

The Curbell CT-5 tester is a portable unit designed to test Curbell-manufactured pillow speakers compatible with the Rauland Responder 5 nurse call system. The CT-5 tester is to be used in conjunction with the included USB cable and a desktop or laptop PC. It can test all Rauland Responder 5 Standard and Enhanced pillow speakers, as well as Curbell-manufactured "Interactive" models compatible with the Rauland Responder 5.



Once connected to the tester and properly configured with a user-supplied PC, you will be able to test the functionality of nurse call, nurse call workflow, environmental control auxiliaries, entertainment, call assurance, speaker and microphone features on any pillow speakers compatible with the Rauland Responder 5.

SAFETY INFORMATION

In these User Instructions, the word CAUTION means a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. CAUTION also may be used to alert against unsafe practices.

CAUTION

- Failure to follow all user instructions may result in the failure or improper function of the Curbell Tester for Rauland Responder 5 Pillow Speakers ("CT-5 tester").
- Be sure to use a USB cable with standard connections – Type A to Mini B – and similar to the cable provided with the unit, in the event it requires replacing.
- Contact Curbell if you still have questions regarding the use of your CT-5 tester, at 800-235-7500.

MINIMUM SYSTEM REQUIREMENTS

- Microsoft Windows XP (SP2), Windows 7, Windows 8, or Windows 10 (32- or 64- bit)
- 1GHz processor or greater
- 512MB memory or greater
- 250MB available disk space
- PC must have at least 1 USB port (not recommended for use with a USB hub or wireless USB peripherals)

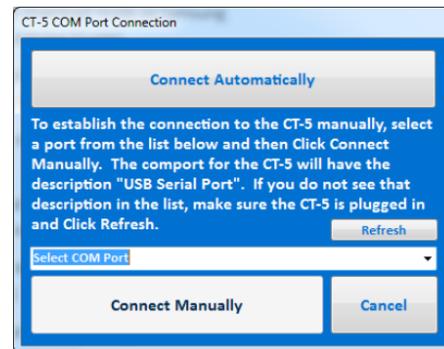
GETTING STARTED

1. Go to www.curbellmedical.com/ct5tester and click on the link to download the software.
 2. Fill out the download information request form and click submit.
 3. Save the downloaded .zip file to your desktop.
 4. It is recommended that the user have computer Administrative privileges to ensure full installation rights and that all other programs, including virus software, are disabled, for proper and expedient installation.
 5. Right click on the .zip file and select "Extract All" to the default location. You will be prompted for a password. Enter this password (the password is case-sensitive): **curbellCT5tester**
Be sure to keep the password in a safe place. Contact Curbell in the event it is misplaced.
- Depending on whether or not your PC is equipped with a 3rd party zipping program, the un-zipping process may be slightly different. If this is the case, ensure the entire software package is downloaded to a folder on your desktop and unzipped from that location.
6. Once properly extracted, locate the "CT5_Setup_x.x.x.x.exe" file; open it and follow the on screen instructions.
 7. Accept the Terms and Conditions for the Curbell and license agreement.
 8. The installer may prompt you to install additional windows components. These are required to run the CT-5 software.
 9. Connect the USB cable to the CT-5 interface box and PC. The Device Manager will notify you of the driver installation of the new device, which should occur automatically. See the troubleshooting section if this doesn't occur.
 10. Once the drivers for the CT-5 tester have been installed, your CT-5 is ready for use.
 11. If you are simply updating the version of this software from a previously installed version, the installation steps are identical to the initial installation steps.

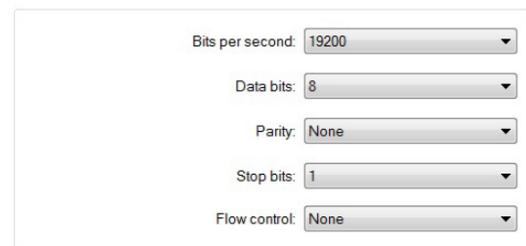
NOTE: These instructions are for version 3.0 and higher. If you do not have the latest version, refer to step 1 to download the latest version.

