



VDSL2/ADSL2+ Modem
plus AC1600 Router
Quick Start



Model MD1600

Packaged with your MD1600 router



Power Cube
(varies by country)



Ethernet Cable



Phone Cord



DSL Filter/Splitter

Para una Guía de Inicio Rápido en español, por favor
vaya a www.motorolanetwork.com/MD1600IR



Before you begin

If you are replacing another DSL modem, you should write down its Username and Password. You can sometimes get these from the documentation or labels of the DSL modem you're replacing. You can also log into that modem to check for a Username and Password; and if you find them, write them down. Note that these are usually different from the Username and Password used for email or for your modem's configuration manager.

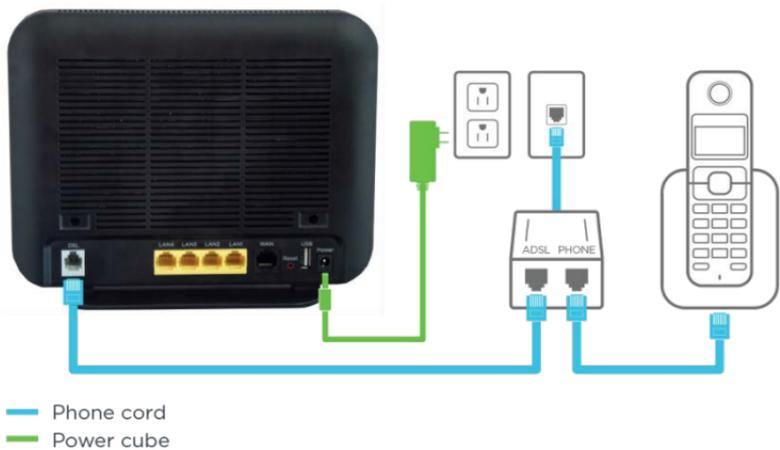
If you received your MD1600 from your service provider, please follow the instructions they provided. Otherwise continue directly below.

Let's get started

1. First connect the supplied power cube between the MD1600's power jack and a working electrical outlet. The MD1600 should power up and the power light on the front of the unit should turn on amber as the modem initializes. When the MD1600 is ready to use, the power light should turn green. If the light does not turn on when you supply power, press the ON/OFF button on the side of the MD1600.
2. Next connect the supplied phone cord between the MD1600's DSL jack and a phone jack that provides your DSL service. If you want to use a phone or other device with the same phone jack, please use the supplied filter/splitter as pictured on the next page.
3. If your DSL modem shares the phone line with telephones, answering machines, or other devices, they can interfere with the DSL modem if they're used at the same time. You can prevent interference by using a DSL filter with each device. We have provided one filter/splitter, but you may need more filters. If you are using one or more DSL filters, please see **Installing a DSL Filter** later in this manual.



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Access the MD1600

Installation requires accessing the MD1600's configuration manager. To access the configuration manager using a wired connection to a computer (recommended), plug the supplied Ethernet cable into any one of the LAN jacks on the back of the MD1600. Plug the other end of the cable into the LAN or ETHERNET port of your computer.

If you need to access the configuration manager using WiFi, go into the WiFi setup section of your smartphone or other WiFi device. **Then use the WiFi Network name and Password printed on the bottom label of the MD1600.**

Once you have connected to the MD1600 with an Ethernet or WiFi connection, open the connected device's browser, type **SetupMyRouter.net** into the address bar, and press **Enter**. The login dialog box for your modem should appear, Enter the modem's Username and Password in lower case, then click **OK**.

Username: **admin**

Password: **motorola**

If you can't access the MD1600's configuration manager, see the **Troubleshooting Tips**.



Run the Setup Wizard

When you log into the MD1600 for the first time, the Configure my Internet Connection screen appears. If you want the MD1600 to detect your DSL connection, select your Country and Internet service provider from the drop-down list and click **Next**. If you want to manually configure the MD1600, select **No, I want to configure the Internet connection myself** and click **Next**. To learn how to configure the Internet connection yourself, skip ahead to **Configuring your Connection Manually**, below.

The wizard will now try to configure your Internet connection. If it determines that you need a Username and Password to set up your connection, it will prompt you for your Username and Password. Enter your Username and Password, and then click **Next**. Your Username and Password are case-sensitive. Click **Save** on the Internet Connection screen to save your configuration.

