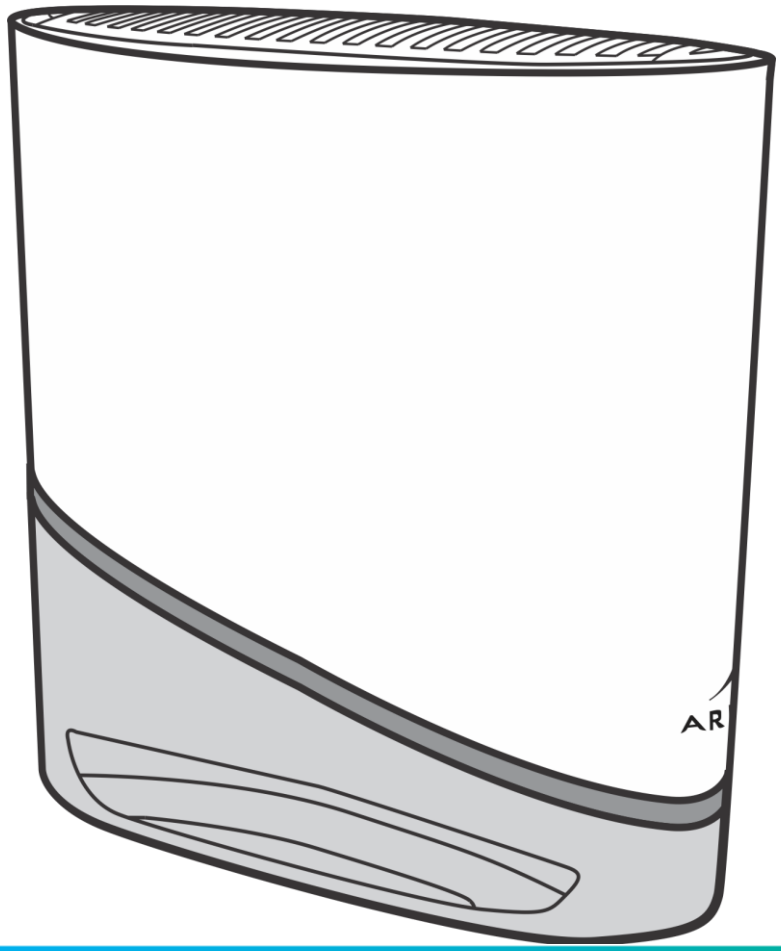
COMMSCOPE®

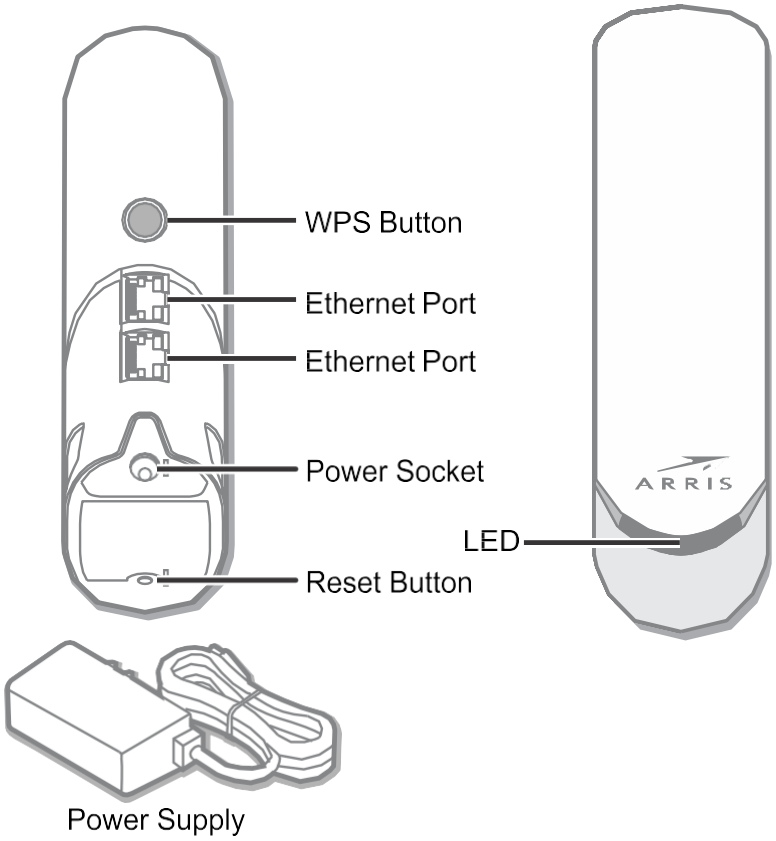


X5 Release

NA Mesh Extender Quick Start Guide , Revision

P/N 616824-002-A

Parts of the X5 Mesh Extender



How to read your X5 Mesh Extender LED

Note: The LED will automatically turn off after 10 minutes. To check the LED status, turn it back on by tapping the WPS button located on the back of the unit.

State		LED Color
Power	Starting up	fast blinking green
	Up; not connected to network	slow blinking green
Wired (Ethernet connection to network)	Fast network speed	solid green
	Limited network speed	solid yellow
	Slow network speed	solid red
Wireless (wireless connection to network)	Extender at good position	solid green
	Extender far from router/gateway	solid yellow
	Extender too far from router/gateway	solid red
WPS	WPS process ongoing	blinking yellow
