



## SURFboard® T25 Cable Modem with Xfinity Voice

User Guide, STANDARD Revision x.6

P/N 365-095-33655

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# Safety and regulatory information


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Read all safety and regulatory information before installing your device and setting up your home network connection.

## Important safety instructions

Read this before you begin — When using your equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read all the instructions listed here and/or in the user manual before you operate this device. Give attention to all safety precautions. Retain the instructions for future reference.
- This device must be installed and used in strict accordance with manufacturer's instructions, as described in the user documentation that is included with the device.
- Comply with all warning and caution statements in the instructions. Observe all warning and caution symbols that are affixed to this device.
- To prevent fire or shock hazard, do not expose this device to rain or moisture. The device must not be exposed to dripping or splashing. Do not place objects filled with liquids, such as vases, on the device.
- This device was qualified under test conditions that included the use of the supplied cables between system components. To ensure regulatory and safety compliance, use only the provided power and interface cables and install them properly.
- Different types of cord sets may be used for connections to the main POWER supply circuit. Use only a main line cord that complies with all applicable device safety requirements of the country of use.
- Installation of this device must be in accordance with national wiring codes and conform to local regulations.
- Operate this device only from the type of power source indicated on the device's marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Do not overload outlets or extension cords, as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard.
- Route power supply cords so that they are not likely to be walked on or pinched by items placed upon or against them. Pay attention to cords where they are attached to plugs and convenience receptacles; and examine the point where they exit from the device.
- Place this device in a location that is close enough to an electrical outlet to accommodate the length of the power cord.
- Place the device to allow for easy access when disconnecting the power cord of the device from the AC wall outlet.

- Do not connect the plug into an extension cord, receptacle, or other outlet unless the plug can be fully inserted with no part of the blades exposed.
  - Place this device on a stable surface.
  - Avoid damaging the device with static by touching the coaxial cable when it is attached to the earth-grounded coaxial cable-TV wall outlet.
  - Always first touch the coaxial cable connector on the device when disconnecting or reconnecting the Ethernet cable from the device or user's PC.
  - Installation of an AC surge protector in the AC outlet to which this device is connected is recommended. This is to avoid damaging the device by local lightning strikes and other electrical surges.
  - Postpone installation until there is no risk of thunderstorm or lightning activity in the area.
  - Avoid using a telephone (other than a cordless type) during an electrical storm. There is a remote risk of electric shock from lightning. For added protection, unplug the device from the wall outlet and disconnect the cables to avoid damage to this device from lightning and power surges.
  - Do not use this product near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool, or in a wet basement.
  - Do not use the telephone to report a gas leak located near the leak.
  - Do not cover the device or block the airflow to the device with any other objects. Keep the device away from excessive heat and humidity and keep the device free from vibration and dust.
  - Wipe the device with a clean, dry cloth. Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the device or use forced air to remove dust.
  - For added protection, unplug the device from the wall outlet and disconnect the cables to avoid damage to this device during lightning activity or power surges.
-  **CAUTION:** To reduce the risk of fire, use only No. 26 AWG or larger (e.g., 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord, or national equivalent.
- Upon completion of any service or repairs to this device, ask the service technician to perform safety checks to determine that the device is in safe operating condition.
  - Do not open the device. Do not perform any servicing other than that contained in the installation and troubleshooting instructions. Refer all servicing to qualified service personnel.
  - This device should not be used in an environment that exceeds 104° F (40° C).

## SAVE THESE INSTRUCTIONS



**Note: To CATV system installer** — This reminder is provided to call the CATV system installer's attention to Section 820.93 of the National electric code, which provides guidelines for proper grounding and, in particular, specifies that the coaxial cable shield must be connected to the grounding system of the building, as close to the point of cable entry as practical.

# FCC statements

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## FCC Interference 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 environment. 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 device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Increase the separation between the device 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, and (2) This device must accept any interference received, including interference that may cause undesired operation.



**CAUTION:** Any changes or modifications not expressly approved by CommScope for compliance could void the user's authority to operate the equipment.

## FCC Declaration of Conformity

CommScope, Inc, 3871 Lakefield Drive, Suwanee, GA 30024, declares that the SURFboard device complies with 47 CFR Parts 2 and 15 of the FCC rules as a Class B digital device.

## FCC Radiation Exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with the FCC RF exposure compliance requirements, the separation distance between the antenna and any person's body (including hands, wrists, feet and ankles) must be at least 8 inches (20.3 centimeters).

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter except those already approved in this filing.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destinations. The firmware setting is not accessible by the end user.

# Caring for the environment by recycling your ARRIS equipment

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Please do not dispose of this product with your residential or commercial waste. Contact your local authorities for information about practices established for your region. If collection systems are not available, call ARRIS Technical Support at **1-877-466-8646** for assistance.

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# Getting started

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The SURFboard T25 is a combination DOCSIS 3.1 telephony cable modem with two Voice-over-IP (VoIP) telephone lines. It uses DOCSIS 3.1 technology to provide ultra high-speed Internet access on your home or small business network.

This is not a Wi-Fi cable modem. You will need use the T25 Ethernet port to add a Wi-Fi router (a separate purchase) for a whole home connectivity.

Using the connection capabilities of the T25, you can connect your computer and other network-enabled devices through the two Ethernet ports.



**Important:** To use the 2nd Ethernet port, contact your service provider to get an additional IP address.

The T25 connects to the existing coaxial cable connection in your home.



**Note:** For Internet connections, you need a cable service connection with a cable Internet Service Provider. The T25 will not work with DSL or satellite Internet service.

This guide provides instructions for installing your T25.

