
MC400 Modular Modem Quick Start Guide

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MC400 Modular Modem Quick Start Guide



Introduction

This document discusses the MC400 removable (modular) modem and provides setup and installation information, as well as reference to compatible Cradlepoint devices.

Intended Audience

This article is intended for professional networking hardware installers. It provides basic knowledge and should be used only as a reference guide for installing the modem. Due to the unique nature of each, potential for RF exposure, and enhanced separation requirements, customers must have a professional install their 5G hardware. This document is a reference guide and is intended only to provide best practices.

Refer to the [Cradlepoint Product Disclaimer and Limitation of Liability](#) section for further information.

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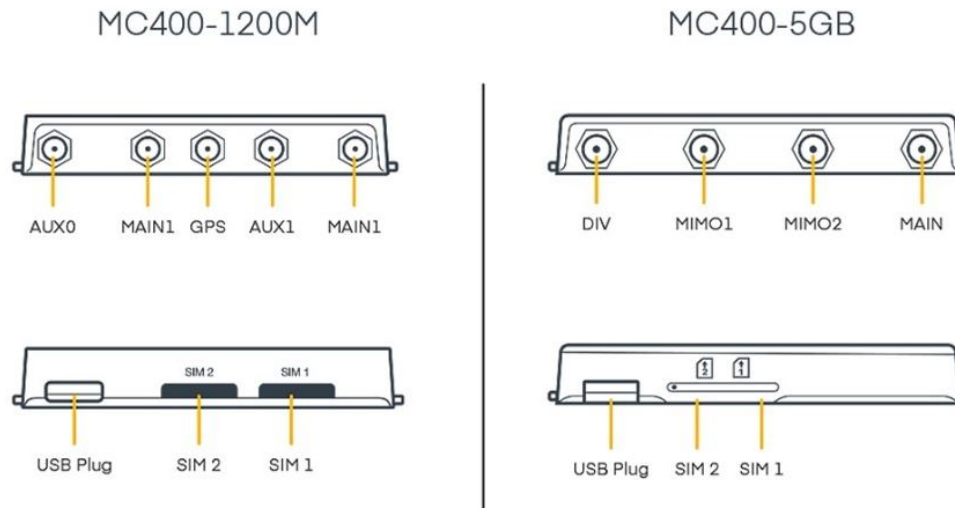
MC400 Modular Modem Models

This document applies to all the following products:

CRADLEPOINT MC400-1200M-B

MODEL: MC400-1200M

Hardware Diagrams



Before You Begin

The modem requires active SIMs for proper functionality and is compatible exclusively with Cradlepoint devices.

Product Compatibility

The MC400 modem is designed to be used exclusively with compatible Cradlepoint devices. The modem is available for Cradlepoint devices with a modular modem slot, as listed below. Click on each device link for more information.

MC400-5GB Compatibility:

5G upgrade option:

- [AER2200 Series](https://cradlepoint.com/product/endpoints/aer2200/) (<https://cradlepoint.com/product/endpoints/aer2200/>),
- [IBR1700 Series](https://cradlepoint.com/product/endpoints/ibr1700/) (<https://cradlepoint.com/product/endpoints/ibr1700/>),
- [E300-C4D](https://cradlepoint.com/product/endpoints/e300/) (<https://cradlepoint.com/product/endpoints/e300/>), [E300-C7C](https://cradlepoint.com/product/endpoints/e300/) (<https://cradlepoint.com/product/endpoints/e300/>), and [E300-C18B Routers](https://cradlepoint.com/product/endpoints/e300/) (<https://cradlepoint.com/product/endpoints/e300/>),
- [E3000-C18B Router](https://cradlepoint.com/product/endpoints/e3000/) (<https://cradlepoint.com/product/endpoints/e3000/>),

Dual-5G modem option:

- [E3000-5GB Router](https://cradlepoint.com/product/endpoints/e3000/) (<https://cradlepoint.com/product/endpoints/e3000/>),
- [E300-5GB Router](https://cradlepoint.com/product/endpoints/e300/) (<https://cradlepoint.com/product/endpoints/e300/>),
- [R1900-5GB Router](https://cradlepoint.com/product/endpoints/r1900-series/) (<https://cradlepoint.com/product/endpoints/r1900-series/>) with [RX30-M Accessory](https://cradlepoint.com/product/accessories/rx30-mc-managed-accessory/) (<https://cradlepoint.com/product/accessories/rx30-mc-managed-accessory/>),

MC400-1200M-B Compatibility:

LTE Category 18 upgrade option:

