

## ARRIS FBA\_P-10-20521

# ARRIS CM820A Cable Modem User Manual

DOCSIS 3.0 High-Speed Data Access

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## 1. INTRODUCTION

The ARRIS CM820A Cable Modem is designed to provide ultra-high-speed data access for cable service subscribers in both home and business environments. Utilizing DOCSIS 3.0 technology, this modem supports 8x4 bonded channels, enabling data services at speeds exceeding 300Mbps. It offers reliable and high-performance internet connectivity, making it suitable for advanced users and competitive against alternative broadband technologies.

## 2. PACKAGE CONTENTS

Verify that all items are present in the package:

- ARRIS CM820A Cable Modem
- Power Adapter
- Ethernet Cable
- Quick Start Guide (not included in this manual)

## 3. PRODUCT OVERVIEW

### 3.1 Front Panel Indicators

The front panel of the ARRIS CM820A features several LED indicators that provide status information about the modem's operation. Refer to the image below for the location of these indicators.



Figure 1: Front view of the ARRIS CM820A Cable Modem. Visible indicators include Power, DS (Downstream), US (Upstream), Online, and Link.

- **Power:** Indicates the modem is receiving power.
- **DS (Downstream):** Indicates downstream channel connectivity.
- **US (Upstream):** Indicates upstream channel connectivity.
- **Online:** Indicates successful internet connection.
- **Link:** Indicates an active Ethernet connection to a device.

### 3.2 Rear Panel Ports

The rear panel contains all the necessary ports for connecting the modem to your cable service and network devices.



Figure 2: Rear view of the ARRIS CM820A Cable Modem. Ports include a coaxial cable connector, an Ethernet port, and a power input.

- **COAX:** Connects to the cable wall outlet.
- **ETHERNET:** Connects to your computer or router using an Ethernet cable.
- **POWER:** Connects to the power adapter.

## 4. SETUP INSTRUCTIONS

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Follow these steps to set up your ARRIS CM820A Cable Modem:

1. **Connect Coaxial Cable:** Connect one end of the coaxial cable to the COAX port on the modem and the other end to a cable wall outlet. Ensure the connection is finger-tight.
2. **Connect Ethernet Cable:** Connect one end of the Ethernet cable to the ETHERNET port on the modem and the other end to your computer's Ethernet port or to the WAN/Internet port of your router.
3. **Connect Power Adapter:** Connect the power adapter to the POWER port on the modem and then plug the adapter into an electrical outlet.
4. **Power On:** The modem will automatically power on. Observe the front panel LEDs. The Power, DS, US, and Online indicators should eventually become solid green, indicating a successful connection. This process may take several minutes.
5. **Activate Service:** Contact your Internet Service Provider (ISP) to activate your new modem. You will need to provide the MAC address of the modem, which is typically found on a label on the bottom or back of the device.
6. **Verify Connection:** Once activated, open a web browser on your connected device and attempt to access a website to confirm internet connectivity.

## 5. OPERATING THE MODEM

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The ARRIS CM820A Cable Modem operates continuously once connected and activated. It functions as a bridge between your home network and your Internet Service Provider's network.

- **Continuous Operation:** For optimal performance, it is recommended to leave the modem powered on at all times.
- **Indicator Lights:** Monitor the front panel LEDs to quickly assess the modem's status. Solid green lights for Power, DS, US, and Online indicate normal operation.
- **Connecting Devices:** You can connect a single computer directly to the modem via Ethernet. For multiple devices or wireless connectivity, connect a router to the modem's Ethernet port.

## 6. MAINTENANCE

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Proper maintenance ensures the longevity and optimal performance of your cable modem.

- **Ventilation:** Ensure the modem is placed in a well-ventilated area to prevent overheating. Do not cover ventilation openings.
- **Cleaning:** Clean the modem periodically with a soft, dry cloth. Avoid using liquid cleaners or aerosols.
- **Power Cycling:** If you experience connectivity issues, a simple power cycle (unplugging the power adapter for 10-15 seconds and then plugging it back in) can often resolve minor problems.
- **Cable Connections:** Periodically check that all cable connections (coaxial, Ethernet, power) are secure.