USING THE TESTER

1. Ensure that the CT-5 tester software has been properly installed. See GETTING STARTED for details on this.
2. Plug the Mini-B end of the included USB cable into the interface box
3. Plug the other end (Type A) of the included USB cable into an available USB port on the PC that contains the newly-downloaded software.
4. Open the latest version of the CT-5 tester software on the PC. A pop-up window will prompt you to hit "Connect Automatically". This will allow the PC to properly communicate with the CT-5 interface box.



NOTE: If Auto Detect does not work, it may be necessary to connect manually. Follow the on-screen instructions to do this.



5. Once the PC is properly communicating with the CT-5 interface box, a second window will appear.



NOTE: Since the software is updated periodically, the version number shown here may not match what is shown on the PC.

6. Plug the pillow speaker into the 9-pin DIN cable of the CT-5. The LEDs on the pillow speaker should blink for a few seconds and then turn off.



7. The screen should now display a generalized picture of the pillow speaker. The tester will sense the specific version of pillow speaker you are testing. Although the buttons on the screen will not have their functions labeled, the layout should match.

NOTE: Depending on the specific version of your pillow speaker, there may be more buttons on the screen than are present on the pillow speaker. This is expected.



Standard or DPS Pillow Speaker



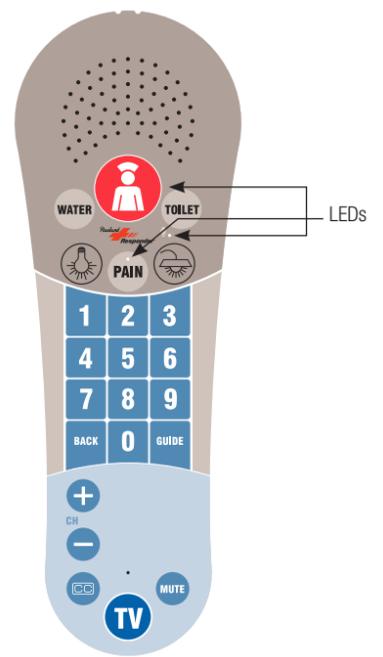
Enhanced or DirectAccess Pillow Speaker



Interactive Pillow Speaker

- 8** Sequentially press all of the buttons on the pillow speaker. Properly-working pillow speaker buttons will be characterized by matching illuminated buttons on the screen. Press the "Start Over" button to retest the same pillow speaker.
- 9** If sound is enabled on the PC, a tone will sound as each button is depressed. The buttons on the PC will remain illuminated until the pillow speaker is disconnected. Test any and all buttons to verify proper functionality.

10 To test LEDs, toggle the "LED Test" button on the PC. There are 3 LEDs that should illuminate on the pillow speaker. Click again to turn them off.



11 To test the speaker (and volume control, if applicable), toggle the "Speaker Test" button on the PC and a smaller pop-up window will advise you: To test the speaker functionality, ensure the Initialize Test LED is lit on screen. Press and hold the black push-button on the CT-5 interface box (labeled as "AUDIO"). If the speaker is working properly, a 1 kHz tone should come from the speaker. If your unit is equipped with analog volume control, scroll the thumbwheel up and down while holding the button down on the CT-5, and verify that the audio level coming from the speaker varies in intensity. Select OK to return to the main screen.



NOTE: If your pillow speaker is equipped with a headphone option, insert the headphones and repeat the test.

12 To test the microphone functionality, speak into the microphone on the pillow speaker, while monitoring the LED on the CT-5 interface box (labeled as "MIC"). If the microphone is working properly, the LED should illuminate as long as the microphone is picking up audio.

NOTE: The microphone is calibrated to verify the presence of audio. The LED will illuminate in the presence of any audio, including loud background noise. Ensure this test is performed in a testing area with low background noise. Verification of the microphone functionality will only require a normal speaking voice or whistle into the microphone.



13 At this point, all standard functionality of the pillow speaker has been confirmed. If you have trouble with any one of these steps, or if the pillow speaker fails any one of these tests, refer to the TROUBLESHOOTING section for clarification and next steps.

14 To test another unit, simply remove the pillow speaker from the CT-5 tester and insert another pillow speaker and repeat the testing steps.