Your DSL Username and Password are different from the Username and Password you may use for email and the Username and Password used to log into the MD1600. If you need to ask your service provider for your Username and Password, make sure the service provider knows that you need your **DSL** login information.

If your DSL connection does not need a Username and Password, the Congratulations screen appears. Click **Next** and then **Save** on the Internet Connection screen to save your configuration.

Now try going to a website to check that your connection is working. If it is, Congratulations! You may start using your MD1600, or you can learn how to connect additional devices to the MD1600 as described in the **Connect Your Devices** section below. If you can't access the website, please see the troubleshooting section at the end of the manual.

If the MD1600 does not detect your connection, you can press **Back** to try again or click **Next** to configure it manually. Configuring your connection manually is described next.



Configuring Your Connection Manually

You should be on the Internet Connection screen if you are configuring your connection manually. On this screen you can enter the setup information for your DSL service. Your DSL service provider should be able to give you this information.

The first thing you need to know is whether your connection is VDSL or ADSL.

If you are using VDSL, you will see the question: Does your Internet connection require a Username and Password. Select **Yes** if you are using PPPoE or if you know you need a Username and Password. If you answer **Yes**, you then enter the Username and Password. Otherwise select **No**.

If your VDSL service provider is using VLAN tagging, ask the service provider what value you should enter in the VLAN ID field.

If you are using ADSL instead of VDSL, you will see the question: Does your Internet connection require a Username and Password. Select **Yes** if you are using PPPoE or PPPoA, or if you know you need a Username and Password. If you answer **Yes**, you then enter the Username and Password. Otherwise select **No**. Your service provider can also provide your VPI and VCI, and tell you whether your connection is using VCMux or LLC for encapsulation.

Once you have entered the correct information on the Internet Connection page, click **Save**. Now try going to a website to check that your connection is working. If it is, Congratulations! You may start using your MD1600, or you can learn how to connect additional devices to the MD1600 as described in the **Connect Your Devices** section below. If you can't access the website, please see the troubleshooting section at the end of the manual.



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Connecting Your Devices

WiFi Wireless

You can connect any of your WiFi devices by first going into the WiFi setup section for the device. **Then use the WiFi SSID/Network Name and WiFi Password/Key printed on the label on the bottom of the MD1600 router.**

Wired

You can also connect up to four HDTVs, computers, game stations, or other devices by connecting an Ethernet cable between an Ethernet or LAN port of the device and any one of the LAN jacks on the router.

Once you've set up WiFi and/or plugged in up to four Ethernet devices, try to browse the Web. If browsing works, Congratulations! Your MD1600 is working. If your MD1600 is NOT working, see **Troubleshooting Tips**.

Installing a DSL Filter

If a phone, answering machine, or other device is connected to your DSL modem's phone line, they can interfere with each other. To prevent this, you need to connect a DSL filter to all devices EXCEPT your DSL modem.

If you want to use the same phone jack for your MD1600 and a phone, plug the included DSL filter/splitter's LINE jack into the phone jack in the wall, plug the supplied phone cord between the MD1600's DSL jack and the filter's MODEM jack, and plug the phone into the filter's PHONE jack.

For a phone that does not share the same phone jack with the MD1600, plug the filter's LINE jack into the phone jack in the wall and plug the phone into the filter's PHONE jack. If there is a DSL jack, leave it open.



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The MD1600 ships with one DSL filter/splitter, if you need more DSL filters, these are typically available in most major electronics stores or online.

Configuration Manager

After configuring the MD1600, most users should not need to access the Configuration Manager. Here are some reasons for using it:

- You want to change the wireless Network Name and Password. For instance, maybe you're replacing a router and want to use your existing WiFi SSID/Network Name and/or WiFi Password/Key instead of the unique ones that come with the MD1600. Instructions for doing this are at www.motorolanetwork.com/MD1600WiFi
- You want to set up special Internet gaming settings.
- You want to set up parental controls to control when children or other users can access the Internet.
- You want to get performance information about the MD1600 router. This can be helpful in optimizing wireless performance.

For details about the Configuration Manager please see www.motorolanetwork.com/MD1600manual

If you need to access the MD1600 Configuration Manager, first open your Web browser. Type **SetupMyRouter.net** in the address bar and press Enter.

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

Username: **admin**

Password: **motorola**

If the Internet Connection page doesn't appear, please see the **Troubleshooting Tips**.



