

# Product Safety Manual

14221-1800-2010  
Rev. C, August 2016



*This booklet contains important safety information regarding specific absorption rate (SAR) and RF exposure limits included in United States and international standards. Read the information in this booklet before operating your radio.*

---

## XL-200P Series Portable Radios



HARRIS.COM | #HARRISCORP

REV	DATE	DESCRIPTION
-	Aug/15	Initial release.
A	Nov/15	Added CE information.
B	Apr/16	Updated DoC and added EU regulatory approval info and EU RF exposure info. Updated Table 1-1 and Tableau 2-1.
C	Aug/16	Added Table 1-2.

#### ACKNOWLEDGEMENTS

The software contained in this device is copyrighted by Harris Corporation. Unpublished rights are reserved under the copyright laws of the United States.

This device is made under license under one or more of the following US patents: 4,590,473; 4,636,791; 5,148,482; 5,185,796; 5,271,017; 5,377,229; 4,716,407; 4,972,460; 5,502,767; 5,146,497; 5,164,986; 5,185,795; 5,226,084; 5,247,579; 5,491,772; 5,517,511; 5,630,011; 5,649,050; 5,701,390; 5,715,365; 5,754,974; 5,826,222; 5,870,405; 6,161,089; and 6,199,037 B1. DVSI claims certain rights, including patent rights under aforementioned U.S. patents, and under other U.S. and foreign patents and patents pending. Any use of this software or technology requires a separate written license from DVSI.

#### CREDITS

Harris is a registered trademarks and TECHNOLOGY TO CONNECT, INFORM AND PROTECT is a trademark of Harris Corporation.

RBRC and 1-800-8-BATTERY are registered trademarks of Rechargeable Battery Recycling Corporation.

All other product and brand names are trademarks, registered trademarks, or service marks of their respective holders.

#### NOTICE

The material contained herein is subject to U.S. export approval. No export or re-export is permitted without written approval from the U.S. Government. Rated: EAR99; in accordance with U.S. Dept. of Commerce regulations 15CFR774, Export Administration Regulations.

Information and descriptions contained herein are the property of Harris Corporation. Such information and descriptions may not be copied or reproduced by any means, or disseminated or distributed without the express prior written permission of Harris Corporation, PSPC Business, 221 Jefferson Ridge Parkway, Lynchburg, VA 24501.



This product conforms to the European Union WEEE Directive 2012/19/EU. Do not dispose of this product in a public landfill. This product should be taken to a recycling center at the end of its life.



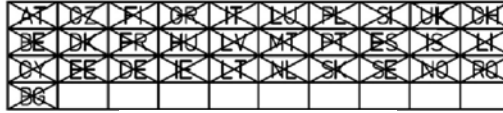
Harris products comply with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive.

The voice coding technology embodied in this product is protected by intellectual property rights including patent rights, copyrights, and trade secrets of Digital Voice Systems, Inc. The user of this technology is explicitly prohibited from attempting to decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into human-readable form.

Repairs to this equipment should be made only by an authorized service technician or facility designated by the supplier. Any repairs, alterations, or substitution of recommended parts made by the user to this equipment not approved by the manufacturer could void the user's authority to operate the equipment in addition to the manufacturer's warranty.


This manual is published by **Harris Corporation**, without any warranty. Improvements and changes to this manual necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made by **Harris Corporation**, at any time and without notice. Such changes will be incorporated into new editions of this manual. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of **Harris Corporation**.

Copyright © 2016 Harris Corporation.



**CE1588**

This device is a RF transceiver intended for land mobile radio applications. The device may have use restrictions, which require that the national authority be contacted for any system licensing requirements, frequency use, allowable power level, etc.

<b>R&amp;TTE Declaration of Conformity (DoC)</b> Unique identification of this DoC: 2014119TCE	
<b>We, Harris Corporation, Communications Systems Division</b> 221 Jefferson Ridge Parkway Lynchburg, VA 24501 Phone 434-455-6600	
<b>declare under our sole responsibility that the product:</b> product name: XL-200P trade name: Harris ® type or model: XL-PPM1M, XL-PPM1Y, XL-PPM1B, XL-PPM1G, XL-PPM1Y, XL-PPM1B, XL-PPM1G, XL-PPM1M relevant supplementary information: Land Mobile radio for public safety, utilities and transit	
<b>to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&amp;TTE Directive (1999/5/EC).</b> <b>The product is in conformity with the following standards and/or other normative documents:</b> HEALTH & SAFETY (Art. 3(1)(a)): EN 60950-1: 2006 + A11:2009 + A12:2011 + A1:2010 + A2:2013; European Council Directive 89/391/EEC; EN 62311:2008 EMC (Art. 3(1)(b)): EN 301 489-1 V1.9.2, EN 301 489-5 V1.3.1, EN 301 489-17 V2.2.1 SPECTRUM (Art. 3(2)): EN 300 086-2 V1.3.1, EN 300 113-2 V1.5.1, EN 300 328 V1.8.1, EN 301 893 V1.7.1, EN 300 440-2 V1.4.1 OTHER (incl. Art. 3(3) and voluntary specs): N/A Limitation of validity (if any): N/A Supplementary information: Notified body involved: American Certification Body (NB#1588) 6731 Whittier Avenue, Suite C110 McLean Virginia 22101, USA Telephone: 703-847-4700 Technical file held by: Harris Wireless Ltd., RF Communications Division 270 Wharfedale Road Wymersley, Wokingham, Berkshire, United Kingdom RG41 5TP Place and date of issue (of this DoC): December 4, 2015 Signed by or for the manufacturer:  Name (in print): William H. Pertner Title: Regulatory Manager	

