



Dolby Integrated Media Server Docking Station Manual

23 June 2020
IMS.OM.005903.DRM Issue 3

Notices

Copyright

© 2020 Dolby Laboratories. All rights reserved.

Dolby Laboratories, Inc.

1275 Market Street
San Francisco, CA 94103-1410 USA
Telephone 415-558-0200
Fax 415-645-4000
<http://www.dolby.com>

Trademarks

Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

The following are trademarks of Dolby Laboratories:

Dialogue Intelligence™	Dolby Theatre®
Dolby®	Dolby Vision®
Dolby Advanced Audio™	Dolby Vision IQ™
Dolby Atmos®	Dolby Voice®
Dolby Audio™	Feel Every Dimension™
Dolby Cinema®	Feel Every Dimension in Dolby™
Dolby Digital Plus™	Feel Every Dimension in Dolby Atmos™
Dolby Digital Plus Advanced Audio™	MLP Lossless™
Dolby Digital Plus Home Theater™	Pro Logic®
Dolby Home Theater®	Surround EX™

All other trademarks remain the property of their respective owners.

Patents

THIS PRODUCT MAY BE PROTECTED BY PATENTS AND PENDING PATENT APPLICATIONS IN THE UNITED STATES AND ELSEWHERE. FOR MORE INFORMATION, INCLUDING A SPECIFIC LIST OF PATENTS PROTECTING THIS PRODUCT, PLEASE VISIT <http://www.dolby.com/patents>.

Product Model

This documentation applies to Model CID1020.

Product Disposal Information

This product is electronic equipment and should be disposed of in accordance with all applicable laws. Do not dispose as household waste. Do not dispose of the product in a fire. Please dispose of this product by taking it to your local electronic waste collection point or recycling center. For more information about where to recycle electronic equipment, contact your service provider.

LIMITED WARRANTY AND WARRANTY EXCLUSIONS

THE LIMITED WARRANTY AND WARRANTY EXCLUSIONS MAY BE FOUND AT THE FOLLOWING URL: <https://www.dolby.com/us/en/about/warranty-and-maintenance-policies.html>

Important safety instructions

1. This product is intended for indoor use only.
2. Do not install near any heat sources, such as radiators, heat registers, or other apparatus that produce heat.
3. Refer all servicing to qualified service personnel only.
4. Where applicable, ensure fuses fitted are the correct rating and type as marked on the unit.
5. This product may require installation in a restricted-access location.
6. Do not expose the apparatus to dripping or splashing liquids; no objects filled with liquids, such as mugs, shall be placed on the apparatus.



Warning! Risk of electric shock and fire! A listed external power supply must be used on this product.

Contents

1 Introduction to this documentation.....	5
1.1 About the Dolby Integrated Media Server Docking Station.....	6
1.2 Contacting Dolby	7
2 Hardware components.....	8
2.1 Packing list.....	9
2.2 Power supply requirements.....	9
3 Installing the Dolby IMS Docking Station.....	10
3.1 Placing the Docking Station in the horizontal position.....	11
3.2 Standing the Dolby IMS Docking Station.....	11
3.3 Plugging in the power adapter.....	12
3.4 Charging the Dolby IMS battery.....	13
4 Troubleshooting.....	15
4.1 Replacing the fan.....	16
4.2 Replacing the circuit board fuse.....	17
5 Documentation revision history.....	19

1

Introduction to this documentation

This documentation provides instructions for setting up and operating the Dolby Integrated Media Server (Dolby IMS) Docking Station.

- [About the Dolby Integrated Media Server Docking Station](#)
- [Contacting Dolby](#)

1.1 About the Dolby Integrated Media Server Docking Station

The Dolby Integrated Media Server (Dolby IMS) Docking Station is a hardware solution for quickly and efficiently charging the battery in certain Dolby media blocks. The battery maintains the secure clock and security identity of the media block. Spare, or unused units, should have their batteries charged at least once every 6 months.

