handset speaker audio volume in 7 steps.

Aux 1 (or 2) - Special function when used with XFSB/ XSJB Smart boxes.

Emergency - Triggers Emergency on host mobile/wireless network device where available.

HF On/Off - Toggles Handsfree local full duplex intercom operation ON / OFF.

Relay Mode On/Off - Toggles Relay Mode ON / OFF to allow Handsets to talk directly or mesh back to vehicle when one Handset is out of vehicle gateway range.

Toggle Radio PTT - Toggles Side PTT button between Network (Radio) or Local transmit (Talkaround)

Mandown Alert- used with XMD mandown option for user audible alerts

Dual Radio - Toggles top Yellow button between Radio One and Radio Two (requires use of XSJB/ XFSB)

Plus Handset Right 1 Button - Long Press Assignments:

On/Off - Manually powers Off and On the Handset.

Power On - Manually powers ON a Handset that is OFF.

When so assigned we suggest that the blue Volume Down button (L2) be programmed for Long Press: Power OFF for intuitive operation (other buttons can be chosen if desired). This assignment is suggested when short press is assigned other than to its default setting.

Plus Handset Top 1/2, Left 1/2 Button - Long Press Assignments:

as per above short press selection but with following addition assignable function:

Power Off - Manually powers OFF a Handset that is ON.

(Default button assignment : Volume down (L2) button)

Default Plus Assignments

Right 1 SP: Search / LP Power On/Off

Top 1 Emergency

Top 2 Talkaround PTT

Left 1 SP Volume Up / LP Relay Mode On/Off

Left 2 SP Volume Down



Gateway Parameters

Pro Plus



Status light

Function Button
- Manual Off/On
- Touchless Pairing
- Master Reset
- Find Me

Hold while powering up for programming
(LED glows solid RED)



Elite Plus



XRTG Elite Plus



Programming XRTG

As the XRTG is externally mounted, the **Function Button** and related LED indicator are internally enclosed but readily accessible when you remove the front cover. Use the button and LED the same as standard or XIVG function button.

Pairing a XRTG or XIVG Gateway

Use the **Auto pairing method** where you power up the gateway with its host radio turned off. For the next 30 seconds the gateway will be in pairing mode. Powering on the radio will in most cases abort the process.

XIVG Gateway

Elite Plus and Pro Plus models available

Status light



Function Button
- Manual Off/On
- Erase Pairing
- Find Me-

Hold while powering up for programming
(LED glows solid RED)

*We highly recommend use of the XGALA Gateway Audio Level Adjustment tool for setting audio levels. Download here:
<https://www.x10dr.com/supports>

Receiver Input Gain From Radio

Sets the receive input sensitivity. **Default - 0**

Transmit Output Gain To Radio

Sets the audio output level to radio when local/remote /handlebar PTT is pressed or when "Live Mic" is active. **Default - 0**

Talk Around Output Gain to other X10DRs

Sets the "intercom" microphone audio level. **Default - 0**

Find Me™ Function

Enables Find Me function in gateway. User double presses gateway **Function** button to trigger Find Me alert tones or triggers Remote FindMe.

Default - OFF

Radio Receive VOX/COR

Enables VOX derived COR.

Default - ON

VOX Trigger Level

Sets the gateway's audio detect sensitivity for VOX derived COR.

Default - 70

Public Address Mode

Sets the gateway so only Handset Talkaround audio is sent to the gateway 3.5mm jack. When unchecked both Radio PTT and Talkaround audio is available for in-car monitor use. **Default - OFF**

Monitor Emergency Input Alert Tone

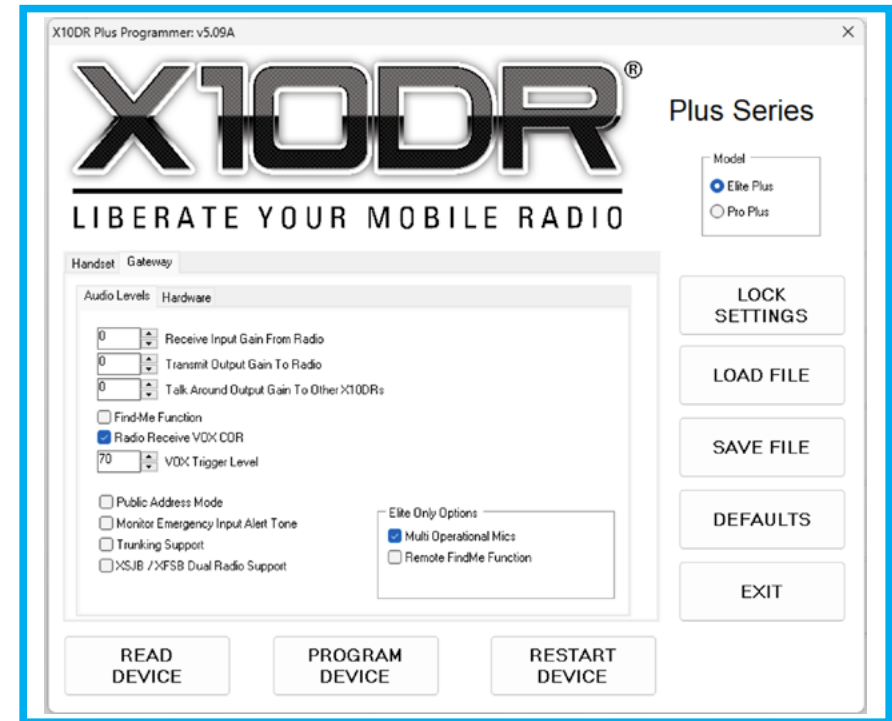
Causes Emergency warble alert tone to sound in all cross connected X10DR Handsets whenever emergency input is triggered. (i.e. triggered from another gateway or externally supplied ground input).