## About your T25





The T25 telephony modem is DOCSIS 3.1 compliant with the following features:

- **Speed:** much faster than dialup or ISDN service; DOCSIS 3.1 is 10 times faster than DOCSIS 3.0.
- **Connectivity:** supports Ethernet connection.
- **Flexibility:** provides two lines of telephone service as well as high-speed data.
- **Compatibility:** Data services: DOCSIS 3.0 compliant ; supports tiered data services (if offered by your service provider).
- **Telephony services:** Packet Cable™ 2.0 compliant.

## In your box

Before installing the T25, check that the following items are also included in the box. If any items are missing, please call ARRIS Technical Support at 1-877-466-8646 for assistance.

## T25 package contents

Item		Description
T25 Telephony cable modem		High-speed DOCSIS 3.1 telephony cable modem with two-port Ethernet
Power adapter		Power cord for an electrical wall outlet connection
Software License and Regulatory card		Safety and regulatory information, software license, and warranty for the gateway
T25 Quick Start Guide		Provides basic information for installing the gateway and setting up a secure connection on your home network.

## Additional item(s) needed (not included)

The following item is not included in the box and must be purchased separately, if required:

- Coaxial (coax) cable, if one is not already connected to a cable wall outlet
- RF splitter (for additional coaxial cable connections, such as a set-top box or Smart TV)
- Ethernet cable for each additional Ethernet-enabled device

## System requirements

- High-speed Internet access account
- Web browser access – Internet Explorer, Google Chrome, Firefox, or Safari
- Compatible operating systems:
  - Windows®10

- Windows 8
- Windows 7 Service Pack 1 (SP1)



**Note:** Although older versions of Microsoft Windows operating systems are no longer specifically supported, they should still function with this model.

- Macintosh® 10.4 or higher
- UNIX®
- Linux®

## Contact information

For technical support and additional ARRIS product information:

- Visit the ARRIS Support website: <http://www.arris.com/selfhelp>
- Call ARRIS Technical support: **1-877-466-8646**



# Product overview




## Front panel



### T25 front view

### T25 front panel LED icons

LED Icon	Blinking	On (Solid)
 POWER	Not applicable - LED does not blink.	Power is properly connected with the device power cord.
 US/DS	Scanning for Upstream (Send) channel and Downstream (Receive) channel connection.	Upstream and Downstream channels are connected.

LED Icon	Blinking	On (Solid)
 ONLINE	Scanning for an Internet connection.	T25 is connected to the Internet.
 Tel 1	Telephone line 1 is off-hook or call is in progress.	Telephone service for line 1 is connected and activated; on-hook.
 Tel 2	Telephone line 2 is off-hook or call is in progress.	Telephone service for Line 2 is connected and activated; on-hook.

## Indicator lights for the T25

The T25 has LED indicator lights to assist in troubleshooting.

### Patterns: normal operation

The following table shows light patterns during normal operation.

#### T25 light patterns: normal operation

Mode	Power	US/DS	Online	Tel 1 / Tel 2
AC power	On	<b>On</b> = Connected to the Internet (ultra-high speed) <b>Flash</b> = Not connected to the Internet	<b>On</b> = Internet available <b>Off</b> = Internet not available	<b>On</b> = On-hook <b>Flash</b> = Off-hook <b>Off</b> = disabled
No AC power	Off	Off	Off	Off
Firmware upgrade	On	Flash	On	(normal operation)

### Patterns: startup sequence

The following tables show the T25 light patterns during each phase of the startup sequence. The two phases of startup sequence are the telephony phase and the cable modem phase. Both are outlined below.

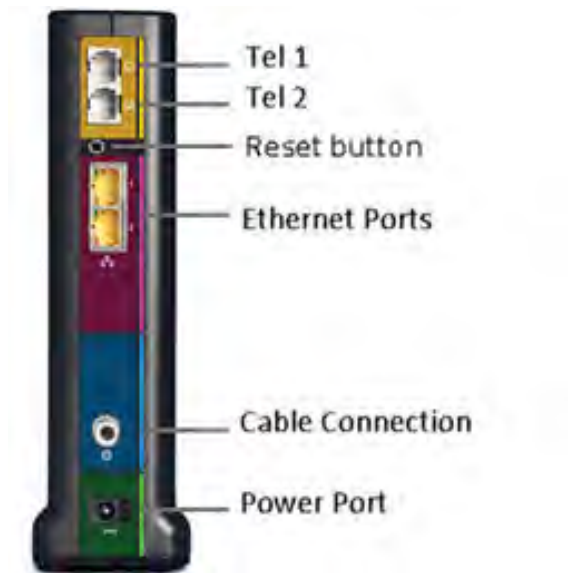
**Telephony startup sequence**

Power, US/DS, Online	Telephone 1	Telephone 2	Description
Off	Off	Off	No power to modem
Flash	Flash	Flash	Power-on self-test
On	Flash	Off	Retrieving telephone network information
On	Off	Flash	Retrieving telephone network information
On	Flash	Flash	Activating telephone service






**Cable modem startup sequence**

DS/US	Online	Description
Flash	Off	Downstream or upstream search
On	Flash	Downstream and upstream found; retrieving setup information from service provider
On	On	Ready for service