R&TTE Declaration of Conformity (DoC)  
Unique identification of this DoC: 20152171CF

We, **Harris Corporation, Communications Systems Division**  
221 Jefferson Ridge Parkway  
Lynchburg, VA 24501  
Phone 434-455-6600

declare under our sole responsibility that the product:

product name: XL-200P Non-Rebanded

trade name: Harris ®

type or model: XL-PFM2M, XL-PFM2Y, XL-PFM2B, XL-PFM2G, XL-PPM2Y, XL-PPM2B, XL-PPM2G, XL-PPM2M

relevant supplementary information: Land Mobile radio for public safety, utilities and transit

to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&TTE Directive (1999/5/EC).

The product is in conformity with the following standards and/or other normative documents:

HEALTH & SAFETY (Art. 3(1)(a)): EN 60950-1: 2006 + A11:2009 + A12:2011 – A1:2010 – A2:2013; EN 62311:2008

EMC (Art. 3(1)(b)): EN 301 489-1 V1.9.2, EN 301 489-3 V1.6.1; EN 301 489-5 V1.3.1, EN 301 489-17 V2.2.1

SPECTRUM (Art. 3(2)): EN 300 086-2 V1.3.1, EN 300 113-2 V1.5.1, EN 300 328 V1.9.1, EN 300 440-2 V1.4.1

OTHER (incl. Art. 3(3) and voluntary specs): N/A

Limitation of validity (if any): N/A

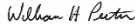
Supplementary information:

Notified body involved: American Certification Body (NB#1588)  
6731 Whittier Avenue, Suite C110  
McLean Virginia 22101, USA  
Telephone: 703-847-4700

Technical file held by: Harris Wireless Ltd., RF Communications Division  
270 Wharfedale Road  
Winnersh, Wokingham, Berkshire, United Kingdom  
RG41 5TP

Place and date of issue (of this DoC): March 02, 2016




Signed by or for the manufacturer:



Name (in print): William H. Partner  
Title: Regulatory Manager

<b>[cs]</b> Český [Czech]	<i>Harris Corporation</i> tímto prohlašuje, že tento <i>XL-200P</i> je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
<b>[da]</b> Dansk [Danish]	Undertegnede <i>Harris Corporation</i> erklærer herved, at følgende udstyr <i>XL-200P</i> overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
<b>[de]</b> Deutsch [German]	Hiermit erkläre <i>Harris Corporation</i> , dass sich das Gerät <i>XL-200P</i> in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
<b>[et]</b> Eesti [Estonian]	Käesolevaga kinnitab <i>Harris Corporation</i> seadme <i>XL-200P</i> vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
<b>[en]</b> English	Hereby, <i>Harris Corporation</i> , declares that this <i>XL-200P</i> is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
<b>[es]</b> Español [Spanish]	Por medio de la presente <i>Harris Corporation</i> declara que el <i>XL-200P</i> cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
<b>[el]</b> Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ <i>Harris Corporation</i> ΔΗΛΩΝΕΙ ΟΤΙ <i>XL-200P</i> ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
<b>[fr]</b> Français [French]	Par la présente <i>Harris Corporation</i> déclare que l'appareil <i>XL-200P</i> est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

<b>it</b> Italiano [Italian]	Con la presente Harris Corporation dichiara che questo XL-200P è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
<b>lv</b> Latviski [Latvian]	Ar šo <i>Harris Corporation</i> deklarē, XG 25P UHF-L(378-470 MHz), 7/800 (764-870MHz) atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
<b>lt</b> Lietuvių [Lithuanian]	Šiuo <i>Harris Corporation</i> deklaruoja, kad šis XL-200P atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
<b>nl</b> Nederlands [Dutch]	Hierbij verklaart Harris Corporation dat het toestel XL-200P in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
<b>mt</b> Malti [Maltese]	Hawnhekk, <i>Harris Corporation</i> , jiddikjara li dan XL-200P jikkonforma mal-ftiġġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
<b>hu</b> Magyar [Hungarian]	Alulírott, Harris Corporation nyilatkozom, hogy a XL-200P megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
<b>pl</b> Polski [Polish]	Niniejszym <i>Harris Corporation</i> oświadcza, że XL-200P jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
<b>pt</b> Português [Portuguese]	Harris Corporation declara que este XL-200P está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
<b>sl</b> Slovensko [Slovenian]	<i>Harris Corporation</i> izjavlja, da je ta XL-200P v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
<b>sk</b> Slovensky [Slovak]	<i>Harris Corporation</i> týmto vyhlasuje, že XL-200P spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