	WPS pairing unsuccessful	fast blinking red; 10 seconds
	WPS pairing successful	fast blinking green; 10 seconds

Installation types

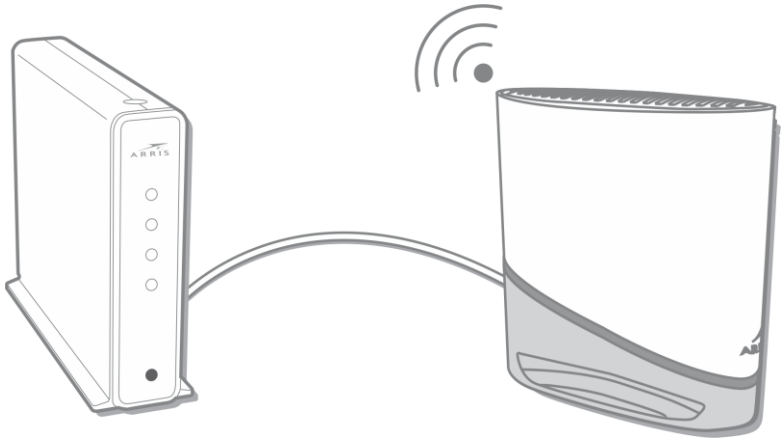
If you want to use your X5 as a Wi-Fi Access Point (AP) connected to your ARRIS gateway, use the *Connect your X5 Mesh Extender wired* (page 4) installation instructions.

If you want to use your X5 as a Wi-Fi extender connected wirelessly to your ARRIS gateway, use the *Connect your X5 Mesh Extender wirelessly* (page 5) installation instructions.

Connect your X5 Mesh Extender wired

Use this procedure if you want to use your X5 as a Wi-Fi Access Point (AP) connected to your ARRIS gateway.

1. Connect your first X5 to your current gateway with an Ethernet cable using either Ethernet port.
2. Connect the X5 to power using the power supply (provided).

