TC-HELICON

VoiceTone T1

USER'S MANUAL

Important Safety Instructions

1 Read these instructions.
2 Keep these instructions.
3 Heed all warnings.
4 Follow all instructions.
5 Do not use this apparatus near water.
6 Clean only with dry cloth.
7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8 Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9 Only use attachments/accessories specified by the manufacturer.
10 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning!
- To reduce the risk of fire or electrical shock, do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
- Do not install in a confined space.

Service
- All service must be performed by qualified personnel.

Caution:
You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

EMC/EMI

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 residential installations. 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 equipment off and on –, the user is encouraged to try correcting the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from the one to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
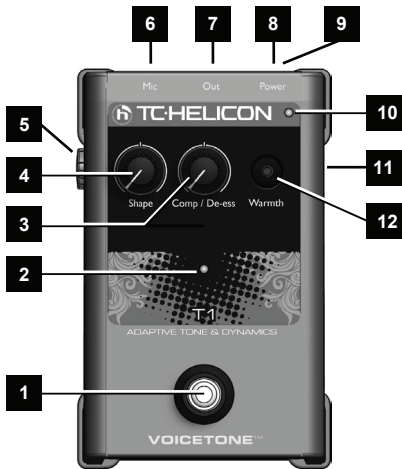
For the customers in Canada:
This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

(EN) Introduction

VoiceTone T1 polishes your live vocal sound with studio-grade dynamics and EQ processors

Like having a personal sound engineer with you at all your performances, VoiceTone T1 automatically reacts to your voice and applies studio quality dynamics and EQ to bring out your most exciting vocal tone. Now you can put a recorded gloss on your live singing without the setup and adjustment of complex equipment normally required to achieve "that sound".

- Super-simple operation is designed to give you great vocal sound right now!
- "Set and forget" center notches in the Shape and Comp / De-Ess controls define the most common effect settings so you don't have to search for your sound.
- Warmth control adds just the right amount of low frequencies when you want them.
- Mic Control feature works with optional TC-Helicon MP-75 mic to add "on-mic" effect switching.
- USB connection to computer for easy firmware updates, news and tips via the free VoiceSupport application.
- Balanced XLR in and out with phantom power for condenser microphones.

1 - **Effect on/off footswitch**

2 - **Effect active LED indicator**

3 - **Dynamics amount control**

4 - **Adaptive Shape EQ amount control**

5 - **MIC GAIN control for input level**

6 - **Balanced XLR mic input**

7 - **Balanced XLR mono output**

8 - **Power in**

9 - **USB connector to computer**

10 - **Input level LED; green=signal, red=clip**

11 - **Effect on/off via optional mic (MP-75): in=on**

12 - **Warmth adds bass EQ**

Connecting

MIC jack - Connect your mic here using a balanced XLR cable. *Phantom power is always on.*

OUT jack - Connect to your PA mixer, another VoiceTone pedal or powered speaker.

Power in - Connect the supplied 12VDC power supply.

USB - Connect to a computer running the TC-Helicon VoiceSupport application for registration, latest version and tips.

NOTE
- **Turn down your PA when making all connections**
- **The latest version of VoiceSupport is available free from www.tc-helicon.com/voicesupport**
- **The USB connection does not provide power to the unit**

First Setup and Use

1. Turn down your PA's master volume and set the desired input channel EQ to flat (EQ=off).
2. Connect your mic and PA as shown in the diagram first, then plug in the AC adaptor. For live performance, a USB connection to a computer is not required.
3. Set the Shape and Comp / De-ess controls to the center notch. Turn Warmth off if is isn't already.
4. Sing into your mic while adjusting the MIC GAIN control so that the input level LED flashes green. Brief flashes of red on the LED on your loudest singing are ok.
5. Ensure that the effect is on (center LED is lit).
6. Sing while turning up your PA volume to a comfortable level.

VoiceTone T1 will take a moment to adjust to the tone of your voice. It constantly adjusts as you sing. You will notice your voice is pleasantly brighter and smoother.

Phantom Power

There is no switch to enable phantom power on the VoiceTone singles. Phantom power is available when the product is powered. Microphones that don't require phantom power will operate properly. Always apply power as the last connection step and ensure your PA is muted. This will reduce the chance of audio crackles that could harm your equipment.

Effect Descriptions

Shape - Controls multiple bands of EQ (equalization or *tone*). Adds brightness while removing bass frequencies that contribute to muddy sound in your specific voice. Turning the Shape control past the notch setting adds more brightness.

