



COMMUNICATIONS

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CT Communications

CTTV Service Support Manual

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It is the goal of CT Communications to provide reliable phone, Internet, and video services to our customers. However, we realize that there are times when our service will fail. It is our intent to restore service as soon as possible. Our CTTV Repair number is open 24 hours a day, 7 days a week in order to make a trouble ticket on your issue so that our repair staff may work on it. The repair operators may be help to assist in clearing some of the minor issues that may occur from time to time, but they will not be in a position to instantly correct any major issues. Please note that our repair staff does not operate 24/7, however they are on-call for network-wide outages.

We attempt to address every customer ticket as soon as possible, but there will be times when we cannot respond as soon as the customer may desire. This manual is designed to assist the customer in performing some basic troubleshooting procedures that may help them restore their service before a technician can address the matter. If when using this manual, your particular issue is resolved, please, call CTTV Repair and inform them the issue had been resolved. This will assist us in addressing other customer tickets sooner. It is important to identify the different components used to provide your CTTV service. Please, refer to the CTTV Component page before proceed with any troubleshooting.

In-service related issues

There are some issues that take place where the video service is working, but not all features or quality is at its best. This part of the manual will try to address some of these issues and what could be done to correct them.

Channel Guide does not display: A common occurrence of a TV set having video service, but the channel guide not displaying is related to the configuration of your CTTV service. CTTV at times will install multiple TVs to the same settop box. This method is called "mirroring". Usually, mirroring is done by splitting the signal off the coax output of the settop box. The newer CTTV settop boxes cannot support menu/guide displays on the coax output if the main TV is using a different output (i.e. HDMI). The guide and menu should be viewable from the main TV. Please, refer to the Video Input Options page for the various settop box outputs.

Cannot change channels: Check to see that the remote control you are using is the one provided by CT Communications. Check to see if you can bring up the TV guide screen using the remote control. If not, then the remote control may be the source of the issue.

When pressing the buttons, a light should come on. On remotes for older settop boxes, this will be a small red LED in the middle. For the remotes for our newer settop boxes it will be the button of the device the remote is trying to control. In this case, it should be the STB button. If no lights come on at the time of a key press, try changing the batteries in the remote control. If it does come on, be sure that there are no obstructions between the remote control and the settop. Remote controls operate better when their line-of-sight is clear. If line-of-sight is clear, press the STB button (or the orbital looking button on the older remotes) to make sure the remote is trying to control the settop box. Then try controlling the settop.

If you are still not able to change channels, or you can perform other functions using the remote control except change channels, you may attempt to re-boot the settop box. Refer to the CTTV Components page on how to re-boot the settop box.

Tiling or freezing of channel(s): If the picture seems to have small blocks within it (tiling) or the picture freezes momentarily, this could be a sign of many different conditions. Weather is a major factor in picture quality. CT Communications cannot guarantee top video quality during periods of storms. If the weather is clear, and you have picture quality issues, try changing channels to see if the condition exists on other channels. If the issue seems to only occur on particular channels, the chances are that the problem is with how our main system is getting the channel signal. Sometimes, these system issues will clear up after several minutes. If they do not clear after some time, please, call CTTV Repair and open a ticket on the channel(s) that are having the issue.

If all the channels on a settop are experiencing tiling or freezing picture, there could be an issue with service to your premise. If you have additional settop boxes in the house, check to see if they are experiencing the same picture quality issue. If only one settop box is having the issue (or you do not have another settop box to compare with), check the connections between the settop box, the modem, and the TV. They should be secure. If this is the case, you can try rebooting the settop box and/or modem to clear the issue (refer to the CTTV Component page). If this does not clear the matter, contact CTTV Repair to open a trouble ticket.

Trouble with recording/replaying programs: The newer Model 530 settop boxes are required for Pause Live TV and DVR functions. Refer to the CTTV Components page to see the difference between the Model 530 and the smaller Model 130 settop boxes. The buttons at the top of the CTTV Remote Control controls the Pause Live TV and DVR service. They operate much like a standard DVD player in that the remote has Play, Stop, Pause, Record, Fast-Forward, and Fast-Rewind buttons. The STB button should light up when a remote control button is pressed. If not, press the STB button to put the remote control in settop control mode, and then try the control buttons again.

Pause Live TV stores up to one hour of programming *if* the channel has not been changed. Once the channel is changed on the settop box, the previous hour of programming is erased and the settop box starts recording the new channel. If your 530 does not allow you to use Pause Live TV, please, call CTTV Repair to open a trouble ticket.

