Appendix E

Configuration Programming

This section describes how to set the user programmable configuration settings. The correct program settings are required to match the communications hook up for proper operation.

Note: Configuration Programming is applicable only for units with firmware version 0.82 and later.

E.1 Program Mode

D To Enter Program Mode:

- Make sure the unit is <u>NOT</u> connected to the monitor/defibrillator.
- Remove the battery compartment cover.
- Disconnect and remove the 9V battery (carefully).
- Locate the two dip switches visible in one corner of the battery compartment.



• Using a ball point pen or similar tool, slide DIP switch 2 to the "Off" position (towards the inside of the Rosetta-Lt).



- Reconnect and install the 9V battery (be careful not to stretch or pinch the wires).
- Reinstall the battery compartment cover.

Determine Firmware Version

- Press the *Start/Stop* button to turn the unit on in Program Mode.
- If the *Power* LED:
 - blinks red and then amber, you have firmware version 0.88 or later.
 Refer to Section E.2 for an overview of how Program Mode operates for these software versions.
 - blinks red and then red again, you have firmware version 0.82 0.86. Refer to Section E.3 for an overview of how Program Mode operates for these software versions.
 - turns solid red, you have firmware version 0.73 or prior and Configuration Programming is not applicable to your unit. Slide DIP switch 2 back to its original setting and refer to Appendix C Output Device Information, Section C.4 for information on adjusting the output level setting.

D To Exit Program Mode:

- Ensure that you have configured all settings appropriately.
- Remove the battery compartment cover.
- Disconnect and remove the 9V battery (carefully).
- Locate the two dip switches visible in one corner of the battery compartment.
- Using a ball point pen or similar tool, slide DIP switch 2 to the "On" position (towards the outside of the Rosetta-Lt)
- Reconnect and install the 9V battery (be careful not to stretch or pinch the wires).
- Reinstall the battery compartment cover.

E.2 Program Mode Operation (Versions 0.88 and later)

Overview

- The current "Program" number is indicated by the *Power* LED blinking amber.
 - o The number of amber blinks indicates the Program Number

Note: If the *Power* LED blinks red, refer to Section E.3 below.

- The current "Program Setting" number is indicated by the Tx/Rx LED blinking green.
 - The number of green blinks indicates the Program Setting
- While traversing through the Program and Setting numbers, the Setting will wrap-around to the beginning after reaching the end.

Example: LED's - *Power* = 2 amber blinks, Tx/Rx = 3 green blinks

Means - Program 2, Setting 3 (Output Level set for MED-HIGH)

- Upon entering Program Mode, the current program will be Program 1 User Program Version.
- A tone will be heard while the *Start/Stop* button is pressed.

D Program Mode Operation

- To select a Program, **Tap** the *Start/Stop* button until the desired "Program" number is indicated by the *Power* LED.
- To change the Setting for the currently selected program, **Press and Hold** the *Start/Stop* button for 3 seconds to increment to the "Setting" number indicated by the Tx/Rx LED, then release the button. Repeat as necessary until the desired setting is obtained.
- Refer to Section **E.4** for a listing of Programs.
- Configuration Settings can also be changed using a PC. Refer to Section **E.6** for more information.

E.3 Program Mode Operation (Versions 0.82 – 0.86)

Overview

- The current "Program" number is indicated by the *Power* LED blinking red.
 - The number of red blinks indicates the Program Number

Note: If the *Power* LED blinks amber, refer to Section **E.2** above.

- The current "Program Setting" number is indicated by the Tx/Rx LED blinking green.
 - \circ $\,$ The number of $\,$ green blinks indicates the Program Setting $\,$
- While traversing through the Program and Setting numbers, the Setting will wrap-around to the beginning after reaching the end.

Example: LED's - *Power* = 2 red blinks, Tx/Rx = 3 green blinks

Means - Program 2, Setting 3 (Output Level set for MED-HIGH)

- Upon entering Program Mode, the current program will be Program 1 User Program Version.
- A tone will be heard while the *Start/Stop* button is pressed.

D Program Mode Operation

- To select a Program, **Press and Hold** the *Start/Stop* button until the desired "Program" number is indicated by the *Power* LED, then release the button.
- To change the Setting for the currently selected program, **Tap** the *Start/Stop* button to increment to the "Setting" number indicated by the Tx/Rx LED. Repeat as necessary until the desired setting is obtained.
- Refer to Section **E.4** for a listing of Programs.

E.4 Configuration Setting Programs

Program 1: Firmware Version *...... Power* LED blinks 1 time

Program 1 will output the current firmware version number. The version consists of one digit Major number and two Minor numbers in the format of **X.YZ.**

Note: Program 1 is for information purposes only and cannot be changed.

The unit beeps a low digit tone and then outputs \mathbf{X}

The unit beeps a high digit tone and then outputs Y

The unit beeps a low digit tone and then outputs \mathbf{Z}

Setting (Tx/Rx LED blinks Setting #)

- 0 Version number is zero
- 1-9 Version number is 1-9, respectively

Program 2: Output Signal Level *Power* LED blinks 2 times

The Output Signal Level setting specifies the Output Level of the Rosetta-Lt as described in Appendix C.

Setting (Tx/Rx LED blinks setting #)

- 1 LOW (used only is rare instances)
- 2 MED (factory default, recommended for most systems)
- 3 MED-HIGH (use if MED is too low)
- 4 HIGH (used only is rare instances)

Program 3: Transmission Mode.....*Power* LED blinks 3 times

The Transmission Mode setting sets the Rosetta-Lt Transmission Mode. This should be left as default (0x) unless instructed otherwise by General Devices technical support, as this setting must match the receiving equipments capabilities.

