



# **Dialogic<sup>®</sup> 4000 Media Gateway Series**

## **Quickstart Guide**

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## Overview

This document provides a high-level overview of how to connect power and network cabling for a Dialogic® 4000 Media Gateway Series. The term "DMG4000 Gateways" is used herein to refer collectively to the Dialogic® 4000 Media Gateway Series, and the term "DMG4000 Gateway" is used herein to refer to a gateway in the Dialogic® 4000 Media Gateway Series.

DMG4000 Gateways use a Dell PowerEdge R310 as a server system. For more information about this hardware, see the Dell web site at <http://www.dell.com>.

To view a copy of the Software License Agreement for the DMG4000 Gateway, see:

<http://www.dialogic.com/manuals/dmg30004000/default.htm>

## Available Dialogic® 4000 Media Gateway Series Versions

The following DMG4000 Gateways are available:

Version	Dialogic® Diva® Media Boards installed	Channels Voice	Channels T.38 Fax	Channels Dialogic® Diva® SIPcontrol™ Software
DMG4008BRISBA	Diva 4BRI-8 PCIe	8	8	8
DMG4008LSSBA	Diva Analog-8 PCIe	8	8	8
DMG4030DTISBA	Diva V-1PRI PCIe HS	30	30	30
DMG4060DTISBA	Diva V-2PRI PCIe HS	60	12-60*	60
DMG4060DTIV34SBA	Diva V-2PRI PCIe HS	60	60	60
DMG4120DTISBA	Diva V-4PRI PCIe HS	120	12-120*	120
DMG4120DTIV34SBA	2 X Diva V-2PRI PCIe HS	120	120	120

\*These DMG4000 Gateways are shipped with a fax license for 12 channels. If you need more channels, you are required to purchase a license. For information about licenses, see the *Dialogic® 4000 Media Gateway Series Reference Guide* at <http://www.dialogic.com/manuals/dmg30004000/default.htm>.

**Note:** For Service update 4 (SU4), all DMG4000 Gateway versions support G.711 pass through fax only. It is planned that T.38 capabilities will be added back in the next service update.

## General Safety Instructions

For general safety instructions, refer to the the *Dell Product Information Guide*, which is included with the DMG4000 Gateway kit, and to the following:

### WARNING



- Never touch non-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources. The use of a surge arrestor on the AC line is recommended.

**Warning!** Do not attempt to modify or use the supplied AC power cord if it is not the exact type required.

**Avertissement!** Ne pas utiliser ni modifier le câble d'alimentation secteur fourni, s'il ne correspond pas exactement au type requis.

**Warnung!** Versuchen Sie nicht, das mitgelieferte Netzkabel zu verändern oder zu verwenden, wenn es sich nicht um genau den erforderlichen Typ handelt.

**Avvertenza!** Non modificare o utilizzare il cavo di alimentazione in c.a. fornito dal produttore, se non corrisponde esattamente al tipo richiesto.

**¡Advertencia!** No intente modificar ni usar el cable de alimentación de corriente alterna, si no corresponde exactamente con el tipo requerido.

- In some cases, the power cord supplied with this system may not be compatible with the AC wall outlet in your region. If this is true, you must obtain a suitable power cord that meets the following criteria:
  - The cord must be rated for use at the AC voltage available, with a current rating that is at least 125% of the current rating of the product (for current rating information, refer to the regulatory label affixed to the product).
  - The AC plug end must be terminated in a grounding-type male plug designed for use in your region. The plug ends must be labeled or marked to indicate they have been certified by an agency acceptable in your region.
  - The power service must be connected through a properly grounded outlet.
  - The connector at the product end must be an IEC 320, sheet C13, female connector (or the equivalent EN 60 320 connector).
  - The cord must be less than 14.8 feet (4.5 meters) long and, for use in Europe, be created with <HAR> (harmonized) or VDE certified cordage.
  - If power needs to be removed from this product, you must disconnect the power cord; therefore, the socket-outlet shall be installed near the equipment and shall be easily accessible.

