



**USER MANUAL FOR
SX-3000 STANDALONE INTEGRATED MEDIA BLOCK™**

SMS version 9.0

February 14, 2013





SX-3000 Standalone Integrated Media Block™

GDC Technology's Standalone Integrated Media Block™ ("IMB"), the SX-3000, the industry's first Standalone IMB™ eliminates the need for an external file server.

TABLE OF CONTENTS

1. INTRODUCTION	11
1.1. About This Manual	11
1.2. Safety Instructions	12
1.2.1. General Safety Instructions	12
1.2.2. Electrical Safety.....	12
2. SMS.....	13
2.1. About the SMS Interface	13
2.2. Accessing the SMS Interface.....	13
2.3. Understanding the SMS Interface	14
2.3.1. Main Menu	14
2.3.2. Playlist Menu	16
2.3.3. Scheduler Menu	19
2.3.4. Configuration Menu	20
2.3.4.1. General.....	20
2.3.4.2. CineCanvas	23
2.3.4.3. Assistance	24
2.3.4.4. Audio Option.....	25
2.3.4.5. Closed Captions Option.....	26
2.3.4.6 IMB Network Tab.....	27
2.3.4.7 IMB Storage Tab	29
2.3.5. SNMP Configuration.....	30
2.3.5.1. Introduction	30
2.3.5.2. Accessing the SNMP Configuration Interface.....	30
2.3.5.3. Understanding the SNMP Configuration Interface	32
2.3.5.3.1. General	32
2.3.5.3.2. Storage.....	33
2.3.5.3.3. Video Card	34
2.3.5.3.4. PCI	35
2.3.5.3.5. Sensors	36
2.3.5.3.6. Restart/Save/Cancel.....	37

2.3.5.3.7. Ethernet.....	38
2.3.6. Automation.....	39
2.4. Show Playlist.....	47
2.4.1. Create a Show Playlist.....	47
2.4.1.1. Access to Playlist Menu.....	47
2.4.1.2. Creating a Playlist.....	48
2.4.1.3. Editing Cues.....	49
2.4.1.4. Saving the Playlist.....	54
2.5. Show Schedule.....	55
2.5.1. Schedule a Show.....	55
2.6. Synchronizing Shows.....	61
2.6.1. Synchronizing Clips for 3D (MPEG2).....	61
2.7. IMB Configuration.....	63
2.7.1. CineCanvas™ and CineLink™ Configuration.....	63
2.7.2. Dolby 3D Setup.....	67
2.8. Series 2 DLP CINEMA® Projector Setup.....	69
2.8.1. Automation Setup.....	69
2.8.2. Subtitle Overlay.....	71
2.8.2.1. Subtitle Overlay Setup.....	71
2.8.2.2. Subtitle Language Selection.....	71
2.8.3. CineCanvas™ Support for Series 2 Projectors.....	75
2.9. Shutdown/Restart Application.....	76
2.9.1. Shutdown or Restart.....	76
3. CONTROL PANEL.....	77
3.1. About Control Panel.....	77
3.2. Control Panel Menu.....	78
3.3. Manual Automation Execution.....	79
3.4. Restarting the Control Panel.....	81
3.5. Shutting Down the System.....	82
4. CONTENT MANAGER.....	83

4.1. About the Content Manager	83
4.1.1. Introduction	83
4.1.2. Accessing the Content Manager.....	83
4.2. Content Management	84
4.2.1. Ingesting Content	84
4.2.2. Ingesting Content from USB Disk	86
4.2.3. Ingesting KDMs	88
4.2.4. Monitor Ingest Progress	89
4.2.5. Cancelling Ingest.....	90
4.2.6. Deleting Content.....	91
4.2.7. Checking Content Integrity	92
4.3. KDM Management	97
4.3.1. Manage KDM	97
4.4. Source Management	98
4.4.1. Adding a Data Source	98
4.4.2. Erasing a Data Source	101
4.4.3. Editing Sources	102
5. ADMIN PANEL	104
5.1. General Introduction	104
5.2. User Interface (UI)	105
5.2.1. Introduction	105
5.2.2. Admin Panel Access.....	105
5.2.2.1. Access via Control Panel	105
5.2.2.2. Access to Admin Panel Menu.....	106
5.2.2.3. Main Menu	107
5.3. Configuration & Maintenance	109
5.3.1. Storage System Management	109
5.3.1.1. Create new RAID array	109
5.3.1.2. Add Disk to RAID Array	112
5.3.1.3. Remove Disks from RAID Array	114
5.3.1.4. Monitor RAID Status.....	116

5.3.1.5. Hard Disk Information	117
5.3.1.6. Hard Disk Usage	119
5.3.1.7. Import RAID Array	120
5.3.1.8. Storage Performance	121
5.3.2. Diagnostics/Maintenance	123
5.3.2.1. Access to Diagnostics/Maintenance	123
5.3.2.2. Extract Logs & Configuration	124
5.3.2.3. Backup Configuration	125
5.3.2.4. Restore Configuration.....	126
5.3.2.5. Configure Timezone	128
5.3.2.6. Software Upgrade	129
5.3.3. System Information	131
5.3.3.1. Access to System Info.....	131
5.3.3.2. Software/OS Version	132
5.3.3.3. Hardware Information	133
5.3.3.4. Hotfix Information	134
5.3.4. Touchscreen	135
5.3.4.1. Access to Touchscreen.....	135
5.3.4.2. Select Touchscreen Type.....	136
5.3.4.3. Calibrate Touchscreen	138
5.4. User Manager.....	139
5.4.1. Access to User Manager	139
5.4.2. Add/Edit user.....	139
5.4.3 Delete User	141
5.4.4. Change Current User Password.....	143
5.5. DCI Compliance	144
5.5.1. Access to DCI Compliance	144
5.5.2. Offset RTC Time	145
5.5.3. Get SM Log	146
5.6. Quit/Shutdown	147
6. IMB OPERATION NOTES.....	149

6.1. Power Up Sequence	149
6.2. Power Down Sequence	149

Thank you for purchasing a GDC SX-3000 Standalone Integrated Media Block™ from GDC Technology Limited.

To ensure proper operation and to maximize the IMB's value, please review this User Manual. It will guide you through all the features and benefits of the new SX-3000 Standalone Integrated Media Block™.

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MANUAL DISCLAIMER

This manual is made with SMS version 9.0 and there might be slight differences depending on the software version the IMB is running. The contents, features and specifications stated in this manual are subject to change without notice due to continuous product development and improvements. In no other event shall GDC Technology Limited be liable for any loss of profit or any other commercial damages, including but not limited to special, consequential, or other damages.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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1. INTRODUCTION

1.1. About This Manual

This user manual provides instructions on how to use and manage the GDC SX-3000 Standalone Integrated Media Block™ (“IMB”). The user interface of the IMB consists of a few key components described in the diagram below **[Figure 1]**. The manual has sections on each of these components describing how it can be used to operate the IMB.

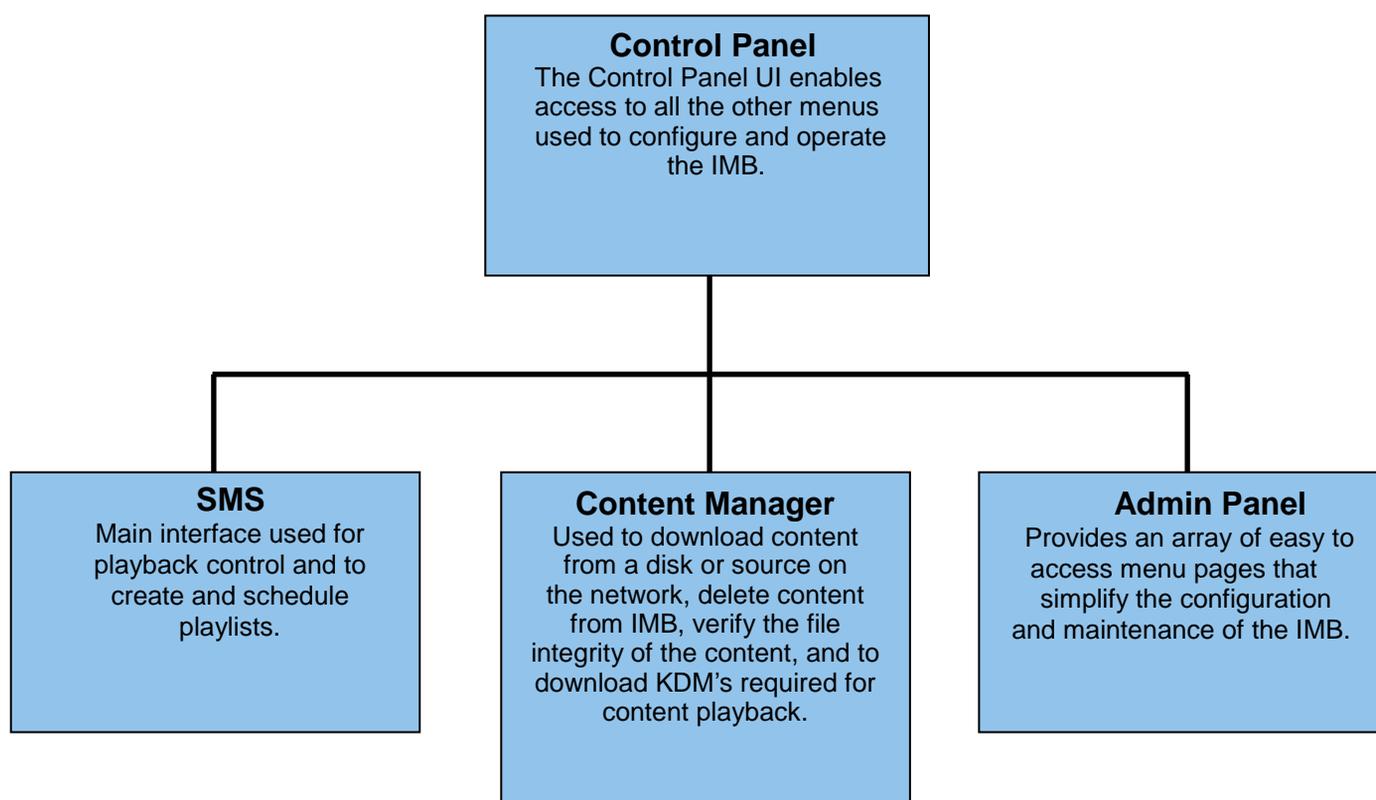


Figure 1 IMB UI components.

1.2. Safety Instructions

1.2.1. General Safety Instructions

- The IMB is intended for installation in a restricted access location.
- The operation environment required for the IMB should be 0°C - 40°C (32°F - 104°F).
- For PLUGGABLE EQUIPMENT, the socket outlet should be installed near the equipment and should be easily accessible.
- Before operating your IMB, please read this manual thoroughly, and retain it for future reference.
- Installation and preliminary adjustments should be performed by qualified GDC Technology personnel. All warnings on the IMB and in the documentation manual should be adhered to.
- All instructions for operating and maintaining the IMB must be followed closely.

1.2.2. Electrical Safety

Safety Warning

- Do not expose the IMB to rain or moisture, to prevent fire or electrical shock hazard.
- Use a dry cloth when cleaning the IMB.
- Do not block any ventilation openings.
- Do not install near any heat sources (e.g. radiators, stove or other apparatus that produce heat).
- Consult Tech Support for servicing or maintaining the IMB.
- You are cautioned that any change or modification not expressly approved in this manual or approved in writing by an authorized representative of GDC Technology could void your warranty and/or authority to operate this IMB.

2. SMS

2.1. About the SMS Interface

The SMS interface is used for playback control, creating and editing playlists, scheduling and also provides access to advanced configuration options.

2.2. Accessing the SMS Interface



Figure 2 SMS interface.

- 1 Enter the user password to access the **SMS** interface as seen in Figure 2.

2.3. Understanding the SMS Interface

2.3.1. Main Menu

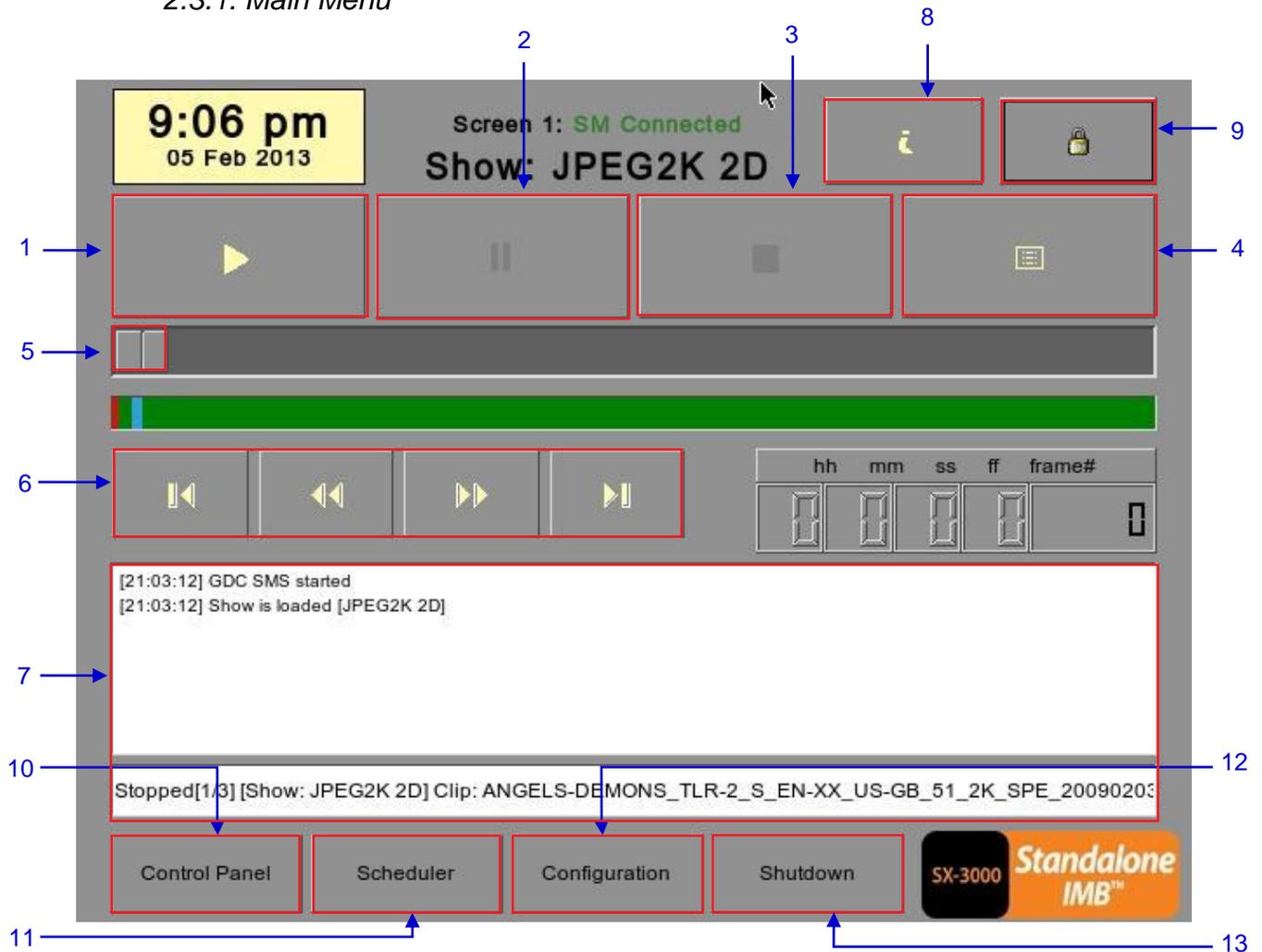
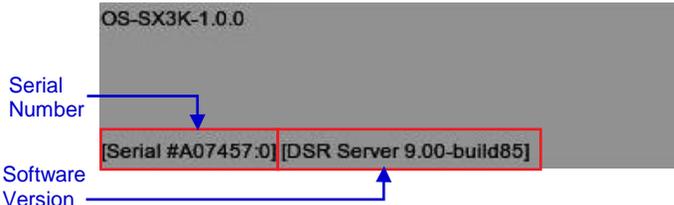


Figure 3 SMS main menu.

1		Play button. The [▶] button starts playback when pressed, and is disabled when the system is in paused mode.
2		Pause button. The [] button is enabled when the system is in playing or pause mode. To resume from pause simply hit the Pause button again.
3		Stop button. The [■] button is enabled when the system is in playing mode, and stops playback when pressed.
4		Playlist button. Press [≡] to open the Playlist menu to create a playlist. For more information about the Playlist menu, please refer to Section 2.3.2. Playlist Menu further below.

5	[Slider Bar]	<p>It will start advancing when [▶] is pressed to start a playback. One clip will take one complete cycle from the left to the right. The Slider Bar always returns to the starting point (extreme left) after a clip is finished. When [■] is pressed, the Slider Bar will stop and return to its starting point.</p> <p>When playback is paused, the Slider Bar can be moved. The Slider Bar can be moved to the left (for rewinding) or to the right (for forwarding).</p>
6	<p>[⏪]</p> <p>[◀◀]</p> <p>[▶▶]</p> <p>[▶]</p>	<p>Move to the first frame of the clip.</p> <p>Rewind (move back) by the number of frames of the playback.</p> <p>Forward (move forward) by the number of frames of the playback.</p> <p>Move to the last frame of the clip.</p>
7	[Status Display]	<p>Reports the status of the system. The display shows the number of clips in the active playlist, the name of the active playlist, and the name of the clip currently being played.</p>
8	[i]	<p>INFORMATION button. If [i] is pressed when the system is in <u>stopped mode</u>, the system will show the serial number and the software version of the IMB. A text box will appear beside the Timecode Display (replacing the navigating buttons [⏪][◀◀][▶▶][▶]) and the text box will show the serial number and software version of the IMB.</p>  <p>The screenshot shows a grey background with the text 'OS-SX3K-1.0.0' at the top. Below it, a red-bordered box contains the text 'Serial #A07457.0' and 'DSR Server 9.00-build85'. Blue arrows point from the labels 'Serial Number' and 'Software Version' to their respective parts of the text in the box.</p>
9	[🔒]	<p>SCREEN LOCK button - The SCREEN LOCK function will prevent any unintentional screen touches or mouse clicks that could disturb playback.</p> <p>The screen will be locked when [🔒] button is pressed. No access to the Main Menu (or associated menus) is allowed when the screen is locked. The User level password or higher is needed to unlock the screen.</p> <p>If the screen is locked while the system is playing, the name, duration and the remaining time of the clip will be shown on the screen while the clip is playing.</p>
10	[Control Panel]	<p>CONTROL PANEL button – For returning to the control panel screen of the user interface.</p>
11	[Scheduler]	<p>SCHEDULE button – For scheduling the time and date of the playlists to be shown. The playlist can also be looped for a period of time. For more information about Scheduler, please refer to Section 2.3.3. Scheduler Menu.</p>
12	[Configuration]	<p>CONFIGURATION button – For changing the general options on the system (e.g. enable startup/ shutdown password, change access level passwords, perform software upgrade, etc.). For more information, please refer to Section 2.3.4. Configuration Menu.</p>
13	[Shutdown]	<p>SHUTDOWN button. For shutting down the IMB or restarting the application. For more information, please refer to Section 2.9 Shutdown/Restart Application.</p>

2.3.2. Playlist Menu

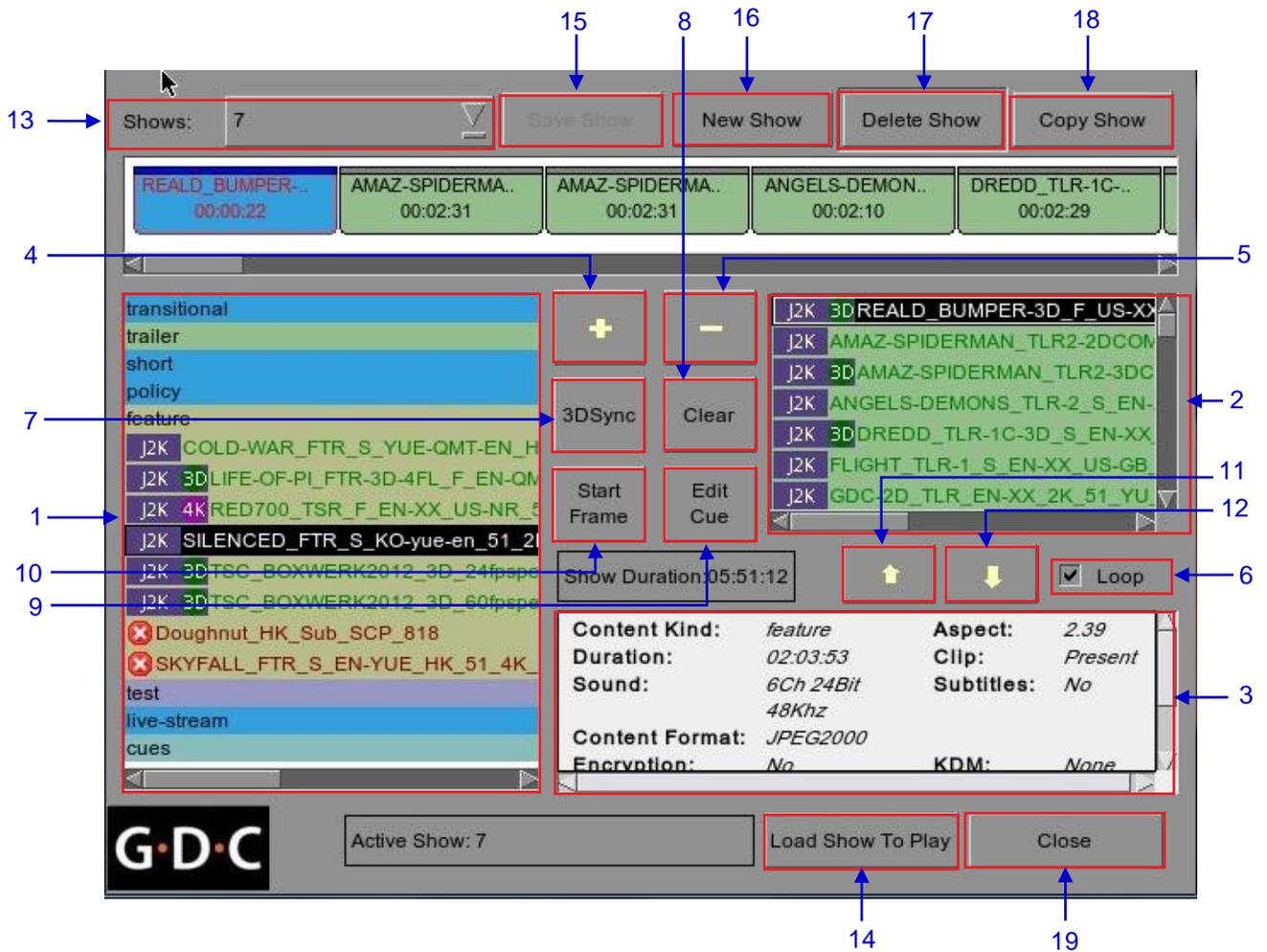
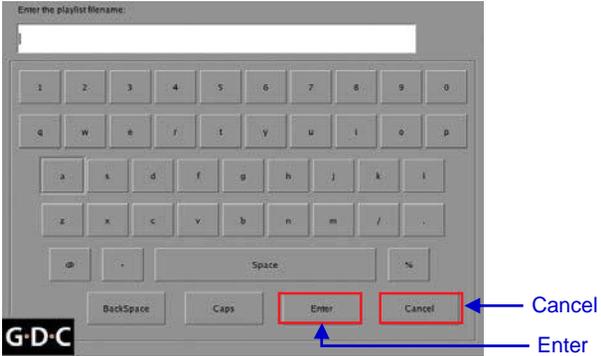


Figure 4 Playlist menu.

1	[IMB Content]	The IMB content is listed here. Content is shown in alphabetical order grouped by [Trailer, Feature, etc]. Available automation cues are listed under cues.
2	[Playlist Content]	The contents of the playlist being currently edited are shown here.
3	[Clip Information]	Displays information about the selected item in the Content. This includes the Name, total Duration, Sound (Audio) format, Content format, if Encryption is present, if a Composition Playlist exists, if it has Subtitles and if a current KDM is on the IMB.
4	[+]	Adds content to the Playlist by pressing [+] after an item from the Content is selected.
5	[-]	Removes the selected item from the Playlist content.

6	[Loop]	When [Loop] is selected, the contents in the Playlist will run continuously in a loop when [▶] is pressed.
7	[3D Sync]	Synchronizes clips for 3D showing.
8	[Clear]	Removes all clips on the playlist.
9	[Edit Cue]	Click the Edit Cue button to bring up the cue editing interface, used to add, remove or edit existing automation cues for the selected clip in the playlist (See Section 2.4.1.3.).
10	[Start Frame]	Allows specifying the timecode or frame number where playback of each clip starts in this playlist.
11	[⬆]	Moves the highlighted clip in the Playlist ahead in chronological order. Makes sure an item is selected from the Playlist before pressing [⬆]. When [⬆] is pressed, the selected item will move to before the previous clip.
12	[⬇]	Moves the highlighted clip in the Playlist down in chronological order. Makes sure an item is selected from the Playlist before pressing [⬇]. When [⬇] is pressed, the selected item will move to after the next clip.
13	[Shows]	This displays a list of all the playlists saved. Selecting a playlist here displays the contents of the playlist for editing. A playlist that is currently playing may not be edited. NOTE: Selecting a playlist here does not load it for playback. The “Load Show to Play” button has to be pressed to load the playlist into the player for playback.
14	[Load Show To Play]	Loads the selected playlist into the player for playback.
15	[Save Show]	Saves the playlist currently being edited.
16	[New Show]	Creates a new blank show playlist. A name must be specified for the playlist.
17	[Delete Show]	Make sure an item is selected in the Shows drop-down menu. When [Delete Show] is pressed, the system will delete the selected playlist and remove it from the Shows drop-down menu. The delete action is irreversible. The system will prompt you to confirm the delete action before it proceeds to delete the playlist.
18	[Copy Show]	Duplicates currently selected playlist. When [Copy Show] is pressed, a text entry keypad will appear for you to enter the new name of the duplicate playlist.

		 <p>Type in the desired name and press [Enter] to complete the action. To cancel the action and return to the previous screen, press [Cancel].</p>
19	[Close]	Exits the Playlist menu and returns to the Main menu.

2.3.3. Scheduler Menu

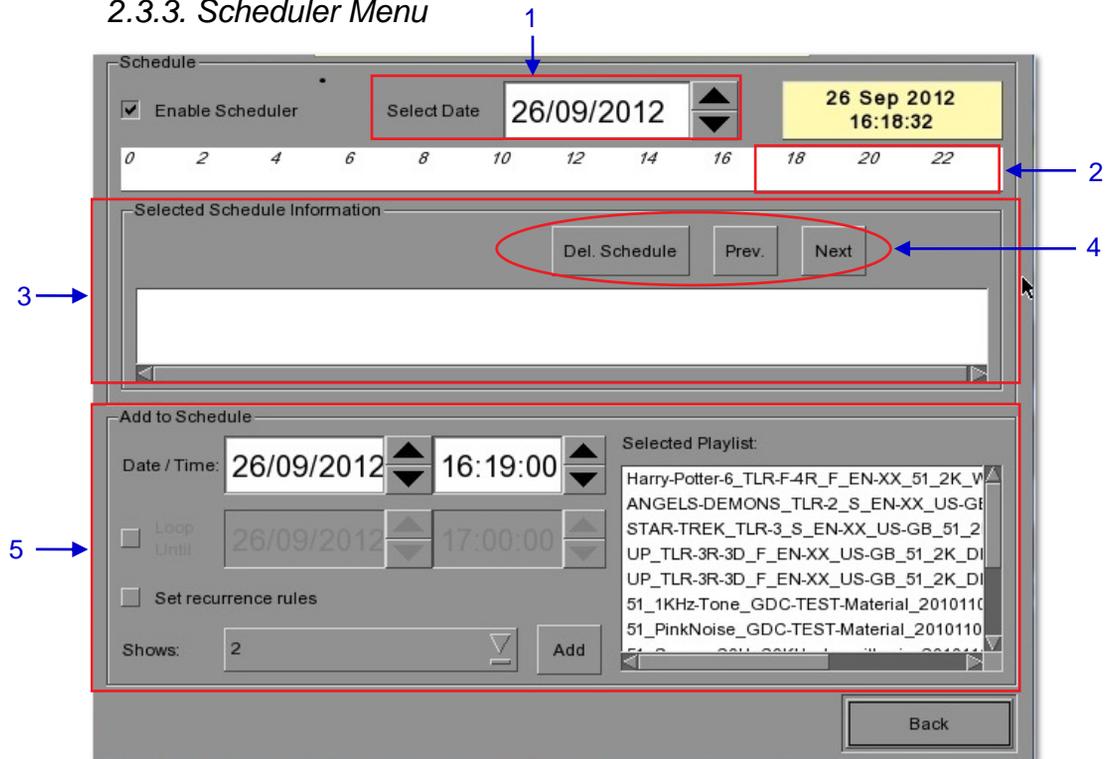


Figure 5 Scheduler menu.

1	[Select Date]	Specifies the date and time of the schedule.
2	[Timeline]	Displays shows scheduled on a 24-hour timeline for the date selected in (1).
3	[Selected Schedule Information]	Displays information such as name, time and duration of the selected show schedule.
4	[Delete Schedule] [Previous], [Next]	Deletes the currently selected show schedule. Navigate show schedules by going forward and backward one at a time.
5	[Add to Schedule]	(a) Select the playlist to be scheduled. The contents of the selected playlist will be displayed in the "Selected Playlist" window. (b) Select the time for the scheduled show. (c) To loop the show until a certain time, check 'Loop until' and select the time. (d) If the schedule is to be repeated every day or week, check 'Set recurrence rules'. (e) Press the 'Add' button. A dialog will pop up for specifying the recurrence rules if it was checked.

2.3.4. Configuration Menu

2.3.4.1. General

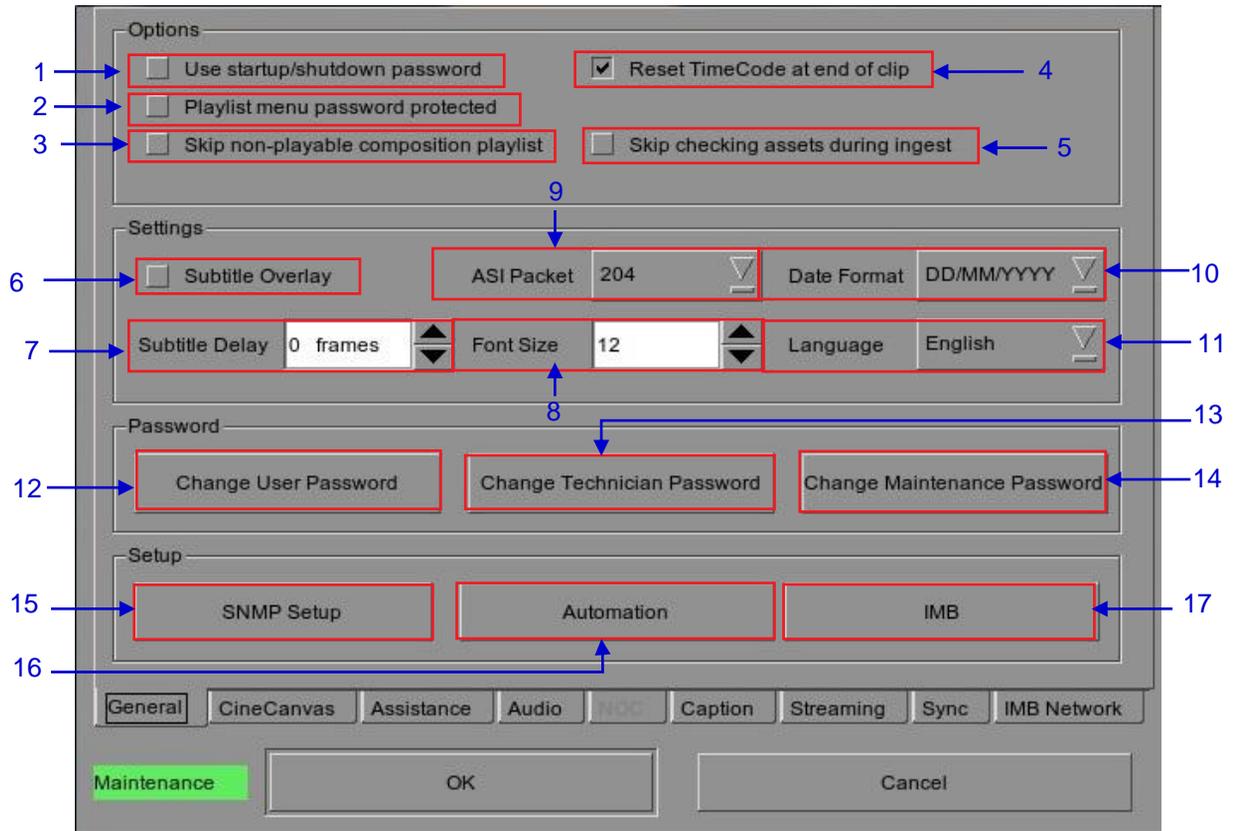


Figure 6 Configuration [General].

1	[Use startup / shutdown password]	There are 3 levels of users on the system - User , Technician , and Maintenance . If this option is checked, the system will start up with a password dialog and the user will have to authenticate themselves as one of the above 3 users to start using or shut down the system.
2	[Playlist menu password protected]	If this option is checked, the User level will be denied the ability to edit or create any playlists. Only Maintenance and Technician level users will be able to create and edit playlists.
3	[Skip non-playable composition playlist]	With this option checked any non-playable CPL within a Show playlist will simply be skipped, a message will appear on the SMS screen indicating that a CPL has been missed, however playback will continue.
4	[Reset TimeCode at end of clip]	<p>If the 'Reset TimeCode at end of clip' option is selected, the timecode will reset to zero [0:0:0:0] whenever a playback ends or stops. The Timecode Display will reset to zero [0:0:0:0] while the Duration and Remaining time will reset to 00 hr 00 min 00 sec. The Slider Bar will return to its starting point at the extreme left.</p> <p>If the 'Reset TimeCode at end of clip' option is not selected, the system will retain the timecode at the point in which playback ends or stops. The Slider Bar will remain at where the playback ends or stops.</p>
5	[Skip checking assets during ingest]	With this option checked the Digital Cinema Package assets will not be checked for their integrity, this option will reduce ingestion time but decrease the reliability of the ingestion.
6	[Subtitle Overlay]	[Subtitle Overlay] option. [Subtitle Overlay] is supported for Series 2 projectors for 2D JPEG2000 content. For more information, please refer to Section 2.8.2. Subtitle Overlay .
7	[Subtitle Delay]	This option provides the ability to delay the on screen subtitles, the delay is set in number of frames.
8	[Font Size]	' Font Size ' option. For changing the size of the font on the screen.
9	[ASI Packet]	This option is provided to select the size of the packets (204 or 188 bytes) on the incoming ASI signal.
10	[Date Format]	' Date Format ' option. For changing the displayed format of the date.
11	[Language]	' Language ' option. For changing the user interface language.
12	[Change User Password]	[Change User Password] button. For changing the User Password. When [Change User Password] is pressed, 3 prompts will appear. The first prompt is for the user to enter the old password, the second prompt is for the user to enter the new password, and the third prompt is for the system to verify the new password.

13	[Change Technician Password]	[Change Technician Password] button. For changing the Technician Password. When [Change Technician Password] is pressed, 3 prompts will appear. The first prompt is for the user to enter the old password, the second prompt is for the user to enter the new password and the third prompt is for the system to verify the new password.
14	[Change Maintenance Password]	[Change Maintenance Password] button. For changing the Maintenance Password. When [Change Maintenance Password] is pressed, 3 prompts will appear. The first prompt is for the user to enter the old password, the second prompt is for the user to enter the new password and the third prompt is for the system to verify the new password.
15	[SNMP Setup]	[SNMP Setup] button. For accessing the SNMP Configuration Interface (see Section 2.3.5).
16	[Automation]	[Automation] button. This will bring up the automation configuration user interface used to integrate the IMB with external devices such as projectors and automation controllers (see Section 2.3.6).
17	[IMB]	[IMB] button. After connecting to the IMB the window will display the IMB version information as well as check the Marriage and Service Door status on the projector. For IMB marriage please reference the SX-3000 Installation manual as process will depend on projector manufacturer and software version.

2.3.4.2. CineCanvas

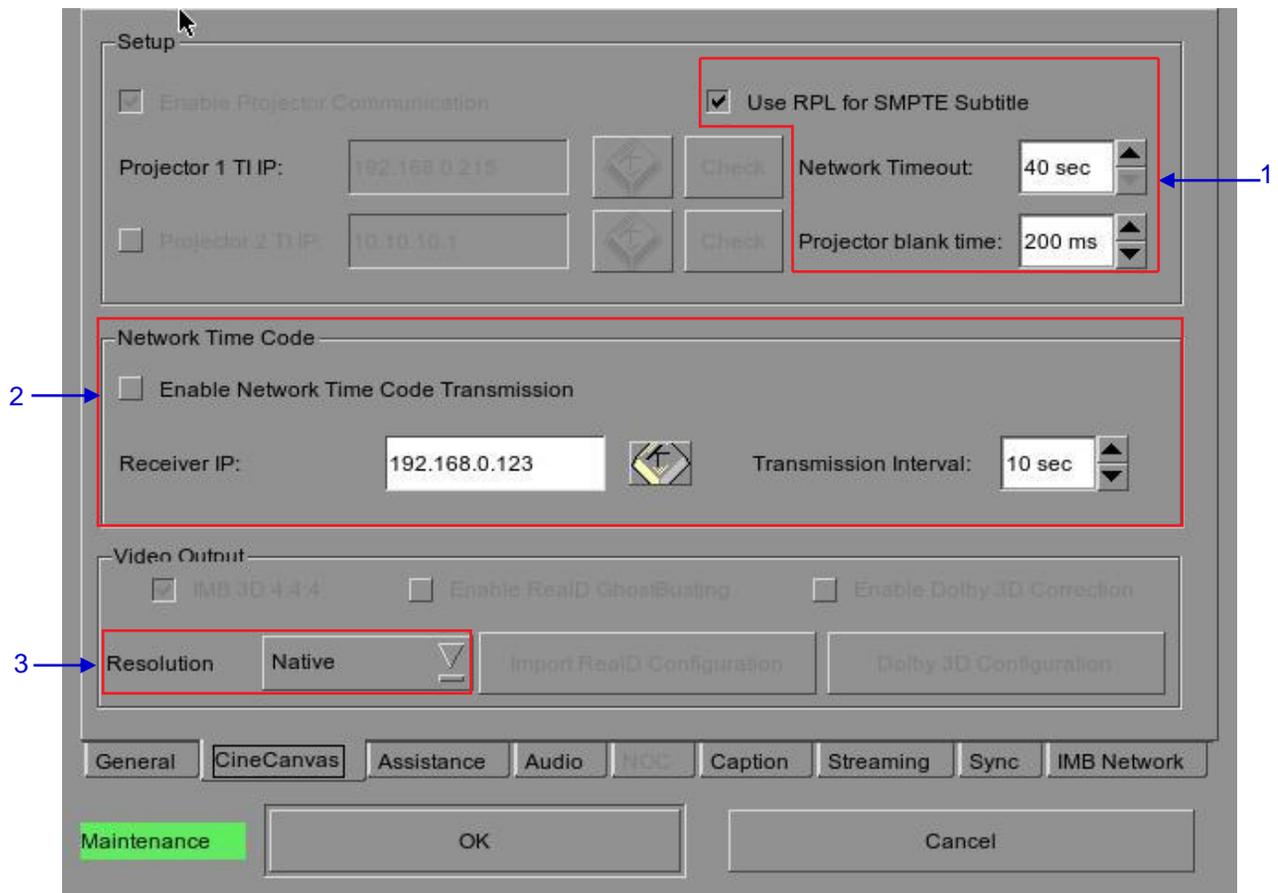


Figure 7 Configuration [CineCanvas].

1	<p>[Use RPL for SMPTE Subtitle]</p> <p>[Network Timeout]</p> <p>[Projector blank time]</p>	<p>Send a SMPTE-compatible Resource Presentation List (RPL) instead of an Interop-compatible Subtitle Presentation List to the projector for Cinecanvas subtitles. This is only enabled when SMPTE subtitles are available for the CPL.</p> <p>Timeout in seconds for communication with the projector.</p> <p>Select the blank time of the projector during change of PCF or format. This is to prevent noise when the PCF or format is changed.</p>
2	<p>[Enable Network Time Code Transmission]</p> <p>[Receiver IP]</p> <p>[Transmission Interval]</p>	<p>Check this to activate transmission of playback time-code over UDP.</p> <p>Enter the IP of the receiver of time-code transmission of UDP.</p> <p>Indicates the time interval between transmissions.</p>
3	<p>[Resolution]</p>	<p>Allows playback of mixed 2K and 4K content at a constant resolution.</p> <p><i>Note: This feature will only affects video, and will not automatically scale PNG subtitles to the target resolution.</i></p>

2.3.4.3. Assistance

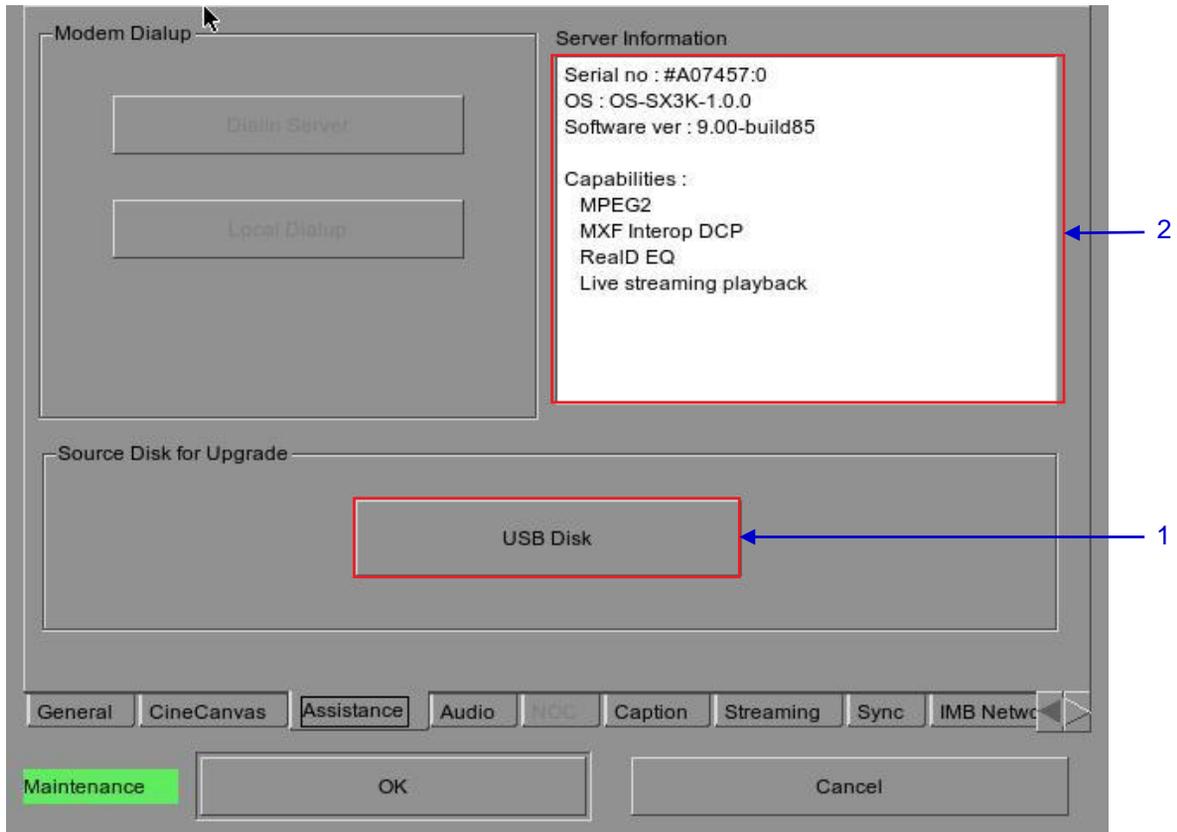


Figure 8 Assistance menu.

1	[USB Disk]	Press to perform software upgrades from USB Disk.
2	[Server Information]	Displays serial number, OS version, software version and video capabilities of the IMB.

2.3.4.4. Audio Option

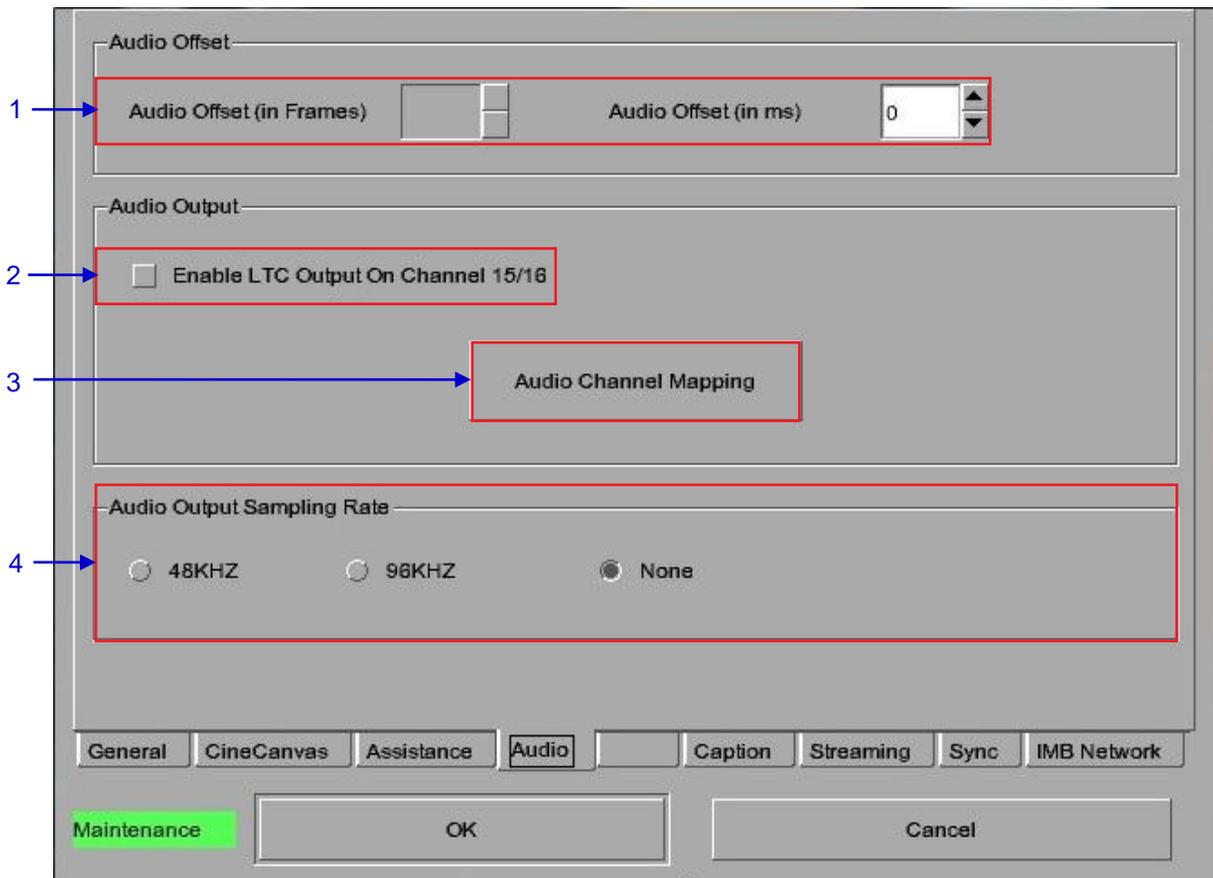


Figure 9 Audio option.

