

CONNECTING TO AN ANALOG LANDLINE PHONE

Note: Compatibility is limited to standard analog single-line desk telephones connected to a standard telephone company single line telephone wall jack. If the telephone has a speakerphone option, that option will not be useable. It is not compatible with cordless telephones or dial-in-handset telephones.

1. Plug the ADAPTER FOR HEADSET PLUG into the MIC IN on the back of the TVT. (This inserts into the center portion of the large circular connector.)
2. Plug the HEADSET into the ADAPTER FOR HEADSET PLUG.
3. Plug the MICROPHONE into the MIC IN jack on the front of the TVT.

4. Disconnect the “curly cord” (the cord that connects the handset to the main part of the telephone) and set aside.
5. Place the handset on the telephone’s cradle in the “hang up” position.
6. Plug the TVT’s phone cable into the telephone’s handset jack. Make sure its plugged into the jack on the main part of the telephone that you removed the “curly cord” from, and not into the jack on the handset.
7. Put on the HEADSET, and remove the telephone’s handset from the cradle. You will hear a dial tone.
8. Dial a phone call, using the TVT’s MICROPHONE and HEADSET for the conversation. To end a call, replace the telephone’s handset on the cradle.



TROUBLESHOOTING

No power

- Check correct battery polarity and/or replace batteries

Can hear a voice but its not modified

- Check that the BALANCE slider control is in the top-most position
- Check that the PITCH and FORMANT slider controls are not in the middle positions
- Check that the BYPASS button is Off (not illuminated)
- If using with a cell phone, make sure that the ADAPTER FOR HEADSET PLUG is plugged into the L/MONO rear output (only this output has been modified for cell phone usage)

Cannot hear any voice at all

- Check that the VOLUME and MIC SENS dials are in the middle positions or higher
- Verify the HEADSET is connected to the correct jack. This is different from cell phone vs. landline phone. Review connection instructions.
- Check that the MICROPHONE is plugged into the MIC IN jack on the front of the TVT.

PEAK LED illuminates

- This is normal. The PEAK indication should illuminate occasionally during a normal conversation. Adjust by turning the MIC SENS knob.

PEAK LED flashes rapidly

- This is an indication of low batteries. Replace batteries.

TELEPHONE VOICE TRANSFORMER

The Telephone Voice Transformer (TVT) is a new generation of telephone voice disguiser. This specialized version of the Roland VT-4 was designed for law enforcement investigators to effectively disguise their voices in real-time telephone conversations and online applications such as in voice chat rooms. It enables the operator to create, use, and store disguised voices by manipulating tone, pitch, octave, formant, and timbre.



TELEPHONE COMPATIBILITY

Cellular Telephone Compatibility

The Telephone Voice Transformer is compatible with Android® phones, and with iPhone® models 4 through 11. Note: iPhone® models 7 and higher require the use of the Apple® Lightning to 3.5mm Headphone Jack Adapter MMX62AM/A (This was included with your iPhone® if purchased prior to October 2018, it now can be purchased separately from Apple®; it is not included with this unit). There are hundreds of different cellular telephones on the market and not all have the same headset/microphone functionality. The TVT is compatible with cell phones which use a connection type for headphones with a microphone configured in TRRS (tip, ring, ring, sleeve) format. However, even this configuration has 2 types. Compatibility is limited to phones that use TRRS with a pinout of Left Audio, Right Audio, Ground, Microphone. Consult your cell phone specifications or supplier to determine compatibility.

Standard Telephone Compatibility

Compatibility is limited to standard single-line analog desk telephones connected to a standard telephone company single line telephone wall jack. If the telephone has a speakerphone option, that option will not be useable. It is not compatible with cordless telephones or dial-in-handset telephones.

COMPONENTS LIST

Telephone Voice Transformer (specially modified telephone-compatible version of Roland VT-4)
 Microphone
 Headset
 Adapter for Headset Plug
 Batteries (four AA alkaline)
 Shomer-Tec TVT-Cell Phone Interface
 3.5mm to 3.5mm Cable
 Carry/Storage Case
 Manual

BATTERY INSTALLATION

Remove the battery compartment lid on the bottom of the TVT. Taking care to observe the correct polarity orientation of each battery, install four AA alkaline batteries. Reinstall the battery cover. Slide the POWER switch on the back of the TVT to ON; a lit display on the TVT confirms proper battery installation. When the batteries run low, the PEAK indicator will blink rapidly. When this occurs install new batteries. Typical battery life is about 6 hours under continuous use. The TVT also has the option of being powered by your computer via a USB Type A to USB Type B cable (not included) using the TVT's USB port located next to the POWER switch.