### INFORMATION



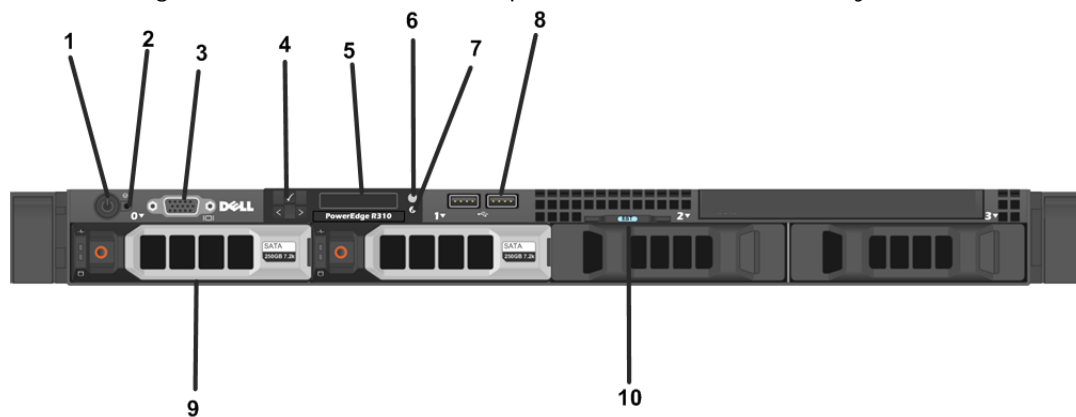
- To help protect your gateway from transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Keep your gateway away from radiators and heat sources. Also, do not block cooling vents.

#### Dialogic® Diva® PRI Media Boards

Cables for Interface ports used for the Dialogic® 4000 Media Gateway Series shall be shielded.

## Front Panel

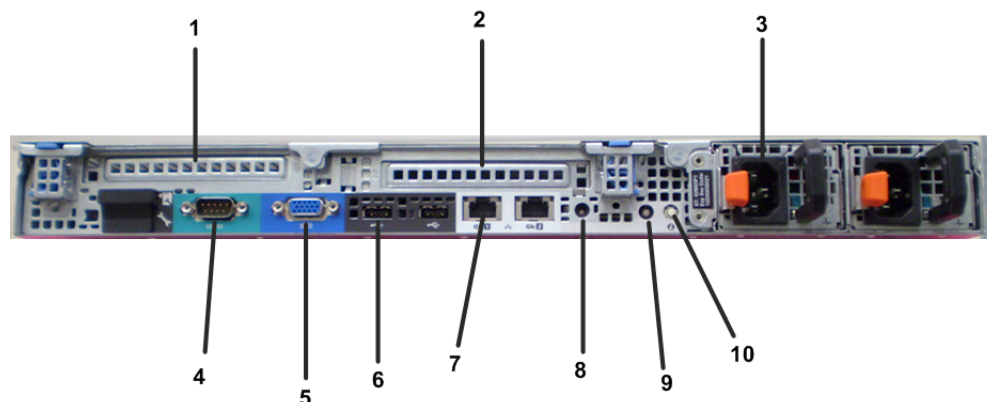
The following illustration shows the front panel of a DMG4000 Gateway:



Number	Description
1	Power-on indicator Power button
2	NMI button
3	Video connector
4	Hard-drive activity indicator
5	LCD panel
6	System identification button
7	System status indicator
8	Two USB connectors
9	Two hard drives
10	System identification

## Back Panel

The following illustration shows the back panel of a DMG4000 Gateway



Number	Description
1	Slot for the first Dialogic® Diva® Media Board
2	Slot for the second Dialogic® Diva® Media Board
3	Two power supplies
4	Serial connector
5	Video connector
6	Two USB connectors
7	Two Ethernet connectors
8	Active ID CMA connector
9	System status indicator
10	System identification button

## Installation

1. Take the DMG4000 Gateway, and identify its connectors. For information, see [Front Panel](#) on page 3, and [Back Panel](#), above.
2. Connect the mouse and keyboard to the USB connectors.
3. Connect one end of the Ethernet cable to the Ethernet connector 1 and the other end to the corporate Ethernet. For fault tolerance and load balancing, also connect a cable to Ethernet connector 2 the same way. See the above graphic above for the numbering of the connectors.