 Suomi [Finnish]	Harris Corporation vakuuttaa täten että XL-200P tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
 Svenska [Swedish]	Härmed intygar Harris Corporation att denna XL-200P står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir Harris Corporation yfir því að XL-200P er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
 Norsk [Norwegian]	Harris Corporation erklærer herved at utstyret XL-200P er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.



<b>TABLE OF CONTENTS</b>	
	<i>Page</i>
<b>1. REGULATORY &amp; SAFETY INFORMATION</b>	<b>10</b>
1.1 SAFETY SYMBOL CONVENTIONS.....	10
1.2 SAFETY TRAINING INFORMATION .....	11
1.3 REGULATORY APPROVALS .....	15
1.4 OPERATING TIPS .....	16
<b>2. RENSEIGNEMENTS SUR LA RÉGLEMENTATION ET SÉCURITÉ .....</b>	<b>19</b>
2.1 CONVENTIONS SUR LES SYMBOLES DE SÉCURITÉ.....	19
2.2 RENSEIGNEMENTS SUR LA FORMATION SUR LA SÉCURITÉ.....	20
2.3 INTERFÉRENCE DES RADIOFRÉQUENCES.....	23
2.4 CONSEILS D'UTILISATION .....	23
<b>3. OPTIONS AND ACCESSORIES .....</b>	<b>27</b>
<b>4. BATTERY PACKS.....</b>	<b>28</b>
4.1 CONDITIONING LITHIUM-ION BATTERY PACKS.....	29
4.2 STORING LI-ION BATTERY PACKS .....	29
4.3 ADDITIONAL INFORMATION.....	29
4.4 BATTERY DISPOSAL.....	29
<b>5. TECHNICAL ASSISTANCE.....</b>	<b>31</b>
<b>6. WARRANTY .....</b>	<b>32</b>

Harris Corporation, Public Safety and Professional Communications (PSPC) Business continually evaluates its technical publications for completeness, technical accuracy, and organization. You can assist in this process by submitting your comments and suggestions to the following:

**Harris Corporation**

PSPC Business  
 Technical Publications  
 221 Jefferson Ridge Parkway  
 Lynchburg, VA 24501

Or

Fax your comments to: 1-434-455-6851

Or

E-mail us at: [PSPC-TechPubs@harris.com](mailto:PSPC-TechPubs@harris.com)

# 1. REGULATORY & SAFETY INFORMATION

## 1.1 SAFETY SYMBOL CONVENTIONS

The following conventions are used to alert the user to general safety precautions that must be observed during all phases of operation, service, and repair of this product. Failure to comply with these precautions or with specific warnings elsewhere violates safety standards of design, manufacture, and intended use of the product. Harris assumes no liability for the customer's failure to comply with these standards.



**WARNING**

The **WARNING** symbol calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury. Do not proceed beyond a **WARNING** symbol until the conditions identified are fully understood or met.



**CAUTION**

The **CAUTION** symbol calls attention to an operating procedure, practice, or the like, which, if not performed correctly or adhered to, could result in a risk of danger, damage to the equipment, or severely degrade the equipment performance.



**NOTE**

The **NOTE** symbol calls attention to supplemental information, which may improve system performance or clarify a process or procedure.

## 1.2 SAFETY TRAINING INFORMATION



The Harris XL-200P portable radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as “Occupational Use Only,” meaning it must be used only during the course of employment by individuals aware of the hazards and the ways to minimize such hazards. This radio is NOT intended for use by the “General Population” in an uncontrolled environment.

The XL-200P portable radio has been tested and complies with the FCC RF exposure limits for “Occupational Use Only.” In addition, this radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC KDB Publication 447498 General RF Exposure Guidance
- American National Standards Institute (C95.1 – 1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3 – 1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave.
- IC Standard RSS-102. Radio frequency Exposure Compliance of Radio communication Apparatus (All Frequency Bands).
- European Council Directive 89/391/EEC.

