tp-link

User Guide

DOCSIS 3.0 Cable Modem
TC-7610

Contents

About This Guide

This guide is a complement of Quick Installation Guide. The Quick Installation Guide instructs you on quick Internet setup, and this guide provides details of each function and shows you the way to configure these functions appropriate to your needs.

When using this guide, please notice that the product features may vary slightly depending on the model and software version you have, and on your location, language, and Internet service provider. All screenshots, images, parameters and descriptions documented in this guide are used for demonstration only.

Conventions

In this guide, the following conventions are used:

Convention	Description
Teal Italic	Hyperlinks are in teal and underlined. You can click to redirect to a website or a specific section.
Teal	Contents to be emphasized and texts on the web page are in teal, including the menus, items, buttons, etc.
>	The menu structures to show the path to load the corresponding page. For example, Basic > Device Information means the Device Information page is located in the Basic tab.
⧮ Note:	Ignoring this type of note might result in a malfunction or damage to the device.
⬤ Tips:	Indicates important information that helps you make better use of your device.

More Info

- The Quick Installation Guide (QIG) can be found inside the product package.
- Specifications and support materials can be found on the product page at http://www.tp-link.com.
- A Technical Support Forum for discussing our products can be found at http://forum.tp-link.com.
- Our Technical Support contact information can be found at the Contact Technical Support page at http://www.tp-link.com/support.

Chapter 1

Get to Know Your Modem

This chapter introduces the modem and shows its appearance.

This chapter contains the following sections:

- Product Overview
- Product Appearance

1. 1.   Product Overview

TP-LINK's cable modem is designed for delivering data through coax used in HFC (Hybrid Fiber-Coaxial) networks. It's an incredibly robust device allowing users to access Internet and share it with a Gigabit Ethernet port.

This modem complies with DOCSIS 3.0, supports channel bonding of up to 8 downstream channels and 4 upstream, combined with Enhanced security of AES encryption, IPv4 and IPv6 dual stack, which makes it future-Proof.

1. 2.   Product Appearance

1. 2. 1.   Front Panel

The modem's LEDs are located on the front panel (view from top to bottom). They indicate the device's working status. For details, please refer to LEDs Explanation.

LEDs Explanation:

LED	Status	Indication
⏻ Power	Off	The power is off.
	On	The power is on.

LED	Status	Indication
📺 Downstream	Off	The synchronization has not started or has failed.
	White	The modem has synchronized one channel.
	Green	The modem has synchronized more than one channel.
	Flashing	The modem is scanning for downstream channels.
📡 Upstream	Off	The synchronization has not started or has failed.
	White	The modem has synchronized one channel.
	Green	The modem has synchronized more than one channel.
	Flashing	The modem is synchronizing upstream channels.
🌐 Internet	Off	Internet service is unavailable.
	On	Internet service is available.
	Flashing	The modem is attempting to connect to the internet.
🖥 LAN	Off	The LAN port is not connected to a powered-on device.
	On	The LAN port is connected to a powered-on device.
	Flashing	The LAN port is sending or receiving data.

1. 2. 2.   Back Panel

The back panel provides the Reset button and several connection ports. Refer to the following for detailed instructions.

Item	Description
Reset Button	With the modem powered on, use a pin to press and hold the Reset button until all LEDs turn on momentarily. And the modem will be reset to its factory default settings.
LAN Port	Through this port, you can connect the modem to your PC or an Ethernet network device.
Cable Port	Through this port, you can connect the modem to the coaxial cable.
Power Port	The power plug where you will connect the power adapter.

Chapter 2

Quick Start

This chapter contains the following sections:

- Prepare for the Installation
- Connect the Modem
- Activate the Modem

2. 1. Prepare for the Installation

2. 1. 1. Installation Environment

- The product should not be located where it will be exposed to moisture or excessive heat.
- Place the modem in a location where it can be connected to the various devices as well as to a power source.
- Make sure the cables and power cord are placed safely out of the way so they do not create a tripping hazard.
- The modem can be placed on a shelf or desktop.
- Keep away from the strong electromagnetic radiation and the device of electromagnetic sensitive.

