

24x8 cable modem plus AC1900 WiFi router

Model MT7711

+ 2 Xfinity® phone lines



Quick Start Guide



Packaged with your MT7711



Para una Guía de Inicio Rápido en español, por favor vaya a www.motorolanetwork.com/MT7711ir



Let's get started

If you don't have cable Internet service, please order that from your cable service provider. Comcast Xfinity customers should also order phone service if they want to use the MT7711 phone lines. This phone capability works for Xfinity, but not for most other cable services since they use a different version of PacketCable to deliver their phone service.

Now connect your MT7711 as shown on page 3.

Connecting to a Coax Cable

Please see the connection photo on the next panel. You connect your MT7711 to a "live" coax cable. Sometimes a cable will already be available. Sometimes there's a coax wall jack available, and you connect to the jack with a coax cable. Your MT7711 can also share a coax cable attached to a TV by using a coax splitter. Please note that a badly chosen splitter reduces a cable modem's speed; so if you need to use a splitter, use a 2-way splitter whose top frequency is 1,000 MHz or higher.





ON/OFF button

POWER

Connect the supplied power cube between the power jack and an electrical outlet.

PHONE (TEL1-2)

If you have Xfinity phone service, you can connect telephones to either or both of these phone jacks.

ETHERNET (LAN 1-4)

You can connect a computer, HDTV, game station, or other Ethernet-capable device to any of these 4 LAN ports.

RESET

WPS button

COAX

Connect a "live" coax cable to the modem's COAX connector as discussed above. (Tighten the nut so it's finger tight. You may want to use the supplied wrench. Make the connection snug but not over-tight.)



Prepare to activate

By now you should have:

- Subscribed to cable Internet service, and possibly to Xfinity phone service.
- Connected your MT7711.
- Powered up your cable modem/router. To do this, the On/Off button needs to be On (Push the button in until it clicks). Wait for the green online connection light to stop flashing and remain solidly lit. This may take up to 15 minutes.

You may need your cable service account number for product registration. A recent cable bill/statement will have this information.

If you're asked for information about the MT7711, such as the Mac Address or Serial Number, you can find this on the label on the bottom of the modem/router.

Activate

Activate your MT7711 by opening the Web browser of a computer or other device that's connected to your MT7711, and enter xfinity.com/activate. Your device can be connected either wirelessly or via one of the MT7711's Ethernet ports. If you connect wirelessly, you'll need the unique Wireless Network Name and Password printed on the bottom of your MT7711. You'll use these in setting up your wireless device to connect to the MT7711. Once you've connected, you can open the browser of that wireless device.

Alternatively, call the Comcast Xfinity number: 1-800-XFINITY



Once your MT7711 is activated either online or by phone, your service provider will provision your MT7711 service. Typically this takes less than 5 minutes for Internet, but in some cases this may take 30 minutes or longer. If you activate voice service for the first time, your service provider may take several days to activate that service.

Once you have been activated, try to browse the Web using a device connected via Ethernet or WiFi to the MT7711. (See the section Wireless Router below for information on connecting via WiFi). If browsing works, **Congratulations!** Your MT7711's Internet capability is working.

If you have Xfinity phone service and want to use that, make sure the MT7711's Tel1 light is ON. (You may have to wait a few minutes after power-up.) Then plug a phone into the Tel1 port. Take the phone off-hook, and confirm there is a dial tone. Then make a call, and ask the person who answers to call you right back. Hang up so you can receive the incoming call and verify that your phone is working. For more information about using the MT711 telephone capability, please see the Telephone Adapter section on page 8. If your MT7711 is NOT

Telephone Adapter section on page 8. If your MT7711 is NOT working, see **Troubleshooting Tips** on page 12.



Configuration Manager

You may not need to use the MT7711's Configuration Manager. Here are some reasons for using it:

- You want to change the wireless network name and password.
 For instance, maybe you want a more easily remembered
 name, or you're replacing a router and want to use your
 existing WiFi Network Name (SSID) and/or WiFi
 Password/Key instead of the unique ones that come with the
 MT7711.
- You want to set up special Internet gaming settings.
- You want to get performance information about the MT7711 modem and/or built-in router. This can be helpful in diagnosing DOCSIS performance issues and/or optimizing wireless performance.

