NELLCOR

Oxinet® III

Service Manual

The information in this manual applies to Oxinet III systems with the Revision E software running on a Dell PC.

To obtain information about a warranty, if any, contact Nellcor's Technical Services Department, 1.800.635.5267, or your local Nellcor representative.

Purchase of this instrument confers no express or implied license under any Nellcor Puritan Bennett patent to use the instrument with any sensor that is not manufactured or licensed by Nellcor Puritan Bennett.

Covered by one or more of the following U.S. Patents and foreign equivalents: 4,653,498; 4,802,486; 4,869,692; 4,934,372; 5,078,136; 5,351,685; 5,485,847; 5,533,507; 5,577,500; 5,803,910; 5,865,736; 6,463,310; 6,708,049; Re.35, 122; and foreign equivalents.

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Introduction

Warnings

Warnings are identified by the WARNING symbol shown above.

Warnings alert the user to potential, serious outcomes (death, injury, or adverse events) to the patient or user.

WARNING: The Oxinet® III system is not intended to be a substitute for clinical supervision. Patients on life-support equipment should be appropriately monitored by competent medical personnel and suitable monitoring devices.

WARNING: The Oxinet III system is a secondary alarm notification system. It is intended to supplement and not to replace any part of the hospital's device monitoring procedures (including procedures regarding bedside pulse oximeters and responding to beside oximeter alarms). Do not rely on the Oxinet III system as the sole source of oximeter alarms.

WARNING: It is essential that the Central Station be visually and/or audibly monitored at all times to assure prompt response to alarms. Do not rely on the pagers as the sole source of Oxinet III alarms.

WARNING: Do not ignore medical device audible alarms. Alarms indicate conditions that require immediate attention.

WARNING: Do not use medical devices, parts, accessories, or options that are not for use with the Oxinet III system.

WARNING: Users are not notified when the pager is out of range of the transmitter.

WARNING: Explosion hazard. Do not use the Oxinet III system in the presence of flammable anesthetics or gases or oxygen-enriched environments.

WARNING: The Oxinet III transmitter is not defibrillator-proof. Although it may remain attached to a monitor that is attached to a patient during defibrillation or while an electrosurgical unit is in use, its transmission may be interrupted during defibrillator use.

WARNING: Do not use an Oxinet III transmitter, pager, or Central Station that appears to be damaged.

WARNING: Do not spray, pour, or spill any liquid on the Oxinet III, its accessories, connectors, switches, or openings in the chassis since this may damage the Oxinet III system. (The transmitter, pager, or any other system component must be removed from service if they ever become submerged in liquid.) To ensure accurate performance and prevent device failure, do not subject the Oxinet III to extreme moisture, such as direct exposure to rain. Such exposure may cause inaccurate performance or device failure.

Cautions

Cautions are identified by the CAUTION symbol shown above.

Cautions alert the user to exercise care necessary for the safe and effective use of the Oxinet III system.

Caution: Federal law (U.S.A.) restricts this device to sale by or on the order of a physician.

Caution: The Oxinet III software is intended for use with the following oximeters: the Nellcor N-395, N-550, N-595, N-560, and N-600.

Caution: The displayed data is limited to that provided by the pulse oximeter.

Caution: Refer to the operator's manuals for the specific pulse oximeter for oximeter warnings and cautions.

Caution: Oxinet III software is intended to run on computers that meet the minimum requirements set forth in the Specifications chapter of this manual. No applications other than those specified should be installed or executed on the application server.

Notes

Notes are identified by the **Note** symbol shown above.

Notes contain important information that may otherwise be overlooked or missed.

Manual Overview

This manual contains information for the Oxinet III system. All users should read this manual completely. More experienced users can use this manual as a reference.

The latest versions of this service manual and the operator's manual are available online, along with other Nellcor oximetry manuals, at:

http://www.mallinckrodt.com/respiratory/resp/Serv_Supp/ProductManuals.html

Intended Use

The Oxinet III system transmits data from the N-395, N-550, N-595, N-560, or N-600 pulse oximeter to the Central Station for patient monitoring, via a wired or wireless configuration. The Central Station displays all monitored rooms, relevant pulse oximeter data, and alarms.

WARNING: The Oxinet III system is a secondary alarm notification system. It is intended to supplement and not to replace any part of the hospital's device monitoring procedures (including procedures regarding bedside pulse oximeters and responding to beside oximeter alarms). Do not rely on the Oxinet III system as the sole source of oximeter alarms.

The intended patient population is comprised of adult, pediatric, and neonatal patients. The intended environments of use are hospitals and hospital-type facilities. Hospital use typically covers such areas as general care floors, operating rooms, special procedure areas, and intensive and critical care areas within the hospital and hospital-type facilities, such as surgicenters, sub-acute centers, special nursing facilities, and sleep labs, outside of the hospital. The Oxinet III system is for use by prescription only.

Description

The Oxinet III software collects and distributes time-sensitive oximetry data via wired or local network wireless technology. Making use of the Intranet's security and connectivity standards, the Oxinet III software enables the review and surveillance of medical device settings and real-time patient data remotely, using a standard HTML compatible web browser.

The components that make up the wireless and wired systems are listed below.

Wireless Configuration:

- Pulse Oximeter (suitable for use within the patient environment)
- Transmitter (suitable for use within the patient environment)
- Access Point
- Router/Switch
- Central Station (application server)
- Oxinet III Operator's Manual
- Pager Transmitter (optional)
  - Pagers, at least two, if pager option installed

Wired Configuration:

- Pulse Oximeter (suitable for use within the patient environment)
- Communication Server
- Router/Switch
- Central Station (application server)
- Oxinet III Operator's Manual
- Pager Transmitter (optional)
  - Pagers, at least two, if pager option installed

Each of these systems is discussed in more detail in the following sections.

Wireless Configuration

In a wireless configuration (Figure 1), each Pulse Oximeter is connected to a Transmitter. Each Transmitter communicates wirelessly with an Access Point, which is connected through a Router/Switch to the Central Station (application server), where the patient's data may be monitored. The Central Station can be connected to an optional Pager Transmitter: if pagers are assigned to a patient, alarms are transmitted from the oximeter to the Central Station, then through the Pager Transmitter to the assigned pagers.

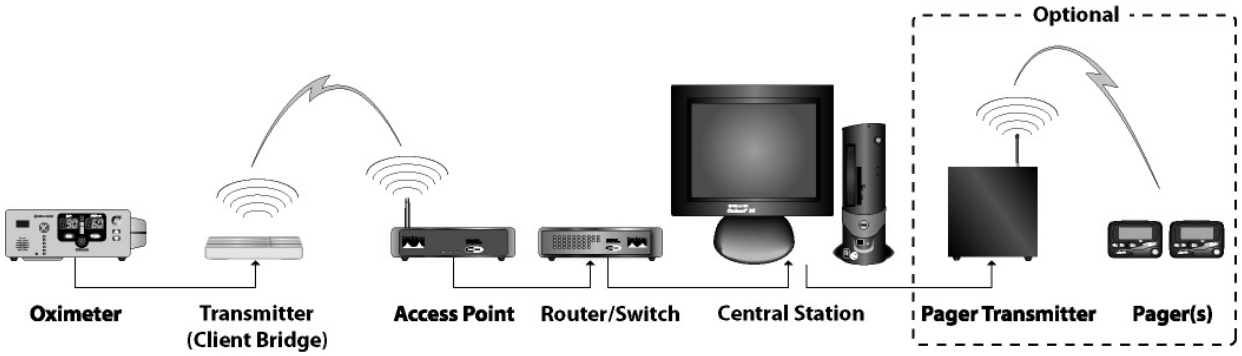


Figure 1: Wireless Configuration — with Optional Pager Transmitter

Wired Configuration

In a wired configuration (Figure 2), all pulse oximeters are connected to a Communication Server (generally, the pulse oximeters are connected to a port in the wall, which connects to the Communication Server housed in a data communications closet). The Communications Server is connected to a Router/ Switch, which is connected to the Central Station (application server), where the patient's data may be monitored. The Central Station can be connected to an optional Pager Transmitter: if pagers are assigned to a patient, alarms are transmitted from the oximeter to the Central Station, then through the Pager Transmitter to the assigned pagers.

In either configuration, the Central Station (application server) is the computer running the Oxinet III software. The software displays all monitored rooms, relevant Pulse Oximeter data, and alarms.

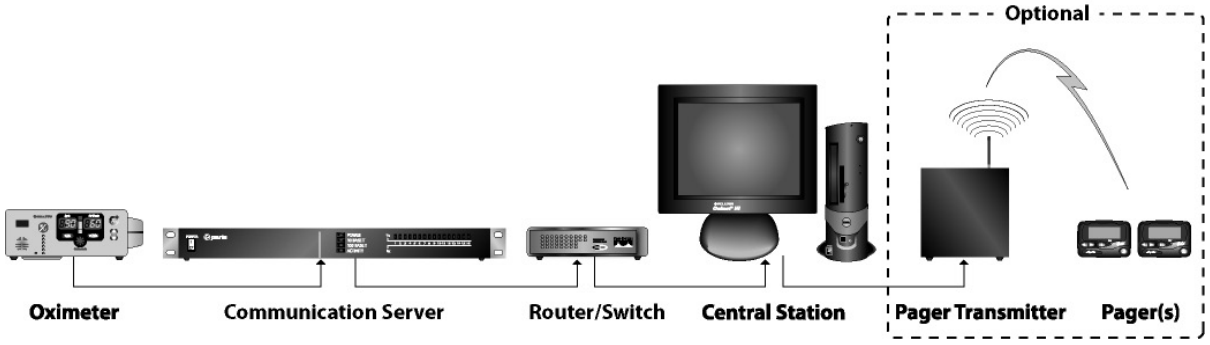


Figure 2: Wired Configuration — with Optional Pager Transmitter

Alarms

Alarms are indicated both audibly and visually at the Central Station. If the optional paging system is used, an alarm text message is transmitted to a pager, displaying the room number, patient name, alarm message, SpO_2 value, and pulse rate at the time of the alarm.

Note: The Oxinet III software performs database maintenance automatically: the software temporarily closes the program, performs database file maintenance, and relaunches the program at 10:05 am every day. This maintenance procedure normally takes less than 45 seconds to run. ***During the brief period that database maintenance is in progress, the system does not process any incoming data — including alarms.***

Reports

The Oxinet III software allows up to 72 hours of monitored data to be stored, trended, and retrieved in a variety of printable reports. Reports can be run at any time or periodic snapshots of oximetry data can be scheduled at intervals selected by the clinician.

