



SURFboard[®] T25 Cable Modem with Xfinity Voice User Guide, STANDARD Revision 2.0 P/N 365-095-33655

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Safety and regulatory information

Read all safety and regulatory information before installing your cable modem 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 of the instructions listed here and/or in the user manual before you operate this device. Give particular 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 electrical 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 particular 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 electrical 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.
- It is recommended that the customer install an electrical surge protector in the electrical outlet to which this device is connected. 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.
- Do not use this product near water: for example, near a bathtub, washbowl, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- 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.
- 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 THE ABOVE INSTRUCTIONS

Note to CATV System Installer — This reminder is provided to call the CATV system installer's attention to Article 820.93 and 820.100 of the National Electric Code, which provides guidelines for proper grounding and specifies that the Coaxial cable shield shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

FCC statements

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:

- Reorient or relocate the receiving antenna.
- 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.

FCC Caution: Any changes or modifications not expressly approved by ARRIS for compliance could void the user's authority to operate the equipment.

FCC declaration of conformity

ARRIS Enterprises, LLC, 3871 Lakefield Drive, Suwanee, GA 30024, declares that the SURFboard DOCSIS 3.1 Cable Modem with Xfinity Voice-T25 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.

Care for the environment by recycling



When you see this symbol on an ARRIS product, do not dispose of the product with residential or commercial waste.

Recycling your ARRIS Equipment

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. 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.

Getting started

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

For whole home connectivity, use the T25 Ethernet port to add a Wi-Fi router (separate purchase)

Using the connection capabilities of the T25, you can connect your computer and other network-enabled devices via the two Ethernet ports. The T25 connects to the existing coaxial 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; up to eight times faster than DOCSIS 2.0 cable modems.
- 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 CableTM 2.0 compliant.

In the 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.

Item		Description
T25 Telephony Cable Modem	···· & & @ =	High-speed DOCSIS 3.1 telephony cable modem with two-port Ethernet
Power Adapter	and the second s	Power cord for an electrical wall outlet connection
Ethernet Cable	53	Standard Category 5E (CAT5E)
Software License & Regulatory Card		Safety and regulatory information, software license, and warranty for the gateway
Support Information Card	ACTA Angeneration Constructi	Provides contact information for obtaining technical support assistance with any issues you may have with your SURFboard device.
T25 Quick Start Guide	A R R IS Boot inter auto Contribution Contribution	Provides basic information for installing the gateway and setting up a secure connection on your home network.

Table 1: T25 package contents

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: www.arris.com/consumers
- Call ARRIS Technical Support: 1-877-466-8646

Chapter 3

Product overview

Front panel



Figure 1: T25 front view

Table 2: T25 front panel LED icons

LED Icon	Blinking	On (Solid)
	Not applicable – LED does not blink.	Power is properly connected with the device power cord and the battery is not connected.
US/DS	Scanning for Upstream (Send) channel and Downstream (Receive) channel connection.	Upstream and Downstream channels are connected.
	Scanning for an Internet connection.	T25 is connected to the Internet.

LED Icon	Blinking	On (Solid)
2	Telephone line 1 is off-hook or call is in progress.	Telephone service for line 1 is connected and activated; on-hook.
Tel 1		
)	Telephone line 2 is off-hook or call is in progress.	Telephone service for Line 2 is connected and activated; on-hook.
Tel 2		

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.

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

Table 3: T25 light patterns: normal operation

Patterns: startup sequence

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

Table 4:	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

Power, US/DS, Online	Telephone 1	Telephone 2	Description
On	Off	Flash	Retrieving telephone network information
On	Flash	Flash	Activating telephone service

Table 5: 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





Table 6: T25 Rear Panel Ports & Connectors

Description	
•	Two telephony ports for RJ-11 cable connections:
-	 VoIP connection for a single or two-line telephone
Tel 1	 VoIP connection for a single-line telephone
	Note: For an Alarm system connection, see <i>Connect your telephone</i> (page 19).
	(page 19).

Description	
2	
Tel 2	
Reset	 Recessed button can be used to either reboot the telephony modem or reset your telephony modem configuration settings. The Reset button is recessed to prevent accidental resets. Reboot (or restart) the telephony modem 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. 2. Press and hold the indented Reset button for three to four seconds only. 3. Remove the small object from the Reset opening. Reset the telephony modem configuration Resets the telephony modem configuration back to the factory default settings: 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. 2. Press and hold the indented Reset button for 10 seconds or until the front panel LEDs flash. 3. Remove the small object from the Reset opening. Note: For network security purposes, ARRIS recommends that you change the default admin password on your T25. See Change the default admin password for more information.
С 	 Two one-gigabit Ethernet ports for RJ-45 cable connections: Green: LED is ON - Indicates a data transfer rate of one gigabit per second Green: LED is Blinking - Indicates data traffic is in progress Amber: LED is ON - Indicates a data transfer rate of less than one gigabit per second Amber: LED is Blinking - Indicates data traffic is in progress Coaxial cable connector
CABLE	
POWER	115 VAC Power Input connectorWarning: To avoid any damage to your T25, only use the power supply provided in the box.