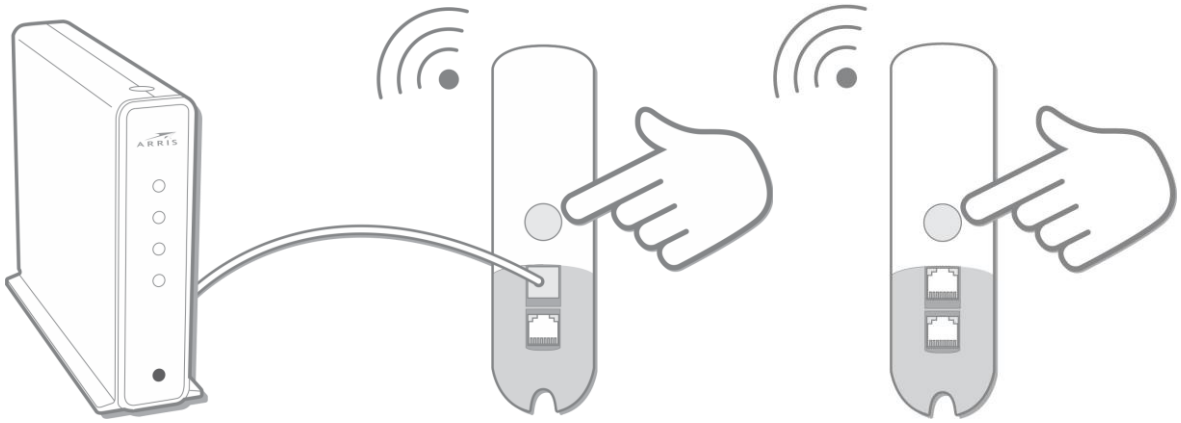


   The LED will blink fast, then blink slow, then turn to solid green. This will take a couple of minutes.
3. Scan the QR code (or enter *https://play.google.com/store/apps/details?id=com.arris.WiFiHome* for Android or *https://apps.apple.com/us/app/id1506183147* for iOS in a browser) to download the ARRIS Wi-Fi Home mobile app and follow the on-screen instructions, or continue to Step 4.

Alternately, connect your X5 to a PC with an Ethernet cable using either Ethernet port and open a web browser to the X5 default web UI address: http://192.168.1.253
You can then set the different parameters, such as Wi-Fi network name and password on the 2.4 GHz and the 5 GHz radio.

4. Now, you are ready to add an additional X5 to the network. Locate your second X5 approximately 5-15m (15- 45 ft) from your gateway; if you have line-of-sight, they can be further apart, but move closer if there are thick walls between.
5. Pair the units: Push the WPS button on the first X5, then push the WPS button on the second X5.

   Note: When adding additional X5 units, always push the button on the first X5 and then push the WPS button on the X5 you are adding.



   The second X5 will be automatically configured with the same Wi-Fi settings as the first X5; this will take a few moments. The LED on the second X5 flashes green quickly when the two units pair successfully.

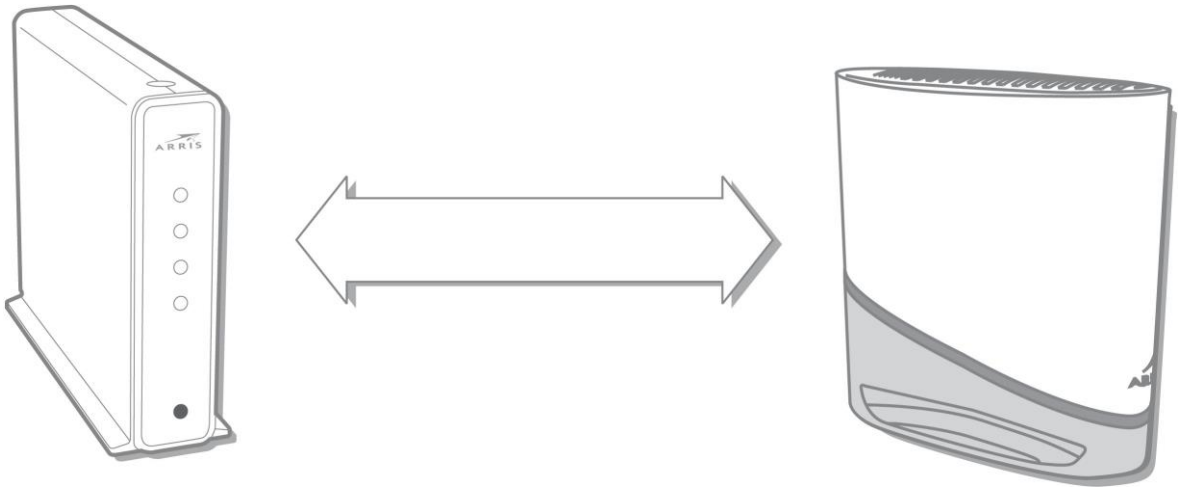
When configuration is complete, the LED on the second X5 will change color to indicate the quality of the link between the first and the second X5. See *How to read your X5 Mesh Extender LED* (page 3) in this guide to understand the state the LED color indicates.

