

Dolby IMS3000 installation manual

Issue 1

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Product Model

This documentation applies to Model CID1002.

Safety precautions



THIS DEVICE MUST BE GROUNDED

Important

Power requirements for electrical equipment vary from area to area. Please ensure that the Dolby IMS3000 meets the power requirements in the surrounding area. If in doubt, consult a qualified electrician or a Dolby Laboratories, Inc., dealer.

Dolby IMS3000 power ratings

The Dolby IMS3000 maximum power consumption is up to 53 W in playback at 400 Mbps with three external USB devices attached that can draw 5 V/0.5 A from the Dolby IMS3000 USB ports.

WARNING: Multiple sources of supply. Disconnect all sources before servicing.

Dolby IMS3000 rackmount and thermal information

- Maximum operating ambient temperature is 40°C.
- Never restrict the airflow through the device fan or vents.

Protecting yourself and the Dolby IMS3000

Never touch the AC plug with wet hands. Always disconnect the projector from the power supply by pulling on the plug, not the cord. Allow only a Dolby Laboratories, Inc., dealer or qualified professional engineer to repair or reassemble the Dolby IMS3000. In addition to voiding the warranty, unauthorized engineers may receive a serious electric shock when touching live internal parts. Do not put or allow anyone to put any object, especially metal objects, into the Dolby IMS3000. Use only a listed AC power supply. Never use a DC power supply.

If water or any other liquid is spilled into or onto the Dolby IMS3000, disconnect the power and call a Dolby Laboratories, Inc., dealer. The unit must be well ventilated and be kept away from direct sunlight. To avoid damage to internal circuitry, as well as the external finish, keep the Dolby IMS3000 away from direct sources of heat (heater vents, stoves, radiators). Avoid using flammable aerosols near the Dolby IMS3000. They can damage the surface area and may ignite. Do not use denatured alcohol, paint thinner, or similar chemicals to clean the Dolby IMS3000. These can damage the unit.

Modification of this equipment is dangerous and can result in the impairment of the functions of the Dolby IMS3000. Never attempt to modify the equipment in any way. In order to ensure optimum performance of the Dolby IMS3000, select the setup location carefully and make sure the equipment is used properly. Avoid setting up the Dolby IMS3000 in the following locations:

- In a humid or dusty environment
- In a room with poor ventilation
- On a surface that is not level
- Inside a moving vehicle where it will be subject to vibration
- In an extremely hot or cold environment

Removable drives warning

Removal of the hot-swappable hard drives allows access to pins and traces supplying power to the hard drive back plane. This is considered an energy hazard. Removal of the hard drives must be performed by a trained service specialist or by trained personnel. The equipment may be used only in a restricted access area that is not accessible to the general public.

Caution

- The nonremovable battery is located on the Dolby IMS3000 fusion board.
- Danger of explosion if battery is removed.

Warning

• To prevent fire or shock hazard, do not expose this appliance to rain or moisture.



Contents

Chapter	1 In	troduction to the Dolby IMS3000 installation manual	9
	1.1	Supporting documentation	9
	1.2	Contacting Dolby	9
Chapter	2 D	olby IMS30001	0
	2.1	Dolby IMS3000 packing list1	0
	2.2	Dolby IMS3000 front panel1	0
Chapter	3 In	stalling the hard-disk drives into the Dolby IMS30001	1
	3.1	Installing the hard-disk drives1	1
	3.2	Preparing to install the Dolby IMS3000 into a projector1	1
	3.3	Connecting the Dolby IMS3000 to an automation controller1	2
Chapter	4 D	olby IMS3000 license agreement1	3
	4.1	Accepting the Dolby IMS3000 license agreement1	3
Chapter	5 In	stalling the Dolby IMS3000 into an NEC Series 2 projector1	4
	5.1	Inserting the Dolby IMS3000 into the NEC Series 2 projector1	4
	5.2	Powering on the NEC Series 2 projector1	8
	5.3	Setting up the network for the Dolby IMS3000 and NEC Series 2 projector1	8
	5.4	Adding the NEC Series 2 projector as a device1	9
	5.5	Performing the marriage between the Dolby IMS3000 and NEC Series 2 projector 2	1
	5.6	Verifying the marriage between the Dolby IMS3000 and NEC Series 2 projector 2	5
Chapter	6 In	stalling the Dolby IMS3000 into a Barco Series 2 projector2	7
	6.1	Inserting the Dolby IMS3000 into the Barco Series 2 projector	7
	6.2	Powering on the Barco Series 2 projector2	8
	6.3	Setting up the network for the Dolby IMS3000 and Barco Series 2 projector2	8
	6.4	Adding the Barco Series 2 projector as a device2	9
	6.5	Performing the marriage between the Dolby IMS3000 and Barco Series 2 projector	31
	6.6	Verifying the marriage between the Dolby IMS3000 and Barco Series 2 projector3	3
Chapter	7 In	stalling the Dolby IMS3000 into a Christie Series 2 projector	5
	7.1	Inserting the Dolby IMS3000 into the Christie Series 2 projector	5
	7.2	Powering on the Christie Series 2 projector3	5
	7.3	Setting up the network for the Dolby IMS3000 and Christie Series 2 projector3	8
	7.4	Adding the Christie Series 2 projector as a device	9

	7.5 Performing the marriage between the Dolby IMS3000 and Christie Series 2	
	projector	42
	7.6 Verifying the marriage between the Dolby IMS3000 and Christie Series 2 project	or44
Chapter	8 Updating the Dolby IMS3000 software	. 46
	8.1 Updating the Dolby IMS3000 using a USB flash drive	46
	8.2 Updating the Dolby IMS3000 using the Ingest Manager Upload	46
	8.3 Updating the Dolby IMS3000 remotely using FTP	47
Chapter	9 Setting up the Dolby IMS3000 audio	. 48
	9.1 Connecting the Dolby IMS3000 to a Dolby DAC3202	48
	9.2 Connecting the Dolby IMS3000 to a Dolby Multichannel Amplifier	49
	9.3 Connecting the Dolby IMS3000 to a cinema audio processor	50
	9.4 Connecting more than one Dolby DAC3202 or Dolby Multichannel Amplifier or mixing devices	50
Chapter	10 Configuring HDMI settings	. 51
•	10.1 Adding an HDMI input source as a live composition playlist	
	10.2 Switching to an alternative HDMI input source	52
Chapter	11 Configuring AES auxiliary inputs and outputs	. 53
	11.1 Adding a microphone	53
	11.2 Adding a monitor	54
	11.3 Adding a fader	55
	11.4 Configuring additional auxiliary AES inputs and outputs	56
Chapter	12 Configuring the Dolby IMS3000 time zone	. 57
	12.1 Configuring the date and time	57
Chapter	13 Configuring the Dolby IMS3000 user accounts	. 58
	13.1 Adding a new user account	58
	13.2 Modifying a user account	59
	13.3 Deleting a user account	60
Chapter	14 Configuring the ingest content source	. 62
	14.1 Adding a new ingest content source	62
	14.2 Removing an ingest content source	63
Chapter	15 Ingesting KDMs into the Dolby IMS3000	. 65
	15.1 Ingesting a KDM using an external drive	65
Chapter	16 Ingesting content into the Dolby IMS3000	. 67

	16.1 Ingesting content	67
	16.2 Canceling an ingest operation	69
	16.3 Pausing an ingest operation	69
	16.4 Resuming an ingest operation	69
Chapter	17 Managing show playlists	70
	17.1 Building a new show playlist	70
	17.2 Opening a show playlist	72
	17.3 Viewing the properties for a show playlist	73
	17.4 Deleting a show playlist	74
Chapter	18 Performing playback	76
	18.1 Loading and playing a show playlist	76
	18.2 Creating a show playlist schedule for playback	79
Chapter	19 Digital and analog audio converters	81
	19.1 Digital-to-analog audio converters	81
	19.2 Analog-to-digital audio converters	82
	19.3 Bidirectional audio converters	82
Chapter	20 Dolby IMS3000 audio system diagrams	83
	20.1 Dolby IMS3000 with Dolby DAC3202 diagram	83
	20.2 Dolby IMS3000 with Dolby Multichannel Amplifier diagram	84
Chapter	21 Audio adapter pinouts	85
	21.1 RJ-45 Ethernet cable color codes	85
	21.2 Auxiliary input audio SPDIF for RCA to RJ-45 unbalanced cable	86
	21.3 Auxiliary input audio AES3/EBU for XLR-F to RJ-45 balanced cable	86
	21.4 Auxiliary input audio AES-3id BNC to RJ-45 unbalanced cable	87
	21.5 Auxiliary output audio AES3/EBU for RJ-45 to XLR-M balanced cable	87
	21.6 25-pin D-connector to dual RJ-45 adapter pinout	88
Chapter	22 AES audio channel pinouts	89
	22.1 AES3 output 1–8	89
	22.2 AES3 output 9–16	90
	22.3 AES auxiliary input and output	91
Chapter	23 General-purpose input and output pinouts	
	23.1 General-purpose input	92
	23.2 General-purpose output	93
Chapter	24 Dolby IMS3000 API and SNMP	94
-	24.1 Application Program Interface and web services	94
	24.2 Simple Network Management Protocol	95
Chapter	25 Glossary	97

Chapter 26 Documentation revision histor	y 99
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Introduction to the Dolby IMS3000 installation manual

This documentation provides the instructions for performing the initial hardware setup and configuration for the Dolby IMS3000.

1.1 Supporting documentation

Dolby provides a full set of documentation to support setting up and configuring the Dolby IMS3000 with Dolby Atmos audio.

- The *Dolby Atmos Designer User's Manual* provides instructions for configuring the theatre auditorium audio parameters and for generating a Dolby Atmos Designer (.dad) file.
- The *Dolby Multichannel Amplifier Manual* provides instructions for setting up the Dolby IMS3000 with a Dolby Multichannel Amplifier.
- The *Dolby IMS3000 User's Manual* provides instructions for operating the Dolby IMS3000.
- The *Dolby IMS3000 Software Bundle Release Notes* include information about software component versions, known bugs, and workarounds.

1.2 Contacting Dolby

This documentation provides instructions for contacting Dolby Cinema Technical Support and for submitting feedback about the documentation.

For questions about product functionality, contact Dolby Cinema Technical Support at cinemasupport@dolby.com.

Use these regional telephone numbers to contact Dolby Cinema Technical Support.

- Americas: +1-415-645-4900
- Europe/Middle East/Africa (EMEA): +44-179-384-2130
- Asia-Pacific (APAC): +86-105-910-3066
- Japan: +81-3-3524-7350

The Dolby customer portal contains software and documentation for the Dolby IMS3000. To access the Dolby customer portal, use www.dolbycustomer.com.

For questions about this documentation, send an email to documentation@dolby.com.

Dolby IMS3000

The Dolby IMS3000 is a Digital Cinema Initiatives (DCI) compliant playback system that plays movies and other content. It is an all-in-one playback system that provides real-time internal audio rendering and video playback.

The Dolby IMS3000 includes a web user interface (UI) that allows you to configure and control audio and video settings, ingest content, ingest a key delivery message (KDM), build a show playlist (SPL), and load an SPL for playback.

2.1 Dolby IMS3000 packing list

The Dolby IMS3000 packing list includes Dolby part numbers and item descriptions.

- One GPIO OUT 25 FT cable, unshielded: 8322208
- One GPIO IN 25 FT cable, unshielded: 8322207
- One modular dual RJ-45 to 25-pin D-connector adapter, female: 7111161

2.2 Dolby IMS3000 front panel

The Dolby IMS3000 front panel identifies the inputs and outputs and each hard-disk drive (HDD).



Figure 2-1 Dolby IMS3000 front panel

Installing the hard-disk drives into the Dolby IMS3000

The Dolby IMS3000 includes three HDDs that are installed into the Dolby IMS3000.

3.1 Installing the hard-disk drives

You must install each HDD into the Dolby IMS3000.

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Note: Each HDD must be from the Dolby approved HDD list. Dolby prohibits intermixing SATA I HDDs with SATA II HDDs.

Procedure

- 1. Remove the Dolby IMS3000 from its carton and antistatic bag.
- 2. Release the lever of the HDD carrier by pressing the release tab, and insert the HDD into the HDD slot with the handle open.

