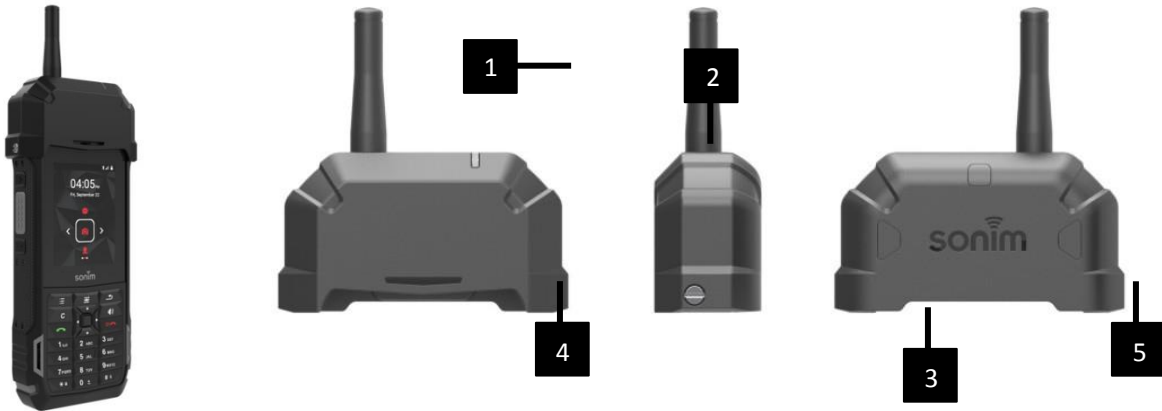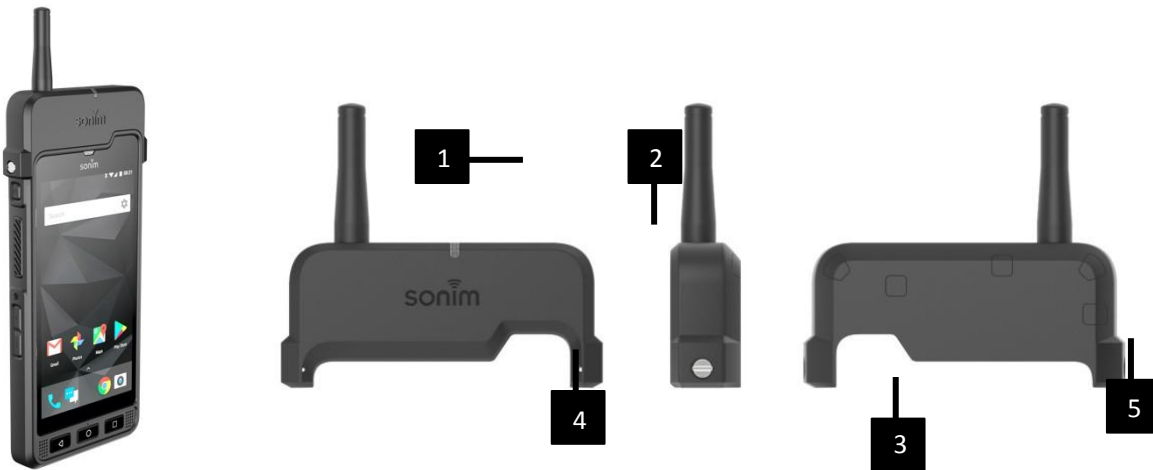**XPand Direct Mode User Guide**

XPand Direct Mode for XP5s

1 – removable, external antenna with standard SMA connector
2 – LED for XPand Direct Mode status
3 – retaining screw, remains screwed into XPand Direct Mode housing
4 – XPand Direct Mode front
5 – XPand Direct Mode back

XPand Direct Mode for XP8

1 – removable, external antenna with standard SMA connector
2 – LED for XPand Direct Mode status
3 – retaining screw, remains screwed into XPand Direct Mode housing
4 – XPand Direct Mode front
5 – XPand Direct Mode back

Installation Instructions for XPand Direct Mode

Step 1 – push the screws out from the inside of the XPand Direct Mode accessory. Do not unscrew the screws from the XPand Direct Mode. The screws retain inside of the accessory to allow for easy insertion and removal, and prevent loss.

Step 2 – insert the XPand Direct Mode accessory on the handset.

Step 3 – load Sonim XPand Direct Mode application from Playstore for XP8 or from Sonim SCOUT App Updater for XP5s. Alternatively, consult your mobile operator or third party application partner for integration. Sonim Software Development Kit (SDK) is available at www.sonimtech.allbound.com.

Sonim 1-Year Limited Warranty

Sonim provides a limited 1-year warranty for this accessory (hereinafter referred to as "Product"). Subject to the conditions of this limited 1-year Warranty Sonim warrants this product to be free from major defects in design, material and workmanship at the time of its original purchase by a consumer, and for a subsequent period of one (1) year.

