

# Getting Started Guide

## Using the Digital Stethoscope

GSG-100  
Revision A

<b>Purpose</b> .....	<b>1</b>
<b>Audience</b> .....	<b>1</b>
<b>Scope</b> .....	<b>1</b>
<b>Using the Digital Stethoscope</b> .....	<b>2</b>
I.    General Background Information .....	2
II.   Installing the Stethoscope .....	2
III.  Using the Stethoscope on a Cart .....	2
IV.  Using the Stethoscope on a Laptop or PC Running tConsult Web.....	4
V.   Using the Stethoscope on a Laptop or PC Running tConsult Cart .....	5

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### **Purpose**

This document provides a quick overview of how to use the digital stethoscope on an AFHCAN Cart with AFHCAN tConsult Cart software. The information is presented in outline form for quick reference.

### **Audience**

This document is written for clinical users of the AFHCAN Cart, tConsult Cart software, and tConsult Web software. Clinicians may be involved in creating a stethoscopy recording and adding it to a case, or in reviewing a recording and responding to a case as a consultant.

Basic familiarity with the AFHCAN Cart and associated software is assumed. Clinical knowledge of correct stethoscope placement and other aspects of using a conventional stethoscope are also assumed.

### **Scope**

This document covers the TelePhonic Stethoscope (with chestpiece, headphones, data cable, and power cable [if applicable]). It describes the basics of using this device in conjunction with an AFHCAN Cart (with the tConsult Cart software), and the tConsult Web capability.

## Using the Digital Stethoscope

### I. General Background Information

- A. The stethoscopy feature allows digital recordings to be made using an electronic stethoscope. These recordings are then saved in a case and played back at another location as a part of reviewing the case.
- B. Digital stethoscopy requires the use of a TelePhonic Stethoscope unit and special software.
- C. Your clinical experience in using a stethoscope is assumed.

### II. Installing the Stethoscope

- A. On the Cart:
  - 1. open the client setup utility (refer to TM-100, *Technical Manual, Setup Utility for the tConsult Cart Application*)
    - a. ensure correct type
      - 1) select TR1EF if the unit is a serial-type
      - 2) select TRUSB if the unit is a USB-type
        - a) drivers need to be installed on the Cart prior to using the TRUSB (refer to IG-101, *Installation Guide, TR-USB Telephonic Stethoscope on V3 Cart*)
    - b. if serial, ensure correct com port selection
      - 1) the serial port on the media expansion panel is usually connected to COM 4
- B. On a laptop or PC for use with the tConsult-Web:
  - 1. on the login screen, download and install the AFHCAN add-ons
    - a. graphic says “AFHCAN Web Tools”
- C. On a laptop or PC running the TelePhonic Stethoscope software in conjunction with tConsult-Cart software:
  - 1. similar to instructions for a Cart, with the exception that the COM port may be different

### III. Using the Stethoscope on a Cart

- A. Connect stethoscope to Cart:
  - 1. USB version
    - a. connect to USB port on media expansion rail
  - 2. serial version
    - a. connect serial cable to serial connector on media expansion rail
    - b. connect power adapter to external AC power source
- B. Capture a recording into a case:
  - 1. connect chestpiece (this activates the *Transmit Mode*)

2. connect headphones
    - a. begin with volume set low
  3. listen to source to confirm sounds to be recorded
    - a. set volume
      - 1) volume setting only affects playback volume; it does not affect record levels
    - b. select bell / diaphragm
      - 1) bell / diaphragm alters playback characteristics only (there is only one recording—it is just filtered differently on playback)
  4. open AFHCAN software
    - a. create case
    - b. select or add patient
  5. select stethoscope from Add To Case screen
    - a. use the pull-down menus or “other information” text field to add descriptors to the recording
      - 1) adding this information is optional (but recommended for good charting)
      - 2) selecting “other” activates a supplemental text entry field giving you full flexibility
      - 3) options for pull-down menus will vary depending on first selection (i.e., if “heart” is selected, subsequent options will pertain only to the heart; if “lungs” are selected, subsequent options will pertain to the lungs)
    - b. select the duration
      - 1) a duration of “continuous” must be stopped manually
      - 2) other durations will stop automatically, but may be stopped early
    - c. press the Record button (or use hand or foot switch)
    - d. press the Stop Recording button (or use hand or foot switch)
      - 1) the recording will appear in the left-most column as a “thumbnail”
      - 2) date, time, and duration will be inserted automatically as label for recording
    - e. press Record New to add another recording (allows you to note a different location or position)
    - f. press Save to save the recordings to the case
  6. complete the case and send
- C. Review a recording:
1. open a case with a stethoscopy recording
    - a. the case opens by displaying the Case screen
      - 1) contents of the case are represented as thumbnails in left column

2. click on a stethoscopy thumbnail
  - a. a TelePhonic Stethoscope unit must be attached to the Cart
3. connect a set of high-quality headphones to the unit
  - a. to protect your ears, set the volume low
4. ensure the chestpiece is **not** connected (disconnecting the chestpiece places the unit in *Receive Mode*)
5. click the Play button
6. on the unit, adjust the volume and select diaphragm (D) or bell (B)
  - a. selecting diaphragm or bell electronically filters the recording and simulates using the bell or diaphragm on a conventional stethoscope
    - 1) bell emphasizes lower tones and is often used for the heart sounds
    - 2) diaphragm allows higher-pitched sounds to be heard and is often used for lung sounds
7. as desired, review any other aspects of the case, add comments, and return or forward the case as appropriate

#### IV. Using the Stethoscope on a Laptop or PC Running tConsult Web

##### A. Background:

1. tConsult Web allows cases to be accessed and reviewed over the local network (or internet) without requiring the tConsult Cart software to be installed
2. the screen layout is similar to an email-type system
3. although primarily designed for viewing and responding to a case, it is possible to add comments as well as various types of files (e.g., documents, images, etc.)
4. it may be necessary to reinstall the AFHCAN Web Tools (a button on the login screen) to update them to the latest version

##### B. Use the features in the left column (Case Inbox pane) and center column (Case List pane) to list the desired case.

##### C. Click on the case to display the case components in the right column (Case Viewer pane).

##### D. Connect a TelePhonic Stethoscope unit to the computer:

1. the USB type connects directly to a USB port (drivers must be installed as described in IG-101, *Installation Guide, TR-USB Telephonic Stethoscope on V3 Cart*)
2. the serial type connects to a serial port
  - a. {exact configuration details, if any, are TBD}

##### E. Connect a set of quality headphones to the TelePhonic Stethoscope unit:

1. initially turn the volume down
2. select diaphragm (D) or bell (B) as desired

- F. Ensure the chestpiece is **not** connected to the TelePhonic Stethoscope unit:
    - 1. removing the chestpiece puts the unit in *Receive Mode*
  - G. Click on the stethoscopy thumbnail for the recording you want to listen to:
    - 1. a window will pop up asking if you want to open or save the file
      - a. click Open
    - 2. a subsequent window will pop up displaying a customized player for stethoscopy
      - a. the window will populate with the information entered when the recording was added to the case
      - b. playback will begin automatically
  - H. Click on the red X in the corner of the player window to close it.
  - I. Add any comments or other items to the case, and reply or forward as desired.
- V. Using the Stethoscope on a Laptop or PC Running tConsult Cart**

**Note:** This is essentially the same as using the stethoscope on a Cart. Refer to Section III above.

**end of document**