

# Sensormedics Vmax with ECG Cycle Interface

You can setup the Cycle with the Sensormedics Vmax using the following directions. The Vmax can be configured to work with the following models of ECG

- Cardiosoft
- MAX-1
- CASE 8000

Choose the model of ECG that your Vmax system has and follow the directions below.

With regards to the hardware, all of the systems will specify an RS-232 cable. You will need the RS-232 cable to establish communication between the Cycle and the Vmax. This cable allows your stress system to prompt the Cycle when it needs a BP measurement. In addition, it allows the BP measurements taken by the Cycle to be transferred to the Vmax display and reports.

Note that all part #'s specified are Sensormedics part #'s.

## Vmax with CardioSoft and Cycle (Sensormedics P/N 772536-10X)

The Vmax with CardioSoft solution includes the following:

- Cycle
- Serial Cable, Cycle to PC: P/N 464695

### 1. Connect the following using the specified cables:

- Parallel cable from Corina to PC Boca (standard connection to Vmax)
- Serial cable from Cycle RS232 port to PC (Com1 or Com 2): P/N 464695

### 2. Setting up the Cycle monitor

- a. From the measurement view, press and hold the **SELECT** and **ADVANCE** buttons simultaneously for 3 seconds. The System Menu will be displayed.
- b. Press the **MENU** button once to proceed to the Communication Screen. Press **ADVANCE** until *Cardiosys* is displayed.
- c. Press **MENU** twice to return to the measurement view.

### 3. Setting up the CardioSoft

- a. Click on the “running man” or “stress test” icon. This will present the **Retrieve Patient** screen.
- b. Select any patient and press **OK**. At the **Test Demographics** screen press **Cancel**.
- c. Select **Defaults** and proceed to **Page 2**.
- d. Select the **BP Monitor** as **BP METER 1**
- e. For **Port**, choose the COM port you have connected the cable to, generally **COM 2**.
- f. In protocol section, specify desired blood pressure interval. Remember that the BP measurement will be initiated one minute prior to the designated time.

### 4. Setting up the Vmax

- a. In the Vmax protocol settings, set ECG to **CardioSoft** and Analog Out to **Group 3**.

## Vmax with MAX-1 and Cycle (Sensormedics P/N 772537-10X)

The Vmax with MAX-1 solution includes the following:

- Cycle
- Serial Cable, Cycle to MAX-1: P/N 465410

### 1. Connect the following using the specified cables:

- Serial cable from MAX-1 Com2 port (CRT) to Computer Com 1 (standard connection to Vmax, P/N 463087).
- Serial Cable, from the Cycle RS232 port to COM1 port on CRT of MAX-1, P/N 465410

### 2. Setting up the Cycle monitor

- a. From the measurement view, press and hold the **SELECT** and **ADVANCE** buttons simultaneously for 3 seconds. The System Menu will be displayed.
- b. Press the **MENU** button once to proceed to the Communication Screen. Press **ADVANCE** until *Max-1* is displayed.
- c. Press **MENU** twice to return to the measurement view.

### 3. Setting up the MAX-1 (Note: requires software version 1D or greater OR 2E)

- a. At the Start Up screen, rotate the trim knob until the cursor is over the **MAIN MENU** and then press on the knob to bring up the Main Menu.
- b. Turn the trim knob to **SYSTEM SETUP**, and press it to select System Setup
- c. Use the trim knob to select **INPUTS/OUTPUTS**.
- d. Ensure that **Slow Analog Out** is set to **Not Used** and that **Fast Analog Out** is set to **II**. If not, use the trim knob to set them correctly.
- e. Use the trim knob to select **TTL OUTPUT** and set it to **QRS DETECT**.
- f. Turn the knob to **WIDTH** and press it to select it. Now turn the knob until **40 msec** is displayed. If you cannot select 40 ms, simply type 40, then press the knob.
- g. Turn the knob to **DELAY**, press it, and set the delay to **0 ms**. Press the knob again to set it.
- h. Go to **BP Device** and press the trim knob. Select **Suntech** and press the trim knob. If Suntech is not available, choose **MEI 1950**.
- i. Press the Escape Key (ESC) to leave this screen. The ESC key is located in the bottom left hand corner of the keyboard. Note: Do not use the return to exit this screen.
- j. Choose **SAVE SETUP**, then choose **SYSTEM**.
- k. Immediately go back and verify that your settings are still saved. If they are not saved, you will have to reset them and then exit this screen via the ESC key.
- l. Return to the Main Menu.

### 4. Setting up the Vmax

- a. In the Vmax protocol settings, set **ECG** to **Serial 1-Marquette**.

## Vmax with Case 8000/CASE and Cycle (Sensormedics P/N 773720-10X)

The Vmax with Case 8000/CASE solution includes the following:

- Cycle
- Serial cable, Cycle to Case 8000 - P/N 464695
- Serial cable from Case 8000 Com1 or 2, to Vmax (Same cable as used in Cycle/CardioSoft configuration, P/N 464695)

### 1. Connect the following using the specified cables:

- P/N 464695, Serial cable from Case 8000 Com 2 to Vmax Computer Com 1.
- P/N 464695, Serial Cable, Case 8000 COM 1 to Cycle RS232

### 2. Setting up the Cycle monitor

- a. From the measurement view, press and hold the **SELECT** and **ADVANCE** buttons simultaneously for 3 seconds. The System Menu will be displayed.
- b. Press the **MENU** button once to proceed to the Communication Screen. Press **ADVANCE** until your stress system (*Case (GE) or Case 8000*) is displayed.
- c. Press **MENU** twice to return to the measurement view.

### 3. Setting up the Case 8000

- a. In the vertical menu bar on the right side, select **System Configuration**.
- b. In the System Configuration screen, click on the **Devices** tab on the top.
- c. Check that the **Treadmill** is set to **Series 2000** and that its **Port** is set to **COM A**.
- d. Go to **BP Monitor** and select **SunTech**, and for its **Port**, choose COM port 1.
- e. Ensure that there is a check mark by **Send Exercise Data**, the remaining **Port** setting is set to **COM 2**, and that **Analog 1** is set to **V5 1V/mv**.
- f. Ensure that the **TTL Output** is set to a **Pulse Width: 50ms**, **Delay: 0ms**, and **Polarity: Positive**.
- g. Click **OK** to return to the main screen.

### 4. Setting up the Vmax:

- a. In the Vmax protocol settings, set **ECG** to **Serial 1-Marquette**.