## Rear panel

**T25 Rear View**

## T25 Rear Panel Ports &amp; Connectors

Description	
 <b>Tel 1</b>   <b>Tel 2</b>	<p>Two telephony ports for RJ-11 cable connections:</p> <ul style="list-style-type: none"> <li>■ VoIP connection for a single or two-line telephone</li> <li>■ VoIP connection for a single-line telephone</li> </ul> <p><b>Note:</b> For an Alarm system connection, see <a href="#">Connect your telephone</a> (page 18).</p>
Reset	<p>Reset button can be used to either reboot the telephony modem or reset your telephony modem configuration settings. The <b>Reset</b> button is recessed to prevent accidental resets.</p> <p>Reboot (or restart) the telephony modem</p> <ol style="list-style-type: none"> <li>1. Insert the end of a small pointed non-metallic object with a narrow tip into the Reset opening on the back of your T25.</li> <li>2. Press and hold the indented Reset button for three to four seconds only.</li> <li>3. Remove the small object from the Reset opening.</li> </ol> <p>Reset the telephony modem configuration</p> <p>Resets the telephony modem configuration back to the factory default settings:</p> <ol style="list-style-type: none"> <li>1. Insert the end of a small pointed non-metallic object with a narrow tip into the Reset opening on the back of your T25.</li> <li>2. Press and hold the indented Reset button for 10 seconds or until the front panel LEDs flash.</li> <li>3. Remove the small object from the Reset opening.</li> </ol> <p><b>Note:</b> For network security purposes, ARRIS recommends that you change the default admin password on your T25. See <a href="#">Change the default password</a> (page 21) for more information.</p>
 <b>ETHERNET</b>  10/100/1000	<p>Two one-gigabit Ethernet ports for RJ-45 cable connections:</p> <ul style="list-style-type: none"> <li>■ Green: LED is ON - Indicates a data transfer rate of one gigabit per second</li> <li>■ Green: LED is Blinking - Indicates data traffic is in progress</li> <li>■ Amber: LED is ON - Indicates a data transfer rate of less than one gigabit per second</li> <li>■ Amber: LED is Blinking - Indicates data traffic is in progress</li> </ul>
 <b>CABLE</b>	Coaxial cable connector
 <b>POWER</b>	<p>115 VAC Power Input connector</p> <p><b>Warning:</b> To avoid any damage to your T25, only use the power supply provided in the box.</p>

## Backup power

T25 does not include an internal battery option. To obtain backup power for use in the event of a power outage, purchase an Uninterruptable Power Supply (UPS) and plug your T25 to the UPS as a power source.



**Note:** Your cable service must be operational for the modem to function. Check for the US/DS and Online LEDs on the front panel. Both LEDs should be lit SOLID white when you power ON the device. If they are not, your cable service is not operational.

### Specifications for T25 power usage:

Model Condition App. Power (VA) T25: Idle - 19.917; Full - 30.740

## Telephony cable modem label



The telephony cable modem label is located on the bottom of your T25. It contains the voice modem information that you may need when contacting your service provider or ARRIS.

To receive Internet service, contact your service provider for assistance. You may need to provide the following information listed on the label:

- Telephony cable modem model name (T25)
- Telephony cable modem MAC address (HFC MAC)
- Telephony cable modem Serial number (S/N)



# Installing your T25

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**CAUTION:** This product is for indoor use only. Do not route the Ethernet cable(s) outside of the building. Exposure of the cables to lightning could create a safety hazard and damage the product.

Before starting the installation, make sure of the following:

- You have all the Additional items needed (not included)
- You have to establish an Internet connection
- Cable, phone, and power outlets are available near the T25.

If a cable outlet is not conveniently located, your service provider can install a new one.

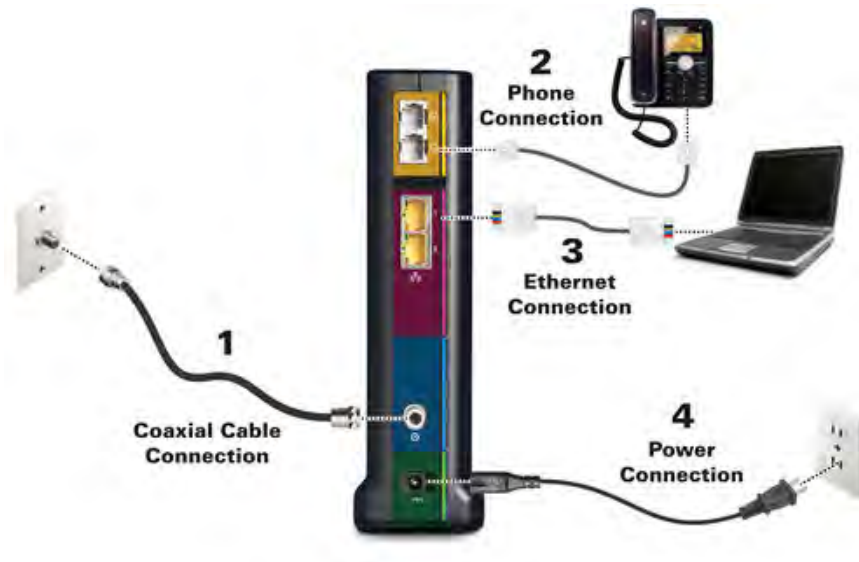
- Broadband cable service is available in your area.

To set up a Wi-Fi network, you will need a router and high-speed Internet connection provided by Comcast.

You can set up your cable modem in one of the following ways.

- **Using the Surfboard Central app (SBC app):** It is recommended that you install and set up your cable modem using the SBC app. For details on how to set up, refer to the SURFboard Central User Guide for Cable Modems available on the <http://www.arris.com/selfhelp>.
- Using client device (laptop/desktop): If you are using your client device (laptop/Desktop) with a wired Ethernet connection, then see [Connect the T25 using your client device](#) (page 18).