1	[Audio Offset]	Specify the audio delay to make the video and audio in sync. '+x' will move the audio x frames forward such that the audio comes earlier than before. '-x' will delay the audio by x frames such that the audio comes later than before.
2	[Audio Output]	Enable Linear Time Code (LTC) output on audio channels 15 and 16.
3	[Audio Channel Mapping]	Use the audio channel mapping interface to map content audio channels to different audio output channels.
4	[Audio Output Sampling Rate]	Change audio output sampling rate. Output audio sampling rate can be fixed at 48kHz or 96kHz for all content, or it can match the content's audio sampling rate (option 'None'). If the output sampling rate is set to a fixed value (48kHz or 96kHz), content audio is re-sampled if it does not match the output sampling rate.

2.3.4.5. Closed Captions Option

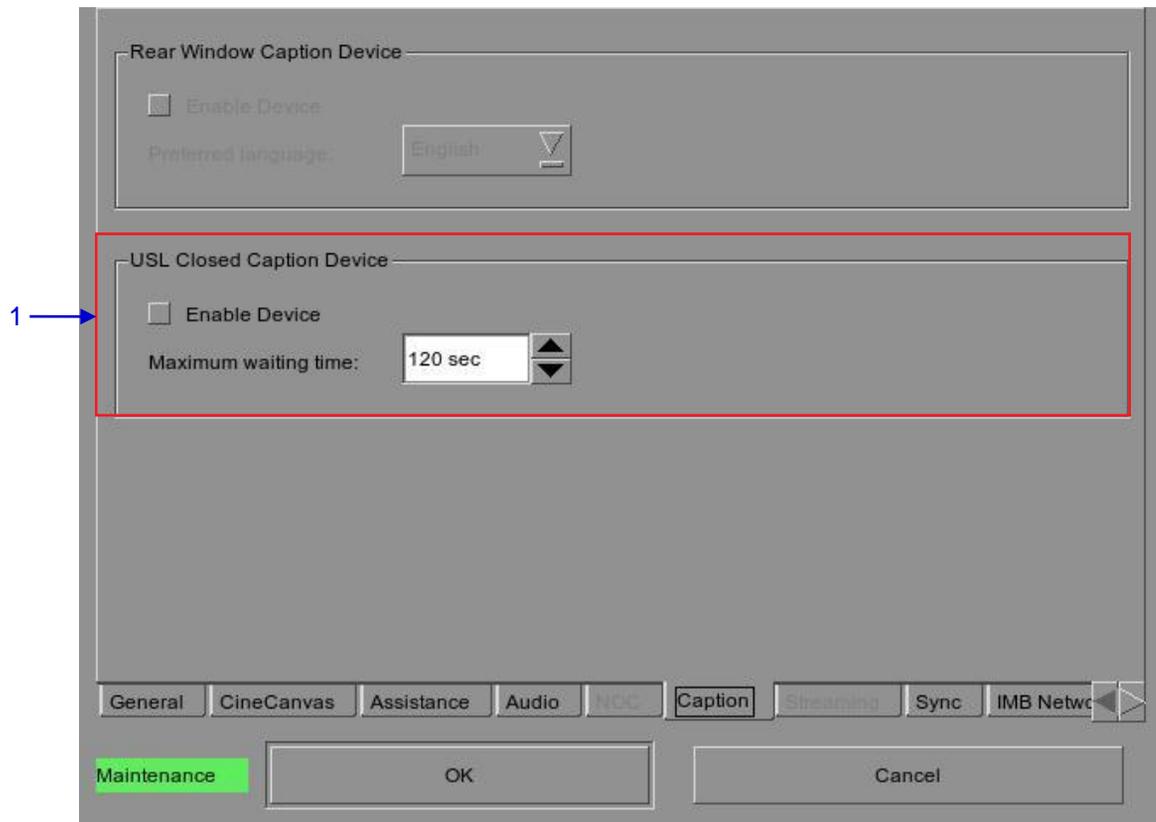


Figure 10 Closed Captions option.

1	[Enable Device]	Enable communication with a closed caption device that supports SMPTE 430-10 (USL CCE-100, etc).
	[Maximum waiting time]	Specifies the maximum time to wait for the closed caption device to report it is ready, before starting playback.

2.3.4.6 IMB Network Tab

The screenshot shows the 'IMB Network' configuration window. It includes the following fields and controls:

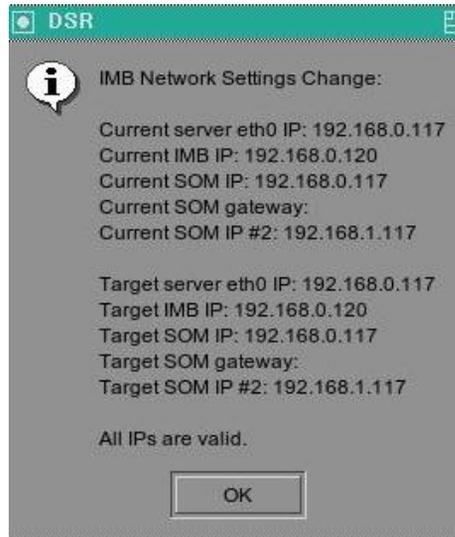
- 1**: Subnet Mask: 255.255.255.0
- 2**: IMB IP Address: 192.168.0.120
- 3**: SOM IP Address: 192.168.0.117
- 4**: SOM Gateway: (empty)
- 5**: Enable SOM IP Address #2
 - SOM IP Address #2: 192.168.1.117
 - Subnet Mask #2: 255.255.255.0
- 6**: Validate IPs button

At the bottom, there are tabs for 'General', 'CineCanvas', 'Assistance', 'Audio', 'NOC', 'Caption', 'Streaming', 'Sync', and 'IMB Network'. Below the tabs are buttons for 'Maintenance' (highlighted in green), 'OK', and 'Cancel'.

Figure 11 IMB Network Tab.

1	Specify the subnet for all IP addresses
2	Specify the IP address of the IMB. This is the IP address of the Security Manager.
3	This is the main IP address of the SX-3000. The SMS user interface can be reached at this IP address using VNC.
4	Specify the network gateway for the SX-3000.
5	Specify a secondary IP address and netmask for the SX-3000. This can be used to connect to a content management network.

- 6 Click to check all IP addresses entered above for correctness. A dialog will be displayed showing the source and target IP addresses, and any errors found in the new network configuration as shown below.



2.3.4.7 IMB Storage Tab

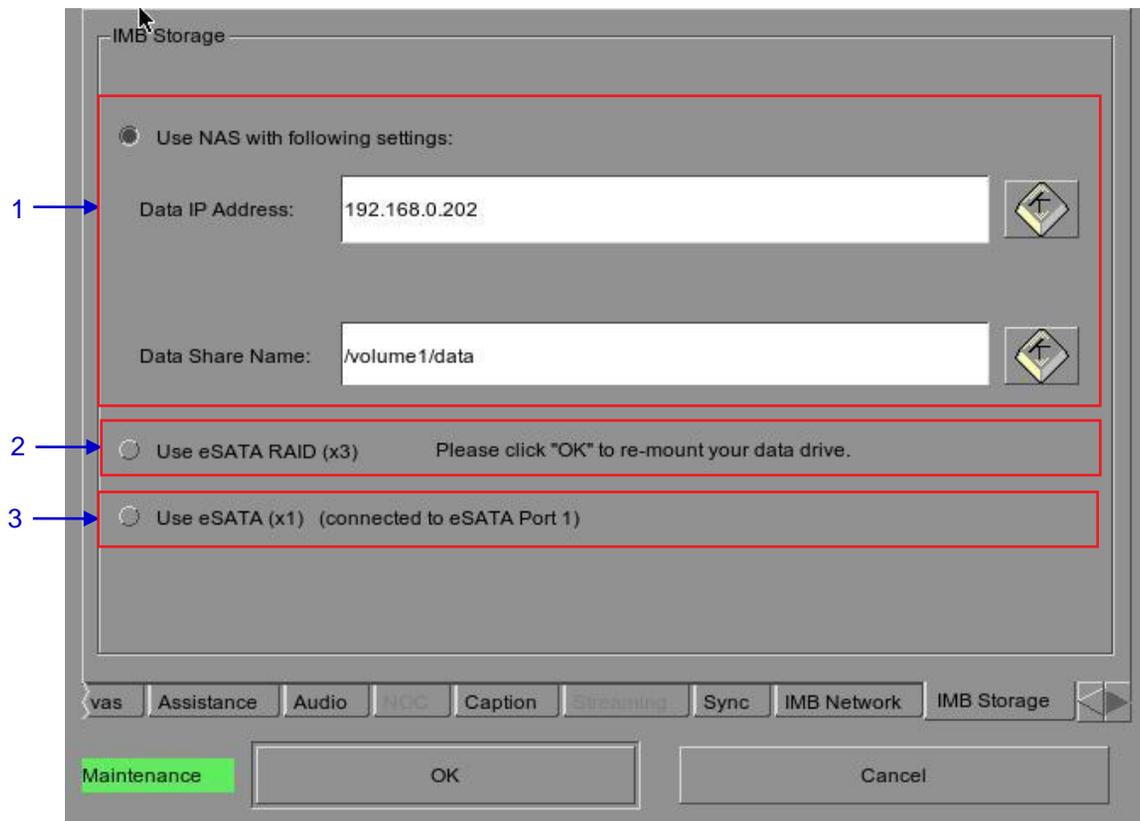


Figure 12 IMB StorageTab.

1	Specify a Network-Attached Storage System (NAS) which has an NFS share available to this SX-3000 system for the use as data storage.
2	Configure the SX-3000 to use an attached eSATA RAID as data storage. This is to be used with PSD-3000.
3	Configure the SX-3000 to use a single externally attached eSATA hard disk as data storage. The external eSATA hard disk must be attached to eSATA Port 1 on the SX-3000.

2.3.5. SNMP Configuration

2.3.5.1. Introduction

The SNMP feature is an option on the SX-3000 that enables the use of SNMP to monitor IMB. The SNMP interface contains many useful SNMP traps and is easy to configure.

2.3.5.2. Accessing the SNMP Configuration Interface

Boot directly to the SMS interface. Press **Configuration** to switch the display from the SMS interface to the **Configuration** menu as seen in Figure 13.

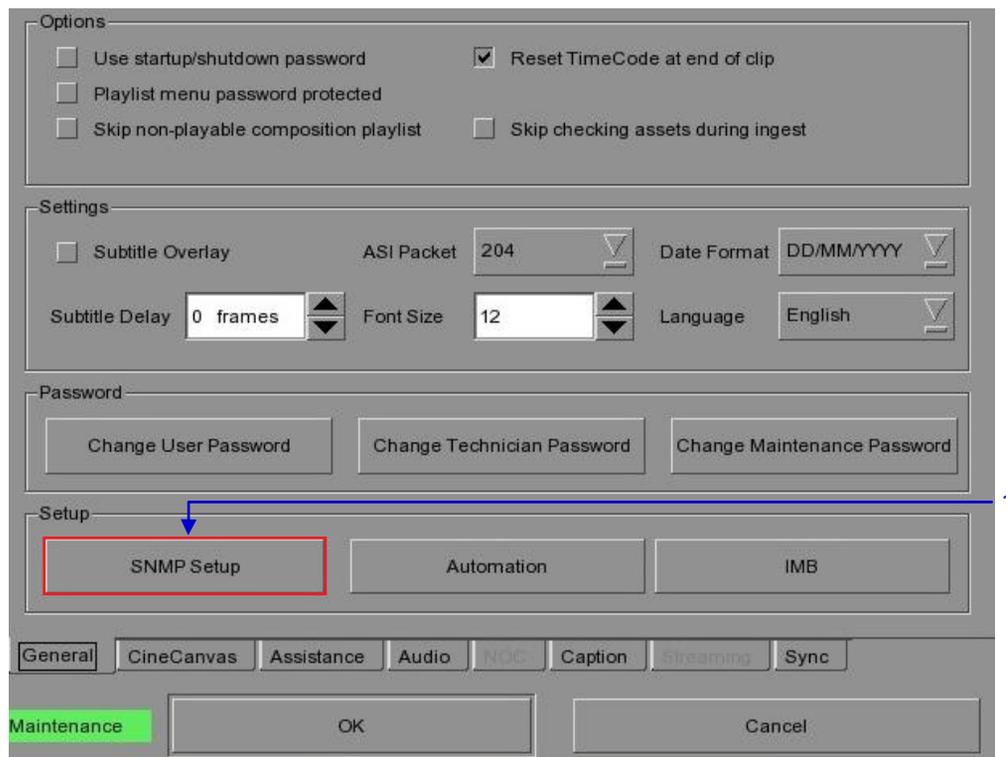


Figure 13 Configuration [General]

- 1 On the **Configuration** menu, select **SNMP Setup**. A new window appears as seen in **Figure 14**.

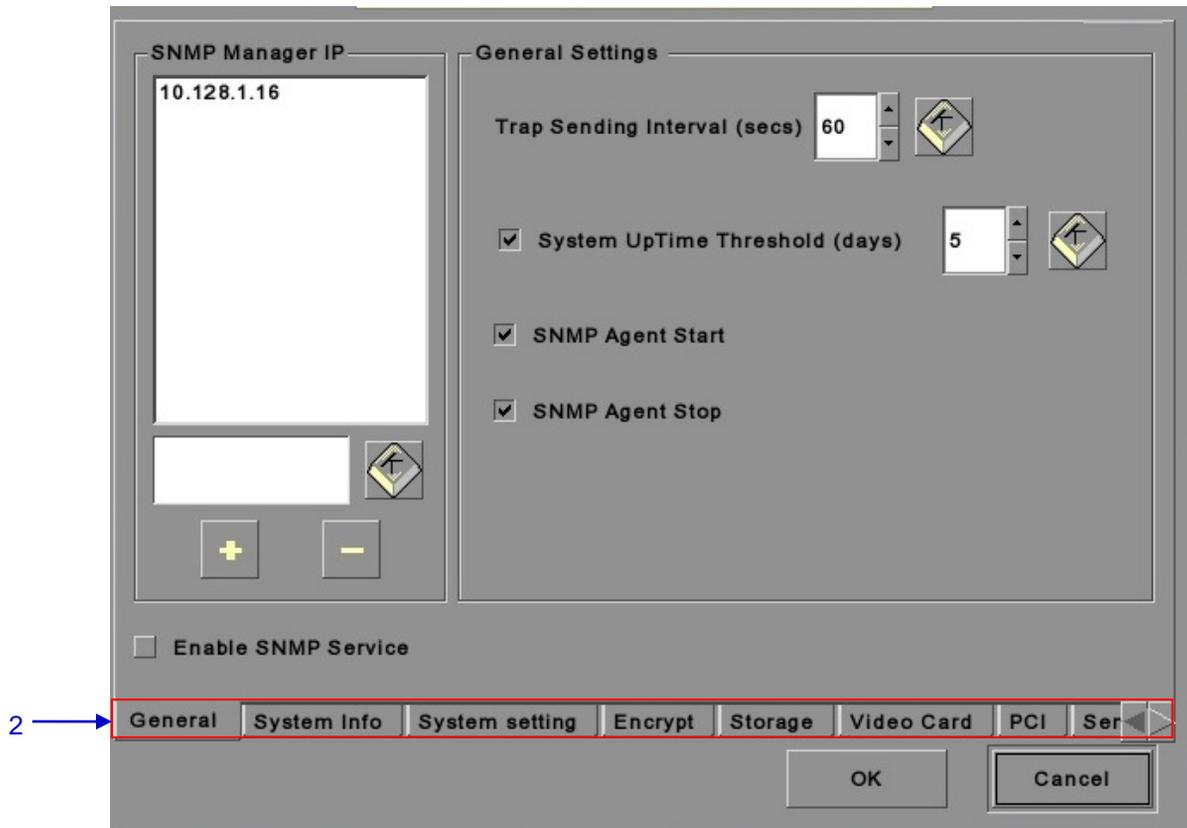


Figure 14 SNMP Configuration [General].

2	<p>On the SNMP Configuration menu, there are several tabs along the bottom of the screen. The General option (currently being shown in above), System Info option, System Setting option, Encrypt option, Storage option, Video Card option, PCI option and Sensors option.</p>
---	--

2.3.5.3. Understanding the SNMP Configuration Interface

2.3.5.3.1. General

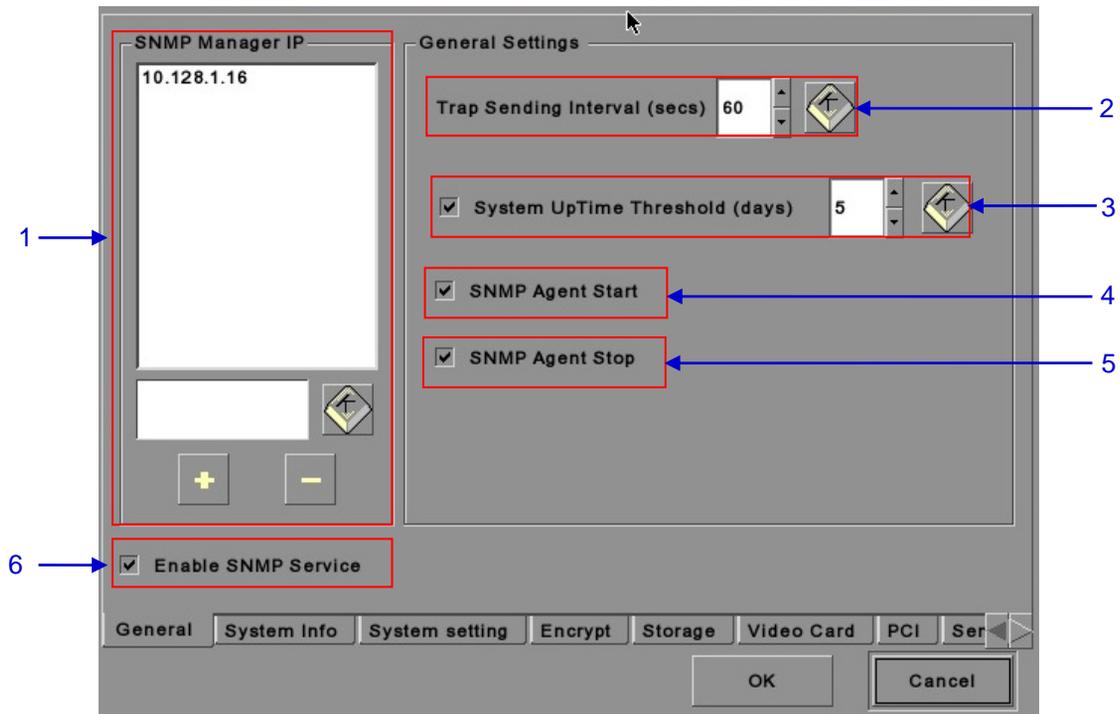


Figure 15 SNMP Configuration [General Settings].

1	For SNMP Manager IP Address , indicate the IP address of the SNMP Manager where traps are to be sent by typing in the IP Address , press the + or - button to insert multiple SNMP addresses.
2	For Trap Sending Interval , indicate the time interval in seconds after which a trap should be resent to the SNMP Manager. The trap will continue to be resent only as long as the error condition exists.
3	For System UpTime Threshold (days) , indicate the threshold time in days. NOTE: When Trap is On, a trap will be sent if the System UpTime exceeds the threshold value.
4	Activate the Trap by checking the small box opposite SNMP Agent Start . NOTE: When Trap is On, a trap is sent if the SNMP Agent is started. Deactivate the Trap by un-checking the small box next to SNMP Agent Start.
5	Activate the Trap by checking the small box opposite SNMP Agent Stop . NOTE: When Trap is On, a trap is sent if the SNMP Agent is stopped. Deactivate the Trap by un-checking the small box next to SNMP Agent Stop.
6	Check on the small box to enable SNMP Service.

2.3.5.3.2. Storage

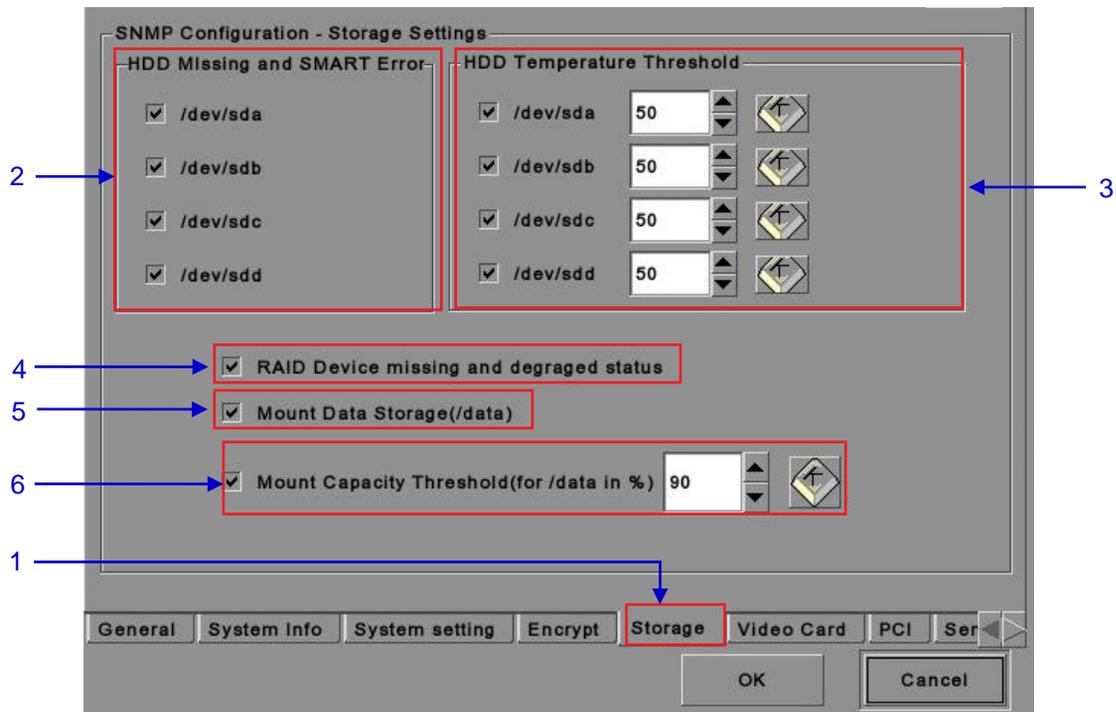


Figure 16 SNMP Configuration [Storage Settings].

1	On the SNMP Configuration menu, select Storage . A new window opens as seen in Figure 16 above.
2	Activate the Trap by checking the small box opposite the corresponding storage device. NOTE: When the Trap is On, a trap will be sent to the SNMP Manager if the system cannot detect the specified device.
3	Set the desired threshold temperature for respective storage device by using the [▲] and [▼] buttons. Activate the Trap by checking the small box opposite the corresponding storage device. NOTE: When the Trap is On, a trap will be sent to the SNMP Manager when the threshold temperature is reached.
4	Activate the Trap by checking the small box opposite RAID Device . NOTE: When the Trap is On, a trap will be sent if the RAID Device is missing or degraded.
5	Activate the Trap by checking the small box opposite Mount Data Storage . NOTE: When the Trap is On, a trap will be sent if the data storage is not mounted on the system.
6	Set the threshold mount capacity of the mount data storage by typing in the field or using the on-screen keyboard  . Activate the Trap by checking the small box. NOTE: When the Trap is On, a trap will be sent to the SNMP Manager if the mount capacity exceeds the threshold value.

2.3.5.3.3. Video Card

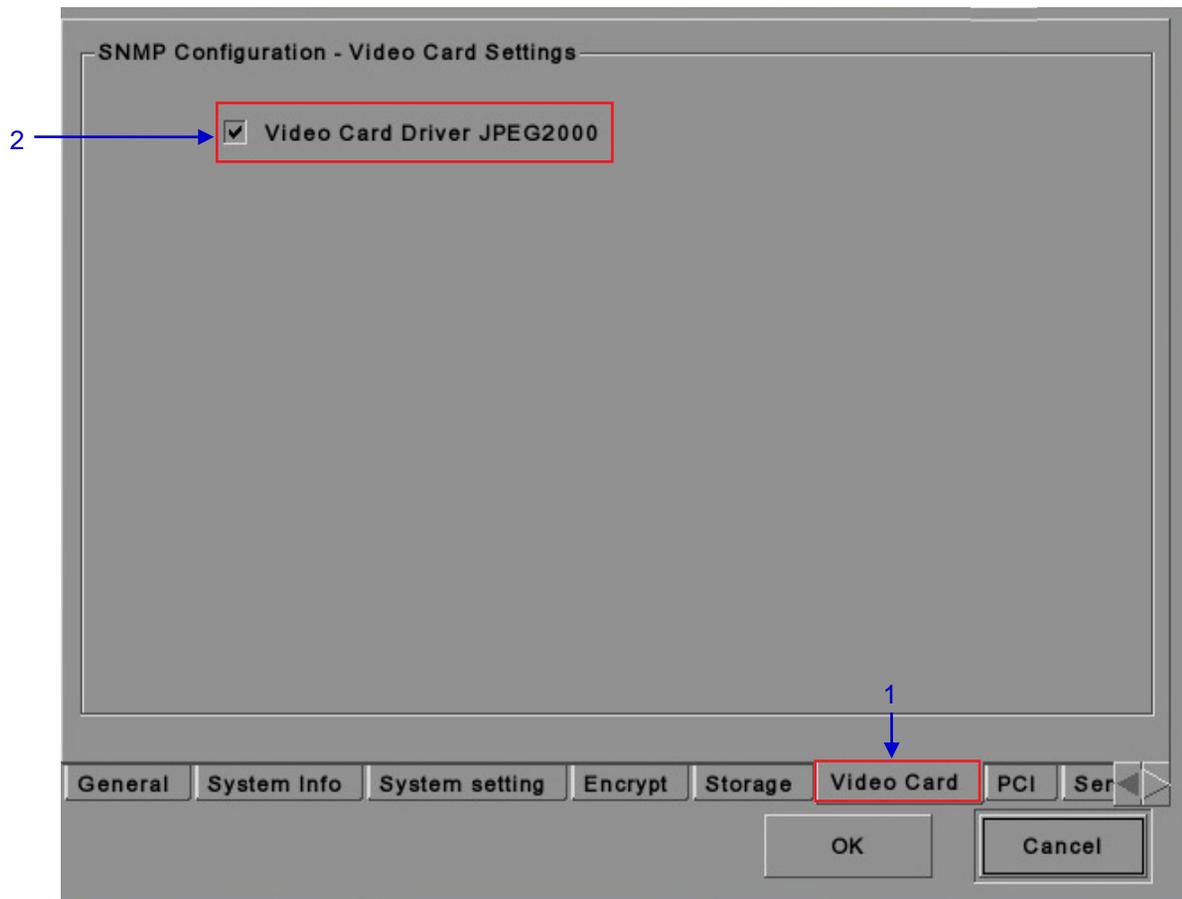


Figure 17 SNMP Configuration [Video Card Settings].

1	On the SNMP Configuration menu, select Video Card. A new window opens as seen in Figure 17 above.
2	Activate the Trap by checking the small box opposite Video Card Driver JPEG2000. NOTE: When the Trap is On, a trap is sent to the SNMP Manager when the video card driver is not loaded.

2.3.5.3.4. PCI

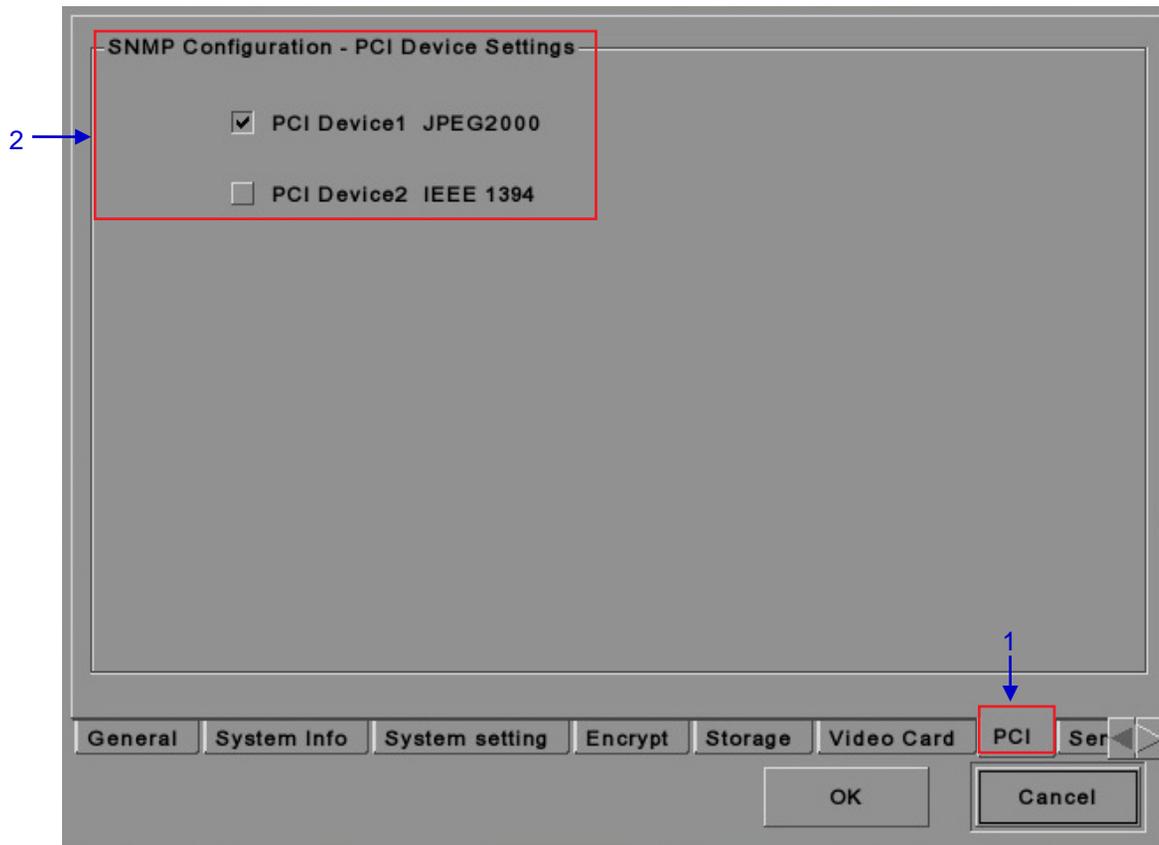


Figure 18 SNMP Configuration [PCI / RAID].

1	On the SNMP Configuration menu, select PCI . A new window opens as seen in Figure 18 above.
2	Activate the Trap by checking the small box opposite the corresponding PCI Device . NOTE: <i>When the Trap is On, a trap is sent when the corresponding PCI device is missing.</i>

2.3.5.3.5. Sensors

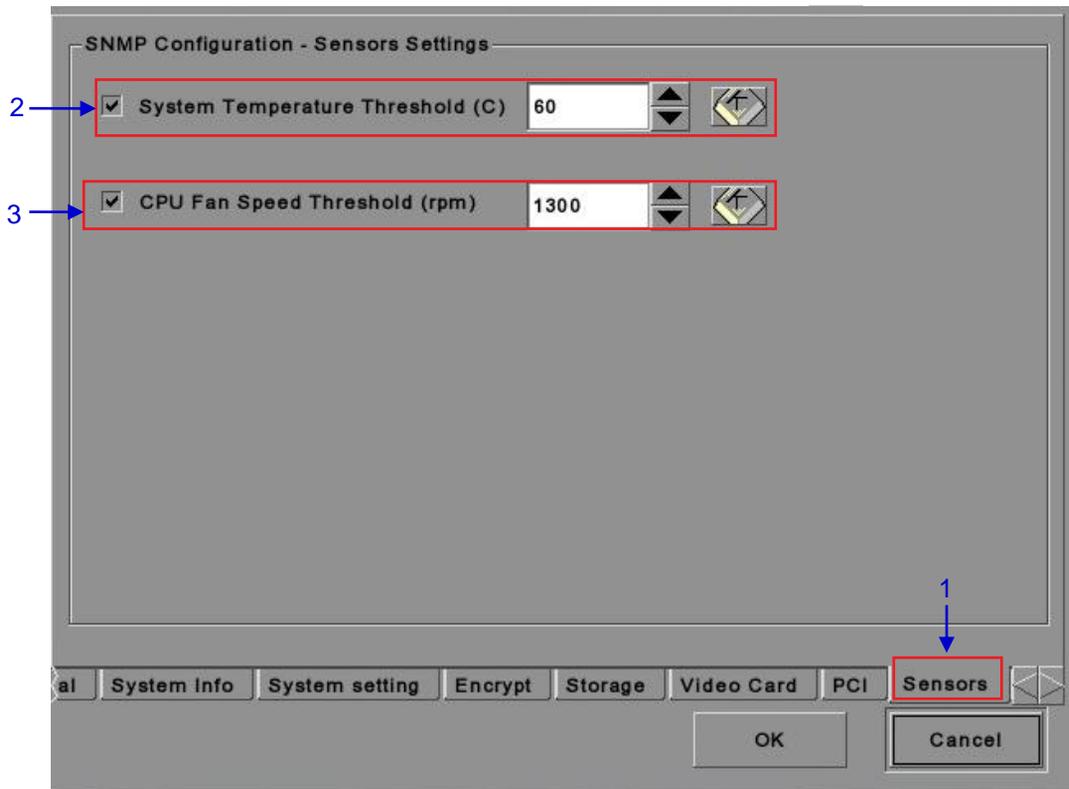


Figure 19 SNMP Configuration [Motherboard].

1	On the SNMP Configuration menu, select Sensors . A new window opens as seen in Figure 19 above.
2	Set the threshold temperature required for the system sensors by typing in the field or using an on-screen keyboard  . Activate the Trap by checking the small box opposite System Temperature Threshold . NOTE: When the Trap is On, a trap is sent if the system temperature exceeds the maximum threshold temperature.
3	Set the threshold CPU fan speed (rpm – revolutions per minute) by typing on the field or using an on-screen keyboard  . Activate the Trap by checking the small box opposite CPU Fan Speed Threshold . NOTE: When the Trap is On, a trap is sent if the CPU fan speed exceeds the threshold value.

2.3.5.3.6. Restart/Save/Cancel

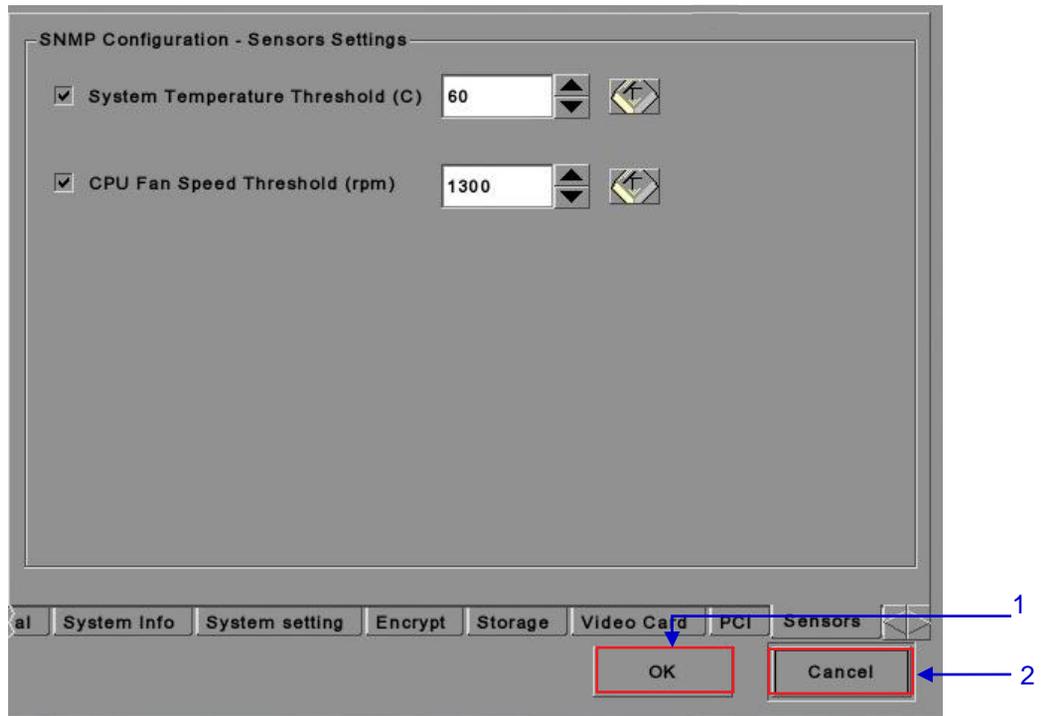
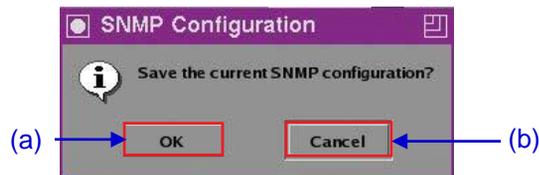


Figure 20 Pop-up window for restarting SNMP service.

- 1** After the settings are complete, press **OK** to confirm. A small window pops out asking if you want to save the current SNMP configuration.



- (a) Select **OK** to save the configuration.
 (b) Select **Cancel** to cancel the configuration.

- 2** Press **Cancel** if you want to cancel the operation. A small window pops out to confirm if you want to quit without saving.



- (a) Select **Yes** if you want to confirm.
 (b) Press **No** if you want to cancel the operation.

2.3.5.3.7. Ethernet

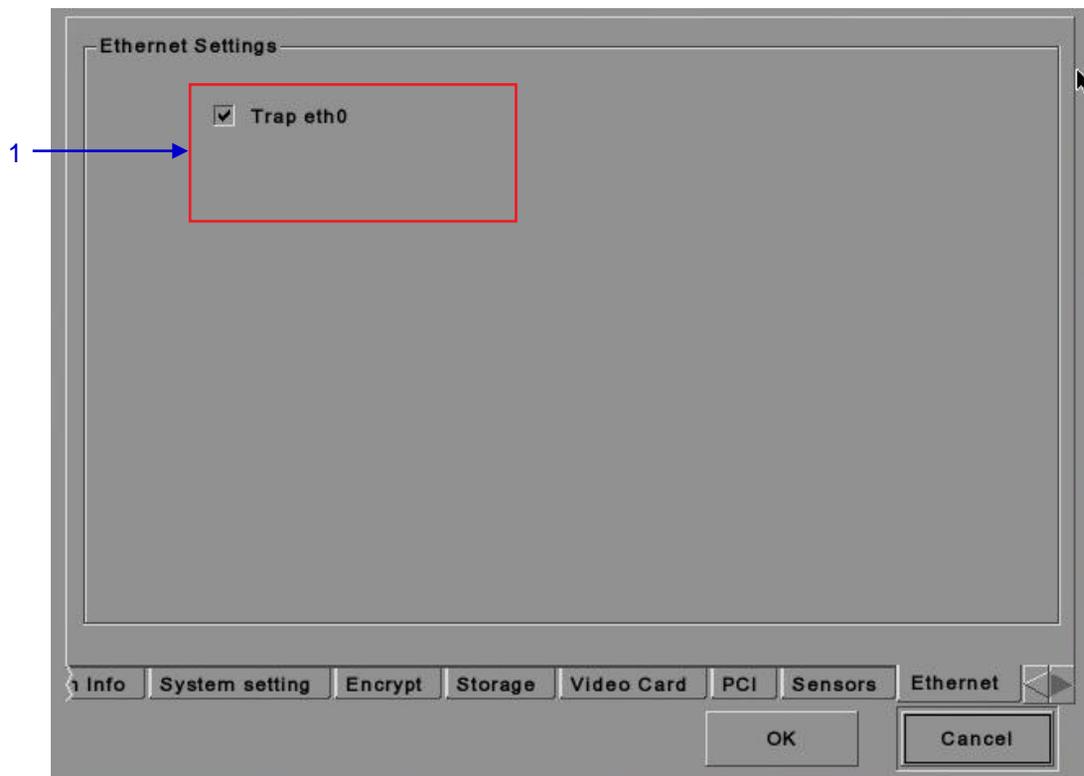


Figure 21 Ethernet settings.

1	Enables sending an SNMP trap if the system detects that the selected network interface is down.
---	---

2.3.6. Automation

Please refer to Figure 6 to transit form Configuration to Automation.

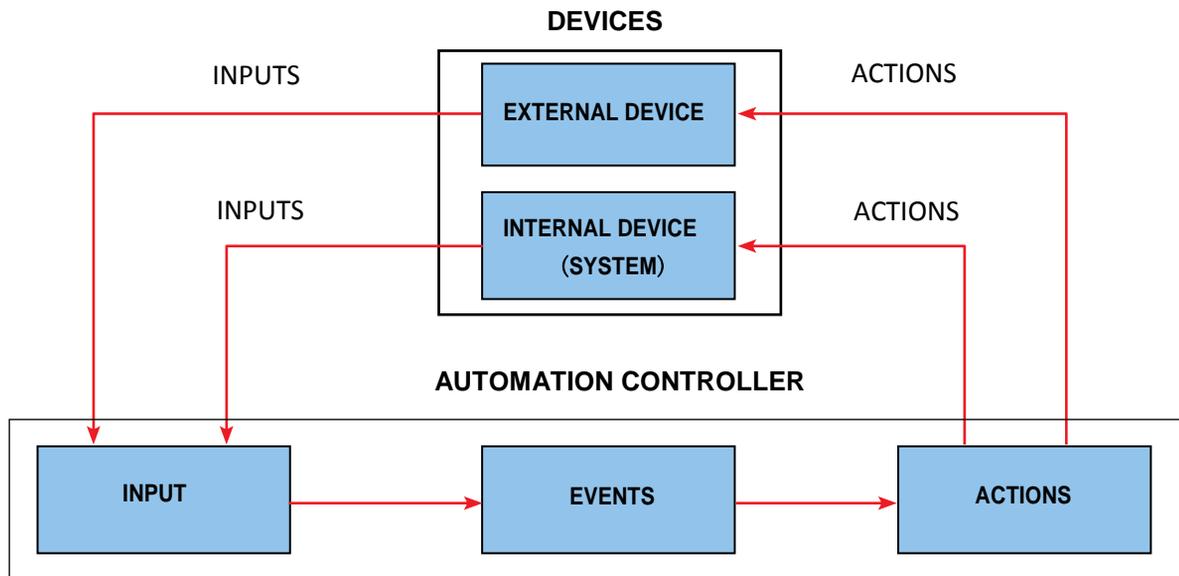


Figure 22 Automation flowchart.

DEVICES

Automation Device Setup

It should be noted that automation will only be executed within a playlist as long as that playlist is playing. If playback stops or the Stop button is pushed automation will not run. For Series 2 projectors please refer to [Section 2.8](#).

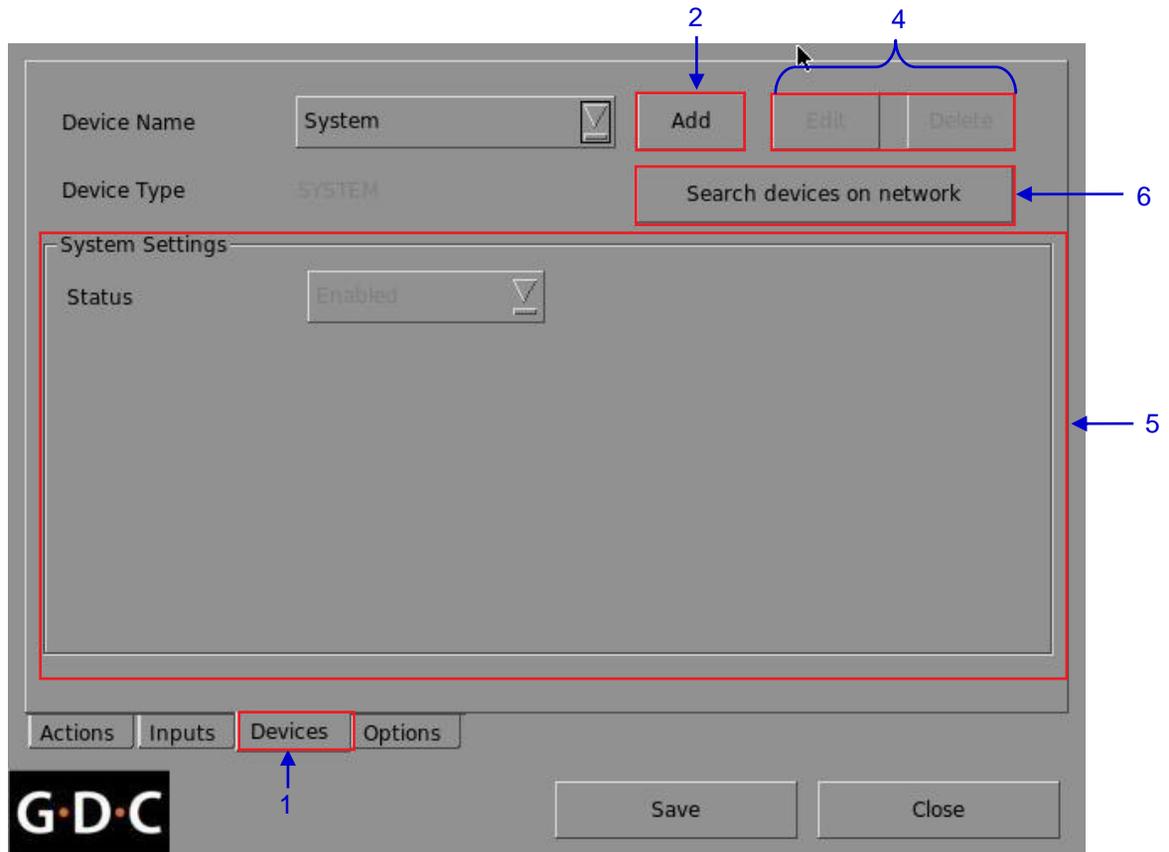


Figure 23 Devices menu.

