Syn248

Syn248 Installation and Configuration Guide

CONTENTS

PREFACE

This Installation and Configuration Guide provides instructions for installing and setting up your Syn248 system with software version 1.3.1 or later. See *page 8* for instructions on checking the software version on the Gateway and the Deskset. To upgrade your Syn248 devices to the latest software version, see *"Updating Devices" on page 74*.

Before using this AT&T product, please read *"Appendix G: Important Safety Instructions" on page 127*. Please read this guide thoroughly for all the information necessary to install your new AT&T product.

> **NOTE** For customer service or product information, visit our web site at **smbtelephones.att.com** or call **1 (888) 386-2006**. In Canada, dial **1 (888) 469-2005**.

Additional Documentation

Downloadable copies of other Syn248 documents are available from **smbtelephones.att.com**. Visit the **Video Gallery** to watch the Syn248 installation video.

Topic Navigation

This Syn248 Installation and Configuration Guide features easy navigation between topics and the ability to return to your original topic.

Text in blue indicates a link to another page in the document. **Bold text in blue** indicates a hyperlink to an external web site.

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Text Conventions

Table 1 lists text formats and describes how they are used in this guide.

Table 1.   Description of Text Conventions

Text Format	Description
Screen	Identifies text that appears on a device screen or a WebUI page in a title, menu, or prompt.
HARD KEY or **DIAL-PAD KEY**	Identifies a hard key, including the dial-pad keys.
CallFwd	Identifies a soft key.
Notes provide important information about a feature or procedure.	Example of a Note.
A caution means that loss of data or unintended circumstances may result.	Example of a Caution.

C H A P T E R

1

INSTALLATION

This section describes the physical installation of the Syn248 devices. Each system must include at least one Gateway and one Deskset. Each Gateway supports up to four analog telephone lines.

Visit the AT&T SMB Telephony **Video Gallery** to watch the Syn248 installation video.

System Overview

AT&T SB35010 Analog Gateway—Each Gateway provides access to up to four analog outside telephone lines. A system can have up to two Gateways, supporting up to eight telephone lines.

AT&T SB35020/SB35025 Deskset—These Deskset models feature a standard screen and programmable feature keys. A system can have up to 24 Desksets. The SB35025 has a DECT 6.0 radio to host an optional cordless headset and an audio in/out port for connecting a Music on Hold (MoH) source and an overhead paging system.

AT&T SB35031 Deskset—This Deskset model features a large screen and a DECT 6.0 radio to host an optional cordless headset. A system can have up to 24 Desksets, and you can combine SB35031 and SB35020/025 Desksets.

AT&T DECT Cordless Accessory Headset (Optional, requires SB35025 or SB35031 Deskset)—The headset lets you work while you talk.

Web User Interface (WebUI)—The WebUI enables you to customize your system using a PC that is connected to the same Local Area Network. The WebUI resides on the Gateways and Desksets, and is updated with device software updates. See *"System Configuration" on page 35* and *"Updating Devices" on page 74*.

> **NOTE**
> The Syn248 system can be expanded to support two Gateways and up to eight lines. For more information, see *"Appendix A: Expanding Your System" on page 118*.

> **NOTE**
> You can register only one AT&T DECT Cordless Headset to a Deskset. Up to five Desksets can have cordless accessories, although this number can increase depending on your office environment. Factors such as proximity of Desksets, number of simultaneous calls, and structural obstacles affect how many Desksets can have cordless accessories. When a Deskset has cordless accessories, they are all part of the same extension, and only one extension device can be used at a time.
>
> > To register a cordless headset to a Deskset, see *"Cordless Headset Installation and Registration" on page 30* rather than the manual that is packaged with the headset.

Software Version Compatibility

Systems with software versions 1.3.1 and later support the features described in this guide. **All Gateways and Desksets must have compatible software versions installed.**

- To determine the software version of a SB35010 Gateway, on the Gateway front panel, press **SELECT**, **SELECT**, and then **DOWN**. The software version appears.

```
Device Info        ▼▲
SW Ver:        1.3.1
FW Ver:        D023
S-Series:      0.5.5
```

- To determine the Deskset software version, press ☰ (**MENU**), then **4**, and then ▽ until **Software Ver** appears.

```
Deskset Information    ▼
Model No:             SB35031
Status:               Synchronized*
IP Address:           192.168.0.101
MAC Address:          00:11:A0:11:EA:4D
Serial No:            GG20013043
Boot Ver:             2.7.1
P Firmware Ver:       1.3.1
Use ▼ or ▲ to scroll. Press Exit when   Quick
done.                                    Dial
                                         Exit
```
SB35031 Deskset

```
Deskset  Information  ▼▲
Software  Ver:        1.3.1
Firmware  Ver:        D023
S-Series:             0.5.5
```
SB35025/SB35020 Deskset

- To determine the software version of all installed devices, log on as administrator. See *"Accessing the Administrator WebUI" on page 36*. After logging on, click **Detailed Site Information** to see the software versions and other information. There may be a delay as the system gathers this information.

System Installation Overview

Figure 1 illustrates how the Syn248 system differs from conventional telephone systems in that calls are not coordinated by a central controller. Instead, the system uses a distributed control system over a new or existing local area network (LAN).
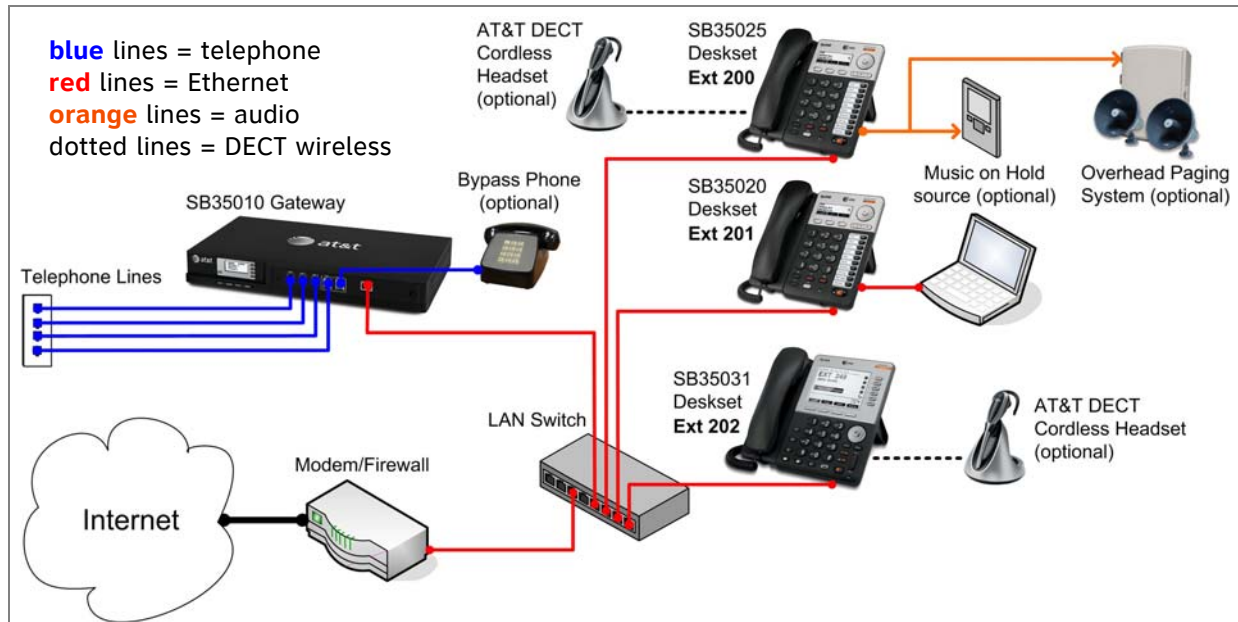
Figure 1. Sample System Network

Recommended Installation Sequence

1. Prepare your site for installation. See *"Site Preparation" on page 11*.

2. Install the Gateway(s). See *"Connecting the Gateway" on page 17*.

3. Install the first Deskset. See *"Deskset Installation" on page 19*. This Deskset is assigned extension number 200.

4. Install the other Desksets. See *"Deskset Installation" on page 19*.

5. If an SB35025 Deskset is installed, connect an optional Music on Hold source and/or overhead paging system. Use the supplied audio in/out cable. Its L-shaped connector is designed to fit into the space available behind the Deskset. See *"Connecting an Overhead Paging System (OHP)" on page 26* and *"Connecting a Music on Hold Source" on page 28*.

6. Configure the system using the WebUI. See *"System Configuration" on page 35*.

7. Install and register any AT&T DECT Cordless Headsets. See *"Cordless Headset Installation and Registration" on page 30*.

8. Complete post-installation tasks.

    ■ Ask all users to record their user names on their Desksets. See *"Name Recording for the Auto Attendant Directory" on page 47*.

    ■ Check for software upgrades and register your Syn248 system products. See *"Updating Devices" on page 74* and *"Product Registration" on page 34*.

Site Preparation

This section describes how to prepare your site for a successful Syn248 system installation.

Network Requirements

- A switched network topology is recommended for your LAN (using standard 10/100 Ethernet switches that carry traffic at a nominal rate of 100 Mbit/s).

- The office LAN infrastructure should use Cat.-5 (or better) cable.

- The LAN connections to Syn248 devices should all be wired. However, wireless connections to other devices (such as laptops) in your office network that are not part of the Syn248 system will not impede performance.

- All devices in the Syn248 system must reside on a single subnet.

- A DHCP server is recommended and must be on the same subnet as the Syn248 system so that IP addresses can be auto-assigned. In most cases, your network router will have a Dynamic Host Configuration Protocol (DHCP) server that will automatically assign IP addresses to Syn248 devices in the system. By default, Syn248 assumes that this automatic assignment will occur.

  If no DHCP server is present, you can assign static IPs. If you do not have a DHCP server or do not manually assign static IPs, you will not be able to access the Syn248 WebUI and/or enable automatic time updates from an NTP server. Syn248 devices will self-assign link-local IP addresses for all voice communication in addition to any DHCP or static IPs that are assigned for management purposes. For more information, see *"Appendix B: IP Addresses and Connectivity" on page 119*.

- Unless you want to manually set the Syn248 clock and manually upgrade Syn248 software, an Internet connection to the LAN is required.

- A DNS server is recommended to resolve the path to the Internet and to the AT&T server for software upgrades.

- If a routing path to the Internet is not available, the system administrator can download the upgrade files and use the WebUI to upgrade the software manually.

- For users whose computers require a GigE Ethernet frame rate (a gigabit per second), use separate Ethernet connections for the Deskset and the computer. The Ethernet connection through a Deskset is limited to 100 Mbits/s.

Placement Considerations

Avoid placing any Syn248 component too close to the following:

- Communication devices, such as television sets, DVD players, or other cordless telephones

- Excessive heat sources

- Noise sources, such as a window with traffic outside, motors, microwave ovens, refrigerators, or fluorescent lighting

- Excessive dust sources, such as a workshop or garage

- Excessive moisture

- Extremely low temperature

- Mechanical vibration or shock, such as on top of the washing machine or workbench.

Power Considerations

Ensure that there is an electrical outlet not controlled by a wall switch within 6 feet (1.83 m) of each device location.

Syn248 Desksets are also compatible with Power over Ethernet (PoE). To use PoE, your network needs a switch that provides PoE. Using PoE simplifies your installation by eliminating the need to route separate power cords. It also allows you to protect your system from power outages by connecting an Uninterruptible Power Supply (UPS) to your PoE switch and Gateway(s). For power requirement specifications, see *"Appendix C: Technical Specifications" on page 120*.

Other Preparations

Before installing the Gateway and Desksets, the following preparations may need to be taken:

- All telephone lines must be gathered into one access point situated no more than 9 feet (2.74 m) from the Gateway location. If you need to rewire your lines, contact your telephone service provider and request the help of a qualified technician.

- You may need one or more network switches set up to ensure there are sufficient ports available for other devices in the network (such as a DSL modem).

- If you plan to use the emergency bypass feature on the Gateway, you will need an analog phone.

- An Ethernet port must be available within 9 feet (2.74 m) of each Deskset location. Each Deskset is capable of sharing an Ethernet port with a PC. If one Ethernet port already exists at a workstation, another port is not necessary unless you need a GigE Ethernet frame rate. If this is the case, use a separate Ethernet connection for the Deskset and the computer.

Assigning Telephone Lines and Extensions

This section discusses various telephone line configuration issues to consider.

Providing Limited Telephone Service During AC Power Outages

The fourth line on each Gateway is a Bypass port that works during AC power failures. If you have a telephone line plugged into **LINE 4**, connect a line-powered analog telephone to the RJ-11 jack labeled **BYPASS** for telephone service during power failures. When power is restored and the line is idle, a relay disconnects this emergency bypass line so that the bypass line cannot be used to eavesdrop on normal calls.

If your telephone lines are part of a hunt group (a telephone company feature that allows calls to a busy phone number to roll over to the next available telephone line), connect the line with your main (pilot) telephone number to Gateway **LINE 4**.

Analog Line Connection Order on Gateways

For outgoing calls, by default the system seizes the lowest idle LINE port numbers (as labeled on the Gateway) when users go off hook. You can also configure the automatic off-hook line selection for each extension (see *"Extension Basic Settings" on page 59*).

If you plan not to change the default settings, telephone lines should be connected to your system with your busiest incoming line placed in the highest port number on the highest numbered Gateway (that is, Gateway #2 if you have the maximum two Gateways installed), so that incoming calls are less likely to receive busy signals. For instance, if your customer service team receives many calls, you would want to plug their phone lines into higher-numbered LINE ports.

Connecting a Two-Line Wall Jack to the Gateway

If you have two phone lines coming from one wall jack, you must use a two-line adapter (or A/B splitter) as shown in Figure 2 to convert the two-line jack into two single-line jacks. Each single-line jack will then connect to a Gateway LINE port.
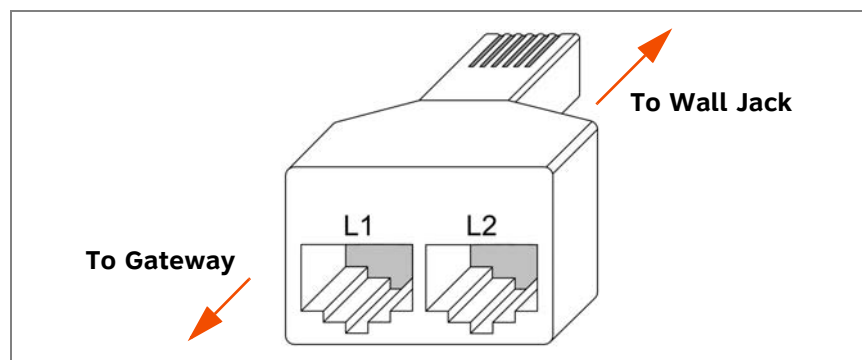
Figure 2. Two-line Adapter

Extension Assignments

The system assigns the first Deskset to join the network as extension 200. The system automatically assigns each additional Deskset an extension number in ascending order as it is connected to the LAN.

Once the Desksets are connected to the same network, they find each other through Peer-to-Peer (P2P) discovery protocols and automatically self-configure. Additional telephony and network configuration is administered through the WebUI.

Even if you disconnect a unit from the network, its extension number is reserved. If you want to remove an extension from the network permanently, you must disconnect it, then delete the extension number using the WebUI **Device Management** menu. See *"Deleting Devices" on page 68*. Deletion ensures that the Deskset does not tie up an extension. You can also use the WebUI to change extension numbers for Desksets connected to the network.

Gateway Placement

You can install the Gateway in a standard 19-inch rack, on a desktop, or mount it on a wall. The Gateway must be installed within three feet of the building ground point. Install each device using the following instructions.

Rack Mounting

To mount the Gateway into a standard 19-inch rack:

1. Remove the two mounting brackets and six screws from the packing tissue.

2. Position a bracket at the front of the device and align the screw holes using the locating indentation.
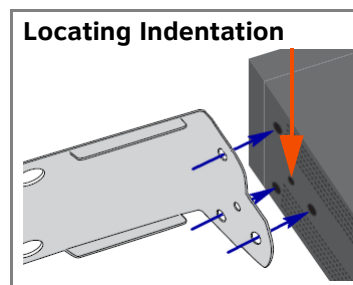
3. Insert each of the three screws into the holes provided and tighten securely. Repeat the process for the other bracket.
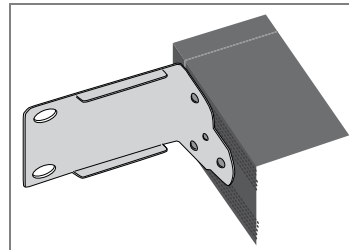
4. Position the chassis into the rack.

5. Insert a top mounting screw (not included) in one side and turn it several turns to establish support. Repeat for the other side.

6. Tighten the screws.

Wall Mounting

You can mount the Gateway to a wall using the two mounting slots on the bottom of the device. Ensure that the device is oriented as shown in Figure 3 to allow air to flow vertically through the ventilation holes on each side of the device.
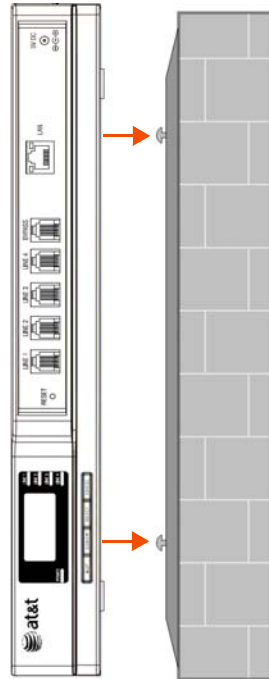
Figure 3. Wall Mount Orientation

To mount the Gateway to a wall:

1. Install two pan-head screws (with ¼-inch diameter head) 7 ⅞ inches (20 cm) apart. The screw shaft diameter should be ⅛-inch (3.2 mm). Ensure you use anchors appropriate for your mounting surface. Leave about ⅛-inch (3.2 mm) clearance between the screw head and the wall.

2. Position the device with the mounting slot centers aligned over the mounting screws. Carefully bring the device down onto the screws.

3. Slide the device downwards so that the screws go into the mounting slots on the device. Ensure the device is secure.

Connecting the Gateway

> ⚠ **CAUTION** The Gateway grounding terminal shown in Figure 4 must be connected to reliable earth ground using a separate ground wire before connecting the telecommunication lines. The connection to earth ground must be verified by qualified personnel.

Grounding Terminal
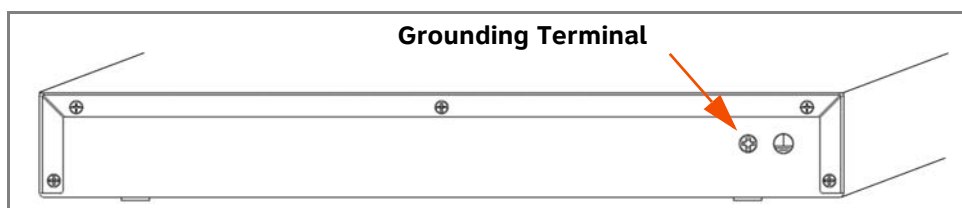
Figure 4. Gateway Grounding Terminal

> ℹ **NOTE** If your service provider uses Centrex lines, you must log on to the WebUI and enter a line access code for each line to allow calibration to take place. Before connecting the lines to the Gateway, connect the Gateway and one Deskset to the network, then see *"Accessing the Administrator WebUI" on page 36* and *"Line Calibration Configuration" on page 80*.

Connect the telephone lines to the Gateway:

1. Remove the plastic covers from the Gateway LINE ports to be used, as shown in Figure 5.

LINE 1 through LINE 4   **BYPASS**
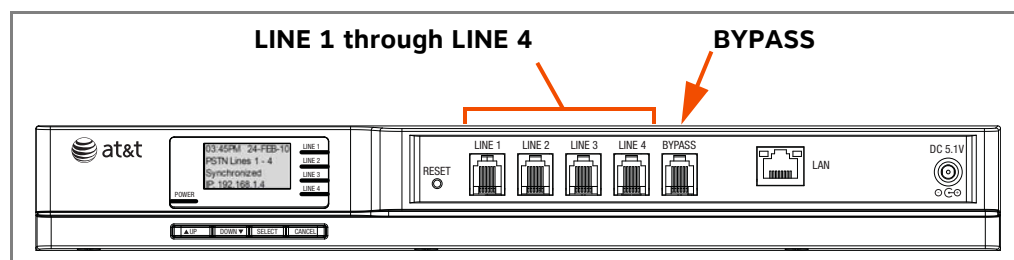
Figure 5. Gateway Telephone Line Connections

2. Plug up to four telephone lines from the telephone wall jacks into the Gateway.

> ⚠ **CAUTION** *If you subscribe to Digital Subscriber Line (DSL) high-speed Internet service through your telephone line, you must plug each telephone line with DSL service into a DSL filter. Then plug the DSL filter into the telephone wall jack, as shown in Figure 6.*
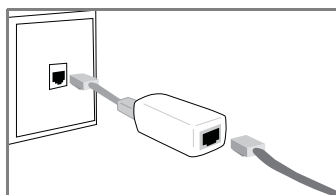
Figure 6. DSL Connection

Connect the Gateway to the network:

1. Connect the supplied Cat.-5 LAN cable (or a comparable substitute) from your office LAN to the Gateway LAN port.

Line LEDs   LAN   DC Power
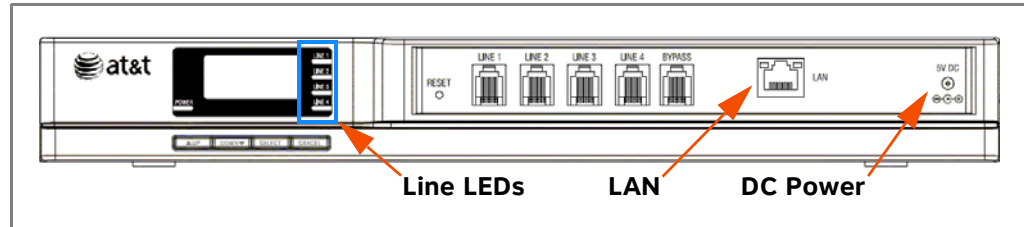
Figure 7. Gateway Power and LAN Connections

2. Plug the AC plug into an electrical outlet not controlled by a wall switch and the DC plug into the DC Power jack on the Gateway, as shown in Figure 7. Wait up to one minute until the screen lights up.

The Gateway takes about a minute to power up. The Line LEDs blink for up to 15 seconds during initialization, then turn off.

After another Syn248 device is installed, and after the Gateway has found the network and the other Syn248 device, **Synchronized** appears on the third line of the display as shown in Figure 8. This is the Idle screen.


```
03:45PM  24-Feb-10
PSTN Lines 1 - 4
Synchronized
IP: 192.168.1.5
```

Figure 8. Gateway Idle Screen, Synchronized

An IP address beginning with 169.xxx indicates there is no DHCP server on the network. Without a DHCP auto-assigned IP address (usually beginning with 192.xxx), the Syn248 devices may not show the correct time and date and you may not be able to access the WebUI to configure the system. You may have to set the time and date manually from a Deskset. See *"Set Time and Date" on page 95*.

Deskset Installation

Figure 9 identifies the features on the bottom and side of the Deskset. You can install the Deskset on a desktop or mount it on a wall.
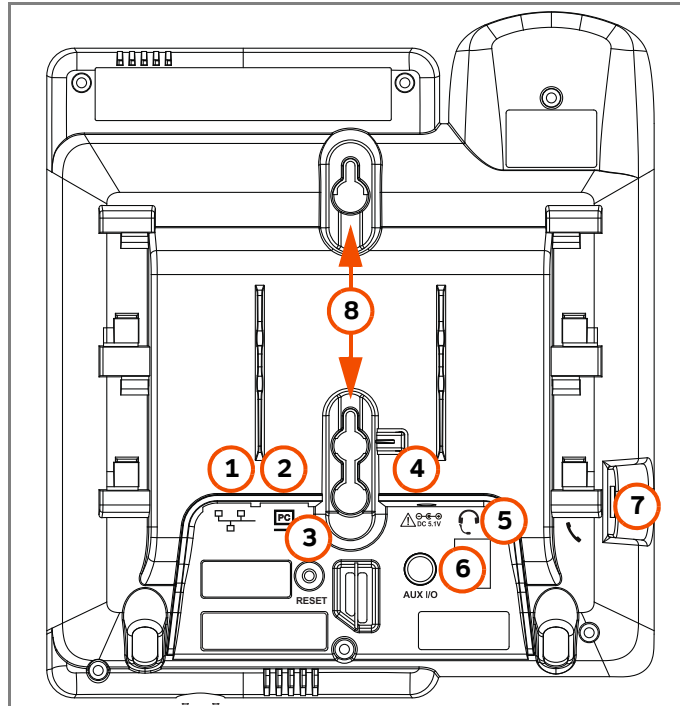
Figure 9. Deskset Connections (SB35025 Model Shown)

1. Network Port	There are two LEDs next to each network port.
	■ The green LED is on when the Deskset is connected to the network and has AC power.
	■ The yellow LED flashes when there is network activity.
2. PC Port	Intended for connecting an end-user PC to share the same LAN connection as the Deskset.
3. Reset Button	Restarts the Deskset when pressed momentarily.
	Restores factory defaults when pressed and held for more than five seconds with the LAN cable disconnected.
4. Power Jack	For connecting the AC adapter to the Deskset. The Deskset also supports Power over Ethernet.
5. Corded Headset Jack	For connecting a corded headset. Actual jack location may be different than shown.
6. AUX I/O Port	**SB35025 Deskset only**—For connecting a Music on Hold source and/or a single-zone overhead paging system.
7. Handset Jack	For connecting the corded handset to the Deskset base using the supplied handset cord.
8. Wall-Mount Slots	See *"To install the Deskset on a wall:" on page 22*.