## Connect the T25 using your client device



### T25 connection diagram

1. Check that a coaxial cable is already connected to a cable wall outlet or RF splitter (not included).
2. Connect the other end of the coaxial cable to the **Cable** connector on the rear of the T25.  
Use your hand to tighten the connectors to avoid damaging them.
3. Connect the Ethernet cable to the **Ethernet** port on the rear of the T25.
4. Connect the other end of the **Ethernet** cable to the Ethernet port of the device (e.g., laptop, desktop) you will be using to activate your T25 (see [Establish an Internet connection](#) (page 19)). You can then use the same Ethernet cable to connect your Wi-Fi Router to the T25.
5. Connect the power cord to the **Power** port on the rear of the T25.
6. Plug the other end of the power cord into an electrical wall outlet that is not controlled by a wall switch.

This automatically powers ON and connects your T25. During startup, the Power and US/DS (Upstream/Downstream) LEDs will FLASH and then light up SOLID white.



**Note:** During startup, if the LEDs continue to blink, it means the device is receiving a firmware upgrade. This may take 5-10 minutes and the T25 will reboot several times in the process.

## Connect your telephone

If you are migrating your current XFINITY service from an existing device, your current phone service and phone number will be transferred to your T25 when the installation is finished.

Please note that if you do not currently have Telephony service from Comcast, call **1-800-Xfinity (1-800-934-6489)** to set up an account that includes Telephony service.

1. Connect the telephone cord (not included) to the **TEL LINE** port on your telephone.
2. Connect the other end of the telephone cord to the **TEL 1** port on the rear of the T25.
3. **Optional:** For a second telephone, connect a telephone cord of a single-line telephone to the **TEL 2** port on the rear of the T25.
4. Check to confirm that your telephone has a dial tone.



**Note:** For an Alarm System connection with a single telephone line, connect the Alarm Panel to the Tel2 port. If both telephone lines are providing telephony services, use an RJ-31X adapter (not included) on the Tel1 port.