Pagers

Use of pagers with the Oxinet III system is optional, since patients are being continuously monitored at the Central Station. If you decide to assign pagers to a patient, you should assign both a primary and a different secondary pager. The primary pager receives the alarm page within 10 seconds of the alarm. If no one responds to the alarm by either silencing the alarm at the oximeter or resolving the reason for the alarm, the system sends a notification to the secondary pager within 30 to 120 seconds of the primary page, depending on the settings for your Oxinet III system. The range of operation from pager transmitter to pager is 150 feet with no intervening structures.

WARNING: It is essential that the Central Station be visually and/or audibly monitored at all times to assure prompt response to alarms. Do not rely on the pagers as the sole source of Oxinet III alarms. The Oxinet III system is a secondary alarm notification system. It is intended to supplement and not to replace any part of the hospital's device monitoring procedures (including procedures regarding bedside pulse oximeters and responding to bedside oximeter alarms).

Component Descriptions

Table 1: Wireless Configuration

Component	Description
Pulse Oximeter	The pulse oximeter monitors and processes patient data and sends this digital data to the transmitter via the oximeter's serial data port. The following Nellcor oximeters are supported: N-395, N-550, N-595, N-560, and N-600.
Transmitter	The transmitter converts serial data from the oximeter to Ethernet data and then transmits the data to the access point.
Access Point	The access point receives the wireless data from the transmitter and forwards it to the router/switch. A number of access points can be installed together to create a Wireless Local Area Network (WLAN), which can cover a single care unit, a single floor, or multiple floors. The number of access points required to create the WLAN is determined by the size of the area to be monitored. Because every building is unique, access point placement must be determined by trained personnel before the Oxinet III installation. It is not recommended that an access point be moved after installation, since the wireless coverage area will be affected.
Router/Switch	The router/switch receives patient data from the access point via the Ethernet network connection (or through the Cat5 Patch cable) then forwards the data to the Central Station (application server).
Central Station (application server)	The Central Station (application server), which includes the computer that runs the Oxinet III software, displays all monitored rooms/beds, relevant pulse oximeter data, and alarms. Oximetry data is received from the connected router/switch and, if the optional paging feature is used, sends the alarm data to the pager transmitter for transmission to the assigned pagers.
Pager Transmitter (optional)	The pager transmitter receives the alarm data through the serial RS-232 port of the Central Station and sends a text message to the assigned pager(s) that includes: the room number, patient name, alarm message, time and date.

Table 2: Wired Configuration

Component	Description
Pusle Oximeter	The pulse oximeter monitors and processes patient data and sends this digital data to the Communication Server via hardwire connection to the oximeter's serial data port. The following Nellcor oximeters are supported: N-395, N-550, N-595, N-560, and N-600.
Communication Server	The communication server is hard-wired to each bedside location and converts digital serial data from the serial port of the pulse oximeter to Ethernet data, then forwards that Ethernet data to the Ethernet router/switch.
Router/Switch	The router/switch receives patient data from the communication server via the Ethernet network (or through the Cat5 Patch cable) and then forwards the data to the Central Station (application server).

Table 2: Wired Configuration

Component	Description
Central Station (application server)	The Central Station (application server), which includes the computer that runs the Oxinet III software, displays all monitored rooms/beds, relevant pulse oximeter data, and alarms. Oximetry data is received from the connected router/switch and, if the optional paging feature is used, sends the alarm data to the pager transmitter for transmission to the assigned pagers.
Pager Transmitter (optional)	The pager transmitter receives the alarm data through the serial RS-232 port of the Central Station and sends a text message to the assigned pager(s) that includes: the room number, patient name, alarm message, time and date.

Power and Space Requirements

Caution: Oxinet III system power cords should only be connected to properly grounded 120V AC, 60 Hz outlets.

When installing the components, leave space beyond the dimensions listed in Table 3 to accommodate cables and to provide adequate ventilation to prevent overheating.

Table 3: Component Dimensions

Component	Dimensions (height x width x depth)
Computer	13" W x 4" H x 15" D (330 mm W x 102 mm H x 381 mm D)
Display, 17-inch LCD Touchscreen	19" W x 19" H x 16" D (483 mm W x 483 mm H x 406 mm D)
Keyboard	2" W x 19" H x 7" D (51 mm W x 483 mm H x 178 mm D)
Mouse with Mouse Pad	2" W x 8" H x 7" D (51 mm W x 203 mm H x 178 mm D)
Transmitter (optional for the Wireless Configuration)	6.93" W x 1.9" H x 4.26" D (176 mm W x 48.3 mm H x 108.2 mm D)
Access Point	7.75" W x 1.25" H x 5.5" D (196.9 mm W x 31.7 mm H x 139.7 mm D)
Communication Server	16.93" W x 1.77" H x 9.01" D (430 mm W x 45 mm H x 229.9 mm D)
Router/Switch	7.32" W x 1.89" H x 6.06" D (185.9 mm W x 48 mm H x 153.9 mm D)
Pager Transmitter (optional for the Wireless Configuration)	8.5" W x 8.5" H x 2" D (215.9 mm W x 215.9 mm H x 50.8 mm D) wall mountable

Place the optional pager transmitter in a location where it is not close to large metal objects such as tall metal filing cabinets or metal desks, which tend to interfere with radio frequency signals. In addition, the pager transmitter should be placed at least 3 feet away from other electronic equipment such as computers, radios, or PA systems to minimize interference with those systems.

Note: Typical symptoms of interference include flickering screens on the Central Station or a computer monitor, or hissing/popping sounds coming from speakers. If either of these symptoms occur, increase the distance between the pager transmitter and the device experiencing the symptoms.

Installation

The Oxinet III system should only be installed by trained Nellcor personnel or authorized representatives. The installation information provided in this manual can be used to reconnect the Oxinet III system after moving it.

Wired Configuration

The following Nellcor oximeters are supported in the Oxinet III system:

- N-395
- N-550
- N-595
- N-560
- N-600

The Oximeter data output port must be configured as follows:

- communication protocol — ASCII
- baud rate — 9600

Refer to the Oximeter'service manual for details on Oximeter settings.

Connect the Oximeter to the Communication Server

1 Plug a DB15M/RJ-45 Cat5 Adapter connector into the data port of each Oximeter (patient room/bed) as shown in Figure 3.

2 Connect a AC power cord to the power input jack on the back of each Oximeter and plug the other end into AC power outlet.

3 Connect a Cat5 Patch cable from the DB15M/RJ-45 connector of each Oximeter to an available serial port on the back of the Communication Server and take note of the room sequence versus the communication serial port number (Figure 3).

Connect the Communication Server to the Router/Switch

1 Connect the Cat5 Patch cable from the 10/100 Base-T network port on the Communication Server to any available numbered RJ-45 LAN port on the Router/ Switch as shown in Figure 3 (**DO NOT use the port labeled "WAN"**).

2 Connect a AC power cord to the power input jack on the back of the Communication Server and plug the other end into one of the battery backed-up AC power outlets of the UPS.

3 Connect the DC barrel connector end of the DC Adapter Power cable to the round DC jack on the back of the Router/Switch and plug the AC end into one of the battery backed-up AC power outlets of the UPS (Uninterruptible Power Supply).

Connect the Router/Switch to the Central Station

Connect a Cat5 Patch cable from any of the numbered RJ-45 LAN ports on the back of the Router/Switch to the network port in the back of the Central Station (Figure 3).

Connect the Central Station to Pager Transmitter (Optional)

This procedure needs to be perform only if your system includes the optional Pager Transmitter.

1 Connect power cord from the power jack on the back of the Central Station to one of the battery backed-up AC power outlets of the UPS.

Caution: To avoid damaging the Pager Transmitter, connect its antenna before connecting power to the Pager Transmitter.

2 Connect the antenna for the Pager Transmitter to the BNC connector on the Pager Transmitter (Figure 3).

3 Connect the Central Station's antenna as shown in Figure 3.

4 Connect one end of the two-ended RS-232 serial cable to the **COM1** serial port of the Central Station, and connect the other end to the **RS232C Interface** serial port on the left side of the Pager Transmitter (Figure 3).

5 Connect the DC power cable into the **12V DC** power port of the Pager Transmitter and plug the AC cord into the AC power outlet (Figure 3).

6 Connect the mouse and keyboard to the Central Station (Figure 3).

Connect the Printer to the Central Station

You need to connect a printer to the Central station in order to print Oxinet III reports.

1 Connect the printer cable from the printer to the parallel port connector on the back of the PC portion of the Central Station (Figure 3).

2 If you are using a USB printer, connect the USB cable to the USB port on the back of the PC portion of the Central Station (Figure 3).