### 1.2.1 RF Exposure Guidelines



To ensure that exposure to RF electromagnetic energy is within the EU/AU/FCC/IC allowable limits for occupational use, always adhere to the following guidelines:

- DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause the FCC RF exposure limits to be exceeded. A proper antenna is the antenna supplied with this radio by Harris or an antenna specifically authorized by Harris for use with this radio.
- DO NOT transmit for more than 50% of total radio use time (“50% duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the “TX” indicator appears in the display. The radio will transmit by pressing the “PTT” (Push-To-Talk) button.
- ALWAYS transmit using low power when possible. In addition to conserving battery charge, low power can reduce RF exposure.
- ALWAYS use Harris authorized accessories (antennas, batteries, belt clips, speaker/mics, etc.). Use of unauthorized accessories may cause the FCC Occupational/Controlled Exposure RF compliance requirements to be exceeded. (Refer to Table 1-1.)
- As noted in Table 1-1, ALWAYS keep the housing of the transmitter **AT LEAST** 0.47 inches (1.2 cm) from the body and at least 0.98 inches (2.5 cm) from the face when transmitting to ensure FCC RF exposure compliance requirements are not exceeded. However, to provide the best sound quality to the recipients of your transmission, Harris recommends you hold the microphone at least 5 cm (2 inches) from mouth, and slightly off to one side.
- Refer to Standard EN 62311:2008.

**Table 1-1: RF Exposure Compliance Tested Distances<sup>1</sup>**

RADIO FREQUENCY BAND	TESTED DISTANCES <i>(worst case scenario)</i>	
	Body <sup>2</sup>	Face
VHF (136 - 174 MHz)	0.47 in (1.2 cm)	0.98 in (2.5 cm)
UHF (378 - 522 MHz)	0.47 in (1.2 cm)	0.98 in (2.5 cm)
700/800 MHz (768 - 776 MHz) (798 - 806 MHz) (806 - 824 MHz) (851 - 870 MHz)	0.47 in (1.2 cm)	0.98 in (2.5 cm)
2400 MHz (2412 - 2472 MHz)	0.47 in (1.2 cm)	0.98 in (2.5 cm)
5 GHz (5.18 - 5.825 GHz)	0.47 in (1.2 cm)	0.98 in (2.5 cm)

**Table 1-2: Worst Case Reported SAR Level**

	LMR STANDALONE	SIMULTANEOUS LMR AND LTE
Head	1.88 W/kg	2.25 W/kg
Body-worn	5.20 W/kg	5.93 W/kg
FCC SAR Limit	8.0 W/kg	8.0 W/kg

This device contains multiple transmitters that may operate simultaneously, see Table 1-3 Simultaneous Transmission Scenarios for the capable transmit configurations.

<sup>1</sup> Minimum safe operating distances for the radio are based on the Harmonized Standards and SAR evaluation.

<sup>2</sup> This is worst case based on the thinnest body mount accessory (belt clip).

**Table 1-3: Simultaneous Transmission Scenarios**

NO.	CAPABLE TRANSMIT CONFIGURATION	HEAD	BODY-WORN ACCESSORY
1	LTE B13/14/4 + VHF	YES	YES
2	LTE B13/14/4 + UHF	YES	YES
3	LTE B4 + 700 MHz	YES	YES
4	LTE B13/14/4 + 800 MHz	YES	YES
5	LTE B13/14/4 + Bluetooth	YES	YES
6	LTE B13/14/4 + 2.4 GHz WLAN	YES	YES
7	LTE B13/14/4 + 5 GHz WLAN	YES	YES
8	LTE B13/14/4 + VHF + Bluetooth	YES	YES
9	LTE B13/14/4 + UHF + Bluetooth	YES	YES
10	LTE B4 + 700 MHz + Bluetooth	YES	YES
11	LTE B13/14/4 + 800 MHz + Bluetooth	YES	YES
12	LTE B13/14/4 + VHF + WLAN	YES	YES
13	LTE B13/14/4 + UHF + WLAN	YES	YES
14	LTE B4 + 700 MHz + WLAN	YES	YES
15	LTE B13/14/4 + 800 MHz + WLAN	YES	YES



**NOTE**

LTE B13/14 + 700 MHz combination is not supported by this device.



**NOTE**

SAR Evaluation: 1g averaged, 50% PTT Duty Factor, Occupational/ Controlled Exposure.

The information in this section provides the information needed to make the user aware of a RF exposure, and what to do to assure that this radio operates within the FCC RF exposure limits.

### **1.2.2 Electromagnetic Interference/Compatibility**

During transmissions, Harris radios generate RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radios in areas where signs are posted to do so. DO NOT operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

## **1.3 REGULATORY APPROVALS**

### **1.3.1 Part 15**

This device 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.

### **1.3.2 Industry Canada**

This device complies with Industry Canada license-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.