Figure 1: Docking Station with Dolby IMS3000 inserted



Supported devices (with rechargeable batteries) include the Dolby IMS1000, Dolby IMS2000, and Dolby IMS3000.

! Important:

Non-supported devices (that do not have a rechargeable battery) include the integrated media block (IMB) (with Dolby ShowVault) and CAT745 IMB. Media blocks made by other manufacturers are not supported.

! Important:

Installing an unsupported device could potentially cause damage to the device or the Docking Station and will not be covered under warranty.

After a Dolby IMS is connected and powered up, it may take up to 48 hours to complete a charge cycle. A cutout in the sheet metal allows you to see the charging status LED on the Dolby IMS board.

⚠ Attention:

This product is intended to power and charge your Dolby IMS unit. It cannot restore the private key of your Dolby IMS (that was lost due to a low battery). A Dolby IMS without a private key forces the unit into Federal Information Processing Standards (FIPS) lock. Due to this state, the Dolby IMS cannot play encrypted content. If you are experiencing this issue, you must return your Dolby IMS to Dolby for rework.

1.2 Contacting Dolby

You can contact Dolby Cinema Solutions and Support using email or regional telephone numbers. You can also access documentation by visiting the Dolby customer portal.

Contact Dolby Cinema Solutions and Support

- Send an email to cinemasupport@dolby.com.
- Call:

Americas: +1-415-645-4900

Europe/Middle East/Africa (EMEA): +44-33-0808-7700

Asia-Pacific (APAC): +86-400-692-6780

Japan: +81-3-4540-6782

Access documentation

Visit <https://customer.dolby.com>.

Submit feedback about this documentation

Send an email to documentation@dolby.com.

2

Hardware components

The Dolby IMS Docking Station requires specific hardware components and the correct power supply for proper and safe operation.

- [Packing list](#)
- [Power supply requirements](#)

2.1 Packing list

The packing list provides the hardware components that ship with the product.

- Dolby Integrated Media Server Docking Station (Dolby part number CAT1743)
- Two metal feet (to set up the Docking Station vertically)
- Four small screws (to set up the Docking Station vertically)

2.2 Power supply requirements

The Dolby IMS Docking Station requires an external AC adapter power supply. This power supply is not included with the Docking Station and must be purchased locally by the user.

To operate the Dolby IMS Docking Station, you will need to purchase an AC adapter power supply with these requirements:

- Output DC voltage: 12 V
- Output rated current: 5 A or higher
- Connector type: P1J (inner diameter 2.1 mm, outer diameter 5.5 mm, connector length 11 mm +/- 0.5 mm)
- The connector is tip positive, meaning that the positive (+) is on the inner ring, and the negative (-) is on the outer conductor.

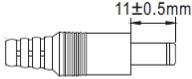
Model suggested for operation

Dolby tested and qualified this model: PSU Model GST60A12 with manufacturer part number GST60A12-P1J.

Figure 2: Power supply ending connector

■ DC output plug

© Standard plug: P1J

P1J		Pin Assignment
		
		 C*+
		Outside   Inside -V not connected to ACFG

⚠ CAUTION:

Failure to use the power supply with the specifications listed can result in damage to the Docking Station and/or the connected Dolby IMS, voiding the warranty on both devices.

3

Installing the Dolby IMS Docking Station

You have the option to stand the Docking Station in a vertical position or a horizontal position, depending on your operating environment.

- [Placing the Docking Station in the horizontal position](#)
- [Standing the Dolby IMS Docking Station](#)
- [Plugging in the power adapter](#)
- [Charging the Dolby IMS battery](#)

3.1 Placing the Docking Station in the horizontal position

You have the option to place the Dolby IMS Docking Station in a horizontal position.

About this task

You need a stable and non-conductive surface to place the Docking Station on.

Procedure

Place the Docking Station down on the surface with the LED indicator cutout facing up.

3.2 Standing the Dolby IMS Docking Station

You have the option to place the Dolby IMS Docking Station in a standing (vertical) position by installing the supplied metal feet.

