



BST Doorphone Installation and Configuration Guide

Avaya Business Communications Manager

Document Status: **Standard**

Document Number: **NN40010-302**

Document Version: **02.01**

Date: **May 2010**



© 2010 Avaya Inc.
All Rights Reserved.

Notices

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of this documentation unless such modifications, additions, or deletions were performed by Avaya. End User agree to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked Web sites referenced within this site or documentation(s) provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product, while under warranty, is available to Avaya customers and other parties through the Avaya Support Web site: <http://www.avaya.com/support>

Please note that if you acquired the product from an authorized reseller, the warranty is provided to you by said reseller and not by Avaya.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, [HTTP://SUPPORT.AVAYA.COM/LICENSEINFO/](http://support.avaya.com/licenseinfo/) ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AUTHORIZED AVAYA RESELLER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AUTHORIZED AVAYA RESELLER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA AUTHORIZED RESELLER, AND AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Copyright

Except where expressly stated otherwise, no use should be made of the Documentation(s) and Product(s) provided by Avaya. All content in this documentation(s) and the product(s) provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software. Unauthorized reproduction, transmission, dissemination, storage, and/or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

Third Party Components

Certain software programs or portions thereof included in the Product may contain software distributed under third party agreements ("Third Party Components"), which may contain terms that expand or limit rights to use certain portions of the Product ("Third Party Terms"). Information regarding distributed Linux OS source code (for those Products that have distributed the Linux OS source code), and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply to them is available on the Avaya Support Web site: <http://support.avaya.com/Copyright>.

Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the documentation(s) and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the documentation(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party. Avaya is a registered trademark of Avaya Inc. All non-Avaya trademarks are the property of their respective owners.

Downloading documents

For the most current versions of documentation, see the Avaya Support. Web site: <http://www.avaya.com/support>

Contact Avaya Support

Avaya provides a telephone number for you to use to report problems or to ask questions about your product. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Web site: <http://www.avaya.com/support>

Contents

About the Business Series Terminal (BST) Doorphone	5
What you need to know	5
Environment requirements	5
Customer service	6
Navigation	6
Getting technical documentation	6
Getting product training	6
Getting help from a distributor or reseller	6
Getting technical support from the Avaya Web site	6
DN configuration requirements for the BST Doorphone	7
Creating a BST Doorphone DN record	7
Other BST Doorphone configuration requirements	9
Trunk/line data	9
Scheduled Services	9
BST Doorphone Installation	11
Wire and mount a BST Doorphone	11
Initialize a new BST Doorphone	13
Optional Equipment	13
Configuring BST Doorphone settings	15
Testing the BST Doorphone	16
Doorphone configuration tips	17

Chapter 1

About the Business Series Terminal (BST) Doorphone

This guide leads an Avaya installer and/or system administrator through installing and configuring a BST Doorphone on an Avaya Business Communications Manager (Avaya BCM) system.

The BST Doorphone is used as an intercom device to control access to your building. It provides call notification and handsfree communication from a site entry location to assigned telephones on the Avaya BCM system.



Note: Door opening capabilities are available with a Door Opening Controller (DOC). For more information on DOC, refer to [“Optional Equipment” on page 13](#).

This chapter contains:

- [“What you need to know”](#)
- [“Environment requirements”](#)
- [“Customer service”](#)

What you need to know

To install and configure a BST Doorphone you must:

- know how to log on to Business Element Manager and use the Business Element Manager interface
- be an Avaya installer with Business Communications Manager certification
- know basic Avaya terminology

Environment requirements

Check the following environment requirements:

Temperature	-35° to 60°C (-31° – 140°F)
Relative humidity	5% to 95% non-condensing
Background noise	up to 70 dB A

Customer service

Visit the Avaya Web site to access the complete range of services and support that Avaya provides. Go to www.avaya.com or go to one of the pages listed in the following sections.

Navigation

- “Getting technical documentation” on page 6
- “Getting product training” on page 6
- “Getting help from a distributor or reseller” on page 6
- “Getting technical support from the Avaya Web site” on page 6

Getting technical documentation

To download and print selected technical publications and release notes directly from the Internet, go to www.avaya.com/support.