VOICE CREATION / EXPERIMENTATION MODE

The Telephone Voice Transformer (TVT) provides a mode that lets you get right to creating voices. It allows you to experiment with various settings and effects, all while monitoring the results in real-time. This mode does not require having a phone connected.

1. Plug the **MICROPHONE** into the jack marked **MIC IN** on the front of the TVT. (If the microphone has a plastic protective cap on its plug, remove that). Rotate the microphone so that it points upward.
2. Take the **HEADSET** and lift the upper lip of the cord container all the way up and un-spool the cordage. Insert the **HEADSET's** plug into the jack marked **PHONES** on the front of the TVT.
3. Set the **VOLUME** and **MIC SENS** dials on the TVT to having the indicator lines pointing straight up.
4. Set the 4 slider controls as follows:
 - PITCH** – set to mid-position
 - FORMANT** – set to mid-position
 - BALANCE** – set all the way to the top (EFFECT) position (very important to always keep in this position)
 - REVERB** – set to bottom (OFF) position
5. Confirm that these switches are in their correct positions:
 - LINE OUT** (on front of TVT) - should be in the Right (MONO) position
 - PHANTOM (REAR MIC)** (on front of TVT) - should be in the Left (OFF) position
6. Move **POWER** switch on the back of the TVT to the ON position. The **MANUAL** button on the TVT should be illuminated.

You are now ready to start experimenting with creating voices!

Put on the headset and start speaking into the **MICROPHONE**. While speaking, adjust the **MICSENS** dial until the **PEAK** indicator lights occasionally. Adjust this accurately; if the level is set too low or too high, the effects won't work correctly. Adjust the **VOLUME** dial to comfort level.

PITCH and FORMANT Slider Controls — Most of the fundamental voice re-structuring is accomplished by utilizing various combinations of settings of the **PITCH** and **FORMANT** slider controls. Experiment with various settings while speaking. Even slight variations of either control make significant changes to the voice composition.

BYPASS — This feature enables you to instantly alternate between your real voice and a disguised voice, allowing you to be both yourself and another person in the same conversation. The **BYPASS** button toggles between the two; when illuminated your real voice is heard, when unlit the disguised voice is heard.

In some circumstances the operator may want to use a voice that the other party would clearly realize is a disguised voice. Accordingly, the TVT provides these voice modification controls:

REVERB – This slider control provides a wide range of voice reverberation (echo) levels

ROBOT – This button modifies to a robotic voice with a fixed pitch and an expressionless character. On/Off toggle button (On when illuminated)

MEGAPHONE – This button gives a voice a distorted character as if speaking through a megaphone. On/Off toggle button (On when illuminated)

The Telephone Voice Transformer also provides musically-purposed voice modification capabilities. These are not primary applications for this specialized telephone-compatible version, but here's a brief description.

HARMONY – This button adds harmony to your voice. On/Off toggle (On when illuminated)

VOCODER – This button transforms sound into a vocoder voice, which is more robotic sounding. On/Off toggle button (On when illuminated)

AUTO PITCH – This dial corrects the pitch and constrains the vocal to a specific key, creating a warbling pitch change. The amount of correction increases as the dial is turned to the right.

KEY – This dial specifies the musical key that is used when the **AUTO PITCH** or **ROBOT** functions are activated. Note: to achieve a minor key, turn the dial 3 clicks to the right. Example: for A minor, turn 3 clicks to the right of "A" (the dial will indicate "C").

STORING A VOICE TO MEMORY

You can store up to 8 voices for future application. Once you have developed a voice that you want to save to memory, select and hold down one of the **MEMORY** buttons ("1", "2", "3", or "4"). After about 2 seconds, all four of the numbered buttons will flash briefly, and then the number of the assigned memory will remain illuminated. The voice is now stored in that memory, and can be activated instantly at any time simply by pushing that memory number button. If any voice modifications are made while using a memory voice, the memory number will flash during use. To assign voices to memory numbers 5 through 8, hold down both the **MANUAL** button and the memory button that is 4 less than the memory number you want to assign the voice to (example – to store to Memory #5, hold down both the **MANUAL** button and the "1" button).