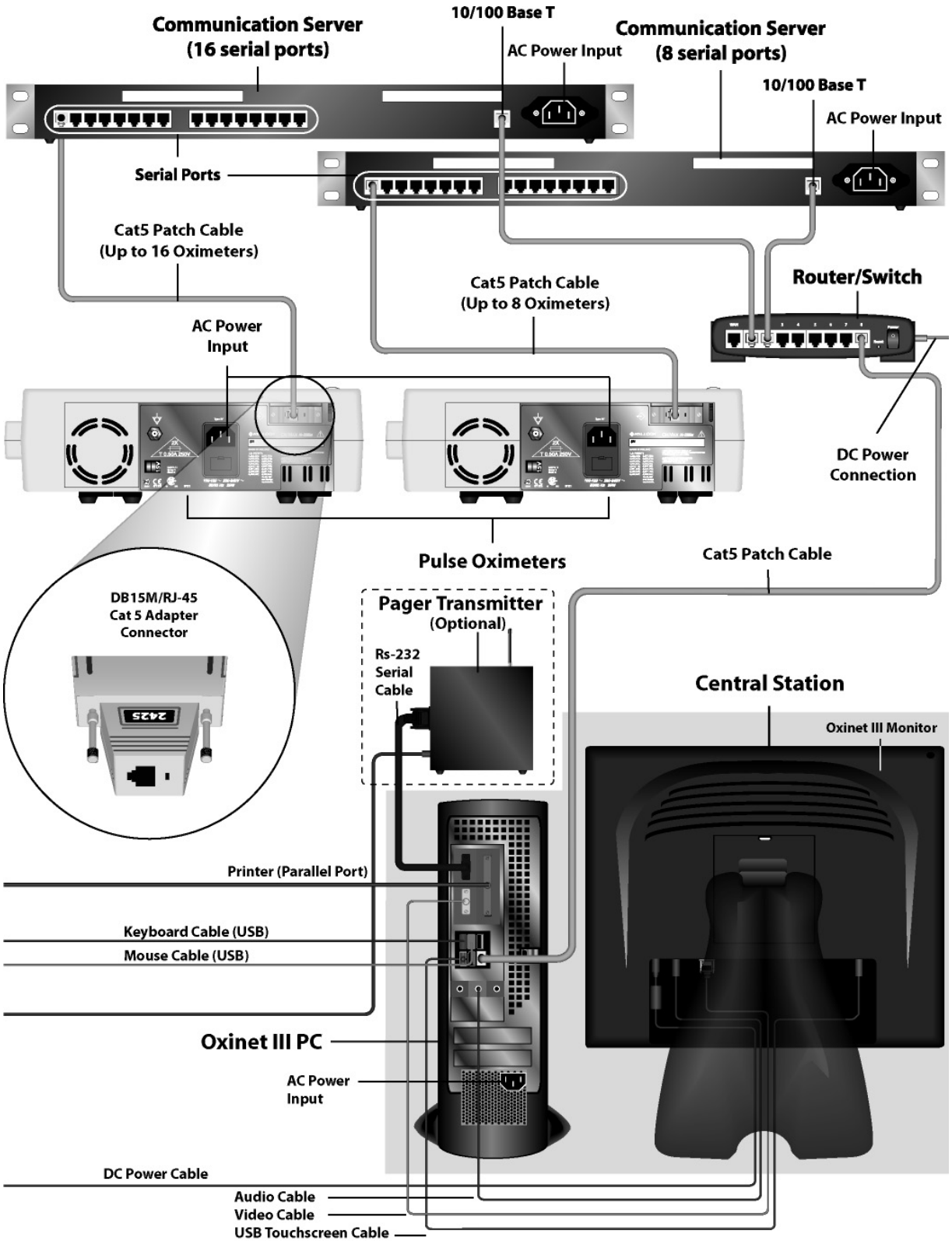


Figure 3: Wired Configuration System Connection

Wireless Configuration

Connect the Oximeter to the Transmitter

The following Nellcor oximeters are supported in the Oxinet III system:

- N-395
- N-550
- N-595
- N-560
- N-600

The oximeter data output port must be configured as follows:

- communication protocol — ASCII
- baud rate — 9600

Refer to the Oximeter'service manual for details on Oximeter settings.

1 Place the Transmitter (Client Bridge) near or on top of the Oximeter (Figure 4).

2 Connect the Oximeter to the Transmitter using the transmitter's RS-232 cable (Figure 4).

3 Connect one end of the AC Y-cord to each unit (Oximeter and Transmitter) and plug the other end into the AC outlet (Figure 4).

Connect the Access Point to the Router/Switch

1 Install a Cat5 cable from the RJ45 jack on the back of the Access Point to any of the numbered RJ-45 LAN ports on the back of the Router/Switch (Figure 4).

2 Connect the Access Point Antenna to the Primary Antenna Connector on the back of the Access Point (Figure 4).

3 Connect DC barrel connector end of the DC Adapter Power cable to the round DC jack on the back of the Router/Switch and plug the AC plug end into an AC outlet (Figure 4).

4 Connect DC power to the Access Point by performing either the *Single Access Point Power Supply Connection* procedure or the *Multiple Access Points Distributed Power Supply Connection* procedure.

a. **Single Access Point Power Supply Connection —** This option can be used if a single Access Point is to be installed in a location (such as a bookcase or tall shelf) where an AC power outlet is available.

- Plug the DC barrel connector end of the DC Adapter Power cable into the round power jack on the access point and plug the AC power cord into an AC outlet (Figure 4).

b. Multiple Access Points Distributed Power Supply Connection — This option can distribute 15V DC power to as many as six access points, concurrently. The distributed power supply is useful when multiple access points are used to cover larger areas or when there is no AC outlet near the access point (such as when an access point is installed in a ceiling plenum).

Perform the following steps to connect DC power to multiple access points:

1. Run a cable between the distributed power supply and each Access Point separately. Since a data cable also has to be run to each Access Point, a cable contractor can pull the two cables at the same time.

   The cable type required for the distributed power supply is a stranded 18 AWG, STP (shielded twisted pair) with an overall foil shield with a rating appropriate for the application (plenum rated, for example). Follow local, state, and national regulations regarding cabling. An electrician or licensed contractor should be consulted. The power cable must be terminated with a special barrel connector at the access point. The white striped connector is positive.

2. Plug the barrel connector into the round power jack on the Access Point.
3. Connect the opposite end of the power cable to terminal blocks on the power distribution panel of the distributed power supply. When terminating the ends of the power cable, observe polarity.
4. Plug the AC power cord of the distributed power supply into an AC outlet.
5. Repeat the process for each Access Point.

Note: When multiple access points are combined to cover large areas, it might be necessary to use multiple switches and multiple distributed power supplies.

Connect the Router/Switch to the Central Station

Connect a Cat5 cable from any of the numbered RJ-45 LAN ports on the back of the router/switch to the network port in the back of the PC portion of the Central Station (Figure 4).

Connect the Central Station to the Pager Transmitter

Caution: To avoid damaging the Pager Transmitter, connect its antenna before connecting power to the Pager Transmitter.

1 Connect the antenna for the Pager Transmitter to the BNC connector on the Pager Transmitter (Figure 4).

2 Connect one end of the two-ended RS-232 serial cable to the **COM1** serial port of the PC portion of the Central Station, and connect the other end to the **RS232C Interface** serial port on the left side of the Pager Transmitter (Figure 4).

3 Connect the DC power cable into the **12V DC** power port of the Pager Transmitter and plug the AC cord into the AC power outlet (Figure 4).

4 Connect the PC portion of the Central Station to an AC power outlet, connect the DC power to the Monitor Portion of the Central Station (via the DC power cable), and connect the mouse and keyboard to the Central Station (Figure 4).

Connect the Printer to the Central Station

You need to connect a printer to the Central station in order to print Oxinet III reports.

1 Connect the printer cable from the printer to the parallel port connector on the back of the PC portion of the Central Station (Figure 4).

2 If you are using a USB printer, connect the USB cable to the USB port on the back of the PC portion of the Central Station (Figure 4).

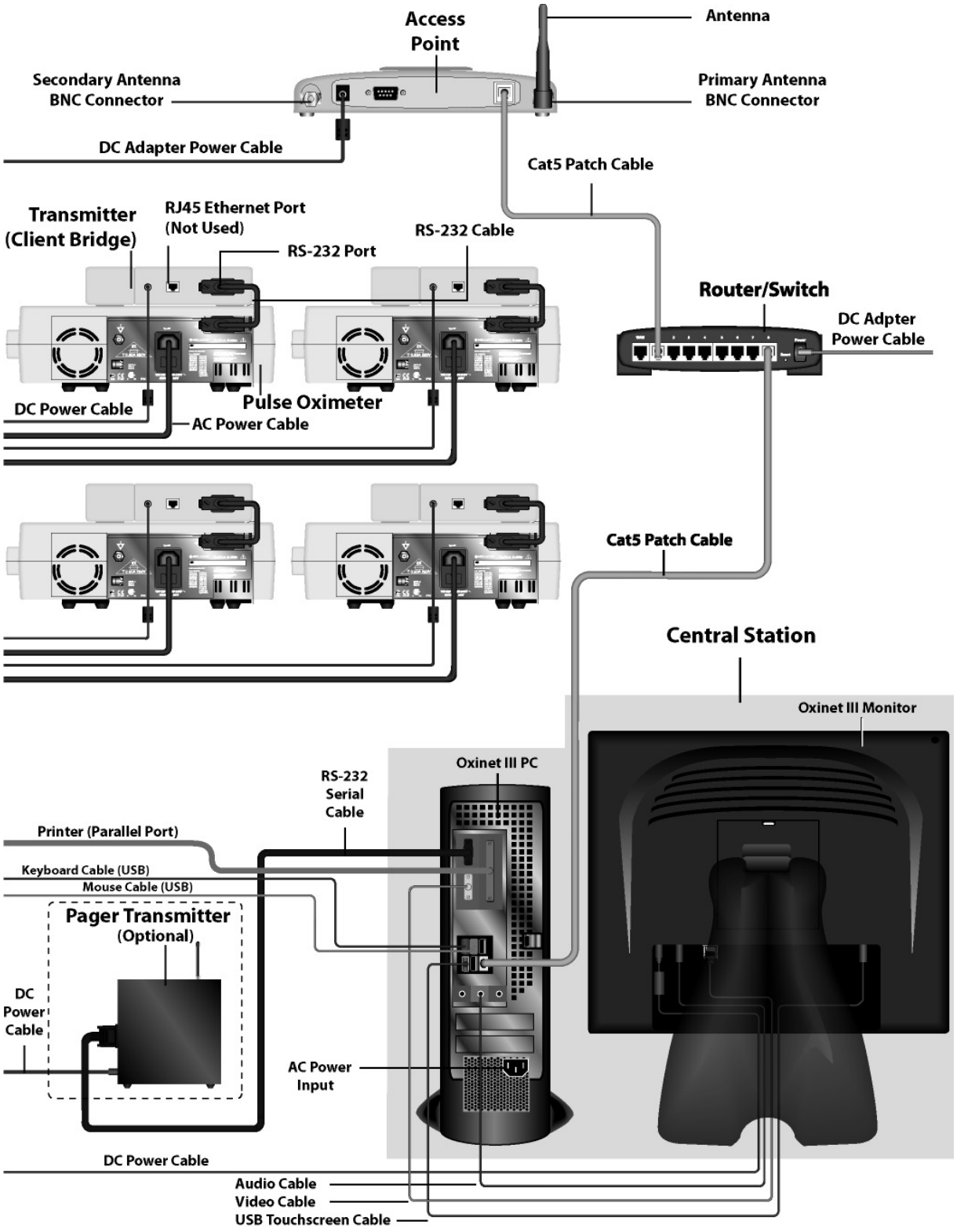


Figure 4: Wireless Configuration System Connection

Central Station

The Central Station performs various Administrative functions for the Oxinet III system.

Caution: The procedures described in this chapter must be performed by qualified service personnel.