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 the T25



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 item(s) needed (not included) (page 11)
- You have *Establish an Internet connection* (page 19)
- 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 high-speed Internet connection provided by Comcast.

Install the T25



Figure 3: 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.
- 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 dail 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 establish 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 by browsing a public web page, e.g. surfboard.com
- 5. Check to confirm that your phone has a dail 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

Monitor the T25 operational status using the T25 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.

T25 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.

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 23)
- HW/FW versions screen (page 25)
- Registration status (CM state) (page 25)

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.



RF Parameters

Downstream QAM

	DCID	Freq	Power	SNR	Modulation	Octets	Correcteds	Uncorrectables
Downstream 1	1	501.00 MHz	2.00 dBmV	43.38 dB	256QAM	4746	57	15
Downstream 2	2	507.00 MHz	1.90 dBmV	43.38 dB	256QAM	4746	54	11
Downstream 3	3	513.00 MHz	1.50 dBmV	43.38 dB	256QAM	4746	54	9
Downstream 4	4	519.00 MHz	1.10 dBmV	43.38 dB	256QAM	4746	42	26
Downstream 5	5	525.00 MHz	1.50 dBmV	44.63 dB	256QAM	4746	58	5
Downstream 6	6	531.00 MHz	1.60 dBmV	43.38 dB	256QAM	4746	49	18
Downstream 7	7	537.00 MHz	1.20 dBmV	43.38 dB	256QAM	4934	54	12
Downstream 8	8	543.00 MHz	1.20 dBmV	43.38 dB	256QAM	4746	44	20
Downstream 9	9	549.00 MHz	1.10 dBmV	44.63 dB	256QAM	4746	47	16
Downstream 10	10	555.00 MHz	0.90 dBmV	44.63 dB	256QAM	4746	55	5
Downstream 11	11	561.00 MHz	1.00 dBmV	44.63 dB	256QAM	4746	31	1
Downstream 12	12	567.00 MHz	0.70 dBmV	43.38 dB	256QAM	4746	26	4
Downstream 13	13	573.00 MHz	0.30 dBmV	43.38 dB	256QAM	4746	1	0
Downstream 14	14	579.00 MHz	0.20 dBmV	43.38 dB	256QAM	4746	0	0
Downstream 15	15	585.00 MHz	0.40 dBmV	43.38 dB	256QAM	4746	0	0
Downstream 16	16	591.00 MHz	0.40 dBmV	44.63 dB	256QAM	4746	1	0
Downstream 17	17	813.00 MHz	-1.60 dBmV	43.38 dB	256QAM	748	37	2
Downstream 18	18	819.00 MHz	-1.50 dBmV	40.95 dB	256QAM	748	23	8
Downstream 19	19	825.00 MHz	-2.20 dBmV	40.95 dB	256QAM	748	30	10
Downstream 20	20	831.00 MHz	-2.40 dBmV	43.38 dB	256QAM	748	35	13
Downstream 21	21	837.00 MHz	-1.80 dBmV	43.38 dB	256QAM	748	56	2
Downstream 22	22	843.00 MHz	-2.10 dBmV	40.95 dB	256QAM	748	23	11
Downstream 23	23	849.00 MHz	-2.50 dBmV	40.95 dB	256QAM	748	48	5
Downstream 24	24	855.00 MHz	-2.60 dBmV	43.38 dB	256QAM	748	31	1
Downstream 25	25	861.00 MHz	-2.90 dBmV	40.95 dB	256QAM	748	29	1
Downstream 26	26	867.00 MHz	-2.50 dBmV	40.95 dB	256QAM	748	12	0
Downstream 27	27	873.00 MHz	-2.20 dBmV	40.95 dB	256QAM	748	5	0
Downstream 28	28	879.00 MHz	-2.60 dBmV	40.95 dB	256QAM	748	0	0
Downstream 29	29	885.00 MHz	-2.90 dBmV	40.95 dB	256QAM	748	0	0
Downstream 30	30	891.00 MHz	-2.80 dBmV	40.95 dB	256QAM	748	0	0

Reset FEC Counters

Downstream OFDM

	FFT	Channel Width (Affler)	# of Active	First Active	Last Active	Average RxMER(dB)		
	Type	widin(iviriz)	Subcamers	Subcamer(MPIZ)	Subcarrier(MHZ)	Pilot	PLC	Data
Downstream l	4K	94	1880	109	202	51	45	45
Downstream 2	4K	94	1880	701	794	53	47	47

Figure 4: T25 Status screen

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.