To attach the Desktop stand for desktop installation:

1. Select a Deskset position. The desktop setup requires the Deskset stand and provides two positions, option 1 at 45° and option 2 at 60°, as shown in Figure 10. If you use option 2, rotate the handset tab as explained in *"To rotate the handset tab for wall and Deskset Option 2 installation:" on page 21*.
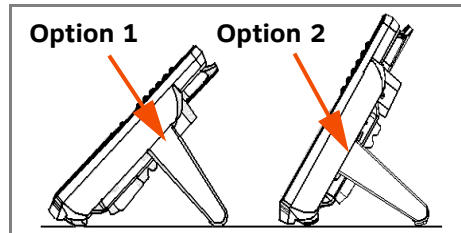
Figure 10. Deskset Stand Options

2. Place the Deskset on a flat surface with the power and network ports facing you, as illustrated in Figure 12.

3. Place the stand, illustrated in Figure 11, on the base with the flexible tab side away from you.
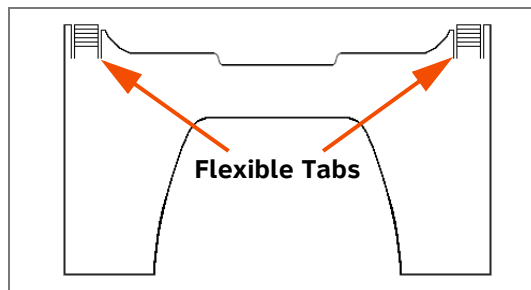
Figure 11. Deskset Stand Tabs

4. Insert the solid tabs of the stand into the option 1 or option 2 slots on the base that are marked in red in Figure 12.
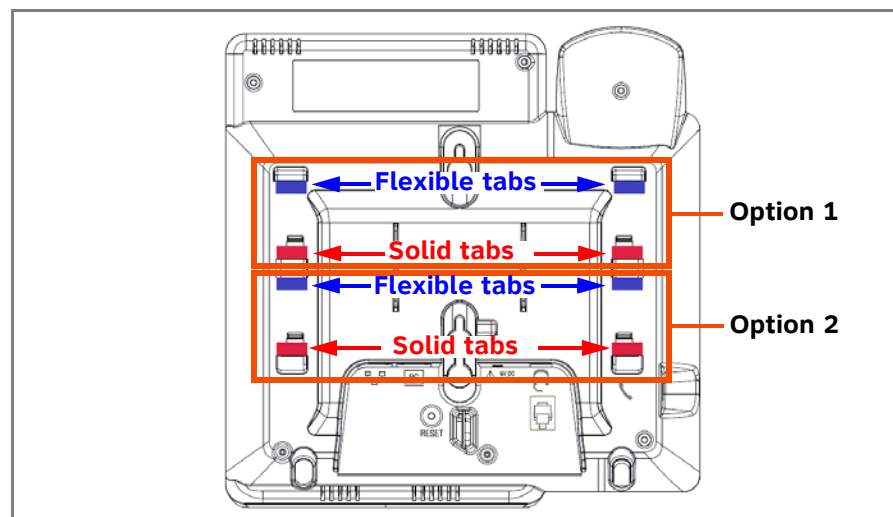
Figure 12. Deskset Stand Installation

5.   Rotate the stand away from you until it rests against the base and you hear a click as the flexible tabs lock into place.

To rotate the handset tab for wall and Deskset Option 2 installation:

1.   Press the switch hook and slide the handset tab toward the top of the base, as shown.

Switch Hook
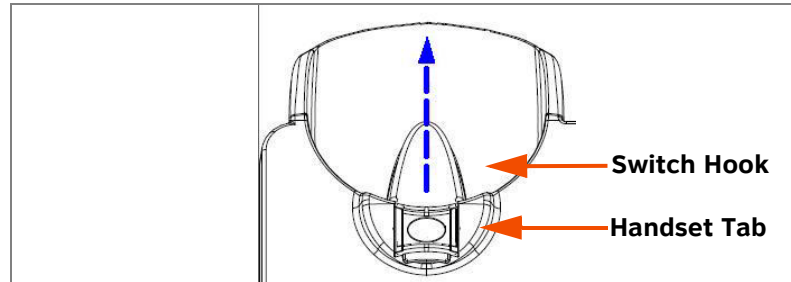
Handset Tab

2.   Rotate the handset tab 180° so that the "hook" is at the top.
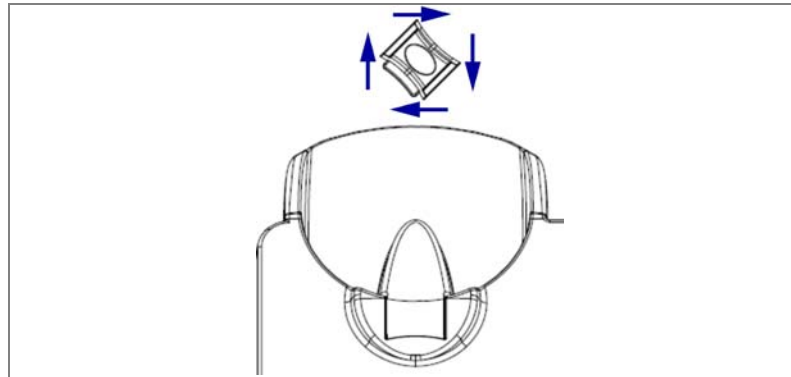
3.   Slide the handset tab back into the base.

"Hook"
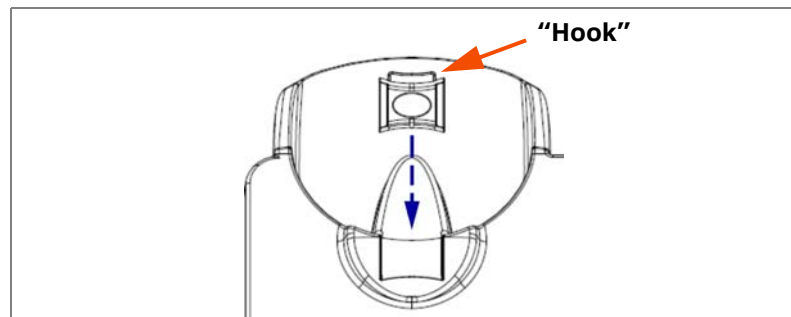
To install the Deskset on a wall:

1. Plug the Ethernet cable into the port on the back of the Deskset. (See *"To connect the Deskset to the network:" on page 24*.)

2. Plug the power adapter into the jack on the back of the Deskset. Skip this step if using PoE. (See *"To connect power:" on page 25*.)

3. Place the Deskset base over the mounting plate as shown in ❶. The Deskset will fit onto wall-mount screws with centers 3 ¼ inches (8.2 cm) or 4 inches (10.2 cm) apart. Most standard wall plates have screw centers 3 ¼ inches apart.

4. Slide the Deskset base down as shown in ❷.

Wall-mount screws with centers 3 ¼ or 4 inches apart
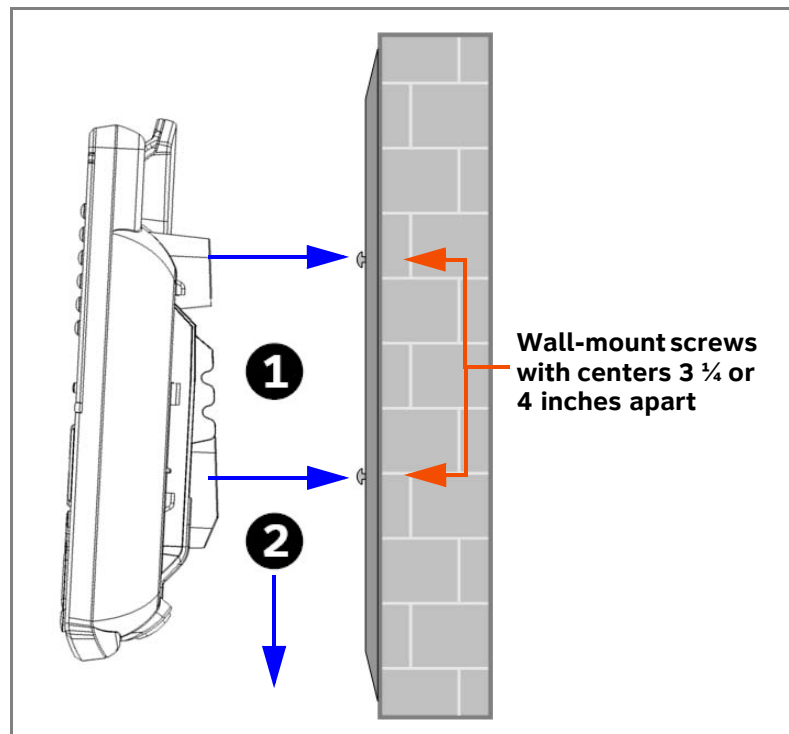
5. Plug the Ethernet cable into the LAN switch or wall jack.

6. Plug the power adapter into a power outlet not controlled by a wall switch. Skip this step if using PoE.

7. Make sure the handset tab is in the wall position, as described in *"To rotate the handset tab for wall and Deskset Option 2 installation:" on page 21*.

8. Connect the handset to the handset jack on the left side of the Deskset.

Connect the corded handset:

1. Plug the coiled end of the handset cord into the handset jack on the left side of the Deskset.

Handset Jack on Deskset

Handset Jack on Handset
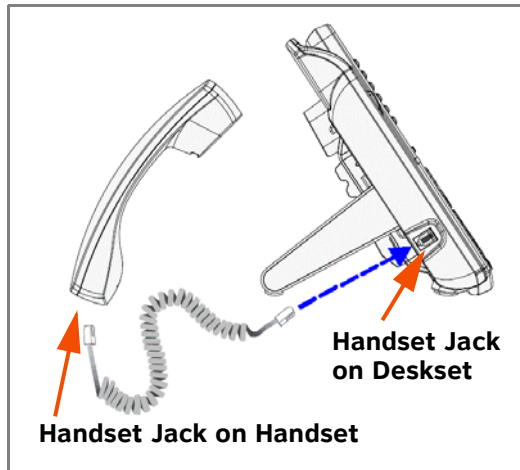
2. Plug the end of the handset cord with the longer straight portion into the handset, then hang up.

Connect an optional corded headset:

Plug an optional corded headset or cordless headset base into the RJ-9 connector on the bottom of the Deskset, as shown.

Optional Headset Jack
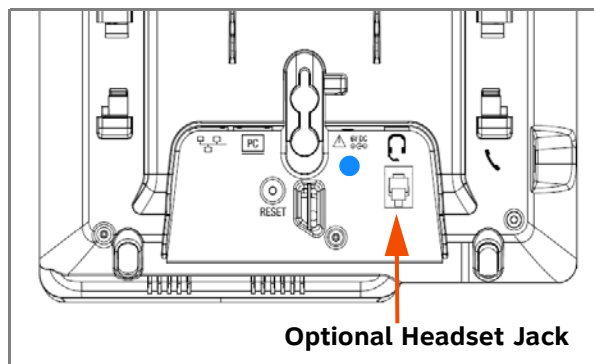
⚠️ **CAUTION**   *Do not plug a headset into the jack for the corded handset.*

To connect the Deskset to the network:

1. Plug a Cat.-5 Ethernet cable into the Network port on the back of the Deskset.

2. Plug the other end into an Ethernet wall jack that connects to your LAN switch.

If there is a networked computer and no extra Ethernet wall jacks near the Deskset, then the Deskset and PC can share the same network connection.

1. Unplug the Cat.-5 Ethernet cable from your computer.

2. Plug that Cat.-5 Ethernet cable into the Network port on the back of the Deskset, as shown below.
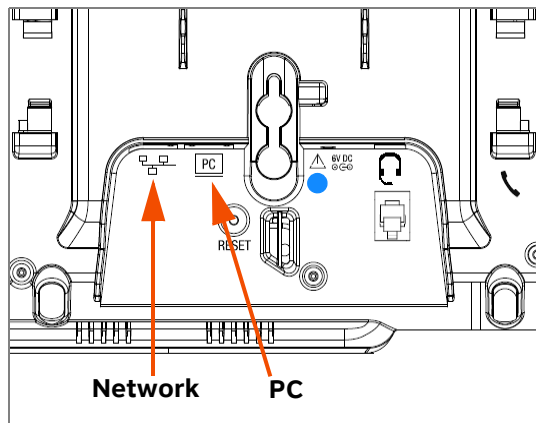
Network   **PC**

3. Plug another Cat.-5 Ethernet cable into the PC port on the Deskset.

4. Plug the other end of the second Cat.-5 Ethernet cable into your computer.

   - If a GigE network is being used, a computer connected through the Deskset will be limited to 100 Mbits/s. If you require a GigE Ethernet rate, use separate Ethernet connections for the Deskset and the computer so that the computer can take advantage of the greater bandwidth.

   - If a PC is connected to your LAN through a Deskset, any Deskset resets and power or network interruptions will disrupt the PC's connection to the network.

CAUTION

The PC port on the Deskset is intended for connection to an end-user PC only.

- *Do not use the PC port to connect to a PC with a heavy bandwidth load (such as a network server PC or a hub, switch, or router).*

- *Do not use the PC port to extend the network. The end-user PC should be the final point. Do not use the PC port to connect to other system devices.*

To connect power:

If you are using PoE, connecting the Deskset to the network also connects the power.

If you are using the supplied power adapter:

1. Plug the power adapter (blue tag) into the DC Power jack on the back of the Deskset.

Power Jack
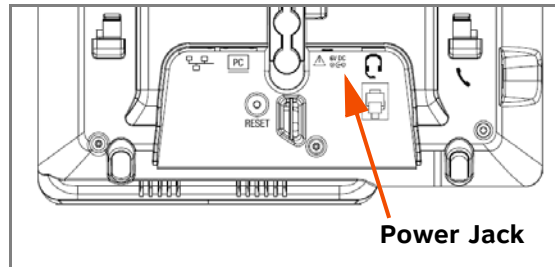
2. Plug the power adapter into an outlet not controlled by a wall switch. The display screen illuminates within a minute.

   If the user's computer is plugged into an uninterruptible power supply (UPS), consider plugging the Deskset into it, too. This will help prevent a computer connected to the Deskset PC port from losing its network connection during a power outage (providing that other network resources have backup power as well).

Connecting an Overhead Paging System (OHP)

You can connect a single-zone overhead paging system to an SB35025 Deskset using the supplied audio in/out cable. Syn248 supports one single-zone paging system per Syn248 system. If necessary, you can connect both an overhead paging system and a Music on Hold source to a single SB35025 Deskset using the supplied audio in/out cable.

NOTE When connecting an overhead paging system, ensure that you use the supplied audio in/out cable to connect the system to the SB35025 Deskset **AUX I/O** port.

Syn248 supports most OHP systems that support auxiliary audio-out connections to a PBX. You should also refer to your OHP system's product documentation for installation and configuration instructions or contact your OHP equipment provider. Some settings for the OHP may have to be changed to work with Syn248.

A single-zone paging system:

- broadcasts to all overhead speakers at once.

- can be included in a Syn248 Paging Zone.

- does not appear in the Paging Zones menu on a Deskset unless you add Overhead Page to a paging zone you create.

- must be connected to the SB35025 **AUX I/O** port. You may need to make or buy a custom cable for the final connection to the paging system. One end of this cable must have a 1/8-inch (3.5 mm) jack to connect to the supplied audio in/out cable.

NOTE The supplied audio in/out cable terminates in a ring/sleeve (or ground) connection at the "Paging Output" jack. Ensure that the cable that connects between the supplied audio cable and your overhead paging system is compatible with this configuration. The cable connector shown below would be compatible.
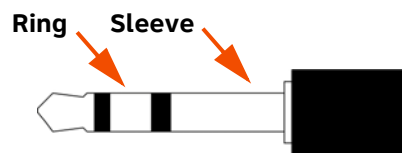
NOTE Whether you are replacing a phone system and using an existing, functional OHP, or installing a new OHP, the paging system may have settings that need to be adjusted to work with Syn248.

To install an overhead paging system:

1. Plug an audio cable from the OHP device into the "Paging Output" jack of the audio in/out cable supplied with the SB35025 Deskset, as shown in Figure 13.

Overhead Paging System

Paging Output

SB35025 Deskset
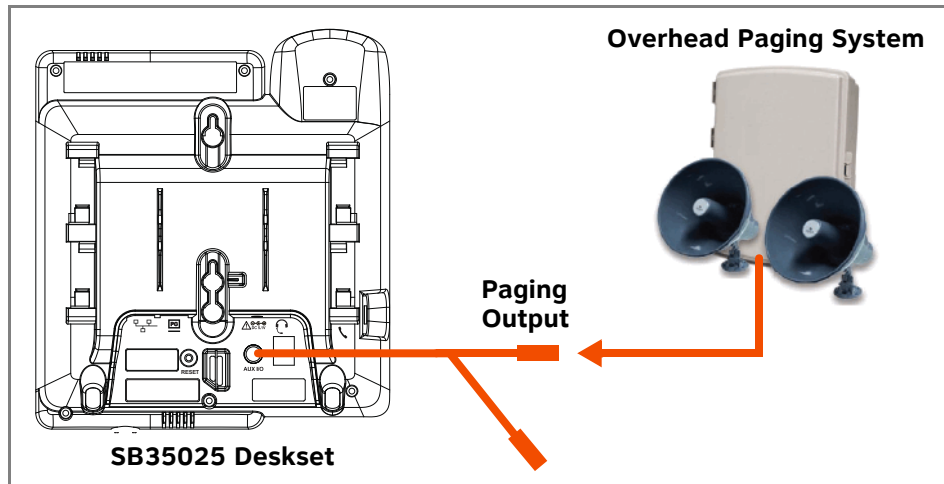
Figure 13. Overhead Paging System Connection

If you need to hard-wire a connection between your OHP device and the supplied audio in/out cable, you can configure a stereo audio cable as follows:

a. Remove the 1/8-inch (3.5 mm) plug from one end of the cable.

b. Strip enough shielding from the cable to expose the three wires inside.

c. Identify the Ring (Right channel) and Ground wires. Depending on the cable, the Ring wire may be red and the Ground wire may be bare/unshielded, as shown in Figure 14. You can use a voltmeter to properly identify the wires.

Tip (Left Ch.)— Do not wire to OHP

3.5 mm stereo plug to supplied audio in/out cable

Ground

Ring (Right Ch.)
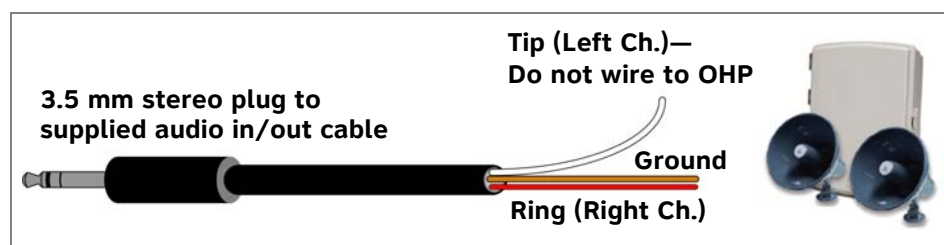
Figure 14. Hard-Wiring a Stereo Cable to the OHP

d. Trim the Tip (Left channel) wire to ensure it does not contact other wires or terminals.

e. Connect the Ground wire to the negative terminal and the Ring wire to the positive terminal on the OHP device.

f. Connect the other end of the hardwired cable to the "Paging Output" jack of the supplied audio in/out cable.

2. Connect the supplied audio in/out cable to the SB35025 Deskset **AUX I/O** port.

3. Log on to the WebUI to enable the OHP device. See *"Accessing the Administrator WebUI" on page 36* and *"Overhead Paging" on page 51*.

Connecting a Music on Hold Source

Your music on hold (MoH) source can be a streaming audio source, such as a radio or MP3 music player. The audio source must have a volume control. The volume adjustment on the audio device should be set to obtain the preferred level of music on hold within the system.

NOTE	On-hold music functionality should only be used in conjunction with music specifically licensed for on-hold use. Licensed on-hold music is available from many third-party suppliers. AT&T disclaims any liability arising from the failure to obtain such a license.

NOTE	When connecting an MoH source, ensure that you use the supplied audio in/out cable to connect the source to the SB35025 Deskset **AUX I/O** port.
	The supplied audio in/out cable terminates in a tip/sleeve (or ground) connection at the "Music on Hold Input" jack. Ensure that the cable that connects between the supplied audio cable and your MoH source is compatible with this configuration. Either cable connector shown below would be compatible.

Tip   **Sleeve**
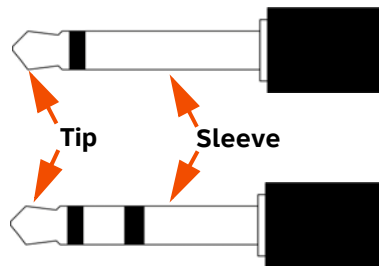
To install a music on hold source:

1. Connect an audio cable with 1/8-inch (3.5 mm) jacks from your music on hold source to the "Music on Hold Input" jack of the audio in/out cable supplied with the SB35025 Deskset. See Figure 15.
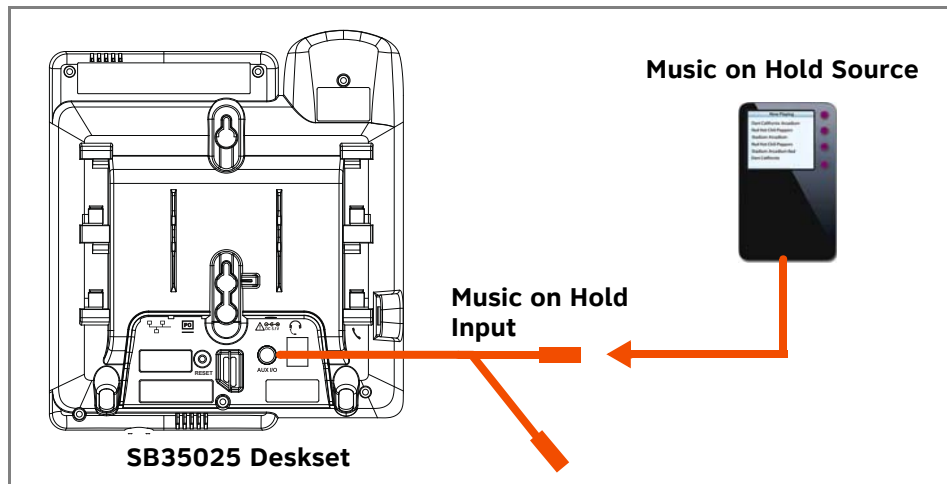
Figure 15. Music on Hold Source Installation

2. Connect the supplied audio in/out cable to the SB35025 Deskset **AUX I/O** port.

3. Log on to the WebUI to configure the Music on Hold settings. See *"Accessing the Administrator WebUI" on page 36.* The Music on Hold settings are listed under **Hold Settings** in the WebUI. You must:

   ■ Enable Music on Hold.

   ■ Select the extension (Deskset) to which you have connected the music on hold source.

   For more information, see *"Configuring Hold Settings" on page 49.*

Cordless Headset Installation and Registration

> **NOTE** The SB35020 Deskset does not support AT&T DECT Cordless Headsets.

Install the cordless headset charger, then install and charge the battery according to the headset user's manual.

You can register one AT&T DECT Cordless Headset to a Deskset. When a Deskset has a cordless accessory, the Deskset and headset are all part of the same extension, and only one device can be used at a time.

> **NOTE** The headset must be in the charger, fully charged and deregistered from any other device before registration can proceed. Remove and replace the cordless headset before you press **Register** on the Deskset.

SB35025 Deskset Registration

To register the cordless headset:

1. On the Deskset, press ☰ (**MENU**), then **2**, and then **6**.
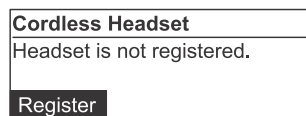
    The **Cordless Headset** menu appears.

Cordless Headset
Headset is not registered.
Register

2. Remove and replace the cordless headset from its charging base.

3. Press **Register** . **Registration in Progress…** appears while the Deskset searches for the headset.

4. When registration is complete, **Headset is registered** appears.

5. Press ✕ (**CANCEL**). The **User Settings** menu appears.

> **NOTE** While registration is in progress, registration can be terminated by pressing ✕ (**CANCEL**) on the Deskset.
>
> If the cordless headset is registered to another Deskset, it must be deregistered first. See *"Deregistering a Cordless Headset" on page 32*.

SB35031 Deskset Registration

To register the cordless headset:

1. Press ▤ (**MENU**), then **2**, and then **5**.

    The **Cordless Headset Registration** menu appears.

🛈 **NOTE**   The headset must be in the charger, otherwise registration cannot proceed.
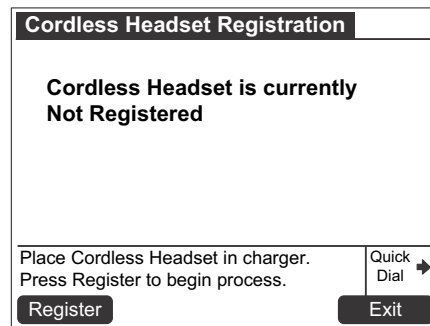
```
┌─────────────────────────────────────────┐
│ Cordless Headset Registration            │
│                                           │
│   Cordless Headset is currently          │
│   Not Registered                         │
│                                           │
│                                           │
│                                           │
│ Place Cordless Headset in charger. │Quick │
│ Press Register to begin process.   │Dial ➤│
│ [Register]                    Exit        │
└─────────────────────────────────────────┘
```

2. Remove and replace the cordless headset from its charging base.

3. Press **Register** . **Registration in Progress…** appears while the Deskset searches for the headset.

4. When registration is complete, **Cordless Headset is currently Registered** appears and the cordless headset **ON/OFF** light turns solid blue.

5. Press **Exit** . The **User Settings** menu appears.

🛈 **NOTE**   Registration can be terminated by pressing **CANCEL** on the Deskset.

If the cordless headset is registered to another Deskset, it must be deregistered first. See *"Deregistering a Cordless Headset" on page 32*.

Deregistering a Cordless Headset

You must deregister cordless accessories before you can register them to different Desksets. If you remove a Deskset from the system, first deregister any cordless accessories.

