

Spectralink Digital DECT Base Station

Installation Guide

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The Product Warranty and Software License and Warranty and other support documents are available at <http://support.spectralink.com/>.

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About This Guide

This guide explains how to install the Spectralink Digital DECT Base Station.

This guide is intended for qualified technicians and the reader is assumed to have a basic knowledge about the Spectralink DECT Server, Spectralink Digital DECT Base Station and Spectralink DECT Repeater.

Related Documentation

All Spectralink documents are available at <http://support.spectralink.com/>.

Safety and Handling information is available online at <http://support.spectralink.com/products>.

Regulatory information is available online at <http://support.spectralink.com/products>.

| Subject | Documentation |
|---------------------------------|---|
| Spectralink DECT Handset | For more information about the handset, refer to the user guide available online at http://support.spectralink.com/products . |
| Site Survey Function in Handset | For more information about the site survey function in handset, refer to the guide available online at http://support.spectralink.com/products . |
| Synchronization and Deployment | For more information about synchronization and deployment, refer to the guide available online at http://support.spectralink.com/products . |
| Spectralink IP-DECT/DECT Server | For more information about the server, refer to the guide available online at http://support.spectralink.com/products . |
| Spectralink DECT Repeater | For more information about the repeater, refer to the guide available online at http://support.spectralink.com/products . |
| Provisioning | For more information about provisioning, refer to the guide available online at http://support.spectralink.com/products . |
| Spectralink Technical Bulletins | Available online at http://support.spectralink.com/products . |
| Release Notes | Document that describes software changes, bug fixes, outstanding issues, and hardware compatibility considerations for new software releases. Available online at http://support.spectralink.com/products . |

| Subject | Documentation |
|------------------------------------|--|
| Spectralink DECT Training material | <p>In order to gain access to the Spectralink training material, you must attend training and become Spectralink Certified Specialist.</p> <p>Please visit http://-partneraccess.spectralink.com/training/classroom-training for more information and registration.</p> |

Description of Base Station



The Spectralink Digital DECT Base Station is only intended for use with a Spectralink DECT Server 2500/8000. The Spectralink Digital DECT Base Station is not intended to be connected directly to the PSTN network.

The Spectralink Digital DECT Base Station is designed with two internal antennas and supports antenna diversity.

The Spectralink Digital DECT Base Station is designed with connector for External Antenna.

The Spectralink Digital DECT Base Station is also able to carry out a handover between the RF channels under the same Spectralink Digital DECT Base Station, and handles 4 or 8 DECT speech channels simultaneously.

The Spectralink Digital DECT Base Station is able to frame synchronize with other Spectralink Digital DECT Base Stations under the same Spectralink DECT Server. Cable length is up to 2 km/1.2 miles on a twisted pair, cat. 5e or higher, between the Spectralink Digital DECT Base Station and Spectralink DECT Server.

The Spectralink Digital DECT Base Station is also power supplied from this connection (maximum supply 1.5 W).

The DECT radius of coverage is up to 600 meters/2000 feet with a handset in free sight.

Installing the Base Station

Below you will find information about installing the base station.



Note:

Before you install the equipment, ensure that a site planner defines the location of the base stations.

Before you begin the installation, determine the position of the base station for best coverage. The average coverage within buildings is 30 meters/100 feet.

The coverage depends on the construction of the building, architecture, and the choice of building materials.

Frequency Bands

- EMEA, Australia & New Zealand: 1G8: 1880 – 1900 MHz
- South America: 1G9: 1910 – 1930 MHz
- USA & Canada: 1G9: 1920 – 1930 MHz (DECT 6.0)

Environmental Considerations

- Do not install a device near metal objects and steel constructions.
- Do not position devices in ducts, plenums or hollow spaces used to transport environmental air except where the duct, plenum or hollow space is created by a suspended ceiling having lay-in panels.
- Do not position devices behind furniture.
- The installation area must be clean, free of traffic and excess dust, dry, and well ventilated.
- The installation area must be within the temperature ranges of 10°C and 40°C/50°F and 104°F.
- The installation area must be between 20% and 80% non-condensing relative humidity.
- For best RF coverage, the device must be mounted vertically on walls.