About this task

Out of the box, the Dolby IMS Docking Station comes without the metal feet installed, which allows it to be used in a horizontal position.

Procedure

1. Align the two feet with the four holes on the bottom of the unit.

Figure 3: Four screws on bottom



2. Insert the four screws into the two feet to fasten them to the unit.

Results

The Docking Station now can stand in the upright (vertical) position.

Figure 4: Vertical position



3.3 Plugging in the power adapter

You must connect one end of the power adapter to an AC power supply outlet, and the other end to the Dolby IMS Docking Station.

Prerequisites

The power switch must be in the off position.

The Docking Station must be empty with no Dolby IMS inserted inside.

About this task

⚠ Attention:

The back panel displays two LEDs: **Wrong Polarity** and **Over Voltage**. If your power adapter is of the correct voltage and polarity, then neither of these LEDs will illuminate.

Figure 5: Back panel with LEDs labeled



If you connect a power supply and the wiring has reversed polarity (tip negative), the **Wrong Polarity** LED will illuminate. To fix this issue, change the polarity of the wiring to be tip positive.

If you connect a power supply that has higher voltage than what is specified (12V), the **Over Voltage** LED will illuminate. To fix this issue, replace the power supply with a 12V model.

If you use a power supply with insufficient voltage, then no warning will illuminate.

Procedure

1. Connect one end of the power adapter into the AC outlet and the other end into the Dolby IMS Docking Station rear-panel power input labeled **DC 12V**.
2. Confirm that neither the **Wrong Polarity** nor **Over Voltage** LEDs are illuminating.

⚠ Important:

The **Wrong Polarity** and **Over Voltage** circuitry was designed to verify the DC input prior to the **POWER** on switch. This provides you the ability to verify the stability of the DC input prior to turning on the Docking Station and delivering the power to the Dolby IMS.

Related information

[Power supply requirements](#) on page 9

3.4 Charging the Dolby IMS battery

You can charge the battery for a Dolby IMS1000, Dolby IMS2000, and Dolby IMS3000.

Prerequisites

Dolby recommends that the Dolby IMS is placed into the Docking Station without its hard drives installed.

Make sure the power switch is in the off position on the Docking Station. The power switch is labeled as **POWER** on the side panel.

About this task

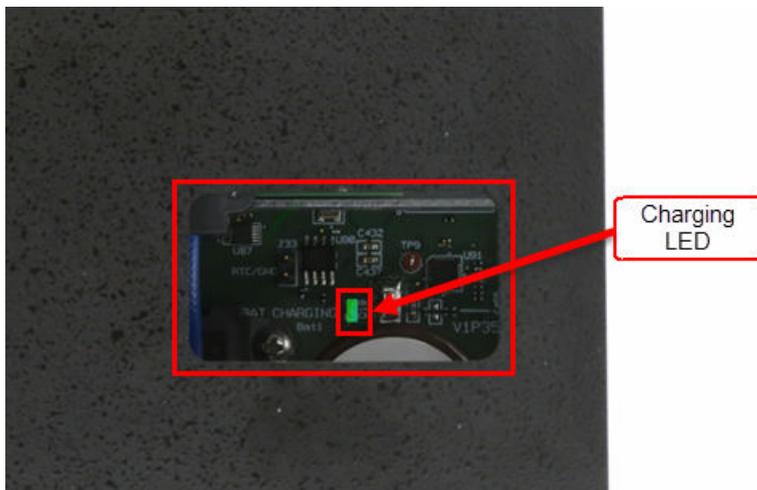
The Dolby IMS has a charging LED to indicate when it is charging and when it is fully charged. The Docking Station has a rectangular cutout that enables you to view the charging LED on the Dolby IMS.

While the Dolby IMS is charging, its green LED battery indicator steadily illuminates. The LED turns off when the Dolby IMS is fully charged. It can take up to 48 hours for the battery of the Dolby IMS to fully charge.