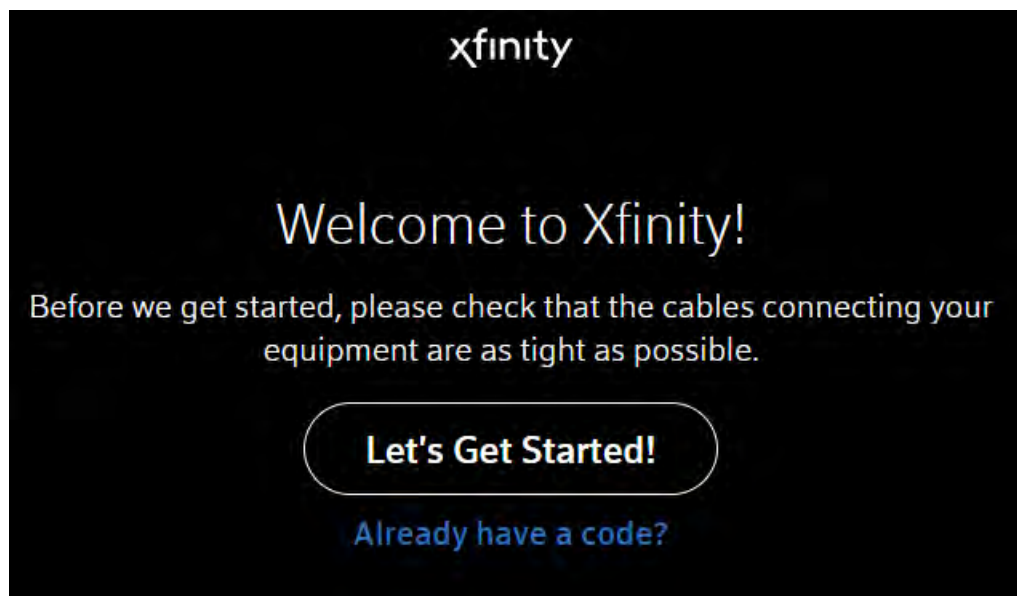
## Establish an Internet connection

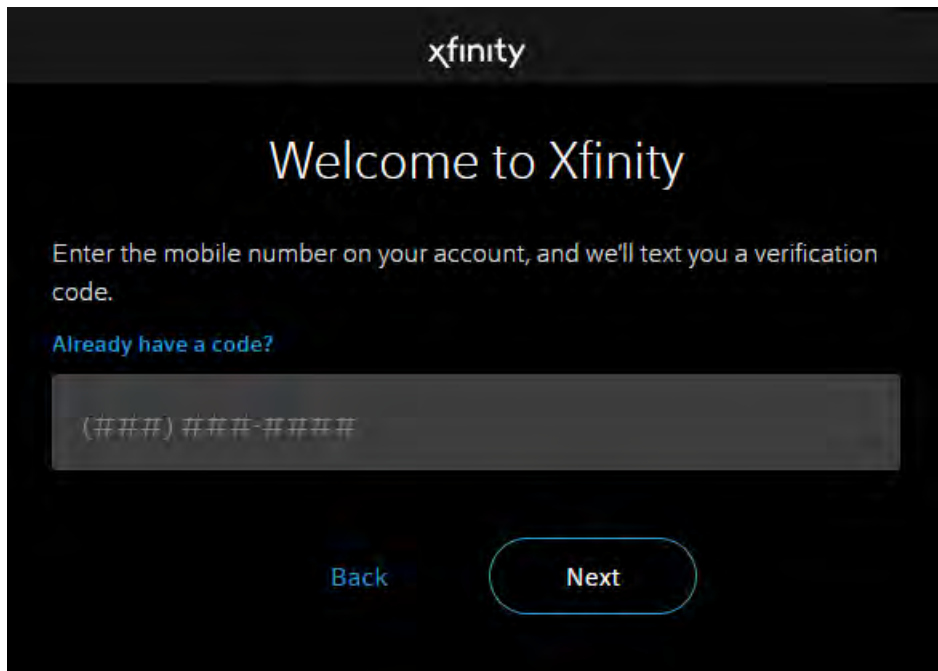
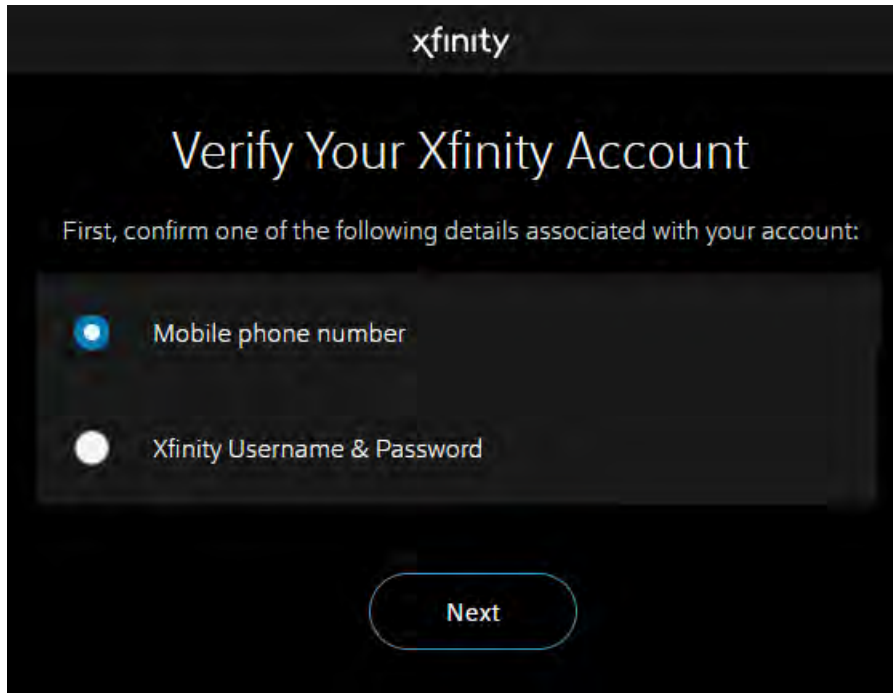
Once the Power, US/DS, and Internet LEDs are lit SOLID white, you are ready to establish an Internet connection. Activate the T25 with Comcast and provide the Serial Number and the MAC address. You can find the Serial Number and the MAC address on the unit label at the bottom of device or in the Quick Start Guide.

If you do not currently have Xfinity service or Xfinity Voice service, contact the Customer Support to create an account.

If you already have Xfinity service, perform the following:

1. Open a web browser on a laptop connected to the T25, or on a mobile device with Internet access.
2. Access the Xfinity Activation web page. If you are connecting via the T25, you may be automatically redirected to the page. If you are not redirected, then type **xfinity.com/activate** in the browser.
3. Access the site using your telephone number or your Xfinity account log in credentials.





4. Once completed, check your Internet connection by browsing a public web page, (e.g., surfboard.com).
5. Check to confirm that your phone has a dial tone.

The ARRIS SURFboard website or your selected website should open. If the website fails to open, please call Comcast Customer Support at **1-855-OK-BEGIN (1-855-652-3446)** to set up your Internet service or activate your T25.

# Using the cable modem Web Manager

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Monitor the T25 operational status using the T25 Web Manager. You can also change your default password.

▶ **To use the cable modem Web Manager:**

1. Open a web browser (e.g., Internet Explorer, Google Chrome, etc.) on your connected computer or laptop.
2. Type the default LAN IP address, 192.168.100.1 in the Address bar and press **Enter**.

## Web Manager menu links

The T25 main menu links are displayed along the top of the T25 Web Manager screen. Click on the main menu link to view any of the other available screens.

## Change the default password

▶ **To change the default password:**

1. Navigate to <http://192.168.100.1>.  
The T25 main screen opens.
2. Click **Admin**.
3. In the Change Password section, enter your old and new password.
4. Confirm the new password.
5. Click **Apply** to update your password.

If, at any time, you lose your new password, you will have to perform a factory reset using the button on the rear of the T25. This will restore the factory defaults on your T25 and allow you to log on to the T25 Web Manager using the default username and password.

## View the T25 network connection status

Using the T25 Web Manager, you can view and monitor the following operational status and network configuration settings:

- [Status screen](#) (page 22)
- [Event Log screen](#) (page 25)
- [HW/FW Versions screen](#) (page 25)

- Registration Status (CM State) (page 26)

## Status screen

The Status screen shows the current status of the upstream and downstream channels for the T25, including the MAC addresses for various ports. You can also configure Energy Efficient Ethernet (EEE), front panel indicators, and link aggregation.

The screenshot displays the 'Status' page of the ARRIS SURFboard web manager. It includes sections for 'System Parameters', 'Downstream QAM', 'Downstream DVB-S', 'Upstream QAM', 'Upstream DVB-S', 'Status', 'Energy Efficient Ethernet', 'Product Type', 'Interface Parameters', and 'Ethernet'. The 'System Parameters' section shows the modem is in 'Advanced' mode. The 'Downstream QAM' table lists 24 channels with details like UQID, Freq, Power, SNR, Modulation, QAM, Constellation, and Uncorrupted. The 'Downstream DVB-S' table shows 2 channels with Freq, Channel, # of Active Subcarriers, First Active Subcarrier, Last Active Subcarrier, and Average Power. The 'Upstream QAM' table lists 4 channels with UQID, Freq, Power, Channel Type, Symbol Rate, and Modulation. The 'Upstream DVB-S' table shows 1 channel with Freq, Channel, # of Active Subcarriers, First Active Subcarrier, Last Active Subcarrier, and % Power. The 'Status' section shows system uptime, firmware version, and time/date. The 'Energy Efficient Ethernet' section has checkboxes for LAN Port 1 and LAN Port 2. The 'Product Type' section lists hardware details like model number and serial number. The 'Interface Parameters' section shows link aggregation settings for LAN ports. The 'Ethernet' section shows Ethernet Range, Description, and Power Band Setting. The 'LAN' section shows LAN 1 and LAN 2 settings.