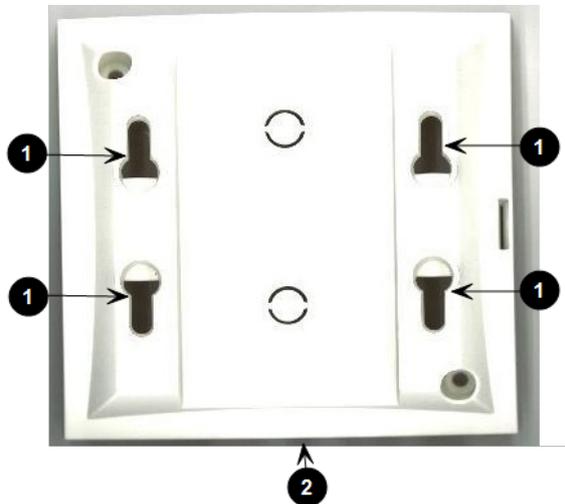
Power Requirements for the Base Station

The Spectralink Digital DECT Base Station is powered directly via the Spectralink DECT Server 2500/8000 Base Station Interface Card (BIF card).

Base Station Appearance and Components

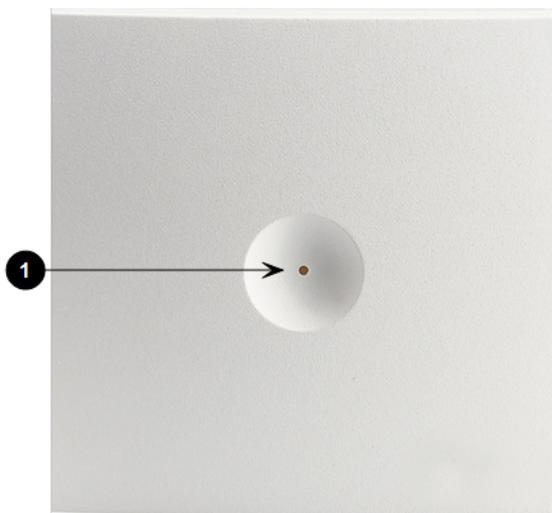
Below you will find a description of the base station appearance and components:

Spectralink Digital DECT Base Station - rear



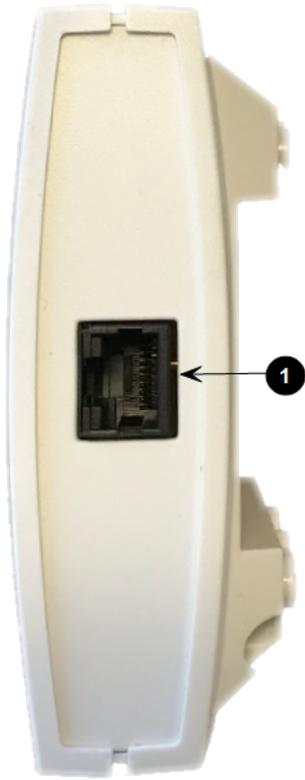
1. Holes for wall mounted screws
2. Connection to server

Digital DECT Base Station - front



1. LED

Digital DECT Base Station - front



1. RJ45 port

Base Station LED Indicators

Below you will find information about LED indicators on the base station.

Front Cover

The base station front cover has one indicator describing the base station faults and failures. The indicator is off when the base station is not powered. The LED flashes when the base station initializes. The indicator is on when the base station is operating.

| LED Indicator | Meaning |
|--|---|
| Steady green | OK and idle. |
| Slow green flashing | OK and active voice call. |
| Fast green flashing | Base station is initializing or busy (all channels are in use). |
| Red flashing | Updating firmware in base station. |
| Steady red | Just powered on. |
| Steady red for 5 seconds followed by fast red flashing | Reset to factory settings. |

How to Wall Mount the Base Station

The base station must be mounted vertically on the wall for best coverage.

