

Marquette Case 12, Case 15, Case 16, and Centra Stress Systems Tango+ Interface Notes

To setup *Tango+* with your stress system, simply follow the directions below.

1. Verify Correct RS-232 and ECG Trigger Cables

- **RS-232 Cable** – used to communicate with your stress system. This cable enables the stress system to prompt *Tango+* when it needs a BP measurement, and allows the *Tango+* BP reading to be transferred to the stress system’s display and reports.
 - **Case 12, Case, 15, Case 16, and older Centra Systems**
 - SunTech Part Number = 91-0012-00
 - Connection Ends:

Stress System Connection
25 pin male

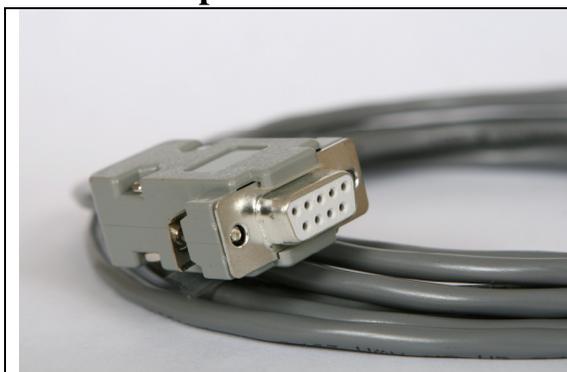


Tango+ Connection
9 pin female

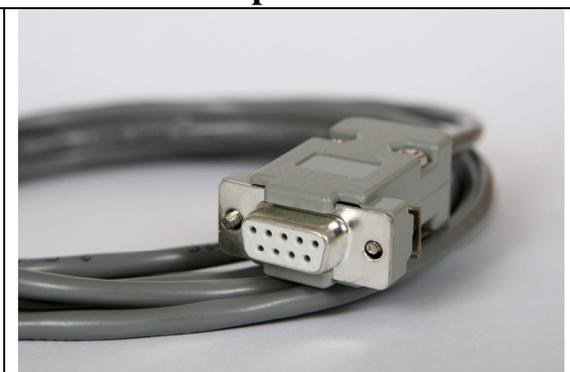


- **Newer Centra Systems**
 - SunTech Part Number = 91-0013-00
 - Connection Ends:

Stress System Connection
9 pin female



Tango+ Connection
9 pin female



- **ECG Trigger Cable** – provides the ECG signal from the stress system to the *Tango+*.
 - SunTech Part Number = 91-0011-00
 - Connection Ends:

Stress System Connection
BNC male

Tango+ Connection
BNC male



Tango+ Monitor

RS-232 Connection
Part # 91-0012-00
or 91-0013-00

ECG Trigger Connection
Part # 91-0011-00



2. Connect the RS-232 Cable

For Case 12, Case, 15, Case 16, and older Centra Systems

From: the RS-232 connection on the rear panel of the *Tango+*.

To: the 25 pin AX-2 RS-232 port on the back of the stress system.

For newer Centra Systems

From: the RS-232 connection on the rear panel of the *Tango+*.

To: the 9 pin AUX/RS-232 port on the back of the stress system.

3. Connect the ECG Trigger Cable

From: the BNC External ECG connection on the rear panel of the *Tango+*.

To: the Pulse 1 connection on the back of the stress system.

*Note – If Pulse 2 is open, follow the instructions in **Step 4** below for replacing Pulse 1 with Pulse 2. Alternatively, you may use a BNC splitter.

4. *Tango+* Monitor Setup

- a. When the operating screen is displayed, press the **SELECT** button 2 times. This will bring up the **MAIN MENU** screen.
- b. Using the UP or DOWN arrows, highlight **MONITOR SET UP** and press the **SELECT** button.
- c. Using the UP or DOWN arrows, highlight **STRESS SYSTEM** and press the **SELECT** button.
- d. Using the UP or DOWN arrows, scroll through the list until **Case 12, Case 15, Case 16, or Centra** is highlighted and press the **SELECT** button to confirm the choice.
- e. Using the UP or DOWN arrows, select **EXIT** twice to return to the operating screen.

5. Stress System Setup

- a. Turn on the Centra, and the main menu is displayed.
- b. Using the trim knob, choose **EXERCISE**.
- c. At the Exercise screen, choose **EXERCISE TEST**.
- d. At the Pre Test screen, select **MORE**.
- e. Select **LOAD**.
- f. Select **TASK** and this will display the TASK FILES screen.
- g. Select **DESIGN**, wait a few seconds, and the DESIGN MENU will be displayed.
- h. Select **DESIGN SET-UP PARAMETERS** and the SET UP SCREEN will be displayed.
- i. Select **LOAD**.
- j. Select **TREADMILL 60 HZ**.
- k. Select **EDIT**, turn the trim knob to CONTINUE, and press the knob.
- l. Turn the trim knob to CONTINUE and press the knob again. Repeat this three more times and you will be at the OUTPUTS screen.
- m. Turn the trim knob to **PULSE 1** and set to **QRS**; set the **WIDTH** to **50 msec**; set **BD DEV** to **MEI 1950**.
- n. Turn the trim knob to **CONTINUE** and press the knob.
- o. Turn the trim knob to **CONTINUE** and press the knob again.
- p. Select **SAVE** and select **DISK** (not DISKETTE).
- q. The message, “FILE NAME IN USE” is displayed. Turn the trim knob to **REPLACE** and press the knob. You should now be back at the SET UP screen.
- r. Select **RETURN**.
- s. Select **SYSTEM INITIALIZATION** and press the trim knob. The message, “Name of the set up file to be used when stress program is started:” is displayed.
- t. Press the trim knob to **SELECT SET UP FILE NAME**.
- u. Select **TREADMILL 60 MHZ** and press the trim knob.
- v. The cursor will be at DEVICE TO INITIALIZE:DISK. Press the trim knob to select **DISK** and press the knob. Go to **OK?** And press the knob. Go to **YES** and press the knob again.
- w. At CONTINUE, press the knob. The system will save the set up and return to the DESIGN MENU.
- x. Select **RETURN**. After a few seconds, you will be back at the main test screen.

To Check That All Was Saved:

- y. Press the trim knob and select **WRITER**.
- z. Select **PRINT**.

aa. Select **SET-UP**. The unit will now print out the system configuration. Review outputs to make sure the parameters are set as follows:

- Pulse 1 = QRS, 50 msec
- BP DEV = MEI 1950

Marquette Technical Support = 1.800.558.5120