Connect your X5 Mesh Extender wirelessly

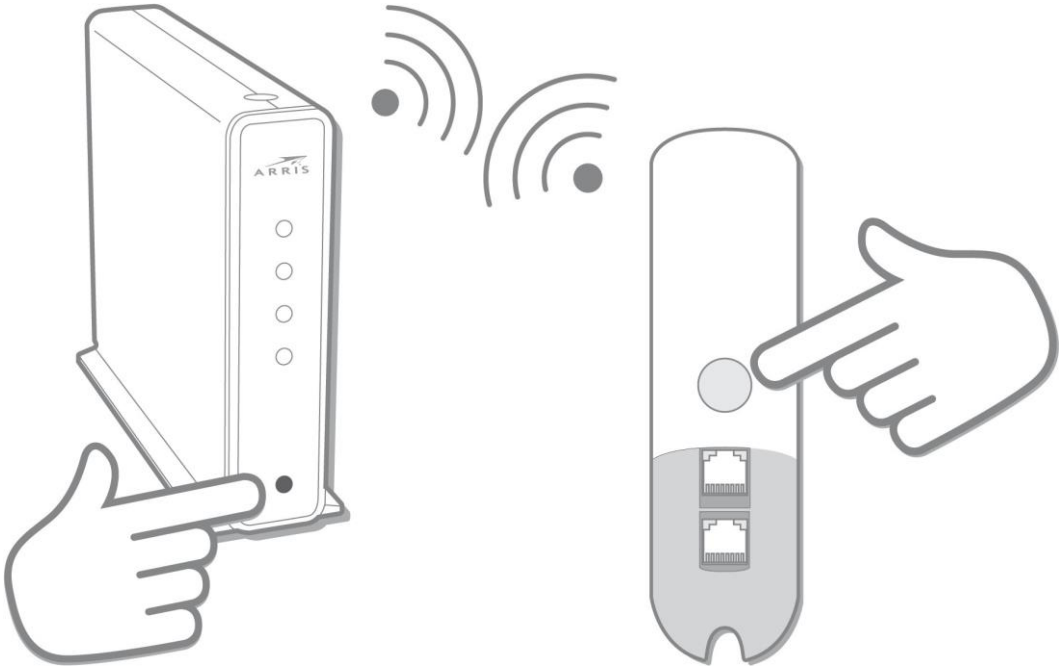
Use this procedure if you want to use your X5 as a Wi-Fi extender connected wirelessly to your ARRIS gateway.

1. Scan the QR code (or enter *https://play.google.com/store/apps/details?id=com.arris.WiFiHome* for Android or *https://apps.apple.com/us/app/id1506183147* for iOS in a browser) to download the ARRIS Wi-Fi Home mobile app and follow the on-screen instructions, or continue to Step 2.

2. Locate your first X5 approximately 5-15m from your gateway; if you have line-of-sight they can be further apart but move closer if there are thick walls between.



3. Connect the X5 to power using the provided power supply.
4. Pair the gateway and the X5: Push the WPS button on the gateway, then push the WPS button on the X5.