The three HDD slots are labeled as **HDD-1**, **HDD-2**, and **HDD-3** on the Dolby IMS3000 front panel.

- 3. Push the HDD handle into the Dolby IMS3000 HDD slot until it locks into place.
- 4. Repeat this procedure for the remaining HDDs.

3.2 Preparing to install the Dolby IMS3000 into a projector

After each HDD is installed, you must insert the Dolby IMS3000 into a projector and then continue the hardware installation and configuration. You can insert the Dolby IMS3000 into an NEC, Barco, or Christie Series 2 projector.

3.3 Connecting the Dolby IMS3000 to an automation controller

You have the option to connect the Dolby IMS3000 to an automation controller using two shielded CAT5 or CAT6 RJ-45 cables.

Procedure

- 1. Connect one end of a shielded CAT5 or CAT6 cable to the general-purpose input (GPI) port, labeled **GPI**, on the Dolby IMS3000.
- 2. Connect the other end of the shielded CAT5 or CAT6 cable to whichever automation controller is available or required.
- 3. Connect another shielded CAT5 or CAT6 cable to the general-purpose output (GPO) port, labeled **GPO**, on the Dolby IMS3000.
- 4. Connect the other end of the shielded CAT5 or CAT6 cable to the automation controller.

Dolby IMS3000 license agreement

After you initially set up the Dolby IMS3000, you are required to accept the license agreement in the Dolby IMS3000 web UI.

4.1 Accepting the Dolby IMS3000 license agreement

You must accept the license agreement in the Dolby IMS3000 web UI.

Procedure

- After you log in to the Dolby IMS3000 web UI, scroll to Setup & Maintenance > System Settings > License Agreement.
- 2. Scroll down this page, read the license agreement, and then select I have read and accept the terms of the software license agreement.



Figure 4-1 License agreement

Installing the Dolby IMS3000 into an NEC Series 2 projector

You can install the Dolby IMS3000 into an NEC Series 2 projector. Afterward, you must perform the marriage between the Dolby IMS3000 and the NEC Series 2 projector.

5.1 Inserting the Dolby IMS3000 into the NEC Series 2 projector

Insert the Dolby IMS3000 into the NEC Series 2 projector.

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Note: Make sure to look for any obstructions. Do not force the Dolby IMS3000 into the projector, as this may cause damage to the connectors.

Prerequisites

Make sure that the NEC Series 2 projector is powered down and in the off position, and the power cord is disconnected from the wall. Follow standard electrostatic discharge procedures to protect the electronic components from damage.

Procedure

1. Remove the NEC Series 2 projector filter cover.



Figure 5-1 Removing the projector filter

2. Remove the four screws holding the projector cover in place.





3. Use the key to unlock the projector.



Figure 5-3 Projector unlock

4. Remove the cover from the projector.



Figure 5-4 Projector cover removed

5. Remove the blank cover from the media block slot by unscrewing its two handles at the side.



Figure 5-5 Removing the slot cover



Figure 5-6 Empty slot

- 6. Slide the Dolby IMS3000 board into the projector media block slot.
- 7. Screw in the handles on the side of the Dolby IMS3000 to secure it in the NEC projector.
- 8. Position the projector cover by lining it up with the screw holes.
- 9. Tighten the four screws.



Figure 5-7 Replacing the projector cover

10. Use the key to lock the cover, and then replace the filter cover by pushing it into place.



Figure 5-8 Locking the projector



Figure 5-9 Replacing the filter cover

5.2 Powering on the NEC Series 2 projector

You must power on the NEC Series 2 projector.



Note: Refer to the projector manufacturer manual for the proper power-up sequence.

Procedure

- 1. Connect the power cable to the projector.
- 2. Turn the projector on.

5.3 Setting up the network for the Dolby IMS3000 and NEC Series 2 projector

You must connect the Dolby IMS3000 to an NEC Series 2 projector and then to a laptop and a local network switch.

Use **ETH-0** to begin the installation process. All Dolby IMS3000 units are shipped from the factory with this default IP address for **ETH-0**:

- IP: 192.168.100.50
- SM: 255.255.255.0
- GW: Blank

Ethernet ports **ETH-1** and **ETH-2** are set to Dynamic Host Configuration Protocol (DHCP) by default and should not be used for initial configuration.

Prerequisites

You need three Ethernet cables for this task.

Procedure

- 1. Take the first Ethernet cable, and connect it to the Dolby IMS3000 Ethernet port labeled **ETH-0**. Next, connect the other end of this Ethernet cable to the local network switch.
- 2. Take the second Ethernet cable, and connect it from the NEC Series 2 projector to the same local network switch as step 1.
- 3. Take the third Ethernet cable, and connect it from the local network switch to a laptop.
- 4. To set up the network configuration on the laptop to connect to the Dolby IMS3000:
 - a. Open the laptop network settings, and then open the IP address settings dialog.
 - b. Select Internet protocol version 4 (TCP/IPv4) from the available options.
 - c. Set the IP address to 192.168.100.25 and the netmask to 255.255.255.0.

- d. Set the network to the desired network connection.
- To log in to the Dolby IMS3000 web UI, use a web browser and enter the default ETH-0 port IP address, and then scroll to Setup & Maintenance > System Settings > Networking Configuration.
- 6. Select and configure **ETH-0**, **ETH-1**, or **ETH-2** as needed for installation.

If you change the settings for **ETH-0**, you need to change the computer settings to access the Dolby IMS3000 again.

Date and	Time Events Configuration	Networking Configu	Power Management	Account Manager	Theater Properties	License Agreement
Networking	configuration					
Hostname:	IMS3000					
Properties of	f eth0:	Properties of eth		Properti	es of eth2:	
📄 Obtain an	IP address automatically with DH	ICP. 🛛 🖸 Obtain an IP a	address automatically with	DHCP. 🗾 Obtai	in an IP address automat	ically with DHCP.
IP address:	192.168.100.50	IP address:		IP addre	ss:	
Netmask:	255.255.255.0	Netmask:		Netmask		
Gateway:		Gateway:		Gateway		
Save	Revert					
AES67 Netw	ork Outputs					
The AES67 o	utputs configuration is available o	on this page.				

Figure 5-10 Networking configuration

7. When finished, click **Save**.

5.4 Adding the NEC Series 2 projector as a device

You must add and then configure an NEC Series 2 projector as a new device in the Dolby IMS3000 **Device Manager**.

Procedure

- 1. Open a web browser and enter the Dolby IMS3000 IP address.
- 2. Enter the log-in credentials, and then click Login.

Username	IMS3000
Password	
	Login

Figure 5-11 Dolby IMS3000 login



3. Click Setup & Maintenance, and then click Device Management.



4. In the **Device Manager** tab, scroll over **New** and click **Projector**.





5. Enter a name for the projector in the **Identifier** field.

Projector	Device Type: Projector Identifier: NECEx_1 Projector mode: NEC Projector mode: NEC Projector mode: NEC Projector mode: NEC Projector is part of a Dual Projector/IMB setup Projector is part of a Dual Projector Projector/IMB Projector Projector is part of a Dual Projector Projector Projector Pro
Save Revert	

Figure 5-14 Device manager

- 6. Select the projector make and model from the **Projector model** drop-down menus.
- 7. Enter the default DLP head IP address.
- 8. Select to enable or disable projector-rendered subtitles, and select whether this projector is the primary projector.
- 9. When finished, click **Save**.
- 10. In the **Authentication** window that appears, select a user-name account, enter the password, and then click **Ok**.

5.5 Performing the marriage between the Dolby IMS3000 and NEC Series 2 projector

You must perform the marriage between the Dolby IMS3000 and NEC Series 2 projector.

allo	

Note: Refer to the projector manufacturer manual for additional information or changes related to the marriage process. Contact the projector manufacturer to receive the latest NEC Digital Cinema Communicator version.

Procedure

1. Use the control panel on the NEC Series 2 projector to find the IP address, if unknown.



Figure 5-15 NEC Series 2 projector menu

2. In the **Communication Settings** window, enter the default IP address of the projector and click **OK**.

Target Select		
Projector	MMS	
Communication Dev	vice Settings	
192 . 168	3. 100. 10	2
C. Hast Name		
Inosi mane		
		_
Port		
Port 43728	_	History
Port 43728		History

Figure 5-16 Communication Settings window

3. Click **MODE**.

IEC	Syster	n: NC900C-A MODE	
GITAL CINEMA COMM	UNICATOR Version	In: 4, 1, 0, 17	1
On	Off	On	

Figure 5-17 Mode button

4. In the **Control Mode** window, click the **Service** tab, enter the password, and then click **OK**.

User	Advanced User	Installation	Service
1			

Figure 5-18 Control Mode window

- 5. In the window that appears, use the arrow button to scroll until the **SETUP** button is available.
- 6. Click **SETUP**.



Figure 5-19 Setup button

7. In the **Setup** window, click **Option Slot**.

Setup	Installation	Color Setting	Option Slot		Reset
Douser Auto (Control Setting				
Panel Key Lo UnLo	ck k Lock	GP	IO Setti	ing	1
Silent Mode	Setting	Au	to Key Lock Disable	Enable	
Filter Messag	e [M] Ap	ply 3D	Connector Not Use	Use	
Unlit Mode Coolir	ng Lamp Of	Sle	ep Timer Setti	ng	

Figure 5-20 Setup window

8. Select **IMB** from the list, and then click **Apply**.



Figure 5-21 Option Slot window

9. Click Installation, and then click Re-Marriage.



Figure 5-22 Remarriage button

10. Enter the log-in ID and password, and then click **Re-Marriage**.

ogin ID :	
Password :	
De Marriage	Cancel

Figure 5-23 Remarriage login

11. In the new window that appears, click **OK**.

Digital Cinema Comn	nunicator for 🔀
() Operation	n Successful.
	ОК

Figure 5-24 Operation successful message

5.6 Verifying the marriage between the Dolby IMS3000 and NEC Series 2 projector

After you perform the marriage, you must verify that it is valid and correctly configured.

Procedure

- 1. Log in to the Dolby IMS3000, and then scroll to **Diagnostics** > **MediaBlock**.
- 2. In the MediaBlock page, verify this information in the Security Manager section:
- Status: Green
- Physical Marriage: Active
- Logical Marriage: Engaged
- Active Marriage: Active

System Status Overview	Storage M	lediaBlock		
Security Manager				
Status				
Service Door Status:		Closed	Physical Marriage:	
Service Door Armed:		Engaged	Logical Marriage:	
Partial Blackout:		Not Active	Active Marriage:	
Projector		Media Decoder		
Status:		Video Watermark:	Dolby 0.3	
Model:	Series- 2/4K	Audio Watermark:	Dolby 1.0.0	
Dowser:				
Lamp:				



When finished with the projector installation, continue to Chapter 8 to update the Dolby IMS3000.

Installing the Dolby IMS3000 into a Barco Series 2 projector

You can install the Dolby IMS3000 into a Barco Series 2 projector. Afterward, you must perform the marriage between the Dolby IMS3000 and the Barco Series 2 projector.

6.1 Inserting the Dolby IMS3000 into the Barco Series 2 projector

Insert the Dolby IMS3000 into a Barco Series 2 projector.

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Note: Make sure to look for any obstructions. Do not force the Dolby IMS3000 into the projector, as this may cause damage to the connectors.

Procedure

1. Remove the blank cover of the media block slot by unscrewing the two screws on the sides.



Figure 6-1 Blank cover



Figure 6-2 Media block slot

- 2. Insert the Dolby IMS3000 board into the projector media block slot guide rails.
- 3. Tighten the two screws to secure the Dolby IMS3000.

6.2 Powering on the Barco Series 2 projector

You must power on the Barco Series 2 projector.

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Note: Refer to the projector manufacturer manual for the proper power-up sequence.

Procedure

- 1. Connect the power cable to the projector.
- 2. Turn the projector on.

The expected boot-up time is approximately two minutes, 30 seconds.

6.3 Setting up the network for the Dolby IMS3000 and Barco Series 2 projector

You must connect the Dolby IMS3000 to a Barco Series 2 projector and then to a laptop.