- 1 On the [Automation](#) menu, press [Devices](#). A new window opens as seen in Figure 23. In the [Devices](#) menu, the [System](#) is the default device name. The [System](#) device is the IMB from which all received commands will be forwarded to the sub-systems in the IMB. (continued on next page)

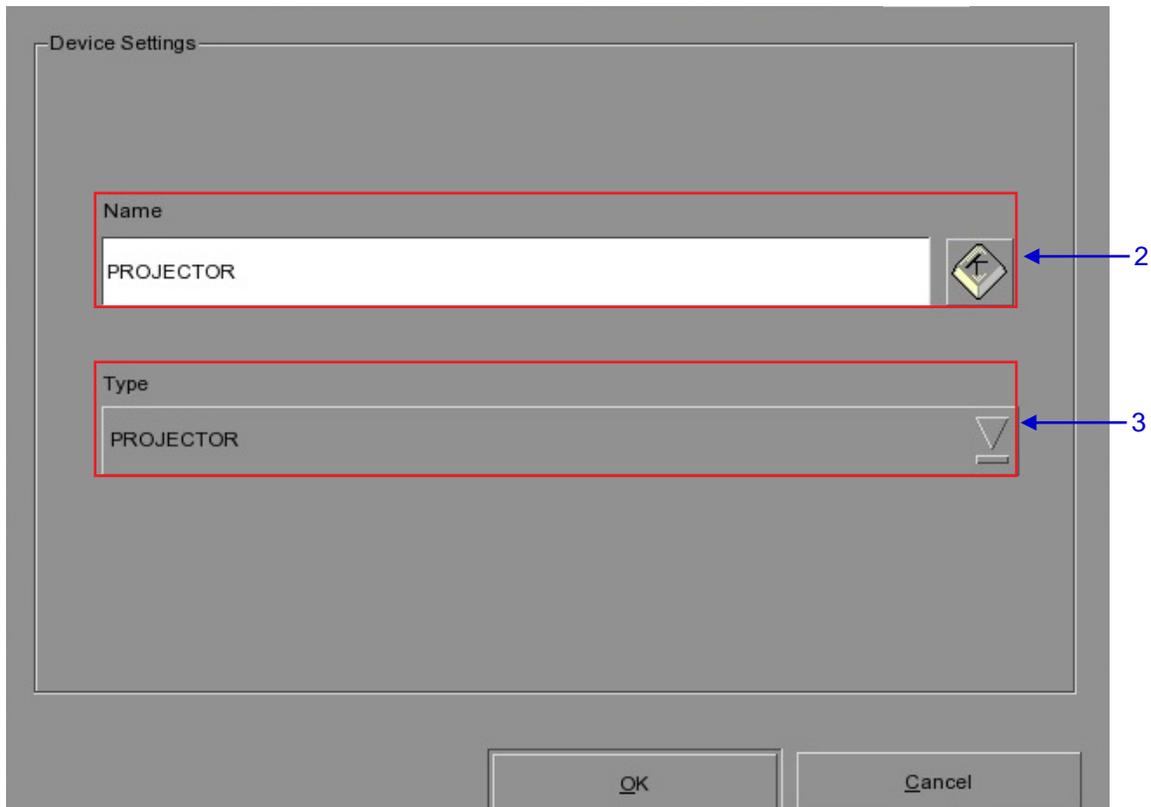


Figure 24 The device configuration window.

2	To add a new device, press Add . A new window appears as seen in Figure 24 . Type in the name you want to assign to a particular device.
3	After adding the device name, assign the type of device you want to use. Select from a dropdown list as seen below. <div data-bbox="678 1325 979 1548" data-label="Image"> </div>
4	You can edit or delete the device name on the dropdown list in the Devices menu (please refer to Figure 23). The device configuration window as seen in Figure 24 opens when you press Edit to edit the existing device name. The device name is deleted immediately after pressing Delete .

5 Under **Projector Settings**,

- (a) When the selected device type is **PROJECTOR**, select the model of the projector you want to use from a dropdown list.



When the selected device type is **JNIOR_IO**, only one model of the Ethernet I/O controller is available from the dropdown list.



- (b) Set the parameters such as **IP address**, **Port** and **Status** of the selected device, **Login name** and **Password**. Use the on-screen keyboard  to type in the IP address, Port, Login name and Password.

- (c) The status of the device can be **Enabled** or **Disabled**. Select from the dropdown list as seen below.



NOTE: This is the only option available for **Projector Settings** when **System** or **GPIO** is selected.

- 6** To search click the **Search Devices on Network** button. This will scan the network for available devices. Once discovered, to select the device and press **Add**.

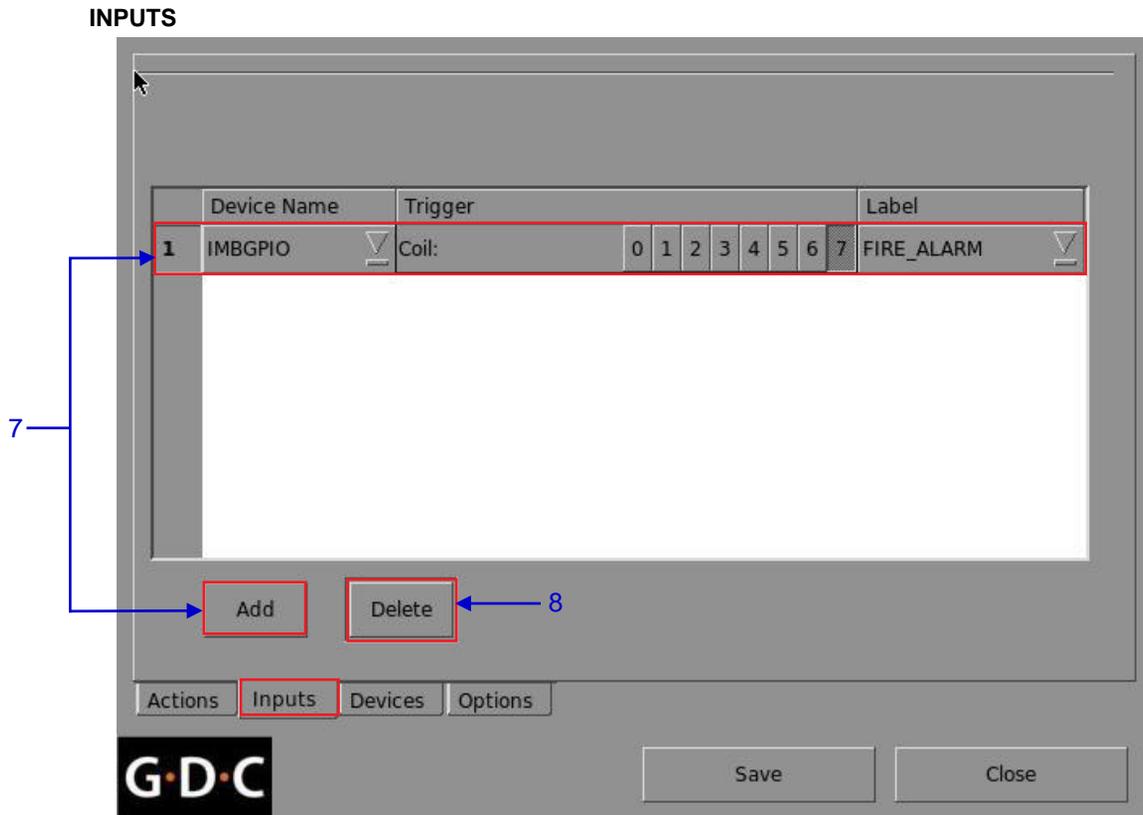


Figure 25 Inputs menu.

- 7** Press the **Inputs** button. A new window opens as seen in Figure 25. On the **Inputs** menu, press **Add** to enter the selected device.
- NOTE:** Only devices capable of sending a signal to the IMB can be added under Inputs.
- (a) Select a **Trigger** number from 0-7. Only one trigger can be selected at a time.
- 
- (b) Select an event label from the dropdown list. See the **Actions** menu.
- 
- 8** Press **Delete** if you want to delete the selected input.

ACTIONS

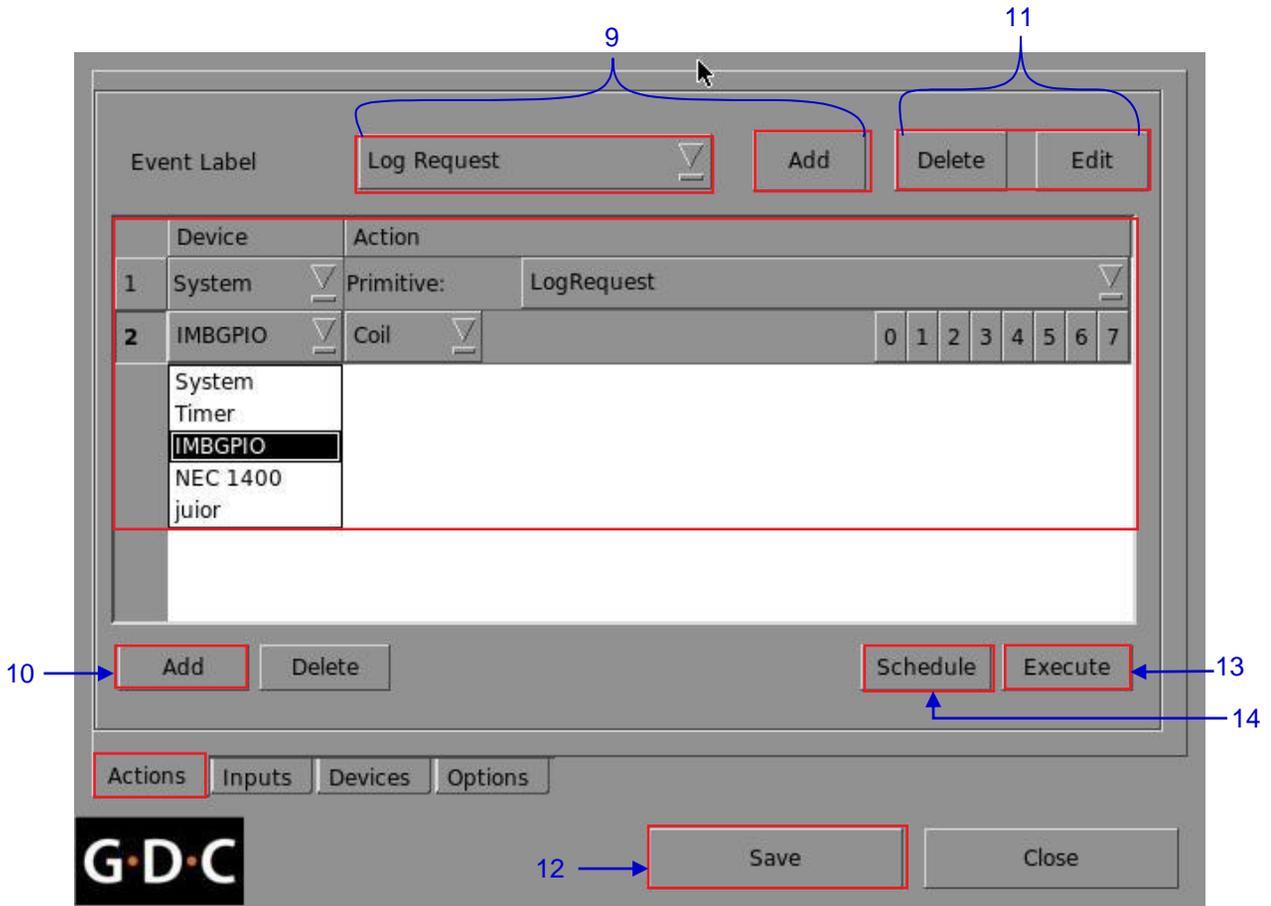


Figure 26 Actions menu.

9	<p>Select Actions on the Automation menu. On the Actions menu, press Add, located at the top portion of the screen. An on-screen keyboard opens. Type in your desired label name and press Enter.</p>
10	<p>Press Add, located at the lower portion the screen, to append an action to the selected Event Label. Then select a device from the dropdown list as seen below. New devices can be added to the list from the Devices menu.</p> <div data-bbox="763 1584 941 1897" style="border: 1px solid gray; padding: 5px; margin: 10px 0;"> <p>Device</p> <p>System ▾</p> <p>IMBGPIO ▾</p> <p>System</p> <p>Timer</p> <p>IMBGPIO</p> <p>NEC 1400</p> <p>juior</p> </div>

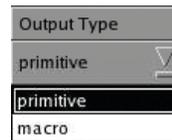
- (a) If the selected device is *System*, the *Output Type* prompt is *Primitive*. The *Pins To Use* option is disabled.



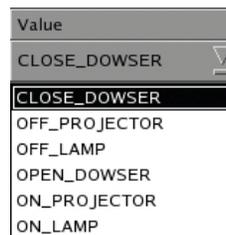
Then select the desired operation under the *Value* option.



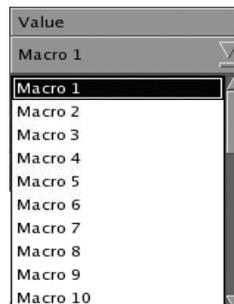
- (b) If the selected device type is a *Projector*, select *primitive* or *macro* from a dropdown list under the *Output Type* column.



- [1] If *primitive* is selected, the *Value* option will show a dropdown list of different projector options. Select the desired projector option.



- [2] If *macro* is selected, the *Value* option will show a dropdown list of *Macro 1-32*. Select the desired number of Macro from 1-32.



- (c) If the device type is *juior* or *IMBGPIO*, select *Coil*, *Register* or *Level* from a dropdown list under the *Output Type* column.

If *Register* is selected, multiple pins can be selected under the *Pins To Use* option. The number of pins selected will be the number of pins that can be used for output under the *Value* option. You can select more than one pin in the *Value* column based on the selected pins in the *Pins To Use* option.

	Device	Output Type	Pins To Use								Value							
1	GPIO	Register	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7

If *Coil* is selected, only one pin can be selected at a time. The *Pins To Use* option is disabled. The pins can be selected directly under the *Value* option.

	Device	Output Type	Pins To Use								Value							
1	GPIO	Coil									0	1	2	3	4	5	6	7

11 To edit an existing label's name, select the label from the dropdown list and then press *Edit*. An on-screen keyboard opens. Edit the existing label name and press *Enter*. To delete an existing label, select the label name from the dropdown list and then press *Delete*.

12 Press *Save* after completing the settings to return to the *Playlist* menu.

13 By pressing the *Execute* button you can test if an automation command is working correctly. This button will trigger the event selected.

14 Automation for events can be scheduled. To access the automation schedule select the *[Schedule]* button. This will bring you to a setup screen.

Automation Schedules

	Date and Time	Repeat	Label
1	26/09/2012 16:38:03	none	FIRE_ALARM
2	16:38:05	daily	FIRE_ALARM

Add
Delete

Cancel
Accept Changes

To add an Automation Schedule select the *[Add]* button. Select the repeat interval, options are either daily or a single occurrence.

2.4. Show Playlist

2.4.1. Create a Show Playlist

2.4.1.1. Access to Playlist Menu



Figure 27 Creating a show playlist.

- | | |
|----------|---|
| 1 | On the SMS interface, press [] to open a Playlist menu for creating playlists as seen in Figure 28 below in Section 2.4.1.2. Creating a Playlist . |
|----------|---|

2.4.1.2. Creating a Playlist

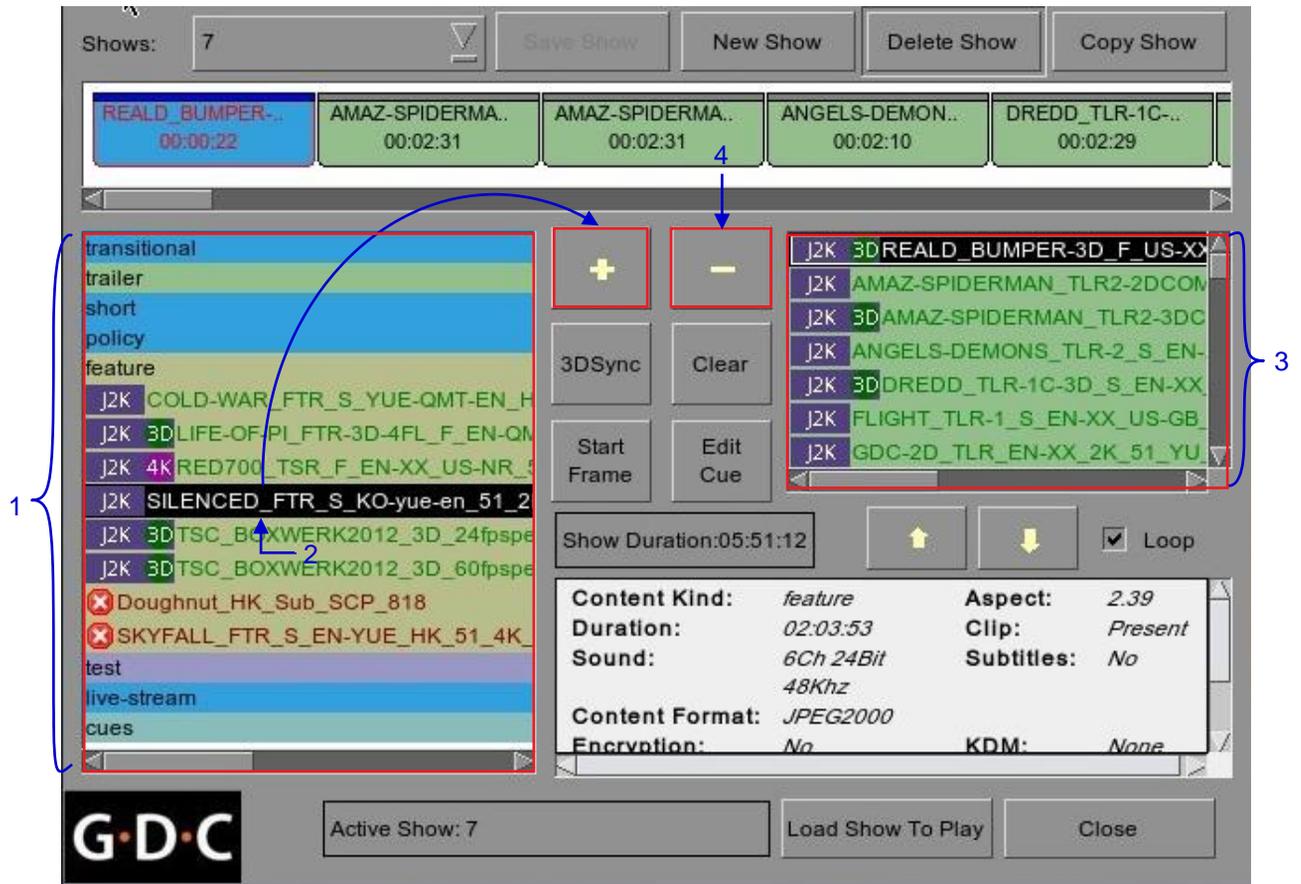


Figure 28 Playlist menu.

1	On the Playlist menu, all compositions stored are listed in the Content column on the left. The content is shown in alphabetical order grouped by type [Trailer, Feature, etc.]. Available automation cues are listed under ' cues '.
2	Select the composition to add to the playlist and press [+]. Repeat the same step to add other compositions (e.g. trailers or advertisements) to the playlist.
3	Compositions in the playlist are shown in the Playlist column on the right. Use [↑] (move up) and [↓] (move down) to change the order of compositions in the playlist. The order of the compositions in the playlist may also be changed by dragging their icons in the timeline display.
4	You can remove compositions from the Playlist column by selecting the clip that you want to remove and pressing [-].

2.4.1.3. Editing Cues

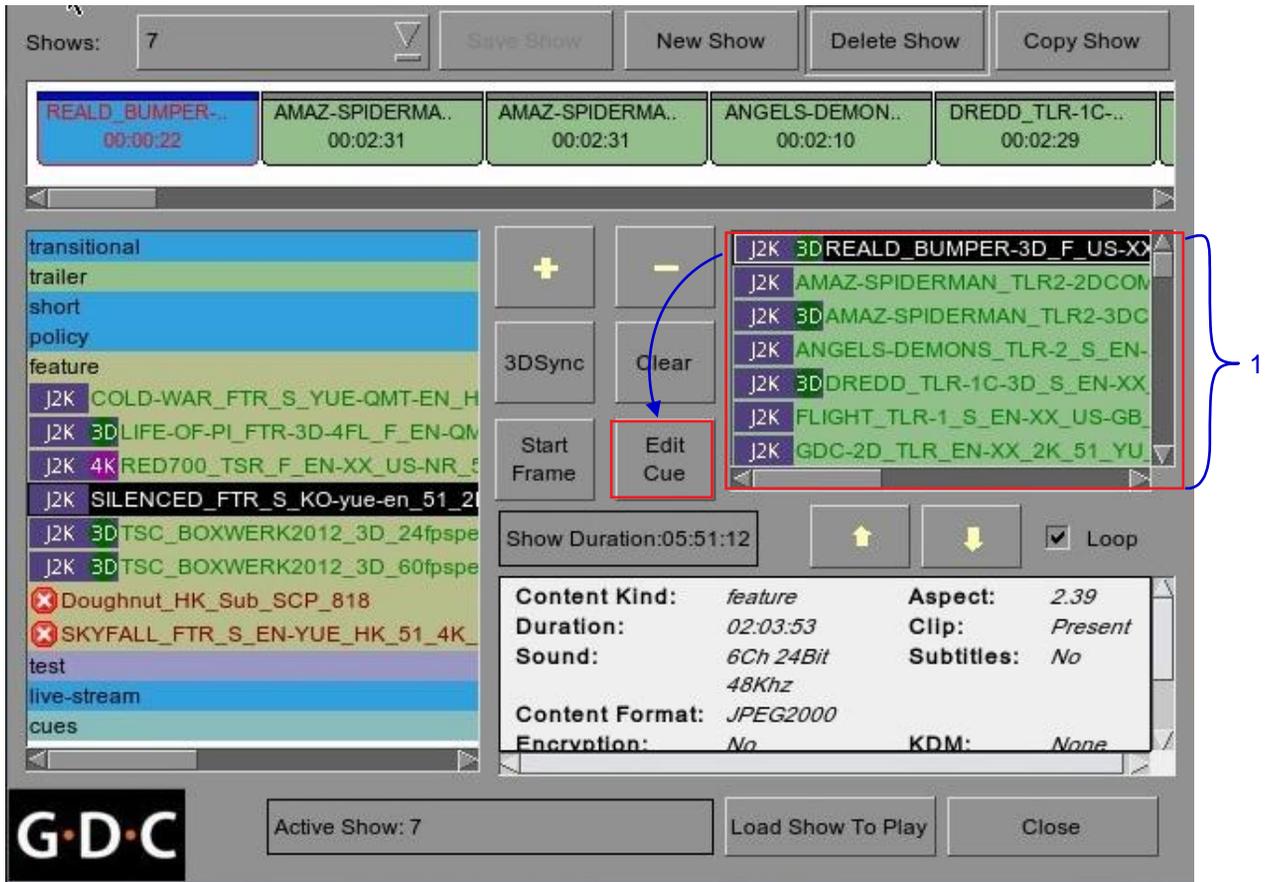


Figure 29 Playlist menu.

- 1 To edit a cue of a composition on the playlist, select the desired composition from the **Playlist** menu and press **Edit Cue**. A new window displaying the **Edit Cue** menu opens as seen in **Figure 30**.

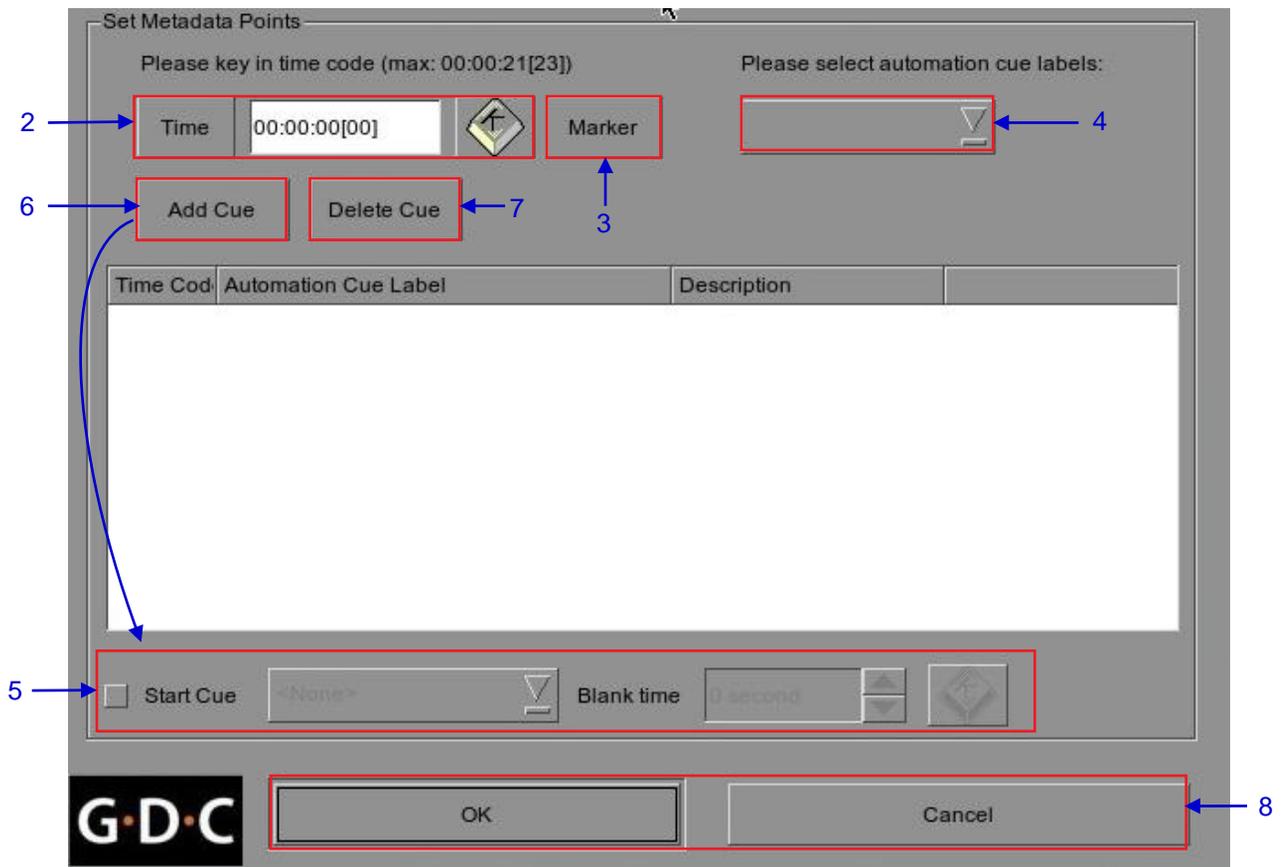
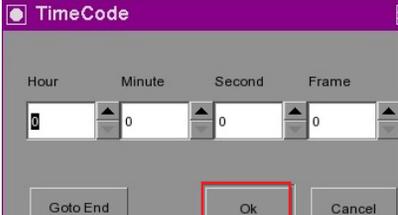


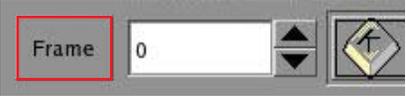
Figure 30 Edit Cue menu.

2

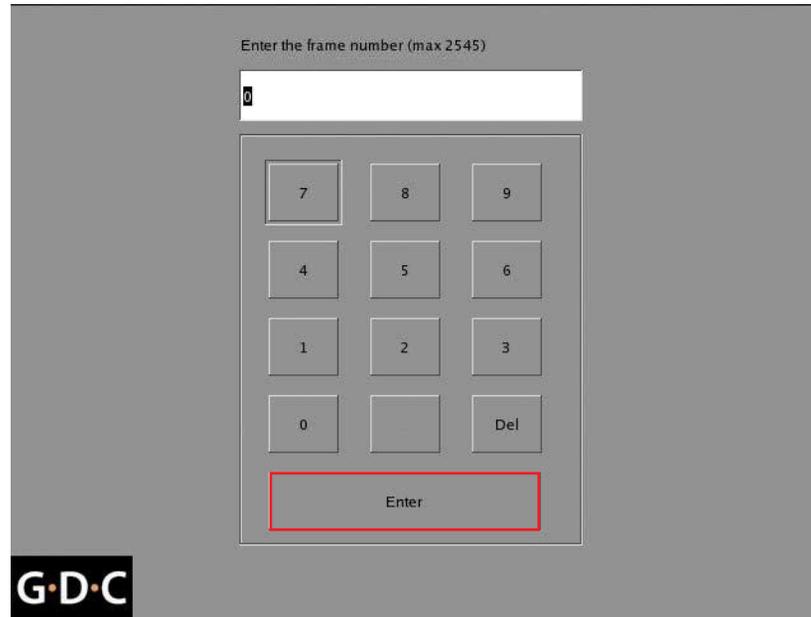
To specify a time code for the activation of the cue, press  and a time code entry window will open. Use the [▲] and [▼] buttons enter the desired time code. Press **OK** to confirm your selection.



To specify a frame for the activation of the cue, press the **Time** button once and it will toggle to display the **Frame** button as shown below.



Press  and a frame number entry window will open. Key in the desired frame number and press **Enter**.



3 Press **Marker** to view any markers present in the composition.

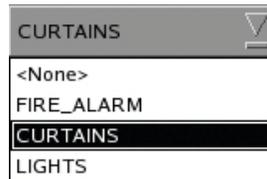
If the composition does not contain any markers, a small window pops up to indicate that there are no markers present.



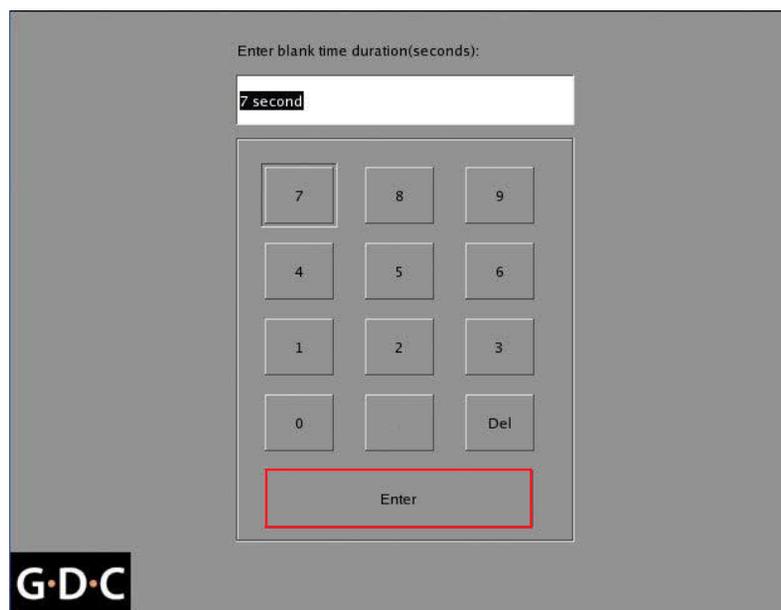
4 To add an automation cue label, select the desired automation cue label from the dropdown list as seen below.



- 5 To add a start cue, tick the **Start Cue** option and select the desired automation cue label from the dropdown list as seen below.



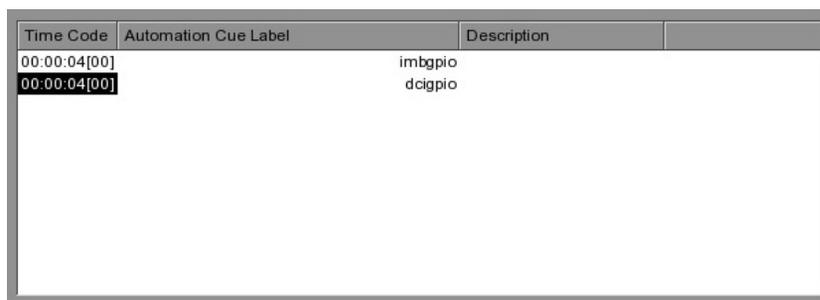
To specify the blank time, press  and a blank time entry window will open. Key in the desired blank time and press **Enter**.



NOTE: A start cue is activated immediately before the composition plays. The blank time indicates the time interval between the end of the start cue and the start of the composition's playback.

- 6** Press **Add Cue** to add the cue to the composition.

The cue's details will then be displayed in the cue window as seen below



Time Code	Automation Cue Label	Description
00:00:04[00]		imbgpio
00:00:04[00]		dcigpio

NOTE: You can select a cue from the cue window at any time to edit its properties.

- 7** To delete a cue from the composition, select the cue from the cue window and press **Delete Cue**.

- 8** To save the changes and exit, press **OK**.
To exit without saving any changes, press **Cancel**.

2.4.1.4. Saving the Playlist

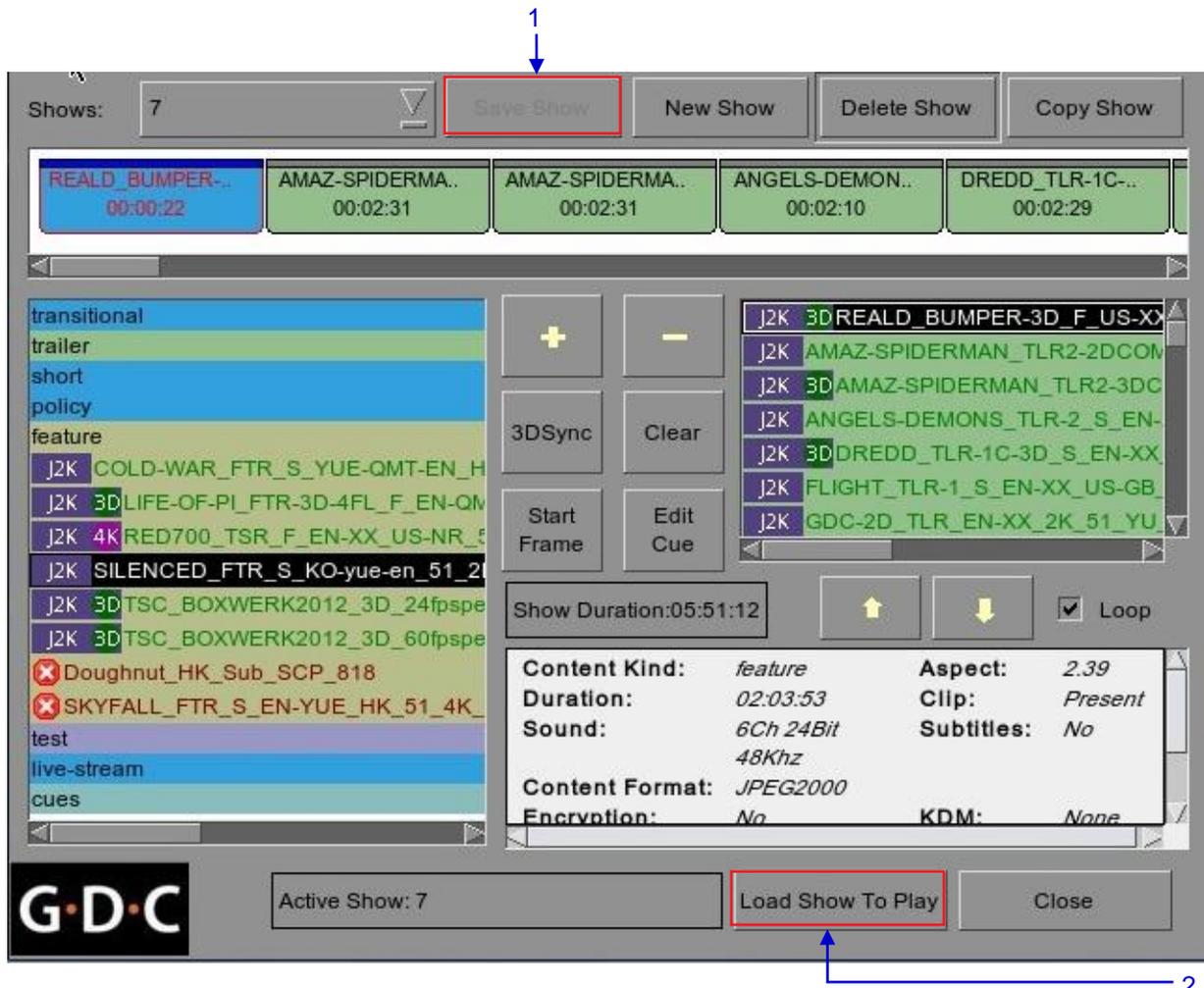


Figure 31 Saving the playlist.

1	Press Save Show to save the playlist. This ensures any changes to playlist will not be lost.
2	Press Load Show to Play and return to the Main menu.

2.5. Show Schedule

2.5.1. Schedule a Show

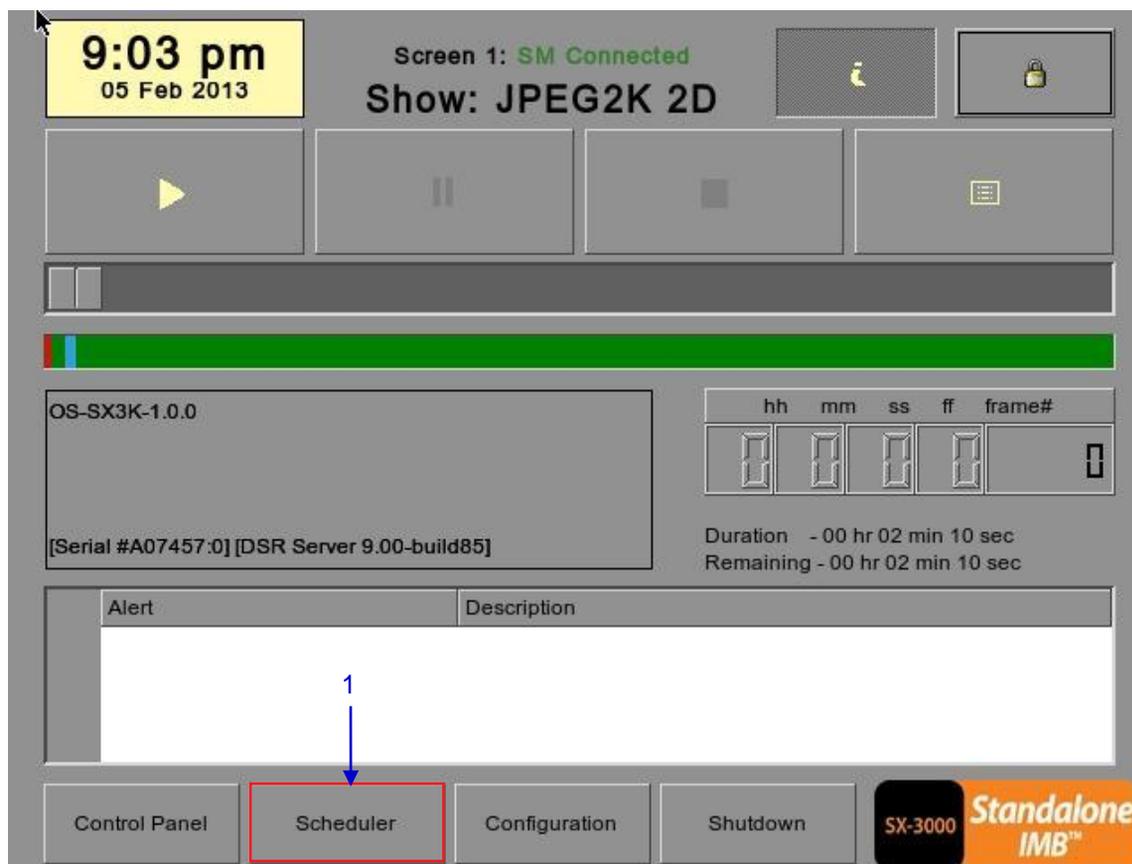


Figure 32 SMS Interface [Scheduler].

- 1 On the Main menu, press **Scheduler**. A new window opens as seen in **Figure 33**.

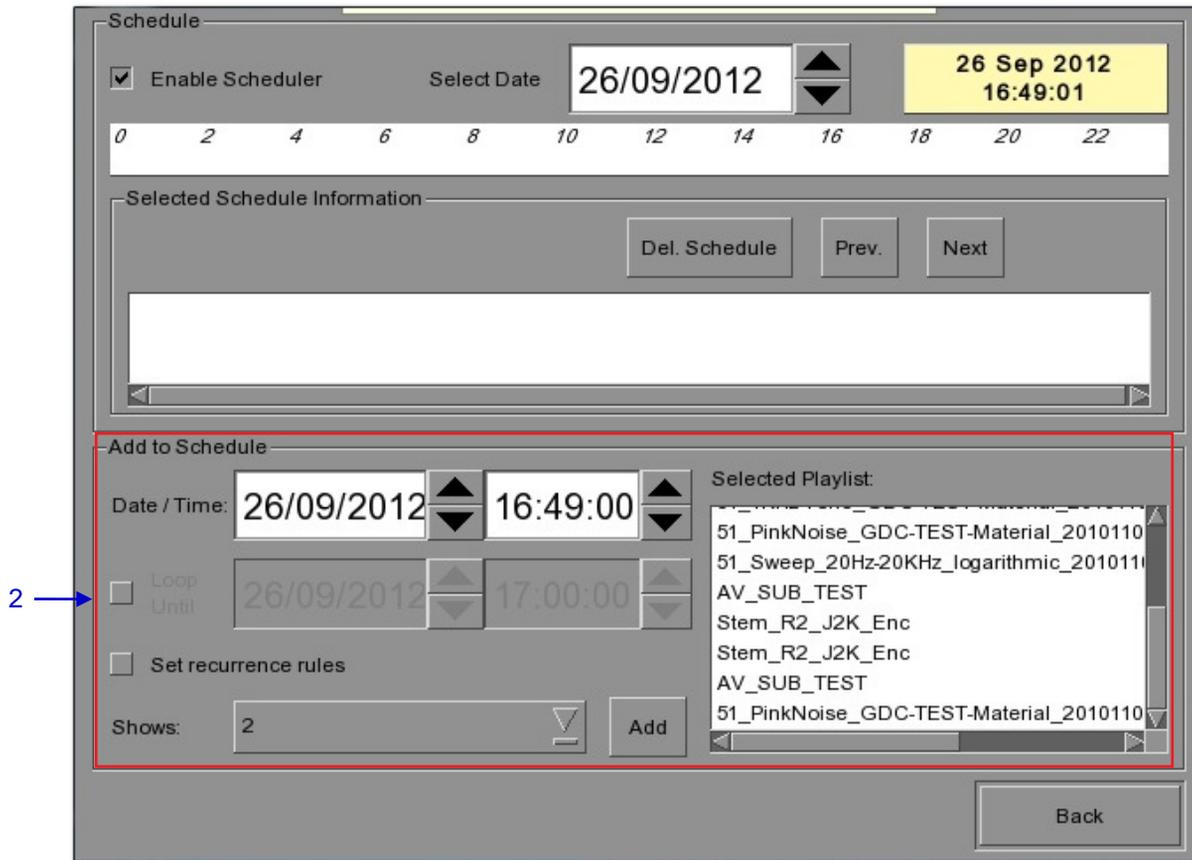


Figure 33 Scheduler menu.

- 2** Go to the bottom section named **Add to Schedule**. At **Date / Time**, indicate the date and time to schedule the show.
- (a) The date format is DD/MM/YYYY and the time format is HH:MM:SS. To select the day, click on DD and adjust to the required day using [▲] and [▼]. Repeat the same for MM, YYYY, HH, MM and SS.
- 
- (b) At **Shows**, select the playlist for the show. Press [▼] to view all the playlists already saved in the IMB. Select the required playlist.
- 

(c) The **Selected Playlist** column on the right displays the clips in each playlist.



(d) If you want the playlist to loop for a period of time, check **Loop Until** and indicate the date and time to end the loop.



(e) Press **Add** after the schedule date/time is fixed and playlist is selected.



(f) If the new show schedule does not conflict with other schedules already saved to the IMB, the schedule will be added to the existing list of schedules in the IMB.

