

TC·HELICON



VoiceTone D1

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:

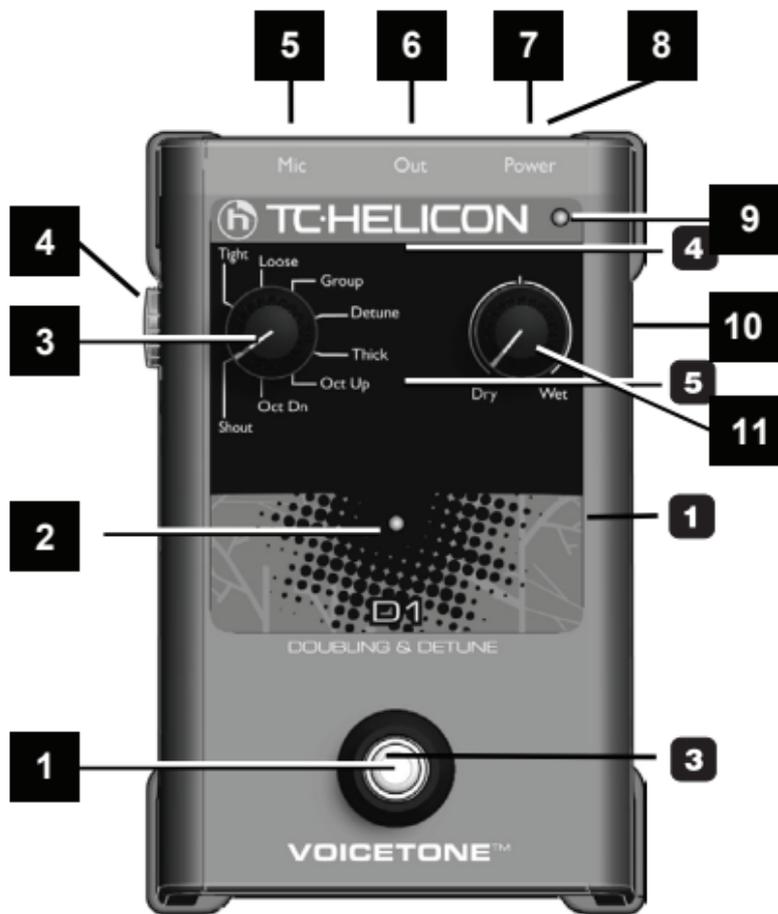
This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

(EN) Introduction

VoiceTone D1 thickens your voice with realistic doubling emulations in an easy-to-use pedal.

Using TC-Helicon's refined vocal algorithms, VoiceTone D1 provides that cool unison doubling effect used by successful artists since the dawn of modern recording. We've taken the time to create the 8 styles for you. All you do is select one, hit the go button and instantly recreate that sound that was, up to now, the domain only of recording studios.

- Super-simple setup and control
- Useful range of 8 styles offer selection of unison doubling plus octave doubling
- "Set and forget" center notch on the mix control defines a factory-set doubling level so you don't have to search for your sound.
- High quality doubling algorithm effectively evokes overdub-style doubling
- 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 - Doubling style selector
- 4 - MIC GAIN control for input level
- 5 - Balanced XLR mic input
- 6 - Balanced XLR mono output
- 7 - Power in
- 8 - USB connector to computer
- 9 - Input level LED; green=signal, red=clip
- 10 - Effect on/off via optional mic (MP-75): in=on
- 11 - Mix control with center notch



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.



- 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.
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 style to Tight and the mix control to the center notch.
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.

You can now sing while you sample the different doubling styles and raise and lower the mix. You're ready to perform! Note that When the effect is on, your dry voice is slightly delayed to align best with the double voices and increase realism for your audience.

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 pops that could harm your equipment.

Effect Descriptions

Doubling Styles - The following table offers an overview of the different factory styles.

	<u># of Voices</u>	<u>Humanize</u>	<u>Detune</u>	<u>Porta</u>
Tight	1	Low	-6c	Low
Loose	1	Med	0	Med
Group	2	Med	0	Med
Detune	1	Off	0, -12c	Low
Thick	2	Med	+/-12c	Low
Oct Up	2X +1 Oct	Med	0, -5c	Low
Oct Down	2X -1 Oct	Med	0, -5c	Med
Shout	2: +/- 1 Oct	High	0, -5c	High

Doubling is mostly used either to highlight a word, phrase or chorus. To use the effect for an entire song, it's a good idea to use a subtle style (Tight or Detune) or use a more obvious one (Loose, Group) with a less wet mix level. That said, don't be afraid to go wilder with Octaves or Shout!

The Dry/Wet (mix) control - Fully left, only your dry lead voice is heard. At the center notch is a factory-set balance of doubling and dry for each style. Beyond the center notch, doubling level is increased until your dry voice is gradually faded out at the end of its travel.

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	D1 > R1	T1 > D1	C1 > D1	3 Pedals	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