regarding support for this product, while under warranty, is available regarding support for this product, while under warranty, is available

software agreement to establish the terms of the limited warranty. In software agreement to establish the terms of the limited warranty. In

Avaya Inc. provides a limited warranty on this product. Refer to your Avaya Inc. provides a limited warranty on this product. Refer to your

Warranty Warranty

Every effort was made to ensure that the information in this document Every effort was made to ensure that the information in this document

and technical support, in the United States and Canada, call the and technical support, in the United States and Canada, call the

Technical Service Center’s Toll Fraud Intervention Hotline at Technical Service Center’s Toll Fraud Intervention Hotline at

1-800-643-2353.

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made by the Customer or End User.

How to Get Help How to Get Help

For additional support telephone numbers, go to the Avaya support Web For additional support telephone numbers, go to the Avaya support Web

site: http://www.avaya.com/support. If you are: site: http://www.avaya.com/support. If you are:

• Within the United States, click the Escalation Contacts link that is • Within the United States, click the Escalation Contacts link that is

located under the Support Tools heading. Then click the type of located under the Support Tools heading. Then click the type of

support tool that you need. support tool that you need.

• Outside the United States, click the Escalation Contacts link that • Outside the United States, click the Escalation Contacts link that

is located under the Support Tools heading. Then click the is located under the Support Tools heading. Then click the

International Services link that includes telephone numbers for the International Services link that includes telephone numbers for the

International Centers of Excellence.

Providing Telecommunications Security Providing Telecommunications Security

Telecommunications security (of voice, data, and/or video telecommunications security (of voice, data, and/or video

communications) is the prevention of any type of intrusion to (that is, communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company’s either unauthorized or malicious access to or use of) your company’s
telecommunications equipment by some party. telecommunications equipment by some party.

Your company’s “telecommunications equipment” includes both Your company’s “telecommunications equipment” includes both
this Avaya product and any other voice/data/video equipment that this Avaya product and any other voice/data/video equipment that could
could be accessed via this Avaya product (that is, “networked equipment”). be accessed via this Avaya product (that is, “networked equipment”).

An “outside party” is anyone who is not a corporate employee, agent, An “outside party” is anyone who is not a corporate employee, agent,
subcontractor, or is not working on your company’s behalf. Whereas, subcontractor, or is not working on your company’s behalf. Whereas, a
a “malicious party” is anyone (including someone who may be otherwise “malicious party” is anyone (including someone who may be otherwise
authorized) who accesses your telecommunications equipment with authorized) who accesses your telecommunications equipment with
either malicious or mischievous intent. either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed Such intrusions may be either to/through synchronous (time-multiplexed
and/or circuit-based) or asynchronous (character-, message-, or and/or circuit-based) or asynchronous (character-, message-, or
packet-based) equipment or interfaces for reasons of: packet-based) equipment or interfaces for reasons of:

• Utilization (of capabilities special to the accessed equipment) • Utilization (of capabilities special to the accessed equipment)
• Theft (such as, of intellectual property, financial assets, or toll • Theft (such as, of intellectual property, financial assets, or toll
facility access) facility access)
• Eavesdropping (privacy invasions to humans) • Eavesdropping (privacy invasions to humans)
• Mischief (troubling, but apparently innocuous, tampering) • Mischief (troubling, but apparently innocuous, tampering)
• Harm (such as harmful tampering, data loss or alteration, • Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated Be aware that there may be a risk of unauthorized intrusions associated
with your system and/or its networked equipment. Also realize that, with your system and/or its networked equipment. Also realize that, if
such an intrusion should occur, it could result in a variety of losses to such an intrusion should occur, it could result in a variety of losses to
your company (including but not limited to, human/data privacy, your company (including but not limited to, human/data privacy, intellectual intellectual
property, material assets, financial resources, labor costs, and/or legal property, material assets, financial resources, labor costs, and/or legal
costs).

