

4

Monitoring in Communication with Acuity

About Wireless Monitoring	77
Establishing Communication with Acuity	78
Monitoring a Patient Outside of Network Range.....	79
About Acuity Message Menu	79

About Wireless Monitoring

The model 802LTRN (wireless) monitor can operate either in standalone mode or in communication with a Welch Allyn Acuity Central Station. (For information about standalone monitoring, see “[Standalone Monitoring](#)” on page 49.)

While the wireless monitor is connected to the FlexNet network, patient data gathered by the monitor is continuously stored at Acuity. At the Acuity station you can access this patient information and perform administrative functions, including the following:

- Admit, transfer, and discharge a patient in the Acuity unit.
- Edit the patient description (name, physician, and so on).
- Review and print patient data such as trends and waveforms.

For more information about Acuity and the FlexNet wireless network, refer to *Acuity Directions For Use*.



WARNING When monitoring a patient who has a pacemaker, position the monitor to maintain a minimum distance of 6 inches (16 cm) between the monitor and the pacemaker. **If you have any reason to suspect that the monitor is interfering with the pacemaker, immediately turn the monitor off and provide appropriate patient care.** The Health Industry Manufacturers Association recommends this minimum distance (6 inches or 16 cm) between a hand-held wireless radio and a pacemaker, which is consistent with the independent research by, and recommendations of, Wireless Technology Research.

WARNING When considering a treatment protocol that involves wireless communication of patient data, be aware of this limitation:

When the monitor is *not* connected to the network by wireless connection:

Acuity does not receive patient alarms or alerts from the monitor.

Acuity does not perform arrhythmia and ST analysis on patient data and therefore does not generate related alarms.



WARNING If you establish a USB link to any active host while the monitor is in network communication with Acuity, the wireless connection is lost.

Note When the monitor is used in Canada:

To provide maximum shielding (to prevent radio interference to the licensed service), the monitor is intended to be operated indoors and away from windows. Radio equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Afin de fournir un écran de blindage maximal (pour empêcher que cet appareil cause du brouillage au service faisant l'objet d'une licence), l'appareil doit être utilisé à l'intérieur et devrait être placé loin des fenêtres. Si le matériel (ou son antenne d'émission) est installé à l'extérieur, il doit faire l'objet d'une licence.

Establishing Communication with Acuity

If the monitor is enabled for communication with Acuity, communication is established automatically whenever the monitor is within range of the network. The monitor always indicates the status of the connection:

Figure 75. Connection Status Indicator

(blank) The monitor is not enabled for communication with Acuity.



The monitor is communicating via USB cable with a PC.



The monitor is associated with the network and is communicating with Acuity.



(Flashing) The monitor is associated with the network but is not communicating with Acuity.



(Continuous) The monitor is not associated with the network and is not communicating with Acuity.



Verify that the monitor, within a minute or two, displays **Y** to indicate that the connection to Acuity has been established.

Upon connecting to the network, the monitor uploads the following data to Acuity:

- Patient information and trends stored at the monitor before the network connection was established.
- Monitor settings.

At the same time, Acuity downloads some configuration settings to the monitor. (See [“About Acuity-Defined Configuration”](#) on page 113.)

For information on monitoring vital signs, see the following:


ECG/Resp [“Monitoring ECG and Resp”](#) on page 55

SpO₂ [“Monitoring SpO₂”](#) on page 64

NIBP [“Monitoring Blood Pressure \(NIBP\)”](#) on page 69

Monitoring a Patient Outside of Network Range

Monitoring continues locally when the monitored patient goes outside of the range of the network. The monitor provides local Resp, NIBP, HR/PR and SpO₂ alarms or equipment alerts. The following also happens:

- An alert occurs at Acuity with the message DROPOUT.
- An alert occurs at the monitor with the message Check Acuity/network connection.
- The monitor emits audible alert tones.
- The appropriate caregiver presses  to acknowledge the alert.

Note When the monitor is outside of network range, battery operating time is reduced.



When the monitored patient is again within network range, the monitor reconnects to the network and wireless monitoring resumes.

Note When communication with the network is re-established, trends data is uploaded to Acuity but snapshot data is not.