- [E300 Series \(https://cradlepoint.com/product/endpoints/e300/\)](https://cradlepoint.com/product/endpoints/e300/)
- [E3000 Series \(https://cradlepoint.com/product/endpoints/e3000/\)](https://cradlepoint.com/product/endpoints/e3000/)
- [R1900 Series \(https://cradlepoint.com/product/endpoints/r1900-series/\)](https://cradlepoint.com/product/endpoints/r1900-series/) with [RX30-MC Accessory \(https://cradlepoint.com/product/accessories/rx30-mc-managed-accessory/\)](https://cradlepoint.com/product/accessories/rx30-mc-managed-accessory/)
- [IBR1700 Series \(https://cradlepoint.com/product/endpoints/ibr1700/\)](https://cradlepoint.com/product/endpoints/ibr1700/)
- [IBR900 Series \(https://cradlepoint.com/product/endpoints/ibr900/\)](https://cradlepoint.com/product/endpoints/ibr900/) with [COR Extensibility Dock \(https://cradlepoint.com/product/accessories/cor-extensibility-dock-3/\)](https://cradlepoint.com/product/accessories/cor-extensibility-dock-3/)
- CBA850 Series
- [AER2200 Series \(https://cradlepoint.com/product/endpoints/aer2200/\)](https://cradlepoint.com/product/endpoints/aer2200/)
- AER1600 Series

SIM Card for Connectivity

A wireless broadband data plan must be used with the modem for wireless broadband connectivity. Network providers must provision a SIM card to provide wireless broadband data plans compatible for use with the modem. Contact your network provider for further details.

Required Tools for Setup

- #0 Philips-head screwdriver (for LTE modem door cover)

Required Items

- Activated SIM(s)
 - 4FF SIM(s) for MC400-5GB models
 - OR
 - 2FF SIM(s) for all other MC400 models
 - May be purchased and activated through a network carrier. Contact your network provider for more information.
 - May be included with bundles that included activated SIMs. Contact your salesperson or partner of record for more information.
- Router or adapter - Included in NetCloud Essentials and endpoint bundles

Setup

Complete the following steps to install and configure the modem.

STEP 1: Check box for content.

The modem may be purchased individually or in a bundle with a compatible Cradlepoint endpoint. The

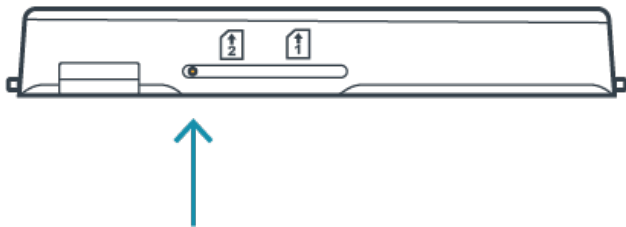
following may be included in the package:

- MC400 Modular Modem
- 4 Cellular antennas (cellular antennas are not included for mobile options)
- Modem door cover*
- SIM tray ejection tool (MC400-5GB models only)
- Getting Started Insert Card
- Safety, Regulatory, and Warranty Guide

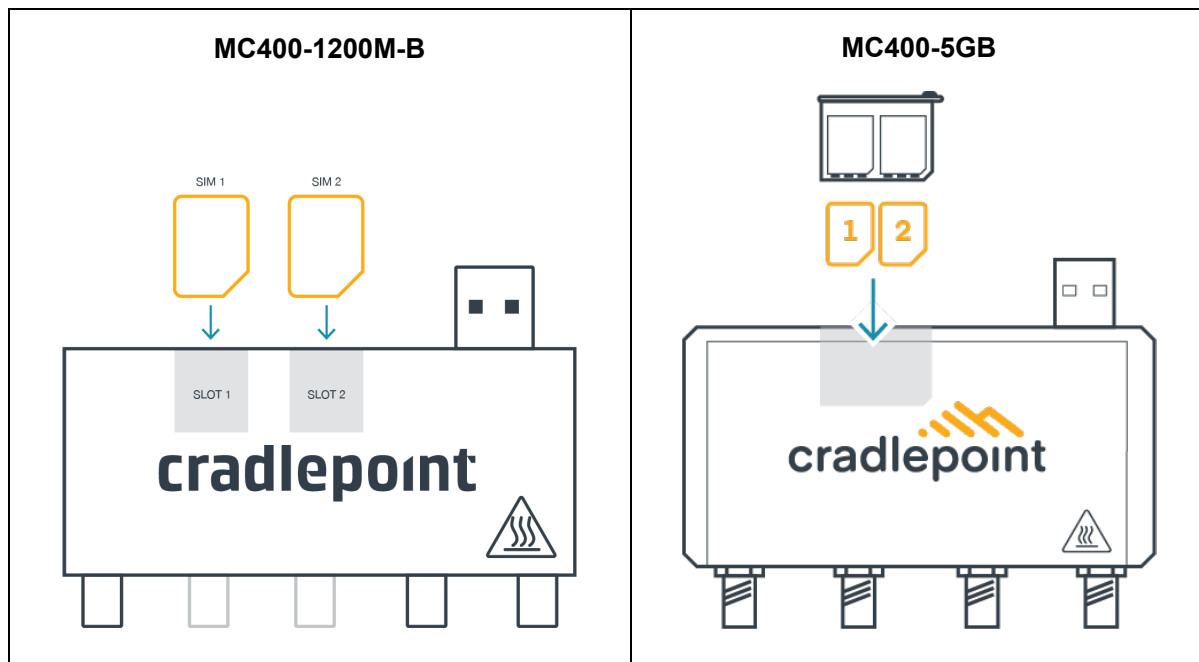
*Modem door covers are specific to the router the MC400 modem is used in. Refer to the [MC400 product page \(https://cradlepoint.com/product/accessories/mc400-modular-modem/\)](https://cradlepoint.com/product/accessories/mc400-modular-modem/) for more information.