SB35025   ***To deregister a cordless headset:***

1.   Press ☰ (**MENU**), then **2**, and then **6**.

The **Cordless Headset** menu appears.

```
Cordless Headset
Headset is registered.

 DeReg
```
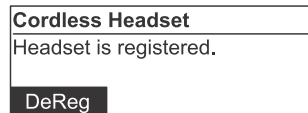
2.   Press **DeReg** . The confirmation message appears.

3.   Press **Yes** to confirm deregistration.

The Deskset screen displays **Headset is not registered**.

```
Cordless Headset
Headset is not registered.

 Register
```
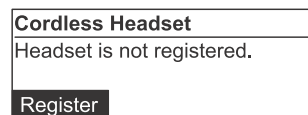
4.   Press ✕ (**CANCEL**). The **User Settings** menu appears.

SB35031   ***To deregister a cordless headset:***

1.   Press ☰ (**MENU**), then **2**, and then **5**.

The **Cordless Headset Registration** menu appears.

```
Cordless Headset Registration


   Cordless Headset is currently
   Registered




Press DeReg to deregister the Cordless    Quick
Headset.                                  Dial  ➜
             DeReg                              Exit
```
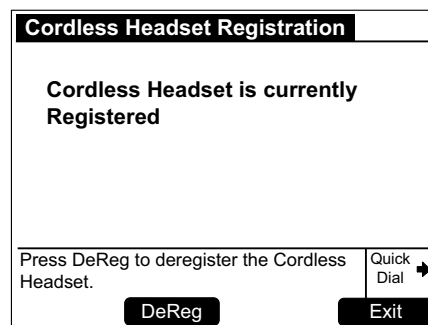
2.   Press **DeReg** . The confirmation message appears.

3.   Press **Yes** to confirm deregistration.

The Deskset screen then displays **Cordless Headset is currently Not Registered**.

Cordless Headset Registration

**Cordless Headset is currently
Not Registered**

Place Cordless Headset in charger.   Quick
Press Register to begin process.   Dial →
Register   Exit
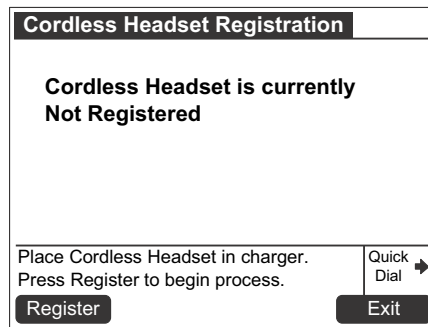
The cordless headset **ON/OFF** light slowly flashes.

4. Press   **Exit**   . The **User Settings** menu appears.

Cordless Accessory Registration and Deregistration Time-Out

> If the cordless device is registered to another Deskset, it must be deregistered
> first. See *"Deregistering a Cordless Headset" on page 32*.
>
> NOTE

For security reasons, the registration process on both Deskset and cordless accessory
terminates after the time-out period of two minutes if registration is not successful.

If the registration process times out, the Deskset it displays **Registration Failed** and
returns to the **Cordless Headset** menu.

If cordless headset registration fails, remove the headset from the charger and try the
registration process again, beginning with Step 1, *"To register the cordless headset:" on
page 30* or *page 31*.

Product Registration

In order to keep your system up to date with the latest upgrades and ensure timely warranty support, it is extremely important to register your system. To register a device, you need its MAC address.

To find a Deskset MAC address:

■ Press ☰ (**MENU**), and then press **4**. Scroll down if necessary and note the **MAC Address** line.

Deskset Information ▼	
Model No:	SB35031
Status:	Synchronized*
IP Address:	192.168.0.101
MAC Address:	00:11:A0:11:EA:4D
Serial No:	GG20013043
Boot Ver:	2.7.1
P Firmware Ver:	1.3.1

Use ▼ or ▲ to scroll. Press Exit when done.   Quick Dial ➜

Exit

Deskset Information ▼▲	
MAC Add:	00:11:A0:19:FB:0D
Serial No:	MS00000022
Boot Ver:	2.7.0
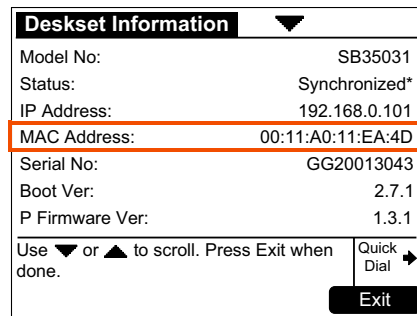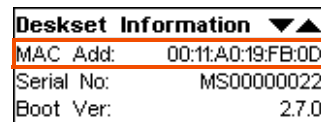
SB35031 Deskset   **SB35025/SB35020 Deskset**

To find a Gateway MAC address:

■ Press **SELECT**, **DOWN**, **SELECT**, and then press **DOWN** until **MAC Address** appears.

Network Status ▲▼
MAC Address:
00:11:A0:09:96:CC
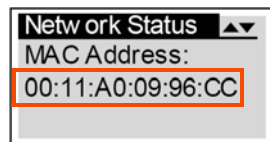
To register your Syn248 system:

1. Open a new browser tab and navigate to the SMB Telephones **product registration web page**.

2. Select your products, then complete the form.

3. When the form is complete, click **Send**.

SYSTEM CONFIGURATION

The WebUI allows you to configure Syn248 devices and the Syn248 system. The WebUI is embedded in every SB35010 Gateway and Deskset. When you access the WebUI, you are accessing it on the device, not on the Internet.

This chapter shows you how to access the WebUI, then guides you through the settings you may have to configure to commission or to customize a Syn248 system.

This chapter also covers device management using the WebUI. As the system administrator, you will use the WebUI to delete devices from the system, change extension numbers, back up your settings, and upgrade devices.

The WebUI menus covered in this chapter include:

- *"System Settings" on page 39*
- *"Extension Settings" on page 59*
- *"Device Management" on page 68*
- *"Help" on page 81*.

> **NOTE** After completing the configuration of the system, back up the system settings. See *"Back Up and Restore Settings" on page 70*.

Accessing the Administrator WebUI

> ⚠️ **CAUTION**
>
> *Only one person at a time should log on as the system administrator to prevent unintentional overwriting of changes.*

> 📖 WebUI information for Deskset users is contained in the "Web Interface" chapter of the SB35020/SB35025 Deskset User's Guide and the SB35031 Deskset User's Guide at **smbtelephones.att.com**.

To access the WebUI and log on:

1. Ensure your computer is connected to the same IP subnet as the Syn248 system. The easiest way to ensure this is to connect your PC to the **PC** port on the back of a Deskset with an Ethernet cable.

2. On the Deskset, press ☰ (**MENU**) then **4**. The **Deskset Information** screen appears.

Deskset Information ▼	
Model No:	SB35031
Status:	Synchronized*
IP Address:	**192.168.0.101**
MAC Address:	00:11:A0:11:EA:4D
Serial No:	GG20013043
Boot Ver:	2.7.1
P Firmware Ver:	1.3.1
Use ▼ or ▲ to scroll. Press Exit when done.	Quick Dial ➡
	Exit

Deskset Information ▼	
Model No:	**SB35020**
Status:	**Synchronized**
IP Address:	**192.168.0.101**

SB35031 Deskset   **SB35025/SB35020 Deskset**
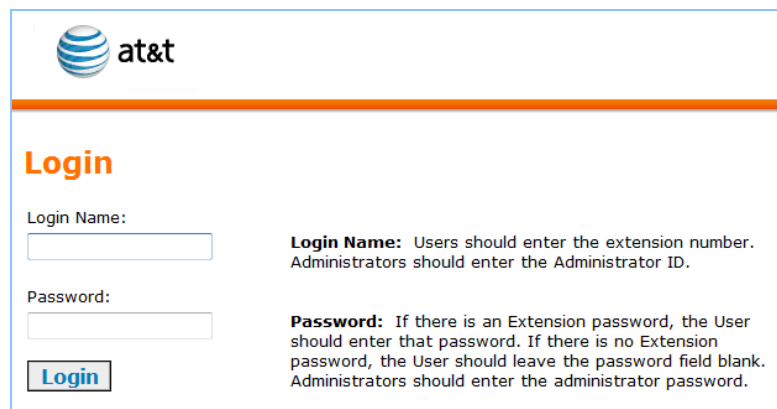
3. Find the IP Address on the **Deskset Information** screen.

4. On your computer, open an Internet browser.

5. In the browser address bar, type the Deskset IP Address and press **ENTER** on your computer keyboard.

[🌐 192.168.0.101| 🔍 ▾ →]

> ℹ️ **NOTE**
>
> You can also use a Gateway IP address (shown in *Figure 22 on page 85*) to log on to the WebUI.

The **Login** page appears.

6.   Enter **admin** in the **Login Name** field and **12345** in the **Password** field, then click [Login] . You can change the Admin ID and password once you have logged on.

The **System Information** page appears.

The **System Information** page displays the count of Desksets and Gateways. You can also expand the **System Information** page to display **Detailed System Information**, which lists information specific to each installed device (such as the **IP Address** and **Software Version**).

Click topics from the navigation menu on the left side of the WebUI to see them. You view and change settings in two different types of fields: drop-down lists and entry fields into which you type information. For your security, the WebUI times out after 10 minutes. If it is idle for that time, you must log on again.

The remaining procedures in this chapter assume that you have already logged on to the WebUI as administrator.

⚠️ **CAUTION**   *In most cases there are multiple settings on one page. Changing a setting does not instantly apply the new value. Click [Apply] on the WebUI to save all changes on that page.*

ℹ️ **NOTE**   Changes made on the WebUI are transmitted to all connected devices when applied. If changes are being made at the Deskset and WebUI simultaneously, a first-come-first-served policy applies. System configuration changes are transmitted globally when you press [Save] on the Deskset or click [Apply] on the WebUI.

System Configuration   37

Error Handling

If you type an invalid value into one of the WebUI fields and click Apply , the page is not saved. The WebUI displays an error message at the top of the page. The field with the incorrect value is highlighted in yellow, as shown in Figure 16. You can view a more detailed error description by resting your mouse pointer on the highlighted field.
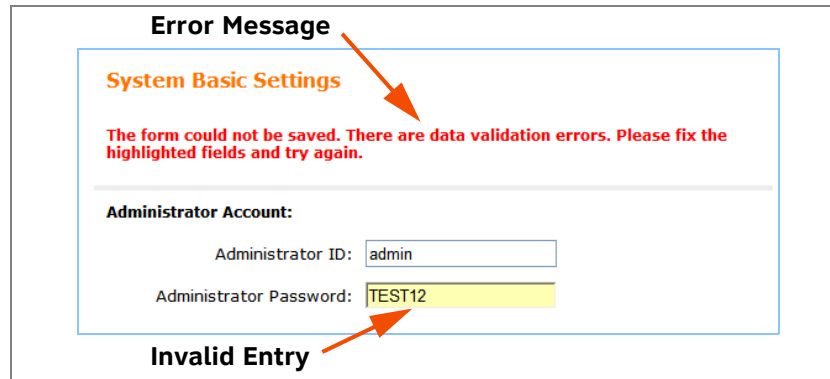
Figure 16. WebUI Error Indication

To view Detailed System Information:

1. On the **System Information** page, click Detailed Site Information .

Information specific to each installed device appears. There may be a delay as the system gathers this information.

> The **Connected** column indicates whether or not the listed device is synchronized with the system, so that communication can occur. **No** means the device is registered with the system, but not currently powered on or detected.

System Settings

After you log on to the WebUI as the administrator with a Gateway or Deskset IP address, you can make changes to the system or to individual Desksets.

> ⚠ **CAUTION** *When making changes to the System Settings through the WebUI, ensure that no one is using the system. To ensure the system is idle, you might need to make the changes outside of normal office hours.*

The System Settings covered in this chapter include:

- *"Changing the System Basic Settings" on page 39*
- *"Configuring the Auto Attendant" on page 42*
- *"Configuring Hold Settings" on page 49*
- *"Overhead Paging" on page 51*

- *"Configuring Phone Line CFNA" on page 53*
- *"Creating, Editing and Deleting Paging Zones" on page 55*
- *"System Directory" on page 57*
- *"Line Naming" on page 58*

Changing the System Basic Settings

To view or modify the System Basic Settings:

1. In the navigation menu at left, click **Basic Settings**.

    The **System Basic Settings** page appears.

    System Basic Settings

    Administrator Account:

    Administrator ID: admin

    Administrator Password: 12345

    Operator Extension:

    Assign Operator "0" Extension: Ext. 200 ▼

2. If necessary, change the **Administrator Account**. The **Administrator ID** can be up to 16 characters long. The **Administrator Password** is limited to four to six digits. Values outside this range generate an error message.

3. Select the **Operator Extension**. Any Deskset can be designated as the system operator. The default is Extension 200. The Operator can select the current Auto Attendant menu. See *"Configuring the Auto Attendant" on page 42*. As well, incoming external calls are forwarded to the operator extension if the caller presses **0** (zero) after the Auto Attendant answers or when callers reach an extension's voicemail. Deskset users can call the operator by pressing **0** from an active intercom line.

4. Set the **Timer for Forwarded and Transferred Outside Calls**. This sets the **Maximum Call Duration** for incoming calls when they are forwarded to non-system phone numbers, such as to cell phones. When you forward these calls, two phone lines are in use for the duration of the forwarded call—one for the incoming call and one for the call to the forwarded line—with no Syn248 user able to end the call. The default time is 30 minutes, adjustable from 15 to 120 minutes. Calls exceeding the Maximum Call Duration are dropped with no warning to the callers.

5. Enable or disable Hook Flash system-wide. When enabled, Desksets have a **Flash** soft key available when an external line is active. Pressing **Flash** simulates a hook flash, which signals your telephone service provider to activate a feature. For example, hook flash may switch you to another incoming call when you hear a call-waiting tone, or enable you to create a conference call. These features may be offered as part of your phone plan. Features that use hook flash occur at the Central Office (CO) and are separate from any similar functions in Syn248.

6. Set the **System Time/Date Options**. You can set the system time to follow a Network Time Protocol (NTP) Server (recommended) or you can set the time and date manually.

    Click **Set Time by NTP Server**:

    a. Click **Default** to set the time automatically from the Internet.

       b.   Click **Custom Time Server** if you have your own preferred time server, then enter the server's URL.

       c.   Select your **Time Zone**.

       d.   Click **Yes** or **No** for **Daylight Savings Time**.

OR

To set the time and date manually, click **Manual**.

       a.   Enter the current time and date.

       b.   Select your **Time Zone**.

       c.   Click **Yes** or **No** for **Daylight Savings Time**.

7.   Click   Apply   to save these settings or click   Cancel .

Configuring the Auto Attendant

The Auto Attendant automatically answers unanswered external calls when it is set as a Call Foward–No Answer destination on the **Phone Line CFNA** page. See *"Configuring Phone Line CFNA" on page 53*. When calls are forwarded to the Auto Attendant, callers hear the Auto Attendant menu, which tells them how to use a touch-tone telephone to reach the appropriate person, operator, or extension mailbox.

There are three Auto Attendant menus available—the Default menu, a Day Menu, and a Night Menu. The Default menu instructs callers to "Enter the extension number or enter 0 for the operator." You can select the current active Auto Attendant menu using the Deskset that is set as the Operator extension (see *"Setting the Current Auto-Attendant" on page 46*).

You can configure the Day Menu and Night Menu with your own voice greetings and key-press commands. You cannot customize the Default menu.

Customizing the Auto Attendant Day and Night Menus

Auto Attendant menus consist of the recordings that the callers hear and lists of actions they can take. To customize the Day and Night menus, plan what you want callers to be able to do. In preparation for recording, write down the greeting and instructions you want callers to hear when they reach each menu. See *"Auto Attendant Voice Prompts" on page 45*.

To customize a menu:

1. Click **System Settings**, then **Auto Attendant**. The Day Menu appears.

2. Click **Play/Record** to record a menu voice prompt. The **Auto Attendant Voice Prompts** screen appears. See *"Auto Attendant Voice Prompts" on page 45*.

3. Set **Enable Direct Dial**. Enabling Direct Dial allows callers to directly dial extensions by entering an extension number after reaching the Auto Attendant.

> **NOTE**
> If you assign dial key values that are the same as the first digit of any extension (2, for example), callers will be unable to directly dial those extensions. Instead, they will be connected to the menu action associated with that key value.

4. Select **Enable Operator**. Enabling the operator allows callers to press zero (**0**) to reach the operator. (The default operator extension is 200.) When **Enable Operator** is **On**, callers cannot press **0** for other actions.

5. Set the dial key values. Program an action for each digit as needed by selecting the action from each digit's drop-down list.

The available choices are:

- **None**—No action.

- **Replay**—Replays the current message.

- **Auto Attendant Directory**—Accesses the Auto Attendant Directory, which allows callers to spell a name, followed by the pound (#) sign. See *"Name Recording for the Auto Attendant Directory" on page 47* and *"Extension Basic Settings" on page 59*.

- *<Extensions>*—Sends calls directly to a specific extension. Select the extension that callers will ring when they press a specific dial key. For example, under **Press 1**, select **Ext. 201**. Your Day Menu recorded voice prompt might say, "To call Graham Bell at extension 201, press 1."

- *<Personal Voicemails>*—Sends calls directly to a specific extension's personal voicemail. Select the extension's voicemail that callers will reach when they press a specific dial key. For example, under **Press 1**, select **Mailbox 201**. Your Day Menu recorded voice prompt might say, "To leave a message for Graham Bell at extension 201, press 1."

NOTE If no digit keys have been pressed five seconds after the voice prompt, the voice prompt replays. After replaying the voice prompt three times, the Auto Attendant says "Goodbye" and hangs up the call.

If the caller hangs up the phone, the Auto Attendant stops.

---

6. When you are done, click Apply to save these settings or click Cancel to refresh the screen without saving the changes.

Auto Attendant Voice Prompts

To record Auto Attendant voice prompts:

1. Click **System Settings**, then **Auto Attendant**.

2. On an Auto Attendant **Day Menu** or **Night Menu** page, click   Play/Record . The
    Auto Attendant Voice Prompts page appears.

Auto Attendant Voice Prompts

1. Select the extension to be used for recording:

    Select Extension ▾

2. When you are ready to start recording, click the "Start Recording" button. The
    selected extension will begin ringing.

3. Answer the call to begin the prompt recording session. Follow the voice
    instructions:

    o   To record a new prompt, press 1.

    o   Press 5 when you are done.

    o   To play the recorded prompt, press 2.

4. After you've completed recording the prompt, hang up.

5. Click the "Save Recording" button to save the new voice prompt.

6. To cancel the recording at any time, hang up and click the "Cancel" button.

Start Recording   **Save Recording**   **Cancel**

3. Follow the instructions on the web page to record the voice prompt.

    Here is an example of a script for a Day menu:

    "This is the Widget Company. We are open from 9 AM to 5 PM, Monday to Friday. If
    you know your party's extension, dial it now. To reach someone by spelling their
    name, followed by the pound sign, press 1. For Sales, press 3. For Customer Service,
    press 4. To replay this message, press 5. To speak with the operator, press 0." The
    Auto Attendant menu that you configure might look like the menu shown in
    Figure 17.

4. Click Save Recording . You return to the Auto Attendant Menu Editor so that you can
    add actions to the menu. If you press Save Recording before you hang up, the
    recording is not saved.

    OR

    Click Cancel to return to the previous screen without saving the changes.

Day Menu

Voice Prompt: **Play/Record**

Enable Direct Dial: ◉ On ○ Off

Enable Operator: ◉ On ○ Off

Press 1:	Press 2:
Auto Attendant Direct ▼	None ▼

Press 3:	Press 4:
Ext. 200 ▼	Ext. 201 ▼

Press 5:	Press 6:
Replay ▼	None ▼

Press 7:	Press 8:
None ▼	None ▼

Press 9:	Press 0:
None ▼	None ▼

Press *:	Press #:
None ▼	None ▼

Apply   **Cancel**

Figure 17. Day Menu Example

Setting the Current Auto-Attendant

To set the current Auto-Attendant:

1. On the Operator Deskset, press ▤ (**MENU**), then **5** to display the **Auto-Attendant** menu.

2. **SB35031 Deskset**—Highlight the desired menu, then press **Set?** .

    SB35020/SB35025 Deskset—Press ◁ or ▷ to select the current menu: **Default Menu**, **Day Menu**, or **Night Menu**.

Auto Attendant Settings ▼▲

1. Default Menu   [Set]

2. Day Menu

3. Night Menu

Use ▼ or ▲ to scroll or press 1-3.   Quick
Press Set? then press Save.   Dial →
  Save   Set?

SB35031 Deskset

Auto Attendant
Select Current Menu:
  ◀ Default Menu ▶
  Save
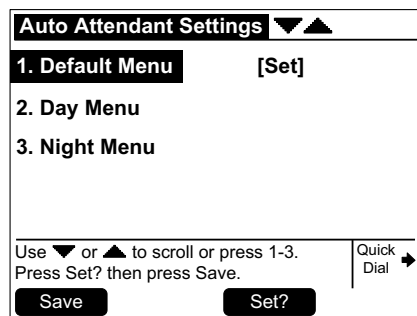
SB35025/SB35020 Deskset

3. Press **Save** to save the setting.

Name Recording for the Auto Attendant Directory

The administrator and individual users can create name recordings at the Desksets. When callers access the Directory through the Auto Attendant, the name recording plays to confirm the selection.

In order to create a fully functional Auto Attendant Directory, ensure that you also enter a name for every extension. See *"Extension Basic Settings" on page 59*.

To create consistent Auto Attendant name recordings for incoming callers, ask Deskset users to state their name slowly, clearly, and at a reasonable volume. You may also recommend that users state both their name and extension number to assist incoming callers further.

> **NOTE** You are limited to a 10-second recording. Recording stops automatically if you exceed the limit.

SB35020/025

To record, play, or delete a personal name:

1. Press ☰ (**MENU**), then **2**, then **1**, and then **2** to display the **Name Recording** menu. The **Play** and **Delete** soft keys do not appear if the name has not already been recorded.

2. Pick up the handset and press **Record**. The **Record** key changes to **Stop**.

3. Press **Stop** when finished.

4. Press **Play** to review the recorded name or press **Delete** to delete the greeting.

5. Press ✗ (**CANCEL**) to return to the **Message Greetings** menu.

SB35031

To record a personal name:

1. Press **MENU**, **2**, and **4**.

   The **Name Recording** screen appears.

2. Press **1** to display the **Play/Rec Name** screen.
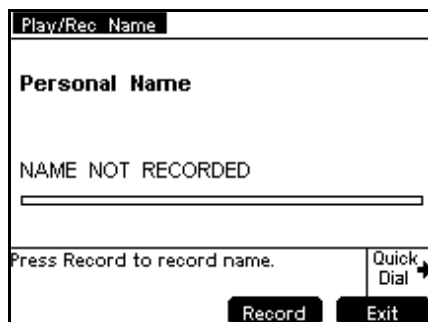
3. Pick up the handset and press **Record** to record a personal name.

4. When you are finished recording, press **Stop** . The screen changes to display **Play** and **Record** .

5. Press **Play** to review the name recording.

6. To return to the **User Settings** screen, press **Exit** .

SB35031   ***To delete a name:***

1. Press **MENU**, **2**, and **4**.

   The **Name Recording** screen appears.

2. Press **2**. A confirmation screen appears.

```
Name Recording

  Are you sure you want to
  delete your recorded name?



Press Yes to delete or No to cancel.
  Yes                          No
```
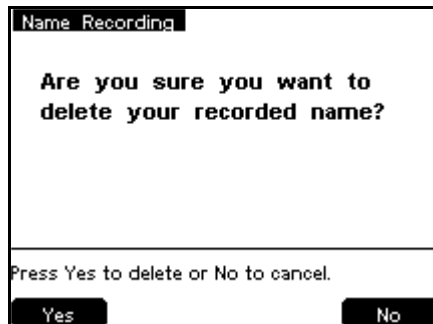
3. Press **Yes** to confirm.

   After deleting the name recording, the extension number plays to callers when they look up your name in the Auto Attendant Directory.

Configuring Hold Settings

On the **Hold Settings** page, you can enable Music on Hold and create a hold announcement for callers to hear when they are on hold. When the hold announcement and Music on Hold are disabled, callers on hold hear two short beeps every 10 seconds.

> **NOTE** The hold announcement does not play when placing a conference on hold, or if one of the parties drops out of the conference.

> **NOTE** Music on Hold settings do not appear if there are no SB35025 Desksets connected to the system.

To configure Hold Settings:

1. In the navigation menu at left, click **Hold Settings**. The **Hold Settings** page appears.

2. Under **Hold Music**, if you have a Music on Hold source connected, click **Enable**.

3. Select the **Port**, which is the extension number of the SB35025 Deskset to which the Music on Hold source is connected. All SB35025 Desksets installed in the Syn248 system appear in the list.

4. If you want to use a hold announcement, click **Enable**.

5. Enter the amount of delay before the announcement first plays to a caller on hold.

6. Enter the delay before the announcement repeats.

7. To play, record, or delete the announcement, click **Play/Record**.

8. Follow the instructions on the **Hold Announcement** page to record a prompt.

    OR

    Click **Delete Recording** to delete the announcement.

9. After hanging up and clicking `Save Recording`, you return to the **Hold Settings** page. If you press `Save Recording` before you hang up, the recording is not saved.

    OR

    Click `Cancel` to return to the **Hold Settings** page without saving the changes.

10. On the **Hold Settings** page, click `Apply` to save these settings or click `Cancel` to return to the previous page without saving the changes.

Overhead Paging

> **NOTE**
> The **Overhead Paging Configuration** page does not appear if there are no SB35025 Desksets connected to the system.

To set up external overhead paging:

1. In the navigation menu at left, click **Overhead Paging**. The **Overhead Paging Configuration** page appears.

2. **Enable** or **Disable** the overhead **Paging**. When overhead paging is enabled, "Overhead Page" appears as an available Paging Zone member on the **Create/Edit Paging Zone** WebUI page. See *"Creating a Paging Zone with Overhead Paging" on page 52* and *"Creating, Editing and Deleting Paging Zones" on page 55*.