### T25 Status screen

## Configure Energy Efficient Ethernet for T25 devices

T25 devices support Energy Efficient Ethernet (EEE). EEE (IEEE 802.3az) reduces power consumption on unused or idle Ethernet ports.

- To configure Energy Efficient Ethernet:

- Navigate to <http://192.168.100.1>.

The Status page opens.

2. Scroll down to the Energy Efficient Ethernet block:

The screenshot shows the 'Status' page with the following information:

System Uptime:	0 d: 0 h: 04 m
Computers Detected:	staticCPE(1), dynamicCPE(0)
CM Status:	Telephony-Reg Complete
Time and Date:	Tue 2019-05-21 13:34:37

Below this is the 'Energy Efficient Ethernet' configuration block, which contains two checkboxes for LAN Port 1 and LAN Port 2, and an 'Apply' button.

3. Check the ports that you want using EEE, then click **Apply**.

The T25 uses Energy Efficient Ethernet on the selected ports.

## Configure front panel indicators

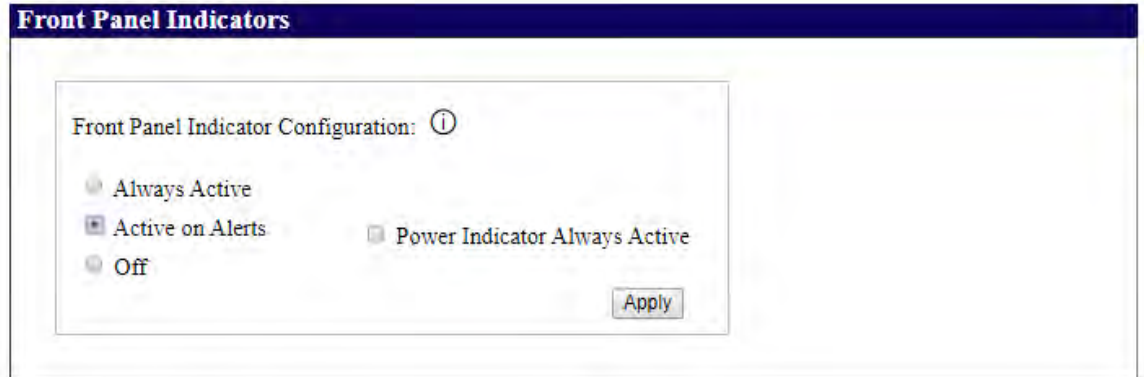
T25 devices control the behavior of the front panel indicators.

### ► *To configure front panel indicators:*

1. Navigate to <http://192.168.100.1>.  
The Status page opens.
2. Scroll down to the **Front Panel Indicators** block:

The screenshot shows the 'Front Panel Indicators' configuration page. It features a section titled 'Front Panel Indicator Configuration: ⓘ' with three radio button options: 'Always Active', 'Active on Alerts', and 'Off'. An 'Apply' button is located at the bottom right of the configuration area.

3. Click the indicator that you want the front panel to show, then click **Apply**
  - **Always Active:** This front panel indicator displays the current status and alert conditions. Choose this mode to see the status at all times.
  - **Active on Alerts:** This front panel indicator is only active when alert conditions are active. In this mode, you can choose whether or not to leave the Power Indicator Always Active. Choose this mode to see the front panel indicators only when alerts are active.



- **Off:** In this mode, you can choose whether or not to leave the power indicator always active. Choose this mode if you do not want to see indications of active alerts.

### Configure link aggregation on T25 devices

The Surfboard T25 modem supports link aggregation on the LAN ports. This allows a subscriber device with two Ethernet ports to use both for a single connection, effectively doubling the available bandwidth between the device and T25.

► **To configure link aggregation:**

1. Navigate to <http://192.168.100.1>.  
The Status page opens.
2. Scroll down to the Interface Parameters block:

**Interface Parameters**

Link Aggregation (on LAN ports)

Bonded: LACP

Interface Name	Provisioned	State	Speed (Mbps)	MAC address
LAN Port 1	Enabled (LAG)	Down	-----	20:F1:9E:14:D6:DC
LAN Port 2	Enabled (LAG)	Down	-----	20:F1:9E:14:D6:DC
CABLE	Enabled	Up	-----	20:F1:9E:14:D6:DD
MTA	PassWithWarnings	Up	-----	20:F1:9E:14:D6:DE

3. Set the link aggregation method:
  - LACP (802.3ad Dynamic link aggregation): always use for MacOS.
  - Balanced-XOR
  - None (turns off Link aggregation)
4. Click **Apply**.

The T25 operates in link aggregation mode.



## Event Log screen

The Event Log screen includes a list of events that have been detected by your T25, including the date and time of the event, the event ID, and the event level.