ARRIS	SUR	Fbo	ard Event Log		
Status	HW/F	W Versio	ns Event Log CM State Advanced		
DOCSIS(CM)	Events				
Date Time	Event ID	Event Level	Description		
9/19/2018 23:09	90000000	5	MIMO Event MIMO: Stored MIMO=-1 post cfg file MIMO=-1;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:01:5c:33:d1:c1;CM- OOS=1.1;CM-VER=3.1;		
9/19/2018 23:09	69020600	4	Improper Configuration File CVC Format		
12/31/1969 16:01	82000200	3	No Ranging Response received - T3 time-out;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- OOS=1.1:CM-VER=3.1:		
12/31/1969 16:02	68001202	3	DHCP failed - DHCP Solicit sent, No DHCP Advertise received;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 8:53	90000000	5	MIMO Event MIMO: Stored MIMO=-1 post cfg file MIMO=-1;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 8:53	68001205	4	Primary address failed, secondary active;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:12	68001202	3	DHCP failed - DHCP Solicit sent, No DHCP Advertise received;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:12	90000000	5	MIMO Event MIMO: Stored MIMO=-1 post cfg file MIMO=-1;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:12	68001205	4	Primary address failed, secondary active;CM- MAC=20:fl:9e:19:00.be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:12	69010200	6	SW Download INIT - Via Config file T25_Upgrade.cm		
1/25/2019 9:13	69011200	6	SW download Successful - Via Config file		
12/31/1969 16:01	82000200	3	No Ranging Response received - T3 time-out;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
12/31/1969 16:02	68001202	3	DHCP failed - DHCP Solicit sent, No DHCP Advertise received;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:16	90000000	5	MIMO Event MIMO: Stored MIMO=-1 post cfg file MIMO=-1;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
1/25/2019 9:16	68001205	4	Primary address failed, secondary active;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
12/31/1969 16:01	82000200	3	No Ranging Response received - T3 time-out;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		
12/31/1969 16:02	68001202	3	DHCP failed - DHCP Solicit sent, No DHCP Advertise received;CM- MAC=20:f1:9e:19:00:be;CMTS-MAC=00:30:b8:c6:3a:26;CM- QOS=1.1;CM-VER=3.1;		

Figure 5: 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			HW/FW Versions		
Status	HW/FW Versions	Event Log	CM State	Advanced	
Hardware Informa	tion				
System:	ARRIS DOCSIS 3.1 / I HW_REV: 2 VENDOR: ARRIS Gro BOOTR: 2.2.16.57385 SW_REV: 11.01.142.P MODEL: T25	PacketCable 2.0 Touch oup, Inc. 4 C20	istone Telephony Moden	n / Retail	
Serial Number: Options:	89H3WD323200062				
Firmware Build an	d Revisions				
Firmware Name: Firmware Build Time: Open Source:	TS11.01.142_061719_70 Mon Jun 17 15:46:15 EE View Open Source Attril	01.PC20.03 DT 2019 bution			

Figure 6: 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	SURFDOard		Registia	tion Status	
Status	HW/FW Versions	Event Log	CM State	Advanced	
CM State: Telephon	y-DHCP				
Docsis-Downstream	n Scanning		(Completed	
Docsis-Downstream	n Ranging		(Completed	
Docsis-Upstream R	anging		Completed		
Docsis-DHCP			Completed		
Docsis-TFTP			Completed		
Docsis-Data Reg Complete			Completed		
Telephony-DHCP			In Progress		
Telephony-TFTP			Not Started		
Telephony-Reg with Call Server			Not Started		
Telephony-Reg Complete			Not Started		
TOD State:					
Time of Day			Retrieved		
BPI State:					
BPI Status			Enabled, Authorized		
DUCP Attempts to	abtain CM IB Address				
IPv4 Attempt(s)	ootanii CM II' Address;				
IDr:6 Attempt(s)					

Figure 7: T25 Registration status - CM state screen

Managing your telephony cable modem and connected networks

You can also use the T25 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.



Figure 8: 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 the 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* for more information.

Solutions

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

Table 7: T25 Troubleshooting solutions

Modem problem

Possible solution

Contact your service provider for assistance.

Front panel LED icons and error conditions

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

Table 8:	Front pane	el LED icons	and error	conditions
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LED Icon	Status	If, During Startup:	If, During Normal Operation
	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
	BLINKING	IP registration is unsuccessful	IP registration is lost
)	OFF	Telephone is not detected	Telephone is disconnected
2	OFF	Telephone is not detected	Telephone is disconnected
Tel 2			

Warranty information

T25 DOCSIS 3.1 Cable Modem

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Corporate Headquarters ARRIS · Suwanee · Georgia · 30024 · USA T: 1-678-473-2000 F: 1-678-473-8470 www.arris.com