## 1.4 OPERATING TIPS

Antenna location and condition are important when operating a portable radio. Operating the radio in low lying areas or terrain, under power lines or bridges, inside of a vehicle or in a metal framed building can severely reduce the range of the unit. Mountains can also reduce the range of the unit.

In areas where transmission or reception is poor, some improvement may be obtained by ensuring the antenna is vertical. Moving a few yards in another direction or moving to a higher elevation may also improve communications. Vehicular operation can be aided with the use of an externally mounted antenna.

Battery condition is another important factor in the trouble free operation of a portable radio. Always properly charge the batteries.

### 1.4.1 Efficient Radio Operation

Keep the antenna in a vertical position when receiving or transmitting a message.



**Do NOT hold onto the antenna when the radio is powered on.**

#### 1.4.1.1 **Antenna Care and Replacement**



**Always keep the antenna at least 0.47 inches (1.2 cm) away from the body and 0.98 inches (2.5 cm) from the face when transmitting to ensure FCC RF exposure compliance requirements are not exceeded.**





Do not use the portable radio with a damaged or missing antenna. A minor burn may result if skin comes into contact with a damaged antenna. Replace a damaged antenna immediately. Operating a portable radio with the antenna missing could cause personal injury, damage the radio, and may violate FCC regulations.



Use only the supplied or approved antenna. Unauthorized antennas, modifications, or attachments could cause damage to the radio unit and may violate FCC regulations.

#### 1.4.1.2 Electronic Devices



RF energy from portable radios may affect some electronic equipment. Most modern electronic equipment in cars, hospitals, homes, etc., are shielded from RF energy. However, in areas in which you are instructed to turn off two-way radio equipment, always observe the rules. *If in doubt, turn it off!*

#### 1.4.1.3 Aircraft



Always turn off a portable radio before boarding any aircraft!

- Use it on the ground only with crew permission.
- **DO NOT use while in-flight!!**

#### 1.4.1.4 Electric Blasting Caps



To prevent accidental detonation of electric blasting caps, **DO NOT** use two-way radios within 1000 feet of blasting operations. Always obey the "Turn Off Two-Way Radios" signs posted where electric blasting caps are being used. (OSHA Standard: 1926.900)

#### 1.4.1.5 Potentially Explosive Atmospheres



Areas with potentially explosive atmospheres are often, but not always, clearly marked. These may be fuelling areas, such as gas stations, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles, such as grain, dust, or metal powders. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Turn OFF two-way radios when in any area with a potentially explosive atmosphere. It is rare, but not impossible that a radio or its accessories could generate sparks.



**DO NOT** remove, install, or charge batteries in potentially explosive atmosphere areas.

Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

## 2. RENSEIGNEMENTS SUR LA RÉGLEMENTATION ET SÉCURITÉ

### 2.1 CONVENTIONS SUR LES SYMBOLES DE SÉCURITÉ

Les conventions suivantes sont utilisées dans le présent manuel pour avertir l'utilisateur des précautions générales de sécurité qui doivent être observées pendant toutes les phases d'opération, d'entretien et de réparation de ce produit. Le non-respect de ces précautions ou d'avertissements précisés ailleurs enfreint les normes de sécurité de la conception, de la fabrication et de l'utilisation prévue du produit. Harris n'assume aucune responsabilité pour le non-respect de ces normes par le client.



MISE EN GARDE

Le symbole **MISE EN GARDE** attire l'attention sur une procédure ou une pratique qui, si elle n'est pas correctement effectuée ou observée, pourrait entraîner une blessure personnelle. Ne pas poursuivre au-delà d'un symbole de **MISE EN GARDE** avant que les conditions identifiées soient complètement comprises ou satisfaites.



AVERTISSEMENT

Le symbole **AVERTISSEMENT** attire l'attention sur une procédure ou une pratique opérationnelle qui, si elle n'est pas correctement effectuée ou observée, pourrait entraîner un bris d'équipement ou une importante baisse de rendement de l'équipement.



Le symbole **REMARQUE** attire l'attention sur des renseignements supplémentaires qui peuvent améliorer le rendement du système ou clarifier un processus ou une procédure.

## 2.2 RENSEIGNEMENTS SUR LA FORMATION SUR LA SÉCURITÉ



**MISE EN GARDE**

La radio portative Harris XL-200P produit de l'énergie électromagnétique des RF lorsqu'en mode de transmission. Cette radio est conçue et classée pour une « Utilisation professionnelle seulement », ce qui signifie qu'elle ne doit être utilisée que dans le cadre d'un emploi par des individus conscients des risques et des moyens de limiter ceux-ci. Cette radio **N'EST PAS** conçue pour une utilisation par la « Population générale » dans un environnement non contrôlé.