3. Select the **AUX I/O Port**, which is the extension number of the SB35025 Deskset to which the overhead paging system is connected. All SB35025 Desksets installed in the Syn248 system appear in the list.

4. Click **Apply** to save these settings or click **Cancel** to return to the previous page without saving the changes.
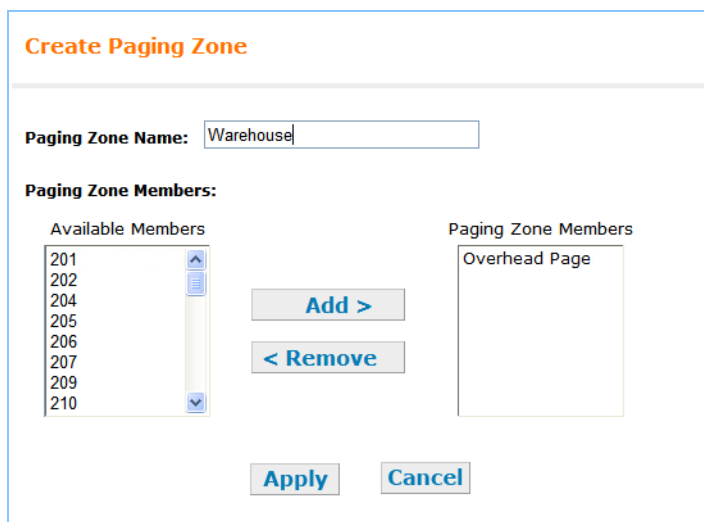
Creating a Paging Zone with Overhead Paging

An overhead paging (OHP) system issues a one-way broadcast to all overhead speakers. These speakers cannot be grouped into separate zones. A single OHP system can be connected to the **AUX I/O** port of an SB35025 Deskset. This OHP system is automatically included when you page "All Extensions".

To create a single overhead paging zone:

1. Follow the instructions in *"Creating, Editing and Deleting Paging Zones" on page 55* to either **Create New Paging Zone**, or **View/Edit** an existing Paging Zone.

2. Select **Overhead Page** from the **Available Members** list and click   Add > .

3. Click Apply to save these settings or click Cancel to return to the previous page without saving the changes.

Create Paging Zone

Paging Zone Name: Warehouse

Paging Zone Members:

Available Members

201
202
204
205
206
207
209
210

Add >

< Remove

Paging Zone Members

Overhead Page

Apply   Cancel

Configuring Phone Line CFNA

On the **Phone Line CFNA** (Call Forward–No Answer) page, you can specify how to forward calls that do not get answered. You can set a CFNA destination for each telephone line connected to the Gateway.

If your telephone lines are part of a hunt group (a telephone company feature that allows calls to a busy phone number to roll over to the next available telephone line), then it is recommended to set the same CFNA destination for all lines in that group.

To configure CFNA settings:

1. In the navigation menu at left, click **Phone Line CFNA**. The **Phone Line Call Forward No Answer** page appears.

2. Select a line. The lines are listed along with their names. See *"Line Naming" on page 58*.

3. Select a Call Forward–No Answer **Target** for the line.

   - **Off**. The line rings until the call is answered or the caller hangs up.

   - **Voicemail**. The unanswered call is directed to the selected extension's voicemail.

- **Extension**. The unanswered call is directed to the selected extension. Note that if the call is not answered at the extension, then the call is forwarded again according the extension's Intercom CFNA setting.

- **Outside Phone Number**. After selecting this, enter a telephone number.

- **Auto Attendant**. The unanswered call is directed to the currently selected Auto Attendant menu.

4. Select the **Seconds before Forwarding**, from 0 to 45 seconds.

5. Click Apply to save the setting. The new setting appears in the **CFNA Destination** column at top. To configure another line, return to step 2.
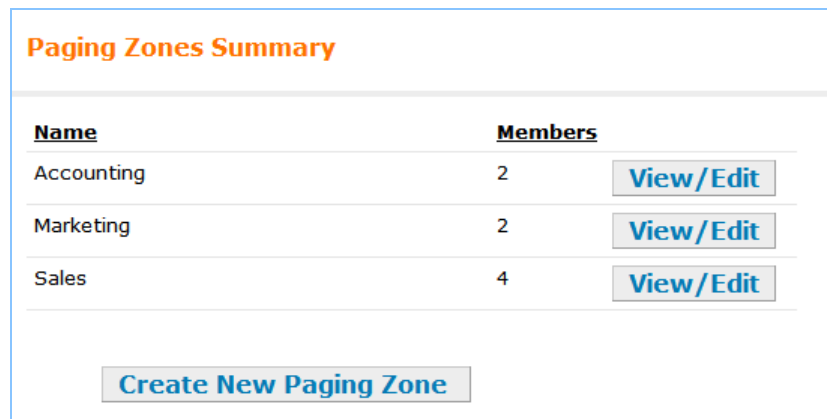
Creating, Editing and Deleting Paging Zones

Use paging zones to set up extensions that can be paged as a group. For example, all extensions in the sales department could be defined as a paging zone. Any Deskset user can initiate a page to all extensions or only to the members of a paging zone. You can configure up to eight paging zones, each with one or more members. You can place every extension in a paging zone.

To create a paging zone:
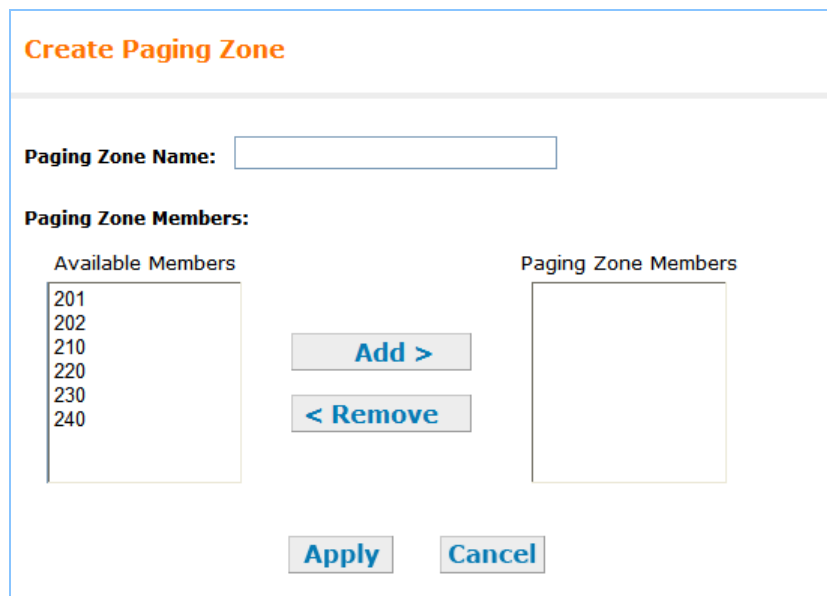
1. In the navigation menu at left, click **Paging Zones**. The **Paging Zones Summary** page appears.

2. Click **Create New Paging Zone** to create a new paging zone. The **Create Paging Zone** page appears.

3. Enter the **Paging Zone Name**.

---

4.   Select one or more extensions that you want in this paging zone from the **Available Members** list and click ⎿ Add > ⏌.

   OR

   Select one or more extensions to remove from this paging zone from the **Paging Zone Members** list and click ⎿ < Delete ⏌.

   ⓘ   Overhead paging speakers can be included in a paging zone. Select **Overhead**
   NOTE **Page** from the **Available Members** list and click ⎿ Add > ⏌.

---

5.   Click ⎿ Apply ⏌ to save these settings or click ⎿ Cancel ⏌ to return to the previous page without saving the changes.

   The new paging zone appears on each Deskset when the user views the **Paging Zones** menu.

To edit or delete a paging zone:

1.   On the **Paging Zones Summary** page, click the ⎿ View/Edit ⏌ button for the paging zone you want to edit or delete. The **Edit Paging Zone** page appears.

2.   Select one or more extensions that you want in this paging zone from the **Available Members** list and click ⎿ Add > ⏌.

   OR

   Select one or more extensions to remove from this paging zone from the **Paging Zone Members** list and click ⎿ < Remove ⏌.

   OR

   Click ⎿ Delete Paging Zone ⏌ to delete this paging zone.

3.   Click ⎿ Apply ⏌ to save these settings or click ⎿ Cancel ⏌ to return to the previous page without saving the changes.

System Directory

Create a list of up to 100 phone numbers (referred to as the **System list** on the Deskset) that Deskset users might frequently call. These numbers are available to all of the extensions.

To set up the System Directory:

1. In the navigation menu at left, click **System Directory**. The **System Directory List** page appears.

System Directory List

Add New Entry

Delete Selected Entries   Sort By Last Name

☐ ABC Accountants   503-555-0194   [Edit]
☐ Angela Martin   732-555-7318   [Edit]
☐ Charlie Johnson   888-883-2445   [Edit]

2. Click **Add New Entry**.
3. Complete the **Add System Directory List Entry** page with the information indicated.

Add System Directory List Entry

First Name: ABC Accountants
Last Name:
Phone Number: 503-555-0194

Apply   Cancel

4. Click **Apply** to save the entry. The System Directory menu appears with the entry added.

   OR

   Click **Cancel** to return to the previous page without saving the changes.

   > To edit an entry, click **[Edit]** to the right of the entry. The **Edit System Directory List Entry** page appears with the fields populated with the entry to be edited.

Line Naming

You can name the lines connected to the Gateway for easier identification.

To name a line:

1. In the navigation menu at left, click **Line Naming**. The **Line Naming** page appears.

2. In the **Select Line to Change** list, select a line. All Gateway lines are listed.

3. Enter the **New Line Name** using up to 16 characters.

4. Click **Apply** to save the entry. The new name appears in the **Line Naming** summary table.

Extension Settings

Use the WebUI to configure the following Extension Settings:

- *"Extension Basic Settings" on page 59*
- *"Personal Directory" on page 62*
- *"Deskset Programmable Feature Keys (PFKs)" on page 64.*

> ⚠️ **CAUTION** *Ensure that the extension you are configuring is not in use, or the configuration changes may fail.*

Extension Basic Settings

You can modify the settings for individual extensions from the **Extension Basic Settings** page.

> 📖 Deskset users have different Extension Settings available when they log on to the WebUI. They are described in "Web Interface" of the SB35020/SB35025 Deskset User's Guide and the SB35031 Deskset User's Guide, available from **smbtelephones.att.com**.

To set the Extension Basic Settings as the administrator:

1. In the navigation menu at left, click **Extension Settings**.

2. If necessary, select the desired extension.

   The **Extension Basic Settings** page appears.

   Extension Basic Settings

   Select Extension: Ext. 200 ▼

   Extension Name:

   First Name: Graham

   Last Name: Bell

   Change Extension Number to: 200

   Please make sure the extension is not in use before changing the extension number.

3. Select an extension from the **Select Extension** list to display the current settings for that extension.

4. Enter an **Extension Name** into the **First Name** and **Last Name** fields. Enter up to 16 characters for each. Be aware that with very long names, depending on the characters used, the entire name may not fit across the Deskset screen.

Extension Name displays the name for the current extension. This name is used on the Idle screen of the Deskset and in the Auto Attendant Directory. Callers spell the **Extension Name**, followed by the pound (#) sign, using their touch-tone phones when they search for extensions in the Auto Attendant Directory.

5. You can enter a new extension number in the range 100–999 into the **Change Extension Number to** box. The first digit of the extension number need not match the default extension number first digit.

> ⚠️ **CAUTION** *Ensure that the extension is not in use and do not assign an extension number with the first digit of any extension that is the same as an Auto Attendant menu digit key value, as callers will be unable to dial that extension. Instead, they will be connected to that Auto Attendant menu action. See "Configuring the Auto Attendant" on page 42.*

> ℹ️ **NOTE** Desksets do not lose their assigned extensions even if a Deskset is disconnected and unplugged. If you want to remove a Deskset from the system, the Deskset must be deleted using the WebUI. (See *"Deleting Devices" on page 68*.) This ensures that the extension number becomes available again.

6. You can select **Call Forward/Transfer to Outside Telephone Number** to enable or disable forwarding or transferring of calls to an external number. This function is enabled by default and uses two outside lines when calls are forwarded. Disabling this function prohibits the user from setting the **Call Forward All** target to **Phone #**.

7. Change the **Intercom Call Forward–No Answer Settings**:

    a. Select the **Target** for unanswered calls:

        • **Off**. The extension rings until the call is answered or the caller hangs up. Conference room extensions typically have Call Forward–No Answer Settings set to **Off** and have their ringers set very low or off.

- **Voicemail**.
- **Extension**.
- **Outside Phone Number**.

b. Select the number of **Seconds before Forwarding**.

> 🛈 **NOTE** The Intercom Call Forward–No Answer settings apply to intercom calls and external calls forwarded from a Phone Line Call Forward–No Answer setting (including calls routed to the extension by the Auto Attendant).

8. Set the **Automatic Off-hook Line Selection**. Users can select and make calls on any line assigned to their extension, but if you have a preferred line that you want the extension to seize when the user goes off hook, select it here.

9. Select the Intercom Auto Answer **Delay**. The user can set the Deskset to automatically answer Syn248 systems after the delay. Without touching the Deskset, you can speak to and be heard by the person who called.

    If Intercom Auto Answer is enabled on the Deskset, a **Disable** button appears, allowing you to disable the feature. The user can always enable or disable Intercom Auto Answer again.

10. Under **User Password**, create or change the Deskset password. The password must consist of up to 6 digits.

11. Click **Apply** to save any changes or click **Cancel** to return to the previous page without saving the changes.

Personal Directory

The Personal Directory is only available at the extension for which it was created. Personal Directory entries can be created and managed by the administrator or by a Deskset user.

To manage the Personal Directory:

1. In the navigation menu at left, click **Extension Settings**, then **Personal Directory**. The **Directory List for Extension:** page appears.

2. Select the desired extension number from the list.

    The Directory list appears. You can add, edit, delete, and sort the entries, as described below.

-   To add a new entry, click [**Add New Entry**]. The **Add Personal Directory List Entry** page appears.

a. Complete the form with the information indicated.

b. Click [**Apply**] to save the entry. The **Directory List** page appears with the entry added.

■   To edit an entry, click **[Edit]** to the right of the entry. The **Edit Personal
    Directory List Entry** page appears with the fields populated with the entry to
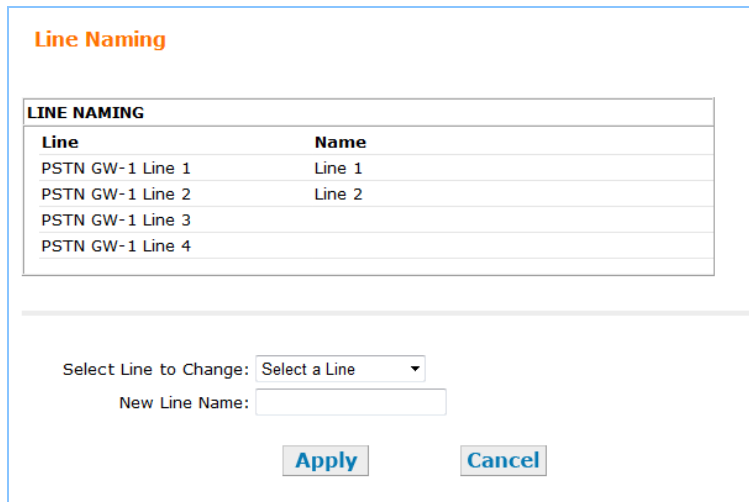   be edited.

Edit Personal Directory List Entry

First Name: Davis

Last Name: Carterer

Phone Number: 443-555-0625

Apply   **Cancel**

Click **Apply** to save the entry. The **Directory List** page appears with the entry
added.

■   To sort entries by last name, click **Sort By Last Name** . The list updates and the
    button changes to **Sort By First Name** .

■   To delete **Directory List** entries:

    a. Mark the entries to delete by selecting the check box to the left of each
        entry.

    b. Click **Delete Selected Entries** . The selected entries are removed.

Deskset Programmable Feature Keys (PFKs)

Use the **Programmable Feature Keys** page to set the PFKs on the Desksets in your Syn248 system. PFKs give users access to lines (Gateway lines and intercom lines) and provide one-touch access to certain Deskset features.

To edit Programmable Feature Key assignments:

1. In the navigation menu at left, click **Extension Settings**, then **Feature Keys**.

2. Select the desired Deskset extension from the **Select an Extension** list. The default PFK assignments appear.

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3. Reassign functions to each key. See *"SB35020/SB35025 Deskset Programmable Feature Keys" on page 65* and *"SB35031 Deskset Programmable Feature Keys" on page 65*.

4. Select **Ignore Incoming Calls** for any lines that you do not want to ring at the extension. Users will be able to monitor activity on that line and answer incoming calls by pressing the `Answer` soft key.

5. Click `Apply` to save the entries or click `Cancel` to refresh the page without saving the changes.

SB35020/SB35025 Deskset Programmable Feature Keys

Keys **1** to **4** are assigned to Gateway lines 1 to 4 by default. Key **10** is fixed as an **Intercom** key to enable internal, extension-to-extension calls.

You can assign the following features to the keys:

- Phone line access
- Call Log
- Directory
- Do Not Disturb

- Held Calls List
- Help
- Intercom line access
- Messages

- Page
- Quick Dial
- Redial

> **NOTE** Clicking **Apply** after configuring PFKs causes the Deskset to reboot and drop any active calls. Before configuring PFKs, ensure that there are no calls in progress.

You can assign phone lines, **Intercom** and **Quick Dial** to multiple keys. Every other feature can be assigned only once. After one of these features has been assigned, it disappears from the list for the other PFKs.

If all 10 PFKs are assigned to **Intercom**, the Deskset cannot make or receive external calls.

The **Ignore Incoming Calls** option is available for each key assigned to a phone line connected to a Gateway. Select this option if you do not want the extension to ring for incoming calls on that line.

SB35031 Deskset Programmable Feature Keys

Keys **1** to **4** are assigned to Gateway lines 1 to 4 by default. Key **5** is fixed as an Intercom key. Key **6** is fixed as a Quick Dial key.

> **NOTE** Clicking **Apply** after configuring PFKs causes the Deskset to reboot and drop any active calls. Before configuring PFKs, ensure that there are no calls in progress.

You can assign phone lines and **Intercom** to multiple keys.

If keys **1** to **4** are assigned to **Intercom**, the Deskset cannot make or receive external calls.

The **Ignore Incoming Calls** option is available for each key assigned to a phone line connected to a Gateway. Select **Ignore Incoming Calls** if you do not want the extension to ring for incoming calls on that line.

SB35020/SB35025 Deskset Quick-Dial Keys

On the Deskset, quick-dial entries are only available if you have assigned PFKs as quick-dial keys. After assigning quick-dial keys, you or a Deskset user can assign phone numbers to the keys.

To edit quick-dial entries:

1. Log on, either as administrator or a user (enter an extension number and the user's password, if needed).

2. In the navigation menu at left, click **Extension Settings**, then **Feature Keys**.

3. If necessary, select the desired Deskset extension number from the **Select an Extension** list. When logging on as a user, you cannot select a different extension.

4. On the **Programmable Feature Keys** page, enter a name and number for every quick-dial entry you want to create. Any hyphens in phone numbers are ignored.

Enter **P** for a pause in the number.

5. Click **Apply** to save the entries or click **Cancel** to refresh the page without saving the changes.

6. To verify the entries, try a quick-dial key on the Deskset, as shown in Figure 18.
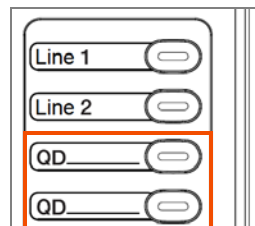
Figure 18. Quick-Dial Key Location

SB35031 Deskset Quick-Dial Keys

You or a SB35031 Deskset user can enter quick-dial entries.

To create or edit SB35031 quick-dial entries:

1. Log on, either as administrator or a user (enter an extension number and the user's password, if needed).

2. If logging on as administrator

    a. Click **Extension Settings**, then **Feature Keys** in the navigation menu at left. The **Programmable Feature Keys** page appears.

    b. If necessary, select the desired SB35031 Deskset extension number from the **Select an Extension** list, then click **Quick Dial Keys**.

    -or-

    If logging on as a user, click **Quick Dial Keys**.

3. Enter a name and number for every quick-dial entry you want to create. Any hyphens in phone numbers are ignored.

4. Click **Apply** to save the entries or click **Cancel** to refresh the page without saving the changes.

5. To verify that the entries have been created, on the Deskset, press the key to the right of [Quick Dial] to display the quick-dial entries, as shown in Figure 19.
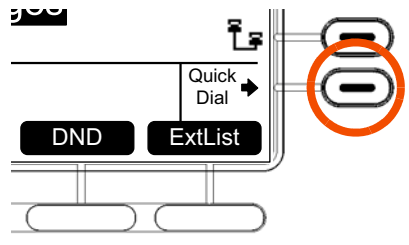
Figure 19. SB35031 Deskset Quick-Dial Key Location

Device Management
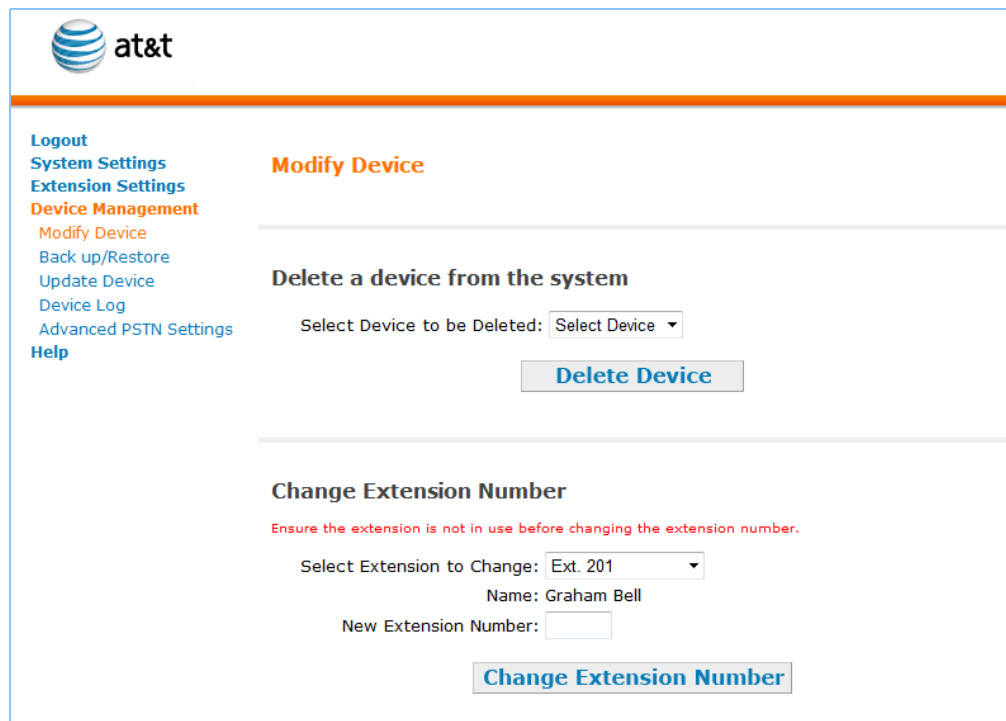
Use the **Device Management** page to delete devices from the system and to change Deskset extension numbers. If you unplug a Deskset from the system, the extension remains in the system database until you use the **Device Management** page to delete the device. All local settings and personal information (Call Logs and voice messages, for example) remain stored in the Deskset.

Device Management consist of:

- *"Deleting Devices" on page 68*
- *"Change an Extension Number" on page 69*
- *"Back Up and Restore Settings" on page 70*
- *"Updating Devices" on page 74*
- *"Device Log" on page 78*
- *"Advanced PSTN Settings" on page 80*.

Deleting Devices

You can delete any device in the system from the **Device Management** page. Disconnect the device before deleting it from the system. If the device is not disconnected, an error message appears, asking you to disconnect the device.

Deleting an Extension (Deskset)

If you unplug a Deskset from the system, it remains in the system database until you use the **Device Management** page to delete the device.

If the Auto Attendant menu programming has set a far-end key press to ring that extension or leave a message in its personal voice mailbox, that key assignment reverts to **None**.

If the operator extension is deleted, the lowest extension number is automatically assigned as operator.

When you delete a Deskset, only the extension number is removed from the system database—all local settings and personal information (Call Logs, voice messages, etc.) remain stored in the Deskset. To erase all data on the Deskset (if, for example, the Deskset is being given to another user), press the **RESET** button on the Deskset for more than 5 seconds to return all settings to factory defaults.

Deleting a Gateway

When replacing a Gateway, delete the old Gateway first if you want the new Gateway to use the same line numbers (Lines 1 to 4, for example). If you do not delete the old Gateway after disconnecting it, then the new Gateway will be assigned the next available line numbers (Lines 5 to 8, for example). System settings other than specific line numbers are stored in all devices, so deleting devices does not erase these settings.

Change an Extension Number

You can change extension numbers. Ensure that the extension is not in use when you make the change.

To change a Deskset extension number:

1. On the **Modify Device** page, under **Change Extension Number**, select the desired extension.

2. Enter the **New Extension Number**.

3. Click [**Change Extension Number**].

Back Up and Restore Settings

Back up individual Deskset settings and system settings so that they can be restored if the network or a Deskset loses its settings. You can also back up a Deskset to copy the settings to other Desksets.

> **NOTE**
> Backup files are automatically saved on your computer using the following naming convention:
>
> **backup_[device]_[extension number]_[year]-[month]-[day]_[time].cfg**.
>
> The device will be either "ds" for a Deskset or "system" for a system backup:
>
> The backup file for extension 208 that was created at 4:29 PM on October 26, 2010 would be named **backup_ds_208_2010-10-26_1629.cfg**.
>
> The system backup file that was created at 4:35 PM on October 26, 2010 would be named **backup_system_2010-10-26_1635.cfg**.
>
> If you are using Safari®, the backup file will be saved as a .tar file instead of a .cfg file. You will still be able to restore this file safely.