Responsibility for Your Company’s Telecommunications Security Responsibility for Your Company’s Telecommunications Security

The final responsibility for securing both this system and its networked The final responsibility for securing both this system and its networked
equipment rests with you - Avaya’s customer system administrator, your equipment rests with you - Avaya’s customer system administrator, your
telecommunications peers, and your managers. Base the fulfillment of telecommunications peers, and your managers. Base the fulfillment of
your responsibility on acquired knowledge and resources from a variety your responsibility on acquired knowledge and resources from a variety
of sources including but not limited to:

• Installation documents • Installation documents
• System administration documents • System administration documents
• Security documents • Security documents
• Hardware/software-based security tools • Hardware/software-based security tools
• Shared information between you and your peers • Shared information between you and your peers
• Telecommunications security experts • Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and To prevent intrusions to your telecommunications equipment, you and
your peers should carefully program and configure:

• Your Avaya-provided telecommunications systems and their • Your Avaya-provided telecommunications systems and their
interfaces interfaces
• Your Avaya-provided software applications, as well as their • Your Avaya-provided software applications, as well as their
underlying hardware/software platforms and interfaces underlying hardware/software platforms and interfaces
• Any other equipment networked to your Avaya products • Any other equipment networked to your Avaya products

TCP/IP Facilities TCP/IP Facilities

Customers may experience differences in product performance, reliability Customers may experience differences in product performance, reliability
and security depending upon network configurations/design and and security depending upon network configurations/design and
topologies, even when the product performs as warranted.

Standards Compliance Standards Compliance

Avaya Inc. is not responsible for any radio or television interference Avaya Inc. is not responsible for any radio or television interference
caused by unauthorized modifications of this equipment or the caused by unauthorized modifications of this equipment or the
substitution or attachment of connecting cables and equipment other substitution or attachment of connecting cables and equipment other
than those specified by Avaya Inc. The correction of interference caused than those specified by Avaya Inc. The correction of interference caused
by such unauthorized modifications, substitution or attachment will be by such unauthorized modifications, substitution or attachment will be the
responsibility of the user. Pursuant to Part 15 of the Federal the responsibility of the user. Pursuant to Part 15 of the Federal
Communications Commission (FCC) Rules, the user is cautioned that Communications Commission (FCC) Rules, the user is cautioned that
changes or modifications not expressly approved by Avaya Inc. could changes or modifications not expressly approved by Avaya Inc. could
void the user’s authority to operate this equipment.

Product Safety Standards Product Safety Standards

This product complies with and conforms to the following international This product complies with and conforms to the following international
Product Safety standards as applicable:

or IEC 60950-1, 1st Edition, including all relevant national deviations as IEC 60950-1, 1st Edition, including all relevant national deviations as
listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A. listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A.

No. 60950-00 / UL 60950, 3rd Edition, or CAN/CSA-C22.2 No. 60950-1-03 / UL 60950-1.

Safety Requirements for Information Technology Equipment, AS/NZS Safety Requirements for Information Technology Equipment, AS/NZS

One or more of the following Mexican national standards, as applicable: One or more of the following Mexican national standards, as applicable:


Electromagnetic Compatibility (EMC) Standards Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international This product complies with and conforms to the following international
EMC standards and all relevant national deviations:

Limits and Methods of Measurement of Radio Interference of Information Limits and Methods of Measurement of Radio Interference of Information
3548.


• Electrostatic Discharge (ESD) IEC 61000-4-2 • Electrostatic Discharge (ESD) IEC 61000-4-2
• Radiated Immunity IEC 61000-4-3 • Radiated Immunity IEC 61000-4-3
• Electrical Fast Transient IEC 61000-4-4 • Electrical Fast Transient IEC 61000-4-4
• Lightning Effects IEC 61000-4-5 • Lightning Effects IEC 61000-4-5
• Conducted Immunity IEC 61000-4-6 • Conducted Immunity IEC 61000-4-6

Federal Communications Commission Statement Federal Communications Commission Statement

Part 15: Part 15:

Note: This equipment has been tested and found to comply with Note: This equipment has been tested and found to comply with the the limits for a Class B digital device, pursuant to Part 15 of the limits for a Class B digital device, pursuant to Part 15 of the
FCC Rules. These limits are designed to provide reasonable FCC Rules. These limits are designed to provide reasonable
protection against harmful interference when the equipment is protection against harmful interference when the equipment is
operated in a commercial environment. This equipment generates, operated in a commercial environment. This equipment generates,
uses, and can radiate radio frequency energy and, if not installed uses, and can radiate radio frequency energy and, if not installed
and used in accordance with the instruction manual, may cause and used in accordance with the instruction manual, may cause
harmful interference to radio communications. Operation of this harmful interference to radio communications. Operation of this
equipment in a residential area is likely to cause harmful equipment in a residential area is likely to cause harmful
interference in which case the user will be required to correct the interference in which case the user will be required to correct the
interference at his own expense.
Part 68: Answer-Supervision Signaling

Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- answered by the called station,
- answered by the attendant, or
- routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user.