La radio portative XL-200P a été testée et est conforme aux limites d'exposition aux RF de la FCC pour une « Utilisation professionnelle seulement ». De plus, cette radio Harris est conforme aux normes et directives suivantes quant à l'énergie des RF et aux niveaux d'énergie électromagnétique, ainsi qu'à l'évaluation de ces niveaux pour l'exposition aux humains:

- FCC KDB 447498
- American National Standards Institute (C95.1 – 1992), norme de l'IEEE sur les niveaux sécuritaires d'exposition humaine aux champs électromagnétiques des radiofréquences, 3 kHz à 300 GHz.

- American National Standards Institute (C95.3 – 1992), pratique recommandée par l'IEEE pour la mesure des champs électromagnétiques potentiellement dangereux – RF et micro-ondes.

### 2.2.1 Directives sur l'exposition aux RF



Pour s'assurer que l'exposition à l'énergie électromagnétique des RF se situe dans les limites acceptables de la FCC pour l'utilisation professionnelle, respectez toujours les directives suivantes :

- N'utilisez PAS la radio sans qu'une antenne appropriée y soit connectée, car ceci peut endommager la radio et également causer un dépassement des limites d'exposition aux RF de la FCC. Une antenne appropriée est celle fournie par Harris avec cette radio, ou une antenne spécifiquement autorisée par Harris pour être utilisée avec cette radio.
- Ne transmettez PAS pendant plus de 50 % de la durée d'utilisation totale de la radio (« cycle de service de 50 % »). La transmission pendant plus de 50 % du temps peut causer un dépassement des exigences de conformité de la FCC en matière d'exposition aux RF. La radio transmet lorsque l'indicateur « TX » apparaît sur l'affichage. La radio transmet lorsqu'on appuie sur le bouton « PTT » (bouton de microphone).
- Transmettez TOUJOURS en basse puissance lorsque possible. En plus de préserver la charge de la pile, une faible puissance réduit l'exposition aux RF.
- Utilisez TOUJOURS des accessoires autorisés Harris (antennes, piles, pinces de ceinture, haut-parleurs/micros, etc.). L'utilisation d'accessoires non autorisés peut entraîner un dépassement des

exigences de conformité pour une exposition aux RF professionnelle ou contrôlée de la FCC. (Reportez-vous à Tableau 2-1.)

- Tel qu'indiqué dans Tableau 2-1, conservez TOUJOURS l'appareil et son antenne à **AU MOINS** 1,2 cm (0,47 po) du corps, et à au moins 2,5 cm (0,98 po) du visage pendant la transmission, pour vous assurer de ne pas dépasser les exigences de conformité de la FCC en matière d'exposition aux RF. Cependant, pour offrir la meilleure qualité sonore aux auditeurs de votre transmission, Harris recommande de tenir le microphone à au moins 5 cm (2 po) de votre bouche et légèrement déplacé sur un côté.

**Tableau 2-1 : Distances de test de conformité des expositions aux RF**

RADIOFRÉQUENCES	DISTANCES TESTÉES (pire des scénarios)	
	Corps <sup>3</sup>	Visage
VHF (136 - 174 MHz)	1,2 cm	2,5 cm
UHF (378 - 522 MHz)	1,2 cm	2,5 cm
700/800 MHz (768 - 776 MHz) (798 - 806 MHz) (806 - 824 MHz) (851 - 870 MHz)	1,2 cm	2,5 cm
2400 MHz (2412 - 2472 MHz)	1,2 cm	2,5 cm
5 GHz (5.18 - 5.825 GHz)	1,2 cm	2,5 cm

Dans cette section figurent les renseignements nécessaires pour sensibiliser l'utilisateur à l'exposition aux RF et sur ce qu'il faut faire pour s'assurer que cette radio fonctionne dans les limites d'exposition aux RF de la FCC.

<sup>3</sup> Ce est le pire des cas basée sur le corps plus mince monter accessoire (clip ceinture).

### **2.2.2 Interférence/Compatibilité Électromagnétique**

Pendant les transmissions, cette radio Harris produit de l'énergie des RF qui peut causer de l'interférence avec d'autres appareils ou systèmes. Pour éviter de telles interférences, fermez la radio dans les zones où il est indiqué de le faire. N'utilisez PAS le transmetteur dans des zones sensibles aux radiations électromagnétiques, comme les hôpitaux, les avions et les sites de détonation.

## **2.3 INTERFÉRENCE DES RADIOFRÉQUENCES**

### **2.3.1 Partie 15 de la FCC**

Cet appareil est conforme à la Partie 15 de la réglementation de la FCC. Le fonctionnement est soumis aux deux conditions suivantes :

1. Cet appareil ne doit pas causer une interférence nuisible; et
2. Cet appareil doit accepter toute interférence reçue, y compris une interférence qui peut causer un fonctionnement non souhaité.

### **2.3.2 Industrie Canada**

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.