If you need to access the MT7711 Configuration Manager, open your Web browser. Type http://192.168.0.1 in the address bar and then press the Enter key.

In the login dialog box type the following User Name and Password in lower case, then click OK.

User Name: admin
Password: motorola

The Basic Status and Settings page will appear. If this page doesn't appear, please see the **Troubleshooting Tips** below.

For more detailed information about the MT7711 and its Configuration Manager, please see www.motorolanetwork.com/MT7711manual



Wireless Router

As noted before, the MT7711 has a unique Wireless Network Name/SSID and Wireless Security Key/Password printed on the MT7711's bottom label. Set up your wireless devices to work with this SSID and security key, or with the SSID and security key you specified, if you changed them.

Note that wireless performance depends on a number of factors. Please keep these things in mind:

- Where possible, put the MT7711 in a central place so that it's not too far away from the your wireless devices that need Internet access.
- Try to avoid interference from Bluetooth headsets and stereos, microwave ovens, WiFi-capable printers, and 2.4 GHz cordless phones and base stations. Try not to put the MT7711 close to these interfering devices.
- Sometimes it helps to change the MT7711 wireless channel frequency to reduce interference with neighbors' wireless networks. This is discussed in the Troubleshooting section of this Quick Start.
- Wireless range can be limited by a variety of issues, including weak wireless clients and challenging building configurations. Sometimes devices with a weak wireless signal will connect to the MT7711, and often those devices can slow down your network's WiFi. If you need greater wireless range far away from your MT7711, you could add a Range Extender. For more information, please see

www.motorolanetwork.com/extenders

If you have coaxial cable running near your router and a distant wireless access point, HDTV, or other device, MoCA is often a good way to connect the router to the device. MoCA can share the same cable used for cable TV or cable Internet. With the Motorola MM1000 MoCA Adapter, speeds are up to 1,000 Mbps. Please see

www.motorolanetwork.com/MocaWifi



Telephone Adapter

The MT7711 includes two telephone ports that support standard (land line) telephones and other devices. The MT7711 is designed to work with Comcast Xfinity voice service only.

To use the telephone ports, first make sure you have subscribed to Xfinity voice service. This service may be provisioned to support either one line, Tel1, or both Tel1 and Tel2.

You can connect almost any standard telephone equipment into an activated MT7711 telephone port. This includes almost anything that connects using an RJ11 jack—telephones, cordless phone base stations, answering machines, etc. (If you want to connect an alarm system, check with the manufacturer for compatibility).

You can connect individual devices, or you can connect multiple devices that plug into the same phone line. (Their Ringer Equivalence Numbers need to add up to 5 or less.) One way to connect multiple devices is to plug the MT7711 phone port into a jack connected to existing telephone wiring. Before doing this, make sure to disconnect the wiring totally from the telephone company's network demarc. This is normally done by unplugging a phone cord at the jack nearest to where the phone line comes into your home. After you unplug that phone cord, check that none of the phones on that line gets dial tone when you go off-hook. If they don't, it's safe to connect a phone cord from one of the line's jacks to an MT7711 phone jack.

You may want to attach a cordless phone base station to the MT7711, and then place cordless handsets wherever you like.

The **Battery Purchase or Replacement** section on page 11 describes how you can make sure you have phone service even if your MT7711 loses power.



Front Panel Lights

During Power up, the lights will blink for about a minute.

LIGHT	COLOR	DESCRIPTION	
Ú	Green	OFF:	MT7711 power off or on battery back-up
Power		ON:	MT7711 power on
↓ Downstream	Green <i>or</i> Blue	OFF: Green Blinking:	On battery back-up Scanning for DS channel
		Green ON:	Connected on 1 Downstream channel
		Blue Blinking:	Negotiating bonded channel(s)
		Blue ON:	Bonded with 2 or more channels
† Upstream	Green <i>or</i> Blue	OFF:	Upstream not connected or on battery back-up
		Green Blinking:	Ranging in progress
		Green ON:	Connected on 1 channel
		Blue Blinking:	Negotiating bonded channel(s) [†]
		Blue ON:	Bonded with 2 or more channels
Online	Green	OFF:	Offline or on battery back-up
		Blinking:	Trying to go online
		ON:	Online
ş	C	OFF:	WiFi is not enabled or on battery back-up.
2.4 GHz WLAN	Green	Blinking: ON:	Data is flowing. WiFi is enabled.
5) Gre		OFF:	WiFi is not enabled or on battery back-up.
	Green	Blinking: ON:	Data is flowing. WiFi is enabled.