1. Use a twisted pair cable, cat. 5e or higher, between the base station and Spectralink DECT Server/Spectralink IP-DECT/DECT Server with an RJ45 connector at the base station end of the cable. Connect the cable to the plug using the two inner connectors of the plug. Pins 4 and 5 for the first 4 channels, and pins 3 and 6 for the last 4 channels.



Note:

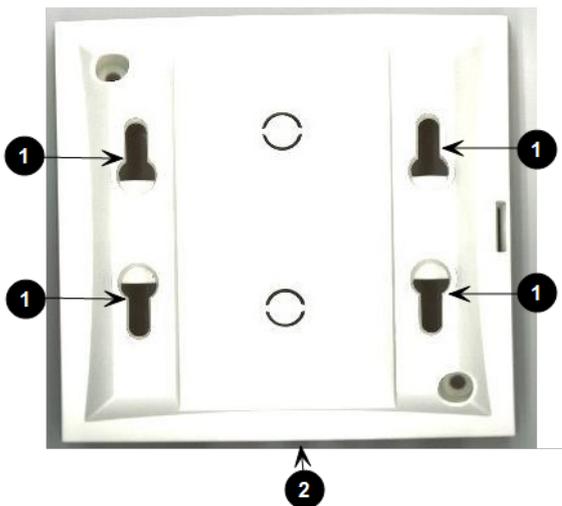
Cable dimensions must as a minimum correspond to those of AWG 26.

2. Mount the base station onto the wall using the screws accompanying the base station.



Note:

When you place the base station on the screws, ensure that the screws do not touch the printed circuit board.



1. Holes for wall mounted screws
2. Connection to server

3. Connect the base station to the Spectralink DECT Server.

Recording the Installation Information

After completing the installation of the base stations, record the location of each base station and add a descriptive text in the web based Administration Page of the Spectralink DECT Server under **Base station/IP Base Station**.

Product Compatibility

If you have any questions about product compatibility, contact your system administrator.

You can use the Spectralink Digital DECT Base Station and with other Spectralink products as identified by the type approval model ID and/or part number located on the label of the product.

Spectralink Base Station

| | |
|--|----------|
| Spectralink Digital DECT Base Station 4 channels | K007 |
| Spectralink Digital DECT Base Station 8 channels | K007 |
| External Antenna (with 1 m connection cable) | 02319705 |
| Connection cable for External Antenna, 3 m | 14002704 |
| Connection cable for External Antenna, 7.5 m | 14002706 |

Spectralink DECT Repeater

| | |
|---|------------------|
| Spectralink DECT Repeater 1G8, 2 channels, with connector for external antenna | K018B (02440000) |
| Spectralink DECT Repeater 1G9, 2 channels, with connector for external antenna | K018B (02441000) |
| Spectralink DECT Repeater 1G8, 2 channels, without connector for external antenna | K018 (02441100) |
| Spectralink DECT Repeater 1G9, 2 channels, without connector for external antenna | K018 (02441200) |
| Spectralink DECT Repeater 1G8, 4 channels, with connector for external antenna | K018 (02441600) |
| Spectralink DECT Repeater 1G9, 4 channels, with connector for external antenna | K018 (02440200) |
| Spectralink DECT Repeater 1G8, 4 channels, without connector for external antenna | K018C (02334601) |
| External Antenna (with 1 m connection cable) | 02319705 |
| Connection cable for External Antenna, 3 m | 14002704 |
| Connection cable for External Antenna, 7.5 m | 14002706 |
| Power Supply (9.0V DC, 350mA) | 84642602 |
| Repeater Programming Kit | 02509210 |

Spectralink Server

| | |
|--|-----------------|
| Spectralink DECT Server 2500 | K017 (0270xxxx) |
| Spectralink DECT Server 8000 | K016 (023389xx) |
| Power Supply, 19.0V (only Server 2500) | 84769905 |
| Power Supply, 19.0V (only Server 8000) | 84769902 |
| Cable for Power Supply: AU version | 84687011 |
| Cable for Power Supply: DK version | 84687012 |
| Cable for Power Supply: EU version | 84687013 |
| Cable for Power Supply: UK version | 84687014 |