Back Up and Restore Extension Settings

Each extension has its own settings and must be backed up and restored individually.

The following items are backed up:

- Calls: New Messages, Redial, and Call Logs
- Messages and Lists: Voice messages, Personal Directory, and Quick Dial
- Deskset Settings: Display, Sounds, and Preferred Audio mode
- User Settings: Greetings, Name Recording, and Intercom Auto Answer
- Admin Settings: CFNA, FWD/Trans Line, Programmable Feature Keys, and User Password.
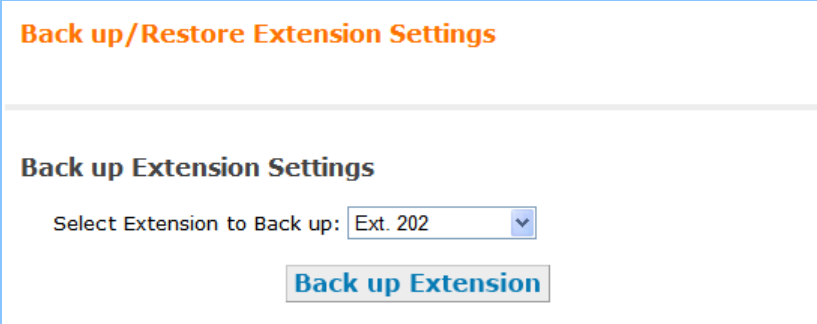
> **CAUTION**
> *Only back up one Deskset at a time. Only restore one Deskset at a time.*
>
> *If you back up an extension less than one minute after creating another backup for that extension, you may overwrite the earlier one, since the file names may be identical.*

To back up the Extension Settings:

1. In the navigation menu at left, click **Device Management**, then **Back up/Restore**. The **Back up/Restore Extension Settings** page appears.

2. Select the desired extension from the **Select Extension to Back up** list.

> **Back up/Restore Extension Settings**
>
> ---
>
> **Back up Extension Settings**
>
> Select Extension to Back up: [Ext. 202 ▾]
>
> [**Back up Extension**]

3. Click [Back up Extension].

> 🛈 **NOTE**　If the desired extension does not appear in the list, then you may need to disconnect and reconnect that extension. See *"Reconnecting a Deskset to the System" on page 101*.

4. Your web browser opens a window asking if you would like to save the backup file; click [Save].

To restore the Extension Settings:

1. On the **Back up/Restore Extension Settings** page, choose the desired extension from the **Select Extension to Restore** list.

> ⚠ **CAUTION**　*Ensure that there are no calls in progress or they will be dropped.*

Back up/Restore Extension Settings

Back up Extension Settings

Select Extension to Back up: [Select Extension ▾]

Restore Extension Settings

Please make sure the extension is not in use. The deskset will reboot after restoration, so any call in progress will be dropped.

Select Extension to Restore: [Ext. 200   ▾]

Overwrite voicemail/call logs: ○ Yes ◉ No

Restore Settings From File: [   ] [Browse...]

[**Restore Extension**]

2. Select whether you want to overwrite voicemail and call logs.

3. Enter the file name or click [Browse...] and select a file.

   Make sure you select the correct file to restore. The restore file name includes your extension number and the date and time.

4. Click [**Restore Extension**].

   Deskset settings are restored and the Deskset restarts. You are then logged off from the WebUI.

   NOTE   If a PC is installed in series with the Deskset, restarting the Deskset causes the PC to lose its network connection briefly.

Back Up and Restore System Settings

The system settings are distributed over all the Desksets and Gateways. System settings are globally backed up once, and restored to the whole system at one time. The following items are backed up and restored:

- Auto Attendant user prompts
- Assigned Operator set
- Timer for Forwarded and Transferred Outside Calls
- System Time settings

- Paging Zones
- Hold Announcement
- System Directory
- Line Naming

To back up the System Settings:

1. In the navigation menu at left, click **Device Management**, then **Back up/Restore**, then **System Settings**. The **Back up/Restore System Settings** page appears.

    Back up/Restore System Settings

    Back up System Settings

    [**Back up System Settings**]
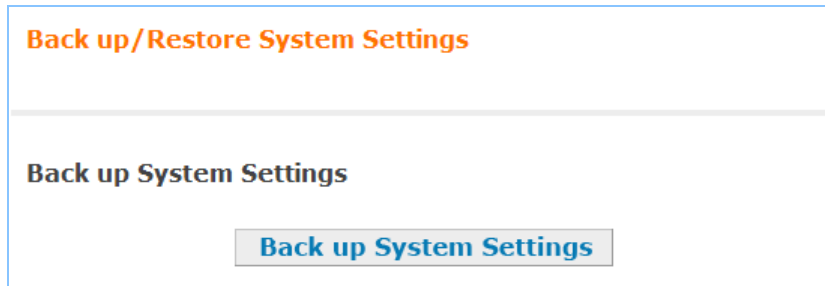
2. Click [Back up System Settings] .

    - Your web browser opens a window asking you if you would like to save the backup file. Click [Save] .

    - Save the file to a location on your computer so that you can restore your settings later.

To restore the System Settings:

1. If practical, unplug the telephone lines from each Gateway while restoration is in progress to ensure you do not receive any incoming calls.

    If you have two Gateways, and you log on to one of the Gateways using the Gateway's IP address, you do not need to unplug all of the other outside lines from the other Gateway; just the one that you have logged on to.

2. In the navigation menu at left, click **Device Management**, then **Back up/Restore**, then **System Settings**. The **Back up/Restore System Settings** page appears.

    Restore System Settings

    Please make sure the system is idle and not in use. The gateway(s) will reboot after restoration, so call(s) in progress will be dropped.

    Select the file containing the system settings to be restored:
    Restore Settings from File: [   ] [Browse...]

    [**Restore System Settings**]
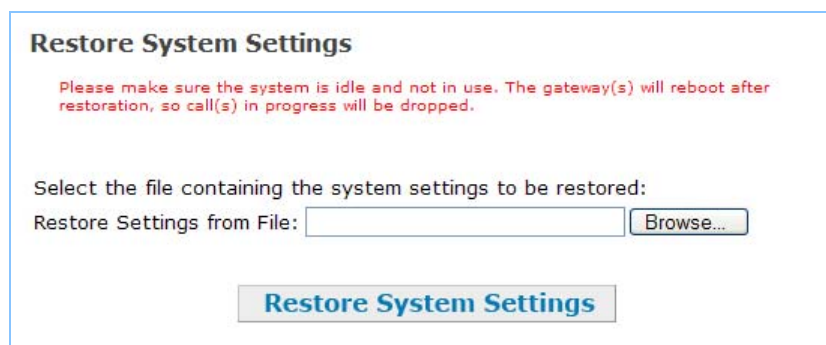
3. Enter the name for the restore file or click [Browse...] and select a system file.

    Make sure you select the correct file to restore. The restore file name includes "system" and the date and time.

4. Click [Restore System Settings] . The system settings are restored and the Gateway restarts. You are then logged off from the WebUI.

Updating Devices

New software versions improve system functionality. All Gateways and all Desksets should be running the same software version number.

You can update all devices with one command, or you can update the Syn248 devices individually.

We recommend automatic device software upgrades for installations with Internet access. This allows your system to obtain the latest upgrade from our server. Automatic upgrades may not work if your network's firewall prohibits connection to the AT&T servers, or if you do not have DNS services provided by your ISP. If you need to manually initiate updates, see *"To update all devices to the latest software version:" on page 76*. If Internet access is not available, see *"To update a single device to the latest software version:" on page 77*.

NOTE	Sometimes devices with different versions of software cannot detect each other in the WebUI. Some versions of Syn248 software codes are incompatible, so that when you use one device's IP address for logging on to the WebUI, only the devices with compatible code versions appear in the device lists. For this reason, if you are updating devices individually, wait until all other devices are updated before updating the software version of the device whose IP address was used for logging on to the WebUI. When an updated device restarts with new software, it may disappear from the device list.

CAUTION	*Although unlikely, some types of software upgrades could interfere with system settings and directories. Therefore, back up the system settings and Deskset settings before updating the system software. If you receive automatic updates, back up each device after each configuration change. See "Back Up and Restore Settings" on page 70.*
	The device restarts after a software upgrade. Ensure that there are no calls in progress or they will be dropped.

NOTE	If a PC is connected to the Deskset PC port, restarting the Deskset causes the PC to lose its network connection briefly.

Adding a New Deskset to an Existing System

When you add a new Deskset to an existing Syn248 system, it may require a software upgrade in order to enable the latest Syn248 system features. In this case, the Deskset will prompt you to upgrade its software.

The first release of Syn248 included SB35020 Desksets running software version 1.0.0. If you add Deskset models SB35025 or SB35031 to your system, you should upgrade the software to take advantage of the new Deskset features. Syn248 software version 1.3.1 and higher for the SB35031 and SB35025 Desksets includes enhanced SB35025 Deskset features such as Music on Hold and Overhead Paging.

How to Upgrade Software After Adding a New Device

Upgrading Syn248 software is simple. You need a reliable Internet connection for your network.

After you connect your new Deskset, the screen prompts you to upgrade the software. If you have more than one Deskset to install, connect them all and wait for the upgrade prompt to appear on all Desksets.

If you press **Upgrade**:

- All Syn248 devices in the system will be upgraded. If you have multiple Desksets to install, you only have to press **Upgrade** on one of the Desksets.

- After the upgrade, all Syn248 devices will reboot. Wait approximately five minutes for the reboot process to complete.

- Once the entire system is upgraded, any Deskset with old software that you connect in the future will be upgraded automatically.

If you want to defer the upgrade and press **Exit**:
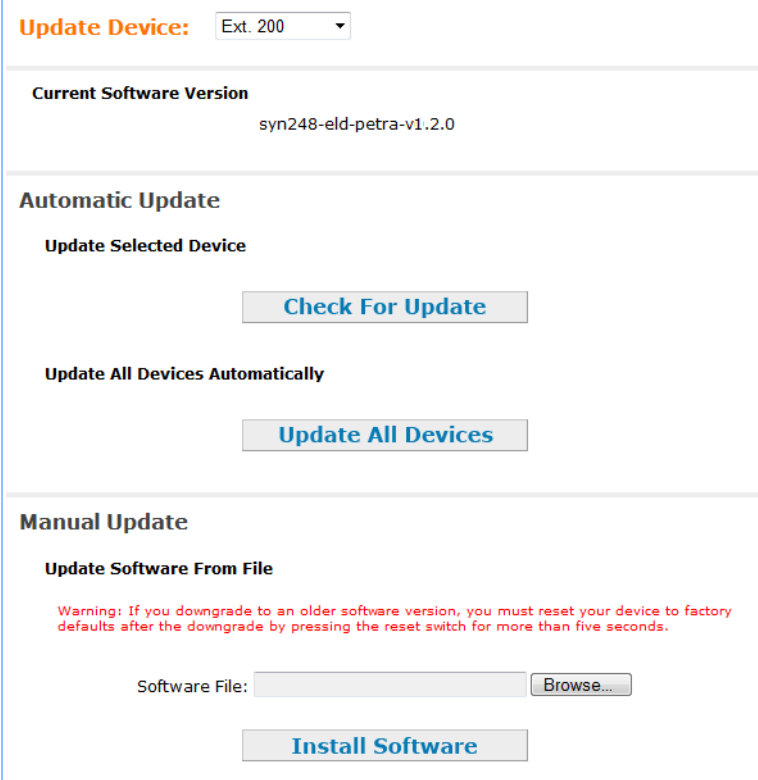
- The device will work with the current software version on all devices, but with no enhanced features.

- The phone will no longer ask you to upgrade.

- You can perform a site-wide software upgrade later. See *"To update all devices to the latest software version:" on page 76*.

Running a Software Update

To update all devices to the latest software version:

1. In the navigation menu at left, click **Device Management**, then **Update Device**. The **Update Device** page appears.

2. Click Update All Devices . The system looks on the Internet for the latest software and systematically updates and then restarts each device. All calls are dropped.

   A caution appears to remind you that all devices will be restarted as each is updated.

   NOTE   Any Desksets registered with the system but disconnected at the time of the update will be updated as soon as they are reconnected to the system.

   After you have started an update using Update All Devices , attempts to manually update a device through the device itself or the WebUI may be interrupted by the system software update in progress.

> **NOTE** Using Update All Devices requires a minimum Internet download bandwidth of 1 Mbps and an Internet router that can handle the same number of total simultaneous connections as the number of Syn248 devices. Refer to your router specification. Performing an update without meeting the minimum requirement may cause some or all devices not to update correctly. See *"System Upgrade" on page 112*.
>
> The total time to update all the devices varies. The update time depends on Internet connection speed, the number of connections to the server, and the number of devices in the system. AT&T recommends conducting system updates overnight to reduce the impact on Deskset users.

If the Update All Devices process does not work, you can upgrade a Deskset or Gateway individually.

To update a single device to the latest software version:

1. In the navigation menu at left, click **Device Management**, then **Update Device**.

2. In the **Update Device** list, select a Gateway or Deskset to update.

   The current software version for that device appears.

   > **NOTE** You can only update one device at a time. Only the selected device is updated.

3. Click Check For Update .

   If there is an update available on the Internet, the message "There is new software available" appears. Click Install Update . The specified device restarts.

   OR

   In the **Manual Update** section of the page, click Browse… to select a previously acquired upgrade file. You may have obtained an upgrade file from a product support specialist. Once you have selected the upgrade file, click Install Software . The specified device restarts.

4. After the device restarts, check the software version number at the device to confirm that the upgrade was successful.

   On a Deskset, press ☰ (**MENU**), then **4**. Check the **Software Ver**.

   On a Gateway, press **SELECT**, **SELECT** and **DOWN**. Check the **SW Ver**.

   > **NOTE** If the device is sluggish or unresponsive during the upgrade process, see *"A Syn248 device becomes sluggish or unresponsive during or immediately after software upgrade." on page 112*.
   >
   > When an updated device restarts with the new software, it may disappear from the device list if its software version is incompatible with the device whose IP address was used for logging on to the WebUI.

Device Log

If you have trouble with your system and you contact the installer or customer service, they may need the device log for troubleshooting purposes. You can generate a device log on the **Device Log** page.

You can also configure a device log prior to generating the log. Your installer or product support specialist may want to see specific information in the device log. If so, you must configure the device log using a configuration file that your Syn248 support person provides.

> **NOTE** For customer service, repair, replacement, or warranty service, and all questions about this product, visit our web site at **smbtelephones.att.com** or call **1 (888) 386-2006**. In Canada, call **1 (888) 469-2005**.

To generate the Device Log:

1. In the navigation menu at left, click **Device Management**, then **Device Log**. The **Device Log** page appears.

2. In the **Device Log** list, select the desired device and click Save Device Log. If you select a Gateway, Line Calibration Data and Configuration tables also appear. For more information about Line Calibration, see *"Resolving Audio Echoes" on page 99* and *"Line Calibration Configuration" on page 80*.

    It takes a minute for the file to generate.

3. When your browser prompts you to open or save the file, save the file to your computer.

4. After the download is complete you should provide the file to the installer or customer service.

> ### *To configure the Device Log:*
>
> 1. In the navigation menu at left, click **Device Management**, then **Device Log**.
>
> 2. In the **Device Log** list, select the desired device.
>
> 3. Under **Configure Device Log**, click **Browse…** and select the Device Log Configuration file.

Configure Device Log

The type of information sent to the device log is configurable by uploading a file containing the specific types of messages required. Please ask your installer or Product Support specialist to assist you.

Device Log Configuration File: [   ] [Browse…]

Configure Device Log

> 4. Click **Configure Device Log** . After configuration is complete, you can proceed with generating the Device Log, as described on page 78.

Advanced PSTN Settings

The Advanced PSTN Settings enable you to configure and troubleshoot the PSTN lines connected to the Gateway.

The Advanced PSTN Settings include the following items:

- Line Calibration Data (see *"Resolving Audio Echoes" on page 99*)
- Line Configuration (described below)
- Advanced Configuration (see *"Resolving Audio Echoes" on page 99*).

Line Calibration Configuration

If your system uses Centrex lines, you must enter an outbound line prefix or code in order for line calibration to take place. You should perform this procedure before connecting the telephone lines to the Gateway. Consult your Centrex line provider for the correct code to enter.

To enter Centrex line access codes:

1. In the navigation menu at left, click **Device Management**, then **Advanced PSTN Settings**.

2. Select the Gateway from the drop-down list. The Advanced PSTN Settings page expands to show **Line Calibration Data**, **Line Configuration** (shown below), and **Advanced Configuration**.

Line Configuration

Port	Line Access Code
1	
2	
3	
4	

3. Under **Line Configuration**, enter the Line Access Code for each line.

4. Click Apply .

   You can now connect the telephone lines to the Gateway LINE ports. See *"Connecting the Gateway" on page 17*.

Help

To display the Help menu:

1. In the navigation menu at left, click **Help**.

    A PDF Help file opens.

    Help Menu

    Startup
    　　　Detecting System Elements
    　　　Changing the Admin ID and Password
    　　　Assigning Operator Extension
    　　　Setting the Time Limit on Forwarded and Transferred Outside Calls
    　　　Setting up the Hook Flash function
    　　　Setting Time and Date

    System Settings
    　　　Configuring Phone Line CFNA destination
    　　　Auto Attendant
    　　　　　Setting up Auto Attendant
    　　　　　Recording a voice prompt for a menu
    　　　　　Enabling Direct Dial in a menu
    　　　　　Enabling Operator in a menu
    　　　　　Assigning an action to digit keys in a menu

2. To view a topic, click the link for that topic. The page for that topic appears.

    Detecting System Elements

    To initiate a search of all system components:

    1. Click **System Settings**, then **System Information**.
    2. Click "Detailed Site Information" then wait while the system gathers the requested information.

    The number of Desksets and Gateways will be listed, including their assigned extension number, IP address, software version, and connected status.

    Note that this information will not be refreshed until you click "Detailed Site Information" once more.

C H A P T E R

3

DEVICE CONFIGURATION

This chapter shows you how to configure the Syn248 system using the device configuration menus. Most of these functions are duplicated in the WebUI, but if you need to assign static IP addresses, they must be set at each device. You can only directly reset a device from the device, although some functions in the WebUI include device resets.

This chapter covers:

- *"SB35010 Gateway Features" on page 83*
- *"Gateway Front Panel Interface" on page 85*
- *"Deskset Admin Settings" on page 89.*

SB35010 Gateway Features

Figure 20 illustrates the Gateway features and connections.
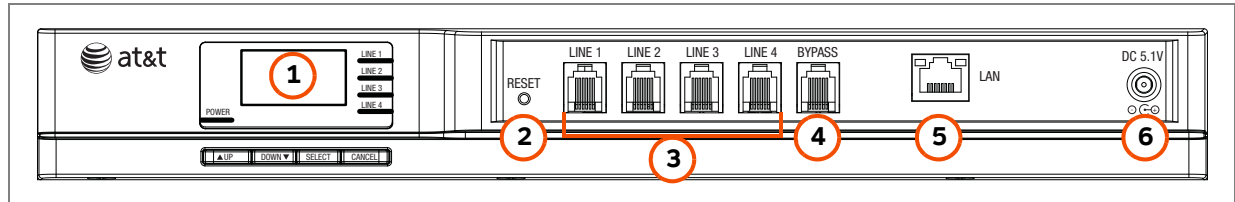
Figure 20. Gateway Features and Connections

1. Display	Provides system and network status, device information, and configuration data. See *"Gateway Front Panel Interface" on page 85*.
2. RESET	Restarts the Gateway when pressed momentarily. Restores the Gateway to factory default settings when pressed and held for more than five seconds with the LAN cable disconnected.
3. PSTN Line Ports 1–4	Traditional 2-conductor wiring (FXO—Foreign Exchange Office Ports).
4. Bypass Port	Traditional analog POTS (Plain Old Telephone Service) that is available during an AC power outage. If the Gateway power fails, calls on Line 4 are routed to the bypass line.
5. RJ-45 Ethernet Network Port	10Base-T/100Base-Tx with Auto MDI/MDI-X switching.
6. DC 5.1V Power-Supply Jack	

Figure 21 and Table 2 provide an illustration and description of the Gateway front panel.
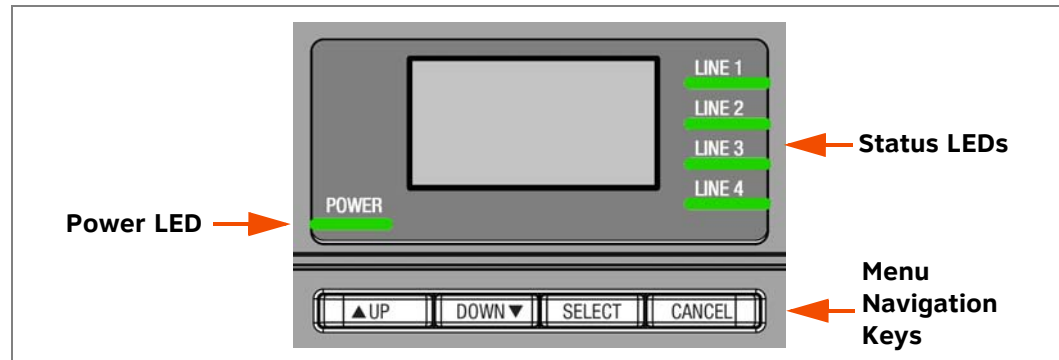
Figure 21. Gateway Front Panel

Table 2.   Gateway Front Panel Keys and LEDs

Key	Used To:	LED	Description
▲UP DOWN▼	Navigate through the menus, and to increase/decrease editable fields. Highlight the previous or next item in the list.	LINE 1 LINE 2 LINE 3 LINE 4	Line-status LEDs indicate the status for each PSTN line. Indications include: **Off**—Connected. **Red** (steady)—Disconnected. **Green** (steady)—In use. **Green** (flashing)—Ringing. Line-status LEDs flash red after lines are connected (during line calibration).
SELECT	Display the main menu when in idle mode or while in network detection mode; save current setting and return to previous menu.		
CANCEL	Terminate current operation without saving new settings and to return to the previous menu.	POWER	**Off**—No power to the device. **Green**—Power is present.

Gateway Front Panel Interface

You can access basic information and perform some configuration tasks using the Gateway's front panel. Most of these tasks are easier to do using the WebUI. See *"Accessing the Administrator WebUI" on page 36*.

The Gateway displays the Idle screen after completing the power-up sequence. Use the Gateway main menu to perform some system operations.

To access the Gateway main menu from the Idle screen, as shown in Figure 22, press the **SELECT** key.

```
03:45PM  24-FEB-10
PSTN Lines 1 - 4
Synchronized
IP: 192.168.1.4
```
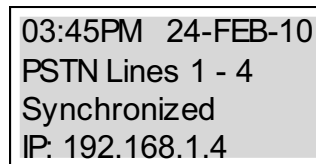
Figure 22. Gateway Idle Screen

From the main menu you can access **Device Information**, **Network Status**, and the **Configuration** menu.

```
Device Information
Network Status
Configuration
```
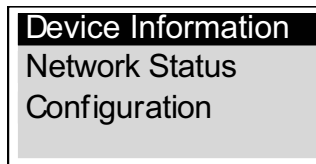
Figure 23. Gateway Menu Screens

Press the **DOWN** key to highlight an entry, then press **SELECT** to see information about your Gateway or your Network.

On the **Device Information** screen, you can view:

- Model #
- Serial #
- Boot Version
- Software Version
- Firmware Version.

On the **Network Status** screen, you can view:

- IP Address
- Subnet Mask
- Default Gateway
- DNS Server x
- MAC Address
- Network Port
- Local Address.

Select **Configuration** to view or modify some Gateway settings. See *"Gateway Configuration" on page 86*.

Press **CANCEL** to return to the main menu.

Gateway Configuration

Press **UP** or **DOWN** in the Gateway main menu until **Configuration** is highlighted, as shown in Figure 24, and press **SELECT** to display the Configuration menu. The current setting is indicated with **[*]**.

Device Information
Network Status
Configuration
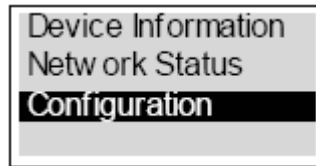
Figure 24. Gateway Configuration

Configuration—Current Gateway settings.

- **Auto IP**—Is set automatically.

- **Static IP**—You can change the static IP only from the Gateway. See your network administrator if you require details regarding IP assignments.

- **Restore Defaults**—Highlight **Restore Defaults** and press and hold **SELECT** for two seconds when prompted to restore the Gateway to factory defaults.

- **Upgrade Software**—Highlight **Upgrade Software** and press **SELECT**. If new software is available, you are prompted to press **SELECT** again to accept the upgrade. You can use this interface or the WebUI to upgrade software.

Setting a Gateway Static IP Address

To configure a Gateway with a static IP address:

1. On the Gateway front panel, press **SELECT**.

2. Press the down arrow button to highlight **Configuration** and press **SELECT**.

3. Highlight **Static IP** and press **SELECT**.

Auto IP (DHCP) [*]
Static IP
Restore Defaults
Upgrade Software
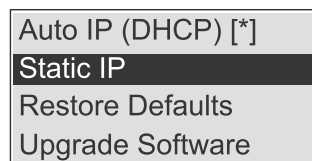
4. Enter the static IP address for the Gateway. An IP address consists of four "octets." Each octet is usually represented by three digits. For octets with less than three digits, omit digits by leaving them at zero. For example, you would enter **192.168.0.20** as **192.168.000.020**.

Static IP
IP Address:
000.000.000.000
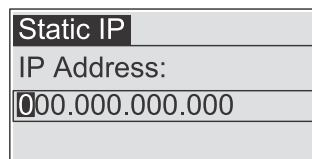
- Change each number with the up and down arrow buttons and press **SELECT** to move to the next number.