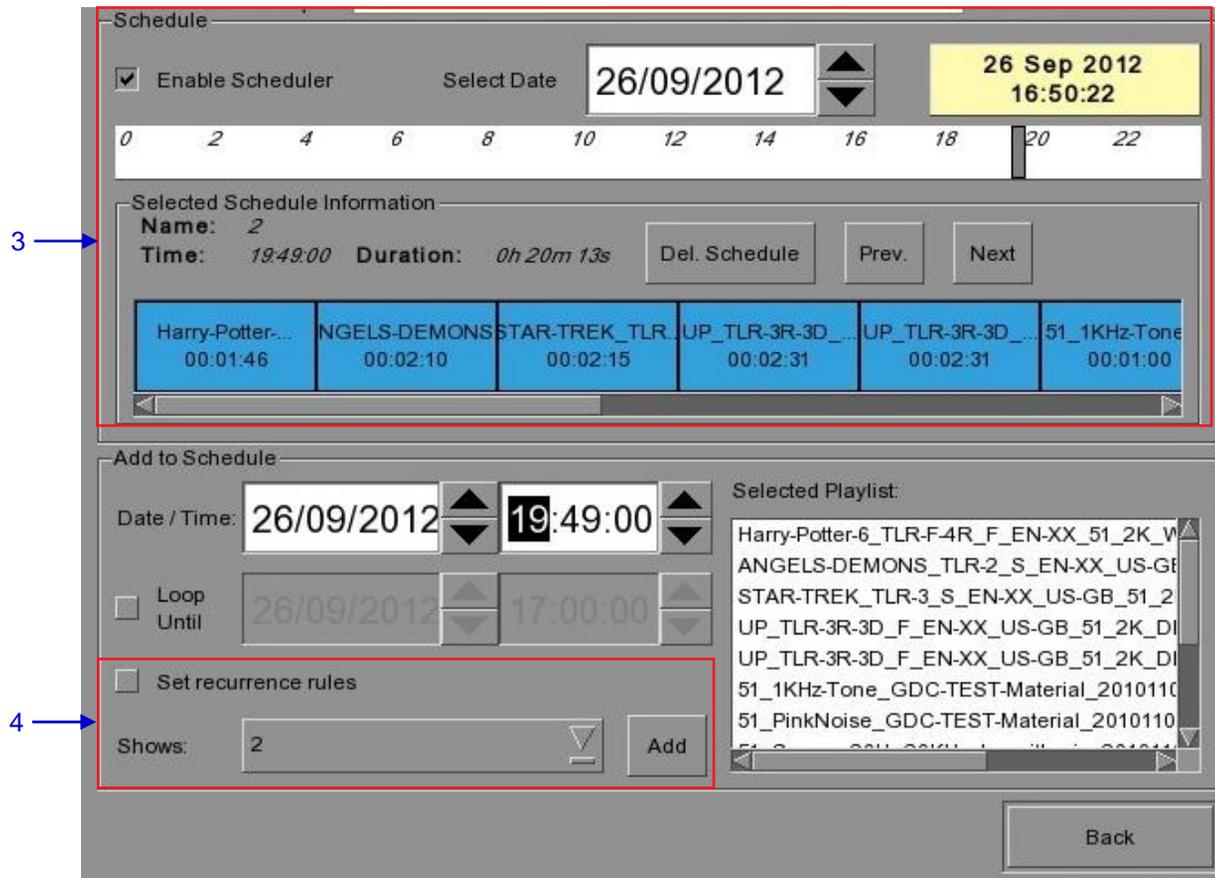
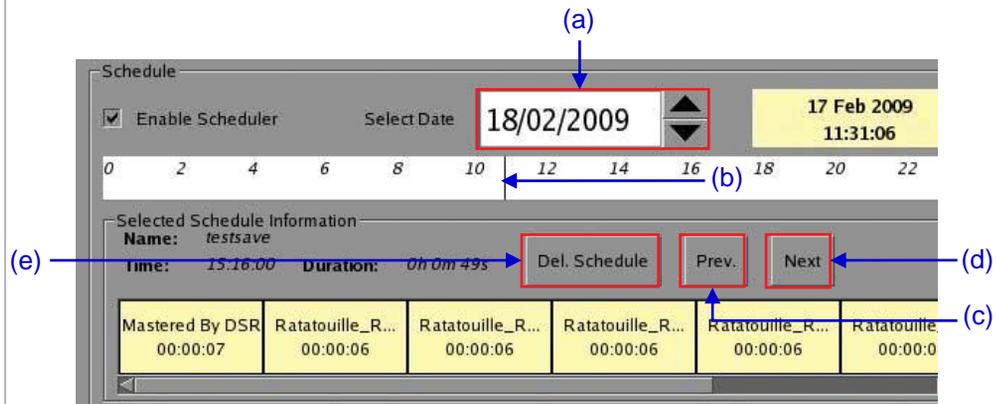


Figure 34 Viewing schedule information.

- 3** Check the **Enable Scheduler** checkbox to enable scheduled playback



- (a) At **Select Date**, indicate the date of the schedule. You should see a line on the time-bar at the slot where the show is scheduled.
- (b) Click on the line. Information about the show such as name, time and duration will be displayed in the **Selected Schedule Information** column beneath the time-bar.
- (c) To navigate to the previously scheduled show just before the selected show, press **[Prev.]**.
- (d) To navigate to the succeeding show scheduled after the selected show, press **[Next]**.
- (e) To delete a show schedule from the time-bar, just click on the relevant color bar and press **[Del. Schedule]**.

- 4** To replicate the same show schedule on other days, check **Set recurrence rules** and press **Add**.

Select rules for the recurrence of the schedule created for Wed 26 Sep 2012

Recurrence rules

Repeat once on 27/09/2012

Repeat on the next 1 consecutive Monday

Repeat on the next 1 consecutive day(s)

Schedule recurrence dates

Thu 27 Sep 2012

Apply recurrence rules Return to the scheduler

Figure 35 Replicating show schedule.

5	A new window opens as seen in Figure 35. Select the required recurrence option. Only one option can be selected. Upon selection, all effective recurring dates will be listed in the Schedule recurrence dates column at the bottom.
6	Press Apply recurrence rules to schedule the recurrence dates. If no option is selected, press Return to the scheduler to return to Scheduler menu. When on Scheduler menu, press Back to return to the Main menu.

2.6. Synchronizing Shows

2.6.1. Synchronizing Clips for 3D (MPEG2)

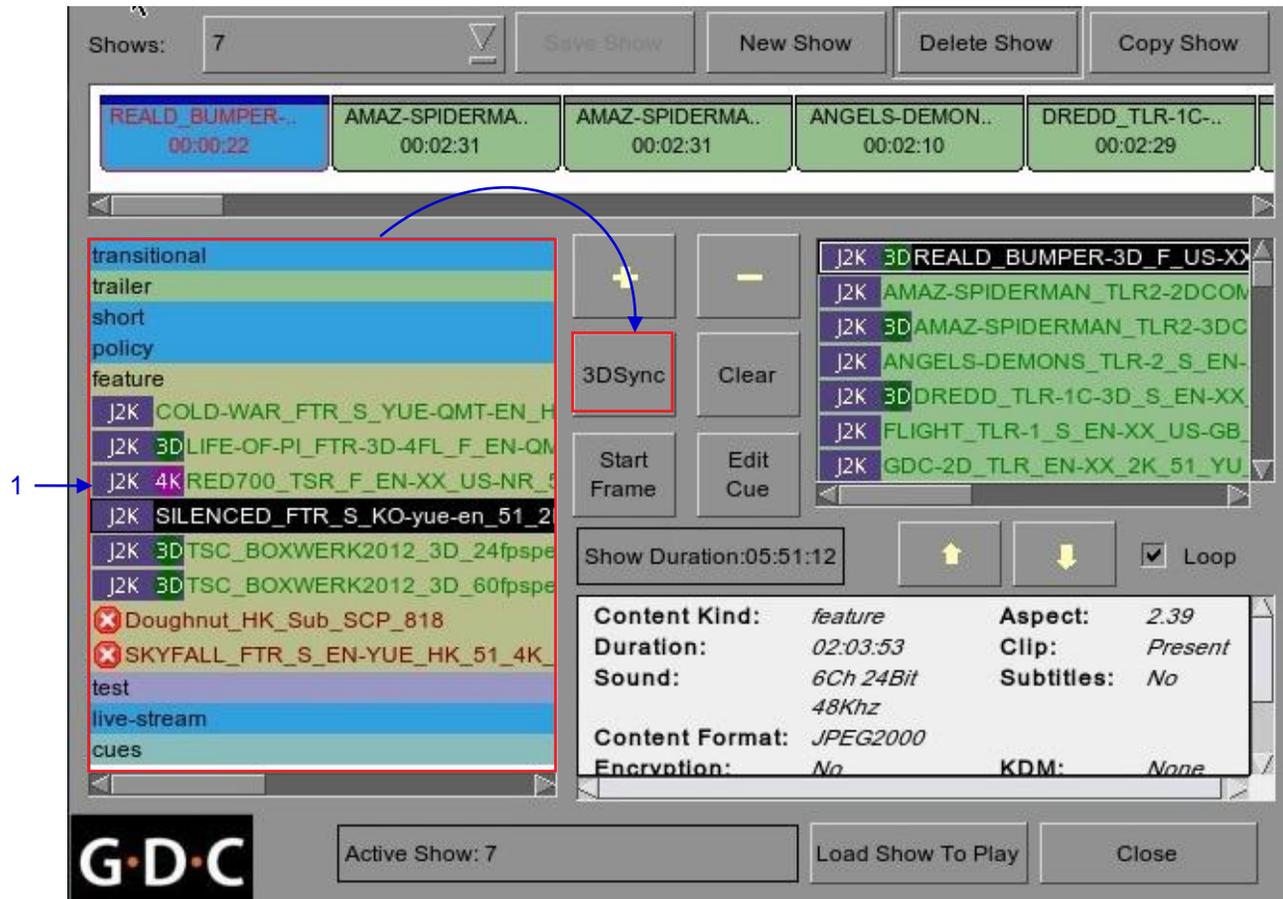
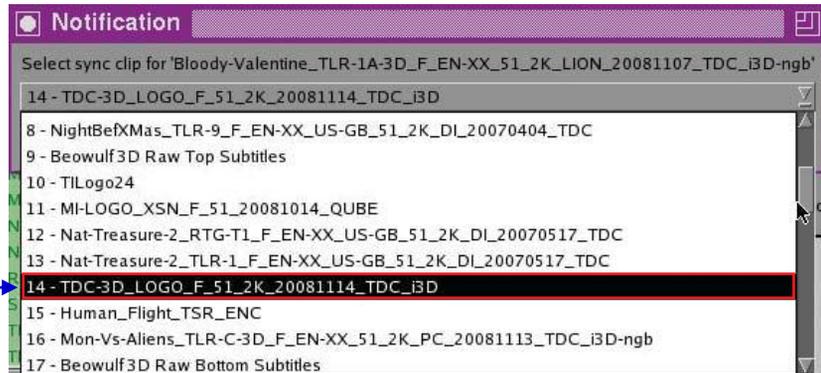


Figure 36 Synchronizing the clips.

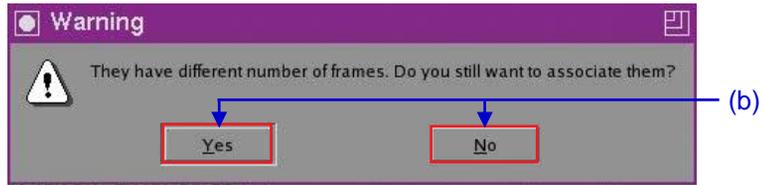
- 1 On the **Playlist** menu, select the clip from the **Contents** you want to associate with another clip for 3D showing and then press **3D Sync**. A small window pops out as seen below.

2

- (a) Select the clip you want to associate with the previous clip you selected from Contents and then press OK.



- (b) Clips with the same number of frames will be immediately synchronized. If the clips don't have the same number of frames, a small window will pop out as seen below.



- (c) Select Yes to confirm or No to cancel. Notice that the title of synchronized clips in Contents will change after confirmation. [3D] is added before the title of the clip.



2.7. IMB Configuration

2.7.1. CineCanvas™ and CineLink™ Configuration

Connect a network cable from the Ethernet 2 port of the IMB to the LAN port of the projector that will accept CineCanvas™ communication. Make sure the IMB and projector are set on the same subnet network. For example, if the projector is set to 10.10.10.10 and the IMB is set to 192.168.0.200, either the IMB has to change its IP to 10.10.10.xxx or the projector has to change its IP to 192.168.0.xxx for them to be on the same network.

*assuming default subnet of 255.255.255.0

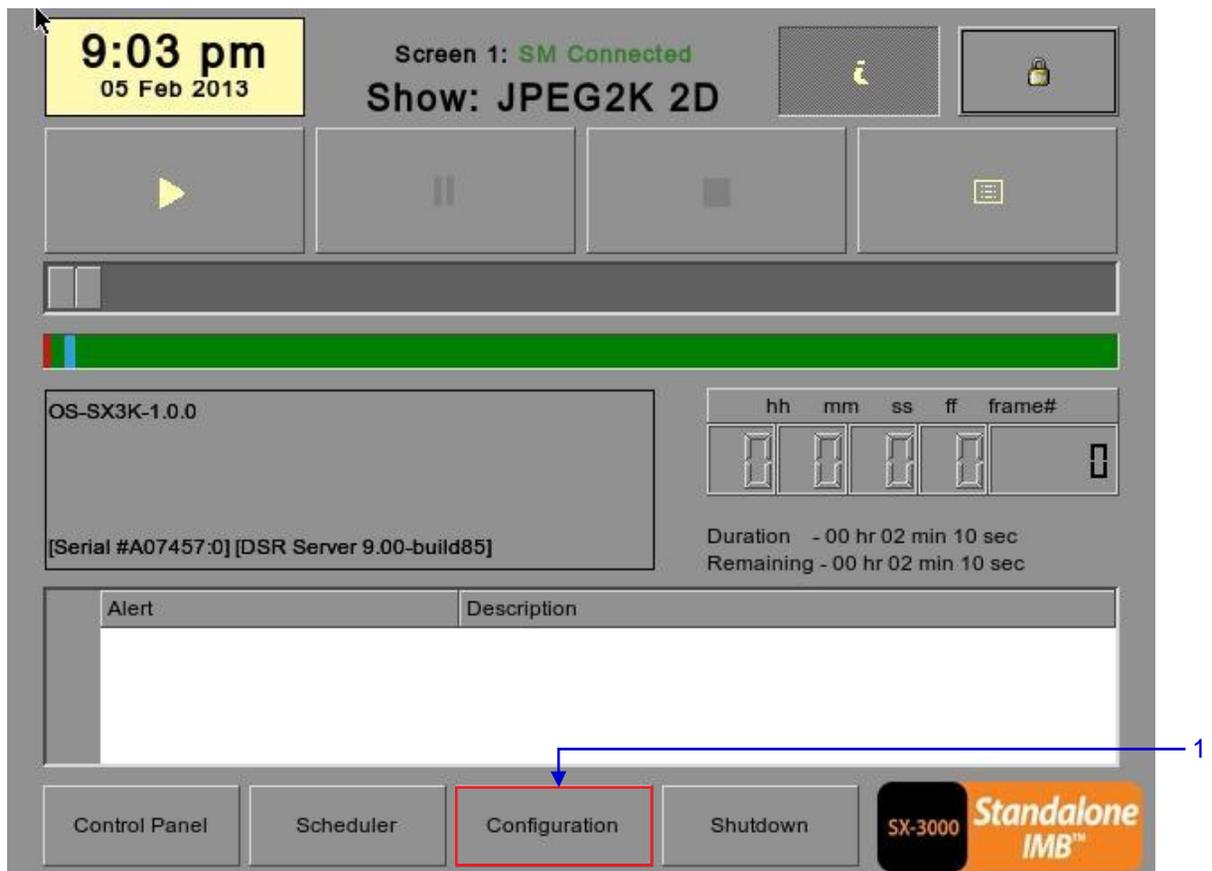
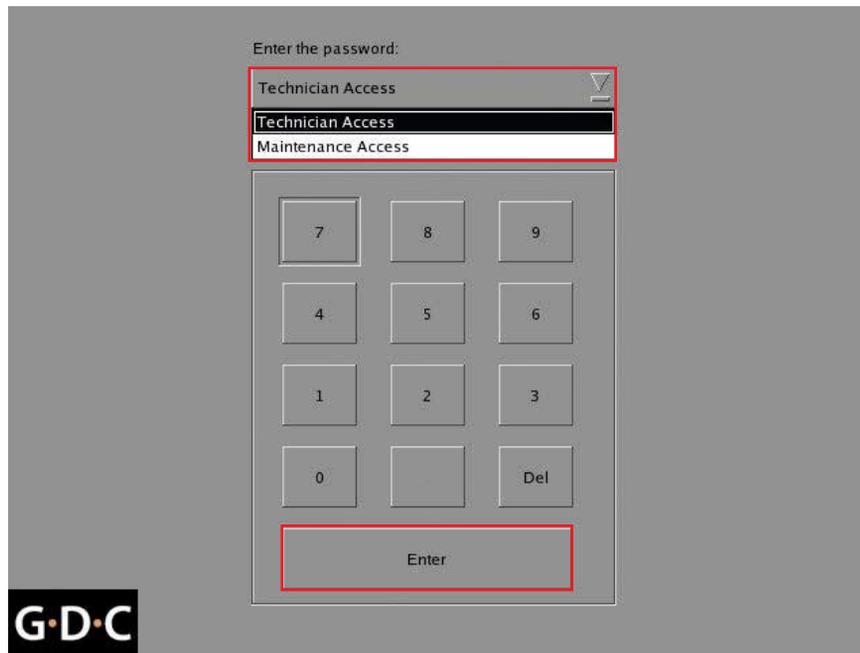


Figure 37 SMS Interface [Configuration].

- 1 On the **Main** menu, press **Configuration**. A prompt for **Maintenance/Technician** password opens. Select **Maintenance** from the dropdown list. Type in the correct password and press **[Enter]**.



NOTE: Only Maintenance access has permission to view or change settings on the CineCanvas™ tab.

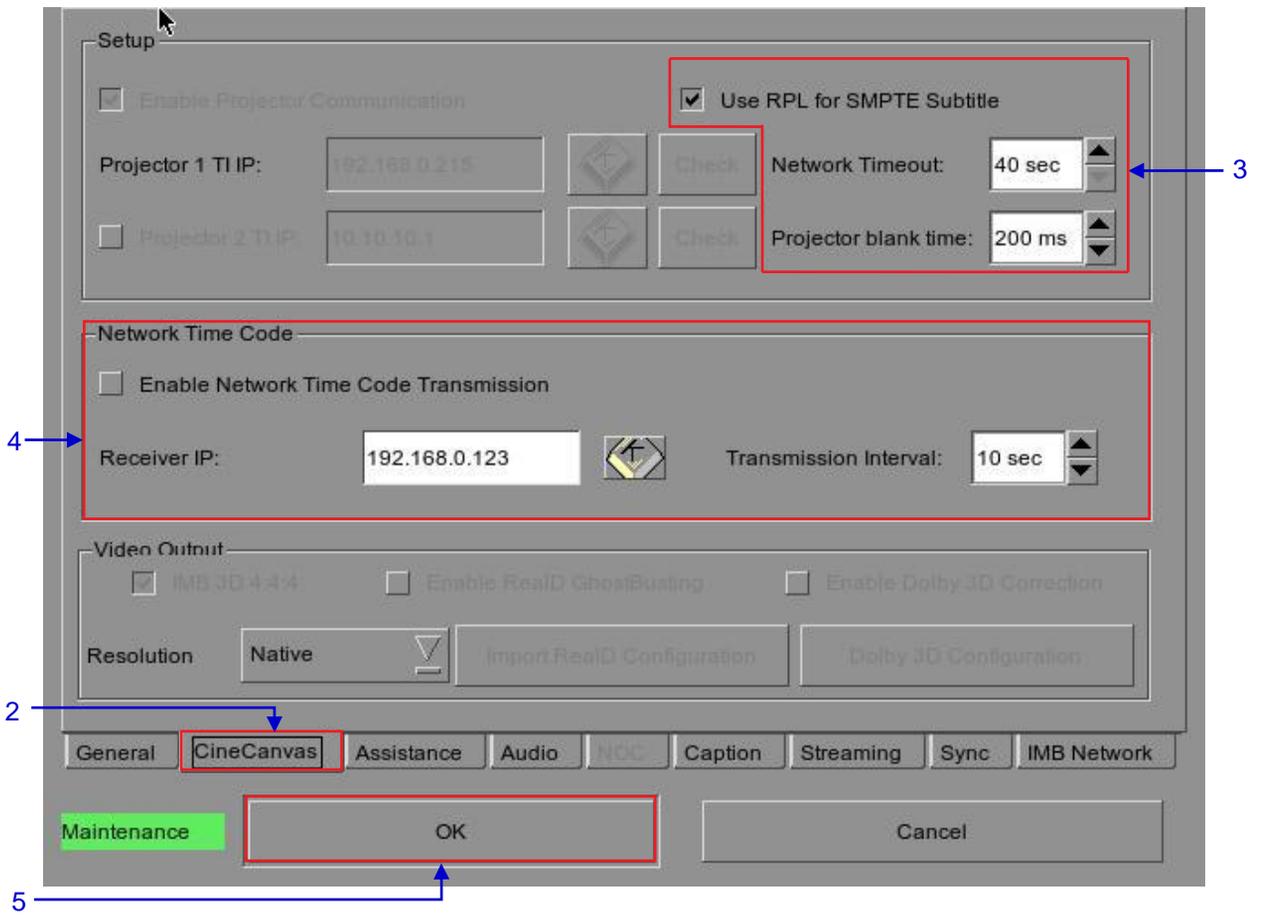
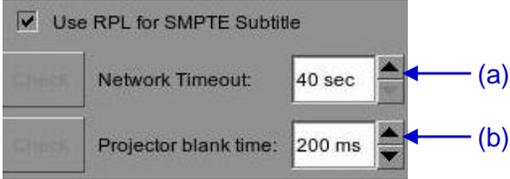


Figure 38 Setting up Cinecanvas subtitling option.

2	A new window for the Configuration menu opens as seen in Figure 36. Press CineCanvas to open the CineCanvas menu.
3	<p>Use the [▲] [▼] buttons to adjust the Network Time out and Projector blank time.</p> <p>(a) At Network Timeout, indicate how long the IMB will wait for the projector to respond to accept the subtitles before popping up an error message. Error can occur due to:</p> <ul style="list-style-type: none"> • Incorrect configurations on the IMB and projector. Make sure the IMB and projector are set on the same LAN network. • Loose network cable connection between the IMB and projector. <p>(b) At Projector blank time, indicate how long the projector should be blanked during change of PCF or format before playback should commence. This is needed because the projector shows some noise when the PCF or format is changed.</p> 
4	<p>Tick the Enable Network Time Code Transmission option to enable network transmission. At Receiver IP, use the on-screen keyboard to type in the Network IP address.</p>  <p>At Transmission Interval, use the [▲] [▼] buttons to adjust the time of transmission interval.</p> 
5	Once set, press [OK] to apply settings and return to Main menu.

2.7.2. Dolby 3D Setup

Once you have obtained a license from GDC, you will be given an update that enables Dolby 3D configuration. Dolby 3D setup requires that you have a PC that can be connected to the IMB network, so that you can access a web interface on the IMB. The Dolby colour test patterns must be ingested to the IMB. Please contact your regional GDC support for the Dolby colour test patterns.

- 1 On the **Main** menu, press **Configuration**. A prompt for Maintenance/Technician password opens. Select **Maintenance** from the dropdown list. Type in the correct password and press **[Enter]**.

Enter the password:

Technician Access

Technician Access

Maintenance Access

7 8 9

4 5 6

1 2 3

0 Del

Enter

GDC

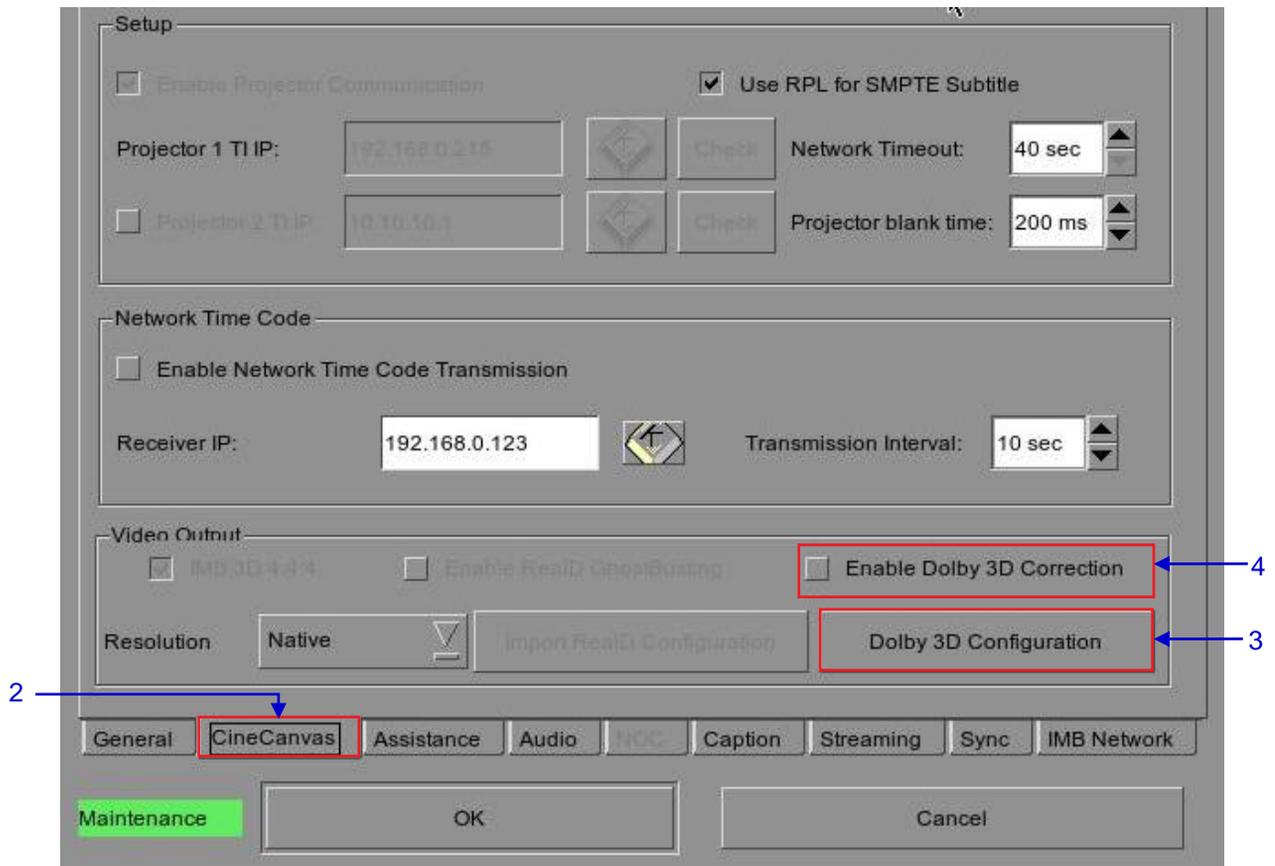


Figure 39 Dolby 3D setup.

2	A new window for Configuration menu opens as seen in Figure 39. Press CineCanvas to open the CineCanvas menu.
3	Click Dolby 3D Configuration to access the DFC IP address configuration. Enter the IP address of the DFC and check the DFC IP address box. If there is no DFC, make sure that the DFC IP address box is NOT checked.
4	Once you have setup the DFC IP address, check the box Enable Dolby 3D Correction.
5	Setup the Dolby 3D filter wheel, Dolby filter controller and glasses; check that the IMB is able to access the projector and the filter controller via the network.
6	Connect your laptop, open a browser and point to http://server-ip/cgi-bin/dolby3dConfig . From here you will follow the wizard to setup color correction for the GDC IMB. The DFC Controller will automatically turn on and off whenever a 3D playlist is being played. **server-ip refers to the SOM IP address configured in SMS Configuration IMB Network.

2.8. Series 2 DLP CINEMA® Projector Setup

There are several points to be noted when setting up the GDC IMB with a Series 2 DLP Cinema® projector. SMS version 9.0 supports Series 2 projectors, the section below details additional steps required for full Series 2 compatibility. If any fields are left blank the default values are assumed. Login and password fields only need to be entered if the user has changed these parameters on the projector.

2.8.1. Automation Setup

- 1 On the **Automation** menu, press **Devices**. This section will describe individual projector setup. An example Barco setup is seen in **Figure 40**.

The screenshot shows the GDC IMB interface with the 'Devices' tab selected. The 'Device Name' is 'PROJECTOR'. The 'Device Type' is 'PROJECTOR'. The 'Model' is 'BARCO'. The 'Status' is 'Enabled' and 'Series 2' is selected. The 'IP Address' is 192.168.100.2, 'Port' is 43728, and 'Login' and 'Password' fields are empty. A red box highlights the 'Device Type' and 'Model' fields, and another red box highlights the 'Status' dropdown. Blue arrows point to the 'Devices' tab (1), the 'IP Address' field (2), the 'Status' dropdown (5), and the 'Series 2' option.

Figure 40 Setting the device type.

2	<p>To setup a Barco Series 2 Projector go to SMS-> Configuration -> General- Automation -> Devices ->Add-> Device Type-> Projector-> Model-> BARCO. The Device Type should be setup as PROJECTOR and Model set to BARCO.</p> 
3	<p>To set up the Christie Series 2 projector the Device Type should be setup as PROJECTOR and Model set to CHRISTIE.</p> 
4	<p>To setup an NEC Series 2 projector the Device Type should be setup as PROJECTOR and Model set to NEC.</p>
5	<p>The Series 2 checkbox must be checked to ensure proper port number setting for Series 2 projectors.</p>

2.8.2. Subtitle Overlay

2.8.2.1. Subtitle Overlay Setup

1	Subtitle Overlay is supported for Series 2 projectors for 2D JPEG2000 content.
2	To setup Subtitle Overlay go to SMS -> Configuration -> Maintenance Access -> General. Under Settings there is a box titled Subtitle Overlay. You can also enter a Subtitle Delay in number of frames, entering a negative number will advance the subtitles by that number of frames.

2.8.2.2. Subtitle Language Selection

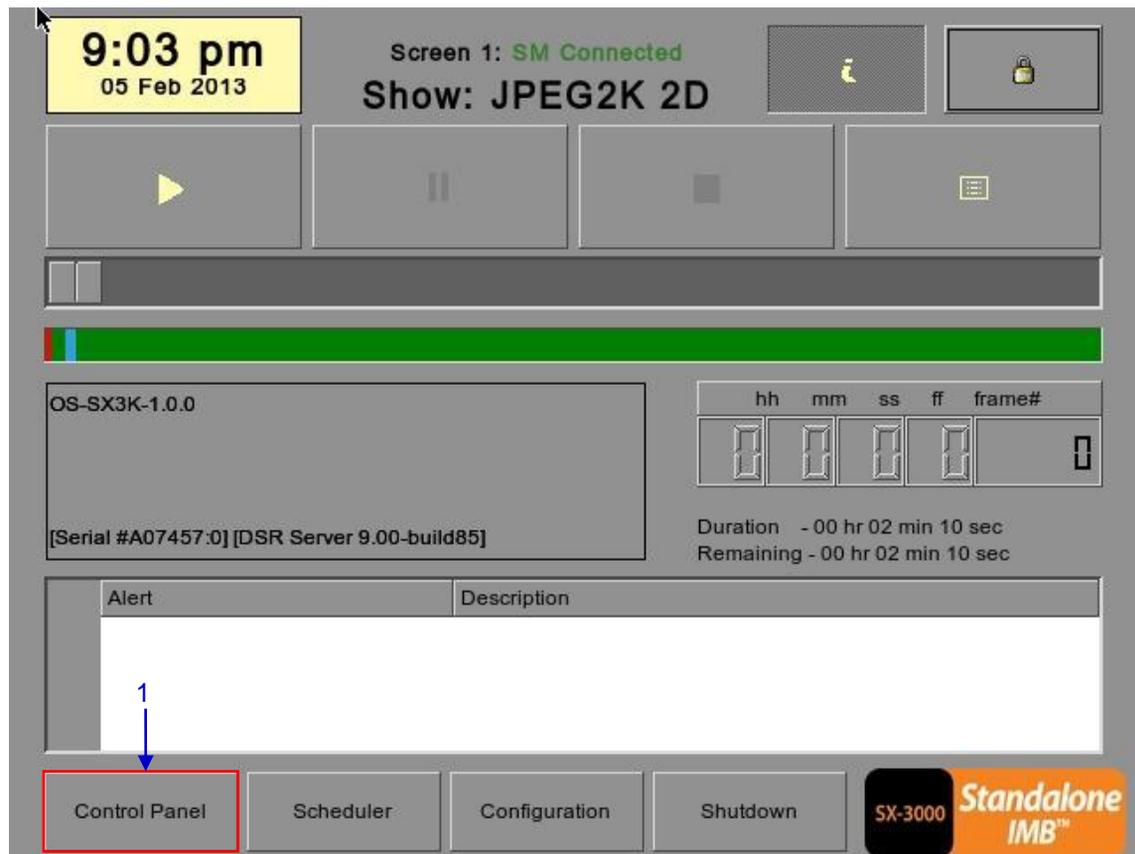


Figure 41 SMS Interface [Control Panel]

1	Press the Control Panel Button to navigate to the Control Panel.
----------	---

The screenshot displays a control panel interface for a device. At the top, it shows the Serial No : A07457. Below this, system information is listed: OS Version : OS-SX3K-1.0.0, Media block driver version: Forge, Media block firmware: 6.1, Media Block Temperature : 51 C, SMS Version : 9.00-build80, and Last update : upgrade-SOM-step3-build80-20130125.tgz.enc.

The interface is divided into two main sections: Storage and Network. The Storage section includes: (Last updated: Tue Jan 29 22:20:06 2013), Usage: 1.8T of 2.0T, Drive Temperatures: 23 C, 23 C, 23 C, Drive status : OS-OK R1-OK R2-OK R3-, and Raid status: DegradedArray. The Network section shows: eth0: 192.168.0.204/24 (up, 1000Mb/s). A Refresh status button is located to the right of the Storage section.

Below the system information is the Applications section, which contains several buttons: Extract logs & configuration, Automation, Admin panel, Manage Content (highlighted with a red border and a blue arrow labeled '2'), System monitor, SMS, Restart, and Shut Down.

Figure 42 Control Panel Menu

- | | |
|---|--|
| 2 | From the Control Panel select Manage Content . |
|---|--|

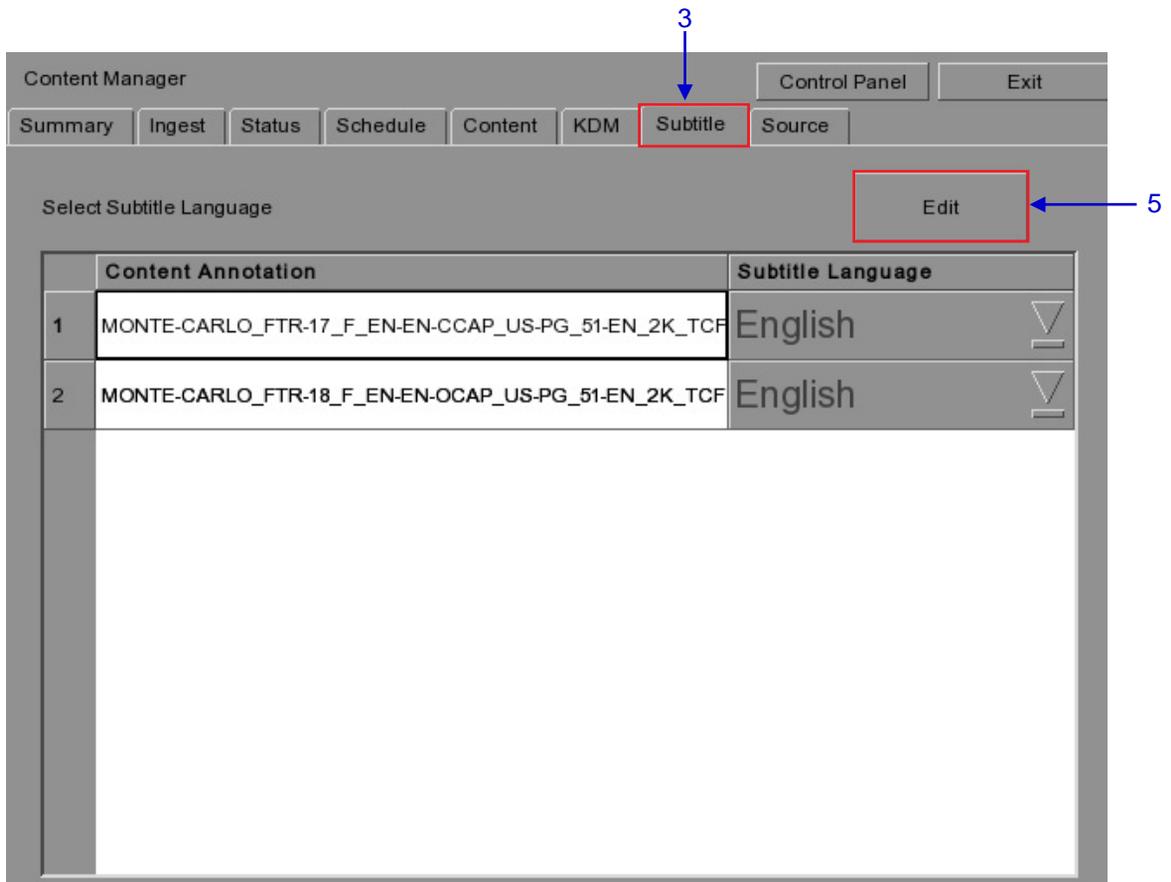


Figure 43 Editing the subtitle language.

3	Select the Subtitle tab to change the subtitle language.
4	When subtitle overlay is selected, the language for clips with subtitles can be configured in the Content Manager as seen in Figure 43 . Setting the correct language for subtitles will ensure that subtitles will be rendered properly for each clip.
5	Press Edit and enter the maintenance password to change the language for the displayed clips.

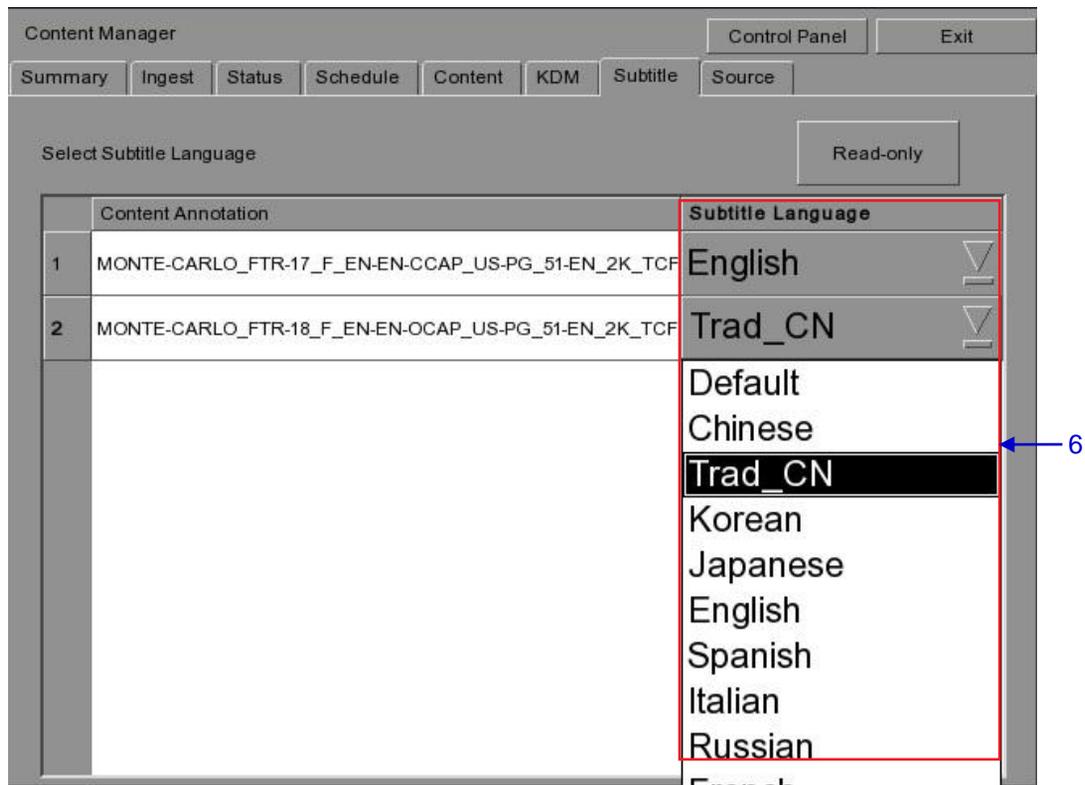


Figure 44 Subtitle language options.

6 As shown in **Figure 44**, the following languages can be set for each clip:

- Simplified Chinese
- Traditional Chinese
- Korean
- Japanese
- English
- Spanish
- Italian
- Russian

The language setting can also be left as **Default** to automatically use the original language setting of the clip content.

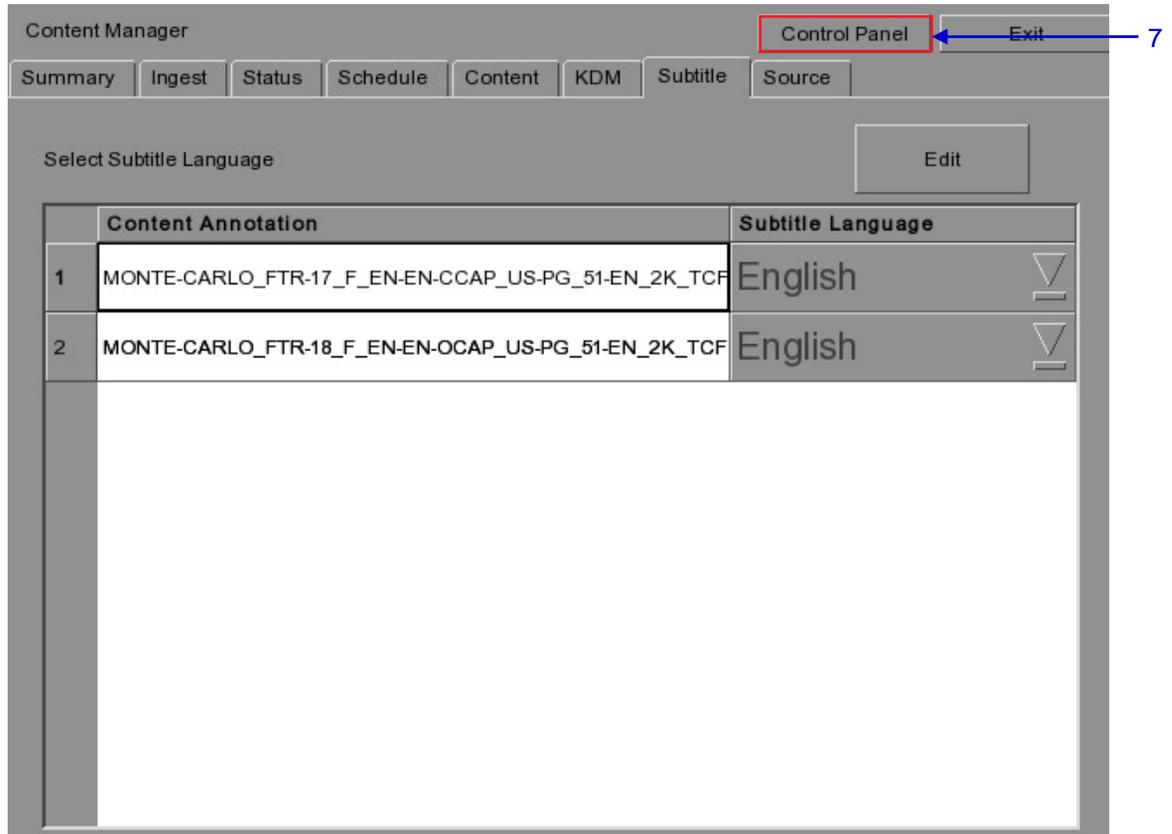


Figure 45 Returning to Control Panel.

7	Click the Control Panel button to return to the Control Panel.
----------	---

2.8.3. CineCanvas™ Support for Series 2 Projectors

CineCanvas™ support for Series 2 projectors will be enabled automatically when the **Subtitle Overlay** checkbox is **unchecked**. The IMB will determine whether CineCanvas™ is supported on the Series 2 projector. If the projector is capable of supporting CineCanvas™, it will be automatically enabled for content with subtitles.

2.9. Shutdown/Restart Application

2.9.1. Shutdown or Restart

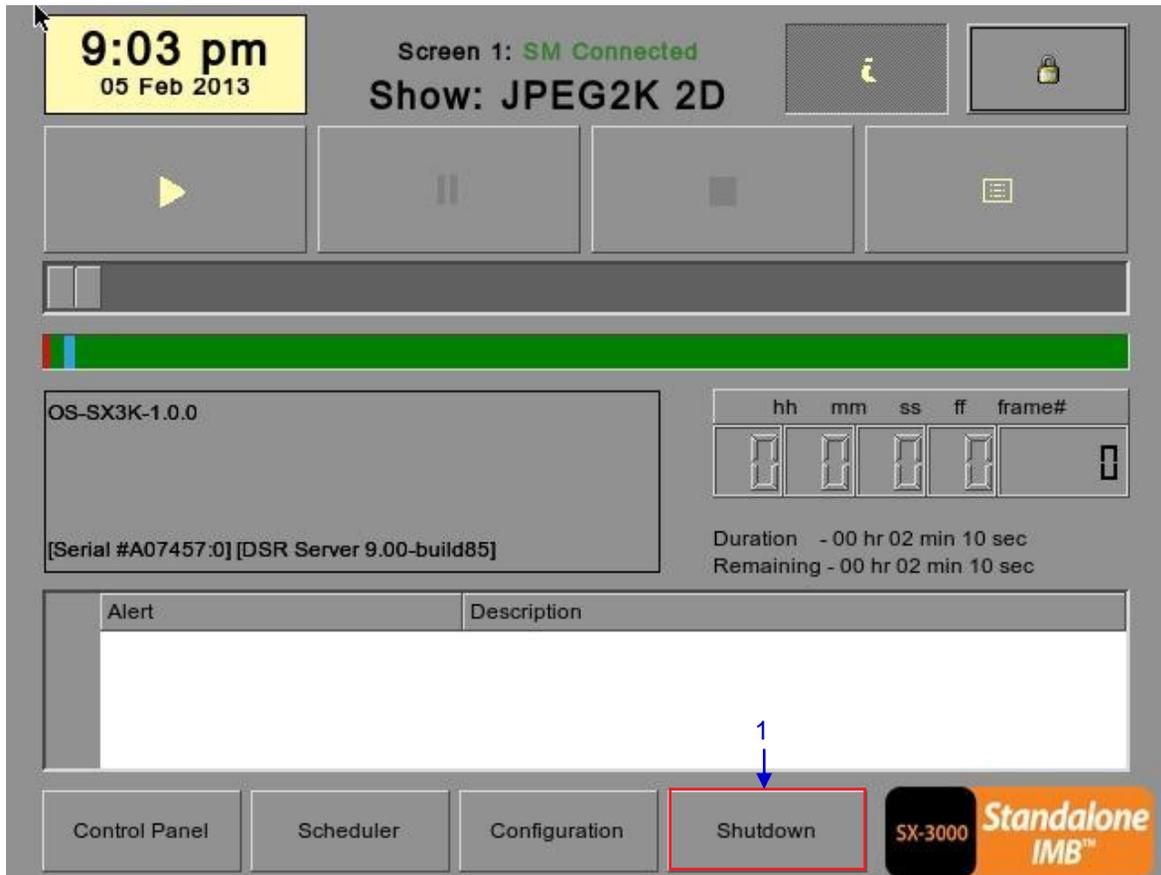


Figure 46 Shutting down the system

- 1 On the **Main** menu, when the **Shutdown** button is pressed, the system will prompt the user to select shutdown or restart application. Restarting the application will not reboot the IMB. It will only restart the software without affecting the hardware. allow some time for the IMB to restart the application or shutdown properly.

If the **Use startup/shutdown password** option on the **Configuration/General** menu is enabled, the system will prompt for a password before it shuts down. Please enter the **Technician** or **Maintenance** Access password.

3. CONTROL PANEL

3.1. About Control Panel

The **Control Panel** UI provides access to all the other menus used to configure and operate the SX-3000 IMB. To get to the **Control Panel**, press **Control Panel** on the **Main** menu as shown in **Figure 52**.



Figure 47 Control Panel menu.