2. 1. 2. System Requirements

- Broadband Internet access service (cable).
- PCs with a working Ethernet adapter and an Ethernet cable with RJ45 connectors.
- TCP/IP protocol on each PC.
- Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

2. 2. Connect the Modem

Before installing the device, please make sure your broadband cable service provided by your ISP is available. If there is any problem, please contact your ISP. Before cable connection, cut off the power supply and keep your hands dry. You can follow the steps below to install it.

1. Connect the coaxial cable to the modem.

2. Connect the power adapter to the modem.

3. Connect your computer to the modem using an Ethernet cable.
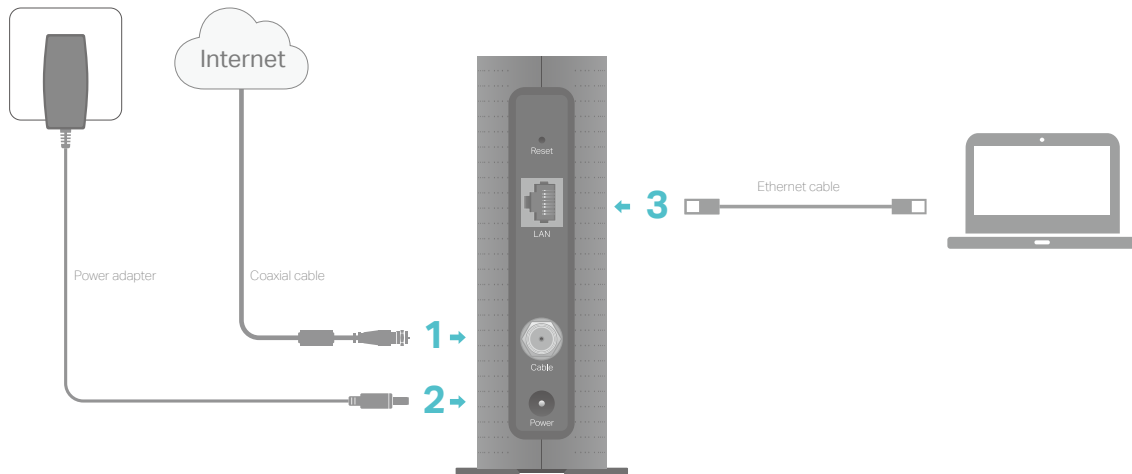
4. Wait until the Internet LED ⊘ turns solid. The modem has synchronized with your ISP's server.

⫟ Note:
1. If the Internet LED does not turn solid after about 1 minute, call your ISP's customer service.
2. The product should be connected to cable distribution system that grounded (earthed) in accordance with ANSI/ NFPA 70, the National Electrical Code (NEC), in particular Section 820.93 - Grounding of Outer Conductive Shield of a Coaxial Cable.

2. 3.   Activate the Modem

1. Get your Internet service account information and the modem's Information Card ready.
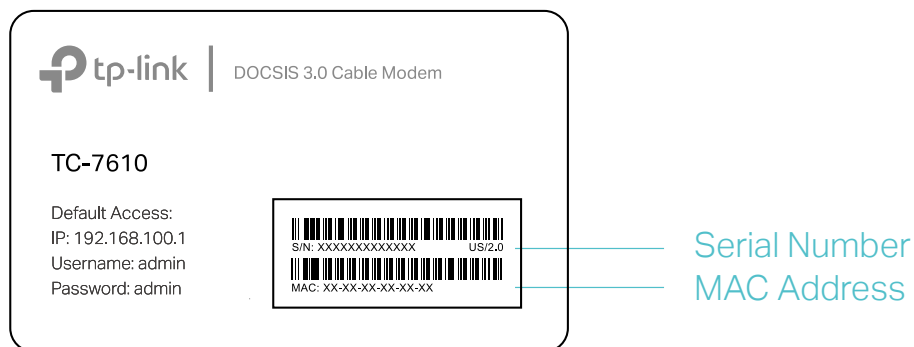
2. Make sure your computer is set to dynamically obtain an IP address. If not, refer to Appendix: Troubleshooting > T5 for instructions.

