The display on the phone is not on and there is no dial tone.

1. Determine if set has died. Replace suspect set with another known working VoIP telephone and power supply (if applicable).
   a. If this replacement set works, try the suspect phone again. If it still fails you have a bad phone set or power supply, continue step 2.
   b. If replacement set fails:
      i. Non-POE - you have a bad power outlet.
      ii. POE - you have a POE problem with the patch cable, outlet cable, or switch. Continue to step 3.
2. Check phone power.
   a. Non-POE:
      i. Using the suspect phone, swap the power supply for a known working power supply.
         1. If it works, try the original power supply again. If the original still fails you need to replace it.
         2. If the replacement power supply fails, plug power supply into another known working power outlet. If this fails, the set needs to be replaced. If set is less than one year old, contact the ITS Switchroom to return equipment and get a replacement, otherwise, order a new set from the ITS Business Office (https://wikis.utexas.edu/display/itsnt/VoIP+Project+-+Supporting+Voice+Services).
   b. POE: Plug in a known working power supply to eliminate a POE problem (but don’t leave the power supply permanently plugged in for a phone on a POE port).
      i. If it works, revert back to POE. If it fails again, contact the ITS Switchroom.
      ii. If the addition of the known working power supply fails, the set needs to be replaced. If set is less than one year old, contact the ITS Switchroom to return equipment and get a replacement, otherwise, order a new set from the ITS
3. Determine whether the problem occurs when plugged into the switch directly. Plug a known working phone directly into the switch port in closet and make a test call.
   a. If the problem does not occur, you have a cable problem.
      i. Check patch cable in room. Swap the patch cable with a known working one.
      ii. Check patch cable in network closet. Swap the patch cable with a known working one.
      iii. If swapping the patch cables does not resolve the problem, have the cable from room to closet checked. Submit a trouble ticket through the ITS Switchroom to have the Cabling and Construction group test the cable.
   b. If the problem does occur, the problem is with the switch/network contact the ITS Switchroom.

“Network is down” message appears on the phone’s display.

1. Reboot the set (hit Menu, 3, 1, 8). If this does not resolve the issue, continue to the next step.
2. Determine if there is an issue with the set. Replace suspect set with another known working VoIP telephone and power supply (if applicable).
   a. If this replacement set works, try the suspect phone again. If it still fails you have a bad phone set. If set is less than one year old, contact the ITS Switchroom to return equipment and get a replacement, otherwise, order a new set from the ITS Business Office (https://wikis.utexas.edu/display/itsnt/VoIP+Project+-+Supporting+Voice+Services).
   b. If replacement set fails, continue to next step.
3. Check patch cable at the phone set.
   a. Ensure the patch cable from the phone is plugged securely into the RJ45 ACO (wall jack).
   b. Swap the patch cable with a known working one.
4. Ensure the switch/port is not the problem. Plug a known working phone directly into the switch port where the suspect phone was plugged in and place a test call.
   a. If the phone fails, the issue is on the switch, proceed to step 6.
   b. If the phone works, the problem is cabling in the closet or between the ACO (wall jack) and the closet, proceed to step 5.
5. Check patch cable in network closet.
   a. Ensure the patch cable in the network closet is plugged in securely on both sides.
   b. Swap the patch cable with a known working one.
      i. If the known working patch cable does not resolve the problem, have the cable from ACO (wall jack) to closet checked. Submit a trouble ticket through the ITS Switchroom to have the Cabling and Construction group test the cable.
6. Check switch/port configuration.
   a. Ensure switch port configured for Voice (VoIP) VLAN. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
b. Ensure Voice (VoIP) VLAN allowed on switch. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
c. If this does not resolve the problem, contact the ITS Switchroom.

Calls are dropping entirely or experiencing significant amounts of audio loss. Note: Occasional, brief (1-2 second) interruptions to audio can occur on VoIP systems similar to a cell phone.