## **2.4 CONSEILS D'UTILISATION**

L'emplacement et l'état de l'antenne sont importants pour l'utilisation d'une radio portative. L'utilisation de la radio dans des zones de faible élévation, sous des lignes électriques ou des ponts, à l'intérieur d'un véhicule ou dans un immeuble à ossature métallique, peut réduire la portée de l'appareil de manière

considérable. Les montagnes peuvent également réduire la portée de l'unité.

Dans les zones où la transmission ou la réception est insatisfaisante, certaines améliorations peuvent être obtenues en s'assurant que l'antenne est verticale. Se déplacer de quelques mètres dans une autre direction ou à un emplacement plus élevé peut également améliorer les communications. L'utilisation d'une antenne fixée à l'extérieur peut faciliter le fonctionnement dans un véhicule.

L'état de la pile est un autre facteur important d'une utilisation sans tracas d'une radio portative. Chargez toujours correctement la pile.

#### **2.4.1 Utilisation Efficace de la Radio**

Gardez l'antenne dans une position verticale pendant la réception ou la transmission d'un message.



Ne tenez PAS l'antenne lorsque la radio est allumée!

##### **2.4.1.1 Entretien et Remplacement de l'antenne**



Conservez TOUJOURS l'appareil et son antenne à *au moins* 1,5 cm (0,59 po) du corps, et à au moins 2,5 cm (1,0 po) du visage pendant la transmission, pour vous assurer de ne pas dépasser les exigences de conformité de la FCC en matière d'exposition aux RF.





MISE EN GARDE

N'utilisez pas la radio portative si son antenne est endommagée ou absente. Une brûlure légère peut se produire au contact d'une antenne endommagée avec la peau. Remplacez immédiatement une antenne endommagée. L'utilisation d'une radio portative alors que l'antenne est absente peut causer des blessures, endommager la radio et pourrait enfreindre la réglementation de la FCC.



AVERTISSEMENT

Utilisez seulement l'antenne fournie ou une antenne approuvée. Des antennes non autorisées, des modifications ou des ajouts à une antenne peuvent endommager la radio et enfreindre la réglementation de la FCC.

#### 2.4.1.2 Appareils Électroniques



AVERTISSEMENT

L'énergie des RF provenant de radios portatives peut affecter certains appareils électroniques. La majorité de l'équipement électronique moderne dans les voitures, les hôpitaux, les maisons, etc. est blindé contre l'énergie des RF. Cependant, dans les zones où l'on vous demande de fermer l'équipement de radio bidirectionnelle, respectez toujours les règles. En cas de doute, éteignez-le!

### 2.4.1.3 Avion



MISE EN GARDE

- Éteignez toujours une radio portative avant d'embarquer à bord d'un avion!
- Ne l'utilisez au sol qu'avec la permission de l'équipage.
- **NE** l'utilisez **PAS** durant le vol!

### 2.4.1.4 Détonateurs électriques



MISE EN GARDE

Pour prévenir la détonation accidentelle des détonateurs électriques, n'utilisez **PAS** de radios bidirectionnelles à moins de 305 m (1 000 pi) des opérations de détonation. Respectez toujours les indications « Éteindre les radios bidirectionnelles » situées là où des détonateurs électriques sont utilisés. (Norme OSHA : 1926.900)

#### 2.4.1.5 Atmosphère Potentiellement Explosive



MISE EN GARDE

Les zones ayant une atmosphère potentiellement explosive sont souvent, mais pas toujours, identifiées clairement comme telles. Il peut s'agir de zones d'alimentation en carburant, comme les postes d'essence, les installations de stockage ou de transfert de carburant ou de produits chimiques, ainsi que les zones dont l'air contient des produits chimiques ou des particules, comme des grains, de la poussière ou des poudres métalliques.

Des étincelles dans de telles zones peuvent provoquer une explosion ou un incendie, causant ainsi des blessures ou même la mort.

Éteignez les radios bidirectionnelles dans toute zone ayant une atmosphère potentiellement explosive. Il est rare, mais pas impossible qu'une radio ou ses accessoires produisent des étincelles.

### 3. OPTIONS AND ACCESSORIES

A complete list of Options and Accessories approved for use with the XL-200P portable radio can be found online in the Operator's Manual 14221-1800-2000 at [www.pspc.harris.com](http://www.pspc.harris.com). Also reference the Products and Services Catalog for all available options and accessories, including those items that do not adversely affect the RF energy exposure.



Always use Harris authorized accessories (antennas, batteries, belt clips, speaker/mics, etc). Use of unauthorized accessories may cause the FCC Occupational/Controlled Exposure RF compliance requirements to be exceeded.



*Always* use the correct options and accessories (battery, antenna, speaker/mic, etc.) for the radio. See Operator Manual 14221-1800-2000, available online at <http://pspc.harris.com/Products/Portable/XL200P.aspx>, for the list of accessories.

