

## 4000 TROUBLESHOOTING

### Device Pairing

Use the following procedure to pair the display unit with a desired wrist-worn patient module.

**NOTE: To ensure proper pairing, disconnect and then reconnect the sensor from the patient module before beginning.**

**NOTE: The Avant 4000 display unit must be OFF before pairing devices.**

1. Press and hold the Bluetooth Control button while turning on the display unit to begin the device pairing process. Notice that amber dashes flash in the SpO<sub>2</sub> and Pulse Rate display areas as the system searches for patient modules available for pairing. (If a patient module is available, its identification number will appear on the display unit screen within 10 seconds.)
2. When available patient module(s) are detected, a maximum of five “pairable” patient modules will be displayed separately, with the device identification number appearing in the SpO<sub>2</sub> and Pulse Rate display areas. (A unique device identification number is included on the sides of each patient module.)
3. If multiple patient modules are available for pairing, use the Plus or Minus buttons to scroll through the available modules. (While five devices may be available, only one may be selected for pairing.)
4. When the identification number of the patient module you wish to pair with is shown and flashing, press the Bluetooth Control button, the display should stop flashing, then press the Bluetooth Control button again to complete the pairing process. Normal operation resumes automatically when the pairing process is complete.
5. To confirm that the pairing process was successful, ensure that the Connection Status LED is lit green.

**NOTE: After the display unit is paired to a patient module, it will remain paired until the above process is repeated.**

### User-Defined Default Setting

To use this function, first turn the unit on then set (DIP switch 8 in the UP position), all alarm limit settings must be adjusted. When this setting is first activated, valid limit settings must be entered for SpO<sub>2</sub> and pulse rate alarm limits; the system will not return to normal operating mode until all limits have been set. Once set, the adjusted values are used as defaults until the system is turned on with DIP switch 8 in the DOWN position, at which time the device restarts in Factory Default setting.

**NOTE: In order to initiate User-Defined Defaults, the unit must be turned on with DIP switch 8 in the UP position.**

**NOTE: Once User-Defined Default Settings are entered, any alarm and volume adjustments made while operating the device will be lost**

**DIP SWITCHES:** The Avant 4000 display unit contains eight DIP switches that are located behind the back cover of the unit. The UP position is toward the top of the unit, and the DOWN position is toward the bottom of the unit. *The factory setting for all DIP switches*

*is the DOWN position.*

**Switch Function**

**Switch 1** *Reserved for Future Use*

**Switch 2** *Alarm Disable Lock*

**Up**—Alarm volume may be disabled

**Down**—Alarm volume cannot be disabled

**Switch 3** *Date Format*

**Up**—International Date format (Day-Month-Year)

**Down**—U.S.A. Date format (Month-Day-Year)

**Switch 4** *Data Output*

**Up**—Real-time (once per second) data output

**Down**—Print on demand

**Switch 5** *Normal / Fast Responding SpO2 Output*

**Up**—Fast responding SpO2 serial output

**Down**—Normal SpO2 serial output

**Switch 6** *Normal / Slow SpO2 and Pulse Rate Averaging*

**Up**—Slow Averaging (8 beat exponential average)

**Down**—Normal Averaging (4 beat exponential average)

**Switch 7** *Nurse Call Output*

**Up**—Continuous

**Down**—Momentary

**Switch 8** *Factory / User-Defined Defaults*

**Up**—User-Defined Defaults for Alarm Limits and Volume Settings

**Down**—Factory Defaults for Alarm Limits and Volume Settings

**Printing Options**

The Avant 4000 Digital Pulse Oximetry System features printing capabilities that allows printing on demand or in real-time. These printing options are controlled by DIP switch 4, which is found under the battery cover at the back of the unit.

- When DIP switch 4 is in the UP position, real-time (once per second) data

output is available via the RS232 connector port, using a null modem cable.

- When DIP switch 4 is in the DOWN position (*default*), the Print-on-Demand mode is activated, allowing you to print only when desired.

To print displayed data on demand, press the ON/STANDBY button.