This equipment returns answer-supervision signals on all direct inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered.
- A busy tone is received.
- A reorder tone is received.

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

Means of Connection

Connection of this equipment to the telephone network is shown in the following tables.

Canadian Department of Communications (DOC) Interference Information

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Declarations of Conformity

United States FCC Part 68 Supplier’s Declaration of Conformity (SDoC)

Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC’s Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site: http://www.avaya.com/support.

All Avaya media servers and media gateways are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at: http://www.part68.org by conducting a search using “Avaya” as manufacturer.

European Union Declarations of Conformity

Avaya Inc. declares that the equipment specified in this document bearing the “CE” (Conformité Européenne) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC). This equipment has been certified to meet CTR3 Basic Rate Interface (BRI) and CTR4 Primary Rate Interface (PRI) and subsets thereof in CTR12 and CTR13, as applicable.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative and are available on the following Web site: http://www.avaya.com/support.

Japan

This is a Class B product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

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Japanese

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Haverhill, MA 01835 USA
Attention: Avaya Account Management
E-mail: totalware@gwsmail.com

For the most current versions of documentation, go to the Avaya support Web site: http://www.avaya.com/support.
About The EU24/EU24BL Expansion Module

Overview

The EU24/EU24BL Expansion Module is an optional device that extends the number of call appearances and Feature buttons available on the telephone. The EU24 and EU24BL Expansion Modules are identical in terms of features and functionality. The EU24BL has a backlit display area and is used with different telephone models than the EU24, which does not have a backlit display.

Use the EU24 with these Avaya telephones:
- 2420 Digital Telephone
- 4620/4620SW IP Telephone

Use the EU24BL with these Avaya telephones:
- 4621SW IP Telephone
- 4622SW IP Telephone

The expansion module has 24 buttons arranged in two columns. Depending on how they have been programmed for your call processing system, these buttons can be call appearances, which are lines for incoming and outgoing calls, or features like Call Forwarding.

Issue Date

This document was issued for the first time in May, 2002. This document was revised for Issue 2 in April, 2005 to include the EU24BL Expansion Module. Procedures to adjust the expansion module’s contrast and its viewing angle were also added for Issue 2.
The EU24/EU24BL Expansion Module

Figure 1 shows a top view of the EU24/EU24BL, with the left column displayed for illustration purposes.

Figure 1: The EU24/EU24BL Expansion Module

1. Call Appearance/Feature buttons
2. Display
3. Alternate Display button
4. Feature Active icon for feature in left column
5. Feature Active icon for feature in right column
Requirements

Before you can use the EU24/EU24BL Expansion Module, you must connect the module to the telephone. See the *EU24/EU24BL Expansion Module Installation and Safety Instructions* (555-233-136) for instructions.

Using the EU24/EU24BL Expansion Module

The following sections explain how to use the features of the EU24/EU24BL Expansion Module. For more information, consult your system administrator.

Adjusting the Viewing Angle

You can adjust the expansion module’s viewing angle to match that of the phone to which it is attached.

**To Adjust the Expansion Module Upward**

1. Hold the EU24/EU24BL base with one hand.
2. Grasp the top of the module and pull up until the module’s height equals that of the telephone.
3. Ensure that the movable section on the underside of the module clicks into the appropriate height adjustment notch on the expansion module’s base.

**To Adjust the Expansion Module Downward**

1. Hold the EU24/EU24BL base with one hand.
2. Depress the button on the top edge of the module and gently push the expansion module down until the module’s height equals that of the telephone.
3. Ensure that the movable section on the underside of the module clicks into the appropriate height adjustment notch on the expansion module’s base.
Viewing the Alternate Display

Although the EU24/EU24BL Expansion Module supports an additional 24 Call Appearance/Feature buttons, it displays only the button labels for one column of 12 buttons at a time. A dotted line separates the left column from the right column. When you view the labels and icons for the left column, the icons for any active or selected right column features display to the right of the dotted line. To view the column not currently displayed, press the Alternate Display button. You can alternately press any Call Appearance/Feature button on the column not currently displayed. Doing so displays that column and selects the line/feature associated with the button you pressed.

Selecting a Call Appearance/Feature Button

To select an available call appearance or feature, press the button next to the appropriate label in the column currently displayed. If you select a button not programmed as a Call Appearance or a Feature button, an error tone sounds.