15 When you are completely done testing units, select the "Exit Tester" button or the close button on the PC.



TROUBLESHOOTING

SYMPTOM	POSSIBLE SOLUTIONS
Unable to download files from website.	<ul style="list-style-type: none"> Ensure that there is a working internet connection. Call your Curbell representative for additional assistance.
Unable to unzip downloaded files.	<ul style="list-style-type: none"> Verify that you have entered the correct password. Re-Enter or call your Curbell representative. Ensure that the zipping program being used is set up properly.
Unable to properly install files.	Verify that the user has administrative rights on PC and the PC meets minimum system requirements.
PC unable to locate driver for USB device.	The PC should auto install the drivers for the USB device. If this does NOT occur, go to www.ftdichip.com and search for the applicable drivers for the FT232RL Device. Follow the recommended instructions for manual installation of drivers.
Auto Detect window does not pop up upon program initiation.	Software was not properly installed. Uninstall and reinstall.
Auto Detect does not work as expected.	See Manual settings in Step 5.
Generalized picture of the pillow speaker does not appear after selecting "Initialize Test"	<ul style="list-style-type: none"> Software was not properly installed. Uninstall and reinstall. Old firmware version is installed on PC. Check Curbell website for latest revision and install. See GETTING STARTED.
Incorrect model of pillow speaker appears after selecting "Initialize Test"	<ul style="list-style-type: none"> Pillow speaker is not functional Software was not properly installed. Uninstall and reinstall. Old firmware version is installed on PC. Check the Curbell medical website for latest revision and install. See "GETTING STARTED." Pillow speaker has corrupt firmware or has failed.
Buttons on screen do not illuminate upon button press.	<ul style="list-style-type: none"> Initialization failed. Exit Tester and restart program. See USAGE Old firmware version is installed on PC. Check the Curbell website for the latest revision and install. See "GETTING STARTED." Pillow speaker has corrupt firmware or has failed.
LEDs do not illuminate	<ul style="list-style-type: none"> Initialization failed. Exit Tester and restart program. See "USING THE TESTER." Pillow speaker has corrupt firmware or has failed.
Speaker does not emit sound	<ul style="list-style-type: none"> Cables are not properly seated Pillow speaker has failed
Microphone LED does not illuminate on CT-5	<ul style="list-style-type: none"> Cables are not properly seated Initialization failed. Exit Tester and restart program. See "USING THE TESTER." Pillow speaker has failed
Operation of CT-5 appears to be sluggish or non-responsive	Some USB peripherals may introduce delays or port conflicts. Disconnect unnecessary USB peripherals and re-try the CT-5 for operation.

CLEANING AND CARE

1. Ensure that the device is completely unplugged from the PC.
2. Use a damp (not wet) cloth to wipe down the CT-5 interface box and cable. Warm water with a tincture of green soap is recommended.

REPAIR

CAUTION
NEVER attempt to repair this unit. If your CT-5 tester fails to operate, call Curbell at 1-800-235-7500 for servicing options.

LIMITED WARRANTY

- Curbell Medical Products, Inc. warrants to the original purchaser that this unit is reasonably free from defects in manufacture for a period of one year from the date of delivery to the original purchaser.
- Curbell Medical Products, Inc. reserves the right to determine if any material or parts are to be repaired or replaced.
- Any replacement parts are warranted only for the remainder of the original warranty period for the unit.
- **Curbell Medical Products, Inc. Does not warrant this unit for failure to perform due to accident, casualty, misuse, or abuse; fire, liquid damage, lightning, vandalism, tampering; improper setup, operation, maintenance or testing; unauthorized service or improper repair; or use exceeding two years.**
- **There are no other warranties, expressed or implied, and no warranty of merchantability or fitness for a particular purpose. Curbell Medical Products, Inc., shall not be liable under this warranty (or under any other legal theory) for incidental or consequential damages.**
- If you return a unit for service under this warranty:
 - Call your Curbell representative to obtain a Return Authorization (RA) Number
 - Pack devices well to avoid damage
 - Reference the RA number on all shipping paperwork and on the outside of the shipping box(es).
 - Insure the package
 - Send it freight pre-paid to: Curbell Medical Products, Inc. 20 Centre Drive Orchard Park, NY 14127
 - Include original shipping date and description of problem to avoid delays



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