Conditions
1) This warranty does not cover any failure of the Product due to normal wear and tear, or due to misuse or abuse, including but not limited to use in other than the normal and customary manner, in accordance with the Sonim Product specifications and instructions for use and maintenance of the Product. Nor does this warranty cover any failure of the Product due to software or hardware modification or adjustment, acts of God or damage resulting from liquid interacting with the Product beyond what is described as acceptable in the user guide for the Product.
2) This warranty does not cover Product failures caused by installations, modifications, or repair or opening of the Product performed by any person other than a Sonim-authorized person. Tampering with any of the seals on the Product will void the warranty.
3) The warranty does not cover Product failures, which have been caused by use of other peripheral devices, which are not Sonim certified and intended for use with the Product.
4) THERE ARE NO EXPRESS WARRANTIES, WHETHER WRITTEN OR ORAL, OTHER THAN THIS PRINTED LIMITED WARRANTY. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL SONIM OR ITS LICENSORS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR COMMERCIAL LOSS; TO THE FULL EXTENT THOSE DAMAGES CAN BE DISCLAIMED BY LAW.

For Technical or Warranty Support:

Email support@sonimtech.com
Call 1 (800) 858-9460

Live Chat Support:
www.sonimtech.com/index.php/support/online-support

For Sonim Certified Accessories, please visit our online store at: http://store.sonimtech.com

Frequently Asked Questions

What is the Sonim DM App?
Sonim Direct Mode ("DM") application ("App") works with your Sonim XP5s and XP8 devices, and compatible Sonim XPand Direct Mode accessory, to communicate when you have no service. With the Sonim DM App, you can talk, text, use maps, and share your location with other Sonim DM App users who are within range when you have

no cellular or Wi-Fi service. Sonim XPand Direct Mode accessory is required in order for the Sonim DM App to work with the Sonim XP5s or XP8 handset.

How does it work?
Sonim DM App works by creating a localized network between users that are within range of one another. Each time you use push-to-talk, text, or location sharing in the app, the data is sent directly through this network.

When would I use it?
Anytime you are in a location that has no cellular service like rural environments, forests, inside large buildings, inside tunnels, or when cellular coverage is down like in a major storm or other natural disaster. You can also use Sonim DM when you are in cellular coverage.

Does Sonim DM App connect others through internet?
No, Sonim DM networks operate independently of cellular or Wi-Fi. It connects other Sonim XPand Direct Mode users only when they are within range.

In what range does Sonim DM work?
LOS (Line of Sight) Range – 2 miles for calls, 4 miles for text and location sharing

NLOS (No-Line of Sight) Range – 1 miles for calls, 2 miles for text and location sharing

Above values are in test conditions. Actual range and voice quality depends on the environment of usage.

What frequencies does Sonim DM use?
Sonim DM operates in the ISM915 band (902-928 MHz).

Does Sonim DM work with other walkie-talkies or two-way radios?
No, Sonim DM only works with other Sonim DM enabled XP5s or XP8 handsets.

Can I use Sonim XPand Direct Mode accessory with non-Sonim mobile devices?
No, the Sonim XPand Direct Mode accessory will not work with non-Sonim mobile devices. It will only work Sonim XP5s and XP8 handsets.

Do I need to charge the Sonim XPand DM Accessory?
No, there is no need to charge the Sonim XPand Direct Mode accessory. It consumes very little power from the handset so you should not expect a major decrease in handset battery life.

How do I reset Sonim XPand Direct Mode accessory?
In the Sonim DM App, navigate to Menu >> Settings >> Reset.

Will I receive traditional mobile phone calls while using Sonim DM App?
Yes, you will receive traditional mobile phone calls provided you are in cellular coverage.

Will I receive PTT calls while using Sonim DM App?
Yes, you will receive PTT calls provided you are in cellular coverage. However, you will not receive PTT calls when using Channel and Code feature.

Is there any charge for using the Sonim DM App?
No, there are no additional charges for using the Sonim DM app. Once you have purchased the Sonim XPand Direct Mode accessory the application will work at no additional cost.

Is there any charge for using OFFLINE Maps in the Sonim DM App?
No, there is no charge for using the OFFLINE Maps feature of Sonim DM.

Does Sonim XPand Direct Mode accessory and application create a mesh network?
No, the current version of the accessory does not support mesh networking.

Is the antenna on the XPand Direct Mode accessory removable?
Yes, it is a standard SMA connector, and easy to replace. Please visit sonimtech.com or store.sonimtech.com for replacement antenna option.