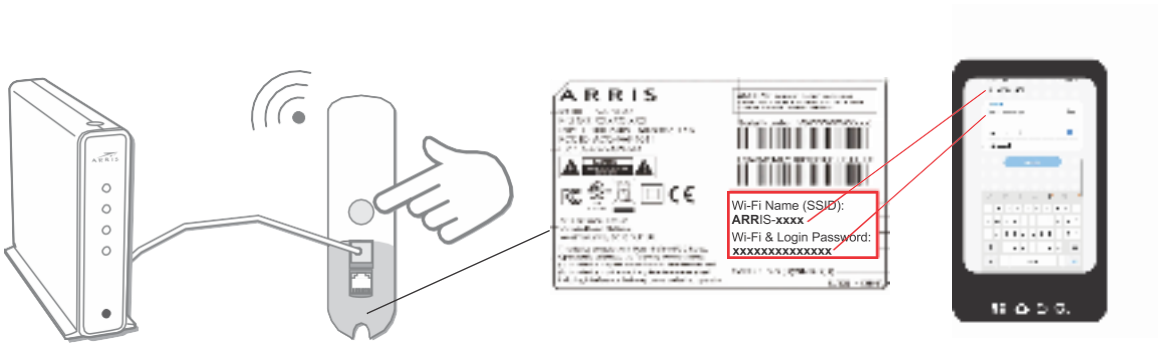


The LED on the X5 flashes green quickly when it has paired successfully with the gateway.

5. Next, the LED will change color to indicate the quality of the link between the gateway and the X5 . See *How to read your X5 Mesh Extender LED* (page 3) in this guide to understand the state the LED color indicates.
6. To add additional X5 units, repeat steps 2-4. Additional X5 units are configured with the same Wi-Fi settings as the first X5.

Connect client devices (optional)

- You can connect your devices to your network in two ways:
  - Use the Wi-Fi credentials used for your residential gateway or the Wi-Ficredentials printed on the first Mesh Extender connected to your gateway.



  - Use the WPS button on the front of the Mesh Extender and the WPS Push-button configuration (PBC) functionality on your device.

Regulatory information

Please read and adhere to the regulatory and safety information provided in this document.

Caution

Environment:

- The Wireless Extender needs air flow to keep cool. Do not block or cover the ventilation holes of the Wireless Extender. Leave a gap of at least 10cm above and around the Wireless Extender to allow for adequate ventilation.
- Do not operate your Wireless Extender in an unventilated cabinet or on top of another unit that emits heat, such as a TV or media player.
- Do not store the Wireless Extender in hot, damp, dusty, or unusually cold locations.
- The Wireless Extender must operate in a location with an ambient temperature between 0°C and +40°C.
- The Wireless Extender is intended for indoor use and installation only.

Handling:

- Only use the power adapter that has been supplied with the Wireless Extender. Using another power adapter than the one supplied can result in fire or serious damage to the device.
- Use only AC power provided by a standard (mains) wall outlet. Confirm that your electrical outlet provides the type of power indicated on the power adapter: Voltage between 100V and 130V, frequency between 57 Hz and 63 Hz.
- Do not put anything on or over your Wireless Extender which might drip or spill on it.
- Never place an open flame, such as from a lit candle, near the Wireless Extender's ventilation holes.

Storage:

- Store your Wireless Extender in a cool, dry place. Before installation and use, let the wireless extender reach room temperature.

Federal Communication Commission Interference Statement

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. This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all Wi-Fi products marketed in the US must be fixed to US operation channels only.

Industry Canada statement

CAN ICES-003(B) / NMB-003(B)

This device complies with ISED's licence-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Caution:

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(iv) where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

Avertissement:

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(iv) lorsqu'il y a lieu, les types d'antennes (s'il y en a plusieurs), les numéros de modèle de l'antenne et les pires angles d'inclinaison nécessaires pour rester conforme à l'exigence de la p.i.r.e. applicable au masque d'élévation, énoncée à la section 6.2.2.3, doivent être clairement indiqués

Radiation Exposure Statement: This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 22cm between the radiator & your body.

Déclaration d'exposition aux radiations: Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 22cm entre le radiateur et votre corps.

