

# **Advent Medical Products TR102 Testing Software Guide**

## **1/19/2011**

### **Rev.C**

*Note: These directions assume the use of Windows XP.*

#### **I.     Installing the Driver**

1. Plug the TR102 Dongle into a USB
2. Windows should recognize the new hardware, if it does not, go to Start -> Control Panel -> Add New Hardware
3. In the “Found New Hardware Wizard” dialog box check the “Install from a list or specific location” radio button and click the “Next” button.
4. Select the “Search for the best driver in these locations” radio button and the “Include this location in the search” checkbox.
5. Click the “Browse” button and navigate to the folder where you placed “AMP\_TR102\_driver.inf” and click “OK”.
6. Click the “Next” button and Windows should install the driver.

#### **II.    Connecting to the Device**

1. Locate the COM Port which the TR102 Dongle is attached to by going to Start -> Run and typing “devmgmt.msc” into the textbox and clicking the “OK” button
2. Expand the “Ports (COM & LPT)” list by clicking on the “+”.
3. Locate the item named “Advent Medical Products TR102” and note the COM number (i.e. COM3) to the right of the name
4. Open windows Hyper Terminal by click on Start -> Programs -> Accessories -> Communications -> HyperTerminal
5. Enter a name for the connection by typing in the Name textbox and clicking “OK”
6. Select the COM Port you made note of in step 3 from the drop down list labeled “Connect using” then click the “OK” button.
7. Make sure the following settings are selected from the drop down boxes before clicking “OK”:  
    Bits per second: 115200  
    Data bits: 8  
    Parity: None  
    Stop bits: 1  
    Flow control: Hardware
8. If the connection was successful the status bar in the lower left hand corner of the Hyper Terminal window should show “Connected”.

### III. Issuing Commands

To enter a command simply type the character as listed in the tables below into the Hyper Terminal window, if done and connected properly a response should be shown in the window.

**Note:** all commands are case sensitive

#### Channel Commands

Issuing these commands will change the operational channel of the device

Character	Channel
a	2.425 GHz (default on startup)
b	2.450 GHz
c	2.475 GHz
d	2.480 GHz

#### Operation Type Commands

Issuing these commands will change the operational type of the device

Character	Operation Type
e	Packet RX – When a second device is configured using Packet TX, data typed into the hyper terminal window will be displayed in the hyper terminal of a device configured with this command.* (default on startup)
f	Packet TX - Data typed into the hyper terminal window connected to this device will be shown in the hyper terminal window of a device configured with Packet RX*
g	Continuous TX – Continuously transmits a modulated signal
h	Continuous RX – Continuously receives a modulated signal

\*The only exception is that typing an x will change between Run Mode and Control Mode.

#### Device Mode Switch

Character	Operation Type
x	Swap Modes – When in “Control Mode” (default on startup) issuing this command will go to “Run Mode” using the Operation Type and Channel specified. When in “Run Mode”, issuing this command will stop all operation and allow changes to Operation Type and Channel.

#### Example

In this example two devices are setup to talk to one another through the hyper terminal:

Device 1 (Receive)		Device 2 (Transmit)	
Command		Command	
a	Set channel to 2.425 GHz	a	Set channel to 2.425 GHz
e	Set to Packet RX	f	Set to Packet TX
x	Enter Run Mode	x	Enter Run Mode

Now any text entered on device 2 (except for ‘x’, which will exit run mode) will appear on the screen of device 1.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.