Getting product training

Ongoing product training is available. For more information or to register, you can access the Web site at www.avaya.com/support. From this Web site, you can locate the Training contacts link on the left-hand navigation pane.

Getting help from a distributor or reseller

If you purchased a service contract for your Avaya product from a distributor or authorized reseller, contact the technical support staff for that distributor or reseller for assistance.

Getting technical support from the Avaya Web site

The easiest and most effective way to get technical support for Avaya products is from the Avaya Technical Support Web site at www.avaya.com/support.

Chapter 2

DN configuration requirements for the BST Doorphone

You can set up the DN record prior to a hardware installation, or you can install the hardware before you configure the DN record. If you install the hardware first, Business Element Manager will automatically detect the BST Doorphone and list it in the Active DNs table.



Note: Some default DN settings can cause the BST Doorphone to automatically answer incoming calls that are not intended to be heard over the BST Doorphone. For detailed information about all DN settings, refer to your Avaya Business Communications Manager (Avaya BCM) Configuration Guide.

Creating a BST Doorphone DN record

Follow these steps to create a DN record for the BST Doorphone.

- 1 From Business Element Manager, click the **Configuration** tab and select **Telephony > Sets > All DNs**.
- 2 The **All DNs** panel contains three tabs: **Line Access**, **Capabilities and Preferences**, and **Restrictions**. Depending on which tab is selected, different fields appear in the main panel and the details panels. The **All DNs** pane displays the parameters shown in the table below regardless of what tab is selected. Use [Table 1](#) to set the values for the BST Doorphone.

Table 1 Static information on the main panel

Attribute	Value	Description
Name	<up to seven alphanumeric characters>	Use this field to provide a more specific description of the BST Doorphone, such as BackDR for Back Door.
Model Port	Doorphone	Choose Doorphone for the BST Doorphone.
	<port number>	This read-only field shows the port number for the Set DN. Remember this port number when you are installing the BST Doorphone to a station module on the Avaya BCM system.

- 3 Select the **Line Access** tab and select the DN. Three tabs display in the details panel. You must set parameters in the main panel and under the following tabs:
 - Line Assignment
 - Line Pool Access
 - Answer DNs

Use [Table 2](#) to set line access parameters for the BST Doorphone.

Table 2 Line access parameters

Tab	Attribute	Values	Description
Main panel	Fwd No Answer	up to 24 digits	Leave blank for the BST Doorphone.
	Fwd Busy	up to 24 digits	Leave blank for the BST Doorphone.
Line Assignment	Line	read only	Ensure there is no line assignment for this DN.
Line Pool Access	Line Pool	read only	Ensure that no line pool access is selected for this DN.
Answer DNs	DN	DN number	Ensure that there are no Answer DN assignments for the BST Doorphone.

- 4** Select the **Capabilities and Preferences** tab and select the DN. Additional tabs display in the details panel. You must set parameters in the main panel and under the following tabs:

- Capabilities
- Preferences

Use [Table 3](#) to set the capabilities and preferences for the BST Doorphone.

- 5** Repeat these steps for every BST Doorphone you plan to install on the system.

Table 3 Capabilities and preferences

Tab	Attribute	Values	Description
Main panel	Prime line	I/C	Ensure that the prime line value is set to I/C for the BST Doorphone.
	Intercom (I/C) keys	1	Assign only one intercom key to the BST Doorphone.
	Control set	None	Set this value to None for the BST Doorphone.
Capabilities	DND on busy	check box	Ensure that this check box is not selected for the BST Doorphone.
	Handsfree	None Standard Auto	Set this value to Auto for the BST Doorphone.
	Paging	check box	Ensure that this check box is selected for the BST Doorphone.
	Direct dial	0 - 9	Set this value to 0 for the BST Doorphone.
Preferences	Aux ringer	check box	Ensure that this check box is not selected for the BST Doorphone.
	Hotline type	None Internal External	Ensure that the Hotline type is sent to None .