All but one of the Administrative functions are password-protected to prevent access by unauthorized personnel. The password is provided in this chapter.

There are two ways to gain access to the Administrative functions, either via an externally connected keyboard or by using the on screen "touchscreen" keyboard.

You may also want to connect a mouse instead of using the touchscreen capability. To connect the mouse and the keyboard to the appropriate ports, see Figure 3 or Figure 4 in the Installation chapter of this manual.

Once the mouse and the keyboard are connected, use the **On/Off** button to restart the Central Station (Figure 5).

Figure 5: Central Station Keyboard Display and On/Standby Button

Funciton Keys Explained

The keyboard's function keys provide access to the Administrative functions of the Oxinet III Central Station. Table 4 lists and describes each of the function keys.

Table 4: Function Keys Explained

Key	Description
F5	Allows you to refresh screen.
F7	Allows you to align the touchscreen.
F8	Allows you to adjust the volume.
F9	Allows you to backup the current system configuration or to restore the most current backed-up version of the system configuration.
F10	Allows you to change the various alarm settings, add/delete pagers, modify the room list, and schedule snapshots.
F11	Allows you to manually initiate database maintenance.

Refreshing the Screen (F5)

Refreshing the screen enables you to restart the current screen if there is a problem with the Central Station. For example, you may want to use the refresh function as the first step when troubleshooting error messages such as Network Communication Error or Pulse Oximeter Communication Error, if the operational status of the Central Station is suspect, or when troubleshooting system interference problems. This is the only Administrative function that is not password-protected; simply press the **F5** key on the keyboard to refresh the screen. *A screen refresh can also be performed by touching the Oxinet III logo on the lower tool bar.*

Aligning the Touchscreen (F7)

Alignment of the touchscreen is necessary if you notice the cursor is not lined up with your finger when using the touchscreen. This function is password-protected.

1 Press the **F7** key on the keyboard.

The uShield dialog box appears (Figure 6).

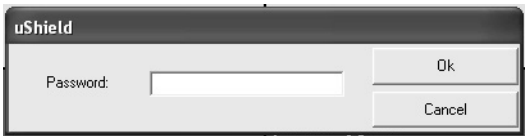


Figure 6: uShield Dialog Box

2 Type the Administrative function password, ***1234***, then press or click the **Ok** button.

The *Elo Touchscreen Properties* dialog box appears (Figure 7).

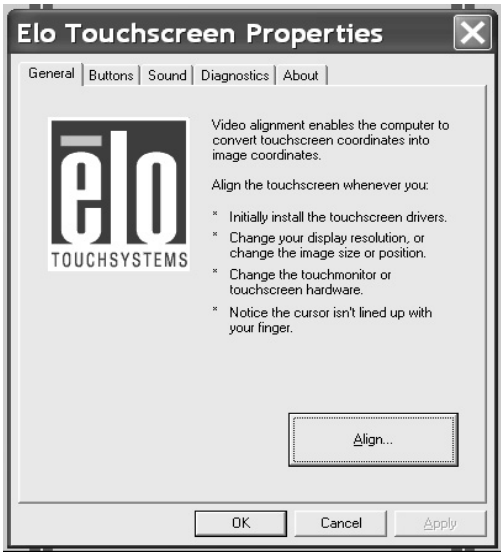


Figure 7: Elo Touchscreen Properties Dialog Box

3 Press or click the **Align** button.

The system will guide you through the alignment process. When complete, press or click the **OK** button on the *Elo Touchscreen Properties* dialog box to close this function and return to the **Main Display** screen.

Adjusting Volume (F8)

This password-protected function enables you to control the Central Station volume.

1 Press the **F8** key on the keyboard.

The uShield dialog box appears (Figure 6).

2 Type the Administrative function password, ***1234***, then press or click the **Ok** button.

3 The *Volume Control* dialog box appears (Figure 8).

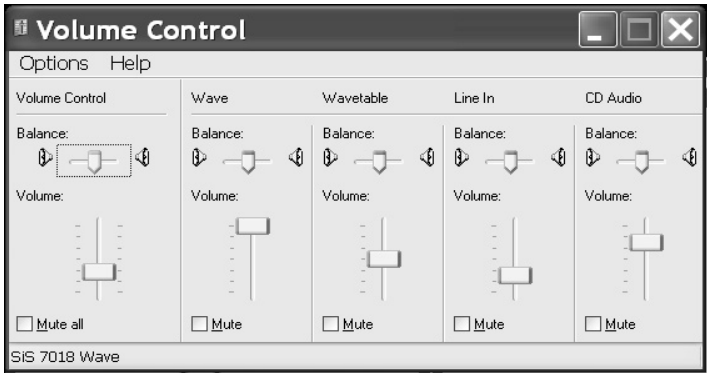


Figure 8: Volume Control Dialog Box

4 Make the following adjustments as desired:

Warning: The Oxinet III Central Station should NOT be muted.

- If the Volume Control's *Mute all* check box is selected, the volume is muted (turned off); clear the check box by clicking it to un-mute (turn-on) the volume.
- Raise and lower the volume by clicking and dragging the Volume slider in the *Volume Control* section — drag it up to raise the volume and down to lower the volume.
- When you have completed the volume adjustments, press or click the **X** in the upper right corner of the *Volume Control* dialog box to close this function and return to the **Main Display** screen.

Using Backup/Restore (F9)

Use this password-protected function to back up the current system configuration or to restore the most current backed-up version of the system configuration. A USB Memory Device is needed to perform this function.

Backing up the Current System Configuration

1 Press the **F9** key on the keyboard.

The *Oxinet Backup/Restore Wizard* opens (Figure 9). The wizard will guide you through the backup process.

Note: Pressing (or clicking) the **Cancel** button enables you to cancel this action and close this function.

Figure 9: Oxinet Backup Wizard

2 Type the Administrative function password, ***1234***, then press or click the **Next** button.

The *Select an action* screen appears (Figure 10).

Figure 10: Backup/Restore Function — Select an Action

The system determines if the USB Memory Device is installed. If the device is installed, the ***Backup Device Detected*** message appears (Figure 11). If the device is not installed, the ***No Backup Device Detected*** message appears.

Note: Pressing (or clicking) the **Cancel** button enables you to cancel this action and close this function.

Figure 11: Backup Function

3 Press or click the **Next** button.

The system begins the backup process and displays the message: ***Backup in Progress*** (Figure 12). The desktop outside the Backup screen will be black.

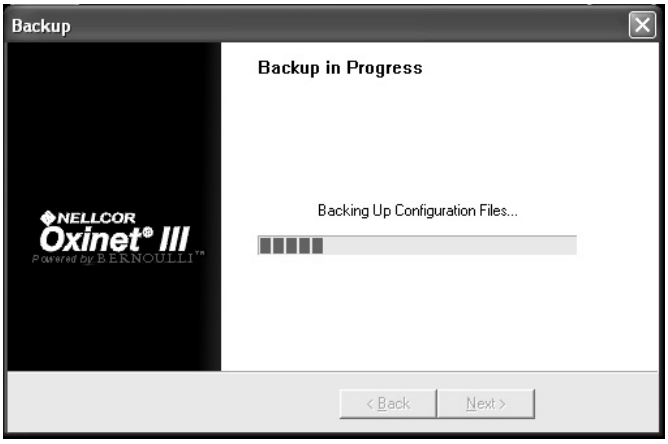


Figure 12: Backup in Progress

4 When the backup process is complete, the word ***Done*** appears (Figure 13).

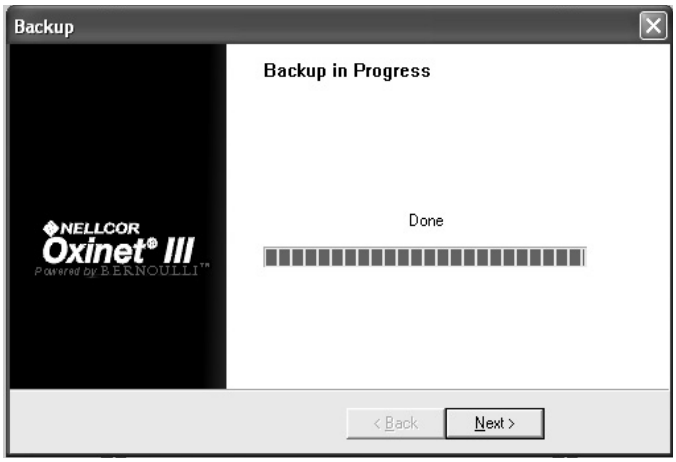


Figure 13: Backup in Progress — Done

5 Press or click the **Next** button.

The final message, ***Backup Completed,*** is displayed (Figure 14).

Figure 14: Backup Completed

6 Click the **Finish** button to close this function.

Restoring the Most Current Backed-up Version

Make sure the USB Memory Device, containing the most current backed-up version, is in place.

1 Press the **F9** key on the keyboard.

The *Oxinet Backup Wizard* opens (Figure 15). The wizard will guide you through the restore process.

Note: Pressing (or clicking) the **Cancel** button enables you to cancel this action and close this function.

Figure 15: Backup/Restore Wizard

2 Type the Administrative function password, ***1234***, then press or click the **Next** button.

The *Select an action* screen appears (Figure 16).

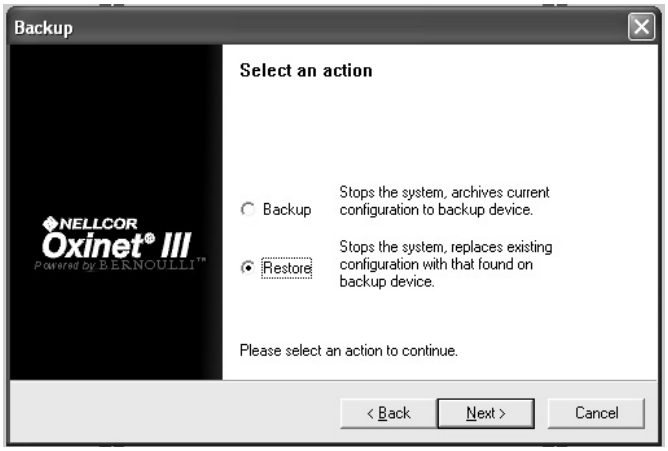


Figure 16: Backup/Restore Function — Select an Action

3 Select the **Restore** option (Figure 16), then press or click the **Next** button.

Note: Pressing (or clicking) the **Back** button at any point in the Wizard enables you to return to the prior Wizard screen.