## 7. TROUBLESHOOTING

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This section addresses common issues you might encounter with your ARRIS CM820A Cable Modem.

### 7.1 No Power

- **Symptom:** Power LED is off.
- **Solution:** Ensure the power adapter is securely connected to the modem and a working electrical outlet. Try a different outlet.

### 7.2 No Internet Connection

- **Symptom:** Online LED is off or blinking.
- **Solution:**
  - a. Verify coaxial cable connection to the wall outlet and modem.
  - b. Power cycle the modem: unplug, wait 15 seconds, plug back in.
  - c. Ensure your service is activated with your ISP.
  - d. If using a router, power cycle the router as well.
  - e. Contact your ISP if the issue persists.

### 7.3 Slow Internet Speed

- **Symptom:** Internet speed is lower than expected.
- **Solution:**
  - a. Power cycle the modem and any connected router.
  - b. Ensure all cables are securely connected.
  - c. Temporarily connect a computer directly to the modem with an Ethernet cable to rule out router issues.
  - d. Run a speed test. If speeds are consistently low, contact your ISP.

## 8. SPECIFICATIONS

Key technical specifications for the ARRIS CM820A Cable Modem:

Feature	Detail
Brand	ARRIS
Model Number	FBA_P-10-20521
DOCSIS Version	3.0
Channel Bonding	8x4 (Downstream x Upstream)
Connectivity Technology	Wired
Ethernet Ports	1 Gigabit Ethernet Port
Dimensions (LxWxH)	7 x 7 x 2 inches
Weight	0.01 ounces
Compatible ISPs	Cox, Optimum, Spectrum, Xfinity ( <i>Compatibility may vary, confirm with ISP</i> )

## 9. WARRANTY AND SUPPORT


For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official ARRIS website. Warranty terms typically cover manufacturing defects for a specified period from the date of purchase.






- **Manufacturer Support:** Contact ARRIS customer support for assistance with product issues, setup, or troubleshooting beyond this manual.
- **ISP Support:** For service activation, billing, or network-related issues, contact your Internet Service Provider directly.



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### Related Documents - FBA\_P-10-20521

	<p><a href="#">ARRIS Touchstone TG2492 Telephony Gateway User Manual</a></p> <p>User guide for the ARRIS Touchstone TG2492 Telephony Gateway, covering installation, configuration, wireless and Ethernet connectivity, and troubleshooting for home and office networks.</p>
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	<p><a href="#">ARRIS SURFboard SBG10 Wi-Fi Cable Modem Quick Start Guide</a></p> <p>Quick start guide for the ARRIS SURFboard SBG10 Wi-Fi Cable Modem, providing instructions for installation, Wi-Fi setup, and basic troubleshooting. Learn how to connect your devices for high-speed internet access.</p>
	<p><a href="#">ARRIS SURFboard SBG6400 Wireless Cable Modem Gateway Quick Start Guide</a></p> <p>Quick start guide for the ARRIS SURFboard SBG6400 Wireless Cable Modem Gateway, covering installation, wireless network setup, testing, and web manager access.</p>
	<p><a href="#">ARRIS SURFboard Cable Modem Quick Start Guide</a></p> <p>A quick start guide for setting up and managing the ARRIS SURFboard Cable Modem, including connection instructions and mobile app features.</p>
	<p><a href="#">ARRIS SURFboard Cable Modem Quick Start Guide</a></p> <p>A quick start guide for setting up and managing your ARRIS SURFboard cable modem using the SURFboard Central mobile app or web interface.</p>
	<p><a href="#">ARRIS SURFboard S33 DOCSIS 3.1 Cable Modem User Guide</a></p> <p>Comprehensive user guide for the ARRIS SURFboard S33 DOCSIS 3.1 cable modem, covering safety, setup, product overview, web manager usage, monitoring, troubleshooting, and warranty information.</p>