Note: For a detailed explanation on all line access fields, refer to your Avaya BCM Configuration Guide.

Other BST Doorphone configuration requirements

You must configure the Trunk/line data and Scheduled Services for the BST Doorphone to work properly.

Trunk/line data

Ensure that the BST Doorphone DN (DN XXX) is not assigned as a prime set for lines on the Avaya BCM system.

The Business Element Manager displays all active lines under:

Configuration > Telephony > Lines > Active Physical Lines headings.

Scheduled Services

Ensure that the BST Doorphone DN (DN XXX) is not assigned as a control set, extra dial set or a ringing set for scheduled services.

The Business Element Manager displays three services (ringing, restrictions and routing) under:

Configuration > Telephony > Scheduled Services headings.

Chapter 3

BST Doorphone Installation

The BST Doorphone can be mounted in a standard recessed double-gang electrical box for flush mounting or surface mounted using the optional surface mount bracket. Mount the BST Doorphone at shoulder height (approximately 5 ft.) in the absence of other specifications, such as compliance with local handicapped access regulations, if required.

Select a location for the BST Doorphone within 300 m (1000 ft.) of the Avaya Business Communications Manager (Avaya BCM) system. This distance can be increased to 780 m (2600 ft.) with the connection of a Station Auxiliary Power Supply (SAPS) to a BST Doorphone.

The BST Doorphone is suitable for exposure to weather; however, care must be taken to ensure holes or recesses provided for the BST Doorphone are properly sealed to prevent water from entering the wall in exposed locations. Gaskets are supplied for both flush and wall mount installations. No gasket is required between the BST Doorphone and surface mount bracket.



Caution: You must install protection devices when wiring between the BST Doorphone and the Avaya BCM system is routed outside a building, such as aerial or buried cable. Protection devices must be installed at each end of the exposed cable. Avaya recommends the ITW LINX MP1A-90-27 secondary protector for this purpose.

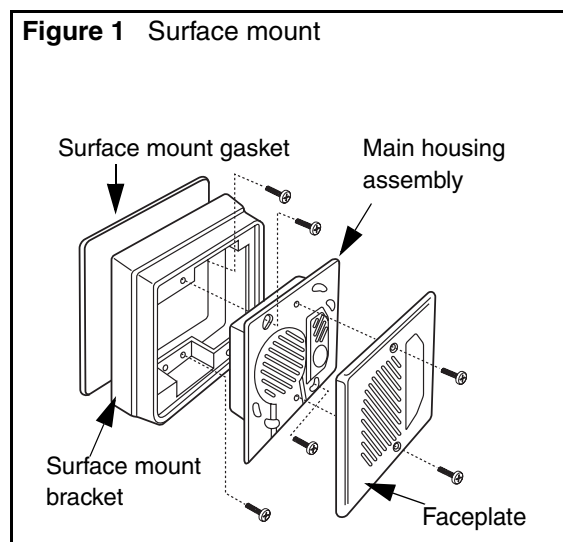
Wire and mount a BST Doorphone

- 1 Remove the BST Doorphone's faceplate.
- 2 Determine if you want a flush or surface mount installation.

For a surface mount:

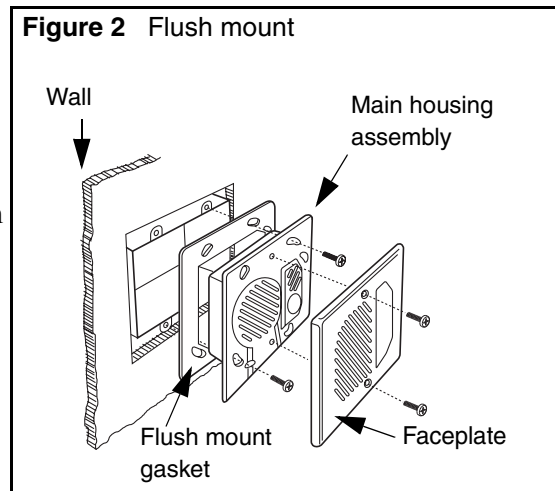
- Discard the flush mount gasket.
- Verify the correct orientation of the surface mount gasket.
- Thread the wires through the center hole, then through the surface mount bracket.
- Fasten the surface mount bracket at the desired location on the wall.