Date Time	Event ID	Event Level	Description
12/31/1969 20:02	68001202	3	DHCP failed - DHCP Solicit sent, No DHCP Advertise received;CM-MAC=20:f1:9e:14:d6:dd;CMTS-MAC=00:01:5c:6f:90:4d;CM-QOS=1.1;CM-VER=3.1;
12/31/1969 20:02	68010700	4	Primary lease failed, IPv4 fallback initiated;CM-MAC=20:f1:9e:14:d6:dd;CMTS-MAC=00:01:5c:6f:90:4d;CM-QOS=1.1;CM-VER=3.1;
10/23/2019 9:15	90000000	5	MIMO Event MIMO- Stored MIMO=1 post cfg file MIMO=1;CM-MAC=20:f1:9e:14:d6:dd;CMTS-MAC=00:01:5c:6f:90:4d;CM-QOS=1.1;CM-VER=3.1;

Date Time	Event ID	Description
10/22/2019 12:14	4000950905	Configuration File Error- Bad Parameter
10/22/2019 12:14	16	MTA TFTP: Successful
10/22/2019 12:14	4000951501	Provisioning Complete - Warnings
10/22/2019 12:14	26	MTA PROV: Successful!
10/22/2019 12:14	3	Voice Line State Change, Line Number = 1, Prev State = OOS, New State = IS
10/22/2019 12:14	3	Voice Line State Change, Line Number = 2, Prev State = OOS, New State = IS
10/22/2019 12:24	3000000002	MTA RESET:
10/22/2019 12:28	4000950905	Configuration File Error- Bad Parameter
10/22/2019 12:28	16	MTA TFTP: Successful
10/22/2019 12:28	4000951501	Provisioning Complete - Warnings
10/22/2019 12:28	26	MTA PROV: Successful!
10/22/2019 12:28	3	Voice Line State Change, Line Number = 1, Prev State = OOS, New State = IS
10/22/2019 12:28	3	Voice Line State Change, Line Number = 2, Prev State = OOS, New State = IS
10/23/2019 8:24	3000000002	MTA RESET:
10/23/2019 8:28	4000950905	Configuration File Error- Bad Parameter
10/23/2019 8:28	16	MTA TFTP: Successful
10/23/2019 8:28	4000951501	Provisioning Complete - Warnings
10/23/2019 8:28	26	MTA PROV: Successful!
10/23/2019 8:28	3	Voice Line State Change, Line Number = 1, Prev State = OOS, New State = IS
10/23/2019 8:28	3	Voice Line State Change, Line Number = 2, Prev State = OOS, New State = IS
10/23/2019 8:33	4000950905	Configuration File Error- Bad Parameter
10/23/2019 8:33	16	MTA TFTP: Successful
10/23/2019 8:33	4000951501	Provisioning Complete - Warnings
10/23/2019 8:33	26	MTA PROV: Successful!
10/23/2019 8:33	3	Voice Line State Change, Line Number = 1, Prev State = OOS, New State = IS
10/23/2019 8:33	3	Voice Line State Change, Line Number = 2, Prev State = OOS, New State = IS
10/23/2019 9:15	4000950905	Configuration File Error- Bad Parameter
10/23/2019 9:15	16	MTA TFTP: Successful
10/23/2019 9:15	4000951501	Provisioning Complete - Warnings
10/23/2019 9:15	26	MTA PROV: Successful!
10/23/2019 9:15	3	Voice Line State Change, Line Number = 1, Prev State = OOS, New State = IS
10/23/2019 9:15	3	Voice Line State Change, Line Number = 2, Prev State = OOS, New State = IS

### T25 Event Log screen

## HW/FW Versions screen

The HW/FW Versions screen includes release and model information for the T25 hardware and firmware. This information includes the serial number for your T25.

ARRIS SURFboard Logout

**HW/FW Versions**

Status **HW/FW Versions** Event Log CM State Admin

**Hardware Information**

System: ARRIS DOCSIS 3.1 / PacketCable 2.0 Touchstone Telephony Modem / Retail  
 HW\_REV: 1  
 VENDOR: ARRIS Group, Inc.  
 BOOTR: 2.2.17.573854  
 SW\_REV: 11.2.X.PC20  
 MODEL: T25  
 Serial Number: 87M3WD212100061  
 Options:

**Firmware Build and Revisions**

Firmware Name: TS11.2.X\_20191022222526\_71.PC20.3402  
 Firmware Build Time: Tue Oct 22 18:25:26 EDT 2019  
 Open Source: [View Open Source Attribution](#)

### T25 HW/FW Versions screen

## Registration Status (CM State)

The Registration Status screen shows the current operating status of T25 with regards to DOCSIS and telephony connections.

ARRIS SURFboard Logout

**Registration Status**

Status HW/FW Versions Event Log **CM State** Admin

CM State: Telephony-Reg Completed

Docsis-Downstream Scanning	Completed
Docsis-Downstream Ranging	Completed
Docsis-Upstream Ranging	Completed
Docsis-DHCP	Completed
Docsis-TFTP	Completed
Docsis-Data Reg Complete	Completed
Telephony-DHCP	Completed
Telephony-TFTP	Completed
Telephony-Reg with Call Server	Completed
Telephony-Reg Complete	Completed

**TOD State:**

Time of Day	Retrieved
-------------	-----------

**BPI State:**

BPI Status	Disabled
------------	----------

**DHCP Attempts to obtain CM IP Address:**

IPv4 Attempt(s)	----
IPv6 Attempt(s)	----

### T25 Registration Status - CM State screen

# Managing your telephony cable modem and connected networks

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You can also use your Web Manager to view and monitor the network configuration settings and operational status of your T25.