The system determines if the USB Memory Device is installed. If the device is installed, the ***Restore Device Detected*** message appears (Figure 17). If the device is not installed, the ***No Backup Device Detected*** message appears.

4 Press or click the **Next** button.

Figure 17: Restore Function

5 If you have more than one version backed up, the system asks you to select the version you want to restore; the most recent version will be the current selection. Press or click the drop-down arrow to view and select another saved version (Figure 18).

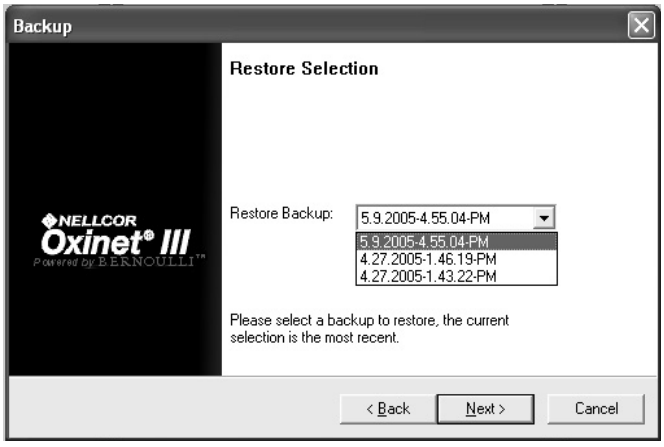


Figure 18: Restore Function —Select a Version

6 Press or click the **Next** button.

7 You will then be asked to confirm your version selection (Figure 19). Press or click the **Next** button to continue. Or, if you have selected the wrong version, click the **Back** button to return to the prior screen (Figure 18).

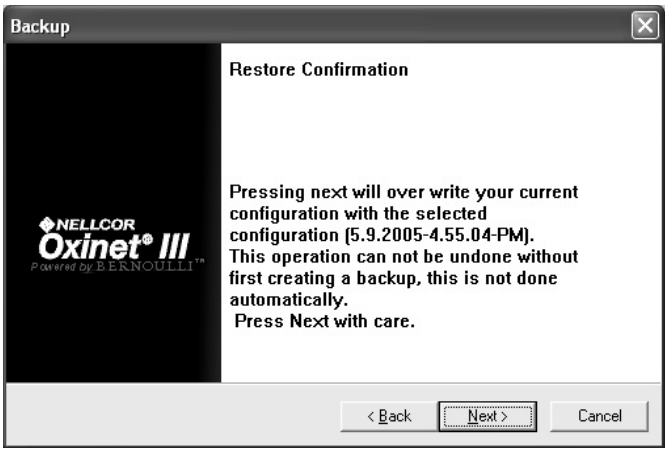


Figure 19: Restore Function — Confirm the Version

8 The system begins the backup process and displays the message: ***Restore in Progress*** (Figure 20).

Figure 20: Restore in Progress

When the backup process is complete, the word ***Done*** appears (Figure 21).

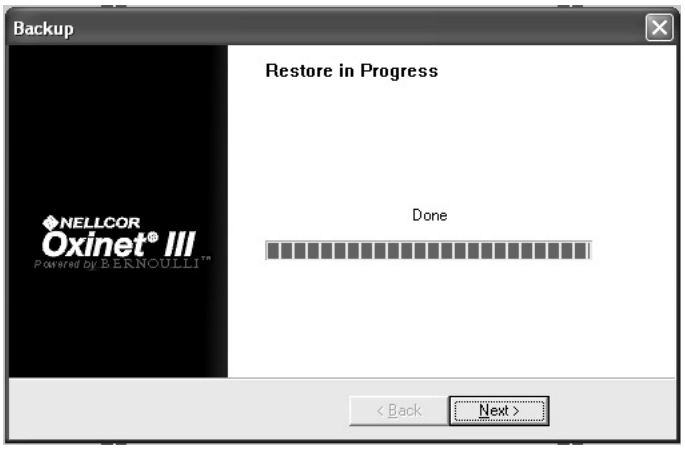


Figure 21: Restore in Progress - Done

9 Press or click the **Next** button.

The final message, ***Restore Completed***, is displayed (Figure 22).

Figure 22: Restore Completed

10 Click the **Finish** button to close this function.

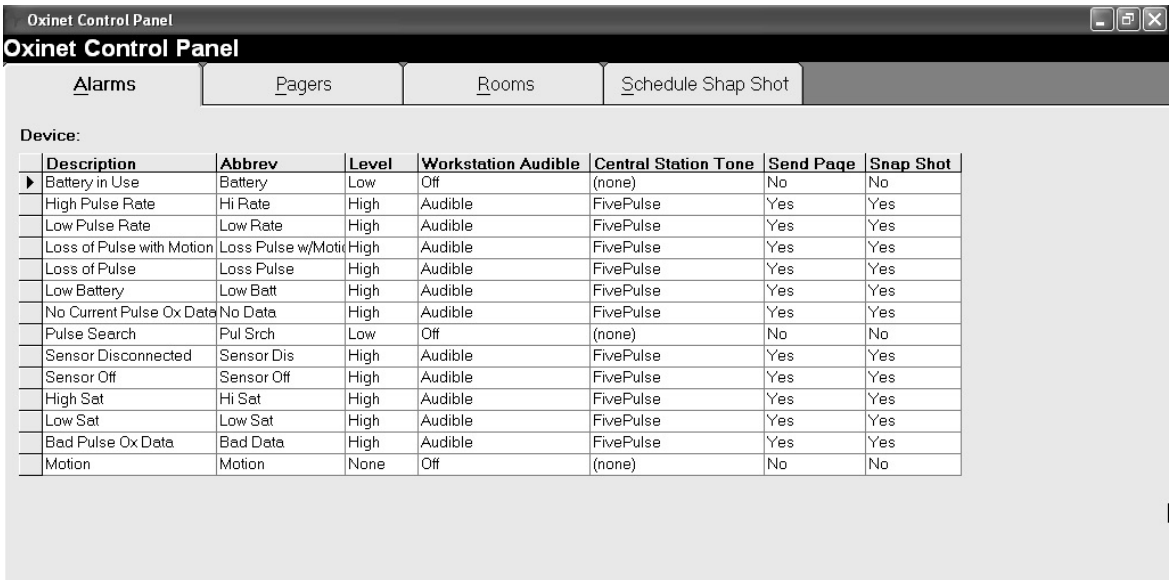
Oxinet Control Panel (F10)

1 Press the **F10** key on the keyboard.

The uShield dialog box appears (Figure 6).

2 Type the Administrative function password, ***1234***, then press or click the **Ok** button.

The *Oxinet Control Panel* opens (Figure 23).



Description	Abbrev	Level	Workstation Audible	Central Station Tone	Send Page	Snap Shot
Battery in Use	Battery	Low	Off	(none)	No	No
High Pulse Rate	Hi Rate	High	Audible	FivePulse	Yes	Yes
Low Pulse Rate	Low Rate	High	Audible	FivePulse	Yes	Yes
Loss of Pulse with Motion	Loss Pulse w/Moti	High	Audible	FivePulse	Yes	Yes
Loss of Pulse	Loss Pulse	High	Audible	FivePulse	Yes	Yes
Low Battery	Low Batt	High	Audible	FivePulse	Yes	Yes
No Current Pulse Ox Data	No Data	High	Audible	FivePulse	Yes	Yes
Pulse Search	Pul Srch	Low	Off	(none)	No	No
Sensor Disconnected	Sensor Dis	High	Audible	FivePulse	Yes	Yes
Sensor Off	Sensor Off	High	Audible	FivePulse	Yes	Yes
High Sat	Hi Sat	High	Audible	FivePulse	Yes	Yes
Low Sat	Low Sat	High	Audible	FivePulse	Yes	Yes
Bad Pulse Ox Data	Bad Data	High	Audible	FivePulse	Yes	Yes
Motion	Motion	None	Off	(none)	No	No

Figure 23: Oxinet Control Panel

The *Oxinet Control Panel* menus enable you to:

- Change the various alarm settings
- Add/delete pagers
- Modify the room list
- Schedule snapshots

There are four tabs at the top of the *Oxinet Control Panel* screen that identify each menu: **Alarms**, **Pagers**, **Rooms**, and **Schedule Snap Shot**. To see a menu, press (or click) the corresponding tab.

Alarms Menu

The **Alarms** menu (Figure 24) is the first screen that appears when the *Oxinet Control Panel* opens.

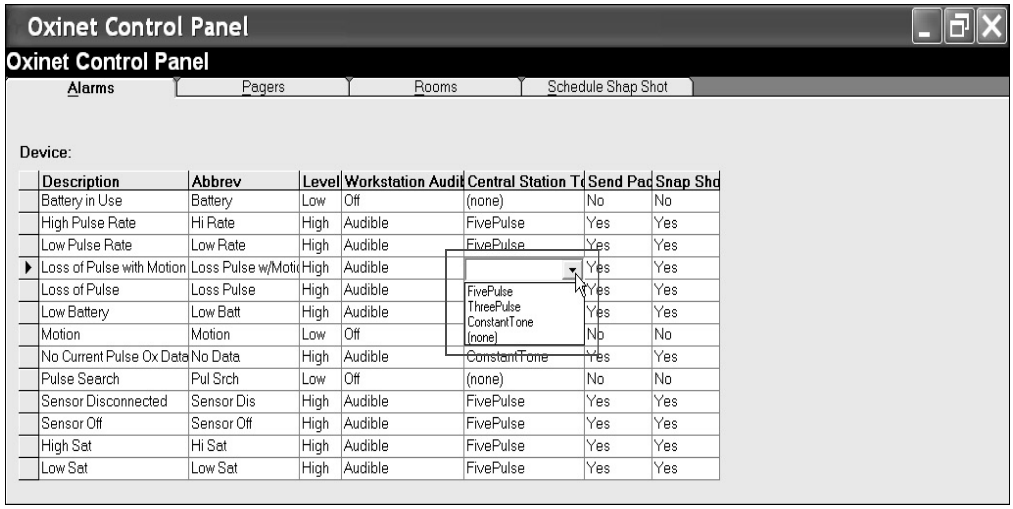


Figure 24: Alarms Menu

The first three columns contain alarm information (description, abbreviation, and level).