3.2. Control Panel Menu

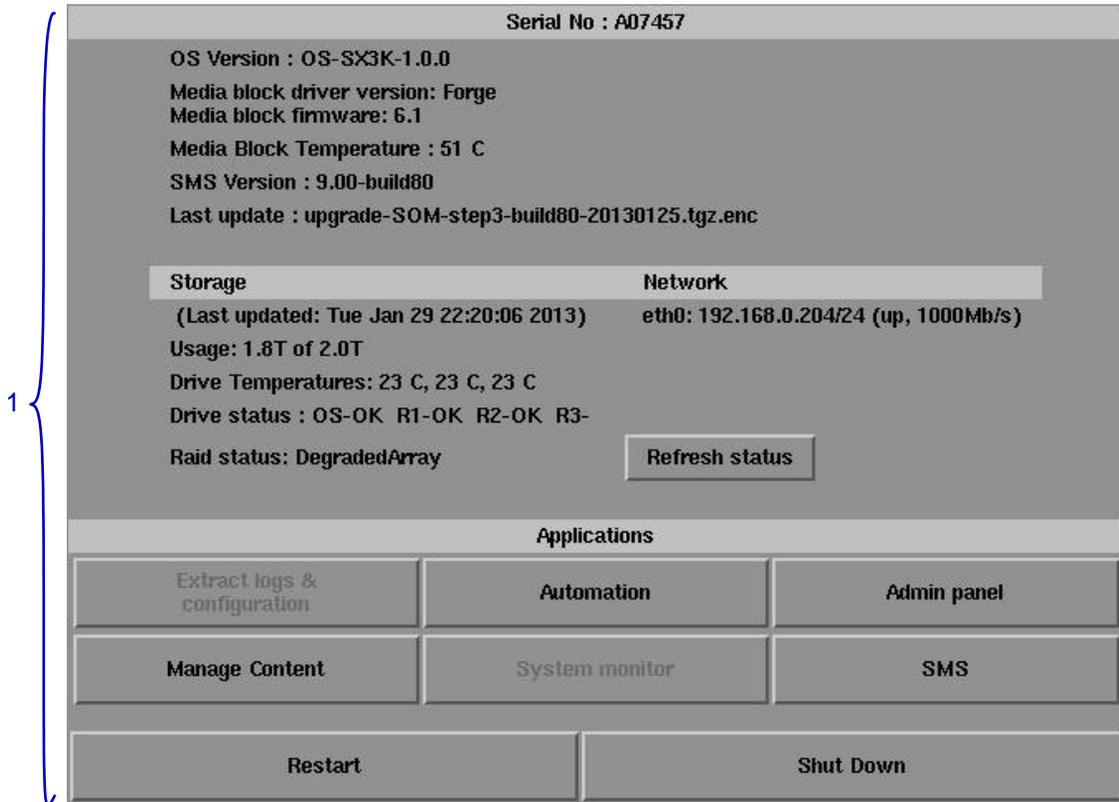


Figure 48 Control Panel menu.

- Switch **ON** the IMB and allow it to boot up to prompt directly to the **SMS** interface. When the SMS interface is shown, press the **Control Panel** button and a new window for the **Control Panel** menu opens as shown in **Figure 48**. The **Control Panel** includes the **Automation** button, **Admin panel** button, **Manage Content** button, **SMS** button, **Restart** button, **Shutdown** button and a **Refresh status** button. System information including the serial number, OS version, SMS version, network and storage information can also be seen on the Control Panel UI.

NOTE: The **Refresh status** button is used to manually refresh the status of the hard disks in the external storage device. This button should not be pressed during playback to prevent disruption of playback.

The SMS software continues to run in the background when using the Control Panel. This allows access to other IMB functions when playback is in progress. It is recommended that these functions be used very sparingly to avoid unnecessary system load that can potentially affect playback performance.

3.3. Manual Automation Execution

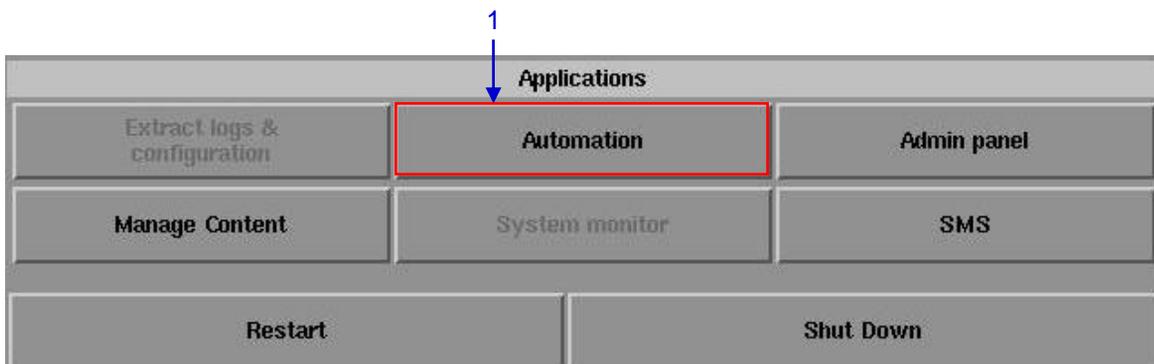


Figure 49 Accessing Automation.

- | | |
|----------|--|
| 1 | Automation labels and projector commands can now be executed from an interface on the Control Panel. Press Automation on the Control Panel to start the manual automation interface as shown in Figure 49 . |
|----------|--|

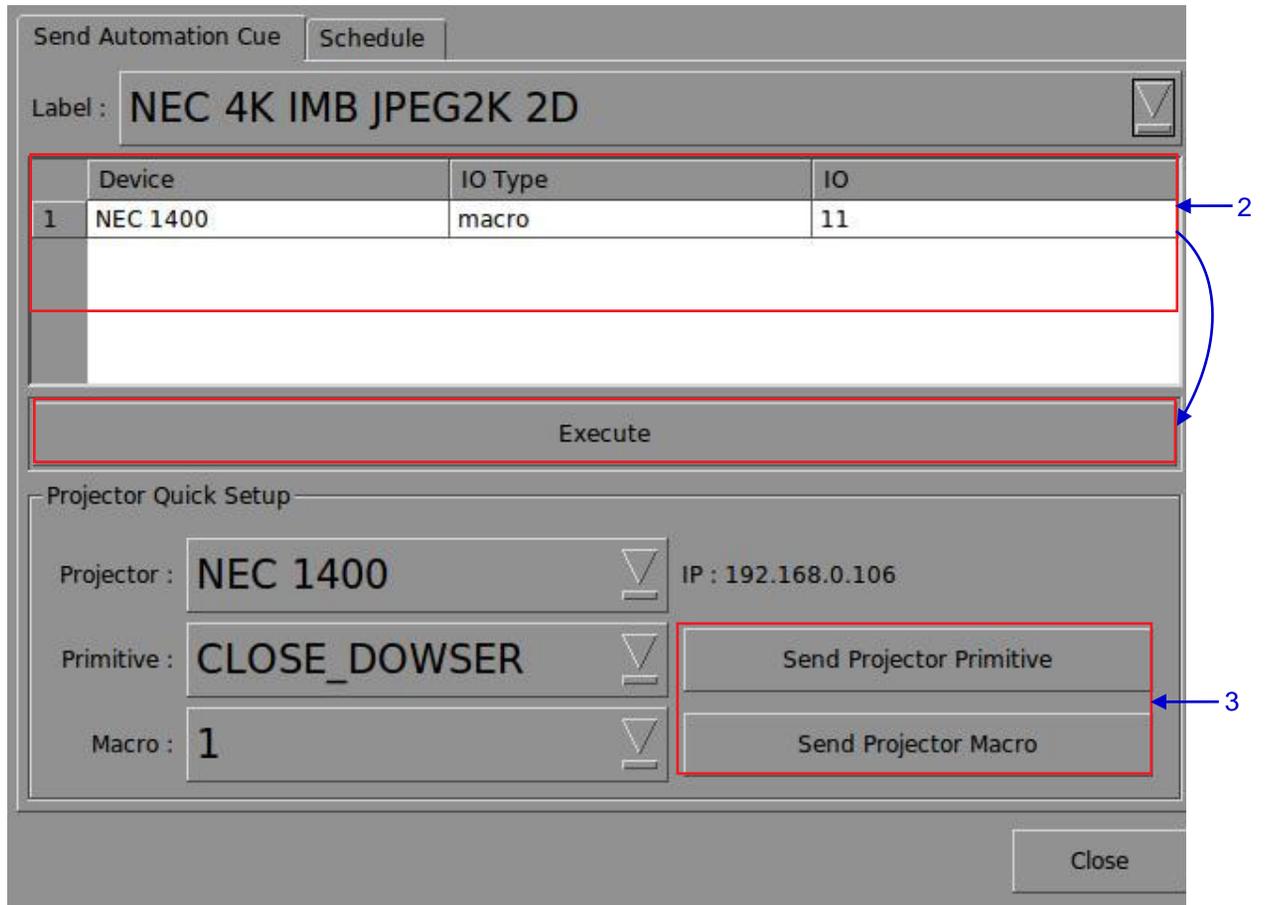


Figure 50 Executing Automation.

2	A new window opens as seen in Figure 50 . Select an automation label to view the actions associated with the label. Press Execute to execute the automation label.
3	When a projector is configured for automation, projector primitives and macros can be triggered from this interface as well. Select the projector primitive or macro to be executed, and click the Send Projector Primitive or Send Projector Macro to send the command to the projector. Please refer to Section 2.3.6. Automation for instructions on how to configure automation labels, actions and devices.

3.4. Restarting the Control Panel

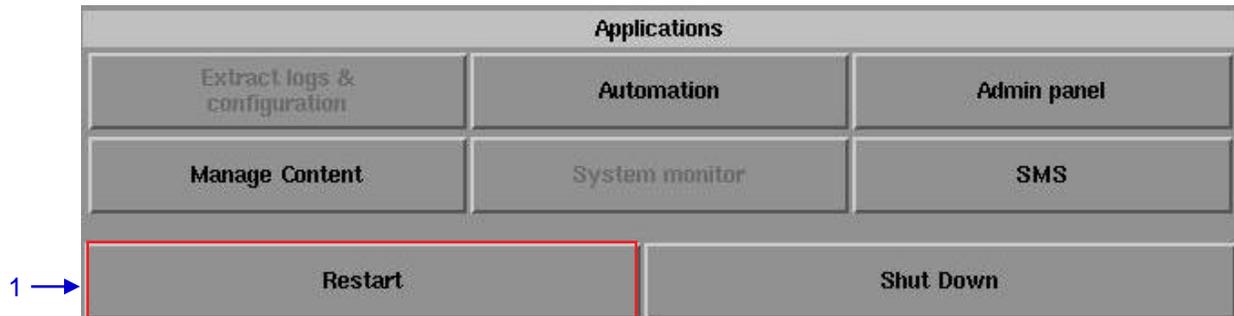


Figure 51 Selecting Restart on the Control Panel menu

- | | |
|---|--|
| 1 | Press Restart to restart the Control Panel. The Control Panel will restart and display the SMS interface as seen in Figure 52 . |
|---|--|



Figure 52 SMS interface.

3.5. Shutting Down the System

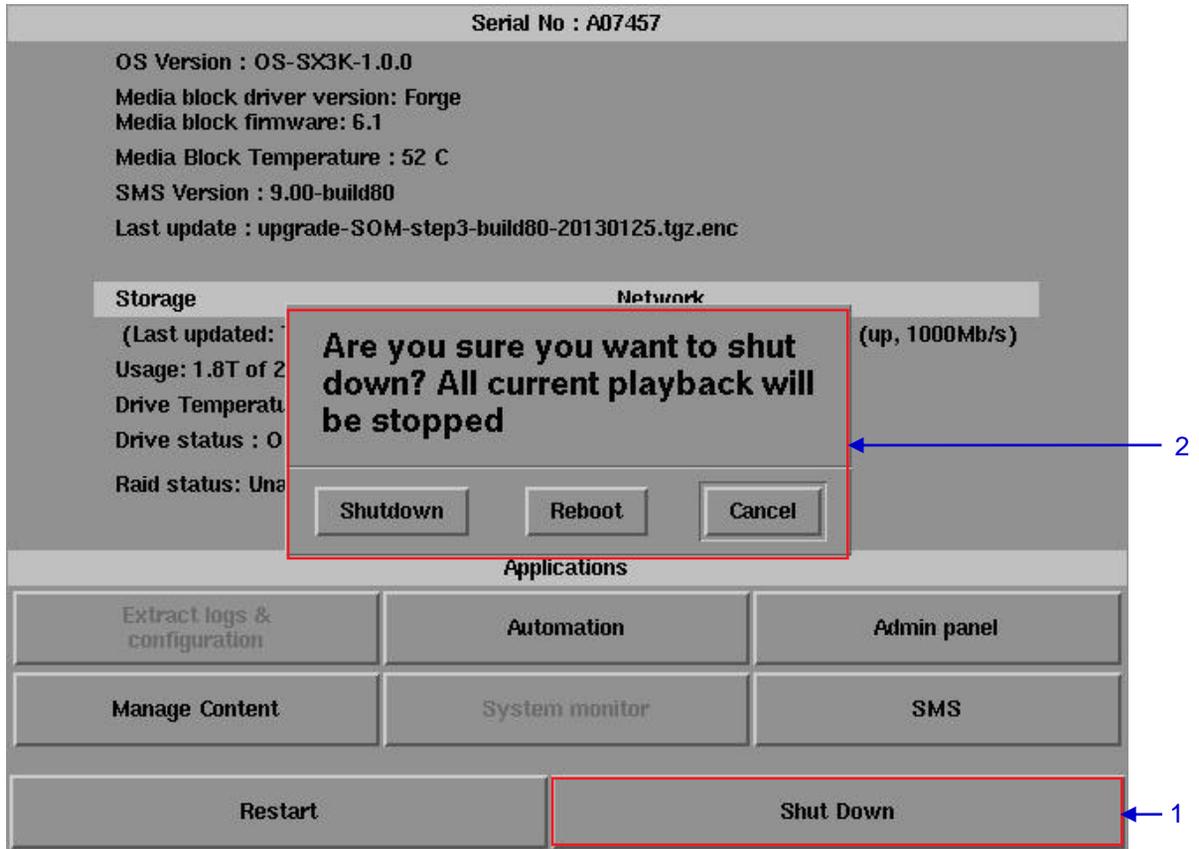


Figure 53 Shutting down the system.

1	Select Shutdown on the Control Panel menu.
2	<p>A small window appears as seen in Figure 53. Select Shutdown to continue shutdown of IMB, or Cancel to cancel shutdown of IMB. All current playback will be stopped upon shutdown of the system.</p> <p>WARNING: If current playback is still running in the background, it will be terminated once the IMB is shutdown. Please use with CAUTION.</p>

4. CONTENT MANAGER

4.1. About the Content Manager

4.1.1. Introduction

The SX-3000 Content Manager allows the user to manage the contents of the IMB to:

1	Download content from a disk or source on the network.
2	Download keys [KDM's] required for playing back content from disk or source on the network.
3	Delete content that exists on the IMB.
4	Check that the content that is already on the IMB is fine and the files are complete and proper.

4.1.2. Accessing the Content Manager

Serial No : A07457

OS Version : OS-SX3K-1.0.0
 Media block driver version: Forge
 Media block firmware: 6.1
 Media Block Temperature : 51 C
 SMS Version : 9.00-build80
 Last update : upgrade-SOM-step3-build80-20130125.tgz.enc

Storage	Network
(Last updated: Tue Jan 29 22:20:06 2013)	eth0: 192.168.0.204/24 (up, 1000Mb/s)
Usage: 1.8T of 2.0T	
Drive Temperatures: 23 C, 23 C, 23 C	
Drive status : OS-OK R1-OK R2-OK R3-	
Raid status: DegradedArray	<input type="button" value="Refresh status"/>

Applications

Extract logs & configuration	Automation	Admin panel
Manage Content	System monitor	SMS
Restart		Shut Down

Figure 54 Manage Content Button.

- | | |
|---|--|
| 1 | Press Control Panel on the Main menu. |
| 2 | Press Manage Content to go to the Content Manager main menu.
NOTE: The Content Manager can run in the background and does NOT need to be exited. |

4.2. Content Management

4.2.1. Ingesting Content

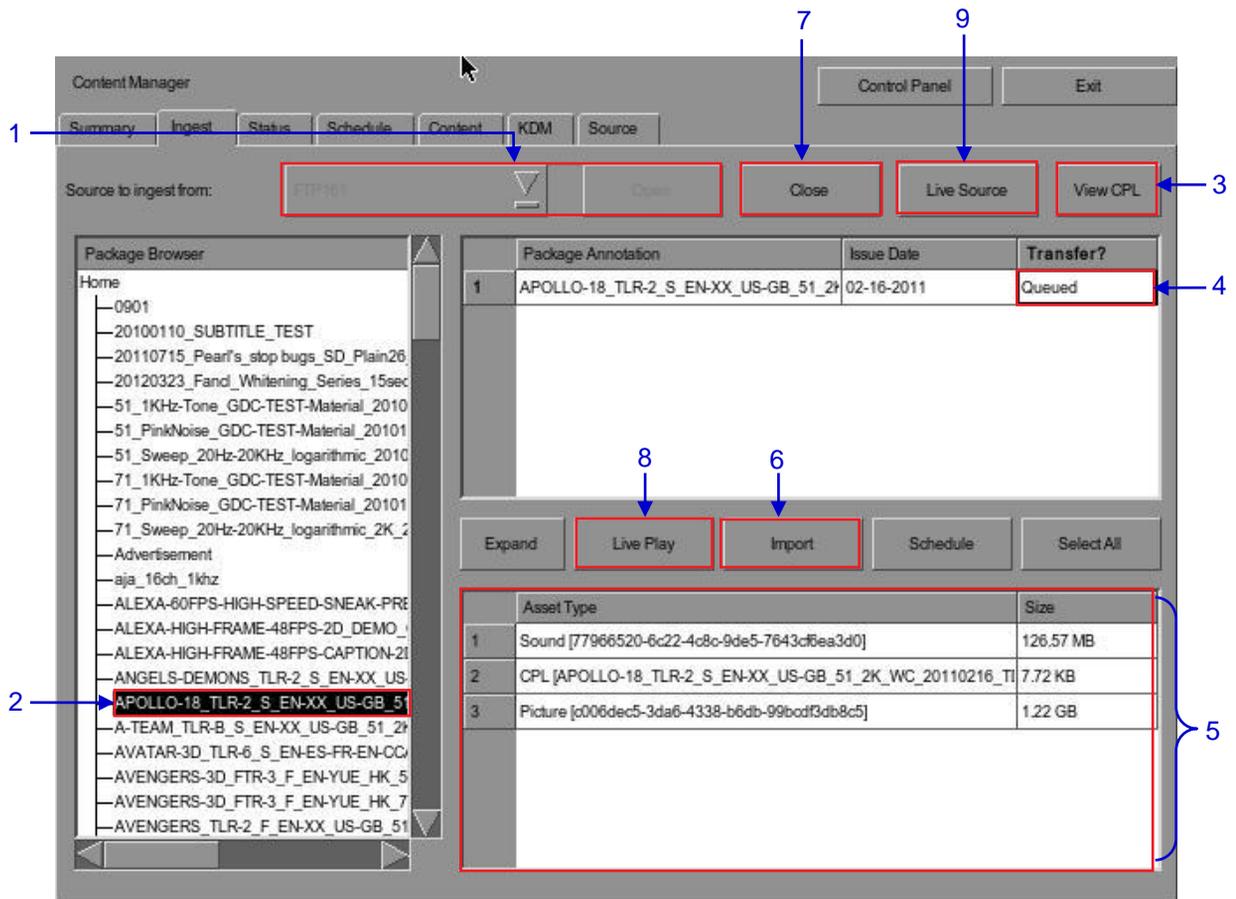


Figure 55 Ingesting a package or CPL from a source located in a specific directory in the network.

1	<p>Select the source of data you want to ingest content from and click Open.</p> <p>Please refer to Section 4.4 Source Management to configure the source of data.</p>
2	<p>Browse the source and select the directory where the package is located. The list of packages in the directory will be displayed in the top right section of the screen.</p>
3	<p>Click View CPL to display the list of CPLs available in the packages. You can use this button to toggle between the package list and CPL list displayed in the top right section of the screen.</p>
4	<p>Click under the Transfer column to select the package or CPL you wish to download. A green check  indicates a selected package or CPL. You can select multiple packages or CPLs.</p>
5	<p>Information about the selected package or CPL, including the file size, is shown in the section below the package or CPL list.</p>
6	<p>Press Import to queue downloading of the package or CPL. (To bypass ingestion for direct playback you can press Live Play instead. Refer to Live Play below for more info.)</p>
7	<p>When done selecting the package(s), click the Close button.</p> <p>IMPORTANT: Always press Close after you are done starting the download of content. You can monitor the progress of ingest by pressing the Status button. Please refer to Section 4.2.4. Monitor Ingest Progress for more information about Status.</p>
8	<p>Live Play can be used instead of Import in order to bypass content ingestion and play directly back from network source. This is not supported through USB but can be used for direct playback through network source (provided the network source has sufficient bandwidth to stream the content).</p> <p>IMPORTANT: You should always use Import whenever possible.</p>
9	<p>When you press the Live Source button you can view all clips currently mounted and available through the Live Play feature. You can detach Live Play sources through this interface as well. You should always detach live play sources whenever you are done using them via Live Play.</p>

4.2.2. Ingesting Content from USB Disk

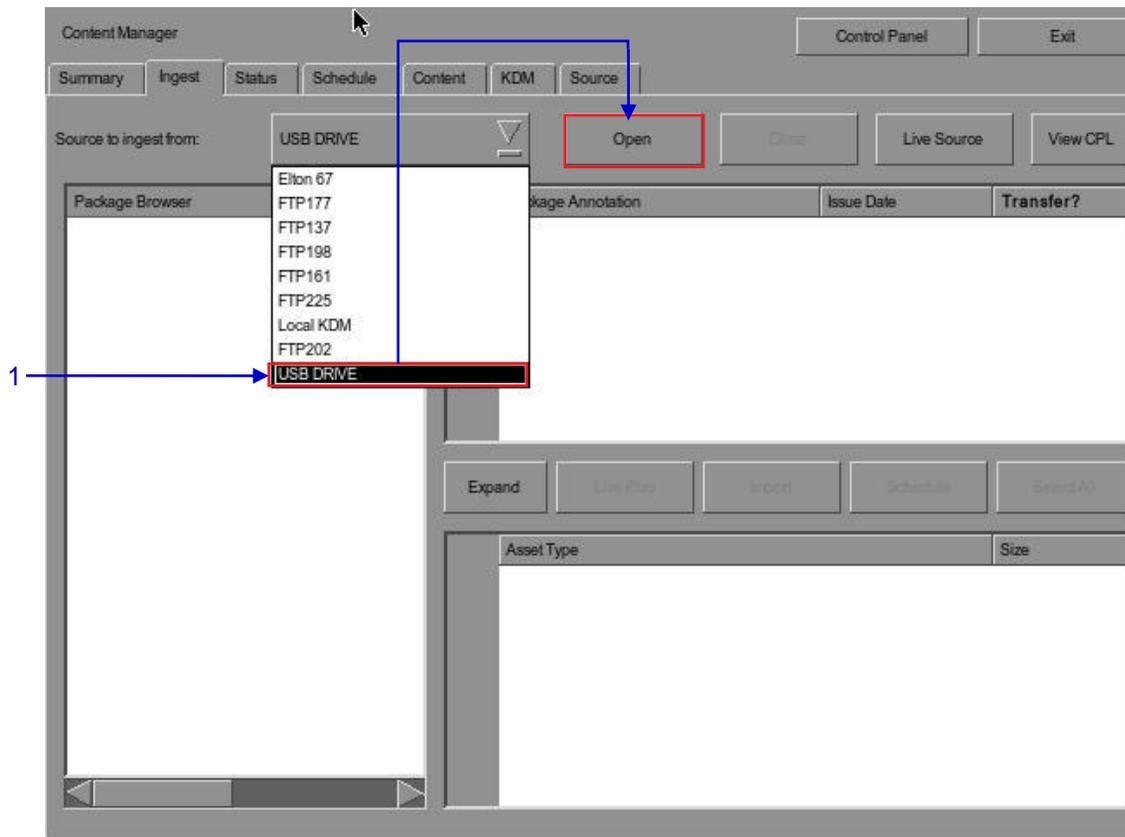


Figure 56 Opening a USB disk connected to the IMB.

- 1 Select **USB drive** from dropdown list and click **Open**. (Continued on next page)

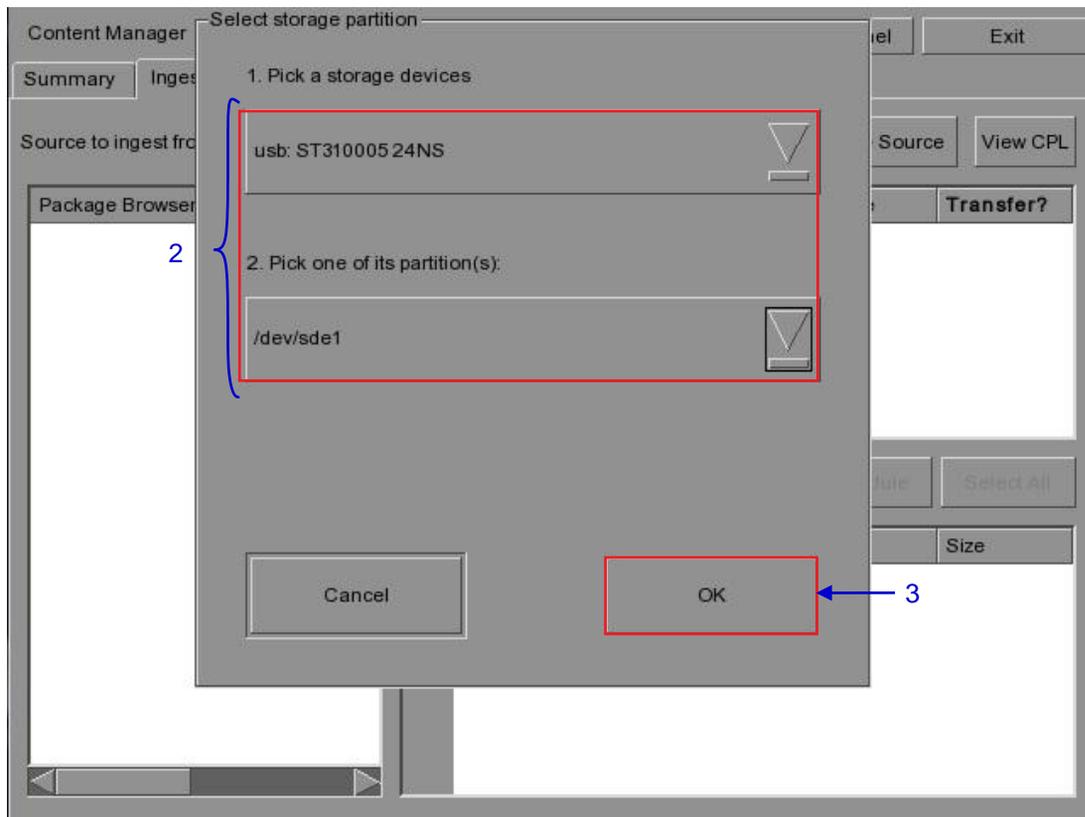


Figure 57 Selecting the USB storage device and its partition

2	Select a storage device and its partition from the dropdown lists.
3	Press OK to confirm the selection.

4.2.3. Ingesting KDMs

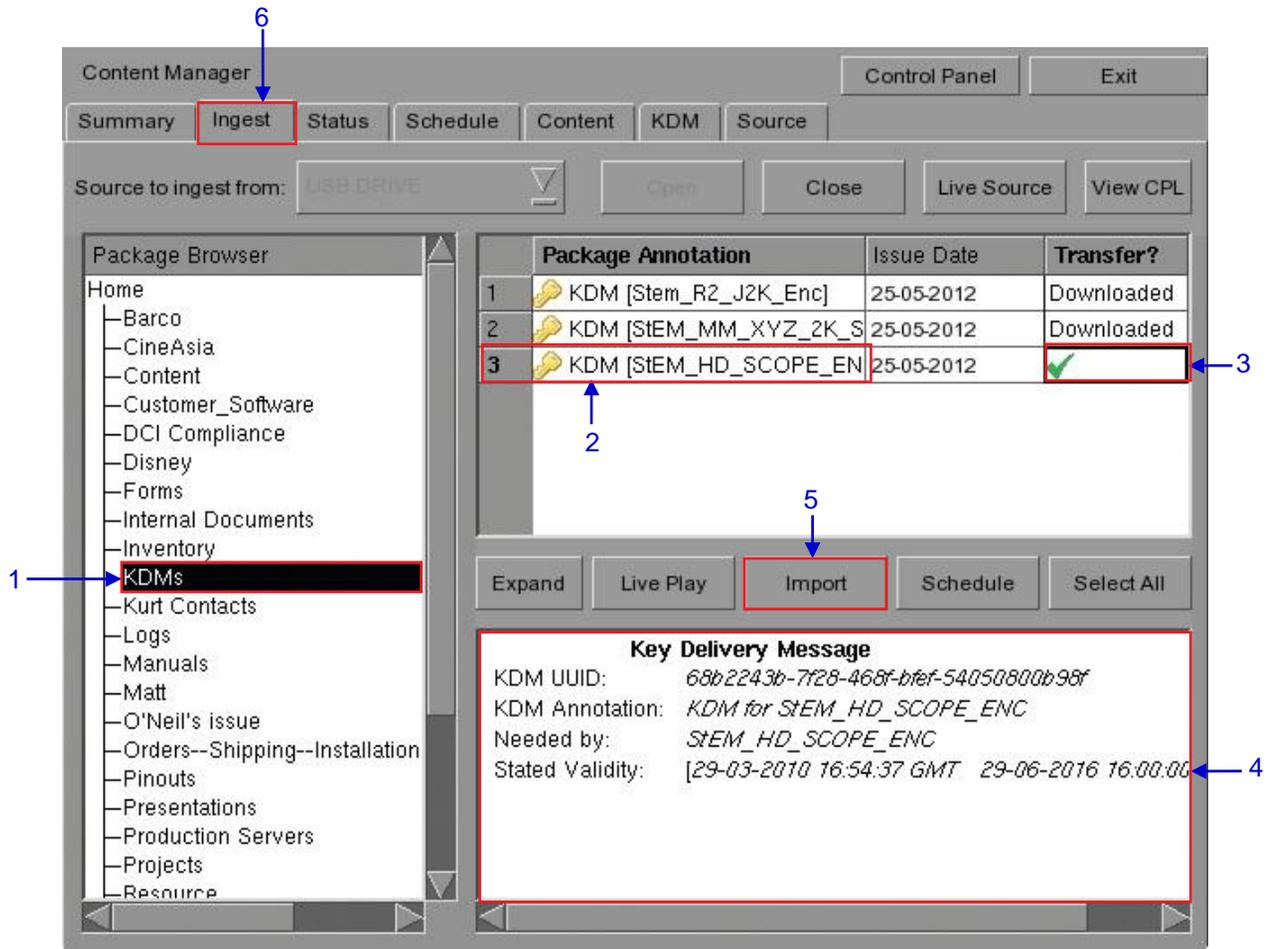


Figure 58 Ingesting KDM from a directory in the selected source.

1	Select the directory in the selected source where the KDM is located.
2	Shows the KDMs present in the selected directory that are valid for this IMB.
3	Click under the Transfer column to select the KDM you wish to download. A green check  indicates the selected KDM.
4	Shows the details of the selected KDM, including target, CPL, and date of validity.
5	Press Import to start the import of the KDM. The green check will change to Queued .
6	When done selecting the KDM, press Close to close the Package Browser.

4.2.4. Monitor Ingest Progress

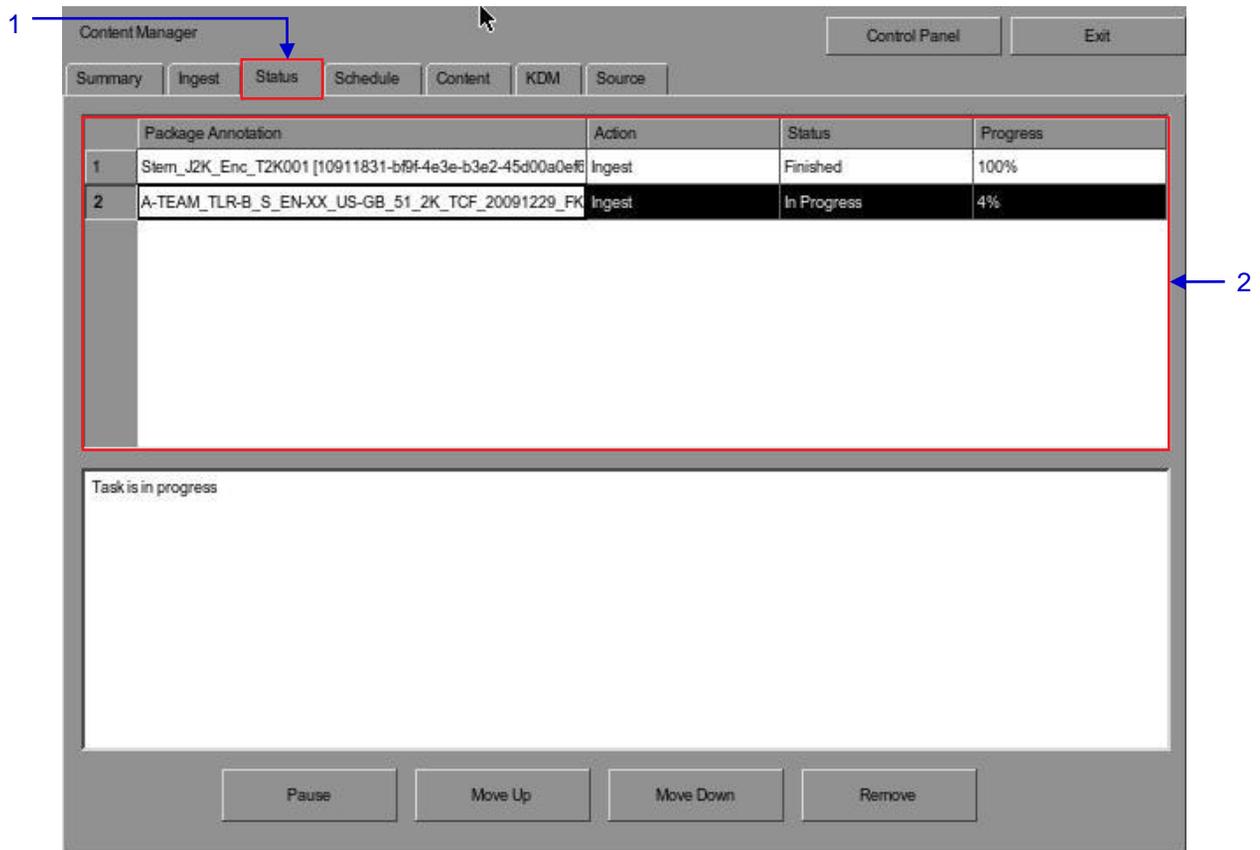


Figure 59 Monitoring the progress of download of the packages.

1	Select the Status option.
2	Shows the download status of the packages or CPLs. In this example, downloading of some packages or CPLs is incomplete.

4.2.5. Cancelling Ingest



Figure 60 Content Manager - Status

1	<p>Press Pause to temporarily stop the download of the package(s) or CPL(s). The Pause button will change to Start and will indicate that the download is being paused.</p> 
2	<p>Use the Move Up and Move Down buttons to move the highlight bar up and down to select the desired package or CPL when multiple packages or CPLs are being downloaded. You can only move the highlighted bar to select the package or CPL when in Pause mode.</p>
3	<p>To cancel the download, select the desired package or CPL and press Remove.</p>
4	<p>If you wish to resume download, press Start button to resume the download.</p>

4.2.6. Deleting Content

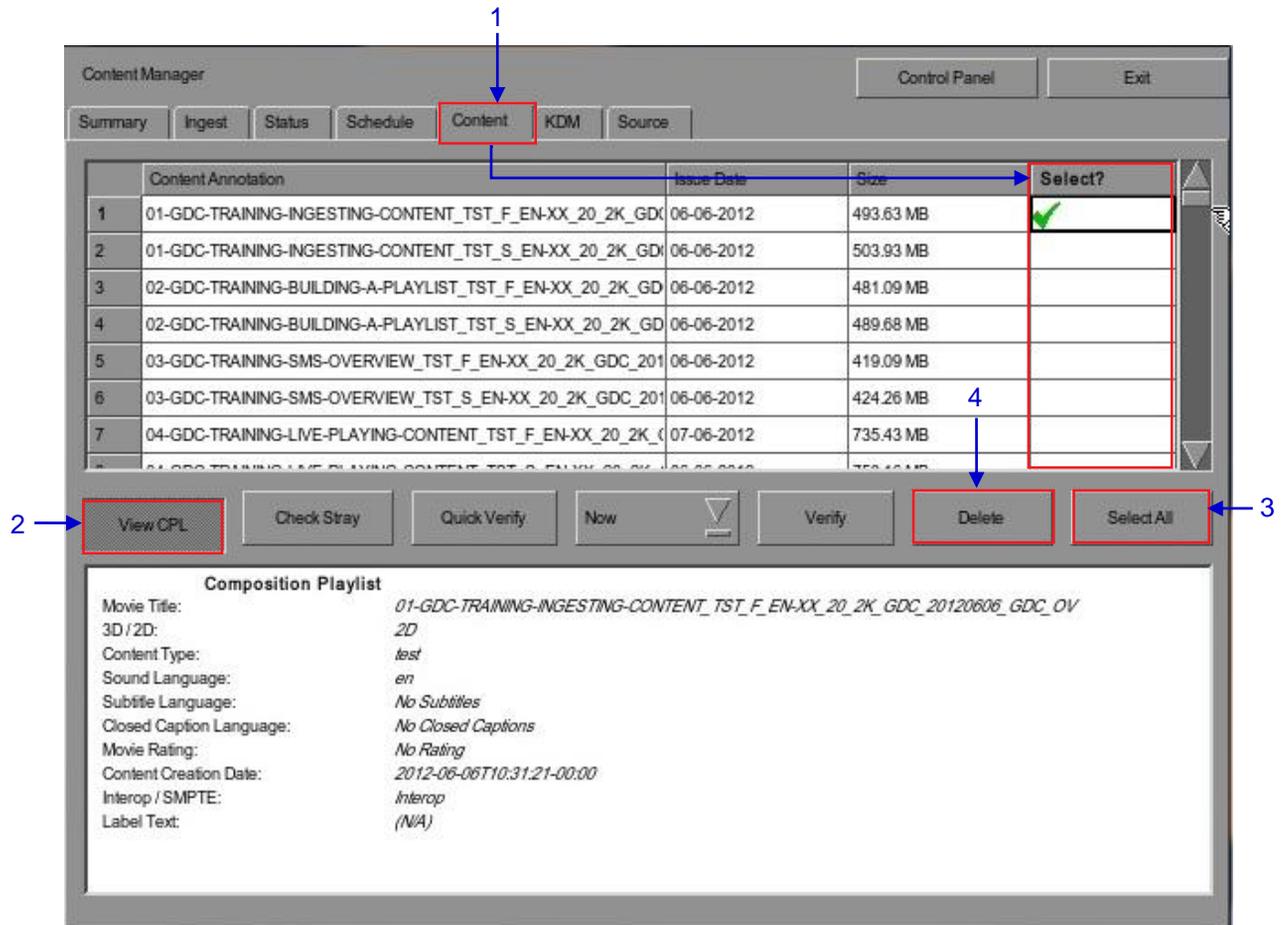
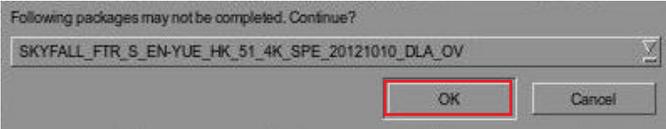


Figure 61 Deleting a downloaded package or CPL

1	To delete a package or CPL, go to Content menu and click under the Select column opposite the package or CPL you want to delete. A green check ✓ indicates the selection.
2	Click View CPL to toggle between the package and CPL lists displayed in the content menu.
3	You can select all by clicking the Select All button, and deselect by clicking the Deselect All button.
4	<p>Press Delete to delete the selected package or CPL. A small window pops up to confirm the deletion of the package.</p>  <p>Press OK to confirm.</p>

4.2.7. Checking Content Integrity

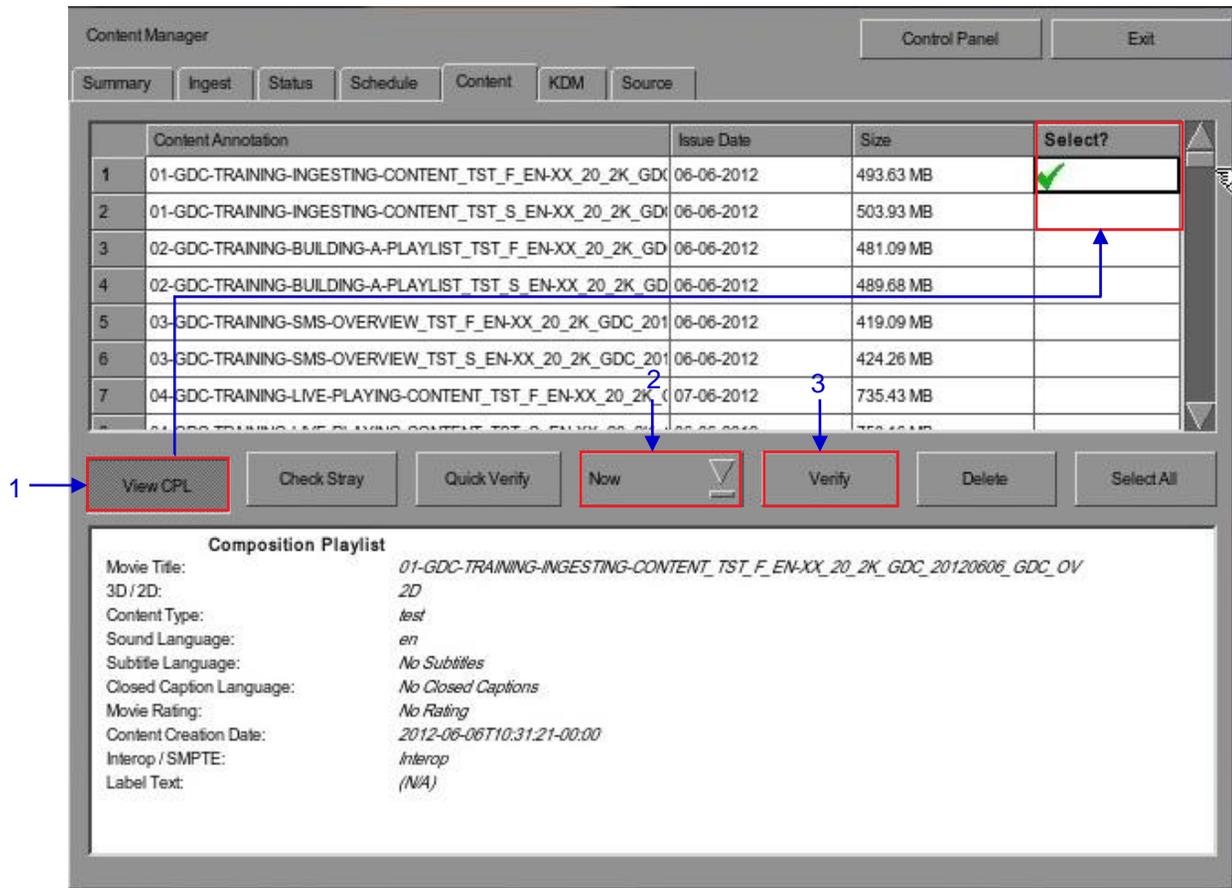
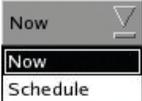


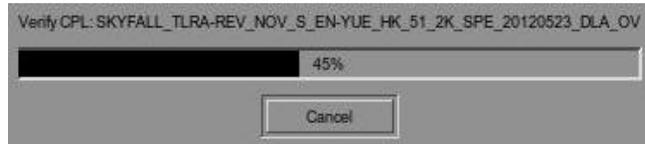
Figure 62 Verifying the integrity of the files in the package(s) or CPL(s).

- | | |
|----------|--|
| 1 | Click View CPL to toggle between the package and CPL lists displayed in the content menu. Click under the Select column opposite the package or CPL you want to verify. A green check ✓ indicates the selection. |
| 2 | Select if you want to verify Now or on a Schedule .

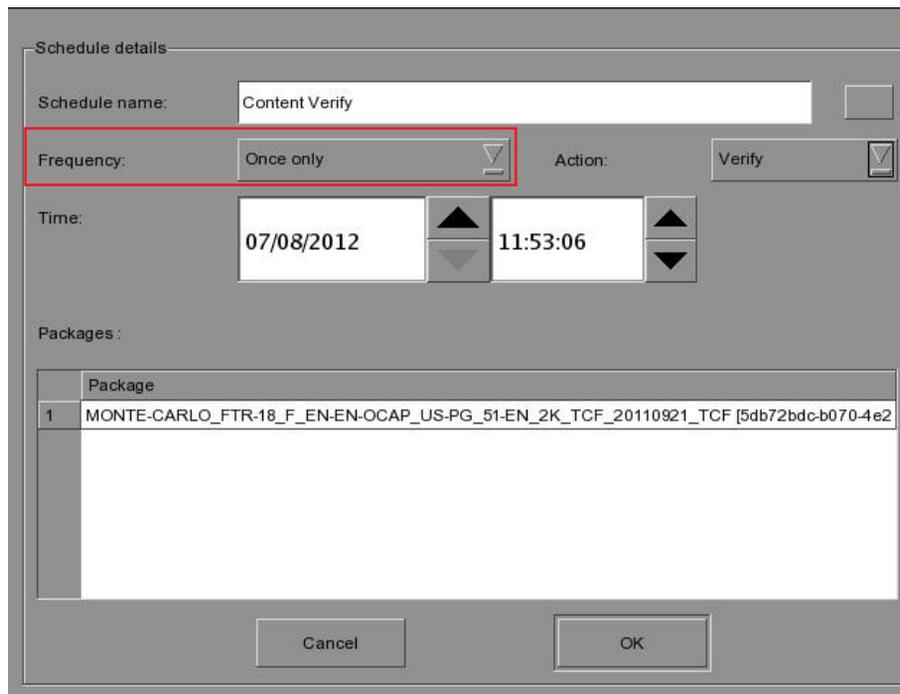
<div style="text-align: center;">  </div> |

3 Press **Verify** to check if all the required files are present in the selected package(s) or CPL(s).

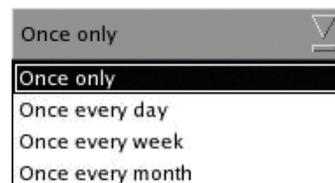
(a) If **Now** is selected, the package will be verified immediately as seen below.