Use **ETH-0** to begin the installation process. All Dolby IMS3000 units are shipped from the factory with this default IP address for **ETH-0**:

- IP: 192.168.100.50
- SM: 255.255.255.0
- GW: Blank

Ethernet ports **ETH-1** and **ETH-2** are set to Dynamic Host Configuration Protocol (DHCP) by default and should not be used for initial configuration.

Prerequisites

You need three Ethernet cables for this task.

Procedure

- 1. Take the first Ethernet cable, and connect it to the Dolby IMS3000 Ethernet port labeled **ETH-0**. Next, connect the other end of this Ethernet cable to the local network switch.
- 2. Take the second Ethernet cable, and connect it from the NEC Series 2 projector to the same local network switch as step 1.
- 3. Take the third Ethernet cable, and connect it from the local network switch to a laptop.
- 4. To set up the network configuration on the laptop to connect to the Dolby IMS3000:
 - a. Open the laptop network settings, and then open the IP address settings dialog.
 - b. Select Internet protocol version 4 (TCP/IPv4) from the available options.
 - c. Set the IP address to 192.168.100.25 and the netmask to 255.255.255.0.
 - d. Set the network to the desired network connection.
- To log in to the Dolby IMS3000 web UI, use a web browser and enter the default ETH-0 port IP address, and then scroll to Setup & Maintenance > System Settings > Networking Configuration.
- 6. Select and configure **ETH-0**, **ETH-1**, or **ETH-2** as needed for installation.

If you change the settings for **ETH-0**, you need to change the computer settings to access the Dolby IMS3000 again.

Date and Time Events Configuration Net	working Configu Power Management Account	Manager Theater Properties License Agreemen	
Networking configuration			
Hostname: IMS3000			
Properties of eth0:	Properties of eth1:	Properties of eth2:	
Obtain an IP address automatically with DHCP.	🖸 Obtain an IP address automatically with DHCP.	Obtain an IP address automatically with DHCP.	
IP address: 192.168.100.50	IP address:	IP address:	
Netmask: 255.255.255.0	Netmask:	Netmask:	
Gateway:	Gateway:	Gateway:	
Save Revert			
AES67 Network Outputs			
The AES67 outputs configuration is available <u>on th</u>	is page.		

Figure 6-3 Networking configuration

7. When finished, click Save.

6.4 Adding the Barco Series 2 projector as a device

You must add and then configure a Barco Series 2 projector as a new device in the Dolby IMS3000 **Device Manager**.

Procedure

1. Log in to the Dolby IMS3000 web UI using the default IP address for the **ETH-0** port.



Figure 6-4 Dolby IMS3000 login

2. Click Setup & Maintenance, and then click Device Management.

(Device M	anager	Content Feed Manage	r NAS Manager	
C Status	• New	Θ Delete			
utterente. N	Projector				
📇 Cinelister					
Content					
土 Ingest					
🎜 Cinema Audio					
e ^o Macros					
Device Controller					
₩ Diagnostics					
Log Viewer					
😎 Setup & Maintenance					
Playback Settings					
Command Terminal					
P Device Management					
Maintenance					
🔧 System Settings					
Add-Ons					
	Save	R	levert		

Figure 6-5 Device manager

3. In the **Device Manager** tab, scroll over **New**, and click **Projector**.

	Device Manager Content Feed Manage
🖵 Status	New O Delete PROJECTOR
👪 Cinelister	AURO
-	AUDIO PROCESSOR
Content	GLOSED CAPTION
🛓 Ingest	DOLBY DEGHOST
	DOLBY DFC100
🞜 Cinema Audio	ECNA
-	JNIOR
Macros	MDA
	RAW
Device Controller	MEALD BD EQ
✓ Diagnostics	SPI-CHASEREE
	SHOW VALIDATOR
	SUBTITLE ENGINE
🔅 Setup & Maintenance	

0	Device Manager Content I			
		eed Manager	NAS Manager	
🖵 Status	New 🕞 Delete			
Proje	ector	Device Type: Pi	rojector	Enabled
🗈 Content		Identifier:	Projector	
🛓 Ingest		Projector model:	Barco 🔻	Series-2 🔻
🞜 Cinema Audio				Test
"O Macros				
			Machine Passwo	rd:
<u>Device Controller</u>			🔘 Yes 😳 No	
✓ Diagnostics			🔾 Yes 🔘 No	
Log Viewer		This projecto	r is part of a Dual Projec	tor/IMB setup 🕐
🔹 Setup & Maintenance				
Playback Settings				
Command Terminal				
Device Management				
Maintenance				
Add-Ons				
	Save Revert			

Figure 6-6 Device manager

4. Enter a name for the projector in the **Identifier** field

Figure 6-7 Device manager

- 5. Select the projector make and model from the **Projector model** drop-down menus.
- 6. Enter the default DLP head IP address.
- 7. Select to enable or disable projector-rendered subtitles.
- 8. Select whether this projector is the primary projector.
- 9. When finished, click **Save**.
- 10. In the **Authentication** window that appears, select a user-name account, enter the password, and then click **Ok**.

If installing the Dolby IMS3000 into a Barco projector for the first time, you must add the projector in the Dolby IMS3000 **Device Manager** page, save the settings, and then power cycle the projector. Once complete, you can proceed to marry the Dolby IMS3000 with the Barco projector.

6.5 Performing the marriage between the Dolby IMS3000 and Barco Series 2 projector

The marriage for Barco Series 2 projectors is performed on the external controls on the projector.

If needed, consult the projector manufacturer documentation for additional information on the marriage process.

Once the projector has finished booting up, the lights at the back of the projector illuminate in red, indicating that the board and the projector are not married. If there is a touch screen attached to the projector, two tamper errors appear, indicating that the marriage has not occurred.

Procedure:

 On the Barco Series 2 projector, push the button with the key symbol. The button illuminates in red to indicate that the physical marriage is not complete.

 Image: Construction of the state of the

Figure 6-8 Key symbol

After you push the button with the key symbol, the numbered buttons should flash in orange.

2. Enter the correct password.

If you do not have a valid password, contact the projector manufacturer.

The numbered buttons flash green when you have entered the password correctly.

Allow approximately a minute for the tamper errors to clear. Once the marriage is complete, the button with the key symbol turns green and the light at the back of the projector also turns green.



Figure 6-9 Green key symbol

6.6 Verifying the marriage between the Dolby IMS3000 and Barco Series 2 projector

After you perform the marriage, you must verify that it is valid and correctly configured.

Procedure

- 1. Log in to the Dolby IMS3000, and then scroll to **Diagnostics > MediaBlock**.
- 2. In the **MediaBlock** page, verify this information in the **Security Manager** section:
- Status: Green
- Physical Marriage: Active
- Logical Marriage: Engaged
- Active Marriage: Active

System	Status Overview	Storage	м	ediaBlock				
Security Manager								
Status								
Service Door Status:					Closed	Physical Marriage:		
Service Door Armed:					Engaged	Logical Marriage:		Engaged
Partial Blackout:						Active Marriage:		
Projector				Media Decoder				
Status:				Video Watermark:			Dolby 0.3	
Model:		Series 2/4K		Audio Watermark:			Dolby 1.0.0	
Dowser:		Closed						
Lamp:								

Figure 6-10 Media Block information

When finished with the projector installation, continue to Chapter 8 to update the Dolby IMS3000.

Installing the Dolby IMS3000 into a Christie Series 2 projector

You can install the Dolby IMS3000 into a Christie Series 2 projector. Afterward, you must perform the marriage between the Dolby IMS3000 and the Christie Series 2 projector.

7.1 Inserting the Dolby IMS3000 into the Christie Series 2 projector

Insert the Dolby IMS3000 into a Christie Series 2 projector.



Note: Make sure to look for any obstructions. Do not force the Dolby IMS3000 into the projector, as this may cause damage to the connectors.

Procedure:

- 1. Remove the blank cover of the media block slot, if present, by unlatching the two latches on the sides.
- 2. Insert the Dolby IMS3000 into the projector media block slot guide rails on the inside of the slot.

The latches must be out and open for the Dolby IMS3000 to fit properly.

- 3. To open the latches, press the red button.
- 4. Close the two latches to secure the board.

7.2 Powering on the Christie Series 2 projector

You must power on the Christie Series 2 projector.

0	
- 2000	Ъ.
	а.

Note: Refer to the projector manufacturer manual for the proper power-up sequence.

Procedure

1. Power on the projector.

The projector boots into STANDBY mode.

2. Use the touch panel controller on the projector to Login.
| Alternative
Content
HDMI
Status
Diagnostics | 3D Scope
1096x1716
DSDI
30
Operational Statu | |
|---|--|---------|
| Network Devices About Help Login | Standby Main Po Run Marriag | — Login |
| Menu | III O | - |



- 3. Log in as Marriage.
- 4. Select Content Devices Configuration.





5. Verify that **Doremi** is selected in the **Devices Installed** drop-down menu.

System Ok		СНИ	ISTIE 4K	
Content Devices Config	uration		8	
	——— Devices Inst	alled		
🗸 LD Installed	IMB Installed:	Doremi		
		None		Doremi
		Doremi		selected
		GDC		
		Dolby		
		/		
Menu	Marriage	NA 🥹 💡 🌋	10:51:27 AM	

Figure 7-3 Devices Installed drop-down menu

6. Press the green power button at the top right corner of the touch panel, to take the projector from standby to active.

The Dolby IMS3000 and projector attempt to communicate with each other at this stage.

	Preferred Channels		All	Power
3996x2160 Flat XYZ	4096x1716 Scope XYZ	3D Flat 3996x2160 3D 13	7.11	Lamp
3D Scope 4096x1716	3996x2160 Flat Dual SDI 19	4096x1716 Scope Dual SDI 17		Douser
Alternative Content HDMI 12	3D Scope 4096x1716 3D SDI 30	30 3D Flat 3996x2160 DSDI 31		Aux Lens
 PIB Status ICP Status LD Status IMB Status 	Operational Sta Sta Ma Q Ru Q Ma	Status andby Power in Power n rriage		- Test Patterns -



7. Click **Acknowledge** to clear any critical errors that may appear as the projector is in standby mode.

State 🔺	Occurred	
Critical	2013-09-03, 11:20:	
	State A Critical	State A Occurred Critical 2013-09-03, 11:20

Figure 7-5 Error message

7.3 Setting up the network for the Dolby IMS3000 and Christie Series 2 projector

You must connect the Dolby IMS3000 to a Christie Series 2 projector and then to a laptop and a local network switch.

Use **ETH-0** to begin the installation process. All Dolby IMS3000 units are shipped from the factory with this default IP address for **ETH-0**:

- IP: 192.168.100.50
- SM: 255.255.255.0
- GW: Blank

Ethernet ports **ETH-1** and **ETH-2** are set to Dynamic Host Configuration Protocol (DHCP) by default and should not be used for initial configuration.

Prerequisites

You need three Ethernet cables for this task.

- 1. Take the first Ethernet cable, and connect it to the Dolby IMS3000 Ethernet port labeled **ETH-0**. Next, connect the other end of this Ethernet cable to the local network switch.
- 2. Take the second Ethernet cable, and connect it from the NEC Series 2 projector to the same local network switch as step 1.
- 3. Take the third Ethernet cable, and connect it from the local network switch to a laptop.
- 4. To set up the network configuration on the laptop to connect to the Dolby IMS3000:
 - a. Open the laptop network settings, and then open the IP address settings dialog.

- b. Select Internet protocol version 4 (TCP/IPv4) from the available options.
- c. Set the IP address to 192.168.100.25 and the netmask to 255.255.255.0.
- d. Set the network to the desired network connection.
- To log in to the Dolby IMS3000 web UI, use a web browser and enter the default ETH-0 port IP address, and then scroll to Setup & Maintenance > System Settings > Networking Configuration.
- 6. Select and configure **ETH-0**, **ETH-1**, or **ETH-2** as needed for installation.

If you change the settings for **ETH-0**, you need to change the computer settings to access the Dolby IMS3000 again.