Improving Wireless Performance

As noted before, **the MD1600 has a unique WiFi SSID/Network Name and WiFi Password/Security Key printed on the MD1600's back label.** Use these unless you want to change them for some reason. If you do change them, we suggest that you tape a label with the new SSID and Password onto the MD1600. (Changing them will not affect wireless quality.) Instructions for changing the SSID and Password are at **www.motorolanetwork.com/MD1600WiFi**

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

- Where possible, put the MD1600 in a central place so that it's not too far away from your other wireless devices.
- Don't put the MD1600 close to interference-generating wireless devices such as Bluetooth headsets and stereos, microwave ovens, 2.4 GHz cordless phones and base stations, and WiFi printers.
- Sometimes it helps to change the MD1600 wireless channel frequency to reduce interference with neighbors' wireless networks. This is discussed in the **Troubleshooting Tips**.
- The MD1600 router provides a powerful wireless signal that can help reach many corners of your house. However, wireless range can be limited by a variety of issues, including weak wireless clients and challenging building configurations. Many devices, such as phones, that you may use to connect to the MD1600 do not have as powerful a wireless signal. Although the MD1600's advanced wireless technology can help improve the performance and range of the devices, often the weaker signal of your other devices can be a limiting factor. If you need greater wireless range with the devices in your home, you could add a Range Extender. For more information, please see **www.motorolanetwork.com/extenders**



Front Panel

INDICATOR	COLOR	STATUS	DESCRIPTION
 Power	Green	On	MD1600 is powered on and operating normally
		Off	MD1600 is powered off
	Amber	On	MD1600 is powered on and initializing
		Blinking	The software is upgrading
DSL	Green	On	DSL link is established
		Blinking	The DSL line is training
 Internet	Green	On	MD1600 is connected to the Internet
		Blinking	Data being sent
		Off	MD1600 is not connected to the Internet
LAN 1 2 3 4	Green	On	Ethernet connection established
		Blinking	Data being sent
 2.4 GHz Wi-Fi	Green	On	2.4 GHz WiFi is enabled
		Blinking	Data is flowing
		Off	WiFi is not enabled
 5G GHz Wi-Fi	Green	On	5 GHz WiFi is enabled
		Blinking	Data is flowing
		Off	WiFi is not enabled
 WPS	Green	On	Light will remain solid after WPS configuration is successful
		Blinking	WPS is in discovery mode
USB 2.0	Green	On	USB device connected
		Blinking	Data being transferred to/from your USB device
		Off	No device is connected



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Back Panel



DSL

Plug one end of the included phone cord into the DSL port and the other into a phone jack in your wall. You need to have DSL service turned on for that line by your DSL service provider.

LAN 4, 3, 2, 1

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

WAN

In the unlikely event that you are using the MD1600 as a stand-alone router without DSL, plug an Ethernet cable between the MD1600's WAN jack and the LAN jack of your modem or network. Most users will not use this configuration.

RESET

Press the reset button for 5 seconds in the event that you need to reset your modem to factory defaults including factory-set WiFi SSID/Network Name and WiFi Password/Security Key.

USB

You can use this USB 2.0 port for plugging in a USB Network drive or Flash drive. If you choose to do this, you can access stored media and files from anywhere on your network. The USB 2.0 port can provide up to 5 Volts and 500 mA to power your attached device.

POWER

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



Troubleshooting Tips

Why can't I connect to the Internet after installing?

- Check that the power cube jack is correctly plugged into the router and that the power cube is plugged into a live outlet.
- Try using another device to access the Internet. If you are using a wireless device, try connecting a computer directly to the MD1600's LAN jack.
- Check your phone cable and filters. Use a known working phone cable. If you have installed a DSL filter/splitter between the MD1600 and the phone jack, remove this filter and connect the MD1600 to your phone jack. If this solves the problem, your DSL filter/splitter may be defective.
- Try turning your computer off, then on. This ensures that your computer gets a new IP address.
- Check the MD1600's DSL light. If it is blinking, continue below, to My DSL light is blinking. If the DSL light is solid, skip ahead to I can't connect to the Internet and my DSL light is solid.

My DSL light is Blinking.