Comp / De-ess - Combines these two pro dynamics effects in one control. *Compression* reduces vocal peaks that can be uncomfortable for listeners especially at loud PA volumes. VoiceTone T1 automatically gives you the right amount of gentle compression whether you're singing right on the mic or further away. *De-ess* reduces Sss, T and D sounds in your singing to add extra studio polish.

Warmth - Can be used to restore a narrow bass frequency band that adds fullness without making your voice muddy.

Using Multiple VoiceTone Single Pedals

It is possible (even encouraged!) to use more than one VoiceTone pedal at a time. You will only need to adjust the MIC GAIN control of the first pedal in the chain. On the rest, MIC GAIN should be set to the minimum (fully left) position.

The order of the pedals is important. See the following table showing 2, 3 and 4 pedal combinations.

2 Pedals			3 Pedals	
D1 > R1	T1 > D1	C1 > D1	T1 > D1 > R1	T1 > C1 > R1
T1 > C1	T1 > R1	C1 > R1	C1 > D1 > R1	T1 > C1 > R1

4 Pedals   T1 > C1 > D1 > R1

The VoiceSupport Application

VoiceSupport is your way of getting the most from your TC-Helicon product, as well as letting your product grow with firmware updates. VoiceSupport includes:

- Access to firmware updates and new features
- Videos, artist profiles, tips & tricks
- Registration of your product

To access the VoiceSupport application:

1. Download VoiceSupport from www.tc-helicon.com/voicesupport.
2. Install VoiceSupport on your computer.
3. Connect your product via USB to your computer.
4. Run VoiceSupport.
5. Read the news, click on tabs and browse the features of the application.

Using the Mic Control Feature

Mic Control allows you to turn effects on and off from the optional TC-Helicon MP-75 microphone. Push the MIC CONTROL switch in to allow remote on/off control on any or all pedals in a chain. *When Mic Control is not desired, ensure the switch is out.* Using multiple pedals requires the **control signal pass through** feature to be enabled on all but the last pedal. To enable or disable this feature, hold the effect footswitch and the switch on the mic for 3 seconds.

Tips for Avoiding Feedback

- Ensure your monitor and/or PA speakers don't aim directly at the front of your mic
  - Sing close to the mic, even touching the grill with your lips
- Try a super-cardioid dynamic mic such as TC-Helicon's MP-70 and MP-75
- Set your PA channel EQ and graphic EQ flat
- Have your band play quieter on stage.

FAQ

Why am I hearing distortion?
Likely the MIC GAIN knob is set too high. Ensure that the Input LED is green most of the time with only brief and rare peaks of red.

Can I use the product on an auxiliary send/return?
Yes. You will need balanced XLR to TRS cables to do so. Ensure that the MIC GAIN knob is set to minimum to accept the line level signal from your mixer.

Will I need a DI box to connect to a mixer?
No.

Why is the product turning the effect on and off by itself?
This can happen when you have the MIC CONTROL knob pushed in and you are connected to a mixer with "pseudo balanced" outputs. Unless you are using only the specific TC-Helicon mic with the Mic Control feature, the MIC CONTROL knob should be out.

(EN) Technical Specifications

Input	Mic Input Impedance:	Balanced: 2.68 kOhm
	Mic Input Level @ 0 dBFS:	-42dBu to +1dBu
	EIN @ Max Mic Gain Rg = 150 Ohm:	-126 dBu
	Mic input SNR:	>104 dB
Output	Output Impedance, Bal./Unbal.:	200/100 Ohm
	Output Full Scale:	+1 dBu
	Dynamic Range:	>104 dB, 20 Hz to 20 kHz
	Frequency Response:	+0/-0.3 dB, 20 Hz to 20 kHz
Power	Power Supply (Supplied):	12V .4A ⊕–◉–⊖
	Power Consumption:	5.6W
Requirements	Operating Temperature:	32°F to 122°F(0°C to 50°C)
	Storage Temperature:	-22°F to 167°F(-30°C to 70°C)
	Humidity Max.:	90 % non-condensing
Size & Weight	Dimensions: 5.4" x 3.5" x 2.3" (140 x 90 x 60) Weight: 0.92 lb. (420 g)	
Warranty	See www.tc-helicon.com\support for warranty information	

Due to continuous development, these specifications are subject to change without notice