Date and	Time	Events Configuration	Networking Configu	Power Management	Account Manage	r Theater Properties	License Agreement	
Networking	configura	ation						
Hostname:	IMS3000							
Properties o	of eth0:		Properties of eti	11:	Prope	rties of eth2:		
Obtain ar	n IP addre	ss automatically with Di	HCP. 🛛 🖸 Obtain an IP	address automatically witl	n DHCP. 🛛 🔽 Ob	tain an IP address automa	tically with DHCP.	
IP address:	192.168	100.50	IP address:		IP add	IP address:		
Netmask:	255.255	255.0	Netmask:		Netma	Netmask:		
Gateway:			Gateway:	Gateway:		Gateway:		
Save		Revert						
AES67 Netw	ork Outp	uts						
The AES67 o	outputs co	nfiguration is available g	on this page.					

Figure 7-6 Networking configuration

7. When finished, click **Save**.

7.4 Adding the Christie Series 2 projector as a device

You must add and then configure a Christie Series 2 projector as a new device in the Dolby IMS3000 **Device Manager**.

Prerequisites

Make sure the Christie Series 2 projector is powered on.

Procedure

1. Log in to the Dolby IMS3000 web UI using the default IP address for the **ETH-0** port.





2. Click Setup & Maintenance, and then click Device Management.

	Device N	tanager	Content Feed Manager	NAS Manager	
🖵 Status	• New	🕞 Delete			
📇 Cinelister					
DI Content					
1 Ingest					
🞜 Cinema Audio					
P Macros					
Device Controller					
∠ Diagnostics					
Log Viewer					
Setup & Maintenance					
Playback Settings					
Command Terminal					
Device Management					
Maintenance					
A System Settings					
Add-Ons					
	Save	R	evert		

Figure 7-8 Device manager

3. In the **Device Manager** tab, scroll over **New** and click **Projector**.

	Device Manager Content Feed Manager
C Status	
- sucus	PROJECTOR
💾 Cinelister	AURO
E Content	AUDIO PROCESSOR
↓ Ingest	DOLBY DEGHOST
	DOLBY DFC100
🎜 Cinema Audio	ECNA
🖉 Macros	JNIOR
	RAW
Evice Controller	REALD 3D EQ
₩ Diagnostics	SPL CHASE RDF.
Log Viewer	SHOW VALIDATOR
🗢 Setup & Maintenance	SUBTITLE ENGINE





🖵 Status	⊕ New ⊝					
	Projector					
🖴 Cinelister			Device Type: Pr	ojector	🛃 En	abled
E Content			Identifier:	Projector		
🚣 Ingest			Projector model:	Christie	▼ Series-2	
Cinoma Audio			DLP Head IP:			Test
o Macros				Machine	Password: ••••••	
🚍 Device Controller			Enable subtities:	🔘 Yes 🔾 No		
M Diagnostics				🔾 Yes 💿 No		
🖹 Log Viewer			This projecto	r is part of a Dual	Projector/IMB se	etup 🕜
🔹 Setup & Maintenance						
Playback Settings						
Discontinuation Command Terminal						
Pevice Management						
📰 Maintenance						
🔧 System Settings						
🖬 Add-Ons						
	Save	Revert				



- 5. Select the projector model from the **Projector model** drop-down menus.
- 6. Enter an IP address for both the **DLP Head IP** and **Vendor IP**.
- 7. Select to enable or disable the projector-rendered subtitles.
- 8. Select whether this projector is the primary projector.
- 9. When finished, click **Save**.
- 10. In the **Authentication** window that appears, select a user-name account, enter the password, and then click **Ok**.

7.5 Performing the marriage between the Dolby IMS3000 and Christie Series 2 projector

Once the Christie projector boots up, the lights on the side of the projector illuminate in red and green, indicating that the board and the projector are not married. The touch-panel controller attached to the Christie projector displays a second error window, indicating that the marriage has not occurred.

The wizard on the touch-panel controller guides you through the required steps to complete the marriage.

If needed, consult the projector manufacturer documentation for additional information on the marriage process.

Procedure

1. On the Christie Series 2 projector touch-panel screen, tap Acknowledge.

Alarms			
ID	State 🔺	Occurred	
IMB Connection to the ICP could not be establis	Critical	2013-09-03, 11:29:	
IMB Logical Tamper	Critical	2013-09-03, 11:29:	
IMB Physical Tamper	Critical	2013-09-03, 11:29:	
IMB Marriage Broken	Critical	2013-09-03, 11:29:	

Figure 7-11 Projector added

2. Select Menu > Service Setup > IMB Marriage.



Figure 7-12 IMB marriage

3. Tap **Next** to begin.



Figure 7-13 Marriage wizard

4. Tap Next in the Marriage Checklist section.



Figure 7-14 Marriage checklist

5. Tap Arm Marriage.

Once this button is pressed, you have 30 seconds to press **Marriage** on the projector, which should now illuminate in green.

Critical alarm	exists	CHKISTIE 4K	
Marriage		8	
Start Marriage Checklist Arming Finish	Arming To am the marriage the button labeled "Marria	riage" on the projector must be	
	pressed within 30 seconds or clicking the bu Arm Marria	ge	Arm marriage Button
Menu	Marriage VNC 📸 19	Prev	

Figure 7-15 Arm Marriage window

The light on the back of the projector turns green when the marriage is complete.



Figure 7-16 Green projection light

7.6 Verifying the marriage between the Dolby IMS3000 and Christie Series 2 projector

After you perform the logical marriage, you must verify the marriage is valid and correctly configured in the Dolby IMS3000 web UI.

- 1. Log in to the Dolby IMS3000 web UI, and then scroll to **Diagnostics > MediaBlock**.
- 2. In the MediaBlock page, verify this information in the Security Manager section:
- Status: Green
- Physical Marriage: Active

- Logical Marriage: Engaged
- Active Marriage: Active

System	Status Overview	Storage	м	lediaBlock				
Security Manager								
Status								
Service Door Status:					Closed	Physical Marriage:		
Service Door Armed:					Engaged	Logical Marriage:		Engaged
Partial Blackout:						Active Marriage:		
Projector				Media Decoder				
Status:				Video Watermark:			Dolby 0.3	
Model:		Series 2/4K		Audio Watermark:			Dolby 1.0.0	



When finished with the projector installation, continue to Chapter 8 to update the Dolby IMS3000.

Updating the Dolby IMS3000 software

Before you use the Dolby IMS3000, we recommend that you update the Dolby IMS3000 with the latest software package. Note that with previous products, you were upgrading several different components. The Dolby IMS3000 upgrade procedure allows you to upgrade the firmware, software, and security manager all together in a bundle.

The latest Dolby IMS3000 package is available from the Dolby customer portal at www.dolbycustomer.com. If you do not have access, make sure to sign up on the site or contact your dealer. If needed, you can contact Dolby Cinema Technical Support.

8.1 Updating the Dolby IMS3000 using a USB flash drive

You can update the Dolby IMS3000 software using a USB flash drive.

Procedure

- 1. Load the software package onto a USB flash drive.
- 2. Insert the USB flash drive into a USB port on the Dolby IMS3000.
- 3. Click Ingest.
- 4. In the Ingest Scan window, from the Select a Location list, select Local Storage.
- 5. Select the package.
- 6. Click **Ingest**.
- 7. Reboot the Dolby IMS3000 to apply the changes.

8.2 Updating the Dolby IMS3000 using the Ingest Manager Upload

You can update the Dolby IMS3000 software using the Ingest Manager Upload.

Procedure

- 1. In the Dolby IMS3000 web UI Status window, click Ingest.
- 2. Click Upload.
- 3. Click Choose Files.
- 4. Select the update bundle you want to upload.
- 5. Click Upload.

If the file was uploaded successfully, this message appears: **Files uploaded successfully. Click here to reboot**.

The Dolby IMS3000 reboots and then applies the update.

8.3 Updating the Dolby IMS3000 remotely using FTP

You can update the Dolby IMS3000 software remotely using File Transfer Protocol (FTP).

- 1. After you receive the software package, open an FTP client from your computer.
- 2. Enter the Dolby IMS3000 IP address. Then log in as **admin**.
- 3. Find the software package, and upload it to the /etc/rc.once directory.
- 4. Reboot the Dolby IMS3000 to apply the changes.

Setting up the Dolby IMS3000 audio

The Dolby IMS3000 provides you with multiple options to configure the audio setup.

You can configure the audio for Dolby Atmos. You can connect the Dolby IMS3000 Dolby Atmos Connect ports, using AES67, to one or more Dolby DAC3202 units or Dolby Multichannel Amplifier (DMA) units. If needed, you can also use the 16-channel AES3 digital outputs in combination with the AES67 connection (note that these may need to be converted to analog for installation).

You can configure the audio for a standard 5.1 or Dolby Surround 7.1 auditorium. You can use the Dolby Atmos Connect ports via AES67 or the 16-channel AES3 digital outputs. The Dolby DAC3202 and the Dolby Multichannel Amplifier are supported, or you can use a digital-to-analog converter to interface with legacy or analog amplifiers.

9.1 Connecting the Dolby IMS3000 to a Dolby DAC3202

You can connect the Dolby IMS3000 to a Dolby DAC3202 to output up to 32 channels of AES67 Dolby Atmos audio using two Ethernet cables.

Prerequisite

You need two CAT5e or greater Ethernet cables for this task.

Procedure

- 1. Connect one end of the first Ethernet cable to the **DOLBY ATMOS CONNECT OUT** connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the Dolby DAC3202 **DOLBY ATMOS CONNECT IN** connector port.
- 2. Connect one end of the second Ethernet cable to the **DOLBY ATMOS CONNECT IN** connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the Dolby DAC3202 **DOLBY ATMOS CONNECT OUT** connector port.
- 3. Generate a Dolby Atmos Designer file, connect to the Dolby IMS3000, and then send the Dolby Atmos Designer file over to the Dolby IMS3000.

For instructions on generating a Dolby Atmos Designer file, refer to the *Dolby Atmos Designer User's Manual*.

4. In the Dolby IMS3000 web UI, scroll to **Cinema Audio** and confirm the Dolby Atmos Designer file is present.

- 5. Verify that the proper default audio configuration file is set according to the type of audio setup.
 - a. In the Status window, click Cinema Audio.
 - b. Click Default Audio Configuration.
 - c. Use the up and down arrows to adjust the audio delay value.
 - d. Select the **EQ Preset** drop-down menu, and select an available preset.
 - e. Click Save All.

For more instructions on configuring the Dolby IMS3000 audio, refer to the *Dolby IMS3000 User's Manual*.

9.2 Connecting the Dolby IMS3000 to a Dolby Multichannel Amplifier

You can connect the Dolby IMS3000 to a Dolby Multichannel Amplifier to output up to 64 channels of AES67 Dolby Atmos audio using two Ethernet cables.

Prerequisite

You need two CAT5e or greater Ethernet cables for this task.

Procedure

- 1. Connect one end of the first Ethernet cable to the **DOLBY ATMOS CONNECT OUT** connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the Dolby Multichannel Amplifier **DOLBY ATMOS CONNECT IN** connector port.
- Connect one end of the second Ethernet cable to the DOLBY ATMOS CONNECT IN connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the Dolby Multichannel Amplifier DOLBY ATMOS CONNECT OUT connector port.
- 3. Generate a Dolby Atmos Designer file, connect to the Dolby IMS3000, and then send the Dolby Atmos Designer file over to the Dolby IMS3000.

For instructions on generating a Dolby Atmos Designer file, refer to the *Dolby Atmos Designer User's Manual*.

- 4. In the Dolby IMS3000 web UI, scroll to **Cinema Audio** and confirm the Dolby Atmos Designer file is present.
- 5. Verify that the proper default audio configuration file is set according to the type of audio setup.
 - a. In the Status window, click Cinema Audio.
 - b. Click Default Audio Configuration.
 - c. Use the up and down arrows to adjust the audio delay value.
 - d. Select the EQ Preset drop-down menu, and select an available preset.
 - e. Click Save All.

For more instructions on configuring the Dolby IMS3000 audio, refer to the *Dolby IMS3000 User's Manual*.

9.3 Connecting the Dolby IMS3000 to a cinema audio processor

You can connect the Dolby IMS3000 to an external cinema audio processor to output up to 16 channels of AES3 audio.

Prerequisite

You need two CAT5e or greater Ethernet cables for this task.