(b) If **Schedule** is selected, you need to assign a name and schedule the time and date when to verify the package(s) or CPL(s) in a new window as seen below.



(c) You can select the frequency of verification.



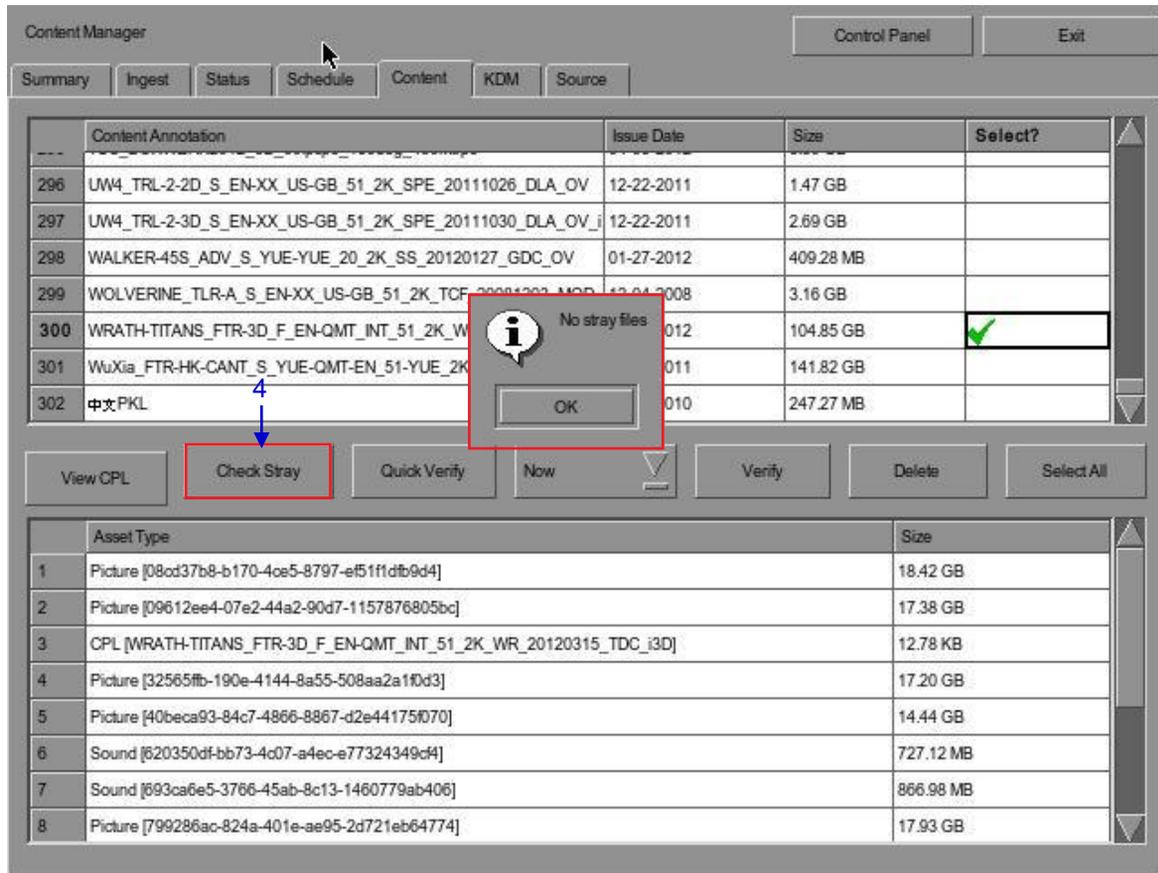


Figure 63 Checking for stray files in package(s) or CPL(s)

- 4 You can check if there are stray files in the selected package(s) or CPL(s) by pressing **Check Stray**. A small window pops out to confirm if there are no stray files.

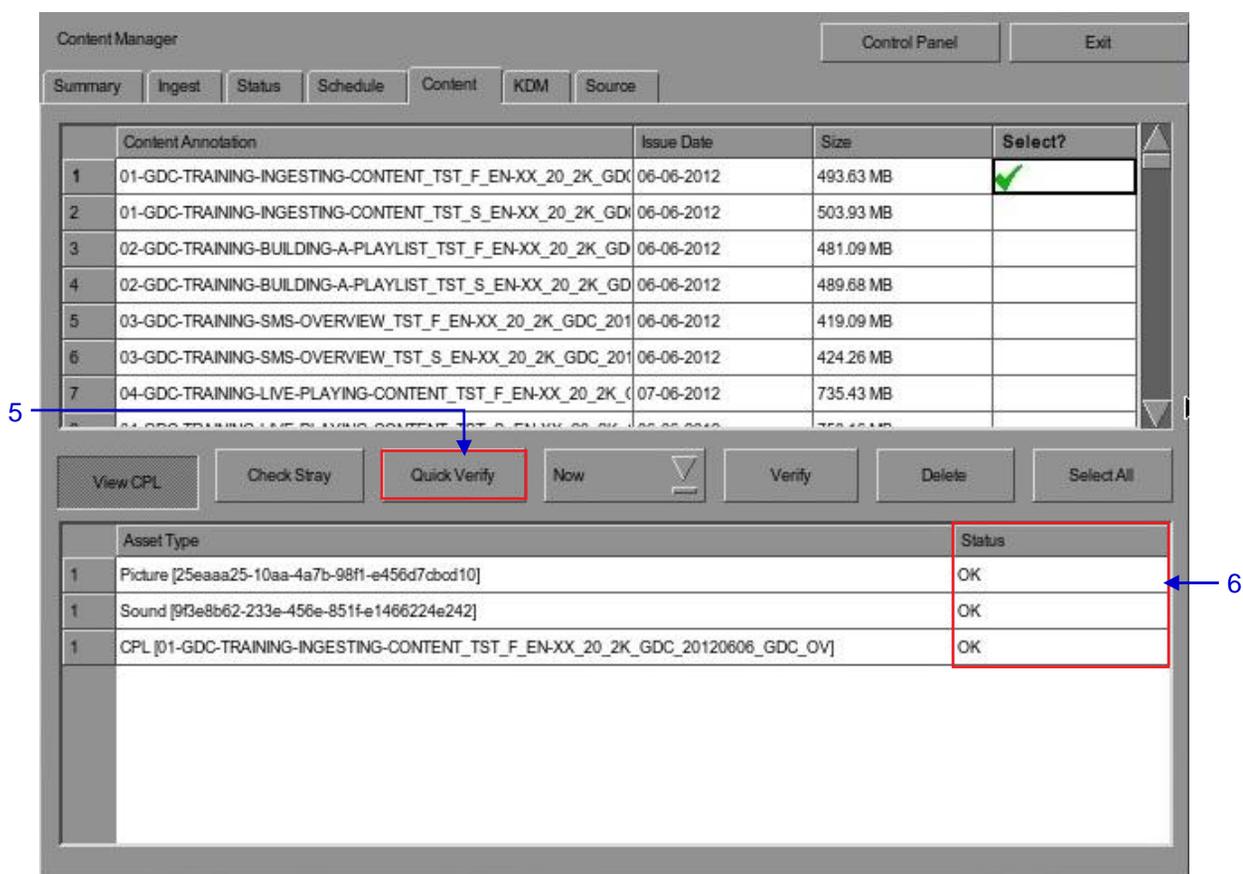


Figure 64 Package [Quick Verify]

- | | |
|----------|--|
| 5 | Select Quick Verify to quickly check the integrity of the files in case it is modified or corrupted by calculating hash for each file in the selected package(s) or CPL(s). |
| 6 | You will see OK under the Status column after verifying that no problems are detected. If errors are found, the description of the error will be shown instead as seen in Figure 64 above.

NOTE: If there is an error in the selected package, it will indicate Failed under the Status column. |

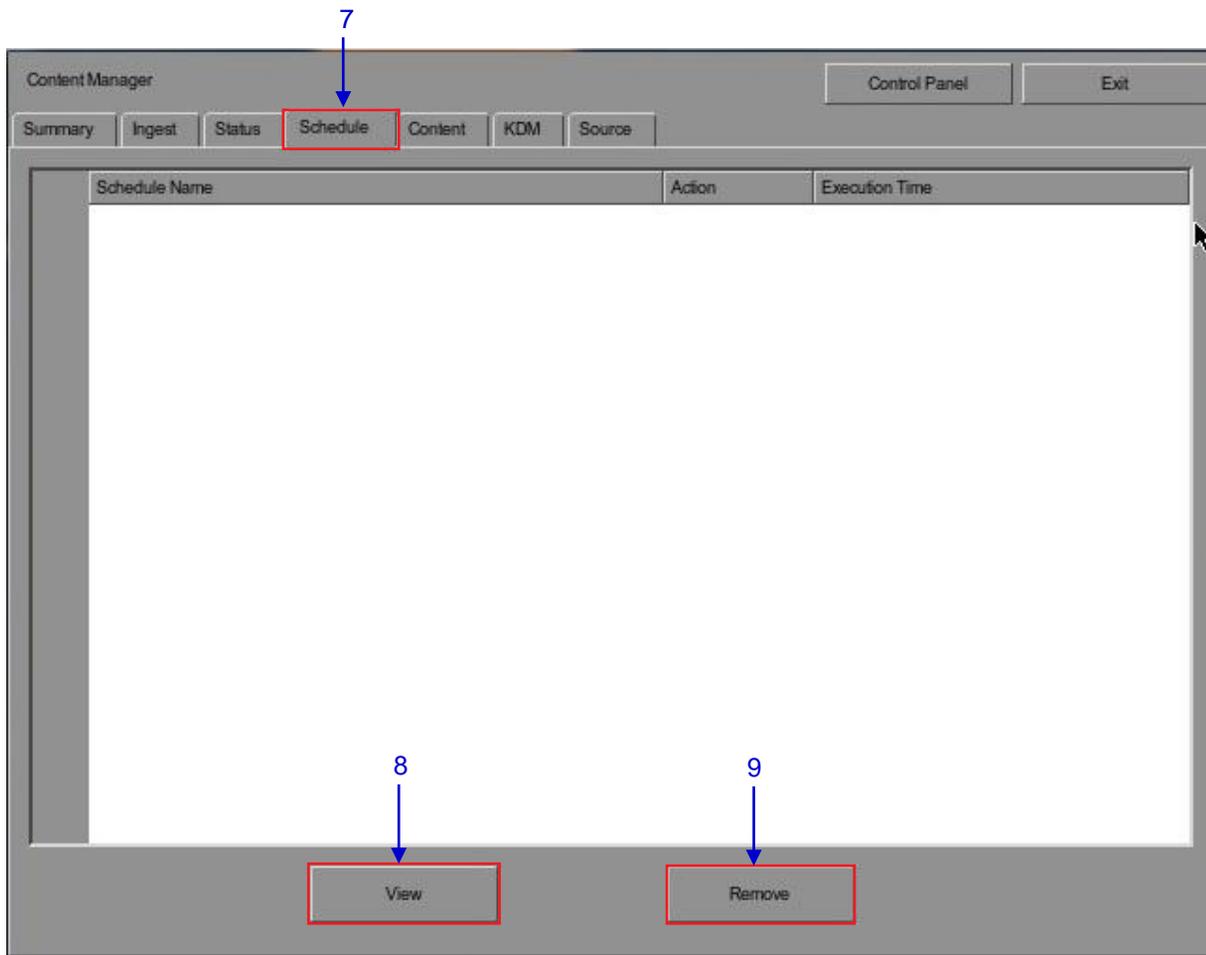


Figure 65 Content Manager [Schedule].

7	You can view the list of package(s)/CPL(s) that you have scheduled for verification by selecting the Schedule option.
8	Select the desired package or CPL and press View to see its schedule details.
9	Select the desired package or CPL and press Remove to delete it from the schedule list.

4.3. KDM Management

4.3.1. Manage KDM

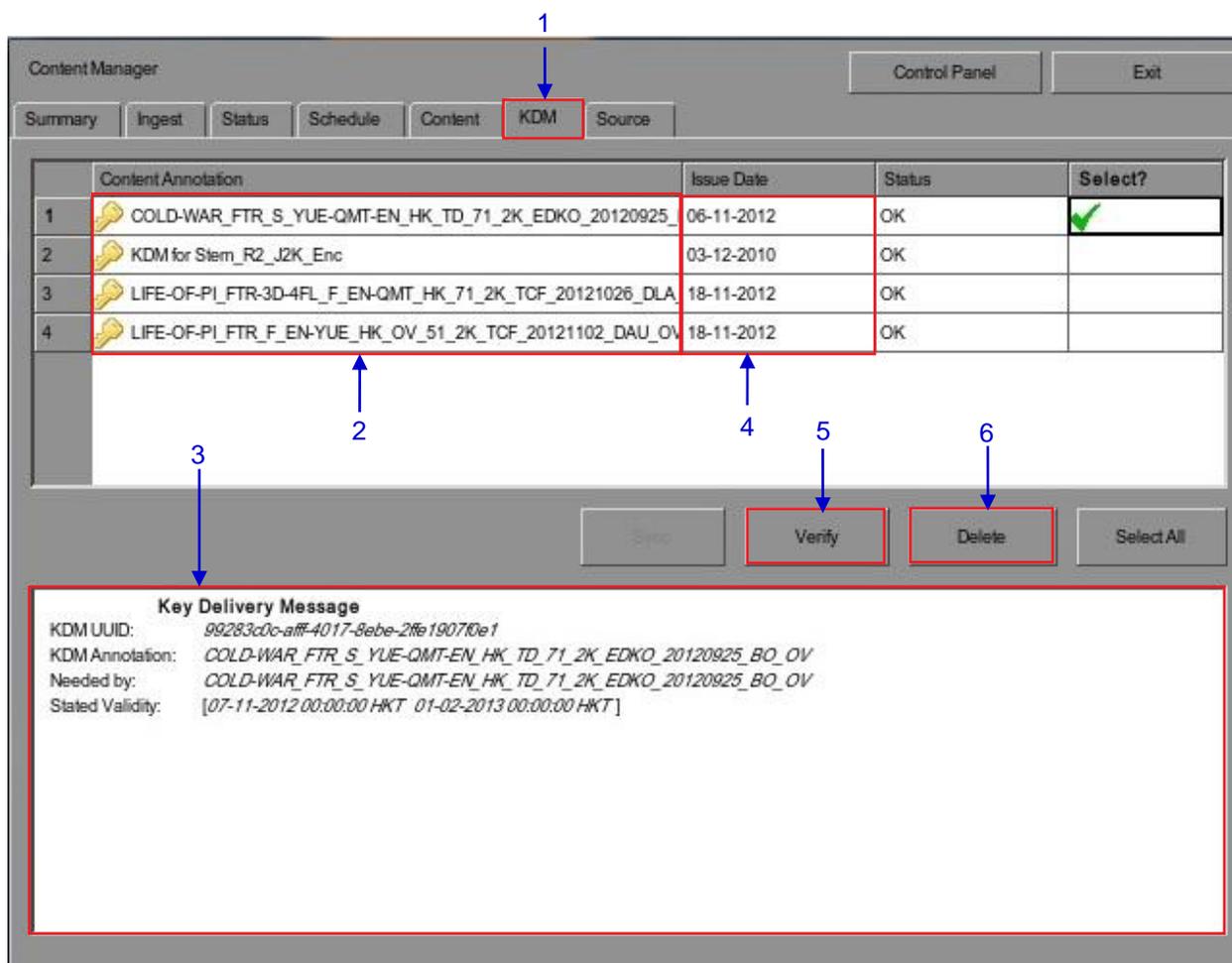


Figure 66 KDM Manager.

1	Select the KDM tab in the Content Manager menu.
2	Show the KDMs present in the selected directory that are valid for this IMB.
3	Show the details of the selected KDM, including target, CPL, UUID and date of validity.
4	Display date of issue for KDM.
5	Verify the integrity of the KDM.
6	Delete removes KDM from the IMB.

4.4. Source Management

4.4.1. Adding a Data Source

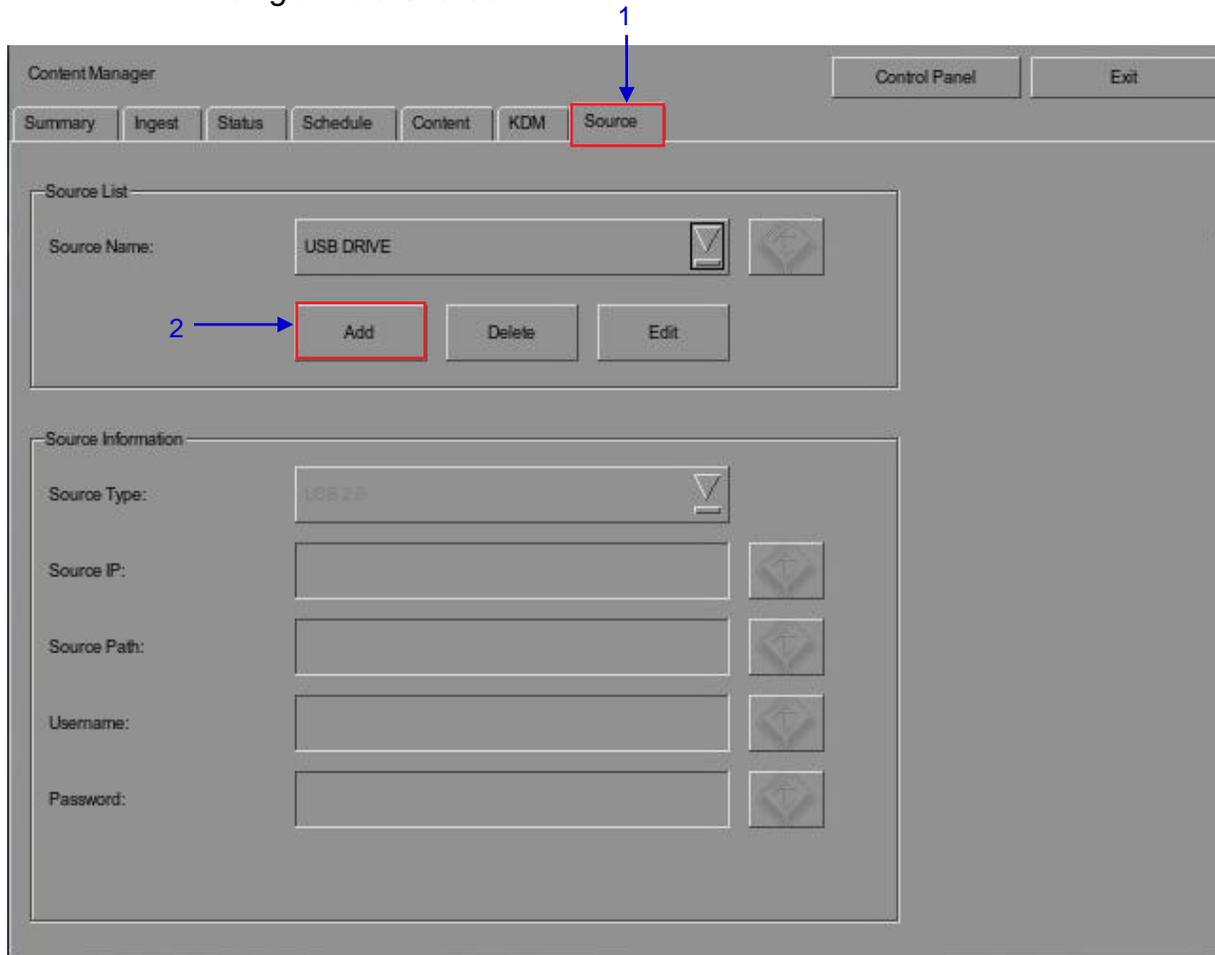


Figure 67 Content Manager [Source].

1	You can add a new source or edit an existing source by selecting the Source option.
2	To add a new source, enable the source name entry and source information entry by pressing Add . The Add button will then change to the Save button as seen in Figure 68 below.

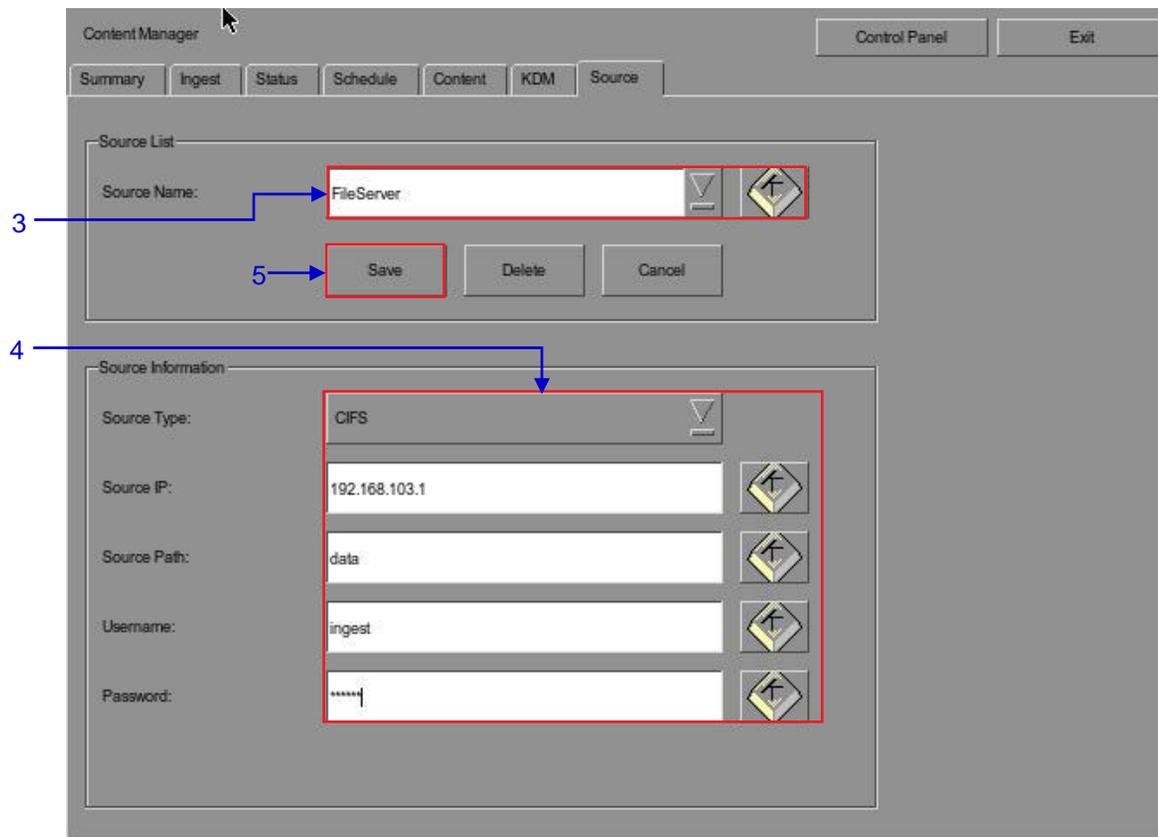


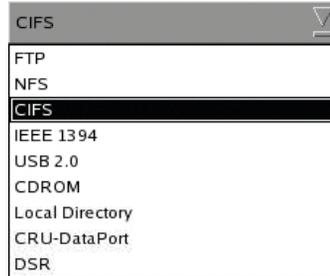
Figure 68 Content Manager – Setting the data source parameters.

- 3** Type in the new data source name on the **Source Name** entry.

NOTE: You can type on each entry using an external keyboard or by using the on-screen keyboard .

The on-screen keyboard is normally used when an external keyboard is not present.

- 4** Set the parameters of the source. Select the type of source from a dropdown list.



Type in the server name (source IP), source directory (source path), username and password of the selected source.

NOTE:

1. For sources such as **FTP** and **CIFS**, the IP address, source path, username and password are enabled. The username and password are optional provided that the data source is not protected by username and password. For example, some window shares can be accessed without username and password, while other window shares need a username and password.
2. For source such as **NFS**, only the server name and directory are enabled. The username and password entries are disabled.
3. For sources such as **IEEE 1394**, **USB 2.0**, **Local directory**, all entries are disabled since they are not necessary.

- 5** Press **Save** to save all settings.

4.4.2. Erasing a Data Source

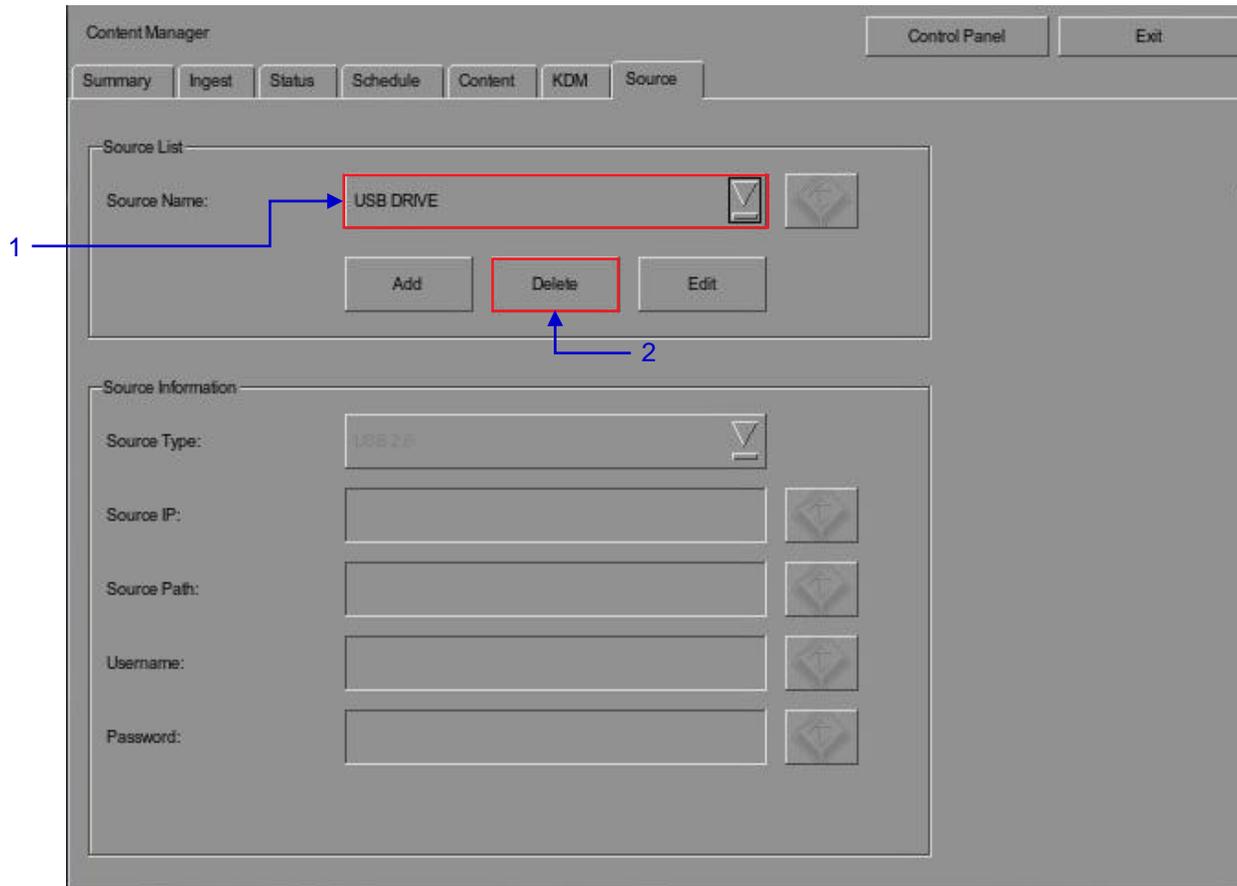


Figure 69 Deleting a previously saved data source.

1	Select the data source you want to delete from the dropdown list.
2	Press Delete to delete the selected data source.

4.4.3. Editing Sources

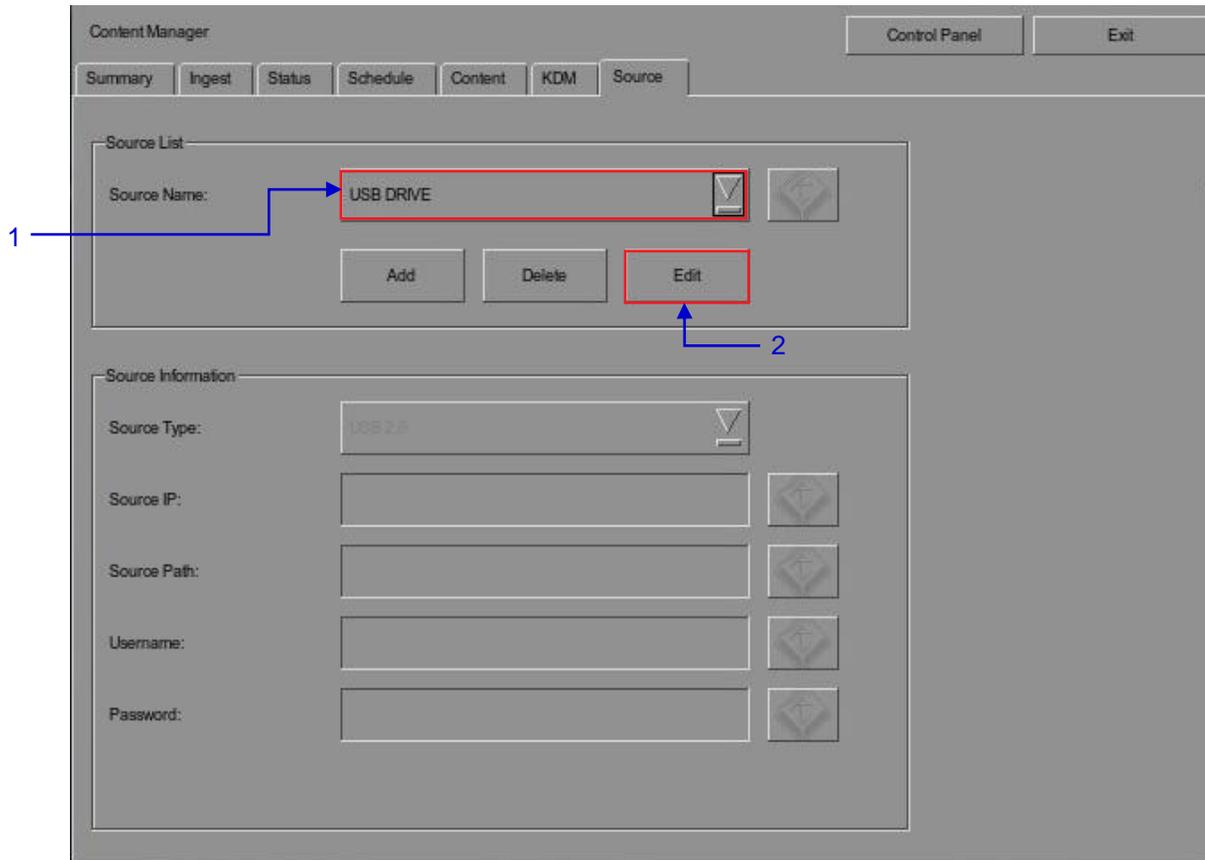


Figure 70 Editing a new data source.

1	To edit an existing source, select the data source you want to edit from the dropdown list.
2	Press Edit to edit the selected data source. Add and Edit buttons will change to Save and Cancel .

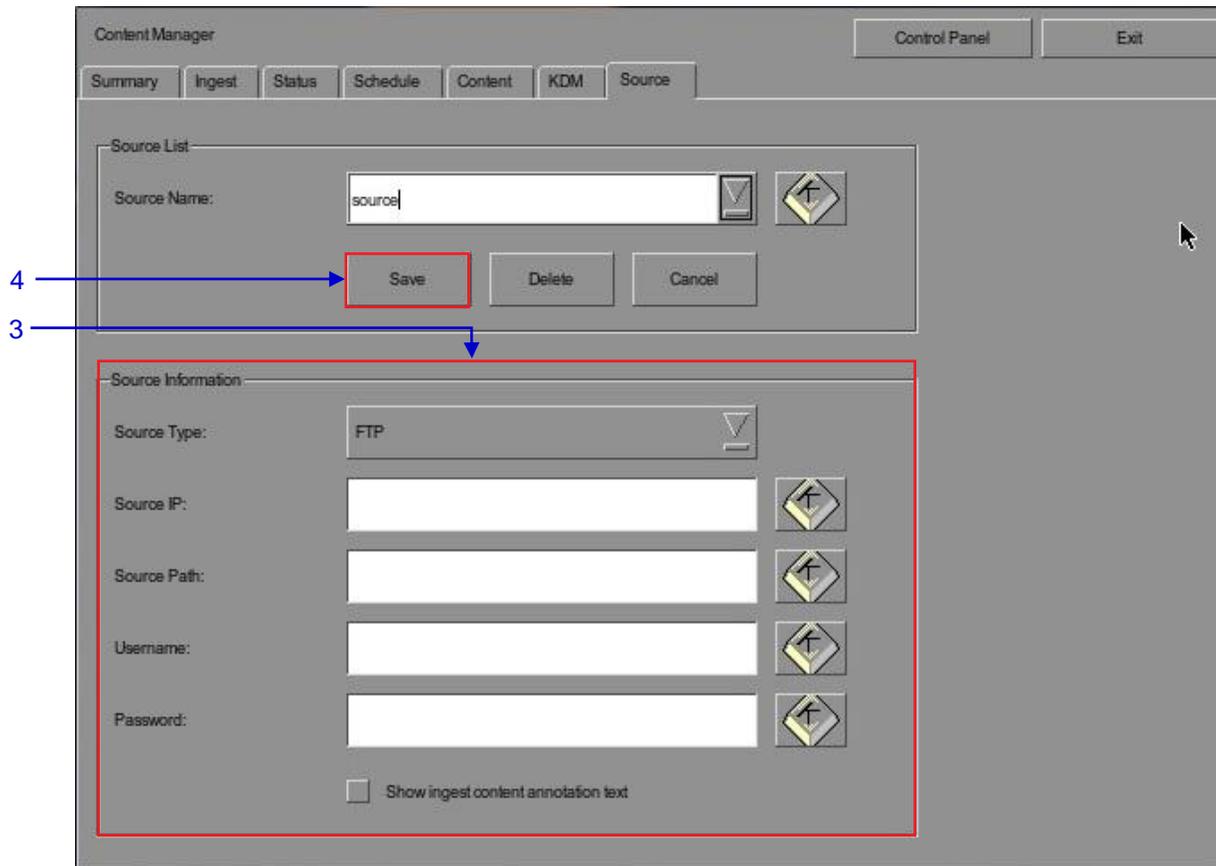


Figure 71 Editing the parameters of the selected data source.

3	<p>You can edit/change the source name, parameter settings, username, or password by typing on each entry using an external keyboard or an on-screen keyboard  .</p> <p>NOTE: For more information regarding types of sources, please refer to Figure 68.</p>
4	<p>Press Save after making all the changes.</p>

5. ADMIN PANEL

5.1. General Introduction

Set Up and Configuration

The **Admin panel** is an easy-to-use and convenient software tool for the maintenance and configuration of GDC IMB. This **Admin panel** provides all the necessary tools for setting up and managing the IMB. A comprehensive array of easy to access menu pages are provided to simplify configuration and maintenance via a combination of simple buttons and an on-screen keyboard.

Secured Access

Clearly indicated button pages allow IMB network setup, maintenance and configuration, and access to software information. All actions can be performed by touching the drawn control on the screen of the IMB. Access to the **Admin panel** of the GDC IMB is available via the maintenance option and by entering a required password available from authorized GDC personnel only.

5.2. User Interface (UI)

5.2.1. Introduction

The **Admin Panel** UI provides access to the menu buttons and on-screen keyboard that are used for setting up and configuring the IMB. Diagnostic maintenance and/or monitoring of the status and performance of the IMB can also be done via the **Admin Panel** UI. Other information including hardware and network setup of the IMB can also be accessed through the **Admin Panel** UI. It also enables configuration of the timezone and selection of the touchscreen type of the IMB.

5.2.2. Admin Panel Access

5.2.2.1. Access via Control Panel

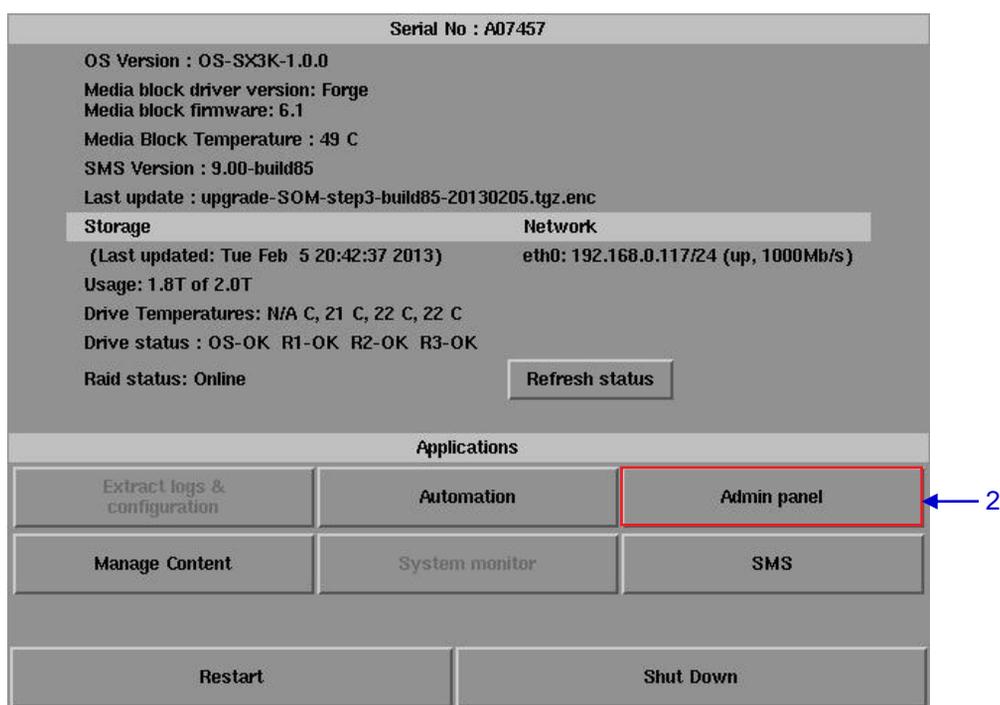


Figure 72 SX-3000 IMB Control panel.

1	Press Control Panel on the Main menu.
2	Click on the Admin panel button to go to the startup window for Admin Panel as seen in Figure 72 .

5.2.2.2. Access to Admin Panel Menu

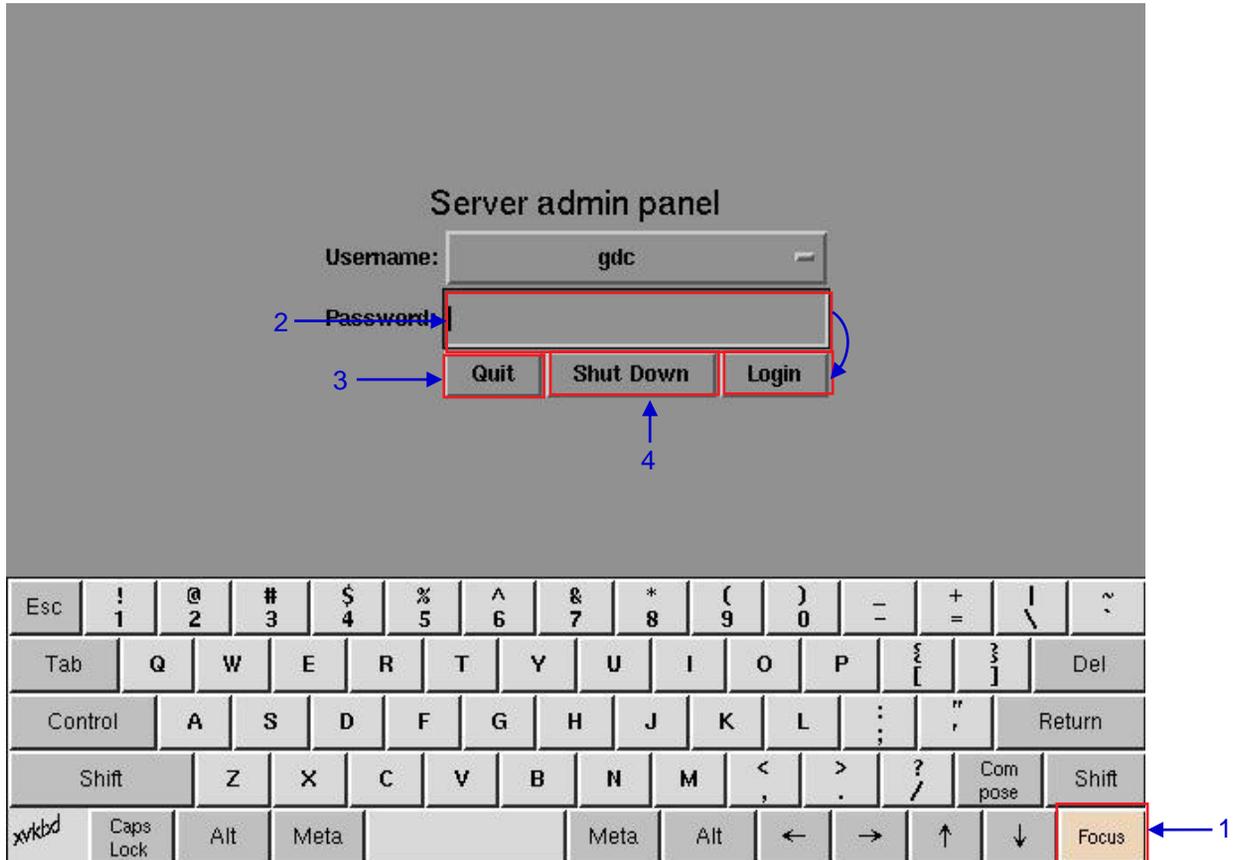
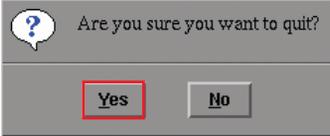
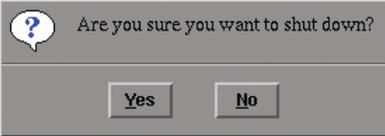


Figure 73 Entering the password for Admin panel main menu.

1	Click on Focus . Clicking on Focus once before you start typing enables what you type in the onscreen keyboard to go into a specific window. Without focusing on the particular window, text will not appear even if you type something. Click Focus again only when necessary.
2	Click on the password entry on the screen and type in the required password using the on-screen keyboard and then press Login to access the Admin Panel main menu. NOTE: <i>The password is available from GDC authorized personnel only.</i>

<p>3</p>	<p>Select Quit if you wish to go back to Control Panel menu. A small window pops out to confirm the selection.</p>  <p>Press Yes to confirm.</p>
<p>4</p>	<p>Select Shut Down if you wish to shut down the IMB. A small window pops up to confirm the selection.</p>  <p>Press Yes to confirm.</p>

5.2.2.3. Main Menu

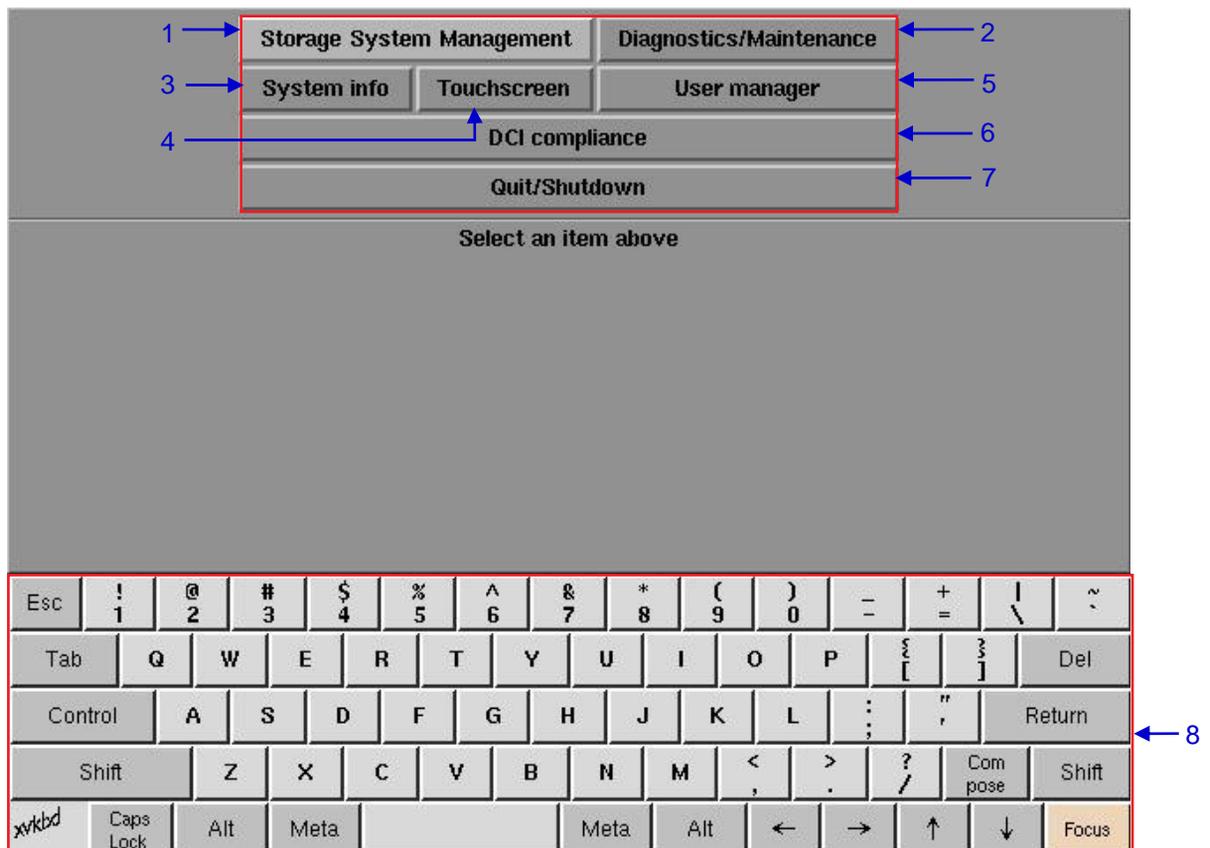


Figure 74 Admin Panel main menu.

1	Storage System Management	For creating a new RAID array and monitoring the RAID array status. For adding and removing HDDs from RAID array. Also shows hard disk information, hard disk usage and storage performance.
2	Diagnostics/Maintenance	For changing timezone, and extracting logs and configuration backups from the IMB.
3	System Info	Shows OS version, licensing, hardware and hotfix information.
4	Touchscreen	For selecting touchscreen type and calibrating the touchscreen.
5	User Manager	For adding/editing/deleting username, and for changing current user password.
6	DCI Compliance	For accessing the RTC clock to make time adjustments as well as extracting the Security Manager logs from the IMB.
7	Quit/Shutdown	For switching to SX-3000 Main menu, for shutting down the IMB and restart all services.
9	On-screen keyboard	For keying in text when not using an external keyboard.