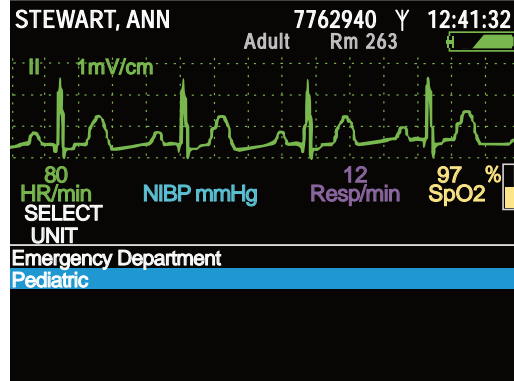
About Acuity Message Menus

When the monitor first establishes communication with Acuity and the clinician selects to start a new patient, the monitor presents a series of screens to determine the location (unit and room number) and the name and ID number of the monitored patient. If the patient is already known to Acuity, you can select the identifying information from a series of lists. If the patient is new to Acuity, you provide the information.

If the clinician is continuing to monitor the same patient, these Acuity message menus are not presented.

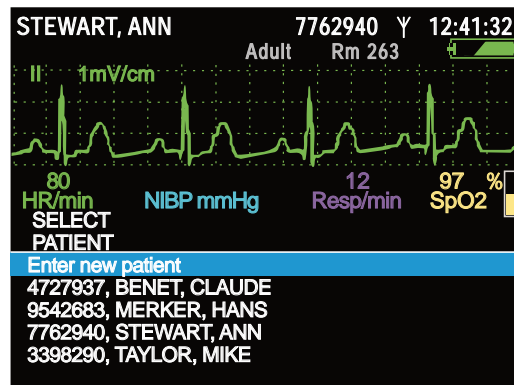
Note Some of these menus can contain lists that are too long to fit on the screen. To view or highlight list items that are not on the screen, press  or  repeatedly as needed scroll the list.

First, the monitor displays a list of units ([Figure 76](#)). Highlight the unit for this patient and press .

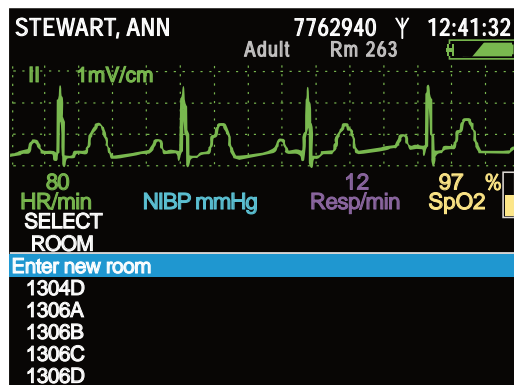
Figure 76. Acuity Unit List

The monitor then displays a list of patients (Figure 77).

- If the patient's name is already on the list, highlight the name and press \odot .
- If it is not, highlight **Enter new patient**, press \odot , and use the information entry screen (Figure 46 on page 51) to enter the patient's name and/or ID number (if either is known).

Figure 77. Acuity Patient List

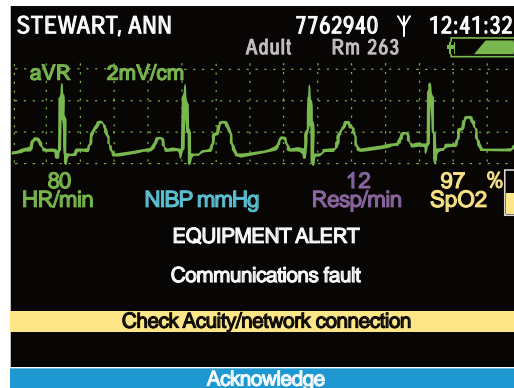
If you select the name of an existing patient, the monitor displays a list of rooms (Figure 78). Select the patient's room.

Figure 78. Acuity Room List

If Communication is Interrupted During Monitoring

If communicated monitoring has begun and communication is then interrupted, the monitor displays an alert message (Figure 79).

Figure 79. Alert Message: Communications Fault

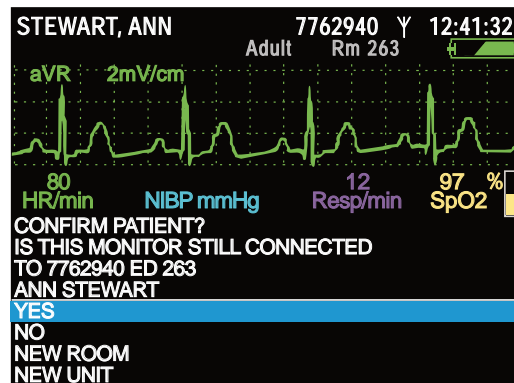


Press to clear the message.