Procedure

- 1. If the cinema audio processor does not have RJ-45 ports but has a single 25-pin D-connector, connect an RJ-45 to 25-pin D-connector audio adapter to the cinema audio processor.
- 2. Connect one end of the first Ethernet cable to the **AES-OUT 1-8** connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the **A** port on the RJ-45 to 25-pin D-connector adapter.
- 3. Connect one end of the second Ethernet cable to the **AES-OUT 9-16** connector port on the Dolby IMS3000 front panel, and then connect the other end of this Ethernet cable to the **B** port on the RJ-45 to 25-pin D-connector adapter.
- 4. In the Dolby IMS3000 web UI, add the cinema audio processor as a raw device in **Device Manager**, and then save the settings.

9.4 Connecting more than one Dolby DAC3202 or Dolby Multichannel Amplifier or mixing devices

You can use Dolby audio devices such as the Dolby DAC3202 and Dolby Multichannel Amplifier together, or you can mix and match. Refer to the *Dolby Multichannel Amplifier User's Manual* for more information.



Note: The Dolby DAC3201 uses a different protocol and is not supported for use with the Dolby IMS3000.

Configuring HDMI settings

You can use the alternative inputs on the Dolby IMS3000 to switch to a High-Definition Multimedia Interface[™] (HDMI[™]) input source.



Figure 10-1 Dolby IMS3000 front panel

HDMI-IN

10.1 Adding an HDMI input source as a live composition playlist

You can add a live composition playlist (CPL) for the HDMI input source to the Dolby IMS3000.

- 1. Take an HDMI cable, and connect it to the Dolby IM3000 front-panel HDMI-IN input connector.
- 2. Take the other end of this HDMI cable, and connect it to the alternative input source.
- 3. In the Dolby web UI, scroll to Setup & Maintenance > Playback Settings > Live Manager to configure the HDMI settings.

	Cinelister/Scheduler	Live Manager	Streamlt Manager	
🖵 Status	Live Composition Playl	ist		
	Dolby StreamIt Ilve from: 10.209.1.141			
Cinelister	Local Live live from: 127.0.0.1			
Cinema Audio				
Macros				
💻 Device Controller	Create a new Live Com	position		
₩ Diagnostics	Live source device type:	Mediablock HDMI		•
Log Viewer	Content title:	Mediablock HDMI		
🔅 Setup & Maintenance				1 *
Playback Settings	Duration:	1 hour(s) 0 minute(s) 0 second(s)	
Command Terminal	Create			
Device Management				
System Settings				
Add-Ons				

Figure 10-2 Live manager

- 4. Use the Live source device type drop-down menu to add Mediablock HDMI.
- 5. Enter a content title in the **Content title** field, if needed.
- 6. Enter any necessary information, and then click Create.
- 7. When finished, make sure to add this live CPL to the show playlist, to ensure the switch to the HDMI input source.

10.2 Switching to an alternative HDMI input source

Use the **HDMI-IN** input connector on the Dolby IMS3000 front panel to switch to an alternative HDMI input source.

- 1. In the Dolby web UI, click **Device Controller** to add the alternative HDMI input source.
- 2. In the **Registered** section, select the IMS device to connect.
- 3. In the Input drop-down menu, select HDMI for the input source.

Dev	ice Controller		
IMS			
🚍 Bro Gei	wse Projectors 🕞 Exit		fo
Input	Internal	Ť	\triangle Please use the Live Manager In order to play HDMI content
Scating	HDMI SDI		



Configuring AES auxiliary inputs and outputs

The Dolby IMS3000 supports several digital inputs that can be configured in different ways to support several alternative workflows. Note that the Dolby IMS3000 does not support any analog inputs or outputs through the **AUX AES** connector.

If the input source is analog, use an analog-to-digital converter. If analog output is required, use a digital-to-analog converter.

You can use the alternative inputs on the Dolby IMS3000 to add a microphone input, add a monitor, add a fader input, and configure additional AES auxiliary inputs and outputs.



Figure 11-1 Dolby IMS3000 front panel



11.1 Adding a microphone

Use the **AUX AES** input connector on the Dolby IMS3000 front panel to add a microphone input.

- 1. Connect a cable with an RJ-45 connector into the **AUX AES** input connector on the Dolby IMS3000. Next, connect the other end of this cable to a digital device (such as a microphone or analog-to-digital adapter).
- 2. In the Dolby web UI, scroll to **Cinema Audio** > **Microphone** to configure the microphone settings.

Microphone										
• There is no Microphone configured. Go to AUX AES Inputs and select Microphone to enable it.										
Audio Delay (ms) EQ Preset	0 🗘 preset0	•								
Output channels	Center (Format 64)	•								
Save										

Figure 11-2 Microphone

3. When finished, click **Save**.

11.2 Adding a monitor

Use the AUX AES output connector on the Dolby IMS3000 front panel to add a monitor.

Procedure

- 1. Connect a cable with an RJ-45 connector into the **AUX AES** output connector on the Dolby IMS3000. Next, connect the other end of this cable to a digital monitor or a digital-to-analog adapter.
- 2. In the Dolby web UI, scroll to **Cinema Audio** > **AUX AES Inputs/Outputs** to configure the monitor settings in the **AES Outputs** section.

DOLBY. IMS3000 - 199000	Screen: IMS Monitor Output: Not User Level: root Time: 1:35	1000 Implemented yet 🔧 / Administrator pm					
002 1	Default Audio Config	AUX AES Inputs/Outp	Microphone	Equalization	Auditorium	Routing	Array Delays
🖵 Status							
🕒 Cinelister	AES Input 1 AES Input 2	Non Sync (1) Non Sync (2)	:	Balanced Balanced			
⊥ Ingest	AES Outputs						
🞜 Cinema Audio	AES Output 1 Ch 1	Booth Monitor	•				
"O Macros	AES Output 1 Ch 2	SMPTE Sync	•				
E Device Controller	AES Output 2 Ch 1 AES Output 2 Ch 2	HI W	;				
Diagnostics	Save						
Log Viewer							
Setup & Maintenance							

Figure 11-3 Monitor

11.3 Adding a fader

You can only use one Cat. No. 868 remote unit at a time with the Dolby IMS3000. As soon as the remote unit is connected, it is live and communicates with the Dolby IMS3000. You can adjust the level using the Dolby IMS3000 web UI or the fader. The changes display on both.



Note: The combined length of cable connecting the remote unit to the Dolby IMS3000 must not exceed 100 meters (or 328 feet).

Procedure

1. Connect an Ethernet cable into the **FADER** input connector on the Dolby IMS3000. Next, connect the other end of this cable to a fader box.

You cannot put this cable through a network switch. It must be a direct connection.

2. In the Dolby web UI, scroll to **Cinema Audio** > **AUX AES Inputs/Outputs** to configure the fader settings in the **AES Inputs** section.

DOLBY. IMS3000 - 199000	Screen: IMSi Monitor Output: Not User Level root Time: 1:35	8000 Implemented yet 🔧 / Administrator pm					
0 0 4 P	Default Audio Config	AUX AES Inputs/Outp	Microphone	Equalization	Auditorium	Routing	Array Delays
🖵 Status	AES Inputs						
📙 Cinelister	AES Input 1 AES Input 2	Non Sync (1) Non Sync (2)	:	Balanced Balanced			
E Content	Save						
土 Ingest	AES Outputs						
🞜 Cinema Audio	AES Output 1 Ch 1	Booth Monitor					
P Macros	AES Output 1 Ch 2	SMPTE Sync					
Bevice Controller	AES Output 2 Ch 1 AES Output 2 Ch 2	HI VÎ					
	Save						
Log Viewer	<u> </u>						
🕏 Setup & Maintenance							

Figure 11-4 AES inputs and outputs

11.4 Configuring additional auxiliary AES inputs and outputs

You can configure additional inputs and outputs using the **AUX AES** input and output connectors on the Dolby IMS3000.

Procedure

1. In the Dolby web UI, scroll to **Cinema Audio** > **AES Inputs/Outputs** to configure any additional inputs and outputs in the **AES Inputs** and **AES Outputs** sections.

AES Inputs			
AES Input 1	Non Sync (1)	T	Balanced
AES Input 2	Non Sync (2)	.	Balanced
Save			
AES Outputs			
AES Output 1 Ch 1	Booth Monitor		
AES Output 1 Ch 2	SMPTE Sync	T	
AES Output 2 Ch 1	н	. *	
AES Output 2 Ch 2	VI	*	
Save			

Figure 11-5 AES inputs and outputs

Configuring the Dolby IMS3000 time zone

You can configure the Dolby IMS3000 web user interface (UI) to operate in any time zone. The clock in the device is a Real Time Clock (RTC) used with keys that unlock encrypted content. You can adjust this clock to compensate for small time drift, but you cannot change it beyond the limits set by DCI.

If the clock drifts beyond the limits, contact Dolby Cinema Technical Support.

12.1 Configuring the date and time

Configure the Dolby IMS3000 system date and time using **System Settings**.

Procedure

1. In the Dolby IMS3000 web UI, select Setup & Maintenance > System Settings > Date and Time.

	Date and Time	Events Configuration	Networking Configura	Power Management	Account Manager	Theater Properties	License Agreement
🖵 Status	Date and Time						
	Current Date:		Monday, 13 March 2017				
🖴 Cinelister	Current Time:						
E Content	Time Format:		12 Vpdate				
上 Ingest	Secured Clock:						
Cinoma Audio	Change time:		11 🔻 : 10 🔻	: 20 ¥ AM	 Update 		
	Time Zene						
" ^O Macros	Time Zone						
-	Time Zone:		America/Los_Angeles	▼ Upd	ate		
Device Controller	UTC Offset:						
✓ Diagnostics	Next DST change:		Sun Nov 5 01:59:59 2017				
Log Viewer							
🟮 Setup & Maintenance	NTP Servers						
Playback Settings	⊕ Add						
🔁 Command Terminal	Last Synchronization Dat	te:	Monday, 13 Mar 2017 06		utes and 30 seconds ago)		
Device Management	Last Synchronization Off	set:					
📰 Maintenance	Extra delay (seconds):						
🔧 System Settings	10 145 21 54	Doloto Tort					
Add-Ons	10.145.21.54	Delete	·				

Figure 12-1 Date and time

- 2. In the **Date and Time** section, select a time format, and then click **Update**.
- 3. Select the hour, minute, and second intervals.
- 4. Select either **AM** or **PM**, and then click **Update**.
- 5. In the Time Zone section, select the region of the world or city, and then click Update.

Configuring the Dolby IMS3000 user accounts

You can add, modify, and delete a user account on the Dolby IMS3000.

13.1 Adding a new user account

Use the **Account Manager** to add a new user account to the Dolby IMS3000.

Procedure

1. In the Dolby IMS3000 web UI, select Setup & Maintenance > System Settings > Account Manager.

Date and Time	Events Configuration Networking Configura Power Management Account Mana	ger Theater Properties	License Agreement		
- Hew					
Login	Full Name			Login Type	Group
admin					SuperUsers
ingest					
ingestkdm					Ingests
manager					ShowManagers
				System	



- 2. Click New.
- 3. In the **Add User** window, enter a log-in name and a full name for the new user account.

Add User			×
Login:	JoeDoe		
Full Name:	JoeDoe		
Group:	Projectionists		T
Login Type:	System		•
Password:		good	
Confirm:			
Save	Canc el		



- 4. Use the **Group** drop-down menu to select the type of user account.
- 5. Use the **Login Type** drop-down menu to select the level for the log-in.
- 6. Enter a password, and then confirm the password.
- 7. When finished, click **Save**.

13.2 Modifying a user account

You can modify a user account created previously and change any user privileges, passwords, and names associated with a user account in the **Account Manage**r.

Procedure

1. In the Dolby IMS3000 web UI, select Setup & Maintenance > System Settings > Account Manager.

Date and Time	Events Configuration Networking Config	ura Power Management	Account Manager	Theater Properties	License Agreement		
- New							
Login	Full Name					Login Type	Group
							SuperUsers
ingest						System	
ingestkdm						System	Ingests
manager							ShowManagers

Figure 13-3 Account manager

2. Click	а	user	account.
----------	---	------	----------

la New			
Login	Full Name	Login Type	Group
admin		System	SuperUsers
doremi		System	Projectionists
ingest		System	Projectionists
ingestkdm		System	Ingests
manager		System	ShowManagers
root	root	System	Administrators



3. In the Edit User window, edit any fields and then click Close.



Figure 13-5 Edit User window

13.3 Deleting a user account

Use the **Account Manager** to delete a user account created previously on the Dolby IMS3000.