- Press **CANCEL** to move back a space.

- Pressing **CANCEL** repeatedly will take you to the previous screen.

- Pressing and holding **CANCEL** for 2 seconds will take you to the Configuration menu.

5. Enter the Subnet Mask.

6. Enter the Gateway.

7. Enter the DNS Server address.

8. After entering the last digit, press **SELECT**. The Configuration menu appears again. The **[*]** indicates that the Gateway is now using Static IP.

> Auto IP (DHCP)
> Static IP   [*]
> Restore Defaults
> Upgrade Software
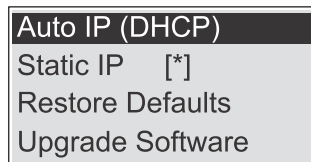
Upgrade Gateway Software

If you have system settings that you want to retain, back up the settings before upgrading the system software. See *"Back Up and Restore Settings" on page 70*.

To upgrade the Gateway software to the latest version:

1. Press **UP** or **DOWN** in the Gateway main menu until **Configuration** is highlighted and press **SELECT** to display the Configuration menu.

2. Press **DOWN** to highlight **Upgrade Software** and press **SELECT** to initiate the software upgrade process. The device initiates a link to the Syn248 Software Updates web site host and any new software.

> Auto IP (DHCP) [*]
> Static IP
> Restore Defaults
> Upgrade Software
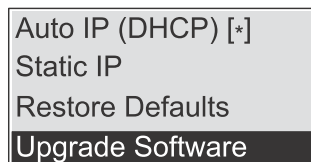
- If a host cannot be found or the server name cannot be resolved, **Timeout** or **Host Not Found** appears. Upgrade the software from the PC, which can offer more information about connection issues.

  If the host is found, but there is no new software available, then the **No New Version** message appears.

> **NOTE** If the device is sluggish or unresponsive during the upgrade process, see *"A Syn248 device becomes sluggish or unresponsive during or immediately after software upgrade." on page 112*.

3. If new software is available, you are prompted to initiate the upgrade by pressing **SELECT**, or abort by pressing **CANCEL**.

> **Upgrade Software**
> Upgrade available.
> Press SELECT to
> download.

Once the downloading starts, the display indicates the progress as shown by the percentage indicator.

> Programming Flash...
> 10% complete. Device
> will reboot upon
> completion.

■ If the upgrade process is interrupted by removing the server connection, no restart occurs. The Gateway remains on the xx% complete screen, until an action is taken at that Gateway. The process does not resume even after the server connection is reestablished.

■ Pressing **CANCEL** during the programming process terminates the download midstream and returns you to the Configuration menu. The previous software version remains in effect.

■ When the upgrade is complete, the screen briefly displays **100% complete**, then **0% complete** for few seconds, before restarting the Gateway.

4. Press **CANCEL** repeatedly until you return to the Gateway main menu.

Deskset Admin Settings

You can use the Deskset Admin Settings to set up the system features described in Table 3. The WebUI also provides an interface for setting up your system. See *"Accessing the Administrator WebUI" on page 36*.

To display the Admin Settings menu:

1. On the Deskset, press ☰ (**MENU**) then **3**.

2. Enter the Admin password, and press ✓ (**SELECT**).

   The Admin Settings screen appears as shown in Figure 25.

The default Admin password is **12345**. To change this password, see *"Changing the System Basic Settings" on page 39*.

```
┌─────────────────────────────────┐
│ Admin Settings          ▼▲      │
│ 1. Intercom CFNA      (Mailbox)  │
│ 2. Fwd/Trans to line  (Enabled)  │
│ 3. IP Settings          (Auto)   │
│ 4. Reset User Password           │
│ 5. Software Upgrade              │
│ Use ▼ or ▲ to scroll then press  │ Quick
│ SELECT or press 1-6.             │ Dial ➤
└─────────────────────────────────┘
```

```
┌─────────────────────────────┐
│ Admin Settings       ▼▲     │
│ 1. Intercom CFNA            │
│ 2. Fwd/Trans to line        │
│ 3. IP Settings              │
└─────────────────────────────┘
```

SB35031 Deskset   **SB35025/SB35020 Deskset**
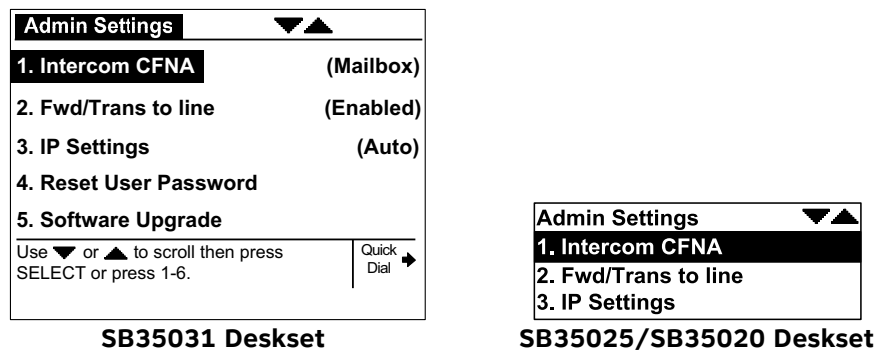
Figure 25. Admin Settings Screen

The Admin Settings menu contains the items listed in Table 3.

Table 3.   Admin Settings Menu

Menu Item	See...
1. Intercom CFNA	*page 90*
2. Fwd/Trans to line	*page 91*
3. IP Settings	*page 92*
4. Reset User Password	*page 94*
5. Software Upgrade	*page 94*
6. Set Time and Date	*page 95*

Setting Intercom Call Forward–No Answer

Intercom Call Forward–No Answer is an administrator setting to handle unanswered intercom calls for each Deskset. Intercom calls include calls from other Desksets and outside calls that have been routed to a Deskset by a Phone Line Call Forward–No Answer setting. See *"Configuring Phone Line CFNA" on page 53*.

By default, intercom calls are forwarded to voicemail after they ring for 15 seconds. You can change the target destination to another extension or to an outside phone number, or you can turn off Intercom CFNA entirely. You can adjust the delay from 5 to 45 seconds.

> **NOTE** Calls forwarded to outside lines use two telephone lines. You can limit the duration of calls forwarded to outside lines with the **Timer for Forwarded and Transferred Outside Calls** setting. See *"Changing the System Basic Settings" on page 39.*
>
> You can also disable **Fwd / Trans to Outside Line** individually for each extension. See *"Fwd/Trans to Outside Line" on page 91.* If **Fwd / Trans to Outside Line** is disabled, you cannot change the target destination to an outside phone number.

To set up Intercom Call Forward–No Answer:

1. On the **Admin Settings** menu, press **1** to display the Intercom CFNA settings.

SB35031 Deskset   **SB35025/SB35020 Deskset**

2. Press ◁ or ▷ to select a target:

   - **Mailbox**.

   - **Ext**. Then press ▽ and enter a valid extension in the **to Ext:** field.

   - **Phone #**. Then press ▽ and enter a valid phone number. Before you can save this setting, "Fwd/Trans to Outside Line" must be enabled.

   - **OFF**. Calls will not be forwarded. Go to Step 5.

3. Press ▽ to highlight the **Delay** before forwarding.

4. Press ◁ or ▷ to adjust the delay time in five-second increments.

5. Press ▮Save▮ to accept the change and display the **Admin Settings** menu.

Fwd/Trans to Outside Line

You can enable or disable the ability of each Deskset to forward or transfer a call to an outside line. These features use two of your telephone lines. This function is enabled by default. Disabling this function prohibits the user from sending a call to an outside line via the Gateway.

To enable or disable Forward/Transfer to an outside line:

1. On the **Admin Settings** menu, press **2** to display the **Forward/Transfer to line** screen.

```
┌─────────────────────────────────────┐
│ Fwd/Trans to line                    │
│                                      │
│ Fwd/Trans to line      ◀ Enabled ▶   │
│                                      │
│                                      │
│  Disabling this option will prohibit Call
│  Forwarding or Call Transfers to an
│  outside line.
│                                      │
│ Press ◀ or ▶ to cycle through  │Quick ▶│
│ options.                       │Dial   │
│   Save                               │
└─────────────────────────────────────┘
        SB35031 Deskset
```

```
┌──────────────────────────────┐
│ Forward / Transfer            │
│ Fwd/Trans to Outside Line:    │
│          ◀ Enabled ▶          │
│     Save                      │
└──────────────────────────────┘
    SB35025/SB35020 Deskset
```
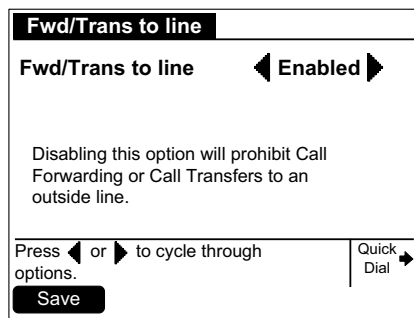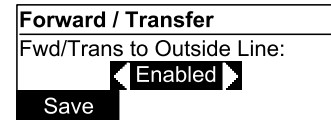
2. Press ◁ or ▷ to select **Enabled** or **Disabled**.

3. Press **Save** to accept the changes and return to the **Admin Settings** menu.

> **NOTE** If the Intercom Call Forward–No Answer target is set to **Phone #**, a warning message will appear if you set **Fwd/Trans to Outside Line** to **Disabled**. The message warns you that Call Forward–No Answer is now set to OFF. You may want to select a new target for the Intercom Call Forward–No Answer setting.

IP Settings

On the IP Settings menu, you can manually configure the Deskset IP address. See *"Appendix B: IP Addresses and Connectivity" on page 119* for a discussion of the Syn248 network configuration and IP settings.

To display the IP Settings menu:

1. On the **Admin Settings** menu, press **3** to display the **IP Settings** menu.

    ```
    ┌──────────────────────────────────┐
    │ IP Settings          ▼▲          │
    │ 1. IP Configuration    ◀ Auto ▶  │
    │ 2. Set/Edit Static IP            │
    │ 3. IP Status                     │
    │                                  │
    │                                  │
    │ Press ▼ or ▲ to move highlight.  Quick▸│
    │ Use ◀ or ▶ to cycle through options.  Dial│
    │    Save                          │
    └──────────────────────────────────┘
    ```

    ```
    ┌──────────────────────────────┐
    │ IP Settings          ▼▲      │
    │ 1. IP Configuration          │
    │ 2. Set/Edit Static IP        │
    │ 3. IP Status                 │
    └──────────────────────────────┘
    ```
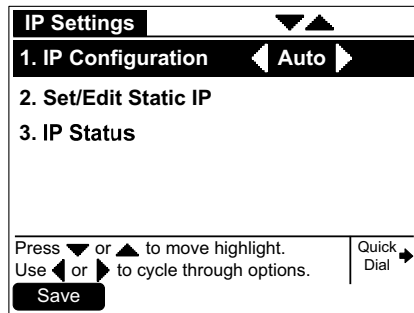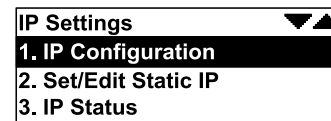
    SB35031 Deskset **SB35025/SB35020 Deskset**

2. Perform one of the following:

    a. Press **1** to select **IP Configuration**. See *"To set the IP Configuration:" on page 92*.

    b. Press **2** to select **Set/Edit Static IP**. See *"To set and edit static IP Address:" on page 93*.

    c. Press **3** to select **IP Status**. See *"To view the IP status:" on page 93*.

To set the IP Configuration:

1. On the **IP Settings** menu, press **1** to select **IP Configuration**.

2. Press ◁ or ▷ to select **Auto** or **Static**.

    ```
    ┌──────────────────────────────┐
    │ IP Configuration             │
    │ Set IP to:      ◀ Auto ▶     │
    │                              │
    │    Save                      │
    └──────────────────────────────┘
    ```
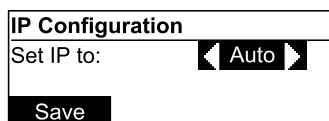
3. Press ▐ **Save** ▌ to accept the changes and return to the **Admin Settings** menu.

Set/Edit Static IP

If your business requires a static IP address, you can enter static IP info at each Deskset.

To set and edit static IP Address:

1. On the **IP Settings** menu, press **2** to display the **Set/Edit Static IP** screen.

```
IP Settings            ▼▲

  IP Address:        █

  Subnet Mask:

  Gateway:

  DNS Server:


Use dial pad to enter digits and press #   Quick
to enter a dot.                            Dial →
   Save     Backspc
```
SB35031 Deskset

```
Set/Edit Static IP     ▼▲
IP Address:       █
Subnet Mask:
   Save      "."      Backspc
```
SB35025/SB35020 Deskset

2. Enter digits:

   ■ The number field is limited to 12 digits (not including dots).

   ■ Pressing **"."** inserts a dot.

   ■ Pressing **Backspc** when the cursor is positioned next to a dot deletes the dot and the digit to the left of the dot.

3. Press △ or ▽ to move to another field.

4. Press **Save** to accept the changes and return to the **Admin Settings** menu.

IP Status

The **IP Status** screen is for informational purposes only.

To view the IP status:

1. On the **IP Settings** menu, press **3** to display the **IP Status** screen.

```
IP Status              ▼
IP Type                      Auto
IP Address            192.168.0.123
Subnet Mask           255.255.255.0
Gateway                 192.168.0.1
MAC Address        00:11:A0:00:12:8D
Network Port             Connected
PC Port                  Connected
Use ▼ or ▲ to scroll. Press Exit when  Quick
done.                                  Dial →
                              Exit
```
SB35031 Deskset

```
IP Status              ▼
IP Type:              Auto
IP Address:    192.168.0.123
Subnet Mask:   255.255.255.0
```
SB35025/SB35020 Deskset

2. Press △ or ▽ to view status entries that are not shown on screen.

3. Press **Exit** to return to the **Admin Settings** menu.

Reset User Password

Having a user password is not required, but users may want to set one in order to prevent others from accessing their messages or User Settings. If users forget their passwords, or you want to eliminate the need for a password, or to enter a new user password, you need to reset the user password.

To reset the user password:

1. On the **Admin Settings** menu, press **4** to begin the password reset process. The confirmation screen appears.

```
Admin Settings


  Are you sure you want to
  reset the User password ?



Press Yes to reset password or No to
cancel.
  Yes                          No
```
SB35031 Deskset
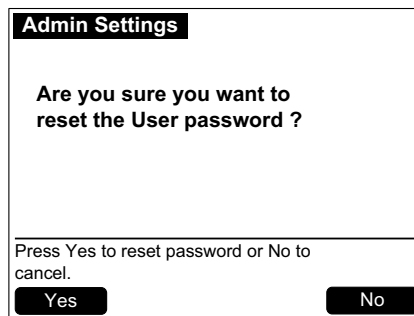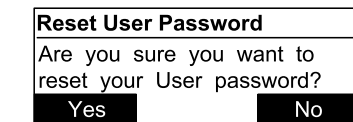
```
Reset User Password
Are you sure you want to
reset your User password?
   Yes                    No
```
SB35025/SB35020 Deskset

2. Press **Yes** to confirm password reset.

   A screen appears, informing you that the password has been reset. The Deskset user can now access settings menus and messages without entering a password.

Upgrade Deskset Software

You can upgrade Deskset software from the Deskset or using the WebUI. To update the Deskset software from the WebUI, see *"Updating Devices" on page 74*.

To access the Deskset Software Upgrade feature:

1. On the **Admin Settings** menu, press **5** to display the Software Upgrade screen. The system scans for an upgrade.

```
Software Upgrade
        Scanning for upgrades...

Current Image Version
syn248-ds-petra-v1.3.0.img




                            Quick ➜
                            Dial
                            Exit
```
SB35031 Deskset
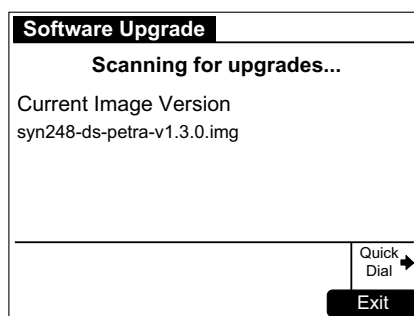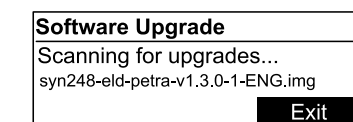
```
Software Upgrade
Scanning for upgrades...
  syn248-eld-petra-v1.3.0-1-ENG.img
                          Exit
```
SB35025/SB35020 Deskset

- ■ If an upgrade is available, the **Found New Upgrade** screen appears. Press **Upgrade** to install the upgrade or press **Cancel** to return to the Admin Settings menu.

- ■ If no upgrade is available, the **No New Version** screen appears. Press **Exit** to return to the Admin Settings menu.

> ⓘ **NOTE** If the device is sluggish or unresponsive during the upgrade process, see *"A Syn248 device becomes sluggish or unresponsive during or immediately after software upgrade." on page 112*.

The Deskset automatically resets at the end of the software upgrade process. If a PC is connected to the Deskset that you are using, any network traffic involving that PC halts until the Deskset has resumed operation. Avoid updating the Deskset when the user is likely to be at the workstation.

See *"Updating Devices" on page 74* to update the Deskset software from the WebUI.

Set Time and Date

You can set the system time and date using a Deskset. To set the system time and date from the WebUI, see *"Changing the System Basic Settings" on page 39*.

To set the System time and date:

1. On the **Admin Settings** menu, press **6** to display the screen shown below.

```
┌─────────────────────────────────┐
│ Set Time and Date      ▼▲        │
│                                  │
│ Clock source:      ◀ Manual ▶    │
│                                  │
│ Date (M/D/Y):      06 / 15 / 2011│
│                                  │
│ Time:                3 : 45  [PM]│
│                                  │
│ Time Zone:    [Pacific]          │
│                                  │
│ Daylight Savings:   [Yes]        │
│                                  │
│ Use ▼ or ▲ to move highlight.  Quick│
│ Use ◀ or ▶ to cycle through options. Dial ➤│
│   Save                           │
└─────────────────────────────────┘
```
```
┌──────────────────────────────┐
│ Time and Date          ▼     │
│ Clock source:  ◀ Manual ▶    │
│ Date (M/D/Y):    06/ 15/ 2011 │
│   Save                        │
└──────────────────────────────┘
```
SB35031 Deskset   **SB35025/SB35020 Deskset**

2. Press ◁ or ▷ to select the **Clock source**. You can set the system time to follow a Network Time Protocol (NTP) Server (recommended) or you can set the time and date manually.

   If you select **NTP Server**, the manual time and date settings disappear from the screen. Ensure that you have configured the NTP Server on the WebUI. See *"Changing the System Basic Settings" on page 39*.

3. If you select **Manual**, use the dial-pad keys and press ◁ or ▷ and ▽ or △ to manually set the Date, Time, Time Zone and Daylight Savings.

4. Press **Save** to return to the **Admin Settings** menu.

C H A P T E R

4

TROUBLESHOOTING

If you have difficulty operating your system, try the following suggestions in this section:

- *"Common Troubleshooting Procedures" on page 97*
- *"Initial Installation" on page 104*
- *"Display Messages" on page 104*
- *"Gateway Setup" on page 107*
- *"WebUI" on page 108*
- *"PC/Deskset Interaction" on page 114*
- *"Other Deskset Features" on page 115*
- *"Music on Hold (MoH) (SB35025 Deskset only)" on page 116*.

> **NOTE** For customer service or product information, visit our web site at **smbtelephones.att.com** or call **1 (888) 386-2006**. In Canada, call **1 (888) 469-2005**.

Common Troubleshooting Procedures

Follow these procedures to resolve common issues.

Resetting Devices

You may need to manually restart a device or return a device to factory defaults (see *"Appendix D: Default Settings" on page 121*). To reset a device, press the **RESET** button shown in *Figure 26* and *Figure 27 on page 98* by inserting a pen or paper clip into the hole and applying pressure to the button.

If the device does not respond or fails to synchronize with the system, the device should be restarted. To restart the device without losing any custom settings, press the **RESET** button for less than five seconds. You can get the same result by disconnecting and reconnecting power to the device.

To completely reset the device to factory defaults, unplug the LAN cable and press the **RESET** button for more than five seconds. You might do this if the device is not synchronized or you want to reset the IP address settings to Auto (DHCP). Any static IP configurations are lost.

When resetting a Deskset to factory defaults, the User Settings, Personal directory, voice messages, Call Log, and the Redial list are all deleted. You can use this complete reset when assigning Desksets to new users. If you do not disconnect the LAN cable before pressing the **RESET** button, the extension number is retained. During the reset, any PC connected to the Deskset PC port momentarily loses network connectivity.

> **NOTE** To reset the entire system to factory defaults and completely clear the system of all settings (Auto Attendant, hold message, and System Directory) and voice messages, unplug the LAN cables from all devices and press the **RESET** button for more than five seconds on each device. Then reconnect all devices to the LAN.

If there is one Gateway in the system, but there are still Desksets connected, then only the voice prompts and hold messages are deleted; the rest of the Auto Attendant settings are maintained on the Desksets. If there is another Gateway, the other Gateway maintains all system configuration settings.

> **NOTE** If you have already set up the system, back up the Deskset and system settings before resetting the device to factory defaults. See *"Back Up and Restore Settings" on page 70*.
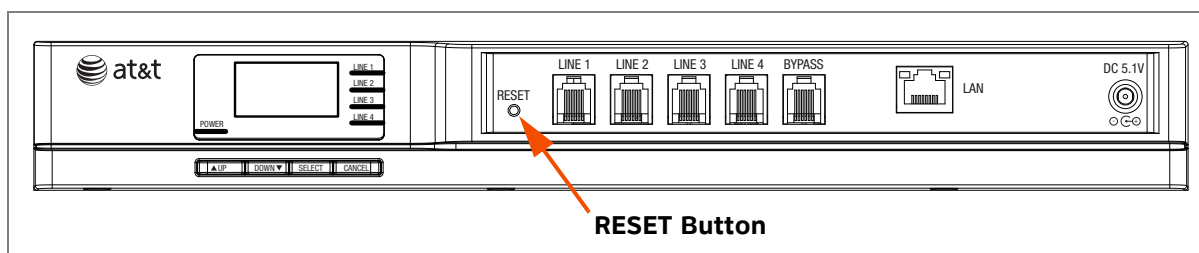
RESET Button

Figure 26. Gateway Reset Button
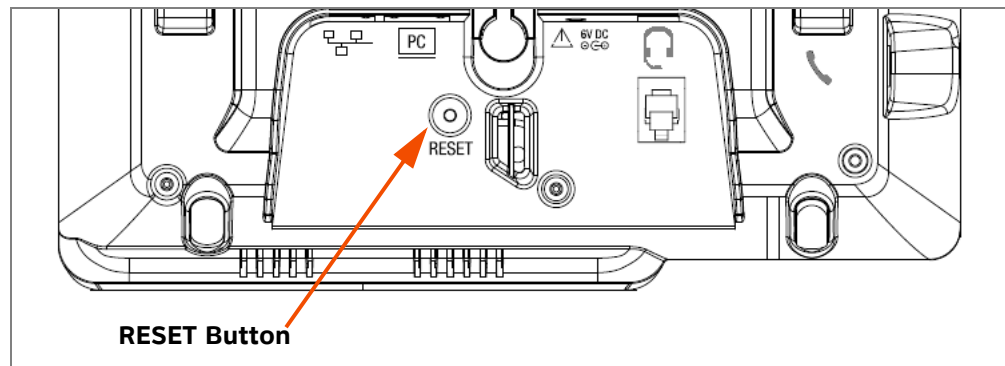
RESET Button

Figure 27. Deskset Reset Button

Resolving General Functional Issues

To resolve a blank screen or device that does not work at all:

- Ensure the AC plug is plugged into an electrical outlet not controlled by a wall switch.

- Verify that the AC power outlet has power. Try plugging in some other AC device. If nothing works, contact an electrician or use another power outlet.

- Verify that the DC plug is plugged into the power jack on the device.

- The system devices are not immediately active when powered up and after a power interruption. Allow at least 30 seconds for the device to boot up.

- If this is a Gateway, check the LED status. The POWER LED should be **GREEN**.

- For Desksets connected to Power over Ethernet (PoE), check whether any PoE switch ports have been configured for devices that require less power. If so, configure your PoE switch to auto-detect device power requirements. For Deskset PoE specifications, see *"Appendix C: Technical Specifications" on page 120*.

To resolve a sluggish, unresponsive, or unusually behaving device:

Reset the device by pressing the **RESET** button for less than five seconds (see *Figure 27 on page 98*) or by removing and restoring AC power.

⚠ **CAUTION** *Pressing the* **RESET** *button for more than five seconds will erase all data and settings.*

To resolve an incorrect system clock:

If the system clock displays the wrong time, the system lacks Internet access for acquiring current time data.

1. Log on to the WebUI as administrator and click **System Basic Settings**.

2. In the **System Time/Date Options** section, specify a local Network Time Protocol (NTP) Server, or manually set the time.

3. Click **Apply** .

Resolving Audio Echoes

If excessive echo occurs on outside calls consistently, there are two approaches you can take to troubleshoot the condition:

1. Check line calibration and parallel devices. The SB35010 Gateway uses automatic telephone line calibration to ensure optimal audio performance on outside calls. You can observe the Gateway line calibration data to understand any telephone line issues and recalibrate the lines, if necessary. Echoes may sometimes be caused by other devices using your PSTN lines, or by an outside caller's phone.

2. Adjust Echo Suppression and Line Loop Length settings.

To check line calibration and parallel devices:

1. Log on to the WebUI as administrator. In the navigation menu at left, click **Device Management**, then click **Advanced PSTN Settings**.

2. Select the PSTN Gateway from the **Select Gateway** list. Line Calibration Data appears.

Line Calibration Data

Port	VRMS	Loss	Index	Profile	RX Offset	TX Offset	
1	1087	22.5	5	0	0	0	Calibrate
2	1231	21.4	5	0	0	0	Calibrate
3	954	23.6	6	0	0	0	Calibrate
4	5402	8.5	0	1	0	0	Calibrate

Refresh Line Calibration Data

3. Check the loss numbers within the Line Calibration Data table for each telephone line connected to the Gateway. A loss number above 10 indicates good audio performance.