1 To change settings in the *Workstation Audible*, *Central Station Tone*, *Send Page*, or *Snap Shot* columns, press (or click) within the cell for the setting you want to change.

   A drop-down arrow appears (Figure 24).

2 Press (or click) the arrow and the list of options appears as shown in Figure 24.

3 Press (or click) the option to select it.

   The change is made.

Table 5 lists and describes the alarm settings in the **Alarm** menu.

Table 5: Alarms Settings

Description	This is the message that appears on the Central Station when the alarm occurs (can be edited by a Nellcor Service technician only).
Abbrev	If pagers are assigned to a patient and the **Yes** option in the *Send Page* column is selected, this is the pager message that will be sent to the pager (can be edited by a Nellcor Service technician only).
Level	The settings in this column determines the priority level of an alarm: **Low** or **High** (can be edited by a Nellcor Service technician only).
Workstation Audible	The settings in this column determine if an audible alarm sounds on the Central Station when this alarm occurs: **Audible** or **Off**. Default setting is **Audible**.
Central Station Tone	The settings in this column determine the audible tone for the alarm: **FivePulse**, **ThreePulse**, **Constant Tone**, or **(none)**.
Send Page	The settings in this column determine whether or not this alarm will trigger an alarm page, if pagers are assigned to the patient: **Yes** or **No**.
Snapshot	The settings in this column determine if a snapshot will automatically be taken when this alarm occurs: **Yes** or **No**.

Pagers Menu

To Set Interval Between Initial Page to Primary Pager and Page to Secondary Pager:

1 Press (or click) the **Pagers** tab to open the **Pagers** menu as shown in Figure 25.

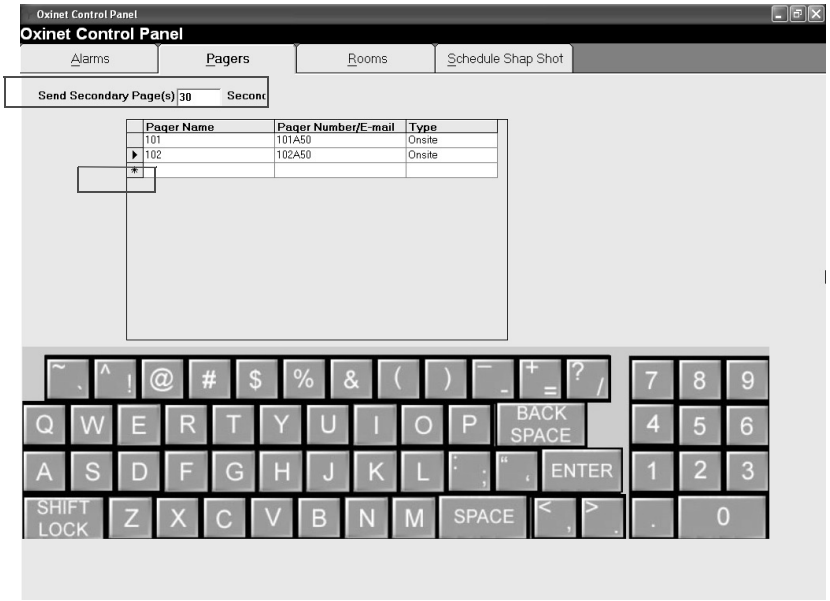


Figure 25: Pagers Menu — Initial

2 Use the *Send Secondary Page(s)* field to set the interval (in seconds) between the initial page to the primary pager and the page to the secondary pager(s), if pagers are assigned to the patient. For example, if you type ***30*** (Figure 25), the secondary pager notification will occur 30 seconds after the initial page occurs (if no one responds to the initial alarm page to either silence the alarm at the oximeter or resolve the reason for the alarm).

To Add a Pager:

1 Press (or click) the starred (*) cell (Figure 25) in the *Pager Name* column.

This inserts the cursor so you can type the pager name or number. Backspace to delete the word **New** (Figure 26).

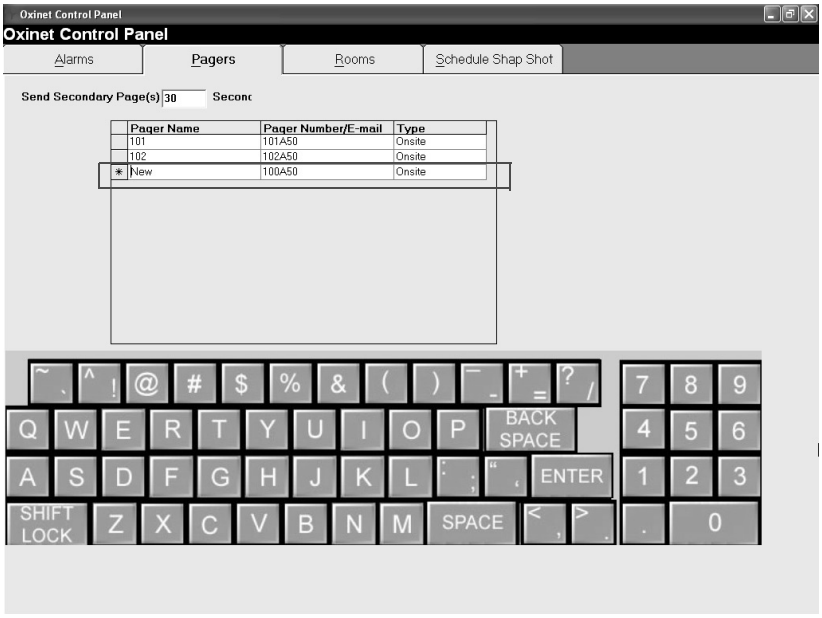


Figure 26: Pagers Menu — Adding Pager

2 Press (or click) the cell in the *Pager Name* column and type the pager number, for example ***103*** (Figure 27).

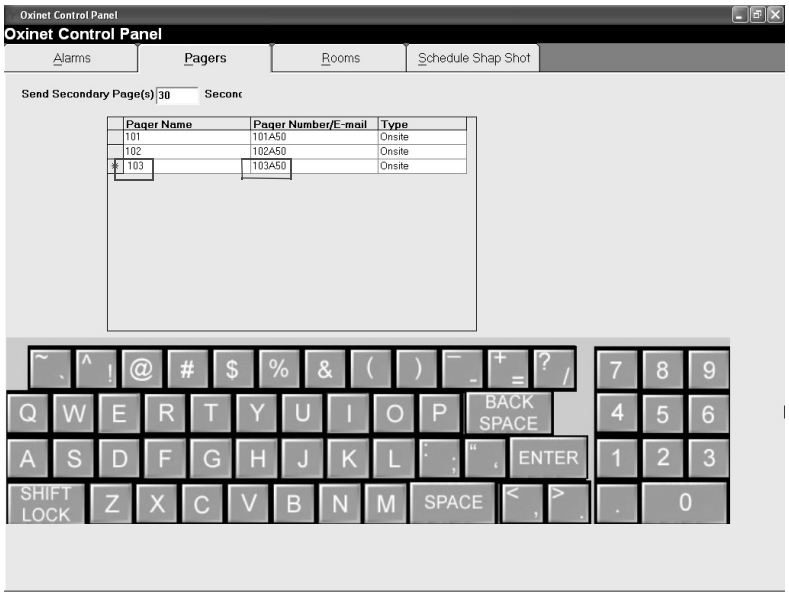


Figure 27: Pagers Menu — Entering Pager Name

3A Press (or click) the cell in the *Pager Number/E-mail* column and type the pager name and number, for example ***103A50*** (Figure 27) — the pager number is indicated on the back of the pager (in this example the pager number is 103).

OR

3B If the Oxinet III system is connected to a SMTP e-mail system on the hospital's intranet and the Oxinet III system is connected to that intranet, you can type an e-mail address instead, then change the *Type* to ***E-Mail*** as shown in Figure 28.

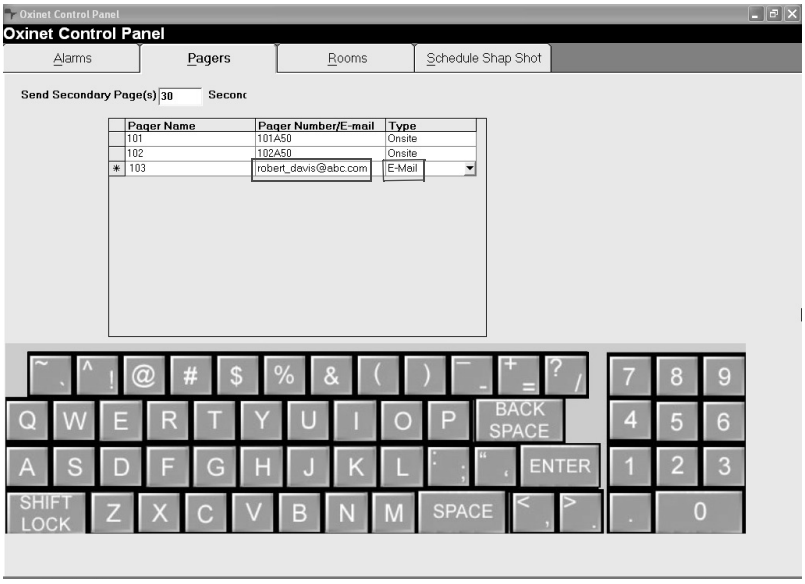


Figure 28: Pagers Menu — Entering Pager E-mail

To Edit a Pager:

Press (or click) the cell containing the information you want to modify, then make the change.

To Delete a Pager:

Press (or click) the area to the left of the row to highlight the row to be deleted, then press the **Delete** key on the keyboard.

Rooms Menu

Caution: Do not make changes to the room list while patients are being monitored — you must first discharge all patients from the Oxinet III system, then make any necessary changes to the list.

The *Unit* column enables you to group rooms/beds in categories that make sense for your facility. If you have multiple Units in the system, buttons representing each of those Units will appear at the top of the **Monitor** screen, so you can switch the **Monitor** view from one Unit to another. Figure 29 shows only one Unit, the **Step Down** Unit.

The *RoomSeq* field determines the order in which the rooms will be displayed on the **Available Room List** and the **Monitor** screens.

The **Tech Page** button is reserved for use by Nellcor Service technicians to clear room assignments in the event of a problem and is password-protected.