By default, six user accounts are hard coded into the system software and cannot be deleted or modified:

- admin
- doremi
- ingest
- ingestkdm
- manager
- root

Procedure

1. In the Dolby IMS3000 web UI, select Setup & Maintenance > System Settings > Account Manager.

Events Configuration	Networking Configure	Power Management	Account Manager	Theater Properties	License Agreement			
Full Name							Login Type	Group
								SuperUsers
							System	
							System	ingests
								ShowManagers
	Events Configuration Full Name In	Events Configuration Networking Configuration Full Name	Events Configuration Networking Configuration Power Management Full Name	Events Configuration Networking Configura Power Management Account Manager	Events Configuration Networking Configura Power Management Account Manager Theater Properties Fill Name	Events Configuration Networking Configura Power Management Account Manager Theater Properties License Agreement Fill Name	Events Configuration Networking Configuration Power Management Account Manager Theater Properties License Agreement Fill Name	Events Configura Power Management Account Managem riff Name Light Type riff Name System riff Name System

Figure 13-6 Account manager

2. Hover over the user account, and then click the **X** that appears.

A New				
admin		System	SuperUsers	
		System		
ingestkdm				
JoeDoe	Joeboe	System	Projectionists	
manager		System	ShowHanagers	

Figure 13-7 Account manager

3. In the small dialog window that appears, confirm the deletion operation and then click **OK**.

Configuring the ingest content source

You must configure the file transfer protocol (FTP) settings for each ingest content source you add to the Dolby IMS3000. Afterward, you can ingest content from that source to the Dolby IMS3000.

14.1 Adding a new ingest content source

Add a new ingest content source to the Dolby IMS3000 using the Content Feed Manager.

Procedure

1. In the Dolby IMS3000 web UI, select Setup & Maintenance > Device Management > Content Feed Manager.

Device Manager	Content Feed Manager	NAS Manager		
⊕ New ⊖ Dele	te			
Save	Revert			

Figure 14-1 Content feed manager

- 2. Click New.
- 3. In the **Identifier** field, enter a name for the ingest content source.
- 4. In the Ingest Protocol drop-down menu, select the ingest protocol.
- 5. Enter an IP address for the ingest content source.
- 6. Enter a user name and password, and then click **Advance Options** to expand the menu.

Device Manager	Content I	eed Manager	NAS Manager	
⊕ New ⊖ Delete				
New Server 1		Identifier:	New Server Source 1	
		Ingest Protocol:	FTP.	
		Server IP:	0.0.0.0	Test
		Username:	manager	
		Password:		
		Remote Path:		
		Hide advanced o	ptions	
		💟 Authorize "pl	ay while ingest" from this server	
		File type to scan:		
		Key Delivery N	Aessage 📲 Dolby License 🔽 Composition Playlist	
		Show Playlist	🔀 Installation Package	
Save	levert			

Figure 14-2 Content feed manager

- 7. In the expanded **Advance Options** menu, choose the type of content to ingest from the source into the Dolby IMS3000.
- 8. When finished, click **Save**.

14.2 Removing an ingest content source

You can remove an ingest content source using the **Content Feed Manager**.

- 1. In the Dolby IMS3000 web UI, select Setup & Maintenance > Device Management > Content Feed Manager tab.
- 2. Select the ingest source, and then click **Delete**.

	Device Manage	r Content F	eed Manager	NAS Manager	
Status	⊕ New ⊖	Delete			
	New Server Source	1	Identifier:	New Server Source 1	
📇 Cinelister			Ingest Protocol:		
E Content			ingest Protocol.	FIP	
↓ Ingest			Server IP:	10.209.1.163	— Test
- ingest			Username:	manager	
🎜 Cinema Audio			Password:		
.O Macros			Remote Path:		
🚐 Device Controller			Advanced option	S	
<u>₩</u> Diagnostics					
Log Viewer					
🕸 Setup & Maintenance					
Playback Settings					
🔁 Command Terminal					
Device Management					
📰 Maintenance					
🔧 System Settings					
🖬 Add-Ons					
	Save	Revert			

Figure 14-3 Content feed manager

Ingesting KDMs into the Dolby IMS3000

You must ingest a KDM to unlock an encrypted clip, which is also known as a CPL, on the Dolby IMS3000. Once the content is unlocked, you can play that CPL in a show.

15.1 Ingesting a KDM using an external drive

You can use an external drive to ingest a KDM into the Dolby IMS3000.

Procedure

- 1. Load the KDM files onto an external drive, and insert it into a USB port or eSATA port on the Dolby IMS3000 front panel.
- 2. In the Dolby IMS3000 web UI, scroll to Ingest > Ingest Scan.

	Ingest Scan	Ingest Monitor	Upload	
🖵 Status	C Refresh			
-	Select a location		P'ngest	
💾 Cinelister				
E Content				
🛓 Ingest				
Cinema Audio				
" ^O Macros				
💻 Device Controller				
<u>W</u> Diagnostics				
Log Viewer				
🗘 Setup & Maintenance				

Figure 15-1 Ingest scan

3. Click the Select a location drop-down menu, and select Local Storage.

	Ingest Scan	Ingest Monitor	Upload
🖵 Status	C Refresh 🛓 Inges	st 🔲 Select all 🦻	
	Select a location	•	
💾 Cinelister	Select a location		
	Local Storage		
🖪 Content	All Nas New Server Source 1		
🚣 Ingest			



4. Select a KDM, and then click **Ingest**.

If the KDM is not visible, it could be because the KDM(s) are not targeted to this Dolby IMS3000.

You can also select multiple KDMs by clicking on all of the files you wish to load, and then clicking **Ingest**.

As the KDM is ingested, the **Ingest Monitor** page appears and displays the status of the operation.

DOLBY. IMS3000 - 199000	Screen: M45000 Nonito: Output: Not Implemented yet Juni ruvet: revol. Administrator Time: 237 PA		Fader Nute	
001	Ingest Scan Ingest Monitor Upload			R C UE La Ra La Ra La Pa
	Cancel Delete @ Pause O Besume O Cancel Delete all	urrent lagest		
	Status Description	Schedule	id Started	Finished
Be Cinelister	> 2K Flat Subcitle Test (Encrypted) 2.2.2 (50)	2016-10-	24 03:57:12 PM 2016-10-24 3:57:12 PM	
El Content	A 2K Alifps Flat Subtitle Test (Encrypted) 2.2.2 (Se)			
	A 2K 48fps Scope Subtitle Test (Encrypted) 2.2.2 (5ta)			
± ingest				
🞜 Cinema Audio				
"O Macros				
Device Controller				
🛃 Diagnostica				
Setup & Maintenance				
	 Patracting essance from WXF Time(Test 'a71119b) cbd5 arec 30th cbd5/7553949' 			
	asset extracted [17/067c2-446d-4b15-8703-2/00b4538691]			d 100%
	asset extracted [1168ea3d-sall-saes-99d1-60e2/69bsa0]			
	asset extracted [abdd715b-967a-4644-878a-3519f078a235]		Total Progre	us 100%
	kdm trigger unwrap of d9063408-6cb6-4cs3-8f7d-s069138d1edf		ious Progres	
		1		

Figure 15-3 Ingest monitor

Ingesting content into the Dolby IMS3000

You can ingest content into the Dolby IMS3000 from a local storage device connected through USB or eSATA cable. You can also ingest content over a network from another Dolby server, Dolby Theatre Management System (TMS), network-attached storage (NAS), FTP site, or satellite delivery server.

16.1 Ingesting content

Use **Ingest Scan** to ingest content from a local storage device, NAS, or a satellite delivery server.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Ingest > Ingest Scan.

	Ingest Scan	Ingest Monitor	Upload	
🖵 Status	🕄 Refresh 🛓 Ingest			
-	Select a location		T P'ngest	
📇 Cinelister				
🗈 Content				
⊥ Ingest				
🎜 Cinema Audio				
P Macros				
💻 Device Controller				
<u>₩</u> Diagnostics				
Log Viewer				
Setup & Maintenance				



2. Click the **Select a location** drop-down menu, and select the content source.

	Ingest Scan	Ingest M	onitor	Upload
Status	C Refresh			
	Select a location	•		
💾 Cinelister	Select a location			
	Local Storage			
Di Content	All Nas			
	New Server Source 1			
上 Ingest				



3. Select the content, and then click **Ingest**.

You can also select multiple content items by pressing the Ctrl button.

	horsen MEDDA manner Oktopet det Ingelenested yn % Der Lones maan Alweidenbeur Tena 2,214*	.o: •
0 0 4 1	agat faat lages Micho Hand	
	Defense A Marine Company	
B-Centralize	Network and printing and an and a second sec	
El Camero	6 Statement of Jacob Annual Statement	
T also	A DEFENSE R. M. J. P. A. S. MIRER	
Contra Anto	(See Asses) See 111 (19)	
P 1100	Easter Accounty Server, 2.2.5 (Sec)	
Devis Contailor	Instant Streep in Sector 2	
At Degentes		
12 Log Viewer	(g) New Denne (Juge Far)	
C Security & Waterson on the	See Server, Juge, Far., St.	
	6 BP080,897,BHR,B,B,B,BBBB,BB	
	🗴 экономистична, на различна, на различна, на	
	😝 ana ta U (a a)a ai ja at annu (at	
	A MARCHART CONTRACTOR AND A CONTRACTOR	
	Big-ty-th/1812013-te-to-te-th/1000000000000	
	See and the product of the second	
	Assist frond	
C Doch Carthall	ONUE HE \$500 IF MILLS I HONSE I \$500 I MILLS	H2 09+30 1

Figure 16-3 Selecting content items

As the content item is ingested, the **Ingest Monitor** page appears and displays the status of the operation.



Figure 16-4 Ingest monitor

16.2 Canceling an ingest operation

Use the **Cancel** button to cancel an ingest operation.

Procedure

- 1. In the Dolby IMS3000 web UI, scroll to Ingest > Ingest Monitor.
- 2. Select one or more ingest operations, and then click **Cancel**.

16.3 Pausing an ingest operation

Use the **Pause** button to pause an ingest operation.

Procedure

- 1. In the Dolby IMS3000 web UI, scroll to Ingest > Ingest Monitor.
- 2. Select one or more ingest operations, and then click **Pause**.

16.4 Resuming an ingest operation

Use the **Resume** button to resume an ingest operation.

- 1. In the Dolby IMS3000 web UI, scroll to Ingest > Ingest Monitor.
- 2. Select the ingest operation, and then click **Resume**.

Managing show playlists

The Dolby IMS3000 allows you to build a new show playlist (SPL), edit an SPL, delete an SPL, and manage all SPLs. In addition, you can view and assign specific properties for each SPL.

17.1 Building a new show playlist

Use the **Cinelister Editor** page to build a new SPL.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Cinelister > Cinelister Editor.

	Cinelister Editor Cinelister Pleyback Cinelister Scheduler		
🖵 Status	😋 Refresh 🖿 New 🎥 Open 💾 Save 📄 Properties 🖿 Deleta		
📇 Cinelister	All available elements	Show Playlist	
Fil Content	All Elements T	SPL: Show Playlist, 20	
+ Insert	Automation Cues		
	Dim lights		
🞜 Cinema Audio			1
O Macros			1500
			Ψ
Device Controller	Light off		•
W Diagnostics			22
Log Viewer	Rewind		
A Setup & Maintenance	Stop playback		
	Peature		
	6 HFR_48lps_30_Unencrypted		
	Live		
	Dolby Streamit		
	Local Live		
	Faten		
	S Black 3D		
	9 Black 3D 48		
	Showplaylist		
	New show playlist		
Quick Controls		Cante const l'exclusiones	

Figure 17-1 Cinelister editor

- 2. Click New.
- 3. Find and select the content to add to the show playlist by clicking one time on each content item.
- 4. When finished adding content, click **Save**.