If the desired call appearance or feature is not currently displayed, use the Alternate Display button to access the additional Call Appearance/Feature button labels. See Viewing the Alternate Display for more information.

Changing the EU24/EU24BL Contrast

On first-time startup, the display area contrast is set to a mid-level. To adjust it to better suit your work environment and lighting, 15 contrast levels are available.

Note:

You might not be able to distinguish between all 15 contrast level settings. Some of the upper and/or some of the lower contrast level settings might appear identical to adjacent settings. This is normal.

Changing the Display Contrast Using a 2420 Digital Telephone

1. With the EU24 attached to your phone, press the telephone’s Option softkey.
2. Select the Contrast Line/Feature button.
3. Press the Line/Feature button on either side of the line in which you see EU24. Doing so identifies that you want to adjust the display contrast and highlights that line.
4. To brighten the contrast, press the telephone’s **Right Page** button until you reach the desired contrast level. To dim the contrast, press the telephone’s **Left Page** button until you reach the desired contrast level.

> Each press results in the contrast being increased or decreased, depending on which page button you press. Chevron symbols provide visual confirmation of the current level.

5. Save the contrast level you set by pressing either the telephone’s **Done** softkey or the **Exit** button. To re-adjust the contrast, repeat this procedure from Step 1.

### Changing the Display Contrast Using a 4620/4620SW, 4621SW, or 4622SW IP Telephone

1. With the EU24/EU24BL attached to your phone, press the telephone’s **Options** button to access the Options Main screen.

2. Select the **Contrast Control** option from the Options Main screen.

3. Press the Line/Feature button on either side of the column in which you see the expansion module’s model number, for example, **EU24**. Doing so identifies that you want to adjust the display contrast and highlights that line.

4. To brighten the contrast, press the telephone’s **Right Arrow** softkey until you reach the desired contrast level. To dim the contrast, press the telephone’s **Left Arrow** softkey until you reach the desired contrast level.

> Each softkey press results in the contrast being increased or decreased, depending on which arrow softkey you press. Chevron symbols provide visual confirmation of the current level.

5. Save the contrast level you set by pressing the telephone’s **Save** softkey. To restore the previous setting without changing the contrast, press the **Cancel** softkey.

> The first Options Main screen displays.
Understanding Call Appearance/Feature Button Status Icons

When a call arrives for a call appearance on the EU24/EU24BL Expansion Module, the bell icon blinks on the corresponding call appearance. To answer the call, press the button associated with the call appearance.

The icons displayed on the call appearance allow you to determine the status, for example, on Hold, of each call on the EU24/EU24BL Expansion Module. Table 1 contains an explanation of these icons.

Table 1: EU24/EU24BL Status Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Condition</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Idle</td>
<td>The call appearance line is available, or the feature is off.</td>
</tr>
<tr>
<td>![Bell Icon]</td>
<td>Ringing</td>
<td>An incoming call is waiting to be answered.</td>
</tr>
<tr>
<td>![Phone Icon]</td>
<td>Active</td>
<td>The call you are currently handling.</td>
</tr>
<tr>
<td>![Hold Icon]</td>
<td>On hold</td>
<td>A call currently on hold.</td>
</tr>
<tr>
<td>![Soft Hold Icon]</td>
<td>On soft hold</td>
<td>A call put on hold during a transfer or conference.</td>
</tr>
<tr>
<td>![Feature/Line Active Icon Left]</td>
<td>Feature/Line active</td>
<td>Button on left side of the display currently is enabled.</td>
</tr>
<tr>
<td>![Feature/Line Active Icon Right]</td>
<td>Feature/Line active</td>
<td>Button on right side of the display currently is enabled.</td>
</tr>
<tr>
<td>![Feature Pending Icon]</td>
<td>Feature pending</td>
<td>Your request is being processed but is not immediately available.</td>
</tr>
<tr>
<td>![Feature Status Icon]</td>
<td>Feature status</td>
<td>The Call Center Q Time feature uses this icon.</td>
</tr>
<tr>
<td>![Feature Status Aux Icon]</td>
<td>Feature status</td>
<td>The Call Center Aux Work feature uses this icon.</td>
</tr>
<tr>
<td>![Feature Status Service Icon]</td>
<td>Feature status</td>
<td>The Call Center Service Observing feature uses this icon.</td>
</tr>
</tbody>
</table>