5.3. Configuration & Maintenance

5.3.1. Storage System Management

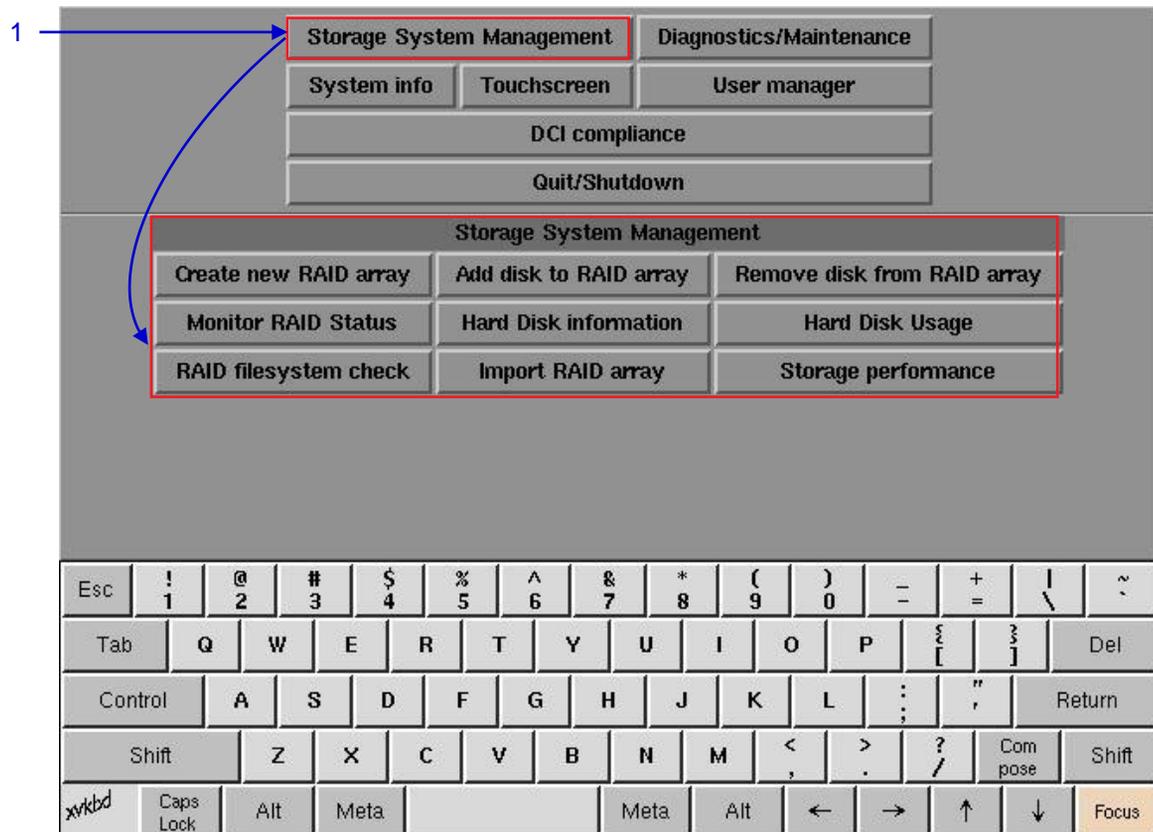


Figure 75 Storage System Management menu.

- 1 Select **Storage System Management**. A small window for **Storage System Management** menu pops up.

5.3.1.1. Create new RAID array

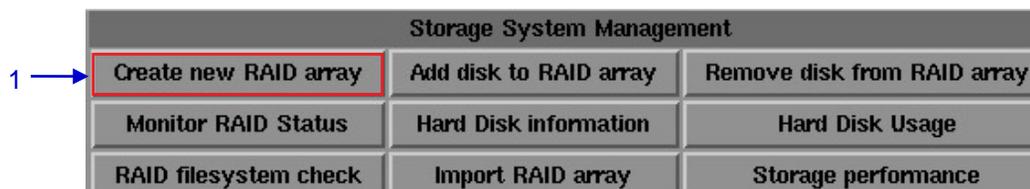


Figure 76 Storage System Management [Create new RAID array].

- 1 Select **Create new RAID array**. A new window appears as seen in **Figure 77**.

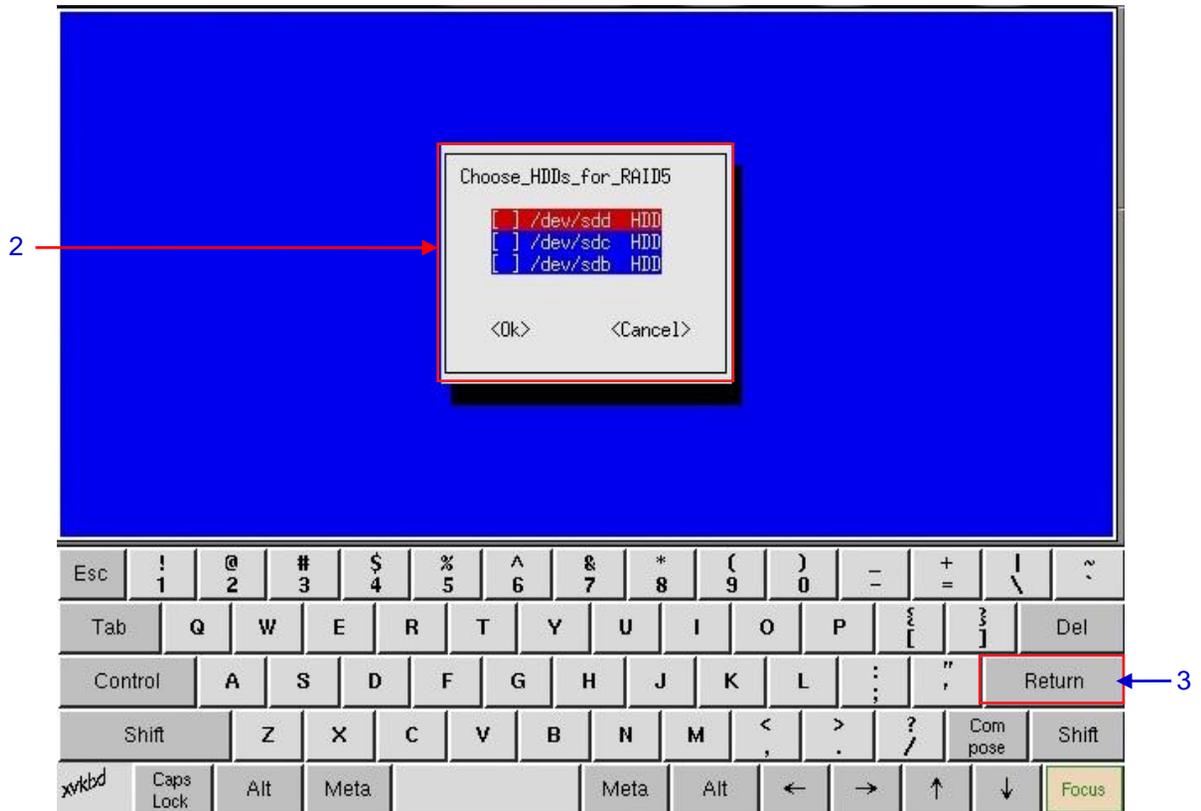


Figure 77 Selecting HDD for RAID.

2	Select the HDD by clicking up [↑] or down [↓] arrow keys and then clicking the space key on the on-screen keyboard. Repeat to select another HDD. A minimum of three (3) HDDs is required for selection.
3	Click Return after selecting the required HDDs. A new window appears to confirm the selection.



Figure 78 Confirming the selection of HDDs.

4	Select Yes or No to confirm or cancel the selection by clicking the right [→] or left [←] arrow keys on the on-screen keyboard and then click Return .
5	<p>If less than three (3) HDDs are selected, a small dialog box pops up.</p> <div data-bbox="706 1433 1039 1584" style="border: 1px solid black; padding: 5px; text-align: center;"> <p>Minimum 3 HDDs required</p> <p><Ok></p> </div> <p>Click Return on the on-screen keyboard to exit and return to Storage System Management menu.</p>

5.3.1.2. Add Disk to RAID Array

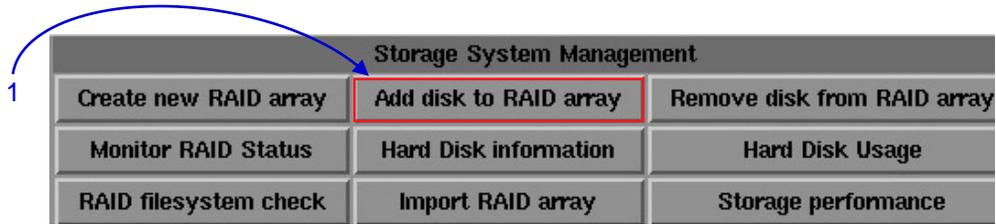


Figure 79 Storage System Management [Add disk to RAID array].

1	Select Add disk to RAID array .
2	<p>A dialog box appears if there are no hard disks available to add to the RAID array.</p> <div style="text-align: center;">  </div> <p>Press OK to exit.</p>

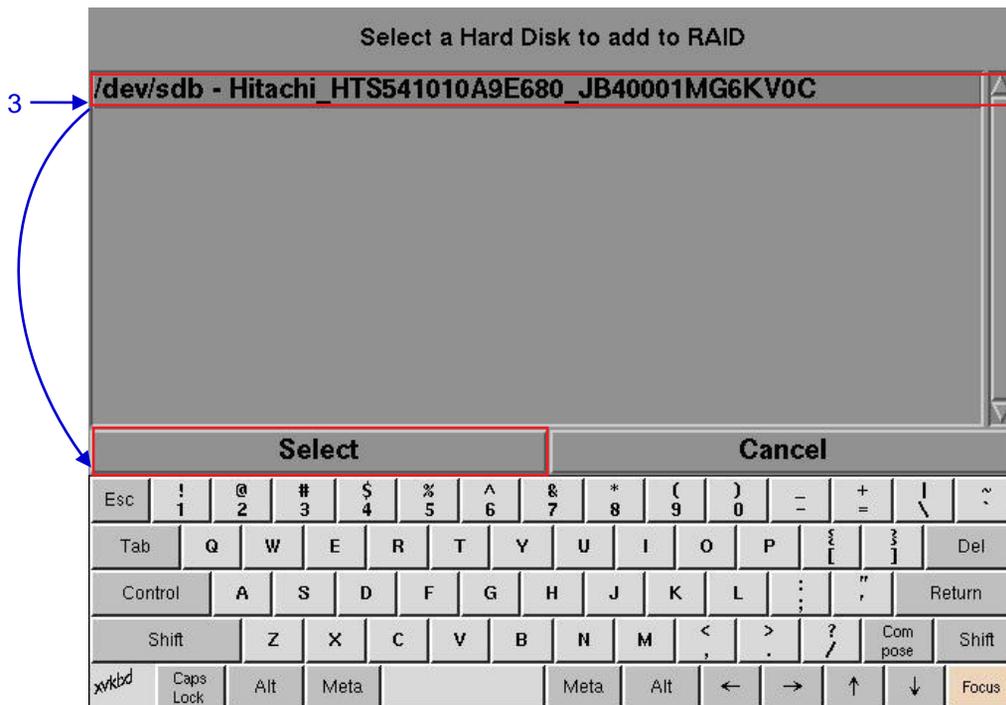


Figure 80 Selecting hard disks to add to RAID.

3	Select the disk to add to the RAID, and then press Select .
----------	--

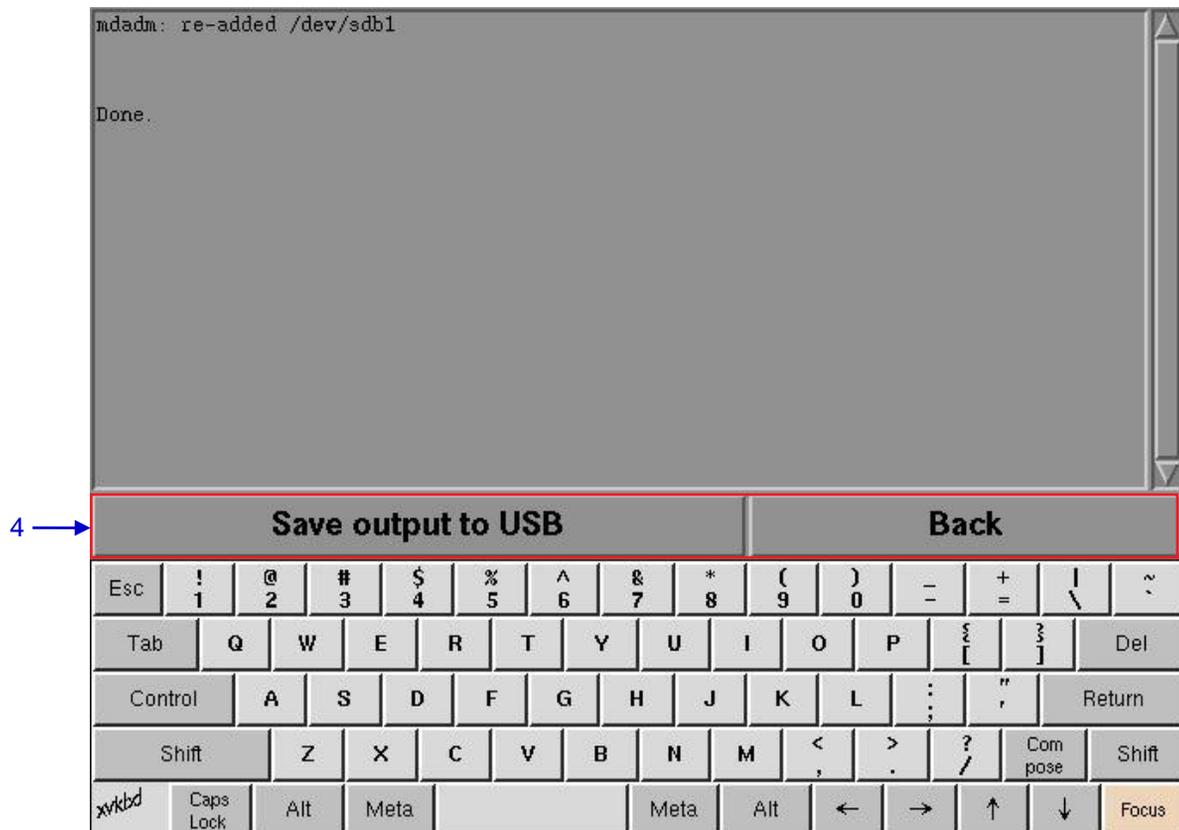


Figure 81 Confirmation of adding a disk to the RAID.

- 4** A new window appears confirming that the hard disk is successfully added to the RAID.
 Press **Save output to USB** to save a screenshot of the information to a USB disk.
 Press **Back** to return to the **Storage System Management** menu.

5.3.1.3. Remove Disks from RAID Array

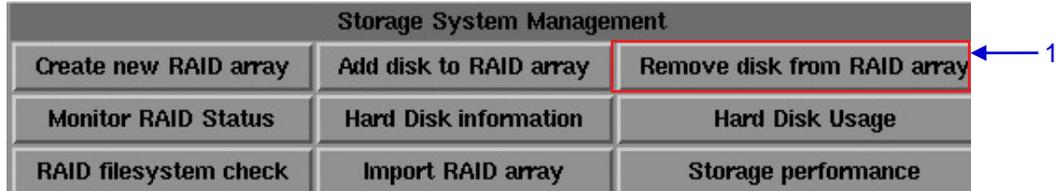


Figure 82 Storage System Management [Remove disk from RAID array].

- 1 Select **Remove disk from RAID array**. A new window appears as seen in Figure 83.

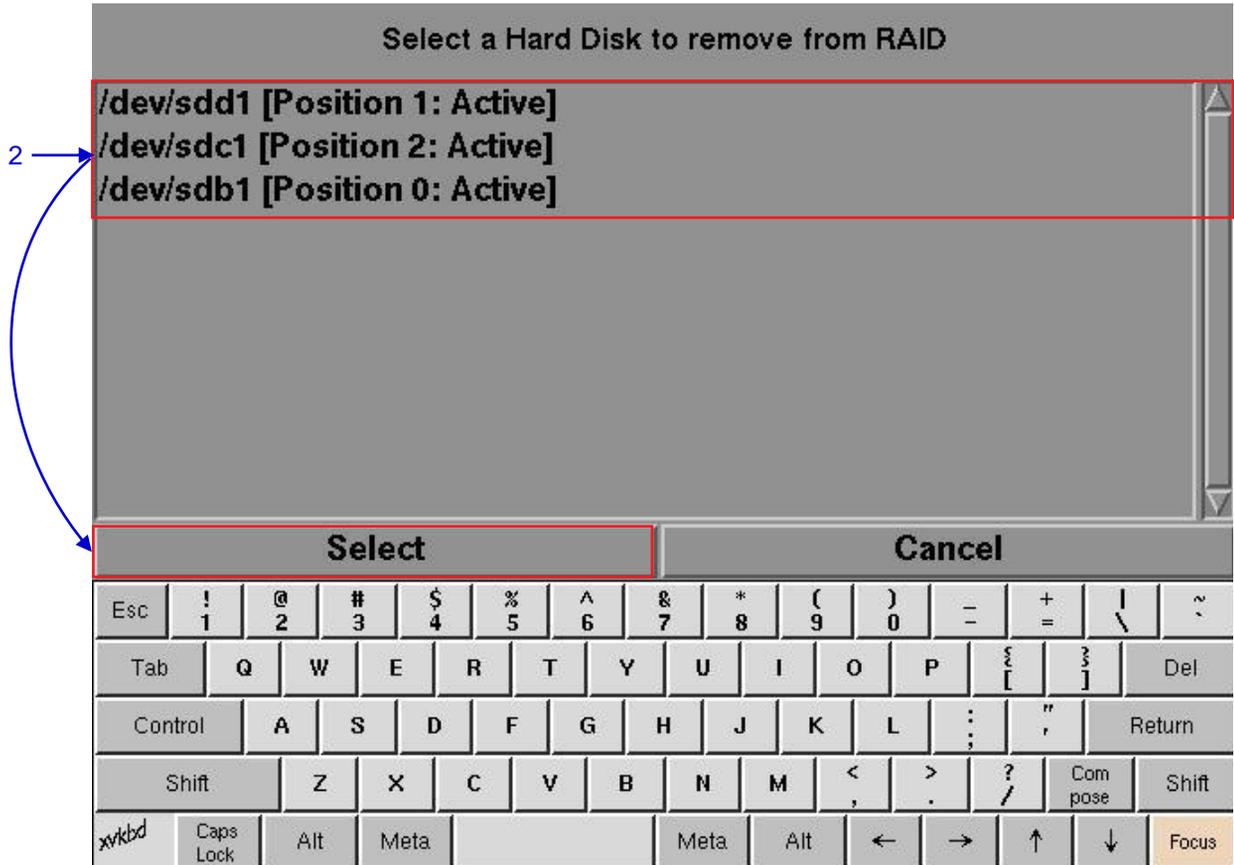


Figure 83 List of hard disks that can be removed from RAID.

- 2 Select the hard disk to remove from RAID and then click the **Select** button. A new window will appear to confirm that the hard disk has been removed as seen in Figure 84.

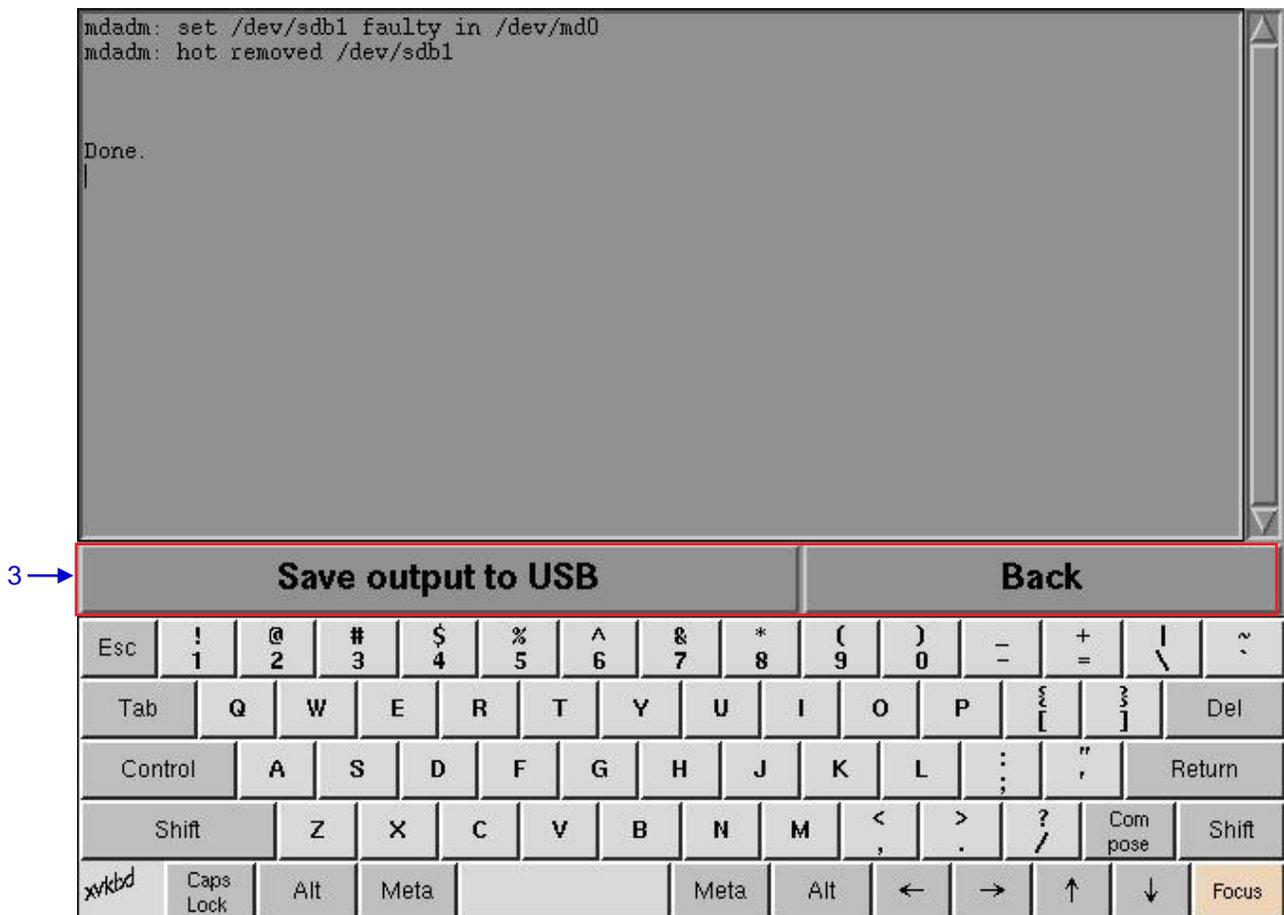


Figure 84 Confirming the removal of selected hard disk.

- | | |
|----------|--|
| 3 | <p>Press Save output to USB to save a screenshot of the information to a USB disk.</p> <p>Click Back to return to Storage System Management menu.</p> |
|----------|--|

5.3.1.4. Monitor RAID Status

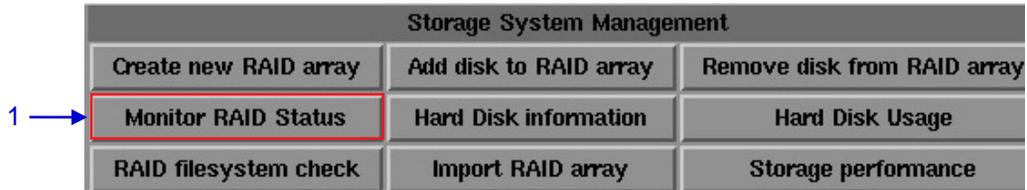


Figure 85 Storage System Management [Monitor RAID status].

1 Select **Monitor RAID Status**. A new window appears as seen in Figure 86.

2 **Press <CTRL+c> to quit**

```
#0 : active raid5 sdb1[0] sdd1[2] sdc1[1]
1953519872 blocks level 5, 64k chunk, algorithm 2 [3/3] [UUU]
bitmap: 1/233 pages [4KB], 2048KB chunk
```



Figure 86 Status of active RAID in the IMB.

2 Press **<CTRL + c>** to quit and return to the **Storage System Management** menu. A blinking red command line for exiting the current window appears on the top left corner of the screen.

5.3.1.5. Hard Disk Information



Figure 87 Storage System Management [Hard Disk Information].

- 1 Select **Hard Disk Information**. A new window appears as seen in **Figure 88**.

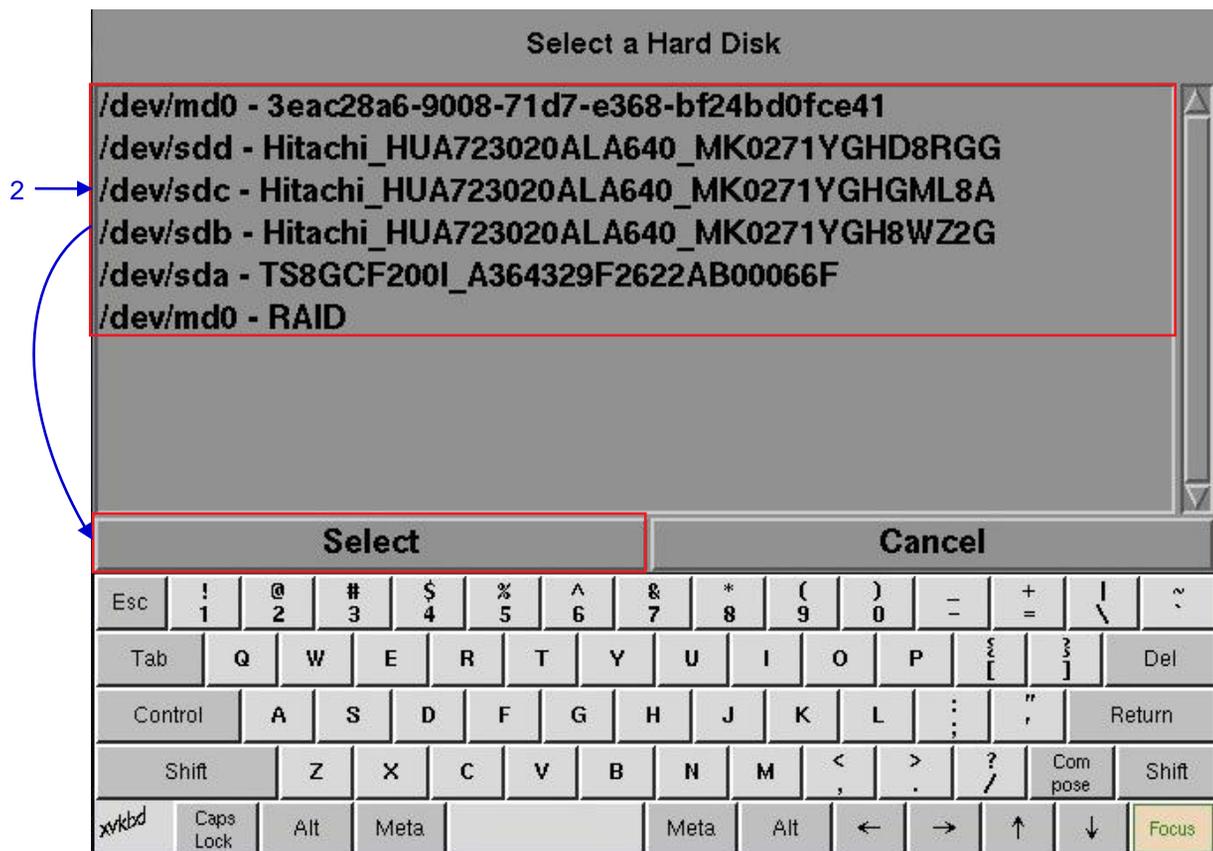


Figure 88 Selecting the hard disk to be viewed.

- 2 Select the disk you want to view the information from and press **Select**.
- 3 A new window will show the information for the selected disk as seen in **Figure 89**.
Press **Save output to USB** to save a screenshot of the information to a USB disk.
Click **Back** to return to **Storage System Management** menu.

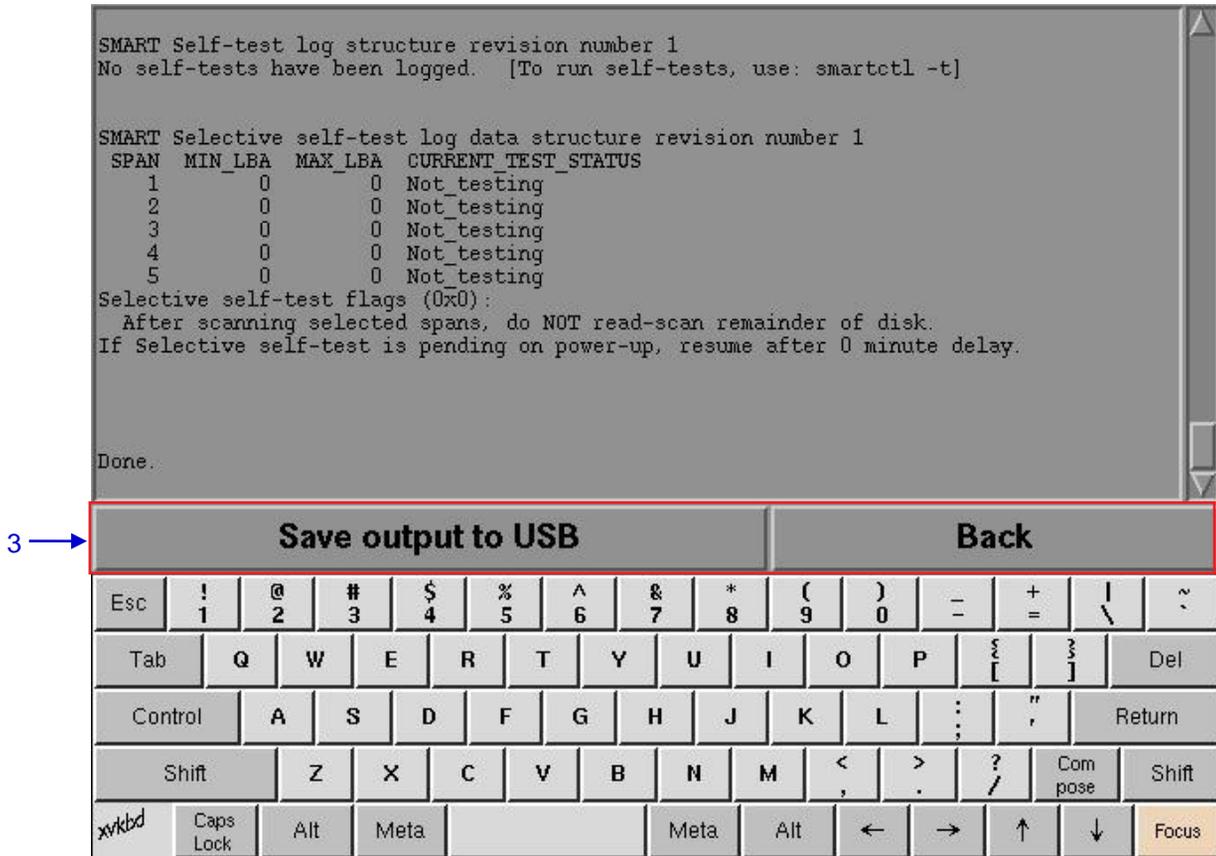


Figure 89 List of information for selected hard disk.

5.3.1.6. Hard Disk Usage

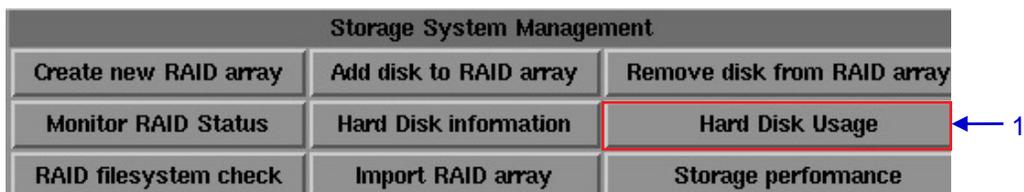


Figure 90 Storage System Management [Hard Disk Usage].

1	Select Hard Disk Usage from Storage System Management menu.
2	A new window showing hard disk usage appears as seen in Figure 91 . Click Back to return to the Storage System Management menu.

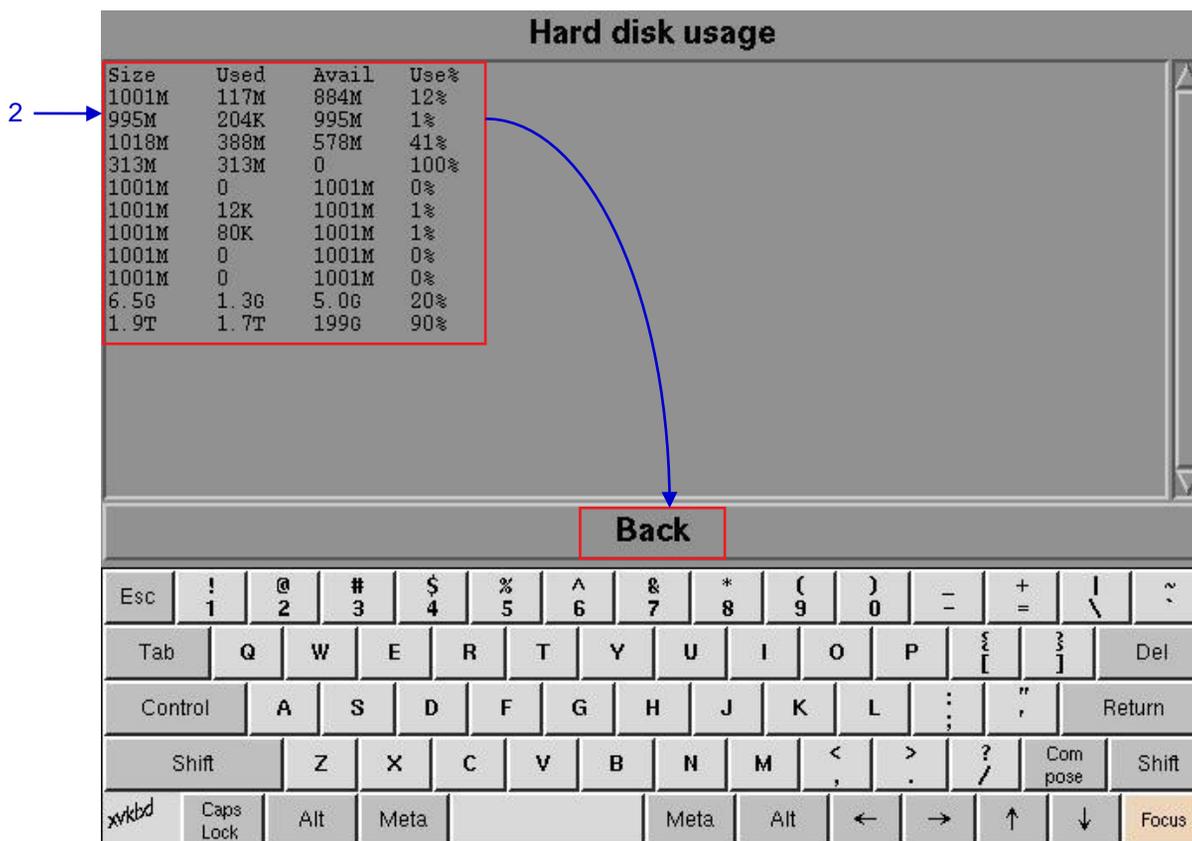


Figure 91 Size of the hard disk, and the used and available spaces in the hard disk.

5.3.1.7. Import RAID Array

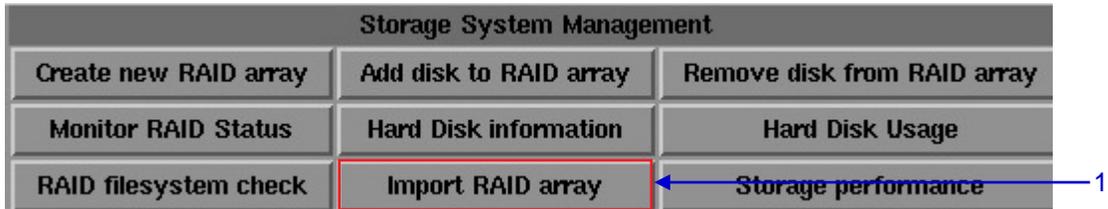


Figure 92 Storage System Management [Import RAID array].

1	Please refer to the SX-3000 installation manual for instructions to set up a PSD-3000-U/P with the SX-3000. Once the PSD-3000-U/P is connected to the SX-3000, the RAID disks on the PSD-3000-U/P has to be configured to work with the SX-3000.
2	Go to Admin Panel → Storage System Management → Select Import RAID array .
3	<div data-bbox="581 987 1122 1187" style="border: 1px solid gray; padding: 10px; background-color: #f0f0f0;"> <p> Clear saved configuration and import running RAID?</p> <p style="text-align: center;"> <input data-bbox="732 1116 821 1166" type="button" value="Yes"/> <input data-bbox="883 1116 972 1166" type="button" value="No"/> </p> </div> <p>Select "Yes" to clear currently saved configuration and import the newly inserted RAID array.</p>
4	<div data-bbox="613 1274 1053 1496" style="border: 1px solid gray; padding: 10px; background-color: #f0f0f0;"> <p> RAID configured successfully.</p> <p>Please use SMS Configuration UI to mount RAID storage.</p> <p style="text-align: center;"><input data-bbox="797 1431 873 1481" type="button" value="OK"/></p> </div> <p>Click "OK" to acknowledge successful import of newly inserted RAID array.</p>

5.3.1.8. Storage Performance

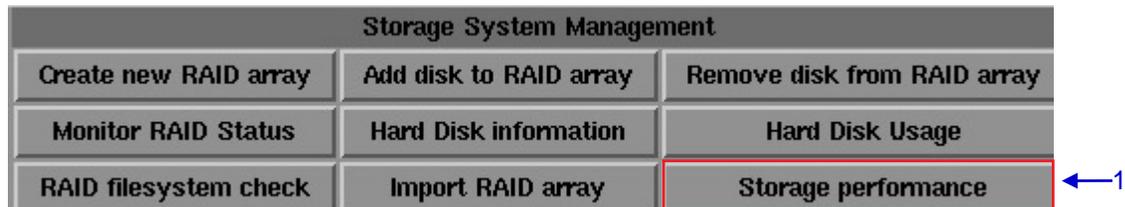


Figure 93 Storage System Management [Storage performance].

1	Select Storage performance . A new window showing a list of hard disks appears as shown in Figure 94.
2	Select the hard disk you want to view and press Select to execute the process.

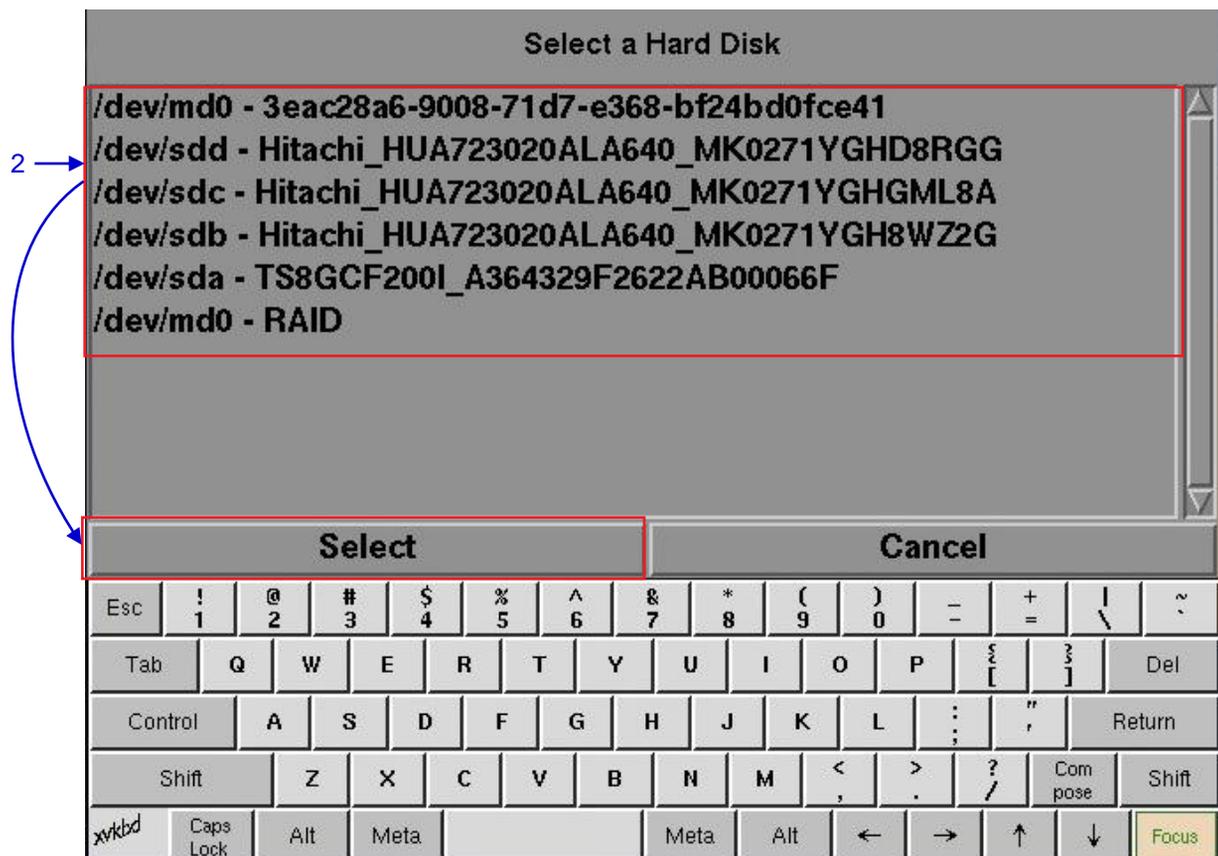


Figure 94 Storage performance [Select a Hard Disk].

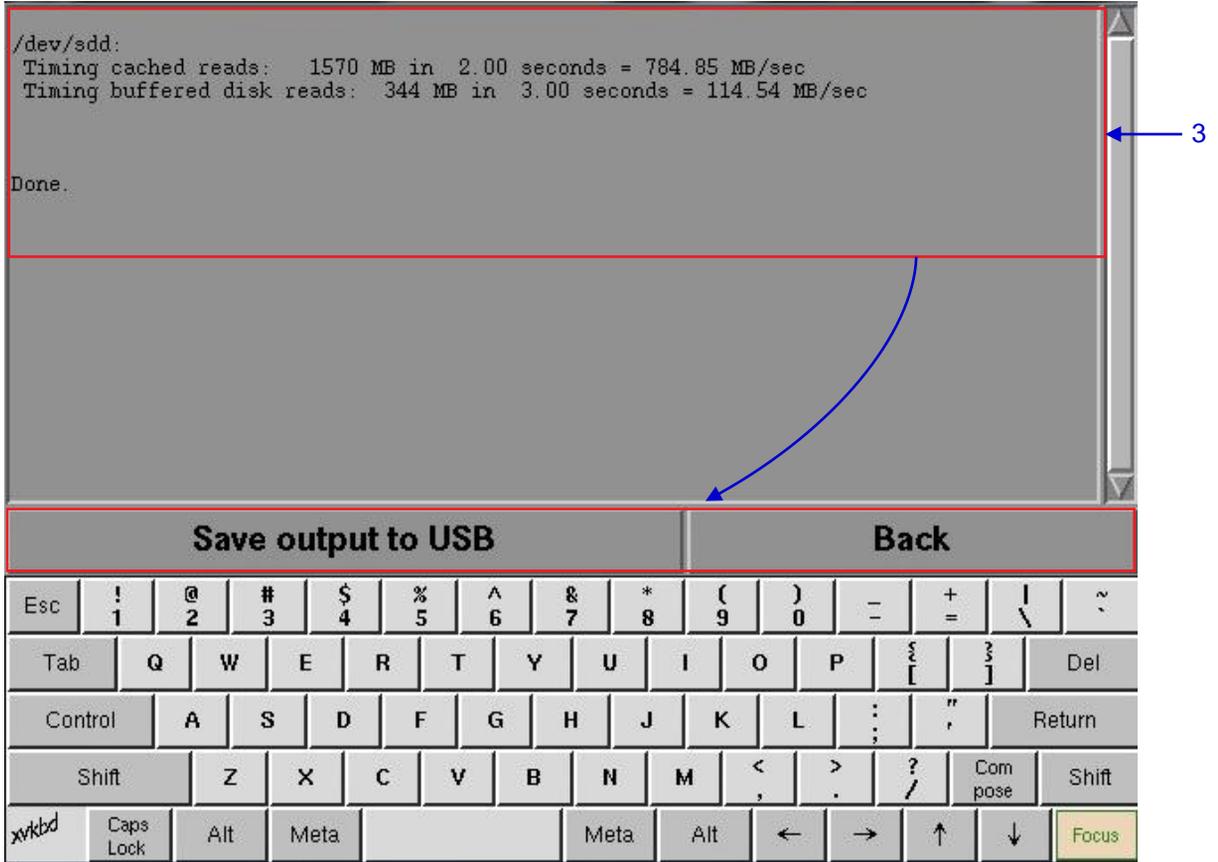


Figure 95 Shows information on storage performance of the selected hard disk.

- 3** A new window showing information on hard disk performance appears as seen in **Figure 95**.
Press **Save output to USB** to save a screenshot of the information to a USB disk.
Press **Back** to return to **Storage System Management** menu.