STEP 2: Insert a SIM card.

1. MC400-5GB models only: Using the SIM tray ejection tool, remove the SIM tray from the modem.



2. Insert an activated SIM card into the SIM1 slot, metal contacts down and notch in towards the modem.



MC400-1200M-B models only: The SIM clicks into place. Depress again to remove the SIM, if necessary.

- Insert an active, secondary SIM card into the SIM 2 slot, if desired.

- MC400-5GB models only: Slide the SIM tray back into the modem.

STEP 3: Install the modem.

1. Switch the Cradlepoint device to the “Off” position.
2. Remove the external modem door from the router or adapter.
3. Align the modem's USB plug with the USB port on the router or adapter.
4. Connect the modem to the router or adapter, pressing on both the modem and the device.
5. Remove the black decal from the front of the modem door to expose the antenna port openings.
6. Snap the modem door into place.
7. Secure the modem door with the modem door screw (included).

STEP 4: Attach the modem antennas.

Attach antennas to all appropriate ports on the new modem, as desired. Do not connect a cellular antenna to the GPS port, if present.

STEP 5: Power up the device.

Turn “On” the Cradlepoint device that contains the modem. Watch for the modem LED to illuminate on the device.

STEP 6: Configure the modem in NetCloud Manager.

Configure the modem through NetCloud Manager, for such optional settings as WAN priority, load balancing, and failover. Configuration requires that you log into your NetCloud Manager account. Refer to Getting Started with NetCloud Manager (<https://customer.cradlepoint.com/s/article/Getting-Started-with-NetCloud-Manager>) for more information.

Understanding LEDs

Refer to the Quick Start Guide of the router in which the modem is installed for LED light patterns and descriptions that pertain to the installed modem.

Resources

MC400 Modular Modem Webpage
(<https://cradlepoint.com/product/accessories/mc400-modular-modem/>)
MC400 Modular Modem Spec Page
(<https://resources.cradlepoint.com/product-docs/mc400-spec-sheet-01202020>)

Help and Support

Cradlepoint Connect Customer Community
(<https://customer.cradlepoint.com/s/>)
Cradlepoint Support Services
(<https://cradlepoint.com/support/>)

Terms of Service

Terms of Service & License Agreement

(<https://cradlepoint.com/about-us/terms-of-service/>).

Privacy Policy (<https://cradlepoint.com/privacy-policy/>).

Cradlepoint Product Disclaimer and Limitation of Liability

Installer Responsibility

Cradlepoint hereby disclaims any liability for failure of the installer to install the hardware properly and for any other acts and omissions of the installer. By using this Professional Installation Guide, you agree to indemnify and hold Cradlepoint harmless from and against any and all, liabilities, losses, damages, costs and expenses (including without limitation attorneys' fees and costs) incurred by Cradlepoint arising out of or in connection with any installation work that is done other than in accordance with the instructions in this Professional Installation Guide.

Limitation of Liability

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL CRADLEPOINT BE LIABLE TO YOU OR TO ANYONE CLAIMING THROUGH OR UNDER YOU FOR ANY LOST PROFITS, EQUIPMENT DOWNTIME, OR LOSS OF DATA OR BUSINESS OPPORTUNITY, OR FOR ANY INDIRECT, SPECIAL, EXEMPLARY, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND UNDER ANY THEORY OF LIABILITY, ARISING IN ANY WAY IN CONNECTION WITH YOUR INSTALLATION ACTIVITIES, EVEN IF CRADLEPOINT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. SOME JURISDICTIONS (SUCH AS THE STATE OF NEW JERSEY) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN NO EVENT SHALL THE AGGREGATE LIABILITY OF CRADLEPOINT AND/OR ITS AFFILIATES ARISING UNDER OR IN CONNECTION WITH THE PRODUCT, HOWEVER ARISING, REGARDLESS OF THE NUMBER OF EVENTS, OCCURRENCES, OR CLAIMS GIVING RISE TO LIABILITY, EXCEED THE PRICE PAID BY THE ORIGINAL PURCHASER OF THE PRODUCT. THE FOREGOING LIMITATIONS WILL APPLY EVEN IF THE ABOVE STATED REMEDY FAILS OF ITS ESSENTIAL PURPOSE.

Professional Installer Network

Email our Professional Installer Network for assistance in locating a professional installer in your service area at installernetwork@cradlepoint.com (<mailto:installernetwork@cradlepoint.com>).

NOTE: The Verify app includes many of the same instructions with an alternate order. This document supports the Verify app instructions. Use the Navigation section below to locate the topics most applicable to troubleshooting your setup issues. For additional setup support, contact a professional installer or Cradlepoint Support.

Safety and Regulatory Warnings

- Use with Listed Information Technology Equipment only.
- The equipment is intended to be supplied by USB 3.0 port of UL listed products which output is complied with ES1/SELV, PS2/LPS, rated 5Vdc, 0.9A minimum, max. ambient temperature 70 °C minimum.

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