- Verify that your service provider has enabled your DSL service. The MD1600 will not work until your DSL service is provisioned.
- Check that each phone, answering machine, or other device (but not your DSL modem) that is plugged into your DSL modem's phone line is using a DSL Filter. You will need to use a DSL Filter with each device.
- Try moving the MD1600 to another phone jack in your house. There may be a problem with your internal wiring. If you know where your phone line enters your house (typically a gray box located in your basement, garage, or on the side of your house) try plugging the modem into this box.

My DSL light is Solid and I can't connect to the Internet.

- Ensure that you are using the correct DSL settings. Your DSL provider should be able to tell you the settings you need. Other service providers such as CenturyLink post their settings



online. You can learn more about CenturyLink DSL settings by going to www.motorolanetwork.com/CenturyLink.

- If your DSL connection requires a logon, ensure that you have entered your DSL Username and Password correctly. This is different than the Username and Password used to log into the MD1600, and is usually different than the Username and Password used to access your Email. Check with your DSL Service Provider if you are not sure.
- If you are using VDSL, check with your service provider to see if you need to enable VLAN tagging.

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

Please re-read the **Improving Wireless Performance** section.

What if I don't know my MD1600's WiFi SSID/Network Name or WiFi Password/Key?

- The default values are printed on the modem's bottom label. Use these unless you changed them. If you changed them, and you have a device that connects wirelessly to the MD1600, it may show the WiFi SSID/Network Name and WiFi Password.
- You can also find this information in the MD1600 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 for 8 seconds. You can then use the default values.

What if I think that wireless devices are interfering with my MD1600 wireless router?

- Where possible, put the MD1600 as far away as possible from interfering devices such as WiFi printers, microwave ovens, Bluetooth transmitters and neighbors' WiFi routers.

Try to pick a less used wireless channel for your MD1600. Go into your MD1600's Configuration Manager. To change the channel, select WiFi. On this page you can select the channel you want in the Channel pulldown for both 2.4 GHz and 5 GHz, then click Apply.



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I'm unable to access the MD1600 when I enter setupmyrouter.net

- First check that the MD1600's Power light is on. If it is not on, the MD1600 is not receiving power.
- Check that your Setup Device is connected to the MD1600. If you are using an Ethernet cable to connect to the Setup Device, make sure it is securely plugged in and that the MD1600 LAN light is on. If the LAN light is not on, your Ethernet cable might be bad, try an Ethernet cable that you know is working.
- If you are using wireless to connect the MD1600 to the Setup Device, make sure you are connected to the MD1600's wireless network, the wireless network name and password appear on the bottom label.
- Try entering the router's IP address.192.168.0.1 in your browser's address bar.

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: **In the US and most other countries:**

+1 800-753-0797 or +1 617-753-0562

UK: +44 800 023 9083 Spain: +34 900 839 783

Do you have any other questions? A good place to start is our User Manual: **www.motorolanetwork.com/MD1600manual**

Changing Wireless Settings, including Network Name and Password: **www.motorolanetwork.com/MD1600WiFi**



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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 MD1600.

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacturer must therefore be followed at all times to ensure the safe use of the equipment. MOTOROLA and MTRLC assume no liability for damage caused by any improper use of the DSL router.

- Place the device on a stable surface in its normal upright orientation.
- Do not use the DSL router outdoors.
- Keep the DSL router in an environment that is between 0°C and 40°C (between 32°F and 104°F).
- Do not place any object on top of the DSL router since this may cause overheating.
- Do not place the DSL router in a confined space that may cause overheating.
- Do not restrict the flow of air around the DSL router.
- Use only the telephone cord that is packed within the device package.
- Use only the power adapter that is packed within the device package.
- Pay attention to the power load of the outlet or power adapter wires. An overburdened power outlet or damaged wires and plugs may cause electric shock or fire. Check the power cords regularly. If you find any damage, replace it at once.
- Do not put this device close to a place where a heat source exits or high temperature occurs. Avoid placing the device in direct sunlight.
- Do not put this device in a wet location or area subject to high humidity. Do not spill any fluid on this device.



FCC Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Class B Part 15 and Part 68 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.

Note: 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 radiation exposure limits and should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

- ~ Input supply voltage is from AC outlet (mains), disconnect device from outlet to remove power.
- ☐ Double-insulated, does not require a connection to Earth ground.
- ♻️ WEEE is a directive in the EU that designates safe and responsible collection, recycling, and recovery procedures for electronic waste.

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