#### 4. BATTERY PACKS

The XL-200P series portable radios use rechargeable, recyclable Lithium-Ion (Li-Ion) battery packs. Please follow the directions below to maximize the useful life of each type of battery pack.



Do not disassemble or modify Lithium battery packs. The Lithium battery packs are equipped with built-in safety and protection features. Should these features be disabled or tampered with in any way, the battery pack can leak electrolyte, overheat, emit smoke, burst, and/or ignite.



If the battery pack is ruptured or is leaking electrolyte that results in skin or eye contact with the electrolyte, immediately flush the affected area with water. If the battery electrolyte gets in the eyes, flush with water for 15 minutes and consult a physician immediately.



CAUTION

Always use Harris authorized chargers and conditioners. Use of unauthorized chargers and conditioners may void the warranty.

#### **4.1 CONDITIONING LITHIUM-ION BATTERY PACKS**

Li-Ion battery packs do not suffer from memory effect and therefore do not require conditioning.

#### **4.2 STORING LI-ION BATTERY PACKS**

If a battery pack is expected to be idle for a month or more, it should be properly prepared. Li-Ion battery packs should not be stored fully charged. Before storing the battery pack, discharge it to 40% capacity. If the battery is not discharged prior to storage, its overall capacity may be reduced. Although all battery packs experience some capacity loss during storage, the shelf life for Li-Ion battery packs is about 3 months. However, note that any capacity drop which occurs during storage is permanent and cannot be reversed. Li-Ion battery packs should be purchased and used immediately. They should not be stock-piled without a rotating stock plan.

#### **4.3 ADDITIONAL INFORMATION**

For more information regarding the proper care of portable radio battery packs or establishing a battery maintenance program, refer to ECR-7367 which may be ordered by calling toll free 1-800-368-3277 (international - 1-434-455-6403) or via <https://premier.pspc.harris.com/infocenter/>.

#### **4.4 BATTERY DISPOSAL**



CAUTION

In no instance should a battery pack be incinerated. Disposing of a battery pack by burning will cause an explosion.



**RECHARGEABLE BATTERY PACK DISPOSAL** – The product you have purchased contains a rechargeable battery pack. The battery pack is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery pack into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal. Canadian and U.S. users may call Toll Free 1-800-8-BATTERY® for information and/or procedures for returning rechargeable batteries in your locality.

## 5. TECHNICAL ASSISTANCE

The Technical Assistance Center's (TAC's) resources are available to help with overall system operation, maintenance, upgrades and product support. TAC is your point of contact when answers are needed to technical questions.

Product specialists, with detailed knowledge of product operation, maintenance, and repair, provide technical support via a toll-free (in North America) telephone number. Support is also available through mail, fax and e-mail.

For more information about technical assistance services, contact your sales representative, or call the Technical Assistance Center directly at:

North America: 1-800-528-7711  
International: 1-434-385-2400  
Fax: 1-434-455-6712  
E-mail: [PSPC-tac@harris.com](mailto:PSPC-tac@harris.com)

## 6. WARRANTY

If any part of the system equipment is damaged on arrival, contact the shipper to conduct an inspection and prepare a damage report. Save the shipping container and all packing materials until the inspection and the damage report are completed. In addition, contact the Customer Care center to make arrangements for replacement equipment. Do not return any part of the shipment until you receive detailed instructions from a Harris representative.

### **North America:**

Phone Number: 1-800-368-3277

Fax Number: 1-321-409-4393

E-mail: [PSPC-CustomerFocus@harris.com](mailto:PSPC-CustomerFocus@harris.com)

### **International:**

Phone Number: 1-434-455-6403

Fax Number: 1-321-409-4394

E-mail:

[PSPC-InternationalCustomerFocus@harris.com](mailto:PSPC-InternationalCustomerFocus@harris.com)

Please register this product within 10 days of purchase. Registration validates the warranty coverage, and enables Harris to contact you in case of any safety notifications issued for this product. Registration can be made on-line at the Customer Care center webpage:

<http://www.pspc.harris.com/Service/Customerservice.aspx>.

While on the webpage, please review the applicable battery and/or product warranty literature.





#### About Harris Corporation

Harris Corporation is a leading technology innovator that creates mission-critical solutions that connect, inform and protect the world. The company's advanced technology provides information and insight to customers operating in demanding environments from ocean to orbit and everywhere in between. Harris has approximately \$8 billion in annual revenue and supports customers in 125 countries through four customer-focused business segments: Communication Systems, Space and Intelligence Systems, Electronic Systems, and Critical Networks.

FLORIDA	NEW YORK	VIRGINIA	BRAZIL	UNITED KINGDOM	UAE	SINGAPORE
---------	----------	----------	--------	----------------	-----	-----------

---