3. Launch a web browser, and visit any website. You will be automatically redirected to your ISP's self-activation page.

4. Follow the on-screen instructions to activate the modem, and wait for about 10 minutes till the LEDs ⫟ ⫟ ⊘ turn solid.
If you have any problem activating the modem, call your ISP's customer service.

> Contact information of major cable ISPs:
>
> Bright House: 1-855-222-0102
>
> Charter: 1-888-438-2427
>
> Comcast: 1-855-OK-BEGIN (1-855-652-3446)
>
> Cox: 1-888-556-1193
>
> Time Warner Cable: 1-888-892-2253
>
> The contact information listed might change. You can also find the contact information in your monthly Internet service billing statement.

5. Now you can use your computer to surf the Internet.

    If you want to share Internet access, connect a router to the modem. You will need to reboot the modem to get the router connected to the Internet.

Note:

1. If you are unable to access the Internet, refer to Appendix: Troubleshooting > T1 for instructions.
2. For advanced settings, log into the modem's web interface at http://192.168.100.1, and enter admin (all lowercase) for both username and password when prompted.

Chapter 3

Software Configuration

This guide recommends using the Quick Installation Guide for first-time installation. If you want to know more about this device, you can get help from this chapter to configure the software through the web interface.

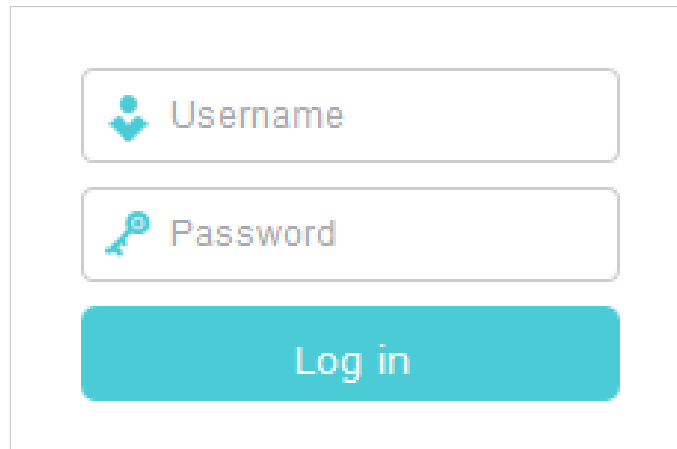This chapter contains the following sections:

- Login
- Basic Settings
- Advanced Settings
- Logout and Reboot

3. 1. Login

To access the web interface, open a web-browser and type the default address 192.168.100.1 in the address field of the browser.
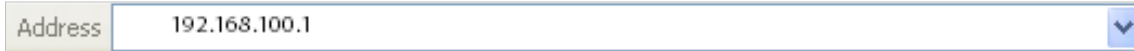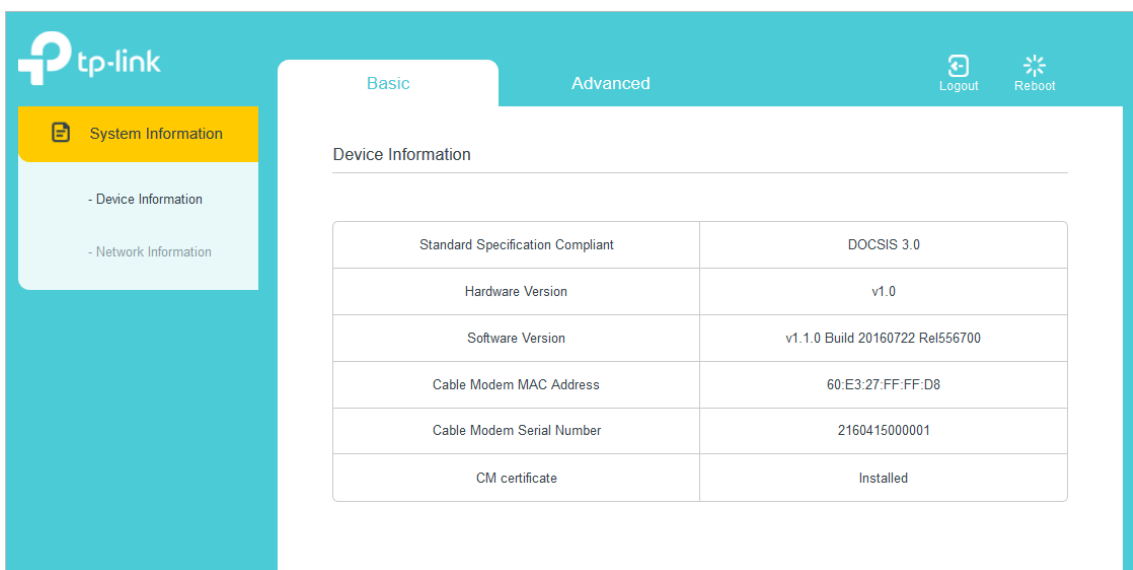