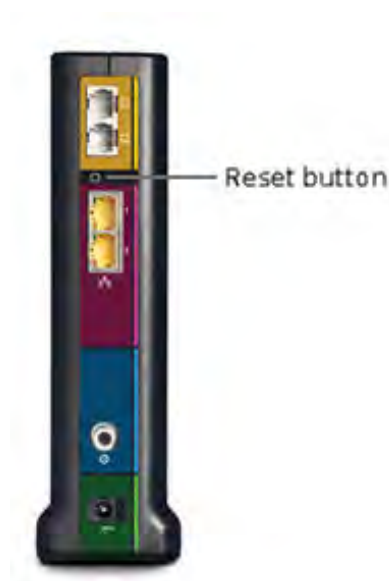
## Reboot and reset the T25

Use the Reset button to reboot (or restart) and reset your T25.

- [Reboot \(or restart\) your T25 using the Reset button](#) (page 27)
- [Reset the T25 configuration using the Reset button](#) (page 28)

## Reboot (or restart) your T25 using the Reset button

1. Insert the end of a paper clip or other small object with a narrow tip into the Reset opening on the rear of your T25.



### T25 reset button

2. Press and hold the indented Reset button for three to four seconds only.
3. Remove the paper clip or small object from the Reset opening.

## Reset the T25 configuration using the Reset button

To reset your T25 configuration back to the factory default settings:

1. Insert the end of a paper clip or other small object with a narrow tip into the Reset opening on the rear of your T25.
2. Press and hold the Reset button for 10 seconds, and then release.
3. Remove the paper clip or small object from the Reset opening.

## Exit the T25 Web Manager

To exit your T25 Web Manager:

- Click the **Close** button in the upper right corner of the web browser window.

# Troubleshooting tips

If the solutions listed in the Troubleshooting solutions table below do not solve your problem, please contact your service provider for assistance. Your service provider may ask for the status of the T25 front panel LEDs, see [Front panel LED icons and error conditions](#) (page 30) for more information.

## Solutions






### T25 Troubleshooting solutions

Modem problem	Possible solution
<b>Power LED icon is OFF</b>	<ul style="list-style-type: none"> <li>■ Check the power connection from the cable modem to the electrical wall outlet.</li> <li>■ Check that the electrical wall outlet is working. If the outlet is controlled by a wall light switch, disconnect the cable modem power cord and connect it to another electrical wall outlet that is not controlled by a wall light switch.</li> </ul>
<b>Cannot send or receive data</b>	<ul style="list-style-type: none"> <li>■ Check each end of the coaxial cable connection on the cable modem and cable wall outlet.</li> <li>■ Use your hand to tighten each connector, if necessary.</li> <li>■ Check the Ethernet cable to make sure it is properly connected to the cable modem and computer.</li> <li>■ On the front panel, check the status of the LED icons and refer to <a href="#">Front panel LED icons and error conditions</a> (page 30) to identify the problem.</li> <li>■ If you have cable television service, check your television to ensure your cable service is operating properly.</li> <li>■ If none of the above solutions resolves the problem, contact your service provider or call ARRIS technical support at <b>1-877-466-8646</b> for assistance.</li> </ul>
<b>Cannot access the Internet</b>	<ul style="list-style-type: none"> <li>■ Check that all cable and power connections on your cable modem and computer are properly connected.</li> <li>■ Check that the <b>Power</b> and <b>Online</b> LED icons on the front panel are lit up solid.</li> </ul>

Modem problem	Possible solution
	<ul style="list-style-type: none"> <li>Check the connection to the router is correct.</li> <li>If none of the above solutions resolves the problem, contact your service provider for assistance.</li> </ul>

## Front panel LED icons and error conditions

The T25 front panel LED icons provide status information for the following error conditions:  
**Front panel LED icons and error conditions**

LED Icon	Status	If, During Startup:	If, During Normal Operation
 POWER	OFF	T25 is not properly plugged into the electrical outlet	T25 is unplugged
 US/DS	BLINKING	Upstream (Send) channel or Downstream (Receive) channel cannot be acquired	Upstream channel is lost Downstream channel is lost
 ONLINE	BLINKING	IP registration is unsuccessful	IP registration is lost
 Tel 1	OFF	Telephone is not detected	Telephone is disconnected
 Tel 2	OFF	Telephone is not detected	Telephone is disconnected

# Warranty Information

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CommScope, Inc. ("ARRIS")

## Retail Purchasers

If you purchased this Product directly from ARRIS or from an authorized ARRIS retail reseller, ARRIS warrants to you, the original end user customer, that (A) the Product, excluding Software, will be free from defects in materials and workmanship under normal use, and (B) with respect to Software, (i) the media on which the Software is provided will be free from defects in material and workmanship under normal use, and (ii) the Software will perform substantially as described in its documentation. This Limited Warranty to you, the original end user customer, continues (A) for Software and the media upon which it is provided, for a period of ninety (90) days from the date of purchase from ARRIS or an authorized ARRIS reseller, and (B) for the Product (excluding Software), for a period of two (2) years from the date of purchase from ARRIS or from an authorized ARRIS reseller. To take advantage of this Limited Warranty or to obtain technical support, you must call the ARRIS toll-free phone number: **1-877-466-8646**. ARRIS' sole and exclusive obligation under this Limited Warranty for retail sales shall be to repair or replace any Product or Software that does not meet this Limited Warranty. All warranty claims must be made within the applicable Warranty Period.

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If you purchased this Product directly from ARRIS or from an ARRIS authorized retail reseller, please call the ARRIS toll-free phone number, **1-877-466-8646**, for warranty service or technical support.

### Cable Operator or Service Provider Arrangements

If you did not purchase this Product directly from ARRIS or from an ARRIS authorized retail reseller, please contact your Service Provider for technical support.





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