



Company	TC-Helicon Vocal Technologies Inc.
Document	Ditto X4 Test Modes
Version	1.0
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Created by	RE
Products Supported	Ditto X4
Notes	This document outlines how to access the different test modes for the Ditto X4 device.

Revisions

Rev.	Description	Date
1.0	Initial Release	Dec. 14, 2015

Potentiometer Calibration

1. Hold down the "FX" button and power up the Ditto X4.



2. Eventually all LEDs turn off except "LOOP 1", which should be blinking red.
3. Turn the "LOOP 1" potentiometer all the way counter-clockwise until it stops.
4. Push the "LOOP 1" switch below it, which should cause the "LOOP 1" LED to blink half red/half green.
5. Turn the "LOOP 1" potentiometer all the way clockwise until it stops.
6. Push the "LOOP 1" switch below it, which should cause the "LOOP 1" LED to turn solid green.
7. Repeat steps 3 to 6 with the "LOOP 2" and "DECAY" potentiometers.
8. Finally turn the "FX" potentiometer all the way counter-clockwise until it stops.
9. Push the "FX" switch below it and the LED will momentarily turn green, then go back to flashing red.
10. Turn the "FX" potentiometer clockwise to the next detent ("HALF") and push the "FX" switch turning the LED above it momentarily green, then it goes back to flashing red.

11. Turn the "FX" potentiometer clockwise to the next detent and repeat step 9. Keep turning the "FX" potentiometer clockwise and repeating step 9 for each detent. The "FX" LED should now be flashing half red/half green.
12. Now turn the "FX" potentiometer counter-clockwise and repeating step 9 at each detent. Once the last counter-clockwise detent ("REVERSE") has gone through step 9, the "FX" LED should be on solid green.
13. All potentiometers are now calibrated.

Update/Test Mode

1. Hold down the "LOOP 1" button and power up the Ditto X4.



2. It is now possible to see the device as a MIDI device and use MIDI-OX etc.