Setting (Tx/Rx LED blinks setting #)

- 1 Mode 0x (DTMF lead ID) (factory default, recommended if DTMFs pass)
- 2 Mode 1x (FM lead ID use if DTMFs do not pass reliably)
- 3 Mode 2x (Special FSK not compatible with all Rosetta-Rx/CAREpoint receiving equipment)

Program 4: Auto Transmission *......Power* LED blinks 4 times

The Auto Transmission setting configures the Rosetta-Lt to begin transmitting; after a manual button press (recommended setting) or automatically once a 12 Lead has been stored.

<u>Setting (*Tx/Rx* LED blinks setting #)</u>

- 1 Off (factory default, recommended)
- 2 On (only to used when the unit is always connected to the radio)

Program 5: Serial Baud Rate.....*Power* LED blinks 5 times

The Serial Baud-Rate configures the baud rate speed of the Rosetta-Lt. This setting must match the baud-rate of the Monitor/Defib or PC.

Setting (*Tx/Rx* LED blinks setting #)

- 1 38400 bps (factory default, recommended)
- 2 115200 bps

Program 6: Preamble Signal Time.....*Power* LED blinks 6 times

The Preamble Signal Time setting specifies the length of the tone that the Rosetta-Lt sends out in order to wake up the receiver.

Setting (Tx/Rx LED blinks Setting #)

- 1 OFF
- 2 1 second
- 3 2 seconds (factory default, recommended)
- 4 3 seconds

Program 7: Auto Power-Off *...... Power* LED blinks 7 times

The Auto Power-Off setting specifies the number of seconds that will elapse before the Rosetta-Lt will turn off (to extend battery life). This is only applicable when operating on 9V battery power.

Setting (*Tx/Rx* LED blinks setting #)

- 1 20 seconds (factory default, recommended)
- 2 60 seconds
- 3 120 seconds

Program 8: TX Un-Key Off-Time.....*Power* LED blinks 8 times

The TX Un-Key Off-Time setting sets the number seconds the Rosetta releases it's PTT closure to un-key the radio momentarily during transmission (occurs just after 12L waveforms @ 45 sec). This setting is desirable as a "work-around" for use with radios that have a 1 minute talk-out-timer set.

Setting (*Tx/Rx* LED blinks setting #)

- 1 OFF
- 2 1 second
- 3 2 seconds (factory default, recommended)
- 4 3 seconds

Note: The following programs vary with firmware version. Refer to Program 1 to determine the version of your unit.

For Firmware Versions 0.82-0.85:

Program 9: Clone Mode*Power* LED blinks 9 times

The Clone Mode setting will put the Rosetta-Lt into Clone Mode. For more information of Clone Mode, refer to section E.5

Setting (Tx/	Rx LED color indicates setting)
RED	Master (or Slave Unit when initially connected to master)
AMBER	Cloning
GREEN	Slave Unit Cloned

For Firmware Versions 0.86 and later:

Program 9: Text Data Mode*Power* LED blinks 9 times

The Text Data Mode setting selects what interpretation/text data is sent after the ECG waveforms

Setting (Tx/Rx LED blinks setting #)

- 1 No Text Data (fastest transmission, use if text data is not received reliably)
- 2 Age/Sex Data only (sends only age & sex data)
- 3 All Text Data sent (factory default, recommended if received reliably)

Program 10: Clone Mode*Power* LED blinks 10 times

The Clone Mode setting will put the Rosetta-Lt into Clone Mode. For more information of Clone Mode, refer to Section **E.5**

Setting (*Tx/Rx* LED color indicates setting)

RED	Master (or Slave Unit when initially connected to master)
AMBER	Cloning
GREEN	Slave Unit Cloned

E.5 Clone Mode

Clone Mode allows the user to configure one Rosetta-Lt device, and then quickly transfer these settings to other units. This process requires a special Cloning Cable (034-183-019A) that can be obtained from General Devices.

Notes: The Rosetta units used in cloning must be of the same firmware version. Contact General Devices for information on updating Rosetta firmware in the field. The "MASTER" unit will be on for several minutes when in Clone mode. Battery life may be reduced if several units are to be cloned. Start with a new battery and replace as necessary.

D To Use Clone Mode:

- The unit that has the desired settings is referred to as the "MASTER".
- The unit that you would like to add these settings to is referred to as the "SLAVE".
- Both units must be in "Program Mode" according to the settings in Section **E.1**.
- Put the "MASTER" into Clone Mode as specified by the Configuration Setting Programs above. The *Power* LED will be blinking amber and the *Tx/Rx* LED will be solid red. (*Power* LED will be blinking red for versions 0.82 – 0.86)
- Connect the "MASTER" to the "SLAVE" using the Clone Cable (034-183-019A)
- The "SLAVE" will wake up and have a solid Red *Power* LED.
- Soon, both the "MASTER" and "SLAVE" will have a solid Amber *Tx/Rx* LED. This indicates that the cloning process is taking place. This is a very short process and usually only takes a few seconds.
- Finally, both the "MASTER" and "SLAVE" will have a blinking amber *Power* LED, and a solid Green Tx/Rx LED. (*Power* LED will be blinking red for versions 0.82 0.86)
- Disconnect the Clone Cable from the "MASTER" and the "SLAVE"
- The "SLAVE" unit can be taken out of "Program Mode" according to the settings in Section E.1. It may now be used for normal operations.
- The "MASTER" may be used to repeat this process as necessary to clone additional units. When done, it can be taken out of "Program Mode" according to the settings in Section **E.1** and can be used for normal operations.

E.6 Changing Configuration Settings Using a PC (Firmware versions 0.88 and later only)

Configuration Settings can be changed from a PC using EZ-Set for Rosetta-Lt Software. Refer to the "Changing Configurations Settings Using EZ-Set" Quick Guide located in the Support Center section of <u>www.general-devices.com</u>.