

T² Remote

The T² Remote is a new breakthrough technology allowing patients to control their hearing aids using most cell or touch-tone phones, avoiding the need to carry additional hardware! The T² Remote capability discreetly and instantly classifies the dual-tone multi frequency (DTMF) touch-tone signal and automatically adjusts the volume or memory.

Dual-Tone Multi Frequency (DTMF)



DTMF is a specific tone made up of both a low-frequency and high-frequency component used for the touch tones of a phone. Please note, not all phones emit a DTMF signal.

Maximizing T² Performance

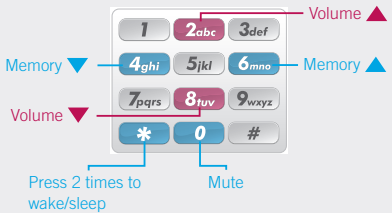
In order for T² to work, the phone must emit a DTMF signal when the keys are pressed. Ensure the key tones are enabled on the phone and are audible. When this input is recognized by the hearing aid microphone, the phone may be used to adjust the volume, memory, or to mute and un-mute the device.

The optimal SNR for the DTMF key tones is 15dB above the noise level in the room. In a louder room, the phone will need to be held closer to the hearing aid microphone for it to interpret the command. Some environments may be too loud for the T² remote to interpret a command.

Steps to Activate T²

1. From the Fine Tuning screen, click on the T²  icon to enable T² functionality. The icon will turn orange when T² is enabled. The device must be programmed with Reserve Gain for T² to have the capability to increase the volume.
2. To view the Remote Adjustment Controls screen, click on the T² label  just above the icon. To print the Remote Adjustment Controls screen, click on the print icon. Note, a Remote Adjustment Controls card is included in every Impulse Technology order and the Impulse Technology operations manual.
3. Disconnect from Inspire® 2009 and the programmer.
4. Using the phone, press the star key twice (**) to 'Wake' the device. An audible indicator will be emitted. The keys must be pressed within 3 seconds of each other.
5. Provide the desired command(s).
6. T² automatically returns to the 'Sleep' mode if the hearing instrument does not receive a command after 20 seconds.

Remote Adjustment Controls
Use the following keypad buttons to remotely adjust your hearing aid settings.



The diagram shows a keypad with the following labels and actions:

- 1**: Volume ▲ (up arrow)
- 2 abc**: Memory ▼ (down arrow)
- 3 def**: Memory ▲ (up arrow)
- 4 ghi**: Volume ▼ (down arrow)
- 5 jkl**: Memory ▼ (down arrow)
- 6 mno**: Memory ▲ (up arrow)
- 7 pqrs**: Volume ▼ (down arrow)
- 8 tuv**: Memory ▼ (down arrow)
- 9 wxyz**: Memory ▲ (up arrow)
- ***: Press 2 times to wake/sleep
- 0**: Mute
- #**: Mute

Please review the Volume Control Tech Tip for VC functionality.

Optimizing Volume Control Selection

Standard VC with T² Disabled (default):

A Standard VC utilizes a definite start/stop rotation which includes the on/off control. The Standard VC incorporates a 40dB range and will be displayed within the software with a rotary dial display.



Standard VC View, T² Disabled

- VC icon enabled (orange)
- T² icon disabled (gray)
- 4dB steps for first 1/3
- 2dB steps in upper 2/3
- VC range is 40dB
- Physical VC acts as volume and on/off control
- Physical VC may be manually disabled by clicking on the VC icon; icon will become gray

Standard VC with T² Enabled:

A Standard VC may be programmed with T² functionality. When programmed with T², the ability to adjust the VC range between 8, 12, 20 and 40dB (default) is available and the rotary dial display is replaced by a slider display. The default range is 40dB and may be adjusted via Preferences, Target, Digital VC Range. The Standard VC on the device will be disabled for volume adjustments but will continue to function as the on/off control.

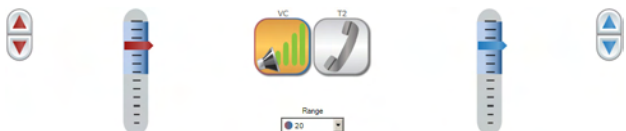


Standard VC View, T² Enabled

- VC icon disabled (gray)
- T² icon enabled (orange)
- 4dB steps for first 1/3
- 2dB steps in upper 2/3
- Programmable VC range: 8, 12, 20 and 40 (default)
- Physical VC acts as on/off control

Continuous Digital VC with T² Disabled:

A Continuous Digital VC incorporates no definite start/stop point within its rotation. The Continuous Digital VC display is a slider display and offers a programmable range of 8, 12, 20 (default) and 40dB. The default range is 20dB and may be adjusted via Preferences, Target, Digital VC Range.



Continuous Digital VC View, T² Disabled

- VC icon enabled (orange)
- T² icon enabled (gray)
- 2dB steps throughout VC range
- Programmable VC range: 8, 12, 20 (default) and 40
- Physical VC acts as volume control
- Physical VC may be manually disabled by clicking on the VC icon; icon will become gray
- On/Off control is via the battery door