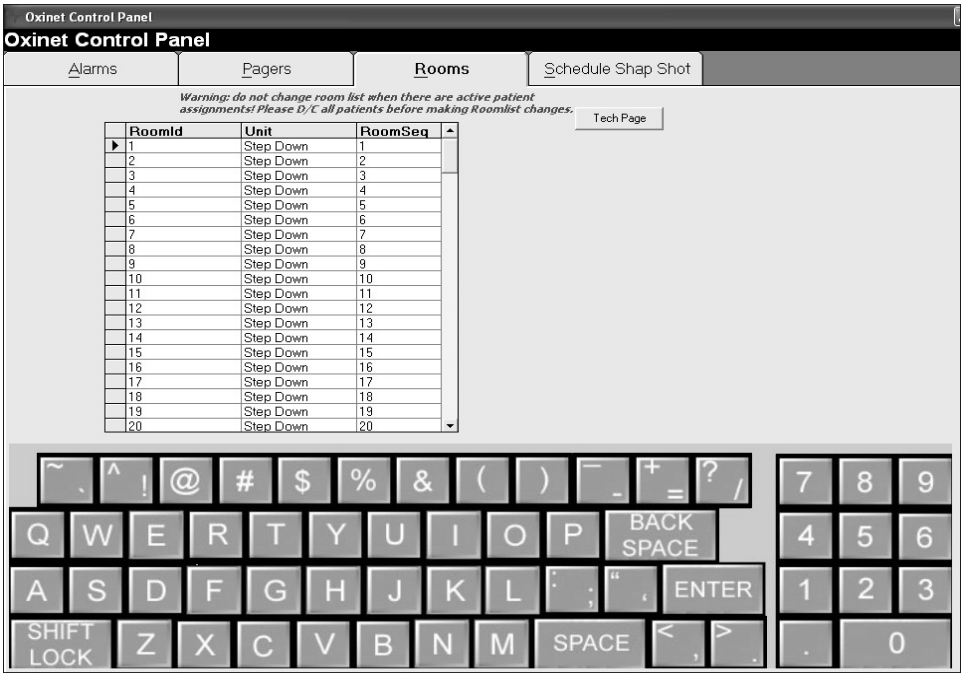


Figure 29: Rooms Menu

Schedule Snap Shot Menu

Use the Schedule Snap Shot menu to set the times for scheduled snapshots to occur (refer to the Running Reports chapter of the operator's manual for more information about Snapshots). Press (or click) the check box next to the desired time to select or clear it. For example, in Figure 30, snapshots will be taken for all patients in the Oxinet III system at midnight, at noon, at 4 am and 4 pm, and at 8 am and 8 pm.

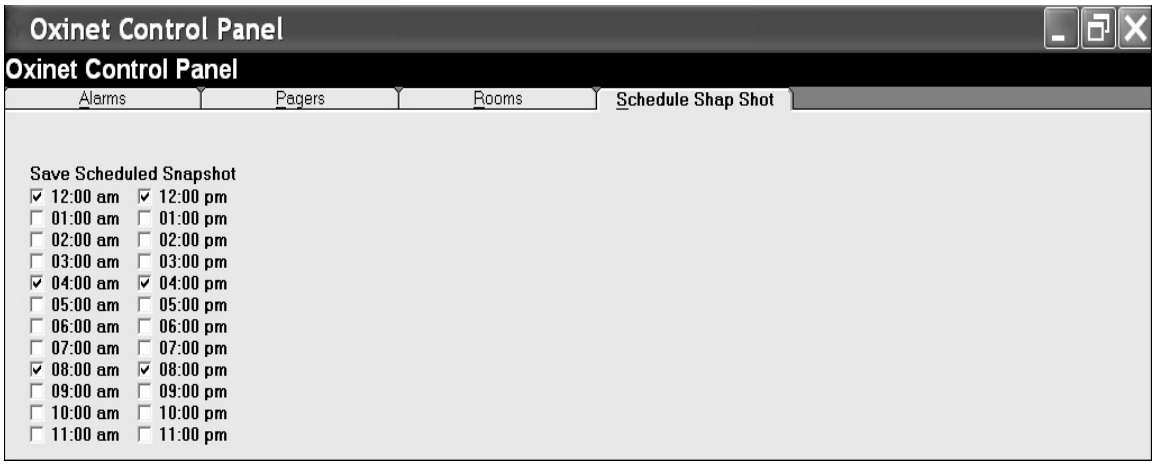


Figure 30: Schedule Snap Shot Screen

Maintenance (F11)

Note: The Oxinet III software performs database maintenance automatically. The software temporarily closes the program, performs database file maintenance, and relaunches the program at 10:05 am every day. This maintenance procedure normally takes less than 45 seconds to run. ***During this brief period, the system does not process any incoming data, including alarms.*** To manually initiate the database maintenance process, perform the following procedure.

To Manually Initiate Database Maintenance

Use the **F11** function to *manually initiate database maintenance*. This function is password-protected.

1 Press the **F11** key on the keyboard.

The uShield dialog box appears (Figure 6).

2 Type the Administrative function password, ***1234***, then press or click the **Ok** button.

When maintenance begins, the ***Please wait..Maintenance is running. This should take up to 5 minutes to complete*** message appears (Figure 31). When maintenance is complete, the system returns you to the **Monitor** screen.

Figure 31: Database Maintenance

Maintenance

Service

If service is needed for any of the Oxinet III system components, contact qualified service personnel or your local Nellcor representative.

The Pager requires periodic replacement of the battery. Refer to the operator's manual for battery replacement instructions. The latest version of the operator's manual is available online at:

http://www.mallinckrodt.com/respiratory/resp/Serv_Supp/ProductManuals.html

Note: The Oxinet III software performs database maintenance automatically. The software temporarily closes the program, performs database file maintenance, and relaunches the program at 10:05 am every day. This maintenance procedure normally takes less than 45 seconds to run. ***During this brief period, the system does not process any incoming data, including alarms.*** To manually initiate the database maintenance process, refer to the section *Maintenance (F11)* on page 37 of the Administrative Functions chapter in this manual.

Periodic Safety Checks

It is recommended that the following checks be performed on the transmitter every 24 months:

- Inspect the transmitter for mechanical and functional damage
- Inspect the relevant safety labels for legibility

If the labels are not legible, call Nellcor's Technical Services Department at 1.800.635.5267 or contact your local Nellcor representative.

Cleaning

Caution: Do not spray, pour, or spill any liquid on any of the Oxinet III components, its accessories, connectors, switches, or openings in the chassis, since this may damage the Oxinet III system.

To clean the pager or Central Station screens, use a clean cloth designed for use on lenses or touch-sensitive screens. To clean the pager or Central Station casings, use a clean damp cloth and wipe dry.

For surface-cleaning and disinfecting the transmitter, follow your institution's procedures or:

- Surface-clean by using a soft cloth dampened with either a commercial, nonabrasive cleaner or a solution of 70% alcohol in water, and lightly wipe the surfaces of the transmitter.

- Disinfect by using a soft cloth saturated with Glutaraldehyde (CIDEX™ or equivalent) or 10% chlorine bleach in tap water.

Spare Parts

To order spare parts, contact Nellcor's Technical Services Department at 1.800.635.5267. Spare parts and part numbers are shown in tables 6 and 7. A parts list for the Oxinet III system is also available online at:

http://www.mallinckrodt.com/respiratory/resp/Serv_Supp/apartweb/main/partaccemenu.html

Table 6: Parts List

Description	Part Number
Access Point	APOXI3
Transmitter	10006088
Communication Server	CS16OXI3
Pager	10005478
Router/Switch	ROUTOXI3

Table 7: Accessories List

Description	Part Number
Antenna, Pager Transmitter	X3440098
Pager Clip-on Holder	10005477
Power Supply, Access Point	APPSOXI3
Transmitter, Pager	PAGETRAN
Power Supply, Pager Transmitter	X3440097
UPS, Uninterruptible Power Supply	UPSOXI3
USB Memory Device	10001957

Returning Components

Failure to follow the instructions in this section may result in loss or damage not covered by any applicable Nellcor warranty.

1. Contact your supplier or local Nellcor office (Technical Services Department, 1.800.635.5267) for a returned goods authorization (RGA) number. They will also provide you with the address for returning the Oxinet III component.
2. Pack the component(s). The best method for returning the component(s) is to pack them in the original shipping carton. If the original shipping carton is not available, use another suitable carton, using sufficient padding to protect the component. Mark the shipping carton and any shipping documents with the RGA number. Return the component(s) by any method that provides proof of delivery.

Troubleshooting List

Table 8 lists troubleshooting tips for some of the problems that might occur while operating the Oxinet III system.

Some problems might indicate equipment malfunction. Your Oxinet III system administrator should be contacted to resolve these types of problems. You can also contact Nellcor's Technical Services Department at 1.800.635.5267.

Table 8: Troubleshooting

Symptom	Cause	Corrective Action
Message appears: ***Please wait..Maintenance is running. This should take few minutes to complete.***	The Oxinet III software performs database maintenance automatically: the software temporarily closes the program, performs database file maintenance, and relaunches the program at 10:05 am every day. This maintenance procedure normally takes less than 45 seconds to run. **During this brief period, the system does not process any incoming data, including alarms.**	**No intervention is needed.**
Poor cursor control on the Central Station	Cursor out of alignment.	• Connect a keyboard to the Central Station and restart it. • Press **F7** key on the keyboard, then type the Administrative function password. • When the *Elo Touchscreen Properties* dialog box opens, press the **Align** button. The system will guide you through the alignment process. • When complete, press the **OK** button on the *Elo Touchscreen Properties* dialog box to close this function.
Software Activity Indicator (colored bars in upper left corner of screen) stop scrolling	Software activity has stopped.	• Restart the Central Station. If the problem still exists, contact Nellcor's Technical Services Department at 1.800.635.5267.