When the monitor re-establishes communication with Acuity (after an interruption of at least 30 seconds), it prompts you to confirm that the patient being monitored is the same patient that was being monitored when communication was interrupted (Figure 80).

Note If the communication interruption lasts less than 30 seconds, or if you save, cycle power, and reestablish communication within 30 seconds, this confirmation is not required.

Figure 80. Same Patient Query



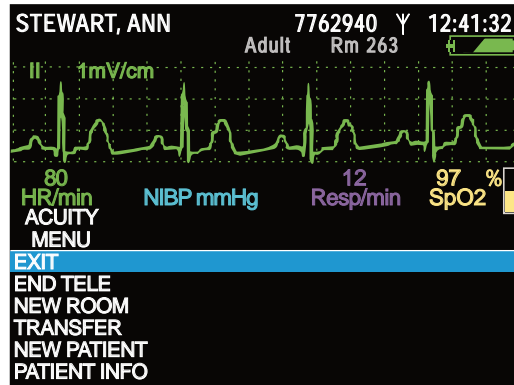
Press to confirm.

To access the Acuity Menu after connection has been established:

1. Highlight Ψ and press \odot . The Wireless Mode popup menu appears (Figure 82).

Note Depending on the level of network traffic, some interactions between the monitor and Acuity can take a few seconds to complete.

2. Highlight **Acuity Menu** and press \odot .

Figure 81. Acuity Menu

You can use the Acuity Menu (Figure 81) to end the telemetry session (END TELE), assign the patient to a new room (NEW ROOM), transfer the patient to another unit (TRANSFER), enter the name and ID of a new patient (NEW PATIENT), or update the information for the current patient (PATIENT INFO).

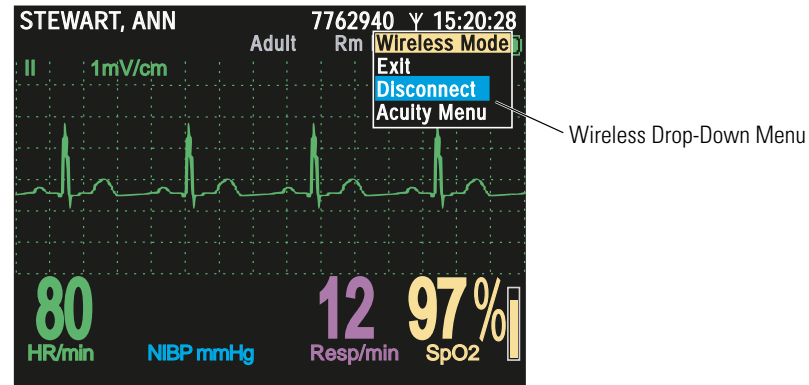
To close the Acuity Menu, highlight **EXIT** and press \odot .

To Disconnect From the Network

Note Disconnecting the monitor from the network while the monitor is outside of network range greatly extends battery life. However, connection with the network must first have been established before this is possible.

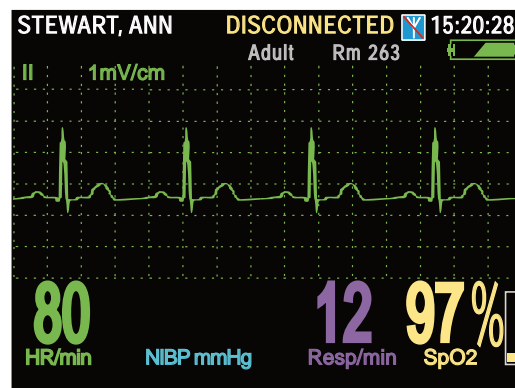
1. Highlight Ψ and press \odot .
2. Highlight **Disconnect** (Figure 82), press \odot , and confirm.

Figure 82. Wireless Mode: Disconnect



Ψ changes to Ψ and the message 'DISCONNECTED' appears (Figure 83), alternating with the patient ID number.

Figure 83. Patient Disconnected from the Network



Note If you disconnect from the network and then turn off the monitor before reconnecting, and if you then select **Continue Patient** when you again turn on the monitor, the monitor powers up in the disconnected state.

To Reconnect a Patient to the Network

1. Highlight Ψ and press \odot .
2. Highlight **Reconnect** and press \odot .

The monitor prompts you for information about the connection and the patient.

3. Provide the information requested.