After a moment, a login window will appear. Enter admin for the username and password, both in lower case letters. Then click Log in or press Enter.

3. 2. Basic Settings

Under the Basic menu, you can see the system information, including the device information and network information.

3. 2. 1.   View Device Information

Go to Basic > Device Information, then you can view the device information.

Device Information	
Standard Specification Compliant	DOCSIS 3.0
Hardware Version	v1.0
Software Version	v1.1.0 Build 20160722 Rel556700
Cable Modem MAC Address	60:E3:27:FF:FF:D8
Cable Modem Serial Number	2160415000001
CM certificate	Installed

3. 2. 2.   View Network Information

Go to Basic > Network Information, then you can view the network information.

Network Information	
System Up Time	0 days 00h:06m:46s
Current System Time	Wed Jul 27 08:05:56 2016
Network Access	Allowed
IP Address	10.0.0.100
Duration	D: 00 H: 01 M: 00 S: 00
Expires	Wed Jul 27 09:01:56 2016

3. 3.   Advanced Settings

Under the Advanced menu, you can see the system tools, including the connection status, account management, and system log.

3. 3. 1.   View Connection Status

Go to Advanced > Connection Status, then you can view the information of startup procedure, downstream bonded channels, and upstream bonded channel.

Downstream Bonded Channels

Channel	Status	Modulation	Channel ID	Frequency	Power	SNR
1	Locked	QAM256	1	514000000 Hz	15.6 dBmV	43.1 dB
2	Locked	QAM256	2	520000000 Hz	15.1 dBmV	43.2 dB
3	Locked	QAM256	3	526000000 Hz	15.4 dBmV	43.7 dB
4	Locked	QAM256	4	532000000 Hz	15.6 dBmV	42.8 dB
5	Locked	QAM256	5	538000000 Hz	15.1 dBmV	43.1 dB
6	Locked	QAM256	6	544000000 Hz	15.9 dBmV	43.4 dB
7	Locked	QAM256	7	550000000 Hz	15.6 dBmV	43.1 dB
8	Locked	QAM256	8	556000000 Hz	15.7 dBmV	43.8 dB

Upstream Bonded Channels

Channel	Status	Channel Type	Channel ID	Symbol Rate	Frequency	Power
1	Locked	ATDMA	1	5120 ksym/sec	19600000 Hz	34.1 dBmV
2	Locked	ATDMA	2	5120 ksym/sec	38800000 Hz	34.4 dBmV
3	Locked	ATDMA	3	5120 ksym/sec	32400000 Hz	34.3 dBmV
4	Locked	ATDMA	4	5120 ksym/sec	26000000 Hz	34.7 dBmV

3. 3. 2.   Change Account Password

Go to Advanced > Administration, then you can see the screen below. Here you can set a new login password for the modem's web interface.

Administration

Old Password:	
New Password:	
	Low Middle High
Confirm New Password:	

Save

3. 3. 3.   View System Logs

Go to Advanced > System Log, then you can view and clear the logs of the modem.