Figure 17-2 Cinelister editor

5. In the window, enter a name for the new SPL and then click **Save**.



Figure 17-3 Save show playlist

6. In the **Cinelister Editor** page, click **Refresh**.

The new SPL appears under the content heading for **Show Playlist**.
DOLBY.	Screm BBS000 Homor Gülger, Mei engelministet yst 🔧 User Leist: reef / Adeloityter Time: 4.22 M	Fader Mute 0.5 ‡ 4 0
	Cinelister Editor Ciselister Playback Ciselister Scheduler	
Status	All multichle elements	Show Dindiri
📇 Cinelister		Philipping and the second seco
D Content		SPL: Slow Playins, 20, HPR
1 ingest	Back	00:00:00 Black
		00:01:01 AURO-PROMO-V2_ADV_F_EN-CN_11-1_2K_G5_20120117_0V_99I-EN
Cinema Audio	Black 3D 4B	00:01:53 AMAZ-SPIDERMAN-20_TLR-1_5_EN-XX_US-GB_51_2X_SPE_2011071_
P Macros		00:04:21 FAST-FURIOUSA_TER-2A_F_EN-XX_CA_S1_2K_UP_20090116_ASC
1.2	WALLE_RIG IA_3_EA4X_US-0_51_2R_UI_20070551_FDC	00.06.37 HFR_488ps_30_Unencrypted
E Device Controller	Show Playler	•
W Diagnostics	Test	
C Los Viewer	2X Alfos Fiat Subtitie Test (Increased) 2.2.2 (95a)	
*	2K Alfos Full Substitue Test (Encrypted) 2.2.2 (61e)	
Setup & Maintenance	2K 480s Scope Subtitle Test (Encrypted) 2.2.2 (@e)	
	2X Flat Subtitle Test (Encrypted) 2.2.2 (5%)	
	2X Full Subotte Test ((incrypted) 2.2.2 (95e)	
	2K Scope Subtitle Test (Encrypted) 2.2.2 (98a)	
	4K Flat Subtitle Test (Encrypted) 2.2.2 (55e)	
	4K Full Subbitle Test (Encrypted) 2.2.2 (Ste)	
	4K Scope Subtitle Test (Encrypted) 2.2.2 (90)	
	CPL_30min_audio_raster_16ch	
	0-80X-Interop-E_TST_F_LN_US_31_20130218	
		Start Lime Elements

Figure 17-4 Cinelister editor

17.2 Opening a show playlist

Use the **Cinelister Editor** window to open an SPL.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Cinelister > Cinelister Editor.

DOLBY.	Norme SECON Manner Delayer Relational of the Start Development of the Second Se		*****
	Chaine Baller Baller Chaine Chaine Baller	New Rivelat	
B-Crelater			
Diament .	Address A	SPL: Stee Papilo, 32	
▲ agent	Alternational Auto Provo et John J. (In Co. (1) 1, 30, 61, 31(311); Dr. (In Exception Academ)		†
S Contro Anto			+
Ø 11000	See, Sereni Japp 26, 30		653
	 Nov, Sereni, Lopi, Sur, 32 		8
Devis Canceller	Price		۷
W Degentes	ANDMAN, THE A DRIVEN SELECTION, TO STREET, AND COLUMN 49, 01		-
12 Log Viewer	final feed from \$1		
O Lines & Barranson	 Demonstration 		
	Constanting of the second s		
	Surveying Concerns		
	C Mill, all pr. 30, Smerringsteel		
	Analysis (10, 10, 10, 1, 1, 100, 11		
	Instagener		
C Durch Carolina	Strend TSY AND THREAD HERE ACT OF		

Figure 17-5 Cinelister editor

- 2. Click Open.
- 3. In the window, find and select the SPL and then click **Ok**.



Figure 17-6 Opening a show playlist

The SPL opens in the right section of the **Cinelister Editor** page.

17.3 Viewing the properties for a show playlist

Use the Cinelister Editor window to view specific properties for an SPL.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Cinelister > Cinelister Editor.

	Sarani Brizzoni Sanani Duburu Bal Ingenerated ya % Una Londi Administrator Tona 2018 ¹⁰⁰		0.0 ; 40
101 101 1 21 1 71	Contract Contract Property Contract Contract		
	O faire Birer Brann Birer Street		
-	All available elements	Show PlayEnt	
El Carriert	Allow 24	SPL: Store Playlin, 20	
≜ topor	Auto-Hannel Auto-Hanne Aguite () () () () () () () () () (۲.
S Contra Antio			4
0 marce	See, Javeni, Japp, 24, 30		F 1
	New Jorens, Japp, Far., 82		Ψ.
Denis Cantoline	File		•
W Depenting	ANTON SECTOR 2014 ST 21 24 29 200000 (2014) 2017		
12 Log Viewer	Back Josek Dates (M		
d tons t Bernard	DE HARD S COP, YTE S ER KELDY, YLANKOL, JK, YCY, SEERING, SLA, DV		
	Develo Administração		
	a set all all a set and a set all a set a		
	Automa Will 10 100 st bills of		
	Matgazy		
	feed the complete		
	SUNSUL DR. SHARVERA JAMAN		
	SUSSECTION AND AND ADDRESS		
C Deck Cartons		Hart Tara Dessere	

Figure 17-7 Cinelister editor

- 2. Click Open.
- 3. In the window, find and select the SPL and then click **Ok**.



Figure 17-8 Opening a show playlist

- 4. In the Cinelister Editor window, click Properties.
- 5. In the **ShowPlaylist Properties** window, view the information and then click **Close**.

ShowPlaylist Properties			×
Name:	Show Playlist		
Display Mode:	2D		
Duration:	02:06:33		
HFR:			
Close			

Figure 17-9 ShowPlaylist Properties window

17.4 Deleting a show playlist

Use the **Cinelister Editor** window to delete an SPL.

Procedure

1. In the Dolby IMS3000 web UI, scroll to **Cinelister > Cinelister Editor**.

DOLBY.	Normen BERDER Inserter Forsten der Inspirenseller of S Sport Forsten mehl, (Anfreiseltender Tenne Lagener Commen Editor Genetister Polyteck Genetister (utstelluter	0.0 \$ 4 0	
	Distant Barren Briter Biter Distantes Biter	The State	
Be Crealister	A Contraction of the Contraction	PL See Paris, 2	
 Larger 	Advertament Advertament Fight Cardin FL, Salvin		4 ⇒ 8 ∞ 8
() Quelo Cantoni	SERVER, M., SHRAVENA, SAMA REVER, Poor, Samperture, Sam yan, andre Am's Server Tey' Alle Stationale Heato Act Or	Net Tex (James	

Figure 17-10 Cinelister editor

- 2. Click Open.
- 3. In the window, find and select the SPL and then click **Delete**.

Show Playlist available on the server:	×
HFR Playlist	
Show Playlist	
Name: Show Playlist	
	F
Delete Cancel	

Figure 17-11 Deleting a show playlist

4. In the Cinelister Editor window, click Refresh.

Performing playback

You can perform video and audio playback of an SPL on the Dolby IMS3000.

18.1 Loading and playing a show playlist

To perform playback, you must first load the SPL in the **Cinelister Editor** window.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Cinelister > Cinelister Editor.



Figure 18-1 Cinelister editor

- 2. Click Open.
- 3. In the window, find and select the SPL and then click **Ok**.

HFR Playlist 01 Name: Show Playlist 01 Ok Cancel	Show Playlist available on the server:	×
Show Playlist 01 Name: Show Playlist 01 Ok Cancel	HFR Playlist	
Name: Show Playlist 01	Show Playlist 01	
Name: Show Playlist 01		
Ok Cancel	Name: Show Playlist 01	
Ok Canc el		
	Ok Canc el	

Figure 18-2 Open show playlist

4. Click the **Cinelister Playback** tab, and then click **Schedule** to place the system into **Manual** mode, which displays the playback control options.

If the playback control options are not visible, the system is in Schedule mode. Note that in Manual mode, the Dolby IMS3000 does not play any scheduled shows.



Figure 18-3 Cinelister playback

5. In the Cinelister Playback window, click Play.





As each CPL item plays, a green dot appears next to its name. After each CPL item finishes, a yellow dot appears next to its name.



Figure 18-5 Cinelister playback

- 6. Click **Pause** to pause playback, if needed.
- 7. Click **Eject** to stop playback and remove the SPL from the **CineLister Playback** window.

Playback	Controls	
	BRIDESMAIDS_TLR-1_F_EN-XX_US-GB_51_2K	
Play		
	00:01:02 / 00:02:24	remaining: 00:01:22
	Show Playlist 01*	
00:04:13 /		remaining: 00:03:55
	к « 🕞 🕕 ж н 🔺	
Mode: P	lay then Eject ¥	

Figure 18-6 Cinelister playback

8. If needed, place the system back into **Schedule** mode.

18.2 Creating a show playlist schedule for playback

You can create a schedule to play back the SPL using **Cinelister Scheduler**.

Procedure

1. In the Dolby IMS3000 web UI, scroll to Cinelister > Cinelister Scheduler.

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Figure 18-7 Cinelister scheduler

- 2. Click **Change Date** to select the desired date for the SPL playback schedule.
- 3. Click **New** to add a new SPL playback schedule.
- 4. In the **New Schedule** window, define the playback schedule, and then click **Create Schedule**.

New Schedule		
Show Playlist:	Show Playlist	
Schedule Show On:	10-25-2016 at 12 am • : 31 •	
Expected End Time:	12:46 ^{am}	
Repeat:	Mon ✓ Tue Wed Thu Fri Sat Sur During the next 1 ▼ week(s) Every 25 th of the next 1 ▼ month(s)	1
Create Schedule	Cancel	

Figure 18-8 New Schedule window

The new schedule appears in the **Cinelister Schedule**r page.

5. To change how the schedule appears in the **Cinelister Schedule**r page, click **View** and select an option.

The Cinelister Scheduler page opens in Calendar View by default.

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Figure 18-9 Cinelister scheduler

Digital and analog audio converters

The Dolby IMS3000 **AUX AES** connector supports AES digital audio input and output. The **AUX AES** input supports AES3-EBU (balanced), or S/PDIF (unbalanced). There are no analog inputs or outputs on the Dolby IMS3000.

If the input source is analog, use an analog-to-digital converter. If analog output is required, use a digital-to-analog converter.

In the **Cinema Audio** menu **AES Input/Outputs** tab, you need to select the appropriate balanced or unbalanced type. In the case of unbalanced audio, connect your signal to the Plus pin and the ground to the Minus pin. See Chapter 21.

If connecting an unbalanced source, the cable impedance must be 75 Ω . If connecting a balanced source, the cable impedance must be 110 Ω .

19.1 Digital-to-analog audio converters

This table provides some suggested digital-to-analog converters used to integrate with the Dolby IMS3000.

Note: This is not a definitive list and may not work with an existing audio setup. Make sure to test the Dolby IMS3000 with one of these converters to avoid performance issues.

 Table 19-1
 Digital-to-analog audio converters

Manufacturer	Product Name
Gra-Vue	MIO DA-AUD D/A converter
Broadcast Tools	DAC-1 24-bit D/A converter
Kramer	6410N D/A converter
RDL	HR-DAC1 D/A converter

19.2 Analog-to-digital audio converters

This table provides some suggested analog-to-digital converters used to integrate with the Dolby IMS3000.

Note: This is not a definitive list and may not work with an existing audio setup. Make sure to test the Dolby IMS3000 with one of these converters to avoid performance issues.

Table 19-2 Analog-to-digital audio converters

Manufacturer	Product Name
Gra-Vue	MIO AD-AUD A/D converter
Broadcast Tools	ADC-1 Plus 24-bit A/D converter
Kramer	6420N A/D converter
RDL	HR-ADC1 A/D converter

19.3 Bidirectional audio converters

This table provides some suggested bidirectional analog-to-digital and digital-to-analog converters used to integrate with the Dolby IMS3000.

Note: This is not a definitive list and may not work with an existing audio setup. Make sure to test the Dolby IMS3000 with one of these converters to avoid performance issues.