Procedure

1. Insert the Dolby IMS into the Docking Station using the guide rails.
This should be similar to inserting a Dolby IMS into the Series II slot in a projector. If you feel any unusual resistance, stop and inspect the Docking Station or the Dolby IMS for any issues.
2. On the rear panel, press the power switch labeled **POWER** to the on position.
3. Confirm that the Dolby IMS is charging by viewing the LED indicator.

Figure 6: Charging LED indicator



4. After charging is complete and the LED on the Dolby IMS stops illuminating green, turn off the Docking Station using the power switch and remove the Dolby IMS.

4

Troubleshooting

You can troubleshoot the Dolby IMS Docking Station and replace one or both fans, and replace the fuse if it is damaged.

- [Replacing the fan](#)
- [Replacing the circuit board fuse](#)

4.1 Replacing the fan

Replace one or both fans if they are damaged or not working.

Prerequisites

Turn off the Docking Station, unplug the power supply, and then remove the Dolby IMS.

Inspect one or both fans for any obstruction or obvious issue.

About this task

The fan part number is Sunon Maglev MF60251V1-10000-G99.

You must accurately source and replace the fan with the same make and model as the original fan, to ensure proper functionality. Dolby does not provide replacement fans or repair services on this product.

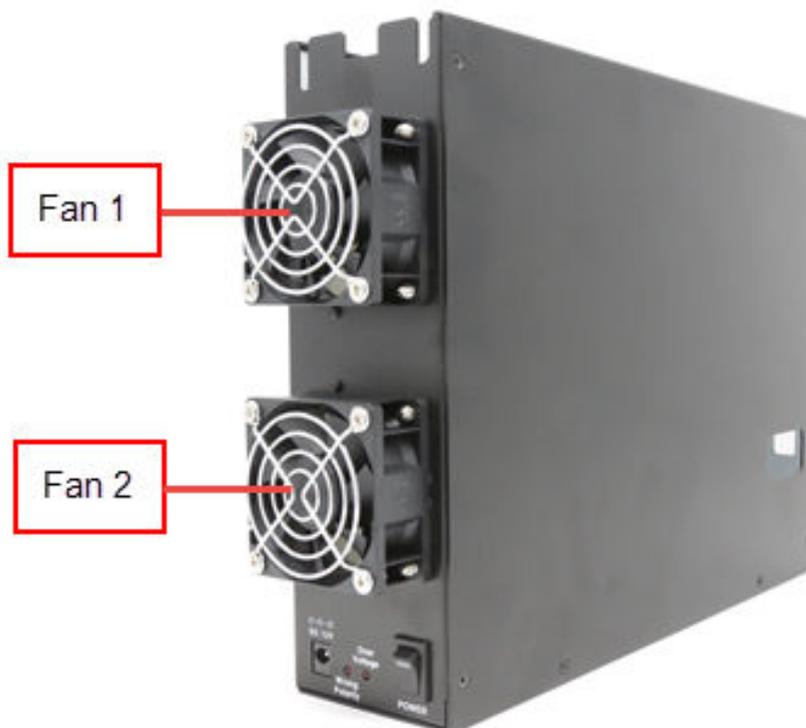
You need a Phillips screwdriver to remove the four screws on each fan and the four screws on each fan guard. You also need three zip ties to tie down the cables.

Procedure

1. With a Phillips screwdriver, remove the four screws from the damaged fan, which are located on the inside of the Docking Station.
2. Remove the four screws holding the fan guard in place.
3. Find the fan cable connecting it to the circuit board, and slowly and carefully disconnect it.

Fan 1 is labeled **FAN1** and Fan 2 is labeled **FAN2**.

Figure 7: Fans



4. Cut the tie holding down the cables, and then set aside the damaged fan.
5. Reinsert the fan guard onto the new fan using the four screws.

6. Take the new fan (with fan guard reinserted), and align it where the four screw holes are located.
7. With a Phillips screwdriver, screw in the four screws from the inside of the Docking Station.
8. Reconnect the new fan cable to the circuit board.
9. Use a new cable tie to keep the cables in place.