Time	Priority	Description
--	--	--
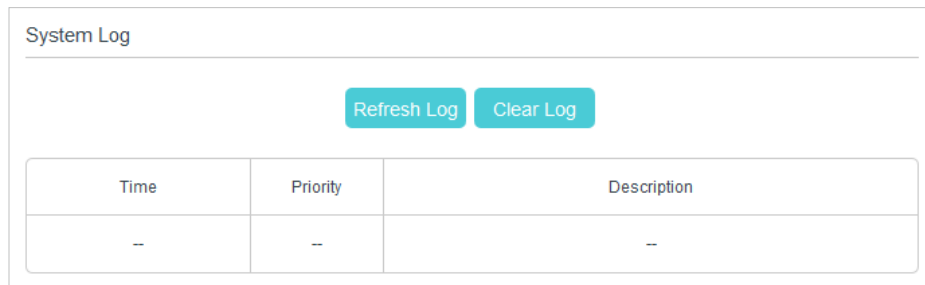
3. 4.   Logout and Reboot

Click the Logout icon [Logout] to log out of the web interface.

Click the Reboot icon [Reboot] to reboot the modem.

Appendix: Troubleshooting

T1. What can I do if I cannot access the Internet?

1. Make sure that all cables are properly and securely connected to the modem.

2. Contact your ISP to ensure your modem is properly activated. If it isn't, your ISP will activate it for you.

3. Make sure that your computer is set to obtain an IP address automatically.

4. Power cycle the modem by unplugging the power adapter from the electrical outlet and plugging it back in.

5. Reset the modem. Please refer to T4 for instructions.

6. Contact our Technical Support if the problem persists.

T2. What can I do if the login page of the modem's web interface does not appear?

1. Check if the computer is set to a static IP address. If so, change the setting to obtain an IP address automatically.

2. Make sure http://192.168.100.1 is correctly entered in the web browser.

3. Use another web browser.

4. Unplug and reconnect both ends of the Ethernet cable.

T3. How can I reset the password to the modem's web interface?

If you have forgotten your password, refer to T4 to reset the modem. This will reset the password back to admin.

T4. How can I restore the modem to its factory default settings?

With the modem powered on, press and hold the Reset button on the back panel until all LEDs turn on momentarily, then release the button.

T5. How can I change my computer's setting to obtain an IP address automatically?

To change the computer's network settings, follow the steps below.

- **For MAC OS X:**

1) Click the Apple icon, and select System Preferences from the drop-down list.

2) Click the Network icon.

3) Select Ethernet (for wired connection) or Wi-Fi (for wireless connection) in the left panel, then click Advanced.

4) Click TCP/IP.

5) From the Configure IPv4 drop-down list, select Using DHCP.

6) Click OK.

- **For Windows 7/8/8.1/10:**

1) Right-click the Network icon on the taskbar and select Open Network and Sharing Center > Change adapter settings.

2) Right-click your network connection (wired or wireless) and select Properties.

3) Double-click Internet Protocol Version 4 (TCP/IPv4).

4) Select both Obtain an IP address automatically and Obtain DNS server address automatically, then click OK.

5) Click OK again to save your configuration.

- **For Windows XP:**

1) Right-click the Network icon on the taskbar and select Open Network Connections.

2) Right-click your network connection (wired or wireless) and select Properties.

3) Double-click Internet Protocol (TCP/IP).

4) Select both Obtain an IP address automatically and Obtain DNS server address automatically, then click OK.

5) Click OK again to save your configuration.

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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.

• Consult the dealer or an experienced radio/ TV technician for help.

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.

2) This device must accept any interference received, including interference that may cause undesired operation.

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

Safety Information

• When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.

• Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.

• Avoid water and wet locations.

• Adapter shall be installed near the equipment and shall be easily accessible.

• The plug considered as disconnect device of adapter.

- The product should be connected to cable distribution system that grounded (earthed) in accordance with ANSI/NFPA 70, the National Electrical Code (NEC), in particular Section 820.93 - Grounding of Outer Conductive Shield of a Coaxial Cable.

Explanation of the symbols on the product label

Symbol	Explanation
	DC voltage
	RECYCLING This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.