Open Source software and licenses

For instructions on how to obtain a copy of any source code being made publicly available by ARRIS related to software used in this ARRIS product you may send your request in writing to: ARRIS, Software Pedigree Operations, 2450 Walsh Avenue, Santa Clara, CA 95051, USA. The ARRIS website opensource.arris.com also contains information regarding use of open source. ARRIS has created opensource.arrisi.com to serve as a portal for interaction with the software community-at-large.

Caring for the environment

CARING FOR THE ENVIRONMENT BY RECYCLING

When you see this symbol on an ARRIS product, do not dispose of the productwith residential or commercial waste.

Recycling your ARRIS Equipment

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact yourlocal authorities for information about practices established for your region. If collection is not available, contact ARRIS customer support for information.

Copyright

Copyright © 2022 CommScope, Inc. All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation transformation, or adaptation) without written permission from ARRIS Enterprises, Inc. (“ARRIS”). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are all registered trademarks of CommScope, Inc and/or its affiliates. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others.

CommScope legal statements

© 2020 CommScope, Inc. All rights reserved.

No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc. and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

Export restrictions

These products and associated technical data (in print or electronic form) may be subject to export control laws of the United States of America. It is your responsibility to determine the applicable regulations and to comply with them. The following notice is applicable for all products or technology subject to export control:

These items are controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Disclaimer

THIS CONTENT AND ASSOCIATED PRODUCTS OR SERVICES ("MATERIALS"), ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMISSIBLE PURSUANT TO APPLICABLE LAW, CommScope DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, FREEDOM FROM COMPUTER VIRUS, AND WARRANTIES ARISING FROM COURSE OF DEALING OR COURSE OF PERFORMANCE. CommScope does not represent or warrant that the functions described or contained in the Materials will be uninterrupted or error-free, that defects will be corrected, or are free of viruses or other harmful components. CommScope does not make any warranties or representations regarding the use of the Materials in terms of their completeness, correctness, accuracy, adequacy, usefulness, timeliness, reliability, or otherwise. As a condition of your use of the Materials, you warrant to CommScope that you will not make use thereof for any purpose that is unlawful or prohibited by their associated terms of use.

Limitation of liability

IN NO EVENT SHALL CommScope, CommScope AFFILIATES, OR THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUPPLIES, LICENSORS, AND THIRD-PARTY PARTNERS, BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER, EVEN IF CommScope HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN AN ACTION UNDER CONTRACT, TORT, OR ANY OTHER THEORY ARISING FROM YOUR ACCESS TO, OR USE OF, THE MATERIALS. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, some of the above limitations may not apply to you.

Trademarks

ARRIS and the ARRIS Logo are trademarks of CommScope, Inc. and/or its affiliates. All other trademarks are the property of their respective owners.

Contacts

Technical services

For technical support, you can contact us by phone, email, or on the web.

By telephone

The Technical Support Center may be reached at: 1-888-944-HELP (4357). Additional support numbers are located at: *Phone Support*.

On the web

Please visit *https://www.commscope.com/supportcenter/* and look for ARRIS support. The ARRIS Membership site gives you the ability to request access to numerous service and support tools once you are registered on that site.

One specific tool is Ask ARRIS, which is the Technical Support web portal. You will need to register for this tool using your support contract ID and email address. Ask ARRIS is located at: *https://ask.arris.com*.

There you will be able to access:

- Support Contact Information for all products
- Knowledge Base Information (also known as Solutions)
- User Documentation
- Current open support cases
- Ability to create a new support case (for technical support or repair and return)
- Training Webcast

By email

The Technical Support Center may also be reached by email. Email addresses for ARRIS products are located at: *Email Support*.

Technical training

For more information about our Global Knowledge Services Department and the programs we offer, email us at: *techtraining@commscope.com*.

Corporate Headquarters
CommScope · Hickory · North Carolina · 28602 · USA
T: 1-828-324-2200
www.commscope.com