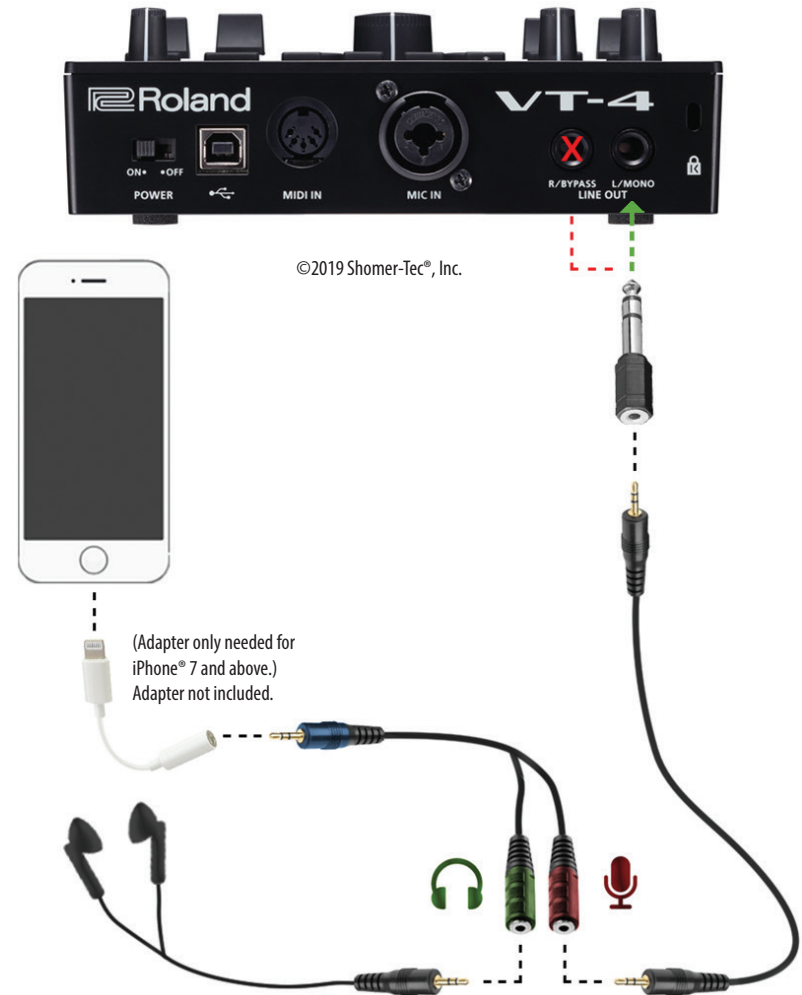
When you are comfortable with creating and using disguised voices with the TVT, and want to use it with a telephone, here are the telephone connection instructions. The first section is for connection to a cell phone, and the second section is for connection to a landline phone.

CONNECTING TO A CELL PHONE

1. Plug the **ADAPTER FOR HEADSET PLUG** into the **L/MONO LINE OUT** jack on the back of the TVT.
2. Plug one end of the **3.5mm to 3.5mm CABLE** into the **ADAPTER FOR HEADSET PLUG**.
3. Plug the other end of the **3.5mm to 3.5mm CABLE** into the **Microphone receptacle** (marked with Red indicator) of the **SHOMER-TEC TVT – CELL PHONE INTERFACE**.
4. Plug the **HEADSET** into the **Headset receptacle** (marked with Green indicator) of the **SHOMER-TEC TVT – CELL PHONE INTERFACE**.
5. If your cell phone is an Android, connect the male plug (marked with dark Blue indicator) of the **SHOMER-TEC TVT – CELL PHONE INTERFACE** into the cell phone. If your cell

phone is an iPhone®, connect the male plug of the **SHOMER-TEC TVT – CELL PHONE INTERFACE** into a **Lightning to 3.5mm Headphone Jack Adapter** (this was included with your iPhone® if purchased prior to October 2018, it now can be purchased separately from Apple®; it is not included with this unit). Plug the other end into the iPhone®.

6. Plug the **MICROPHONE** into the **MIC IN** jack on the front of the TVT.
7. Set the **PITCH** and **FORMANT** slider controls in their middle positions (you will feel a click when in position). Set the **BALANCE** slider control to its upper-most (EFFECT) position. (Always leave it in this position.) Set the **REVERB** slider control to its lowest (OFF) position.
8. Make or receive a telephone call, using the TVT's **MICROPHONE** and **HEADSET** for the conversation.



©2019 Shomer-Tec®, Inc.