4. If the loss number is below 10, the system will most often function normally, but there is an increased likelihood of audio performance issues like echo. If the loss number is below 10 the following procedures can be used to increase the loss value:

    a. Click the **Calibrate** button for the affected line.

    b. Wait one minute, then click **Refresh Line Calibration Data**.

5. If the recalibration has no effect, a parallel device such as a fax adapter, alarm system, DSL modem, or DSL splitter/filter may be connected to the system. Parallel external devices may affect line calibration. Disconnect these devices from the telephone wall jacks that are connected to the same telephone lines, as follows:

    a. Unplug these non-system external devices from their telephone wall jacks.

    b. Recalibrate the affected line.

    c. If there is a significant increase in the loss number and improved audio performance on those lines after disconnecting a parallel device, you may want to install separate lines for those parallel devices.

To adjust Echo Suppression and Line Loop Length settings:

1. If line recalibration and checking parallel devices do not resolve audio echoes, go to the **Advanced Configuration** section on the **Advanced PSTN Settings** page.

2. Under **Echo Suppression** for the affected line(s), select **Aggressive**.

3. Click <kbd>Apply</kbd> to save the settings.

4. Test your line(s) by establishing a call under the same conditions in which the echo condition was previously heard.

5. If the condition persists, leave the **Echo Suppression** set to **Aggressive**, and adjust the **Line Loop Length**. This setting compensates incoming and outgoing audio levels depending on line loop length. Try **Medium** first, click <kbd>Apply</kbd>, then make a test call.

6. If the condition persists, try **Short**, click <kbd>Apply</kbd>, then make a test call.

> **NOTE** You may need to test different combinations of Echo Suppression and Line Loop Length settings to achieve the desired results.

Resolving General Audio Issues

Check the following if you hear static, sudden silences, gaps in speech, echoes, distorted speech, or garbled speech.

To resolve general audio issues:

You may be experiencing network problems.

- Your LAN administrator should ensure the following minimum guidelines are met:
  - A switched network topology, which requires attaching network components to switches rather than hubs, is recommended. The network should use standard 10/100 Ethernet switches that carry traffic at a nominal rate of 100 Mbit/s.
  - The office network infrastructure should use Cat.-5 wiring.
- Do not connect a network server PC to the PC port on the Deskset.

If you have Digital Subscriber Line (DSL) service, you may be experiencing telephone line problems.

- Make sure you have a DSL filter plugged in between each DSL line and the telephone wall jack.
- You may need a higher quality DSL filter than you are currently using. You can also try plugging in multiple DSL filters in sequence to decrease DSL interference.
- Move the DSL line to the lowest priority line, which is Line 4 on the highest numbered Gateway, as indicated on the Gateway display.

The Gateway might not have recognized a new outside telephone line, so line calibration—which allows the Gateway to adjust its performance depending on the phone lines' characteristics—did not occur. Try unplugging the telephone line, then waiting for 15 to 30 seconds before plugging the telephone line back into the Gateway.

Reconnecting a Deskset to the System

If there are no more than 24 Desksets in the system and a Deskset screen displays **Synch Failed** or **Synchronizing** for a long time, you may need to remove the Deskset from the system and reconnect it. This problem may have been caused by a network disruption, the Deskset having been part of a different network, or by an AC power failure.

To reconnect a Deskset to the system:

1. Ensure that the Deskset is connected to the same LAN subnet as other system Gateways and Desksets. Ensure that the PC you will use to access the WebUI is either on the same subnet as Syn248, or that the PC subnet can communicate with the Syn248 subnet. Devices on the same subnet generally share the first three octets of their IP addresses. If the subnets are different, contact your installer.

2. If you want to retain the programming for a problem Deskset, back up the Deskset.

   a. Log on to the WebUI as administrator on the problem Deskset. Click **Device Management**, then **Back up/Restore**, and then **Extension Settings** in the navigation menu at left.

b. Select the extension from the **Select Extension to Back up** drop-down list, and click `Back up Extension` to save the file to a specified location on your computer. You will need to locate and retrieve this file later, so make sure you remember where you saved it. The default file name will be in the format:

backup_ds_[extension number]_[year]-[month]-[day]_[time].cfg.

> **NOTE** If you back up the same extension less than one minute after creating the backup, you may overwrite the earlier backup file.

3. Perform a complete factory reset to return to the values set at the factory.

a. Unplug the LAN cable.

b. Insert a pen or the end of a paper clip into the **RESET** button, located on the underside of the Deskset. Hold until **Restoring to Factory Defaults** appears on the screen (approximately 5 seconds).
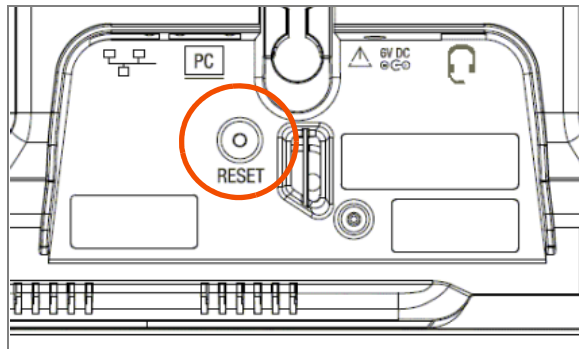
After the Deskset restarts, the screen displays **EXT 0**.

c. Reconnect the LAN cable.

The Deskset rejoins the system. Unless the entire system was reset, the Deskset retains its previous extension number. After the Deskset rejoins the system, the screen changes from **EXT 0** to the previous extension number.

4. If you backed up the Deskset settings in Step 2, restore your settings.

a. Log on to the WebUI as the Administrator at the PC where you stored the backup file.

Syn248 Desksets with static IP addresses need to have new addresses assigned if the Deskset IP addresses are to be used for logging on to the WebUI. At a Deskset, press ▤ (**MENU**) –> **3** –> **3** –> **2** to set the **IP address**.

b. Click **Device Management**, then click **Back up/Restore**.

c. Under **Restore Extension Settings**, select the Deskset's extension number from the **Select Extension to Restore** drop-down list. See *"Back Up and Restore Settings" on page 70*.

d. Select the backup file.

e. Click **Restore Extension**.

Power Failure Recovery Procedure

The Syn248 system automatically recovers after a power failure. The following describes the recovery process.

Allow about a minute for the Gateway to boot up when power returns after a power failure. The power-up sequence for the Gateway follows:

1. About 20 seconds after turning on power to the device, the POWER LED turns on.

2. When the device finds the network, **Synchronizing** momentarily appears, indicating that the device is in the process of detecting and synchronizing with other system devices.

```
03:45PM  24-FEB-10
PSTN Lines 1 - 4
Synchronizing...
```

3. Once the device has successfully finished synchronizing with the rest of the system, **Synchronized** appears.

```
03:45PM  24-FEB-10
PSTN Lines 1 - 4
Synchronized
IP: 192.168.1.4
```

When AC power returns after a power failure, the system self-assigns a link-local address to the Deskset beginning with number 169.254.

- If the Deskset is set for automatic IP address configuration, it searches for the DHCP server. If the DHCP server is found, it assigns an IP address.

- If the Deskset is set with static IP addresses, the address does not change.

We recommend that you check each Deskset and Gateway to confirm that it has started up properly.

If any of the system devices' screens report **Synch Failed** or **Synchronizing** for more than 10 minutes, see *"Reconnecting a Deskset to the System" on page 101* for recovery methods from these states.

> **NOTE**
> The time and date may not be correct. The time and date are set using the WebUI *"System Settings" on page 39*.
>
> The Desksets also automatically restart and synchronize after an AC power failure.

> **NOTE**
> Some systems will take longer than others depending on the network topology.

Initial Installation

The device screen displays Synchronizing.

Probable Cause	Corrective Action
The device has previous data and settings that are now inconsistent with current system settings.	■ Erase all Deskset data and settings by unplugging the LAN cable and pressing the reset button on the bottom of the Deskset for more than five seconds.
	■ The LAN cable may be connecting the Network port on the bottom of the Deskset, marked ⊟⊟, to another system device, rather than to the Network. Make sure the LAN cable is attached to the LAN.

Display Messages

The Gateway screen is blank.

Probable Cause	Corrective Action
Many.	■ See *"To resolve a blank screen or device that does not work at all:" on page 98*.

The Gateway screen displays Joining Site… for more than one minute.

Probable Cause	Corrective Action
The Gateway is failing to synchronize with a Deskset configured for a different system configuration.	■ Always disconnect the LAN cable before restoring factory defaults (by pressing the **RESET** button more than five seconds).

The device screen displays Network Down.

Probable Cause	Corrective Action
The LAN cable is unplugged.	■ Ensure that one end of the LAN cable is plugged into the Network/LAN port on the device and that the other end is plugged into your office LAN.
	■ Confirm that the light next to the LAN port is green. If it is not, unplug the cable and plug it in again.
There may be a problem with the office network.	■ Check if other network devices, such as computers, are communicating with the network. If not, then contact your IT administrator.

The device screen displays Synch Failed.

Probable Cause	Corrective Action
The device synch failed when trying to connect to the system.	■ Reset the device. Disconnect power or insert a pen or paper clip to press the **RESET** button for less than five seconds.
The device was disconnected, then reconnected after configuration changes were made to the system.	■ See *"Reconnecting a Deskset to the System" on page 101*.
The device was configured on another network or has returned to the system after being deleted from the system.	■ Reset to factory defaults by using a paper clip to press and hold the **RESET** button for more than five seconds. See *"Reconnecting a Deskset to the System" on page 101*.
The maximum number of that type of device has been reached.	■ A device must be removed from the network and deleted from the system before another device can be added.
The same Deskset extension number already exists.	■ Reset the Deskset to factory defaults without the network cable connected. Use a paper clip to press and hold the **RESET** button for more than five seconds.

The device screen displays Synchronizing.

Probable Cause	Corrective Action
Not enough time has elapsed.	■ The device may display **Synchronizing** for a few seconds. This is normal and does not indicate a problem.
This device is the first Syn248 device on the network.	■ Connect another Syn248 device to the network.
The devices are on different subnets.	■ If you use static IP addresses, ensure that the first three octets of the device IP address matches the IP addresses of the other system devices.

Probable Cause	Corrective Action

The device may have been configured on another network.	■ Power cycle the Deskset by unplugging the power cord and plugging it back in.
	
	■ If power cycling does not work, back up your Deskset and reset to factory defaults.
	
	   a. Back up the Deskset. See *"Back Up and Restore Settings" on page 70.*
	
	   b. Unplug the LAN cable.
	
	   c. Press the **RESET** button for at least five seconds.
	
	   d. Restore your settings after the Deskset restarts.

Deskset cannot make or receive phone calls and the Deskset screen displays Synchronizing.

Probable Cause	Corrective Action
The Deskset may have an incompatible software version.	■ Log on to the WebUI using the IP address of the Deskset and update the software. See *"Updating Devices" on page 74.*

A Syn248 device displays Host Not Found or File Not Found after a user attempts a software upgrade.

Probable Cause	Corrective Action
The user attempted a software upgrade with no outside Internet connection.	■ Ensure you have Internet connectivity and that your connection to your Internet Service Provider is operating normally. ■ Ensure your firewall is not blocking http requests. ■ Ensure that http requests are not being directed to a firewall log-in page. ■ Ensure that your http requests are not being routed through a proxy server.

A Syn248 device displays an error message other than Host Not Found or File Not Found after a user attempts a software upgrade.

Probable Cause	Corrective Action
The device encountered an unexpected problem.	1. Disconnect the power to the device, wait a few minutes, then reconnect the power and try the upgrade process again. 2. If the error message persists, visit our web site at **smbtelephones.att.com** or call **1 (888) 386-2006**. In Canada, call **1 (888) 469-2005**.

Gateway Setup

Line-Status LEDs do not flash red when the telephone line cords are plugged into the Gateway after power is switched on.

Probable Cause	Corrective Action
Line calibration allows the Gateway to adjust its performance depending on the phone lines' characteristics. The Gateway may not have performed calibration.	■ Make sure an LAN cable is plugged into the port marked LAN. ■ Unplug the telephone line. After the Gateway line LED turns red, wait 15 to 30 seconds before plugging the line back in.

Bypass jack does not work during power failure.

Probable Cause	Corrective Action
The line is not in the correct jack.	■ Make sure there is a line plugged into Line 4. ■ Make sure an analog phone is plugged into the Bypass jack (using a modular line cord).

WebUI

Administrator WebUI

The WebUI is unresponsive.

Probable Cause	Corrective Action
The web browser encountered an unexpected problem.	1. Close the unresponsive web browser, reopen the browser, and log on again as administrator. 2. If this does not work, try again using the IP address of a Deskset that is connected to the PC you are using. 3. If this does not work, try closing the browser and waiting 10 minutes before logging on again.

The WebUI displays "Login to target device failed."

Probable Cause	Corrective Action

The software version of the device you are currently logged on to is no longer compatible with the software version of other devices within the network.	1. Log on to the WebUI as administrator using the IP address of the device that caused the problem. Click **Device Management**, then **Update Device** in the WebUI navigation menu at left.
	
	2. Click Install Update . The selected device updates its software and reboots.
	
	3. After the device reboots, check the software version number on the device to confirm that the upgrade was successful.
	
	    ■ On the Deskset, press ☰ (**MENU**) –> **4**. Note the **Software Ver** value.
	
	    ■ On the Gateway, press the **SELECT** key to access the **Main Menu**. Then select **Device Information**, then **SW Ver**.

The device to be updated is unplugged.	■ Verify that the device is powered up.
The device to be updated has failed to synchronize with the system.	■ Verify that the other device says **Synchronized**. If it does not, see *"Reconnecting a Deskset to the System" on page 101*.

A Syn248 device upgrade failed, the WebUI displays "Login to target device failed", and the WebUI and device screens display the old software version.

Probable Cause	Corrective Action

The software version of the device you are currently logged on to is no longer compatible with the software version of other devices within the network.	1. Log on to the WebUI as administrator using the IP address of a device that does not have updated software and is not having any problems. Click **Device Management**, then **Update Device**.
	
	2. Select a device from the **Update Device** drop-down list. Do not select the device whose IP address you are using.
	
	3. Click **Install Update** . The selected device updates its software and reboots.
	
	4. After the device reboots, check the software version number on the device to confirm that the upgrade was successful.
	   ▪ On the Deskset, press ☰ (**MENU**) –> **4**. Note the **Software Ver** value.
	   ▪ On the Gateway, press the **SELECT** key to access the **Main Menu**. Then select **Device Information**, then **SW Ver**.
	
	5. After updating all other devices, upgrade the device whose IP address you are using.

Some devices did not update after using [Update All Devices] **.**

Probable Cause	Corrective Action
Did not allow enough time for software to update due to a slow Internet connection.	■ Wait 30 minutes, then check whether additional devices have been updated. If devices are still being updated, then the Internet connection is slow and you must wait for all the devices to complete the update process.
	■ If the update has failed (you see a failure message), retry [Update All Devices]. Allow sufficient time for the upgrade process to complete. You may prefer to schedule a system update to take place overnight.
	■ Update individual devices manually either through the front panel or through the WebUI for that particular device.
	i NOTE If you are using the WebUI to upgrade the device, ensure that you log on using that device's IP address.
	■ Power cycle each device that did not get upgraded. Unplug the power cord and plug it back in. As each device reboots, it automatically updates if it detects updated software in the system.

An extension number was not changed correctly.

Probable Cause	Corrective Action
That extension may have been on a call while the extension number was changed in the WebUI, or someone tried to change the extension number to a number that was already being used.	■ Change the extension number again. Make sure no one is using that extension while you are changing its settings.
	a. Log on to the WebUI as administrator, click **Extension Settings**, then **Basic Settings**.
	b. Enter a new extension number in the **Change Extension Number to** box.

WebUI reverts to Log-in page after clicking a navigation link.

Probable Cause	Corrective Action
The browser is not checking for newer versions of pages.	■ Ensure that your Internet browser is working normally. It may not be automatically caching pages. In your browser settings, enable the browser to automatically check for newer versions of stored pages.

Changes made to System Configuration from the WebUI are not saved.

Probable Cause	Corrective Action
The device whose IP address you used to log on to the WebUI failed to synchronize with the system. The WebUI displays "Unable to save data at this time. Please re-enter and try again."	■ Check the device status in the footer of the WebUI page. If the status reads "Synch Failed," see *"Reconnecting a Deskset to the System" on page 101*.
More than one person is using the WebUI to change System Configuration at the same time.	■ Make sure only one person at a time logs on as the administrator.
Apply must be clicked on each page to confirm the changes.	■ Click Apply on each page to confirm the changes.

Prompt created for Auto Attendant menu or Hold Announcement is not saved.

Probable Cause	Corrective Action
You must hang up the extension before saving the recording.	■ After recording a prompt for an Auto Attendant menu or for the Hold Announcement, hang up the extension before clicking Save Recording in the WebUI.

System Upgrade

A Syn248 device becomes sluggish or unresponsive during or immediately after software upgrade.

Probable Cause	Corrective Action
Cannot connect to AT&T server or the device encountered an unexpected problem.	■ Disconnect the power to the device, wait a few minutes, then reconnect the power and try the upgrade process again.

During device upgrade one of the following messages appears: "UNKNOWN ERROR Current image version" or "UNKNOWN ERROR".

Probable Cause	Corrective Action
A communication error between the devices and the server.	■ If this failure occurred after clicking `Update All Devices`, power cycle each device that did not get upgraded. Unplug the power cord and plug it back in. As each device reboots, it automatically updates (if it detects updated software in the system).
	■ Wait 30 minutes to allow for the device to update. If the system has a very low bandwidth Internet connection, it may take up to 4 hours.
	■ If this failure occurred during a manual single-device update, power cycle the device that did not get upgraded. Unplug the power cord and plug it back in. As the device reboots, it automatically updates if it detects updated software in the system.

User WebUI

Unable to access the WebUI Log-in page from my computer.

Probable Cause	Corrective Action
The computer is not connected to the same subnet (network) as the Deskset, and the subnets are not set up to communicate.	■ Verify the IP address. You must correctly enter the IP address of your Deskset into your Internet browser's address bar. At the Deskset, press ▤ (**MENU**) –> **4** to see the **IP address** displayed in the third line of the information. ■ Ensure that there is an LAN cable attached to Network port on the Deskset and to the LAN. If a PC at the same workstation is sharing the LAN connection, attach a network cable to your computer's network port and to the PC port on the back of the Deskset. ■ Confirm that your computer and your Deskset are on the same subnet so that they can talk to each other. Check that the first three sections of each IP address are the same. If they are not, they may not be connected to the same subnet. Contact the installer; the subnets may not be set up to communicate.
The local address, rather than the network IP address, was used in the address line of the browser.	■ Use the network IP address assigned through DHCP or manually in the address bar of the browser.

Changes made to System Configuration from the WebUI are not saved.

Probable Cause	Corrective Action
Apply must be clicked on each page to confirm the changes.	■ Click Apply on each page to confirm the changes.

PC/Deskset Interaction

Internet connection or access to the local network on my computer does not work after installing the Deskset.

Probable Cause	Corrective Action
The LAN cables are not installed correctly.	■ Check that the network cable from the computer is plugged into the Deskset port labeled $\boxed{\text{PC}}$. A second LAN cable should be plugged into the port on the Deskset marked ⬒ with the other end plugged into your LAN.

My PC is slower now that I have connected it to the LAN through the Deskset.

Probable Cause	Corrective Action
A computer connected through the Deskset will be limited to 100 Mbits/s.	■ Use separate network connections for the Deskset and the computer so that the computer can take advantage of the network's greater bandwidth.

My PC, which is connected to the LAN through the Deskset, briefly loses its network connection.

Probable Cause	Corrective Action
For PCs connected to the LAN through Desksets, disruption to the Deskset operation affects the PC. For example, when the Deskset restarts (possibly due to a software upgrade) the connection to the LAN is temporarily lost.	■ If the PC is connected to the LAN through the Deskset, avoid updating software or restoring the Deskset settings when a user is at the workstation. ■ If the PC is connected to the Deskset, and if the PC is connected to an Uninterruptible Power Supply (UPS), plug the Deskset into a UPS. ■ Use separate network connections for the Deskset and the computer.

Other Deskset Features

For more information about the corrective actions recommended in this troubleshooting section, see the SB35020/SB35025 Deskset User's Guide or SB35031 Deskset User's Guide at **smbtelephones.att.com**.

Other Desksets do not appear in the extension list.

Probable Cause	Corrective Action
The Deskset is not connected to the same subnet as the other Desksets.	■ Verify that the first two sections of the IP address (the portion before the second "dot") match the IP addresses of the other Desksets or that the subnets are set up to communicate with each other. Press ☰ (**MENU**) −> **4** at a Deskset to find the IP address. ■ If the other Desksets have been assigned static IP addresses, you may have to assign your Deskset a static IP address to match the other Desksets.

Users cannot add quick-dial entries.

Probable Cause	Corrective Action
You must configure one or more programmable feature keys as quick-dial keys before they can be used.	■ Configure one or more quick-dial keys for the Deskset. See **Feature Keys** under the **Extension Settings** menu.

Music on Hold (MoH) (SB35025 Deskset only)

Music on Hold (MoH) is not playing.

Probable Cause	Corrective Action
MoH is disabled.	■ Log on to the WebUI as administrator. On the **Hold Settings** page, enable **Music on Hold**. Set **Select Port** for the Deskset to which the Music on Hold source is connected, then click Apply .
MoH source is not properly connected.	■ Verify that an audio source is connected to a SB35025 Deskset's **AUX I/O** port.
MoH not properly configured.	■ Verify that the audio source is playing and not muted. ■ Set the MoH output volume level by adjusting the playback volume of the music source device. You may need to set the volume near the maximum. ■ Some MoH sources without volume controls, such as those with audio-out jacks, are usually very loud and might be too loud. ■ Syn248 limits the volume of the sound delivered to the phone line. Because of this, there may be audio clipping (missing sounds) for some sources. ■ Use different hold music. Some types of music sound better than others when played across a telephone line. For example, classical music with extreme volume fluctuations may not sound very good when used as MoH. ■ Verify that Hold Announcement is not playing a silent message. See *"Configuring Hold Settings" on page 49*.

MoH audio is interrupted.

Probable Cause	Corrective Action
Hold Announcement is enabled.	■ The Hold Announcement is a feature that repeats a recorded audio clip at regular intervals during MoH. See *"Configuring Hold Settings" on page 49*.

MoH audio is too quiet, fluctuating, or dropping out.

Probable Cause	Corrective Action
The volume on the audio source is too low or too high. If the volume is too high, overdriven audio components may be causing short periods of sound to drop out (not be heard).	■ If you can adjust the output volume of your audio source (like the headset jack of an MP3 player), call into your Syn248 system, place the call on hold, listen to MoH on the outside line, and adjust the audio volume on your audio source up or down until the best sound quality is achieved. ■ If you created a recording to use as the audio source, try to adjust the recording volume by speaking louder or speaking closer to the microphone. ■ Use different hold music. Some types of music sound better than others when played across a telephone line. For example, classical music with extreme volume fluctuations may not sound very good when used as MoH.
Use of audio source outputs whose levels are not adjustable, such as RCA "Line Out", may result in unacceptable background music levels and should not be used.	■ Use an audio source with output volume control.

APPENDIXES

Appendix A: Expanding Your System

You can add another SB35010 Gateway to expand your system to support up to 8 incoming lines, as shown in Figure 28.

After adding the Gateway to the system, ensure that you select a Phone Line CFNA destination for the additional phone lines connected to the Gateway (see *"Configuring Phone Line CFNA" on page 53*), and that you assign the lines to Line keys on the Desksets (see *"Deskset Programmable Feature Keys (PFKs)" on page 64*).
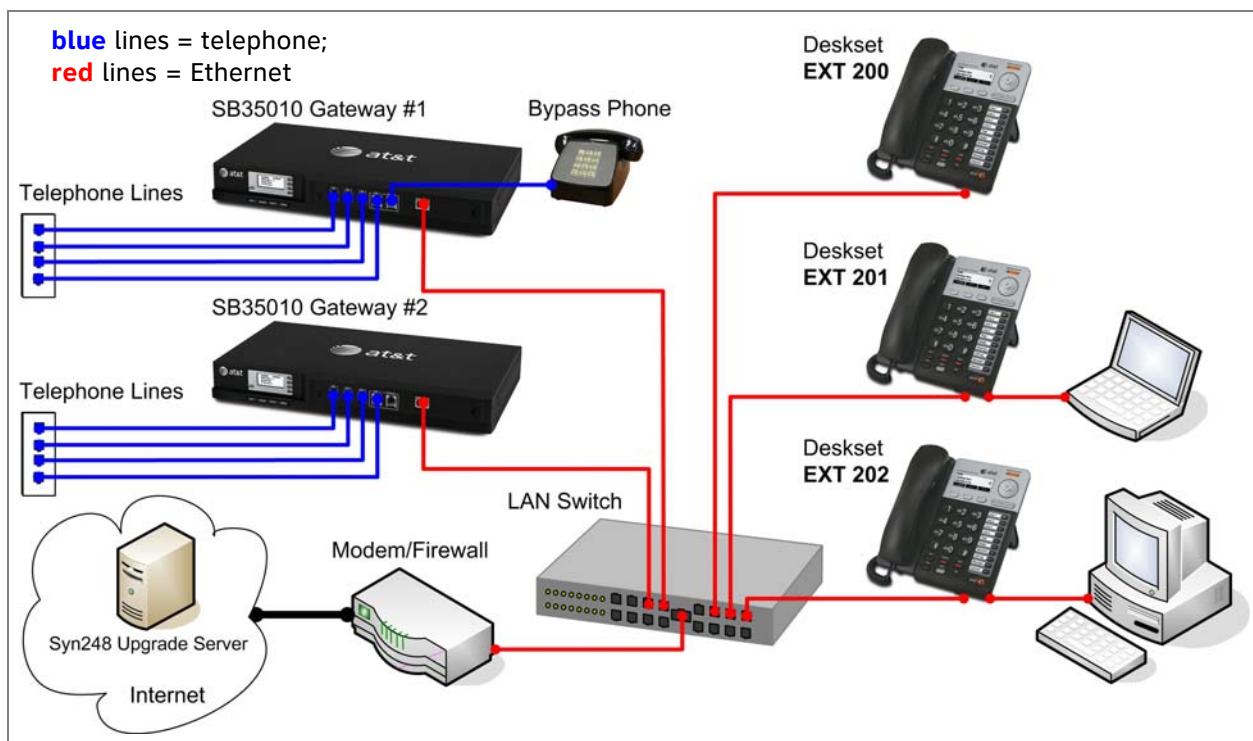

Figure 28. Expanded Syn248 System

Appendix B: IP Addresses and Connectivity

An IP address is an individual numeric identification assigned to devices on a computer network. At least one Syn248 device needs a network-assigned IP address on the subnet shared with any computers that will allow access to the WebUI. Valid IP addresses on the same subnet allow devices on the network to identify each other and enable communication.