4. Connect the monitor to the video connector.

5. Connect your PRI, BRI, or analog telephone cables to the Diva Media Board in slot 1. Plug one end of the cables into the ports of the Diva Media Board. Plug the other end into the ports of the PBX. The ports of the Diva Media Board in slot 1 are numbered from 1 to 4 from the left to the right. The port numbers may be important during the software configuration.

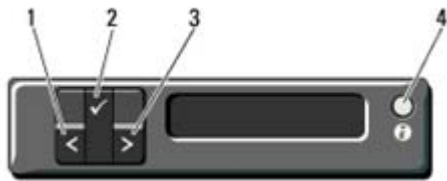
If the DMG4000 Gateway contains a second Diva Media Board in slot 2, connect this board as described above. The ports of the Diva Media Board in slot 2 are numbered from 4 to 1 from the left to the right.

**Note:** The ports on the analog Diva Media Board included with the DMG4008LSSBA are numbered as follows from left to right: 1/2 3/4 5/6 7/8.

6. Plug one end of the first power cord into one of the power supplies. Connect the other end to power source. Connect the second power cord the same way. It is recommended to connect both power supplies for proper functioning of the DMG4000 Gateway.
7. Switch on the DMG4000 Gateway.

## LCD Panel

The following LCD panel is integrated in the front panel of the DMG4000 Gateway:



Number	Button	Description
1	Left	Moves the cursor back in one-step increments.
2	Select	Selects the menu item highlighted by the cursor.
3	Right	Moves the cursor forward in one-step increments. During message scrolling: <ul style="list-style-type: none"> <li>• Press once to increase scrolling speed.</li> <li>• Press again to stop.</li> <li>• Press again to return to default scrolling.</li> <li>• Press again to repeat the cycle.</li> </ul>
4	System ID	Turns the system ID mode on (LCD panel flashes blue) and off. Press quickly to toggle the system ID on and off. If the system hangs during POST, press and hold the system ID button for more than five seconds to enter BIOS Progress mode.

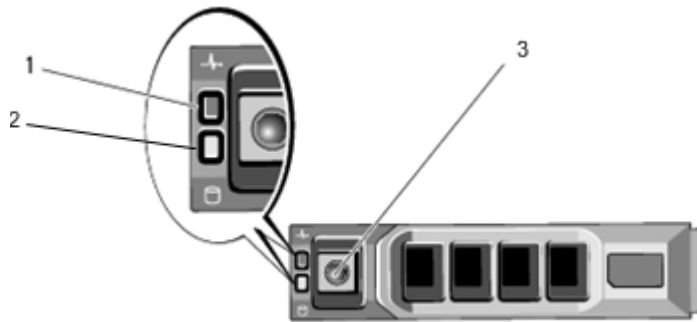
The LCD panel provides messages that signify whether the system is operating correctly or if it needs attention:

- A blue light indicates a normal operation condition.
- An amber light indicates an error condition.

If there is an error, the LCD panel displays a message that consists of a status code followed by descriptive text. The message refers to events recorded in the System Event Log (SEL). For information about LED panel status messages and their corresponding corrective actions, see the documentation for the Dell PowerEdge R310 on the Dell website (<http://www.dell.com>).

## Hard-Drive Status Indicators

The following illustration shows the location of the hard-drive indicators:



Number	Description
1	Drive status indicator, which can be green or amber
2	Drive activity indicator, which is green when the drive is accessed
3	Button to unlock the hard drive, when you want to replace it in case of failure

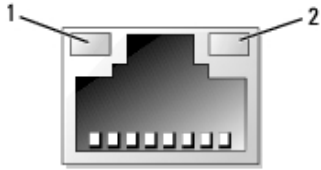
The drive status indicator blinks as follows to indicate drive conditions:

Blink Pattern (RAID Only)	Condition
Blinks green two times per second	Identify drive/preparing for removal.
Off	Drive ready for insertion or removal. The drive status indicator will remain off until all hard drives are initialized after system power is applied. Drives are not ready for insertion or removal during this time.
Blinks green, amber, and off	Drive predicted failure.
Blinks amber four times per second	Drive failed.
Blinks green slowly	Drive rebuilding.
Steady green	Drive online.
Blinks green three seconds, amber three seconds, and off six seconds	Rebuild aborted.