What to do next

To test the new fan functionality, plug the power supply into the Docking Station and then switch the power on. Check whether the fan or fans are working properly.

4.2 Replacing the circuit board fuse

Replace the circuit board fuse if it is damaged.

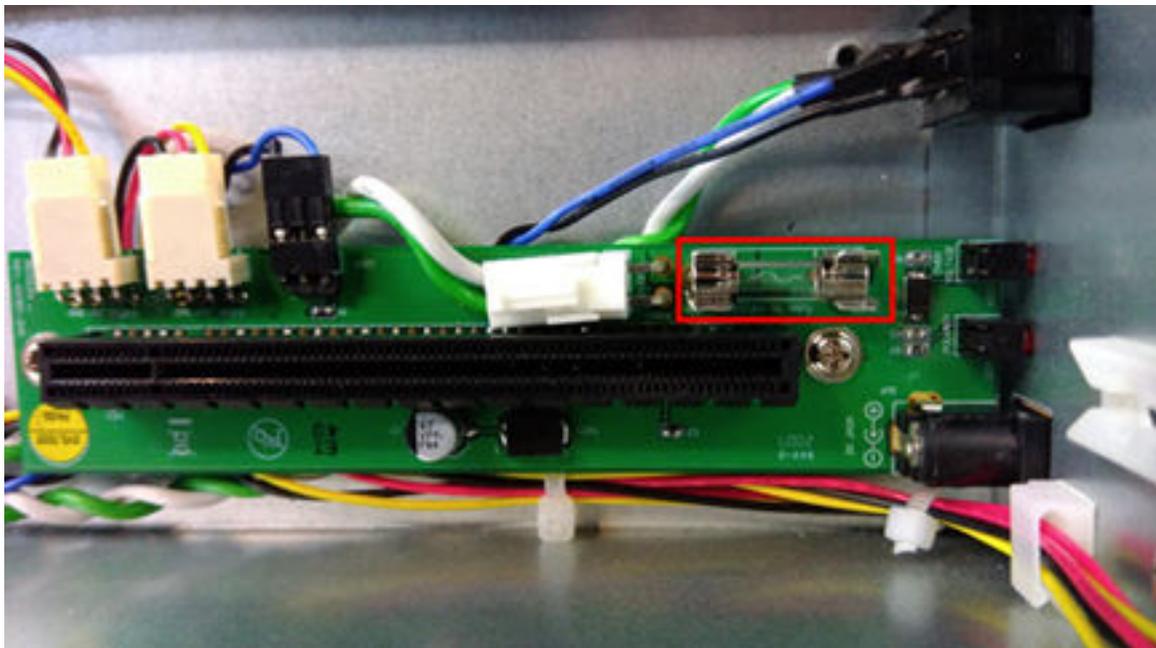
Prerequisites

Turn off the Docking Station, unplug the power supply, and then remove the Dolby IMS.

About this task

The Docking Station has a fuse designed to protect the Dolby IMS from any overvoltage or short-circuit issues.

Figure 8: Fuse location



If the fuse fails more than once, there may be an issue with the external power supply, which you should investigate.

You must accurately source and replace the fuse with the same make and model as the original fuse, to ensure proper functionality. Dolby does not replace it for you or provide a spare fuse.

We recommend a fuse that is 7A/250V Fast Acting, Glass Tube Fuse (Fast Blow).

We recommend you use a fuse puller.

Procedure

1. Using a fuse puller, carefully remove the damaged fuse from the circuit board.

2. Using a fuse puller, carefully reinsert the new fuse on the circuit board.

What to do next

To test the new fuse functionality, plug the power supply into the Docking Station and then switch the power on. Check whether the fuse is working properly.

Documentation revision history

The documentation revision history lists the date, issue number, and description of all publications of the *Dolby Integrated Media Server Docking Station Manual*.

Date	Issue	Description
06 March 2020	1	Initial release
11 March 2020	2	Updates made to chapters 3 and 4
23 June 2020	3	Small text inserted for clarification