All program recordings are performed with the Model 530 settop. Some households may have Model 130 settop boxes which can deliver recorded content from a 530 box that the customer is using for another TV. All settops that are assigned to share recorded programs must plug into the same modem or ONT. Your CTTV installer should inform you at the time of installation if you have the opportunity to watch recorded programs with your 130 settop.

Program recordings are limited to the hard drive space inside the Model 530 settop box. You can check to see what percentage of hard drive space is available by checking the

Recordings window under the 530 settop settings. If the 530 is running out of hard drive space, it will overwrite older recordings which were not assigned for protection. If you cannot view any of the recordings on your Model 530 settop box, you may attempt to reboot the settop (refer to the CTTV Component page). If you do not see a program in the list of previous recordings, there may have been some error that kept the program from recording. Contact CTTV Repair to open a trouble ticket if you keep having trouble recording programs.

Please note that due to bandwidth limitations with our ADSL customers, there are restrictions on how many channels can be recorded simultaneously. HDTV subscribers will not be able to watch a HD channel while recording another HD channel. *Some* HD subscribers will be able to watch a standard definition (SD) channel while recording a HD one (or vice versa). Your CTTV installer will be able to inform you if you have this ability at the time of installation.

All ADSL customers are limited to only recording one program at a time. Be sure to check the guide to see if any programs scheduled for recording overlap. For recording a program when not watching TV, it is good practice to set the Force Tune option to "Yes" for that recording. This will insure proper bandwidth for the channel being recorded.

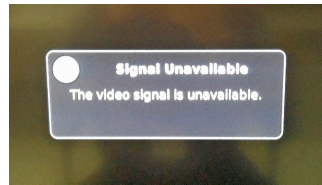
Fiber to the Home customers are not limited to the ADSL restrictions mentioned above, however there are still limitations on simultaneous recordings. Please, try to keep simultaneous recordings as low as two channels at a time in order to avoid potential network issues.

Out-of-service related issues

This part of the manual will address issues that can create a total outage of your CTTV service, and how you can perform some basic troubleshooting tasks to determine if your service can be restored without CTTV Repair taking action or not. With any outage, even if you are able to restore the service on your own, please, contact CTTV Repair to open a ticket and inform the operator if you were able to restore service or not. CT Communications would like to track your outage history with or without our help.

A common user error that is misinterpreted as an outage occurs when the customer TV set is not tuned to the input selection to which the CTTV settop box is connected. Common symptoms of this occurrence is a screen that is all black, all blue, or has an error message stating something along the lines of "No Signal". To be certain that this occurrence is not channel related, try changing to another channel on the settop box to see if that channel will display. You can also press the Guide button on the remote control and see if the channel guide is displayed. If neither of these tests changes the display on the TV, there is a strong possibility that the TV is not tuned to the correct input selection. Refer to the Video Input Options page for images of the various inputs that are used to connect the CTTV settop box to the TV set. Check the TV to see which of these options are being used. Be certain to check that the connection between the TV and settop box is secure. Verify that the TV set is tuned to the proper setting. If you are using the coax option, your service should be coming in on either channel 3 or 4. Note that if the TV has multiple inputs of the option being used by the settop box, you should tune the TV to each of those inputs to verify your service is not playing on one

of them. It may be necessary to use the original TV remote control to access all of the input options. When using the CTTV remote control, be sure that the TV light is lighting up when trying the input selection. If not, press the TV button, and then try the input selection again.

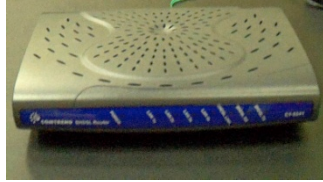


The image above is an example of the error messages utilized by the CTTV settop box. When this message is displayed, the above TV tuning condition can be disregarded. The connection between the TV and the CTTV settop box is fine. The issue resides between the CTTV settop box and the CTTV video network. This error message indicates that the settop box cannot tune to that channel. This could be isolated to one particular channel. If all but a couple of the channels are OK, then please, contact CTTV Repair to open a trouble ticket on the channels that displays this error. If all the channels are displaying this message, there is a possibility that your connection to the CTTV service center has been disrupted. Please, refer to the Modem Troubleshooting page to identify a possible correctable issue.