		OFF:	After boot-up, WPS is OFF (not being used).
WPS	Green	Blinking:	WPS is in discovery mode.
		ON:	Light will remain solid for 5 minutes after WPS configuration is successful.
		OFF:	Phone service not provisioned.
L 1 L 2 TEL1 & TEL2	Green	Blinking:	Registration in process OR Phone off-hook / Call Active (See box below.)
		ON:	Phone on-hook / Ready for calls
		OFF:	No battery installed, depleted battery, or not provisioned for phone service
† Battery	Green	Blinking:	Battery is charging
		Fast Blinking:	Battery is not charging or depleted; or if on back-up power, battery is low.
		ON:	AC Power Fail / Battery back-up active

[†] If a blue light blinks continuously, this indicates partial service (at least one designated channel has not completed bonding). You should still get high Internet speeds, but your service provider may want to know so they can adjust their network.

Please note: If no telephone service is provisioned, both the Tel1 and Tel2 lights will blink continuously. To turn the blinking off, first plug a phone into one of the phone ports, then take the phone's handset off-hook, and then put the handset back on-hook. Now repeat the process for the other phone port. The Tel1 and Tel2 lights should now be OFF.



Battery Purchase or Replacement

The MT7711 has battery back-up circuitry which is for Telephone back-up only. The MT7711 typically does not ship with a battery included. A battery is not required for normal operation with AC power. If you lose AC power, a back-up battery allows your telephone to still function even when you lose your Internet connection. If you want a back-up battery, you can purchase one online.

The type of back-up battery that can be used with this product is Model 98250 from MTRLC LLC, and is labeled BP-15033-22/2150 ${\bf S}$.

Note that in the case of loss of power, the Tel1 jack will provide up to five hours of talk time or eight hours of stand-by time when your MT7711 is equipped with an optional battery. The Tel2 jack does not provide this back-up feature. Only phones that do not require their own power source will work during a power outage (unless the phones are provided with their own separate battery back-up system). It's a good idea to have at least one phone available that just needs to plug into the MT7711, and not into a power jack.



Troubleshooting Tips

What if I can't make an Internet connection right after installation?

- First turn your MT7711 off for at least 8 seconds, then on, to see if that fixes the problem.
- Check the connections you've made to your MT7711. Power and coax connections are required, and up to 4 Ethernet connections are optional. Are those connections good? Be sure that the coax cable connection is finger-tight, possibly using the coax wrench. Do not over-tighten.
- Check that the MT7711's power supply is plugged into a live outlet, and that the Ethernet cable (if used) is connected securely.
- Make sure that your coax cable is live. If you have cable TV service you can check that by using it with a TV.
- Check that you provided the correct setup information to your cable service provider.
- Contact your cable service provider to make sure they've turned on your Internet service.

What if I can't make or receive phone calls right after installation?

- Make sure that you've ordered Xfinity phone service.
- Make sure that the Tel1 light is ON (lit solidly). It may take several minutes after power-up before voice service is established. Note also that it may take several days to activate voice service for the first time.
- If the Tell light never turns on, turn your MT7711 off for at least 8 seconds, then on. Wait up to 10 minutes to see if that fixes the problem.
- If the Tel1 light still isn't ON, call your service provider.
- If the Tell light is ON but you can't make and receive calls, check the connections to your phone. Is the phone cord connected snugly at both ends?



- If your phone has a base that needs to be powered, make sure it has a secure connection to a live outlet.
- If your phone's handset uses a battery, make sure this is fully charged.
- If you have connected to your home's telephone wiring, make sure that the home's wiring is disconnected at the demarc from the telephone company's network. The demarc is where the telephone company's network enters into the home and connects to the home phone wiring.

What if my MT7711 has been working, then stops working?

- First turn your MT7711 off for at least 8 seconds, then on, to see if that fixes the problem.
- If the MT7711's lights don't come on, check that the modem is getting power from its power cube and that the MT7711's power button is on.
- Check your MT7711 Ethernet or telephone cables, if used.
- Check with your service provider. Sometimes there's a service outage or some other service issue. Sometimes a service outage also affects your TV service, so check that.