OR



For a flush mount:
(into an electrical box embedded in the wall)

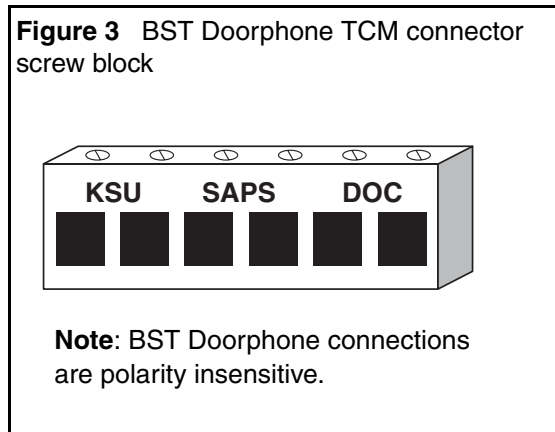
- Discard the surface mount gasket and bracket.
- Slide the flush mount gasket onto the main housing assembly.



- 3** Run a standard 3-pair cable from the Avaya BCM system to the BST Doorphone location. Use one pair to connect the "KSU" terminals of the BST Doorphone to a reserved station module port on the Avaya BCM system.

Strip wires 6 mm (1/4 inch) before inserting them in the terminal block and tightening.

The second pair can be used to connect an optional DOC, leaving a spare pair for a SAPS installation. For more information on DOC, refer to [Optional Equipment](#) on page 13.



- 4** Fasten the BST Doorphone's faceplate to the main housing assembly.

Note: When the surface mount bracket is used, secure the wiring with a cable tie through the round holes in the rear of the surface mount bracket or electrical box (customer supplied), before fastening the BST Doorphone's faceplate to the main housing assembly.

Initialize a new BST Doorphone

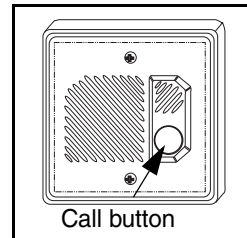
The system automatically recognizes the BST Doorphone once it is installed and connected. Use the following commands, to refresh the Business Element Manager view in order for the BST Doorphone to appear in the Active Sets panel.

- In Business Element Manager, click on the IP address in the **Network Elements** pane. Go to the top menu and select **View > Refresh**. Business Element Manager refreshes and the allows BST Doorphones to appear in the system.

The BST Doorphone will identify itself to the system as a Doorphone.



Note: The Call button's backlight automatically turns on when the BST Doorphone is connected to a station module port on the system. The backlight is useful in low light conditions.



Optional Equipment

The Door Opening Controller (DOC) operates through a BST Doorphone to provide door opening control. The DOC receives data from the BST Doorphone, that is compared against a dip-switch set code for activation.

The DOC provides convenient control of locked mechanisms but is not intended for sole building entry security. In high security environments, backup systems should be used for added protection. Power failure, device failure, wiring faults and unauthorized equipment access can all contribute to a failed locked or unlocked situation.

For more information on the DOC, refer to documentation provided with the DOC unit.

Chapter 4

Configuring BST Doorphone settings

Doorphone programming allows you to customize feature settings for individual BST Doorphones on the BCM system.

Follow these steps to configure Doorphone settings:

- 1 From Business Element Manager, click on the **Configuration** tab and select **Telephony > Sets > Active Sets**.




Note: A maximum of 250 BST Doorphones can be attached to the BCM system.

- 2 Click on the Doorphone you want to program (for example, **Doorphone 1**) and select the **Capabilities and Preferences** tab.
- 3 Select the **Preferences** tab from the details panel, and set the Dialing Options to **Standard dial**.
- 4 Select the **Doorphone Settings** tab from the details panel.
- 5 Use the information in [Table 4](#) to change the Doorphone settings.
- 6 Repeat these steps for each BST Doorphone installed on the system.