Table 19-3 Bidirectional audio converters

Manufacturer	Product Name
AJA	ADA4 four-channel bidirectional A/D and D/A converter
Behringer	Ultramatch Pro SRC2496 bidirectional A/D and D/A converter

Dolby IMS3000 audio system diagrams

The Dolby IMS3000 audio system diagrams provide useful information to help you verify setup options and avoid performance issues.

20.1 Dolby IMS3000 with Dolby DAC3202 diagram



This diagram illustrates the Dolby IMS3000 with Dolby DAC3202 audio system setup.





Note: For the list of suggested digital and analog audio converters, refer to Chapter 19.

20.2 Dolby IMS3000 with Dolby Multichannel Amplifier diagram



This diagram illustrates the Dolby IMS3000 with Dolby Multichannel Amplifier (DMA) audio system setup.

Figure 20-2 Dolby IMS3000 with Dolby Multichannel Amplifier audio system diagram



Note: For the list of suggested digital and analog audio converters, refer to Chapter 19.

Audio adapter pinouts

This chapter provides useful audio adapter pinout information to help you connect the Dolby IMS3000 to external devices.

21.1 RJ-45 Ethernet cable color codes

These RJ-45 Ethernet cable color codes provide useful information to help you connect the Dolby IMS3000 to external devices.

Pin number	Color
1	White with orange stripe
2	Orange with white stripe
3	White with green stripe
4	Blue with white stripe
5	White with blue stripe
6	Green with white stripe
7	White with brown stripe
8	Brown with white stripe

Table 21-1 RJ-45 Ethernet cable color codes



Figure 21-1 RJ-45 connector

21.2 Auxiliary input audio SPDIF for RCA to RJ-45 unbalanced cable

Use this table to modify an Ethernet cable to create an SPDIF 1 and SPDIF 2 cable.

Note:There are two different Sony/Philips Digital Interface Format (SPDIF)
inputs on the Dolby IMS3000 RJ-45 AUX AES connector. You need two
RCA cables to connect an SPDIF source. The RCA impedance must be 75Ω.

Table 21-2 Auxiliary input

Signal/Designation	RJ-45 connector	RCA connector
SPDIF 1	Pin 1	Center pin
Ground for SPDIF 1	Pin 2	Ground/Shield
SPDIF 2	Pin 3	Center pin
Ground for SPDIF 2	Pin 6	Ground/Shield
Not used	Pin 4, 5, 7, 8	Not used

21.3 Auxiliary input audio AES3/EBU for XLR-F to RJ-45 balanced cable

Use this table to modify a cable to create an AES3/EBU for XLR-F to RJ-45 balanced cable.

Note: You can connect XLR or other balanced cables from an AES3 digital source.

Table 21-3 Auxiliary input

Signal/Designation	RJ-45 connector	XLR connector
AES IN channels 1/2 plus	Pin 1	Pin 2
AES IN CH 1/2 minus	Pin 2	Pin 3
Ground/Shield	No Connection	Pin 1
AES IN Channels 3/4 plus	Pin 3	Pin 2
AES IN channels 3/4 minus	Pin 6	Pin 3
Ground/Shield	No connection	Pin 1

21.4 Auxiliary input audio AES-3id BNC to RJ-45 unbalanced cable

Use this table to modify a cable to create an AES-3id BNC to RJ-45 unbalanced cable.

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and the second	

Note:You could also use a BNC 75Ω to XLR-M 110Ω adapter (for example,
Neutrik NADIT BNC-MX) with the balanced cable defined above in
Section 21.3. A word clock input would typically this cable.

Table 21-4 Auxiliary input

Signal/Designation	RJ-45 connector	BNC connector
AES IN channels 1/2	Pin 1	Center pin
Ground for channels 1/2	Pin 2	Ground/Shield
AES IN channels 3/4	Pin 3	Center pin
Ground for channels 3/4	Pin 6	Ground/Shield

21.5 Auxiliary output audio AES3/EBU for RJ-45 to XLR-M balanced cable

Use this table to modify a cable to create an AES3/EBU for RJ-45 to XLR-M balanced cable.

This section applies for any type of AUX AES3 output (HI/VI, booth monitor, or SMPTE sync signal).

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Note: The Dolby IMS3000 only supports balanced AES3/EBU outputs. If you need to connect to a device that only accepts unbalanced AES3 input, you need to add an XLR-F 110 Ω to BNC 75 Ω adapter (for example, Neutrik NADIT BNC-FX).

Table 21-5 Auxiliary output

Signal/Designation	RJ-45 connector	XLR connector
AES OUT channels 1/2 plus	Pin 4	Pin 2
AES OUT channels 1/2 minus	Pin 5	Pin 3
Ground/Shield	No connection	Pin 1
AES OUT channels 3/4 plus	Pin 7	Pin 2
AES OUT channels 3/4 minus	Pin 8	Pin 3
Ground/Shield	No connection	Pin 1

21.6 25-pin D-connector to dual RJ-45 adapter pinout

If connecting the output of the dual RJ-45 AES3 connectors to an external cinema audio processor, like a Dolby CP750, use this pinout.



Note: The Dolby IMS3000 contains a fully functional cinema audio processor. It does not supply Dolby Atmos audio to a Dolby CP850.

Dolby IMS3000 AES3 connector	25-pin D-connector	AES pair	AES channels
(1-8) Pin 1	Pin 14	1	Channels 1/2 plus
(1-8) Pin 2	Pin 2	1	Channels 1/2 minus
(1-8) Pin 3	Pin 3	2	Channels 3/4 plus
(1-8) Pin 6	Pin 16	2	Channels 3/4 minus
(1-8) Pin 4	Pin 17	3	Channels 5/6 plus
(1-8) Pin 5	Pin 5	3	Channels 5/6 minus
(1-8) Pin 7	Pin 6	4	Channels 7/8 plus
(1-8) Pin 8	Pin 19	4	Channels 7/8 minus
(9-16) Pin 1	Pin 8	5	Channels 9/10 plus
(9-16) Pin 2	Pin 21	5	Channels 9/10 minus
(9-16) Pin 3	Pin 22	6	Channels 11/12 plus
(9-16) Pin 6	Pin 10	6	Channels 11/12 minus
(9-16) Pin 4	Pin 11	7	Channels 13/14 plus
(9-16) Pin 5	Pin 24	7	Channels 13/14 minus
(9-16) Pin 7	Pin 25	8	Channels 15/16 plus
(9-16) Pin 8	Pin 13	8	Channels 15/16 minus

Table 21-6 25-pin D-connector to dual RJ-45 adapter pinout

AES audio channel pinouts

The Dolby IMS3000 AES audio channel pinouts provide useful information to help you verify setup options and avoid performance issues.

22.1 AES3 output 1–8

This table provides the AES3 output pinout information for channels 1–8.

Pin number	Description
1	Channels 1 and 2 plus
2	Channels 1 and 2 minus
3	Channels 3 and 4 plus
4	Channels 5 and 6 plus
5	Channels 5 and 6 minus
6	Channels 3 and 4 minus
7	Channels 7 and 8 plus
8	Channels 7 and 8 minus

 Table 22-1
 AES3 output 1–8 pin number and description



Figure 22-1 RJ-45 connector

22.2 AES3 output 9–16

This table provides the AES3 output pinout information for channels 9–16.

Pin number	Description
1	Channels 9 and 10 plus
2	Channels 9 and 10 minus
3	Channels 11 and 12 plus
4	Channels 13 and 14 plus
5	Channels 13 and 14 minus
6	Channels 11 and 12 minus
7	Channels 15 and 16 plus
8	Channels 15 and 16 minus

 Table 22-2
 AES3 output 9–16 pin number and description



Figure 22-2 RJ-45 connector

22.3 AES auxiliary input and output

This table provides the AES auxiliary input and output pinout information.

Pin number Description 1 AES input Channels 1 and 2 plus/SPDIF 1 input 2 AES input Channels 1 and 2 minus/SPDIF 1 ground 3 AES input Channels 3 and 4 plus/SPDIF 2 input 6 AES input Channels 3 and 4 minus/SPDIF 2 ground 4 AES output Channels 1 and 2 plus 5 AES output Channels 1 and 2 minus 7 AES output Channels 3 and 4 plus 8 AES output Channels 3 and 4 minus

 Table 22-3
 AES auxiliary input and output pin number and description

General-purpose input and output pinouts

The Dolby IMS3000 supports general-purpose input (GPI) and general-purpose output (GPO). GPI allows an external device to control some basic functions on the Dolby IMS3000. GPO allows the Dolby IMS3000 to control external devices, such as lighting or curtain controllers.

23.1 General-purpose input

This table provides the GPI pinout information.

Table 23-1 GPI pin	number and description
--------------------	------------------------

Pin number	Description
1	GPI 0 plus
2	GPI 0 minus
3	GPI 1 plus
4	GPI 2 plus
5	GPI 2 minus
6	GPI 1 minus
7	GPI 3 plus
8	GPI 3 minus

23.2 General-purpose output

This table provides the GPO pinout information.

Table 23-2	GPO pin r	number and	description
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Pin number	Description
1	GPO 0
2	GPO 1
3	GPO 2
4	GPO 4
5	GPO 5
6	GPO 3
7	+5 Voltage Direct Current (VDC)
8	Ground

Dolby IMS3000 API and SNMP

The Dolby IMS3000 supports Application Program Interface (API) that allows the Dolby TMS and other devices to control the system remotely. At launch, with system bundle v3.0.1, the system uses multiple APIs that control different sections of the Dolby IMS3000.

To access the APIs, contact Dolby Cinema Technical Support.

24.1 Application Program Interface and web services

The Dolby IMS3000 supports API that allows the Dolby TMS and other devices to control the system remotely.

Dolby TMS v4.2.1 and greater supports the Dolby IMS3000.

In addition to supporting the previous version of the Key-Length-Value (KLV) API that is used on earlier Dolby IMS products, the Dolby IMS3000 includes updated SOAP/web services for additional control of the Screen Management Server (SMS) and several new functions not supported in the previous version.

KLV API: Legacy control of the SMS functions include:

- Show playlist (SPL) creation and management
- SPL scheduling
- Ingestion of content over the network
- SMS Macros

SOAP/web services 1: Control of the SMS functions include:

- Legacy KLV API functionality
- Fader control
- Mute control
- Test signal generation

The WSDL file for this web service is available on the Dolby IMS3000 at this location: /dolby/share/wsdl/.

SOAP/web services 2: Control of the cinema audio processor functions similar to other Dolby Atmos capable processors. This web services API also supports the ability to look up useful information:

- Room configuration
- EQ settings
- Crossover settings
- Cinema processor status

The WSDL file for this web service is available on the Dolby IMS3000 at this location: http://<YOUR_IMS>:9090/cp/ws/smi/v1/services/SystemManagement?wsdl.

Insert the Dolby IMS3000 IP address in place of <YOUR_IMS>.

24.2 Simple Network Management Protocol

The Dolby IMS3000 supports remote monitoring through Simple Network Management Protocol (SNMP), which is a generic protocol used to monitor networked devices. It allows central management systems to get information or alarms from these devices. The Management Information Base (MIB) is stored on the Dolby IMS3000 at this location: /dolby/etc/snmp/.

Glossary

This table defines the terms used in this documentation.

Table 25-1 Terms		
	Term	Definition
	API	Application Program Interface
-	CPL	Composition playlist
-	DCI	Digital Cinema Initiatives
-	DHCP	Dynamic Host Configuration Protocol
-	FTP	File Transfer Protocol
	GPI	General-purpose input
	GPO	General-purpose output
	IP	Internet Protocol
	KDM	Key delivery message
	KLV	Key-Length-Value
	MIB	Management Information Base
	NAS	Network-attached storage
	RTC	Real Time Clock
	SMS	Screen Management Server
	SNMP	Simple Network Management Protocol
	SPDIF	Sony/Philips Digital Interface Format
_	SPL	Show playlist
_	TMS	Theatre Management System
	UI	User interface
-	USB	Universal Serial Bus
	VDC	Voltage Direct Current

This table defines the terms used in th

Documentation revision history

This table provides the documentation revision history.

Table 26-1 Documentation revision history		
Date	Issue	Description
21 March 2017	1	Initial release

 Table 26-1
 Documentation revision history