Are the screws on the XPand Direct Mode accessory retaining and replaceable?
Yes, the screws retain in the accessory, however they are easy to replace. Please visit sonimtech.com or store.sonimtech.com for replacement screws.

Are my existing Bluetooth or wired accessories compatible with XPand Direct Mode and app?
Audio is routed through the XP5s or XP8 handset, or connected and compatible accessories.

What is the warranty of the XPand Direct Mode accessory?
One year limited liability warranty. Please reach out to support@sonimtech.com for warranty support.

Is the XPand Direct Mode non-incendive C1D2 like the XP5s and XP8 handsets?
No, the XPand Direct Mode accessory is not non-incendive C1D2.

Do you provide a software development kit ("SDK") for application developers?
Yes, Sonim SDK is available at www.sonimtech.allbound.com.

<u>Federal Communication Commission Interference Statement</u>

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the 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 installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:
This device meets the government's requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. *Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

Industry Canada Statement

❶ 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.

❶ 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.

❷ This Class B digital apparatus complies with Canadian ICES-003.
❷ Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

❸ This device complies with RSS-310 of Industry Canada. Operation is subject to the condition that this device does not cause harmful interference.
❸ Cet appareil est conforme à la norme RSS-310 d'Industrie Canada. L'opération est soumise à la condition que cet appareil ne provoque aucune interférence nuisible.

❹ This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter, except tested built-in radios.
❹ Cet appareil et son antenne ne doivent pas être situés ou fonctionner en conjonction avec une autre antenne ou un autre émetteur, exception faites des radios intégrées qui ont été testées.

Radiation Exposure Statement:
The product comply with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Additional statement for phones:
This device has been tested for compliance with IC SAR values at a typical operating near the body. To ensure that RF exposure levels below the levels tested, use accessories with this equipment to maintain a minimum separation distance of 1.0 cm between the body of the user and the device. These accessories should not contain metallic components. It is possible that the accessories used close to the body that do not meet these requirements are not consistent with the SAR limits and it is advisable to avoid using them.

Déclaration d'exposition aux radiations:
Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.
Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

Additional statement for phones:
Ce dispositif a été testé pour la conformité avec les valeurs SAR à un fonctionnement typique près du corps . Pour assurer que les niveaux d'exposition aux radiofréquences en deçà des niveaux testés , utiliser des accessoires avec

cet équipement pour maintenir une distance de séparation minimale de 1.0 cm entre le corps de l'utilisateur et l'appareil. Ces accessoires ne doivent pas contenir des composants métalliques . Il est possible que les accessoires utilisés près du corps qui ne répondent pas à ces exigences ne sont pas compatibles avec les limites SAR et il est conseillé d'éviter de les utiliser.

XPand Direct Mode for XP5s

Model   ACX03G

FCC ID   WYPACX03G

IC ID   8090A-ACX03G

SAR   The highest SAR value for the model ACX03G as reported to the FCC when tested for use in front of face is 0.58W/kg, and when worn on the body, as described in this user guide, is 0.44W/kg (body worn

measurements differ among device models, depending upon available accessories and FCC requirements).

XPand Direct Mode for XP8

Model   ACX04G

FCC ID   WYPACX04G

IC ID   8090A-ACX04G

SAR   The highest SAR value for the model ACX04G as reported to the FCC when tested for use in front of face is 0.85W/kg, and when worn on the body, as described in this user guide, is 1.02W/kg (body worn measurements differ among device models, depending upon available accessories and FCC requirements).

Professional installation instruction

1. Installation personal

This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

2. Installation location

The product shall be installed at a location where the radiating antenna can be kept 1.0cm from nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. External antenna

Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC Part15C Canada limit and is prohibited.

4. Installation procedure

Please refer to manual for the detail.

5. Warning

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.

Instructions d'installation professionnelle

1. Installation

Ce produit est destine a un usage specifique et doit etre installe par unpersonnel qualifie maitrisant les radiofrequences et les regles s'y rapportant. L'installation et les reglages ne doivent pas etre modifies par l'utilisateur

final.

2. Emplacement d'installation

En usage normal, afin de respecter les exigences reglementaires concernant l'exposition aux radiofrequences, ce produit doit etre installe de facon a respecter une distance de 1.0 cm entre l'antenne emettrice et les personnes.

3. Antenn externe.

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Utiliser uniiquement les antennes approuvees par le fabricant. L'utilisation d'autres antennes peut conduire a un niveau de rayonnement essentiel ou non essentiel depassant les niveaux limites definis par FCC Part15C &Canada, ce qui est interdit.

4. Procedure d'installation

Consulter le manuel d'utilisation.

5. Avertissement

Choisir avec soin la position d'installation et s'assurer que la puissance de sortie ne depasse pas les limites en vigueur. La violation de cette regle peut conduire a de serieuses penalites federales.