Default - OFF

Trunking Support

Enables speaker audio upon PTT for 500mS, so host trunked mobile's Channel Grant/Talk Permit tones can be clearly distinguished by user. Handset Mic audio is also muted for 500mS to prevent those tones being rebroadcast over talkgroup. For optimum performance set VOX trigger level for **90-100** for fastest response.

Default - OFF



XSJB/XFSB Dual Radio Support

Enables Dual Radio with Talkaround functionality when used with XSJB/XFSB accessories

Default - OFF

Multi Operational Mics

Allows two or three Elite Series Mics to be simultaneously operational through the one Elite gateway unit.

Default - ON

Remote Find Me™

Enables Find Me function in gateway via grounding the white wire connected to pin 8 (Replaces Remote PTT function)

Default - OFF

I/O

Defines whether the specific gateway interface pin is assigned as an input or an output.

Active

Sets whether the interface pin needs to be held low or pulled up high to activate assigned functionality.

Function

Assigns desired functionality to Interface pin.

Choose the desired input or output from the dropdown boxes.

Pulse

Defines the length of time an input must be activated before the function is triggered or alternatively how long an output is activated when the assigned function has been triggered. A value of zero means an input triggers instantly.

	I/O	Active	Function	Pulse (ms)
Radio PTT	Output	Low	Radio PTT	0
Radio Emergency	Output	Low	Emergency	0
Radio COR	Input	Low	Radio COR	0
Function 1	Output	Low	Disabled	500
Function 2	Output	Low	Radio COR	500
Function 3	Output	Low	Remote PTT	0
Function 4	Output	Low	Find Me	0
Function 5	Output	Low	Handset in Cradle	0
Function 6	Output	Low	Handset out of Range	0
Function 7	Output	High	Disabled	100
Function 8	Output	High	Disabled	100

Pro Plus Default settings: Handset - Gateway

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

User Experience Audio Levels Emergency Hardware

☐ Radio PTT Key Beep
☒ Emergency Key Beep
☒ Talk Around PTT Key Beep
☐ Stealth Mode Always Active
☐ Mute Speaker On PTT
☒ Mute Speaker On Charge
☒ LED Charge Indicate
☒ Auto Turn On When Charging
☐ Minimum Volume Is Off
☐ Mandomon Monitor (when fitted)
☐ Internal Mic Only Operation

Out of Range Auto Turn Off Timer (in hours)
3.5
Low Battery Beep Voltage (in volts)
5
Low Battery Beep Interval Timer (in minutes)
5

Elite Only Options
☐ Handfree Function
☐ Toggle PTT / TA Button Assignment
Command Relay Mode

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

User Experience Audio Levels Emergency Hardware

Speaker +ve Hicose Pin 2 Function

Long Press Duration 5000 ms

Button Assignments
Press and Hold Short Press Long Press
Acc PTT Radio PTT (Disabled) (Disabled)
PTT Radio PTT (Disabled) (Disabled)
Top 1 Emergency (Disabled) (Disabled)
Top 2 Talk-Around PTT (Disabled) (Disabled)
Left 1 (Disabled) Volume Up (Disabled)
Left 2 (Disabled) Volume Down (Disabled)
Right 1 (Disabled) Search On / Off

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

User Experience Audio Levels Emergency Hardware

Internal Mic Gain
Internal Mic High Gain Boost
External Mic Gain
External Mic High Gain Boost
Remote PTT Gain Boost

☐ Fixed Alert Tone Volume
Alert Tone Volume

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

User Experience Audio Levels Emergency Hardware

Press and Hold Emergency Function
0 Audio Link Active Time (in seconds)

Short or Long Press Emergency Live Mic Function
0 Transmit Time (in seconds)
0 Receive Time (in seconds)
1 Emergency Repeat Cycles

☐ Transmit Audible Emergency Tone

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

Audio Levels Hardware

0 Receive Input Gain From Radio
0 Transmit Output Gain To Radio
0 Talk-Around Output Gain To Other X10DRs

☐ FindMe Function
☒ Radio Receive VDR CDR
20 VDR Trigger Level

☐ Public Address Mode
☐ Monitor Emergency Input Alert Tone
☐ Trunking Support
☐ XSUB / XFSB Dual Radio Support

Elite Only Options
☒ Multi Operational Mics
☐ Remote FindMe Function

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE

X10DR®
LIBERATE YOUR MOBILE RADIO

Plus Series
Model
☐ Elite Plus
☒ Pro Plus

Handset Gateway

Audio Levels Hardware

I/O Active Function Pulse (ms)
Radio PTT Output Low Radio PTT 0
Radio Emergency Output Low Emergency 0
Radio CDR Input Low Radio CDR 0
Function 1 Input Low Disabled 0
Function 2 Input Low Disabled 0
Function 3 Output Low Disabled 0
Function 4 Output Low Disabled 0
Function 5 Output High Disabled 0
Function 6 Output High Handset in Cradle 0

LOCK SETTINGS
LOAD FILE
SAVE FILE
DEFAULTS
EXIT

READ DEVICE PROGRAM DEVICE RESTART DEVICE