As always, CTTV Repair operators are available 24/7 to make a trouble ticket on any service related issue you have with our service. We hope that this manual can be of assistance to you in restoring your service as quick as possible, but we also hope that you do not have to refer to it often. Thank you for your patronage.

CTTV Components

CTTV customer premise equipment consists of a network element device that connects to our central office location and the video settop box that provides video service to the customer TV set. The network element device varies depending on the media used to reach the customer premise. If the media is standard copper phone wires, then an ADSL modem (aka router) will be installed. If the customer has fiber to the home, then an Optical Network Terminal (ONT) will be installed at the customer premise (more than likely on the side of the house).



ADSL: Older version modem:



Newer version modem:



Fiber to the home ONT:



Newer settop boxes:

Note that CTTV has many older legacy settop boxes deployed. The large box with Fujitsu written on it, another with Entone written on it, and a slender gray box with a blue front facing are from an older version of CTTV software and will be replaced by the newer 530 and 130 settop boxes as time permits.

The power indicator for the gray box to the left above (Model 530) is to the left hand side. Green indicates the settop is ON. Red indicates the settop is In-Standby. Use the power button on the STB remote to turn the settop ON.

The red light in the middle of the smaller box to the right above (Model 130) indicates the settop is powered ON. It may flash at times when receiving a command from the remote control.

Rebooting the settop box: The recommended method of rebooting a settop would be to unplug the power cable at the power receptacle and not at the settop box itself. Wait about a minute before re-inserting the power cable into the receptacle. The settop may take several minutes to download all of the necessary information in order to provide service.

ADSL modem users have to have the phone line pair conditioned for video service plugged into the phone socket on the back of the modem. The phone jack in the house that was used by the CT installation technician is the only one conditioned to provide reliable video service. If the service needs moved to another jack location, please, contact CT for an appointment to have a technician perform the move. The modem has to remained powered up in order to provide video service.

Rebooting the modem/router: Rebooting the ADSL modem/router can be performed by utilizing On/Off switch on the back of the modem. Power down the modem for a minute then turn it back on. Do *not* press in the reset button on the back of the modem as this could permanently disable your CTTV service until a technician gets there to service it.

Ethernet cables are used to connect the settop boxes to the modem in LAN ports 1-3 on the back of the modem. The port labeled LAN4 is used for customers who also have our Internet service. Unless informed by a CT installation technician, settop boxes should *never* be plugged into LAN4. Conversely, PCs and routers should *not* be plugged into any other modem port than LAN4 for Internet service.

Those customers with more than one modem at their homes should not assume that they can move their Internet service from one modem to another. If a modem was not being used for Internet service at the time of installation, it may not be configured to provide it in the future. Please, contact CTTV repair if you intend to move Internet service from one modem to another.

Each settop box used by ONT users will have an Ethernet cable installed to the ONT (which usually is outside). If the connection is OK between the ONT and the settop box, a LED will be lit (maybe flashing) on the port that is plugged in. If this port does not light up, the Ethernet cable connecting the settop and ONT may be damaged, the settop may be powered down or damaged, or the port on the ONT is malfunctioning. Call CTTV Repair to open a trouble ticket on suspected damaged equipment.

Some subscribers on older ONT equipment may have a device called a hub or switch inside their homes which has a single connection to the ONT, then each settop box is plugged into that device. This device needs to be powered up for video service to work.

ADSL Modem Troubleshooting

Normal operating indicators will be green lights on Power, DSL, and LAN ports. Internet light may be on or flashing if Internet service is provided by that modem.

If the Power light is not green, check to make sure the modem switch in the back is set to ON and that the modem is plugged into a power receptacle that is operating.

If the Power light is green, and the DSL light is off or flashing intermittently, check that the phone line used for video service is plugged firmly into narrow phone jack in the back of the modem. If the line is secured in the back of the modem, contact CTTV Repair to open a trouble ticket.

The LAN ports should flash green indicating data traffic is present. If the LAN lights are off on a port which has a settop box plugged into it, then the settop box may be powered down or damaged, the Ethernet cable connecting the modem to the settop may be damaged, or the modem is damaged. Damaged equipment needs to be replaced by a CTTV technician, please contact CTTV Repair to open a trouble ticket.

There are some customers who have had either wireless transmitters or coax adapters installed to connect the modem to the settop boxes. If a settop box is not delivering video, it is possible that one of these elements is malfunctioning. Unplugging the power to the wireless transmitters, then powering them back up may fix the problem. Do *not* press the reset button on the transmitters.