What if I'm getting Internet service but my speed is disappointing?

- Be sure you know what speed you're paying for.
- Check the speed with a computer using a wired Ethernet connection and plugged into one of the modem's Ethernet ports. Use one of the tools found when you search the phrase: broadband speed test. Make sure your computer's wired Ethernet LAN port supports gigabit rates (1000BT or GE). You will need this to achieve service speeds of 100 Mbps or greater.
- If you get good speed when a computer's plugged into the modem, you may have a wireless problem. In that case, please re-read the wireless router section.
- Some video streaming services get bottlenecked, especially at busy times like after dinner. See whether you have the speed



problem at less busy times or when using another streaming service.

- Try connecting your MT7711 nearer to where the coaxial cable comes into your home. This lets you see whether your home's cabling is a problem.
- If you're using a splitter with your MT7711, try the MT7711 without the splitter to see if that helps. If it does, you may need to get a better splitter, one with a top frequency of at least 1,000 MHz.

What if I'm told that my MT7711 isn't approved by my cable service provider?

If your Cable Service Provider is Comcast Xfinity, then that's not true. The MT7711 is specifically listed on the Comcast Xfinity website as an approved device for Internet and phone services at mydeviceinfo.xfinity.com. Other leading cable service providers have a list of certified cable modems for each of their Internet speeds. You can check the list for your service provider. You can also find information about certifications at www.motorolanetwork.com/services

What if I am connected wirelessly but my connection seems slow or keeps dropping?

Please re-read the Wireless Router section above.

What if I don't know my MT7711's Wireless Network Name/SSID or Security Key/Password?

The default values are printed on the bottom label of the MT7711. Use these unless you changed them. If you changed them, try to remember where you put the new values. If you have a device that connects wirelessly to the MT7711, it may show the Wireless Network Name/SSID and Password. You can also find this information in the MT7711 Configuration Manager. Information about using this is in the Configuration Manager section above.



If all else fails, reset the device to factory defaults by holding the Reset button depressed for 10 seconds. (A paperclip helps.) You can then use the default values.

What if I think that wireless devices are interfering with my MT7711 wireless router?

- Where possible, put the MT7711 as far away as possible from interfering devices such as Bluetooth transmitters and neighbors' WiFi routers.
- 2. To try to pick a less used wireless channel for your MT7711, first go in to your MT7711's Configuration Manager.
 - Then, click the Advanced button at the top of the page, then click the Wireless and Scan/Bridge menu items at the top of the page.
 - Click the ScanWirelessAPs button. A list will appear of competing wireless networks, including the channels they are using. Write down one or more of the less used channel numbers, since a less used channel should be better for your MT7711.
 - On the top of the page, click the Wireless Basic menu item.
 - On the Basic page, select the channel you want in the Channel pulldown, then click Save.

Do you have any other questions? We have lots more information at www.motorolanetwork.com/mentor



We like to help.

Please visit our support Website or call our support specialists. Our Website has our Motorola Mentor information, and also provides returns and warranty information.

www.motorolanetwork.com/support

Email: support@motorolanetwork.com

Phone: 800-753-0797 or 617-753-0562

Our full-length user manual is available at www.motorolanetwork.com/MT7711manual

Limited Warranty

MTRLC LLC warrants this product against defects in material and workmanship for a warranty period of 2 years. To read the full warranty, please go to

www.motorolanetwork.com/warranty



Safety Precautions

These precautions help protect you and your MT7711.

- Do not put the MT7711 or its power supply in water, since this is a shock hazard.
- The MT7711 should normally be installed indoors. If you use it outdoors, protect it from moisture and be careful about temperature.
- Your MT7711 should be operated in an environment that's between 32 and 104° Fahrenheit (0 to 40° Centigrade).
- Your MT7711 should not be in a confined space. There should be room for air flow around the top, front, and sides of the MT7711.
- Make sure to use your MT7711's power supply and a compatible electrical outlet
- The coaxial cable's ground shield is intended to be connected to the building's Earth ground. Attachment to Earth ground is typically provided through your cable service provider's installation.



FCC Statement

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 or more 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, and/or consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.

This device complies with Class B 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.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

♦ DC input connector is center-pin positive polarity.

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