This network IP address may be assigned from a Dynamic Host Configuration Protocol (DHCP) server, or set statically to the same subnet. The network IP address will be separate from the self-assigned 169.254.xxx.xxx link-local address that the Syn248 devices use to communicate with each other. When setting up the IP address on a Syn248 device, this network IP address used for WebUI connectivity is the only address you can change.

The network IP addresses can be assigned in two ways:

1. The Syn248 device can request a network server to automatically assign an IP address. In a home or small office environment, the server is usually your router. This IP address is assigned dynamically; the address is on lease from the server. The lease is renewed as long as the device remains connected and there is no change to the network. However, if the device is disconnected, or if there is a network or AC power interruption, the lease may not be renewed (that is, the IP address expires) and a new IP address may be assigned.

   Most LANs use servers to automatically assign IP addresses. By default, Syn248 assumes that this automatic assignment will occur.

   ⚠️ **CAUTION** *Some servers have default settings that limit the number of network IP addresses assigned to devices on the network. You should log on to your server (in most cases, this will be your router) to confirm that the IP range is sufficient to accommodate at least one of the Syn248 devices that you are adding. At least one Syn248 device needs an assigned IP address to enable WebUI configuration activities.*

2. The Syn248 system administrator can manually assign a static system IP address. This IP address does not change, even when there are network or AC power interruptions. Some installations will require manual static IP assignment. You can assign a static IP address for a Gateway using the device front panel interface. See *"Gateway Configuration" on page 86*. You can assign a static IP address for a Deskset from the Deskset IP Settings menu. See *"IP Settings" on page 92*.

Appendix C: Technical Specifications

Table 4 lists the technical specifications for the SB35010 Analog Gateway and SB35020/025 Deskset.

Table 4.   Technical Specifications

Feature	Specification
Frequency control	Crystal controlled PLL synthesizer
Size	SB35020/025 Deskset: 6.9″ × 7.9″ × 8.1″ (H × W × D @ 57° angle), 7.9″ × 7.9″ × 7.1″ (H × W × D @41° angle)
	SB35031 Deskset: 7.9″ × 8.9″ × 6.5″ (H × W × D @57° angle), 6.9″ × 8.9″ × 7.5″ (H × W × D @41° angle)
	SB35010 Gateway: 1.8″ × 13.5″ × 7.9″ (H × W × D)
Weight	SB35010 Gateway: 88.18 oz. (2500 g) (including adapter)
	SB35020/025 Deskset: 35.59 oz. (1009 g) (including adapter)
	SB35031 Deskset: 59.96 oz. (1700 g) (including adapter)
Power Requirements	SB35010 Gateway: 5.1 V DC @ 1700 mA
	SB35020/025 Deskset and SB35031 Deskset: 5.1 V DC @ 1700 mA (AC Adapter), PoE Class 2
Transmit Frequency	SB35025 Deskset, SB35031 Deskset, Cordless Headset: 1921.536–1928.448 MHz
RJ-45 Ethernet Network Jack	(10Base-T/100Base-Tx) with auto MDI/MDIX switching
Gateway Telephone Jacks	1–4 and BYPASS (FXO ports) use traditional 2-conductor wiring
Gateway BYPASS	26 mA loop current; REN 5; 100 m max loop length
LAN Cable	Cat.-5 standard cable
Headset Support	SB35025 Deskset and SB35031 Deskset: DECT Cordless Headset and corded headset supported
	SB35020 Deskset: corded headset supported

Appendix D: Default Settings

Table 5 and Table 6 list the default settings for the Syn248 system.

Table 5. System Default Settings

Parameter	Selection	Default
Admin Password	4 through 6 digits	12345
Administrator Login Name	16 characters max	Admin
Auto Attendant Digit Assignment (1–9, *, #)	None, Replay, Directory, Previous Menu, Main Menu, Default Menu, (user created)	None
Auto Attendant Enable Direct Dial	On, Off	On
Auto Attendant Enable Operator	On, Off	On
Call Forward-No Answer	On, Off	On
Call Forward-No Answer Extension Number	200 through 299	Nothing
Intercom Call Forward-No Answer Seconds Before Forwarding	5 through 45	15
Phone Line Call Forward-No Answer Seconds Before Forwarding	0 through 45	15
Intercom Call Forward-No Answer Target Type	Voicemail, Extension, Outside Phone Number	Voicemail
Phone Line Call Forward-No Answer Target Type	Off, Voicemail, Extension, Outside Phone Number, Auto Attendant	Auto Attendant
Directory Sort	First Name, Last Name	First Name
Display First and Last Name	16 characters maximum	Nothing
Operator Extension	All extensions	200
System Time/Date Option	NTP Server, Custom Server, Manual	NTP Server
Timer for Forwarded and Transferred Outside Calls	15 through 120 (5-minute increments)	30
User Password	6 digits maximum	Nothing

Table 6. Deskset Default Settings

Parameter	Selection	Default
Backlight	Hi, Lo, Off	Hi
Call Forward–No Answer Delay	5 through 45 (5-second increments)	15
Call Forward–No Answer Target	Auto Attendant, Mailbox, Ext, Phone #, OFF	Auto Attendant
Call Forward/Trans to outside line	Enabled/Disabled	Enabled
Contrast	1 through 9	5
Current Greeting	Primary, Alternate, Pre-Set	Pre-Set
Current Name	Personal, Pre-Set	Pre-Set
Date and Time (when server is not available)		12:00PM, January 1, 2009
Directory List	All, Personal, System, Extension	All
First Name/Last Name toggle	First Name, Last Name	First Name
IP Configuration	Auto, Static	Auto
Key Beeps	On, Off	On
Preferred Audio Mode	Speakerphone, Headset	Speakerphone
Ring Volume	0 through 9	3
Ringtones	1 through 9	1
User Password	0 through 6 digits	Nothing

Appendix E: Parts Lists

Figure 29 illustrates the SB35010 Gateway parts.

SB35010 Gateway

Power Adapter   **Four Phone Cords**   **Cat.-5 Ethernet LAN Cable** (Gray)

Mounting Brackets and Screws   **Installation Quick Start Guide**   **Important Product Information**
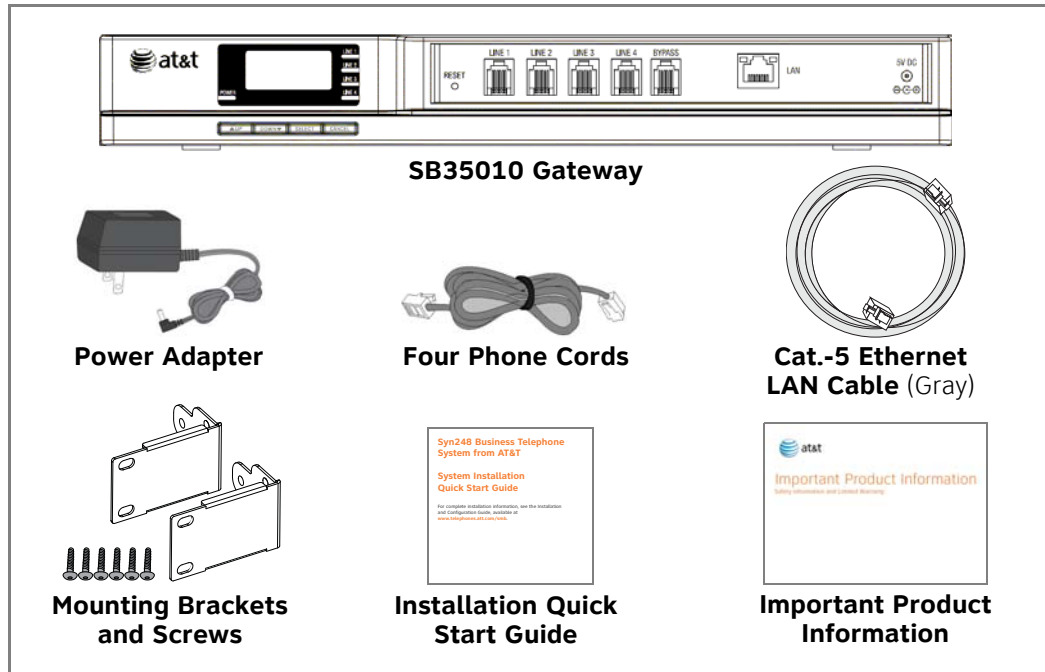
Figure 29. Gateway Parts List

Figure 30 illustrates the SB35020 and SB35025 Deskset parts.
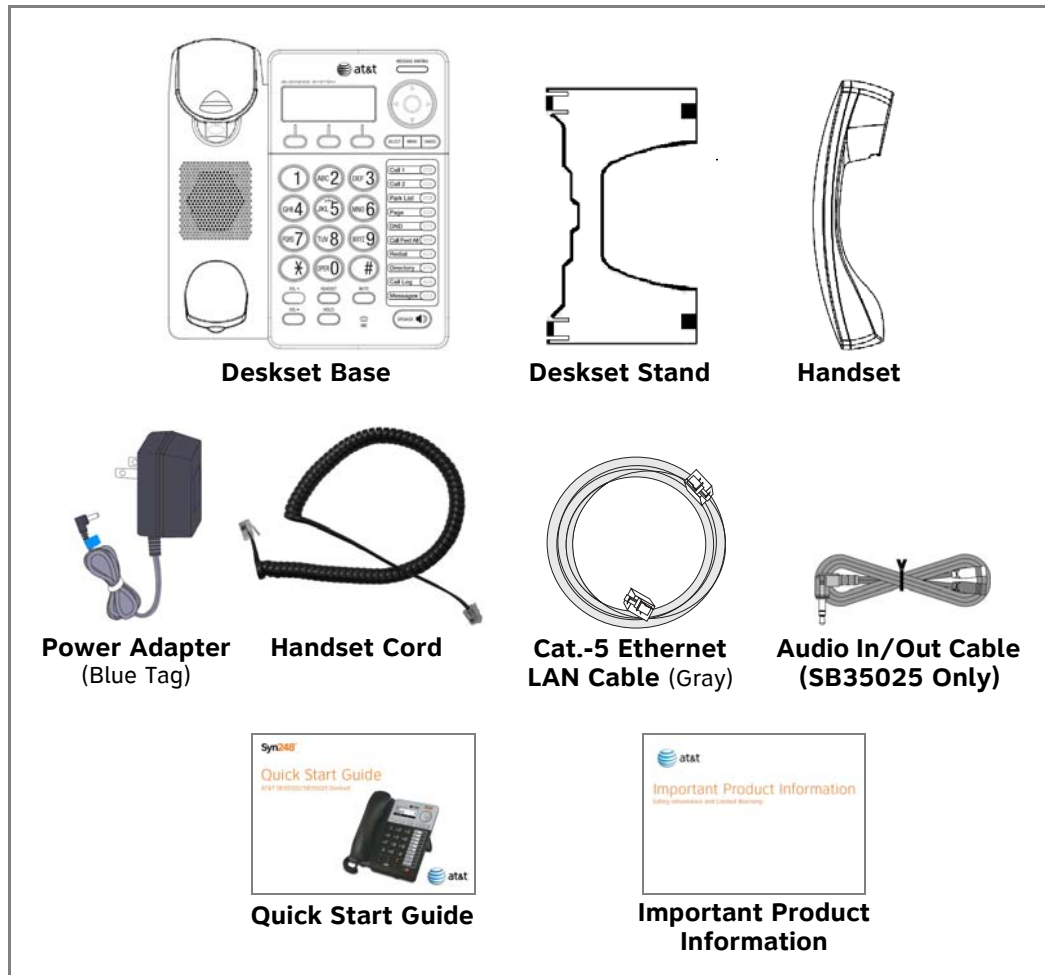
Figure 30. SB35020 and SB35025 Deskset Parts List

Figure 31 illustrates the SB35031 Deskset parts.
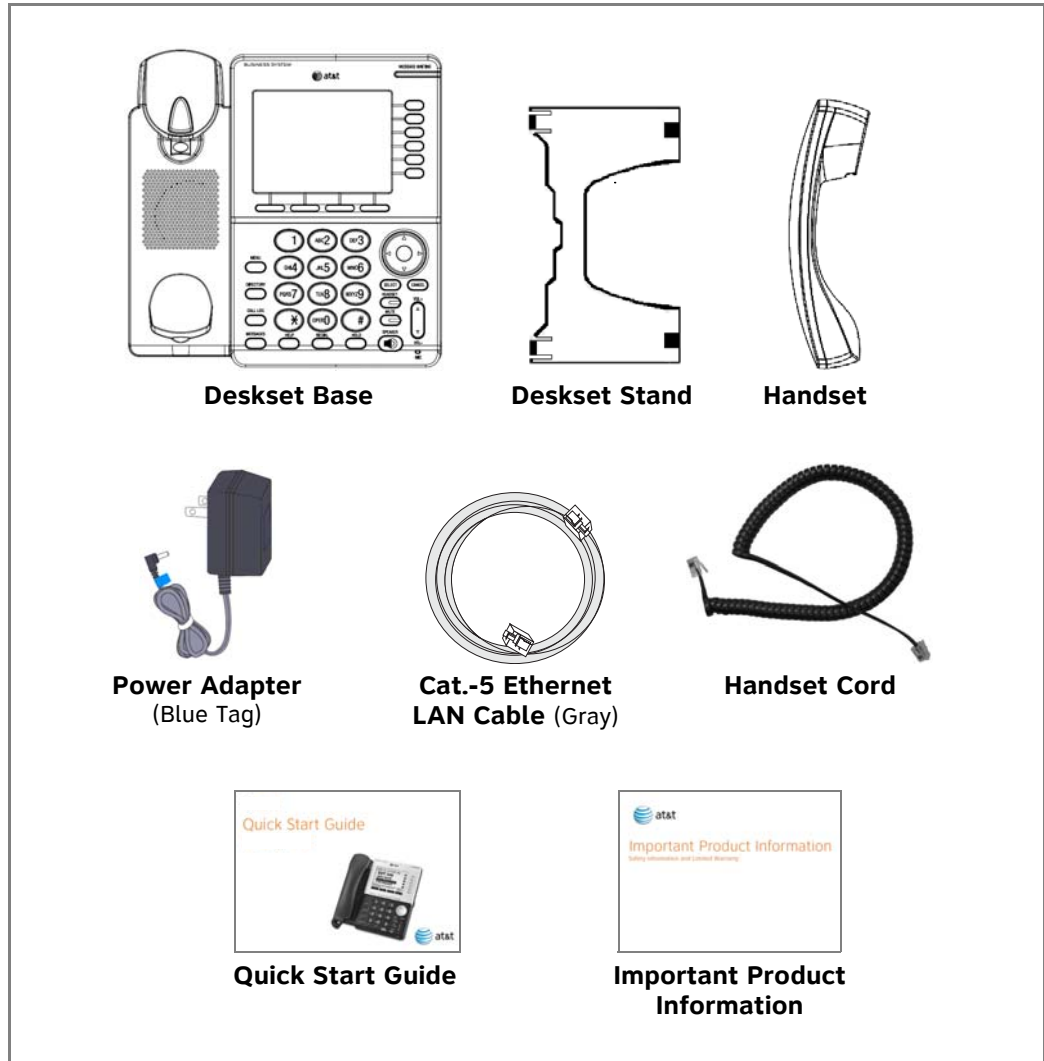
Figure 31. SB35031 Deskset Parts List

Appendix F: Maintenance

> ⚠️ **CAUTION** *Your system contains sophisticated electronic parts, so it must be treated with care.*

Avoid Rough Treatment

Handle the unit gently. Save the original packing materials to protect your equipment if you ever need to ship it.

Avoid Water

Your unit can be damaged if it gets wet. Do not use the equipment outdoors in the rain or handle it with wet hands. Do not install the equipment near a sink, bathtub, or shower.

Electrical Storms

Electrical storms can sometimes cause power surges harmful to electronic equipment. For your own safety, exercise caution when using electrical appliances during storms.

Cleaning Your Unit

Your unit has a durable plastic casing that should retain its luster for many years. Clean it only with a soft cloth slightly dampened with water or a mild soap solution. Do not use excess water or cleaning solvents of any kind.

Appendix G: Important Safety Instructions

> ⚠️ **CAUTION** *This symbol alerts you to important operating or servicing instructions in this document. Always follow basic safety precautions when using this product to reduce the risk of injury, fire, or electric shock.*

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury, including the following:

- Read and understand all instructions.
- Follow all warnings and instructions marked on the product.
- Unplug this product from the wall outlet before cleaning. Do not use aerosol or liquid cleaners. Use a damp cloth for cleaning.
- Do not use this product near water (for example, near a bathtub, kitchen sink, or swimming pool).
- Do not place this product on an unstable surface.
- This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home or office, consult your dealer or local power company.
- Do not allow anything to rest on the power cord. Do not install this product where the cord may be walked on.
- Never push objects of any kind into this product through the slots in the unit because they may touch dangerous voltage points or create a short circuit. Never spill liquid of any kind on the product.
- To reduce the risk of electric shock, do not disassemble this product; take it to an authorized service facility. Opening or removing parts of the unit other than specified access doors may expose you to dangerous voltages or other risks. Incorrect reassembling can cause electric shock when the product is subsequently used.
- Do not overload wall outlets and extension cords.
- The power adapter is intended to be correctly oriented in a vertical or floor mount position. The prongs are not designed to hold the plug in place if it is plugged into a ceiling or an under-the-table or cabinet outlet.

Unplug this product from the wall outlet and refer servicing to an authorized service facility under the following conditions:

- When the power supply cord or plug is damaged or frayed.
- If liquid has been spilled on the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally when following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and often requires extensive work by an authorized technician to restore the product to normal operation.
- If the product has been dropped and the unit has been damaged.
- If the product exhibits a distinct change in performance.

GLOSSARY

This glossary provides definitions that apply to the Syn248 telephone system.

10/100 Ethernet Port: An Ethernet port that supports two different speeds of Ethernet on the same port. The two speeds supported are 10Base-T and 100Base-TX.

10Base-T/100Base-TX: An Ethernet network operating at up to 100 megabits per second.

active call: An established telephone call that is not on hold.

analog: A continuously variable signal.

analog phone: A non-Syn248 telephone that plugs directly into a normal telephone wall plug or into the Gateway BYPASS port.

Auto Answer: You can set the Deskset to automatically answer Syn248 systems after a delay that you specify. Without touching the Deskset, you can speak to and be heard by people who call you.

Auto Attendant: A system that automatically answers incoming calls and provides instructions to callers.

BYPASS port: An RJ-11 jack on the Gateway that allows for communication during power outages. Plug an analog telephone into this jack.

Call Forward–No Answer: Automatically forward unanswered calls to voicemail, the Auto Attendant, an extension, or outside phone number. The system administrator can configure a Call Forward–No Answer setting for each line connected to the Gateway, and an Intercom Call Forward–No Answer setting for each Deskset.

Cat.-5 wiring: A twisted pair data cable commonly used in offices for computer communication.

CO (Central Office): An office to which subscriber home and business lines are connected. The central office has switching equipment that can switch calls locally or to long-distance carrier phone offices.

default: The original product settings.

DHCP (Dynamic Host Configuration Protocol): A network protocol that automatically assigns computer IP addresses.

dial pad: The **0** through **9**, *****, and **#** keys on the Deskset.

direct dial: Allows callers to directly dial users' extension numbers after the Auto Attendant answers.

Directory: A list of names and phone numbers.

Display Names: The names that the system administrator enters to identify each extension number. The Auto Attendant uses these names to assist callers in forwarding calls.

DND (Do Not Disturb): A feature that suppresses audible ringing and incoming paging at the Deskset.

DND ON: An indicator in the top right corner of the Deskset display that illuminates when you turn on the Do Not Disturb feature.

DNS (Domain Name System) server: A server that stores the Domain Name System records, such as address, name server, and mail exchanger records for a domain name and responds with answers to queries against its database.

DSL (Digital Subscriber Line): High-speed Internet service through your telephone line. Telephone lines with DSL service require DSL filters to separate the telephone and data signals.

DTMF (Dual-Tone Multi-Frequency): Telephone tones commonly known as "touch-tone".

dynamic IP address: An IP address that is automatically assigned by the server.

Ethernet: A type of computer networking technology that connects devices via Local Area Networks (LANs).

Extension list: A list of names and extension numbers for the Syn248 system telephones.

extension number: The three-digit number representing each individual Deskset.

factory default: The original product settings.

FXO (Foreign Exchange Office): The Gateway telephone signaling interface between the telephone lines and the LAN.

Gateway: A network device equipped for interfacing with another network that uses different protocols.

greeting, preset: The voice message that plays to callers if the user has not recorded an outgoing message.

grounding: An electrical ground connection that minimizes interference, reduces the risk of equipment damage due to lightning, eliminates electrostatic buildup, and helps protect people who service the equipment.

hard key: Any physical key on the Deskset or Gateway. Examples include ▤ (**MENU**) and **1**.

hard reset: An action that restores factory default settings.

Hold announcement: A recorded message to play while calls are on hold.

hub: A network hub or repeater hub is a device for connecting electronic devices, making them act as a single link.

hunt group: A telephone company feature that allows calls to a busy phone number to roll over to the next available line.

icon: A small picture in the display that presents status information.

Idle: The mode of a device when it is not involved in call or call setup activity.

intercom call, internal call: A phone call placed from one of your Syn248 system extensions to another extension.

interference: Electrical signals close by that cause degraded audio performance for cordless devices.

IP address (Internet Protocol address): An individual numeric identification assigned to devices on your LAN.

key beep: When enabled, pressing a Deskset key plays a tone.

LAN (Local Area Network): A communications network that allows data devices to communicate with each other.

LCD (Liquid Crystal Display): The screen that provides instructions and feedback.

LED (Light Emitting Diode): A small light on a device that indicates status.

link-local address: A local address used for network address creation when no external source of network addressing information is available.

live dial: Dialing after the phone is off hook.

MAC address (Media Access Control address): A unique identifier assigned to most network adapters or network interface cards that is required for registering your devices.

main menu, Auto Attendant: The Auto Attendant messages and actions that are available to callers before the callers take additional actions.

MDI/MDIX: (Medium-Dependent Interface Crossover): A computer networking technology.

mute: Stop sending your voice to the other party during a phone call.

NTP (Network Time Protocol): An Internet standard protocol that assures time synchronization in a computer network.

off hook: Indicates that you are on a phone call, have lifted the corded handset, or have pressed the **SPEAKER** or **HEADSET** key to answer a call or to prepare to place a call. You are off hook from the moment that you hear a dial tone to when you hang up a call.

on hook: Indicates that no Deskset is active.

operator: The extension that callers reach by dialing **0** (zero) when the Auto Attendant operator feature is enabled or that system users reach at any time by dialing **0** (zero).

outside call: A phone call between a phone not a part of your Syn248 system and an extension within your Syn248 system.

P2P (Peer-to-Peer): A telecommunication system architecture in which some resources associated with a device are directly available to other similar system devices.

page: Broadcasts your voice to all idle extensions that do not have Do Not Disturb turned on.

paging zone: A set of extensions that can be paged as a group.

Personal Directory: A private list of names and phone numbers available to only a single extension.

POTS (Plain Old Telephone Service): Basic telephone operation. The ability to make and receive phone calls.

predial: Enter digits before going off hook to place a call.

PSTN (Public Switched Telephone Network): The world's telephone network.

Quick Dial: Provides two-touch dialing for frequently called phone numbers.

reboot: Restart a device.

Redial: Accesses the log of outgoing calls.

router: An electronic device that connects two or more other electronic devices to each other, allowing them to communicate.

soft key: The Syn248 Desksets feature keys below the LCD screen. The bottom of the LCD displays the appropriate label for each key as the function of the key changes.

static IP address: An IP address that is manually assigned to a computer by a system administrator. This type of addressing requires specific knowledge of the LAN.

subnet (subnetwork): Typically a LAN served by one router.

switch: A network switch links electronic devices. The switch processes and routes data flexibly, allowing more data to be handled without error.

system administrator: A person to perform functions such as setting up and modifying system configurations. This system administrator can be an employee or your telephone equipment provider.

System Directory: (see System list).

System list: This list of names and phone numbers is created and maintained by the system administrator. All system users can sort and view this list.

system operator: The extension that callers reach by dialing **0** (zero) when the Auto Attendant operator feature is enabled or that system users reach at any time by dialing **0** (zero).

UPS (Uninterruptible Power Supply): A battery-powered emergency power supply device.

URL (Uniform Resource Locator): An Internet address.

VoIP (Voice over Internet Protocol): A transmission technology for delivery of voice communications over IP networks such as the Internet or other packet-switched networks. Other synonymous terms include IP telephony, Internet telephony, Voice Over BroadBand (VoBB), broadband telephony, and broadband phone.

WebUI (Web User Interface): A means of interacting with a product using a computer interface. Connection to the World Wide Web is not necessary.