Table 4 BST Doorphone settings (Sheet 1 of 2)

Setting	Values	Description
Doorphone state	Active	This read-only field indicates if the Doorphone is detected on the system and is operational.
Speaker volume	Low Medium High	Assign a volume level for the Doorphone speaker.
Chime volume	Low Medium High	Assign a volume level for chime tones played during a Doorphone page.
Call Action	Ring Set Page Both	Select a call activity when the Doorphone Call button is pressed. Ring Set: Calls an internal telephone. Page: Sends a page tone to a specific group of telephones in a page zone. Both: Calls an internal telephone. If the call is not answered after a set length of time, a page tone is sent to a specific group of telephones in a page zone.
Target DN	< any telephone DN>	Enter the DN number of the internal telephone to call when the Doorphone's Call button is pressed.
Ring Delay	1 to 60 seconds	Select a set length of time (in seconds) to allow ringing at the Target DN before the call is automatically disconnected.

Table 4 BST Doorphone settings (Sheet 2 of 2)

Setting	Values	Description
Page Target	Internal External Both	Internal: Make a page announcement to a specific group of telephones in a page zone, through the telephone speakers. External: Make a page announcement through an external loudspeaker system. Both: Make a page announcement through telephone speakers and an external loudspeaker system.
Page Zone	Zone (1 to 6) All	Assign Doorphone paging to one of six page zones. Select All to assign Doorphone paging to all six page zones.
Chime Sequence	1 to 4 None Custom	During a Doorphone page, a page tone will be heard followed by the distinctive chime. Select one of four standard distinctive chimes. Select None to have no chimes presented during a Doorphone page (only a page tone will be heard) Select Custom for an unique chime setting. You must enter a custom chime sequence in the Custom Chime setting.
Custom Chime	< 0 to 8 digit string>	Allows you to create your own chime tune using the following parameters: 0 to 4 - chime tone (pitch) increases by number 5 = silence
Opener Type	DOC None	Allows you to specify if a Door Opening Controller (DOC) is connected to the Doorphone.
Open Digit	0 - 9, * or # < one-digit code>	The Open digit setting allows you to specify a single digit code to unlock a door or gate when a DOC is connected to the Doorphone.
	Note:	The Open digit setting must match the dip-switch set code on the DOC. For more information on DOC, refer to Optional Equipment on page 13.
Hardware ID	<10 character string>	This read-only field that shows the hardware identification number assigned to the Doorphone.

Testing the BST Doorphone

You can perform the following tasks to test the Doorphone settings:

- Press the Call button on the BST Doorphone and ensure the Target DN telephone rings.
- Let the Target DN telephone ring until the call is automatically disconnected. Ensure that a page tone followed by the Doorphone's distinctive chime is heard at specified telephones included in the Doorphone's page zone.
- To establish a voice path, dial the BST Doorphone's DN from any telephone on the system, or press the Call button on the BST Doorphone and answer the ringing call at the Target DN telephone.
- If installed, test the DOC as shown below:
 - Press the Call button on the BST Doorphone and answer the call at the Target DN telephone.

- To open the door, dial the single digit code (specified in Doorphone programming) or on a two-line display telephone, press the **OPEN** display button.
- Press the release button or hang up to end the test.

Doorphone configuration tips

- The Doorphone's Target DN telephone should be assigned to the same page zone that is used by the Doorphone for paging (chime presentation).
- The Doorphone can ring several telephones on the system using Answer DNs. Program one or more telephones to have a Ringing Answer button for the Target DN telephone.
 - For example, the Target DN telephone is DN 230. Assign DN 230 as an Answer DN for extensions 223, 224 and 225. When the BST Doorphone Call button is pressed, four telephones on the system will ring (telephones: 230, 222, 223 and 225).

For more information on Answer DNs and assigning telephones to page zones, refer to your Avaya Business Communications Manager (Avaya BCM) Configuration Guide.