## Network Interface Controller (NIC Indicator) Codes

The following illustration shows the location of the NIC indicators:



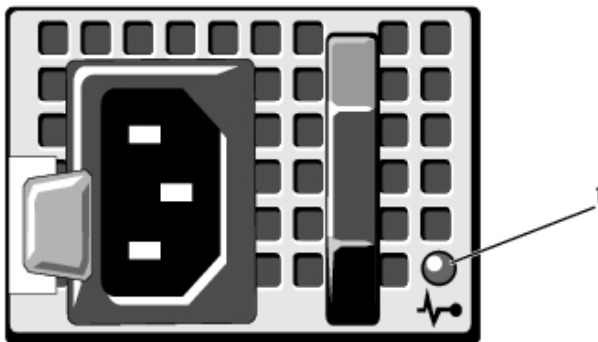
Number	Description
1	Link indicator
2	Activity indicator

The NIC indicators light up as follows to show NIC conditions:

Indicator	Condition
Link and activity indicators are off.	The NIC is not connected to the network.
Link indicator is green.	The NIC is connected to a valid network link at 1000 Mbps.
Link indicator is amber.	The NIC is connected to a valid network link at 10/100 Mbps.
Activity indicator is green and blinking.	Network data is being sent or received.

## Power Indicator Codes

Each power supply on the DMG4000 Gateways has an indicator that shows whether power is present or whether a power fault has occurred. The following illustration shows where the power supply status indicator is located (marked by a **1**):



The power supply status indicator lights up as follows to show power supply conditions:

Indicator	Condition
Not lit	AC power is not connected.
Green	In standby mode, indicates that a valid AC source is connected to the power supply, and that the power supply is operational. When the system is on, it also indicates that the power supply is providing DC power to the system.
Amber	Indicates a problem with the power supply
Alternating green and amber	When hot-adding a power supply, this indicates that the power supply is mismatched with the other power supply (a high output power supply and an Energy Smart power supply are installed in the same system). Replace the power supply that has the flashing indicator with a power supply that matches the capacity of the other installed power supply.

## Technical Specifications

Environmental requirement:

Operating temperature range: 10 degrees Celsius to 35 degrees Celsius

	Dialogic® 4000 Media Gateways
CPU	Intel Xeon 3430 series processor
Memory	8GB 1333MHz
Dimensions in mm	
Height:	42.4
Width:	434
Length:	610
External interface	4 USB (2.0) ports VGA port RS232 Serial port 2x Gigabit-Ethernet ports
Power supply	2 power supplies; each with: 100-240 Vac 50/60 Hz 4/2 A

## More Information

For more information about DMG4000 Gateways, see the following manuals, which are available at <http://www.dialogic.com/manuals/dmg30004000/default.htm>.

For...	See the...
Information about configuring a DMG4000 Gateway	<i>Dialogic® 4000 Media Gateway Series Reference Guide</i>
Information about deploying a DMG4000 Gateway as a survivable branch appliance with Microsoft® Lync™ Server 2010	<i>Deploying a Dialogic® 4000 Media Gateway as a Survivable Branch Appliance for Microsoft® Lync™ Server 2010</i>
Detailed information about Dialogic® Diva® System Release software	<i>Dialogic® Diva® System Release 9.5WIN Reference Guide</i>
Detailed information about Dialogic® Diva® SIPcontrol™ software	<i>Dialogic® 4000 Media Gateway Series Reference Guide or the Dialogic® Diva® SIPcontrol™ Software 2.5 Reference Guide</i>