Table 8: Troubleshooting (Continued)

Symptom	Cause	Corrective Action
No display on the Central Station	Central Station loss of power.	• Ensure that the AC power cord is connected to the power input jack on the back of the base of the Central Station and the other end is plugged into one of the battery backed-up AC outlets or the UPS.
	Monitor not connected.	• Ensure all monitor cables are connected.
	The UPS has drained its battery.	• Recharge the battery on the UPS. • Replace the battery, if necessary.
	The UPS is not operating properly.	• Replace the UPS.
No current data is being displayed for an active oximeter or several oximeters	Data from an active oximeter is not reaching the Central Station.	• Make sure the cable is securely connected to the oximeter's data port. • Check that router/switch has power Wired configuration: • Check the connection between the oximeter and communication server • Check that the communication server has power. • Check the connection between the communication server and the router/switch. Wireless configuration: • Check that the transmitter has power. • Check the connection between the oximeter and transmitter. • Check that the access point has power.
No current data is being displayed for any oximeters in the Oxinet III system.	Data from all active oximeters is not reaching the Central Station.	• Check that the Cat5 cable connecting the router/switch to the Central Station is securely connected to any of the router/switch's numbered ports. • Check that the other end of the Cat5 cable is securely connected to the network port connection on the back of the Central Station. • Check that the router/switch has power. Wired configuration: • Check that the communication server has power. • Check the connection between the communication server and the router/switch. Wireless configuration: • Check that the access point has power. • Check the connection between the access point and the router/switch.

Table 8: Troubleshooting (Continued)

Symptom	Cause	Corrective Action
A pager does not receive an alarm page	The pager may not be assigned to that patient or the pager may have been out of range.	• Check the Pager Assignments on the Central Station to confirm that the pager is assigned to the room/patient where the alarm occurred. • The pager transmitter may have lost power or the cord connecting the pager transmitter with the Central Station may be loose or disconnected. Confirm that the cord is still securely attached. • Confirm the red power light for the pager transmitter is on; make sure the power supply is still connected to the back of the pager transmitter. • If needed, contact Nellcor's Technical Services Department at 1.800.635.5267.
Multiple pagers do not receive an alarm	The pager transmitter may have lost power or the cord connecting the pager transmitter with the Central Station may be loose or disconnected.	• Confirm the red power light for the pager transmitter is on. • Confirm the power supply is still connected to the pager transmitter. • Check the cord connecting the Central Station to the pager transmitter to ensure it is securely connected to the serial port of the pager transmitter and the **COM1** port of the Central Station.
The Central Station is frozen	Program error	• Restart the Central Station. If the problem still exists, contact Nellcor's Technical Services Department at 1.800.635.5267.
	Central Station computer error	• Restart the Central Station. If the problem still exists, contact Nellcor's Technical Services Department at 1.800.635.5267.
Alarms not audible	Alarm is not configured as an audible alert.	• Press the **F10** key on the keyboard: 1. When the uShield dialog box appears, type 1234 for the password and press the Ok button. 2. In the Oxinet Control Panel, set the type of audible alarm desired. See *Oxinet Control Panel (F10)* on page 30 for details.
	Volume is turned off/down for speakers.	• Press the **F8** key on the keyoard: 1. When the uShield dialog box appears, type 1234 for the password and press the Ok button. 2. In the Volume Control dialog box, raise the volume by clicking and dragging the Volume slider up. See *Adjusting Volume (F8)* on page 21 for details. • Check Audio cable connection.

Obtaining Technical Assistance

For technical information and assistance, or to order parts or a service manual, contact Nellcor's Technical Services Department at 1.800.635.5267 or your local Nellcor representative.

The latest versions of this operator's manual and the service manual are available online, along with other Nellcor oximetry manuals, at:

http://www.mallinckrodt.com/respiratory/resp/Serv_Supp/ProductManuals.html

Physical Design Requirements

Table 9: Central Station

CPU	Minimum 500 MHz processor
Memory	Minimum 256 MB SDRAM
Floppy Disk	1.44 MB 3.5-inch Floppy Drive
CD-ROM	Read Only
I/O	1 RS-232 port 1 Parallel port 8 USB ports 1 Network Ethernet 10/100 port
Physical Dimensions: Computer	13" W x 4" H x 15" D (330 mm W x 102 mm H x 381 mm D)
Display	17-inch LCD Touchscreen 19" W x 19" H x 16" D (483 mm W x 483 mm H x 406 mm D)
Weight: Computer	16. 8 lbs
Display	22.9 lbs
Storage Temperature	– 20 to 60 °C (– 4 to 140 °F)
Operating Temperature	0 to 45 °C (32 to 113 °F)
Altitude	0 to 3048 meters (0 to 10,000 feet)
Relative Humidity	10% to 95% non-condensing

Table 10: Transmitter

Physical Dimensions	6.93” W x 1.9” H x 4.26” D (176 mm W x 48.3 mm H x 108.2 mm D)
Connections	Power Port RS-232 Port
Visual Indicators	Power and Communication Indicators
Power	Power use approx. 100 mW Operating range: 90-264 VAC and 47-63 Hz
Malfunction Indicator	Transmitter has an audible or visual indicator of a pulse oximeter failure to communicate
Storage Temperature	– 20 to 60 °C (– 4 to 140 °F)
Operating Temperature	0 to 45 °C (32 to 113 °F)
Altitude	0 to 3048 meters (0 to 10,000 feet)
Relative Humidity	5% to 95% non-condensing

Table 11: Access Point

Physical Dimensions	7.75” W x 1.25” H x 5.5” D (196.9 mm W x 31.7 mm H x 139.7 mm D)
Frequency Range	2.4 to 2.5 GHz
Data Rate	2 Mbps
Output Power	500 mW
Power Management	Receive: 500 mW = 375 mA @ 5V Transmit: 500 mW = 500-675 mA @ 5V
Operating Temperature	0 to 54 °C (32 to 130 °F)
Storage Temperature	– 21 to 60°C (– 5 to 140°F)

Table 12: Communication Server

Physical Dimensions	16.93" W x 1.77" H x 9.01" D (430 mm W x 45 mm H x 229.9 mm D)
Connections	RS-232 Ports; RJ-45 Network Connections
Visual Indicators	Power and Communication Indicators
Power	Autoranging 110 V – 240 V
Operating Temperature	0 to 40 °C (32 to 104 °F)

Table 12: Communication Server (Continued)

Storage Temperature	– 30 to 70 °C (– 22 to 158 °F)
Relative Humidity	5% to 95% non-condensing

Table 13: Router/Switch

Ports	10/100 RJ-45 Switched Ports
Indicators	Power, Ethernet, Internet
Network Protocol	TCP/IP
Physical Dimensions	7.32” W x 1.89” H x 6.06” D (185.9 mm W x 48 mm H x 153.9 mm D)
Weight	12.28 oz
Power Input	External 9 VAC, 100 mA
Operating Temperature	0 to 40 °C (32 to 104 °F)
Storage Temperature	– 20 to 70 °C (– 4 to 158 °F)
Operating Humidity	10% to 85% non-condensing
Storage Humidity	5% to 90% non-condensing

Table 14: Pager Transmitter

Physical Characteristics	8.5” W x 8.5” H x 2” D wall mountable Weight: 1.5 lb (0.68 oz)
Power Supply	12 VDC 2 A AC/DC Adapter
RF Power Out	5 watts nominal, configurable to 2 watts
Frequency	VHF: 148 – 174 MHz, UHF1: 400 – 430 MHz, UHF2: 440 – 470 MHz
Operating Temperature	0 to 28 °C (32 to 82 °F)

Table 15: Pager

Physical Characteristics	2.76” W x 1.89” H x 0.79” D (70.1 mm W x 48 mm H x 20 mm D) Weight: 1.76 oz (weight includes battery) Minimum: 60-message storage memory, up to 500 characters per message
Power and battery life	Standard AAA alkaline batteries Battery life: at least 700 hours under typical use (has a low-battery indicator)

Table 15: Pager (Continued)

Display	2-Line Alphanumeric display, 36-character
Display Lighting	Button activation
Storage Temperature	– 20 to 60 °C (– 4 to 140 °F)
Operating Temperature	– 10 to 50 °C (14 to 122 °F)
Relative Humidity	Up to 95% 50 °C (non-condensing)

Compliance

Table 16: Compliance Information

Item	Compliant with
Equipment classification	Safety Standards: IEC 60950-1 IEC 60601-1-1 Compliant UL 60950 EN60950
Marking and Instructions	IEC 60950-1, Sub-clause 1.7
Protection from hazards	IEC 60950-1, Sub-clause 2
Wiring connections and supply	IEC 60950-1, Sub-clause 3
Comply with IEC 60950 or relevant component standard	IEC 60950
Protection against ingress of water	IEC 60950-1, Sub-clause T IPX1
Electromagnetic emissions	FCC Part 15:2002 CLASS B
Power interface	IEC 60950-1, Sub-clause 1.6
Thermal requirements	IEC 60950-1, Sub-clause 4.5
Resistance to fire	IEC 60950-1, Sub-clause 4.7

This device has been tested and found to comply with FCC Part 15 “Class B” regulations for digital devices. Operation is subject to the following two conditions:

- This device may not cause harmful interference and
- This device must accept any interference that may cause undesired operation

These FCC limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential or commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with this operator’s manual and the service manual, may cause harmful interference to radio communications.

IEC 60601-1-1 Compliance

The following information provides instructions and guidance regarding the use of the Nellcor N-395, N-550, N-595, N-560, and N-600 pulse oximeters. These oximeters have been found to be compliant with IEC 60601-1-1, when used in a system level configuration with the AC Y-Cord and the Oxinet III transmitters.

Note that the AC Y-Cord is designed with one AC plug connection to AC mains power and with two (IEC-320 style) connectors for powering an oximeter and a transmitter.

The requirements listed below must be followed:

1. This system is authorized for use in the USA only.
2. The AC mains voltages must be in the range of 100 to 132 VAC.
3. The combinations of equipment listed below are authorized to be in the patient environment.
   - N-395 with Oxinet III transmitter, both AC powered by AC Y-Cord
   - N-595 with Oxinet III transmitter, both AC powered by AC Y-Cord
   - N-550 with Oxinet III transmitter, both AC powered by AC Y-Cord
   - N-560 with Oxinet III transmitter, both AC powered by AC Y-Cord
   - N-600 with Oxinet III transmitter, both AC powered by AC Y-Cord

Note: When using Oxinet III, use only the "Lead Year, Model ADP-0502-5V AC/DC Adapter". The adapter is connected to mains power via the AC Y-Cord.

WARNING: No other devices are intended for use with the AC Y-Cord. The use of equipment not specified in this document may subject the patient to excessive leakage current. The Oxinet III has a DB-9 connector with a metal shell. Do not touch the metal shell and the patient simultaneously. High leakage current is possible in case of ground failure of the PSU. During cleaning, sterilization, disinfection or adjustment of any kind, the instructions contained in this manual must be followed.

Please contact the Nellcor's Technical Service Department at 1.800.635.5267 if you have any questions regarding the proper use of the system.

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