1. Reboot the set (hit Menu, 3, 1, 8). If this does not resolve the issue, continue to the next step.
2. Determine if the quality issue is with your set or that of the person you were on the call with. Leave a voicemail for yourself and see if the message is clear or exhibits the problem. From your set, dial 28886. Enter your voicemail PIN followed by #. Enter 4. Record a message of sufficient length such that you would typically encounter the problem followed by #. Press 6 to add recipients. Enter your five digit mailbox number followed by #. Enter 2. Enter 2 to send. Review your message. If you cannot replicate the issue this way, the issue may be on the other party’s end. If you can replicate the issue, proceed to the next step.
3. Determine whether the problem exists on the switch or with the cabling between the switch and phone. Plug a known working phone directly into the switch port where the suspect phone was plugged in and place sufficient test calls to replicate symptoms or to feel confident the issue is not present.
   a. If the phone exhibits the problem, proceed to step 6.
   b. If the phone does not exhibit the problem, the cabling between the switch and the phone is likely the issue, proceed to next step.
4. Check patch cable at the phone set.
   a. Ensure the patch cable from the phone is plugged securely into the RJ45 ACO (wall jack).
   b. Swap the patch cable with a known working one. If this does not resolve the issue proceed to next step.
5. Check patch cable in network closet.
   a. Ensure the patch cable in the network closet is plugged in securely on both sides.
   b. Swap the patch cable with a known working one.
      i. If the known working patch cable does not resolve the problem, have the cable from ACO (wall jack) to closet checked. Submit a trouble ticket through the ITS Switchroom to have the Cabling and Construction group test the cable. Start keeping a log of call start, duration and issues in case the cable test passes.
6. Check switch/port configuration.
   a. Ensure switch port configured for Voice (VoIP) VLAN. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
   b. Check switch port for errors. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
   c. If cat 3 cable, ensure port speed configured correctly. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
   d. If no problem is found with the switch configuration, contact the ITS Switchroom. Be prepared to share a log of call start times, durations and issues encountered.
“Soundpoint IP…” message appears on the phone’s display.

The phone is missing its configuration file.

1. Update the configuration file the set (Menu, 3, 1, 7).
2. Check the configuration on the switch there is not a network problem interfering with the configuration file load.
   a. Ensure switch port configured for Voice (VoIP) VLAN. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
   b. Ensure Voice (VoIP) VLAN allowed on switch. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
3. Contact Black Box or ITS. If the phone set has recently been deployed and is within the Black Box warranty period, submit a ticket to Black Box per the instructions provided during the deployment. If the set is outside its warranty period, contact the ITS Switchroom to confirm configuration.

A triangle with an exclamation point in it appears on the phone’s display.

There is a problem with the phone’s configuration.

1. Update the configuration file the set (Menu, 3, 1, 7).
2. Check the configuration on the switch there is not a network problem interfering with the configuration file load.
   a. Ensure switch port configured for Voice (VoIP) VLAN. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
   b. Ensure Voice (VoIP) VLAN allowed on switch. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
3. Contact Black Box or ITS. If the phone set has recently been deployed and is within the Black Box warranty period, submit a ticket to Black Box per the instructions provided during the deployment. If the set is outside its warranty period, contact the ITS Switchroom to confirm configuration.

A phone line on the set is not working and the telephone icon next to that number on the display is not solid (not filled in).

One or more lines on the set are not registered.

1. Update the configuration file the set (Menu, 3, 1, 7).
2. Check the configuration on the switch there is not a network problem interfering with the configuration file load.
   a. Ensure switch port configured for Voice (VoIP) VLAN. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs
b. Ensure Voice (VoIP) VLAN allowed on switch. See wiki for instructions: https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs

3. Contact Black Box or ITS. If the phone set has recently been deployed and is within the Black Box warranty period, submit a ticket to Black Box per the instructions provided during the deployment. If the set is outside its warranty period, contact the ITS Switchroom to confirm configuration.

**Set can make calls but not receive them.**

There is a problem with the configuration of the account or the routing of the line.

1. Contact Black Box or ITS. If the phone set has recently been deployed and is within the Black Box warranty period, submit a ticket to Black Box per the instructions provided during the deployment. If the set is outside its warranty period, contact the ITS Switchroom to confirm configuration and routing.

**The set is receiving repeated calls from caller such as “sip:1@146.6.68.116” but when the call is picked up, there is no one there.**

The phone is not on a voice VLAN.

1. The most likely cause is that the phone has been patched into a switch that is not configured to run VoIP either because the switch is incapable or because it was exempted from VoIP by the TSC or by ITS networking. In the TSC tools, switches that are not configured for VoIP are denoted by a VoIP_VLAN of “0”. For network troubleshooting information see https://wikis.utexas.edu/display/itsnt/VoIP+Troubleshooting+Resource+for+TSCs