5.3.2. Diagnostics/Maintenance

5.3.2.1. Access to Diagnostics/Maintenance

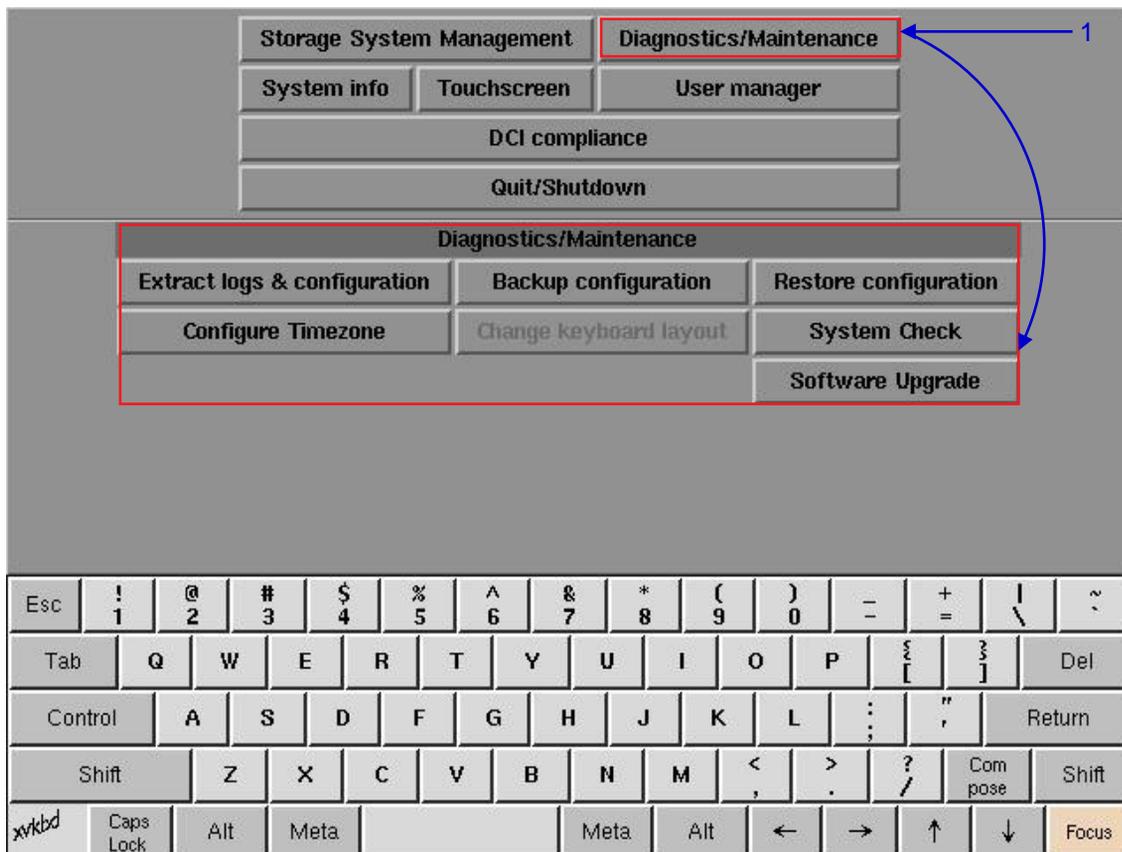


Figure 96 Diagnostics/Maintenance menu.

- 1 On the Main menu, select **Diagnostics/Maintenance**. A small window for **Diagnostics/Maintenance** menu appears.

5.3.2.2. Extract Logs & Configuration

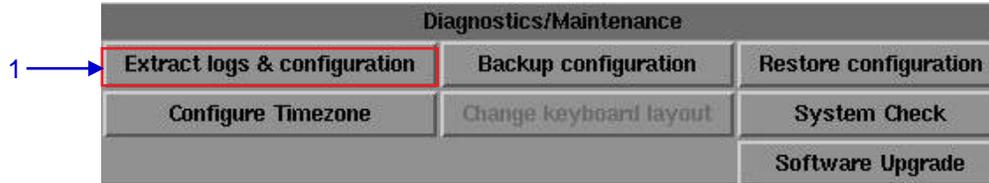
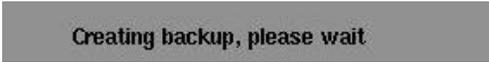


Figure 97 Diagnostics/Maintenance [Extract logs].

1	<p>Select Extract logs. A pop up window shows that backup is in the progress.</p> 
2	<p>Once extract log files finished, a new window showing backup done is appeared. The USB can be removed.</p> 

5.3.2.3. Backup Configuration

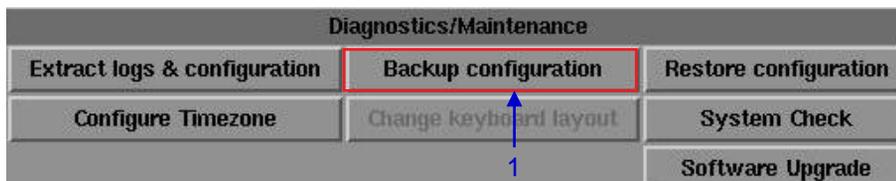


Figure 98 Diagnostics/Maintenance [Backup configuration].

- 1 The **Backup Configuration** saves the IMB configuration to a backup file on a USB disk or thumb drive. Attach a USB thumb drive to the IMB and select **Backup Configuration** to save the current IMB configuration.

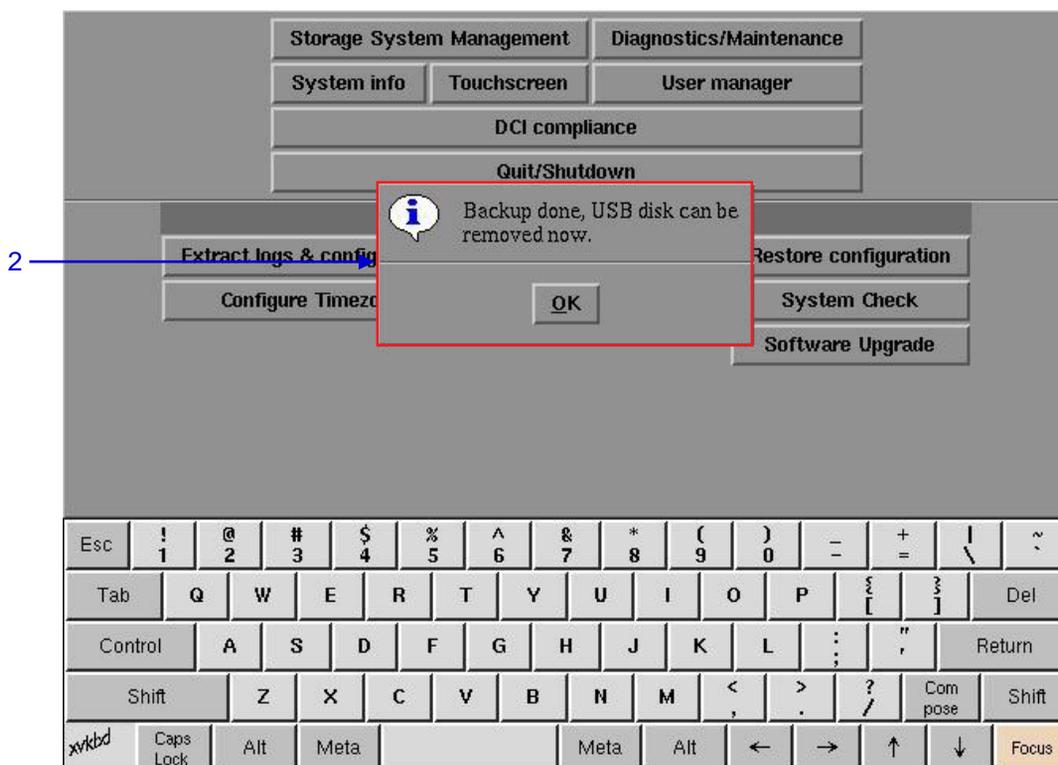


Figure 99 Saving IMB configuration

- 2** The backup file is saved in an encrypted format as seen in **Figure 99**. The following configuration files are included in the backup file:
- Network configuration information
 - Automation configuration
 - SNMP configuration
 - SMS configuration
 - Content manager source configuration
 - Network Time Protocol (NTP) configuration
 - System user interface passwords
 - Show Playlists

5.3.2.4. Restore Configuration



Figure 100 Diagnostics/Maintenance [Restore configuration].

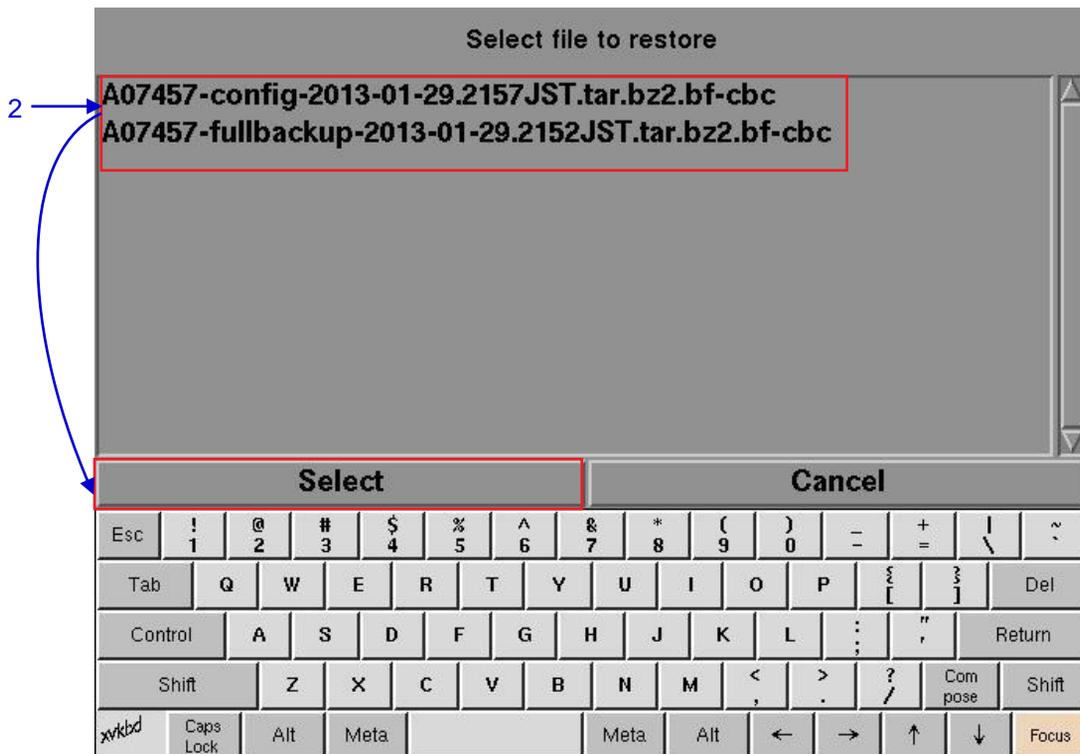


Figure 101 Select file to restore.

- 2** **Restore Configuration** will restore the IMB configuration from a backup file on a USB disk or thumb drive. When **Restore Configuration** is pressed, a list of backup files present on the USB disk is displayed. Select the backup file to restore and then press **Select**.

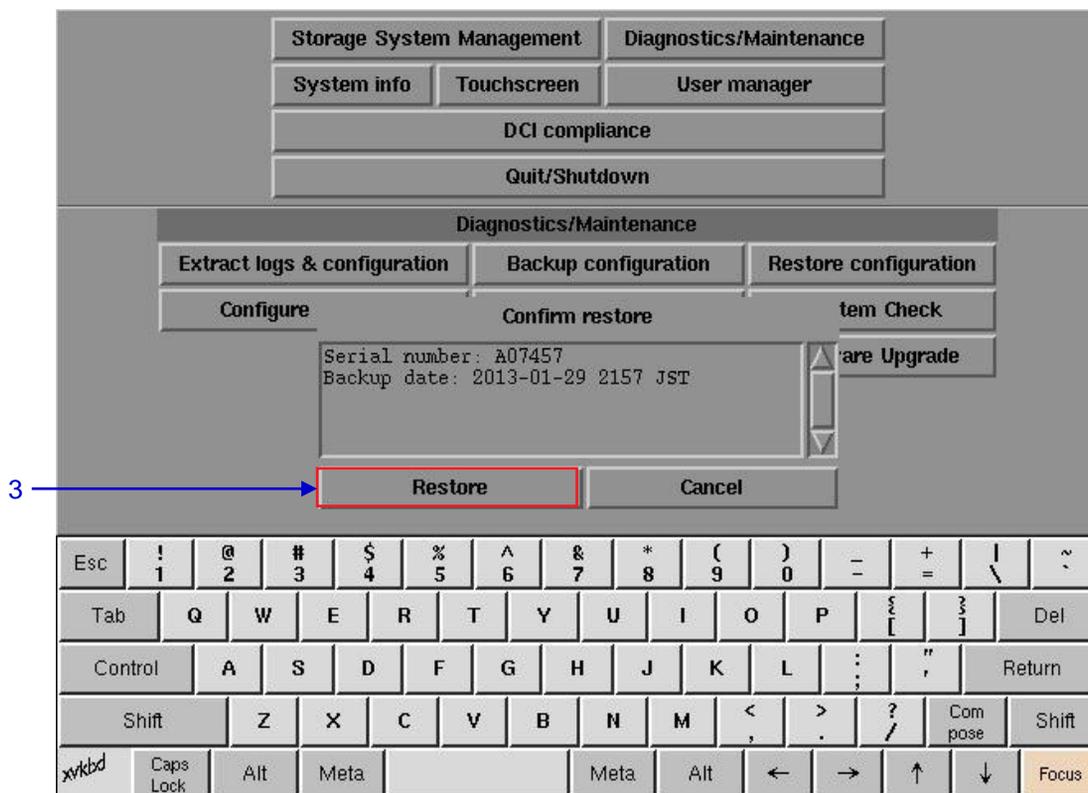
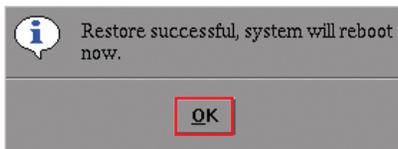


Figure 102 Confirm restore.

- 3** Information on the backup file will be displayed. Press **Restore** to confirm and restore configuration from the backup file.
- 4** When the configuration is restored from the backup file, a confirmation message will appear. Press **OK**. IMB will then be rebooted.



5.3.2.5. Configure Timezone

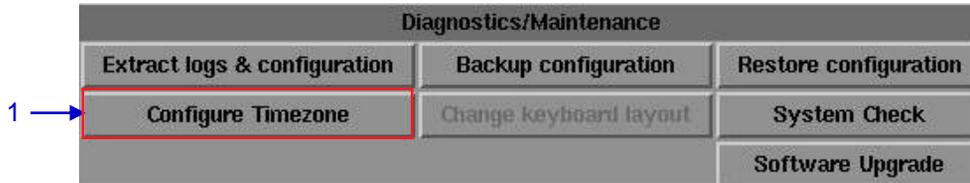


Figure 103 Diagnostics/Maintenance [Configure Timezone].

1	Select Configure Timezone . A new window will appear as seen in Figure 104 .
2	Move the highlight bar to your geographical area by clicking the up [↑] or down [↓] arrow keys on the on-screen keyboard and then click the space key. Then click the right [→] arrow key to select the OK button.

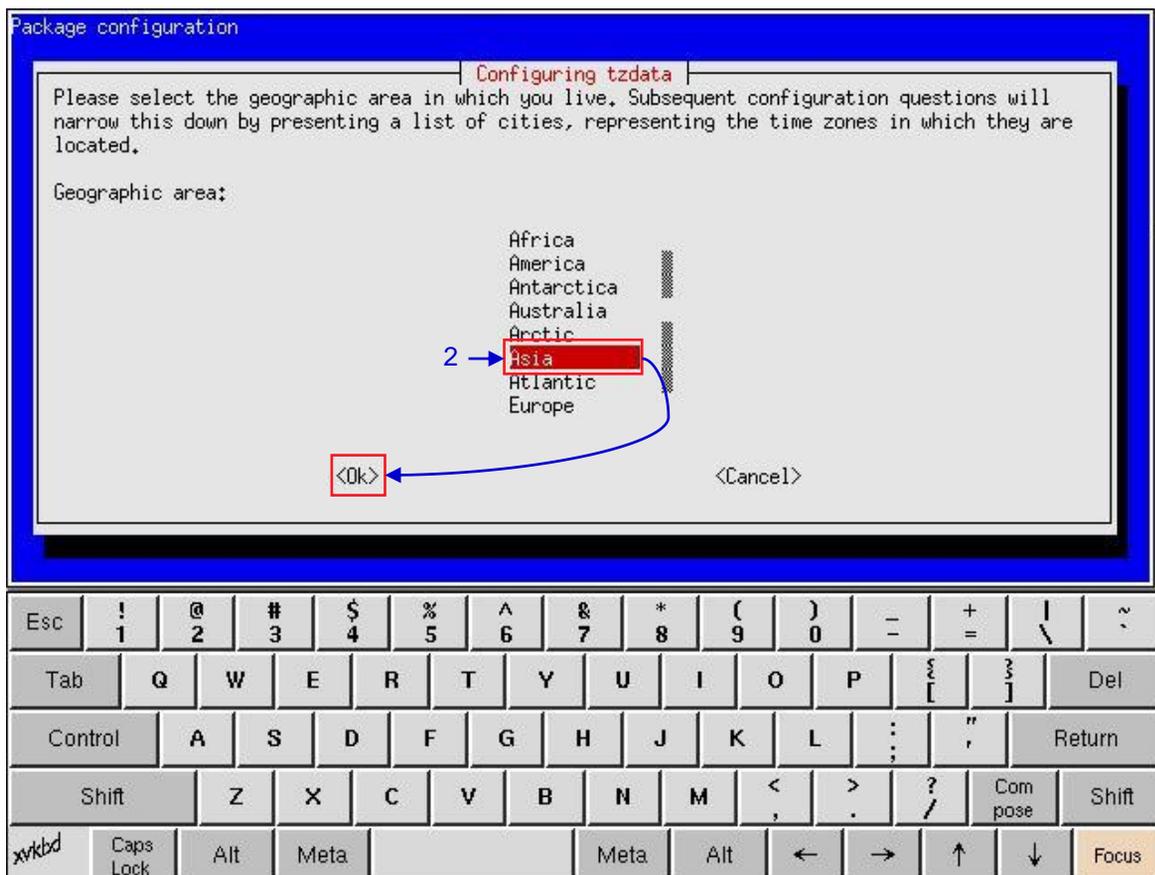


Figure 104 Selecting the timezone of specific region.

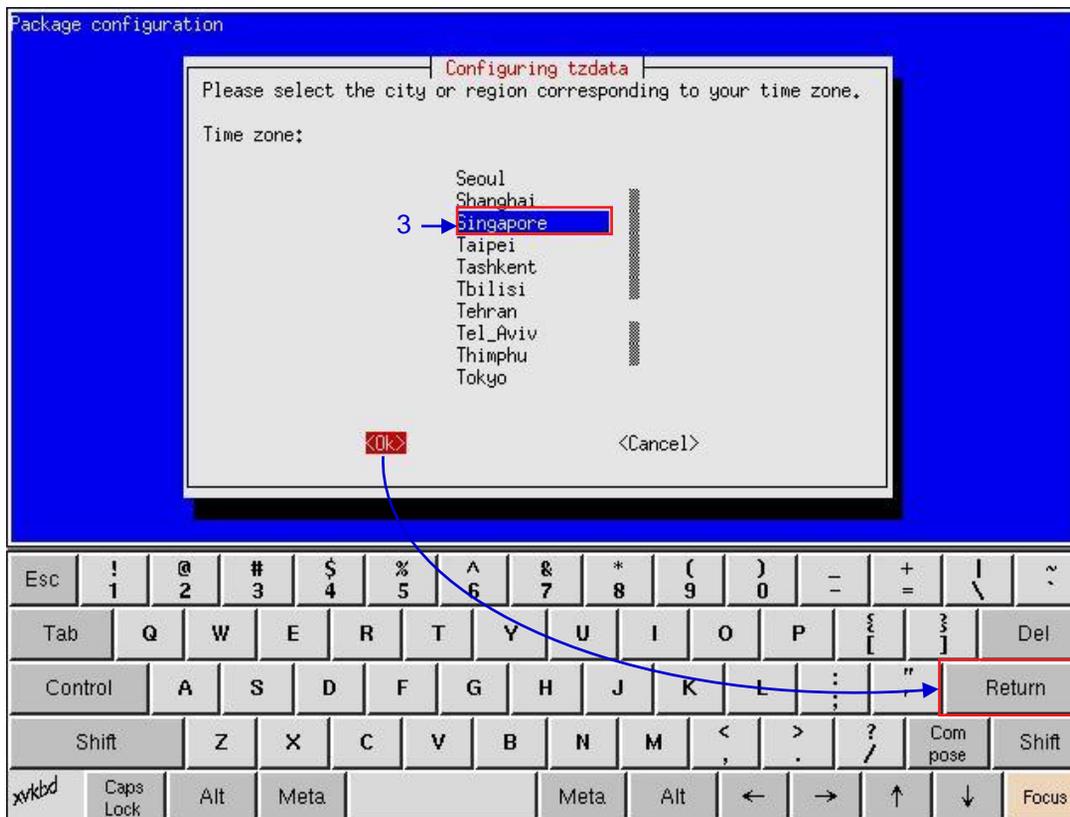


Figure 105 Selecting the timezone of specific country.

- 3 Move the highlight bar to your timezone by clicking the up [↑] or down [↓] arrow keys on the on-screen keyboard and then click the space key. Then click the right [→] arrow key to select the **OK** button and click **Return**.

5.3.2.6. Software Upgrade



Figure 106 Diagnostics/Maintenance [Software Upgrade]

- 1 From the **Software Upgrade** button in the Admin Panel you can run any GDC issued script, once you press the button you will be prompted for the upgrade password as seen in **Figure 107**.

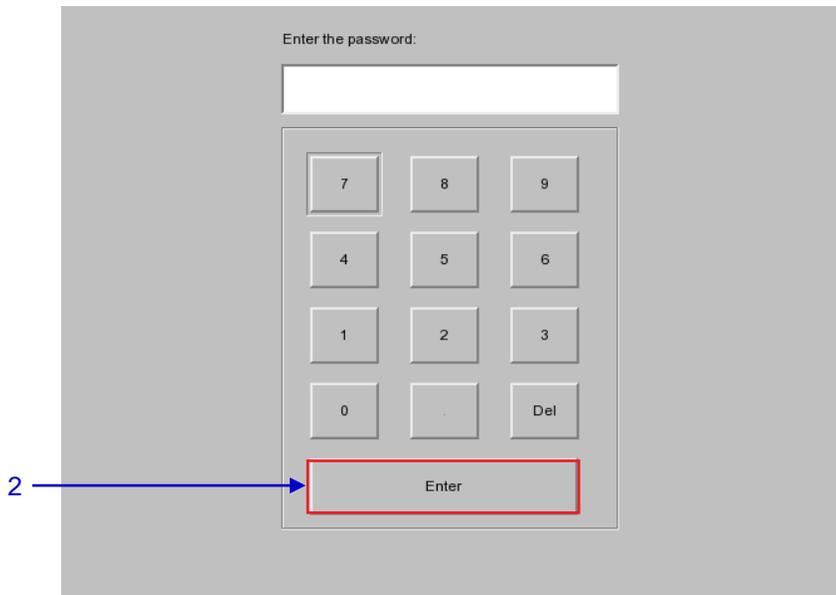


Figure 107 Diagnostics/Maintenance [Software Upgrade]

2	Enter the password of the upgrade file and press Enter.
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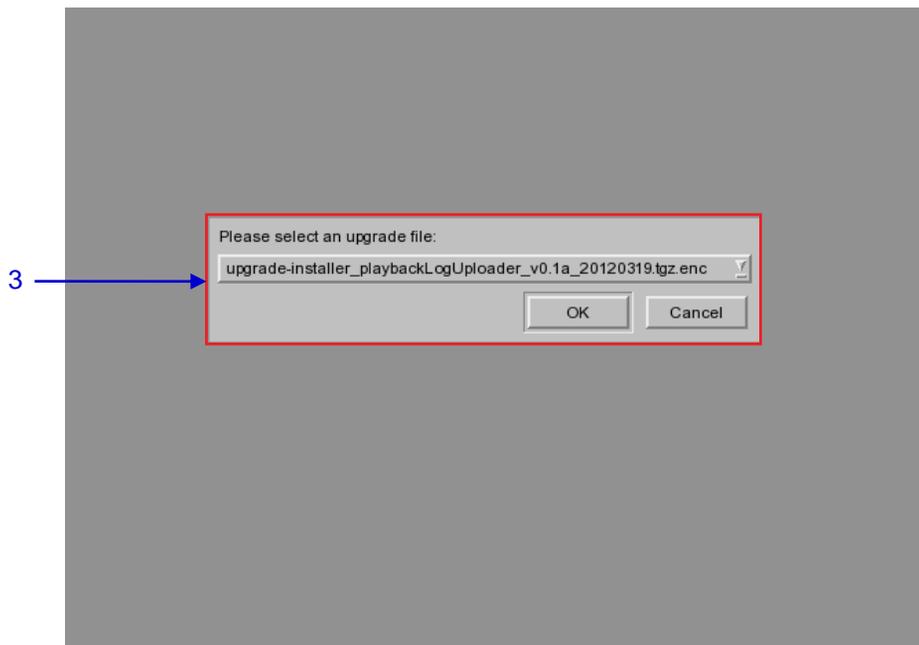


Figure 108 Diagnostics/Maintenance [Software Upgrade]

3	Select the upgrade file from the dropdown list and press OK .
----------	--

5.3.3. System Information

5.3.3.1. Access to System Info

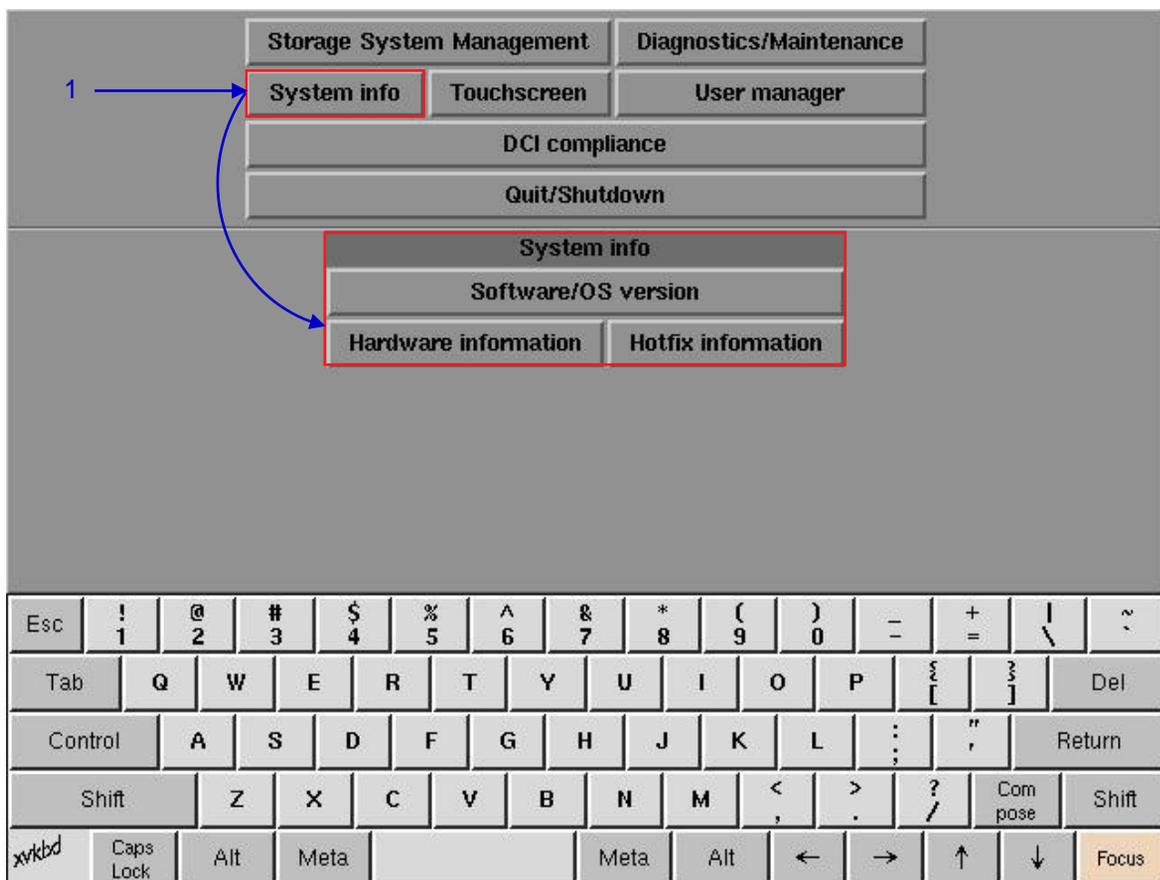


Figure 109 System Info menu.

- 1 On the Main menu, select **System Info**. A small window for **System info** menu appears.

5.3.3.2. Software/OS Version

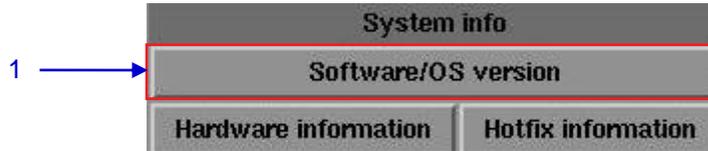


Figure 110 System Info [Software/OS version].

1	Select Software/OS version on System Info menu.
2	The OS and Software versions of the IMB are shown in a new window as seen in Figure 111 . Press Back to return to System Info menu.

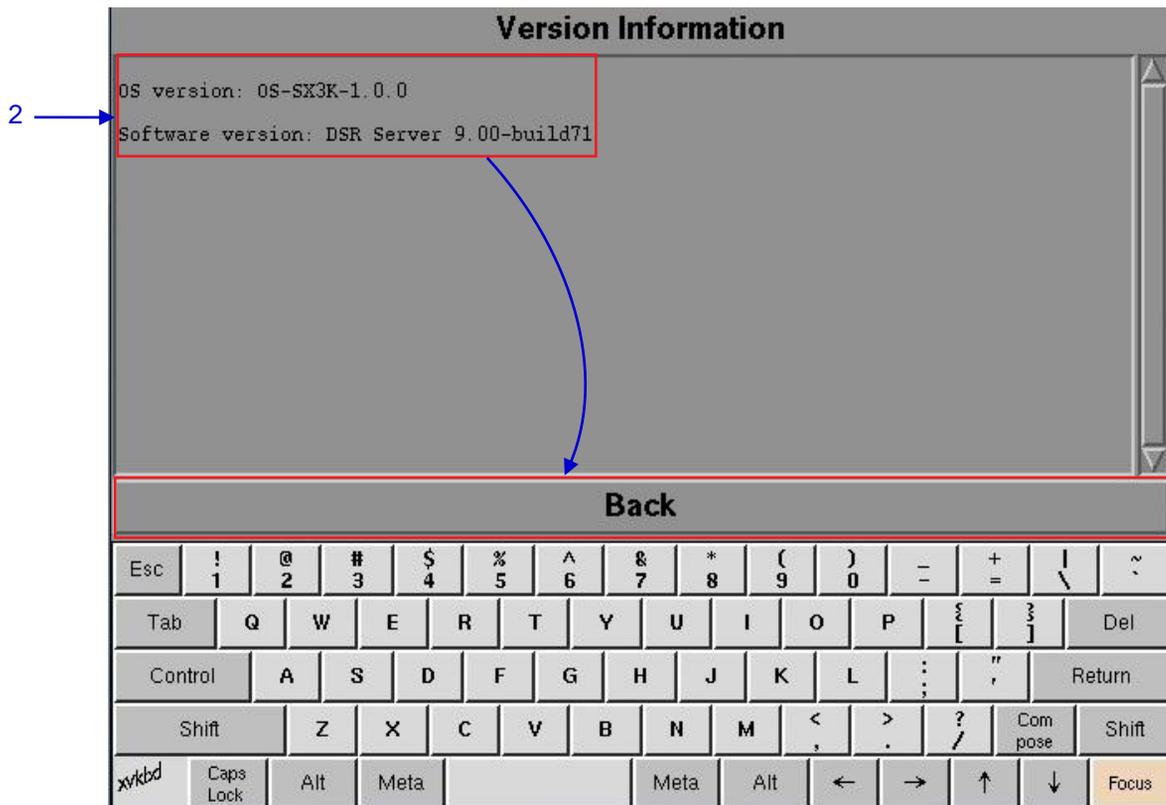


Figure 111 Shows current software and OS versions of the IMB.

5.3.3.3. Hardware Information

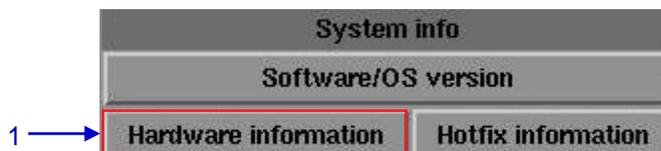


Figure 112 System Info [Hardware information].

1	Select Hardware information on the System Info menu.
2	A new window showing the list of hardware information including the Motherboard, Video card and MPEG card used in the IMB as seen in Figure 113 . Press Back to exit and return to System Info menu.

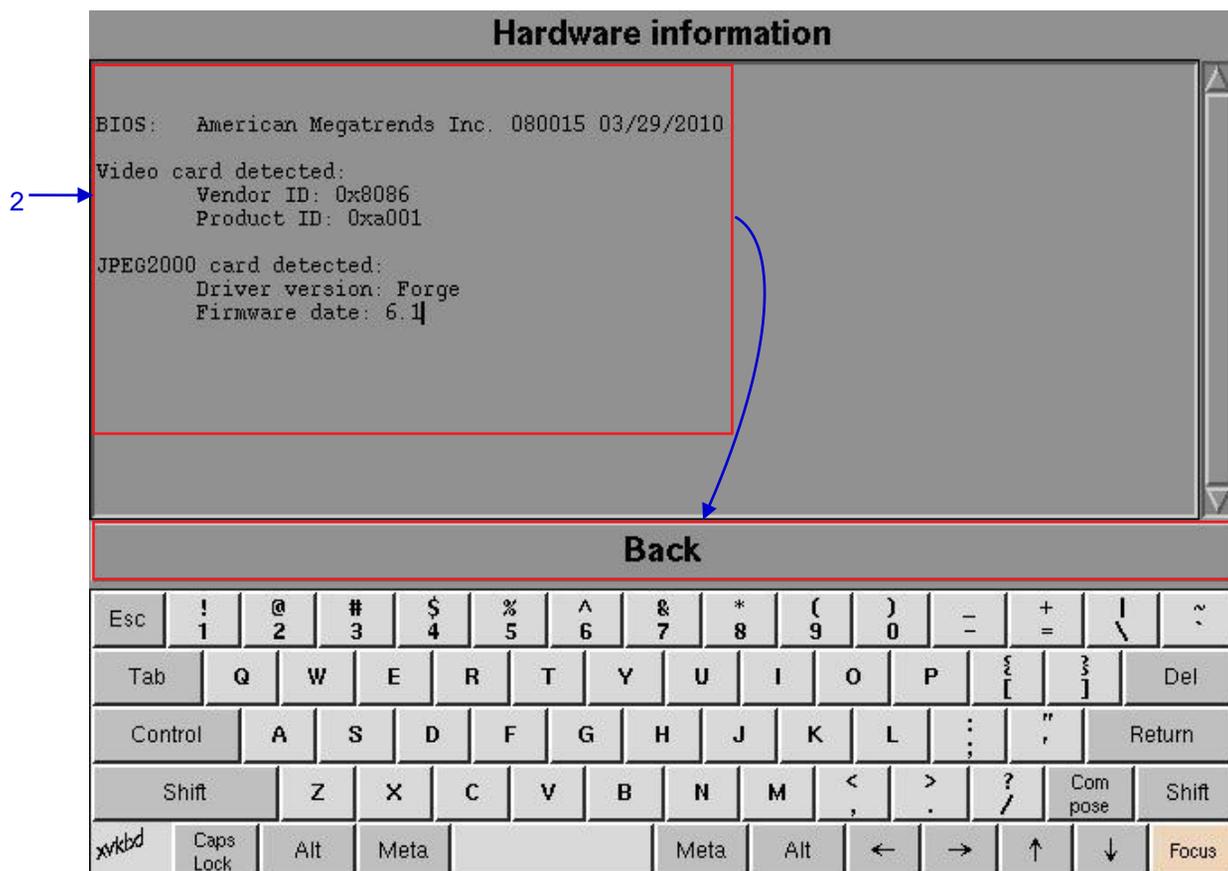


Figure 113 List of hardware information including the Motherboard, Video card and MPEG card used in the IMB

5.3.3.4. Hotfix Information



Figure 114 System Info [Hotfix information].

1	Select Hotfix information . It allows the user to check on the patches and upgrades installed on the IMB.
2	A new window showing hotfix information appears as seen in Figure 115 . Press Back to return to the System Info menu.

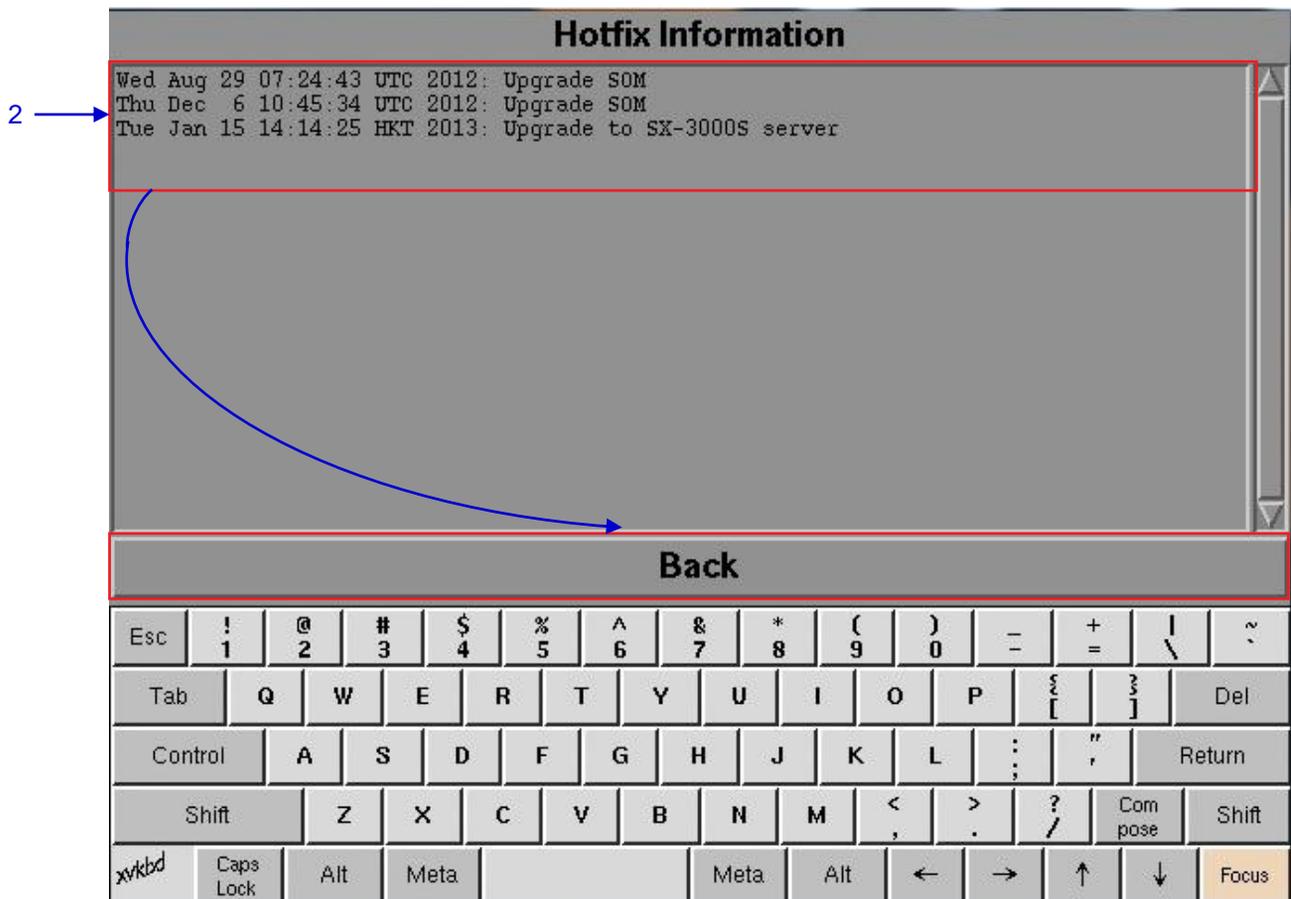


Figure 115 Patches and upgrades installed in the IMB.

5.3.4. Touchscreen

5.3.4.1. Access to Touchscreen

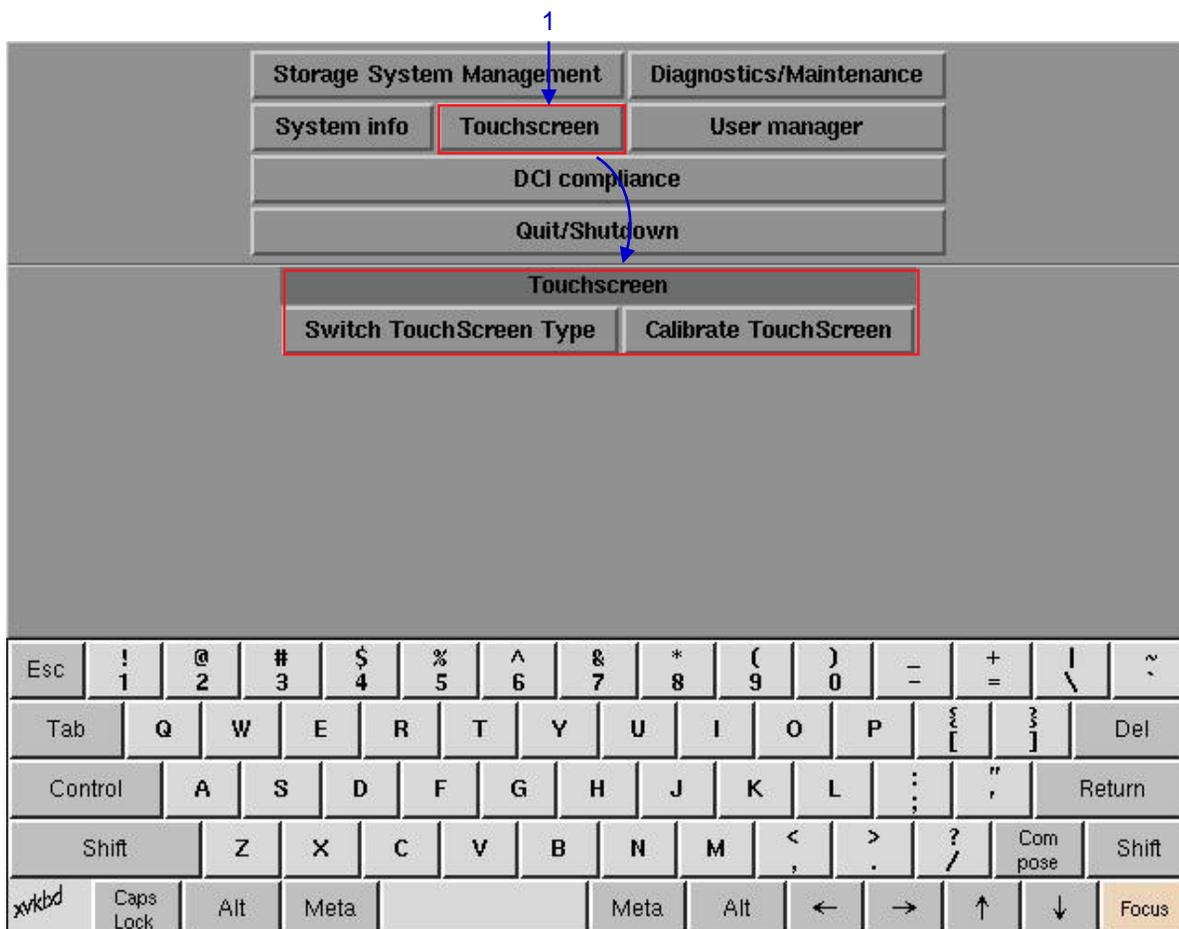


Figure 116 Touchscreen menu.

- | | |
|---|--|
| 1 | On the Main menu, select Touchscreen . A Touchscreen menu appears showing two types of touchscreens. |
|---|--|

5.3.4.2. Select Touchscreen Type

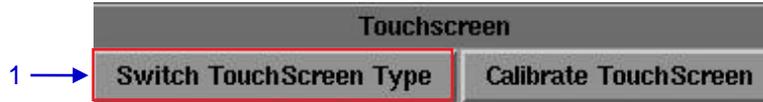
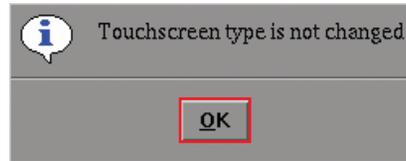


Figure 117 Touchscreen [Switch Touchscreen Type].

1	<p>Select Switch Touchscreen Type. A small dialog box pops up warning that the cursor may stop working if a change is made to the touchscreen type.</p> <div data-bbox="581 672 964 879" data-label="Image"> <p>A warning dialog box with a yellow triangle icon containing an exclamation mark. The text reads: "Warning: Changing touchscreen type may stop cursor from working. Are you sure you want to change touchscreen type?" At the bottom are two buttons: "Yes" (highlighted with a red box) and "No".</p> </div> <p>Select Yes to confirm the change in touchscreen type.</p>
2	<p>A small menu for selecting the touchscreen type appears.</p> <div data-bbox="485 1009 1002 1155" data-label="Image"> <p>A dialog box titled "Select touchscreen type:" with two buttons: "TK USB" (highlighted with a red box and labeled (a)) and "NONE" (highlighted with a red box and labeled (b)). A "Cancel" button is at the bottom.</p> </div> <p>(a) If TK USB is selected, the screen will switch to TK screen in USB connection with the system. Press OK to confirm.</p> <div data-bbox="677 1319 1032 1504" data-label="Image"> <p>An information dialog box with an 'i' icon. The text reads: "Switched to TK screen". At the bottom is an "OK" button (highlighted with a red box).</p> </div> <p>(b) If NONE is selected, touchscreen functionality will be disabled. Press OK to confirm.</p> <div data-bbox="677 1647 1081 1813" data-label="Image"> <p>An information dialog box with an 'i' icon. The text reads: "Please restart Control Panel to enable/disable Touchscreen". At the bottom is an "OK" button (highlighted with a red box).</p> </div>

A small window indicating no change in touchscreen type will appear if The selected screen type is already activated.



5.3.4.3. Calibrate Touchscreen

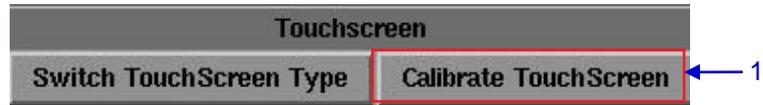


Figure 118 Touchscreen [Calibrate Touchscreen].

1	Select Calibrate Touchscreen .
2	If Calibrate Touchscreen is selected when in TK USB screen , the screen will appear as seen in Figure 119 .

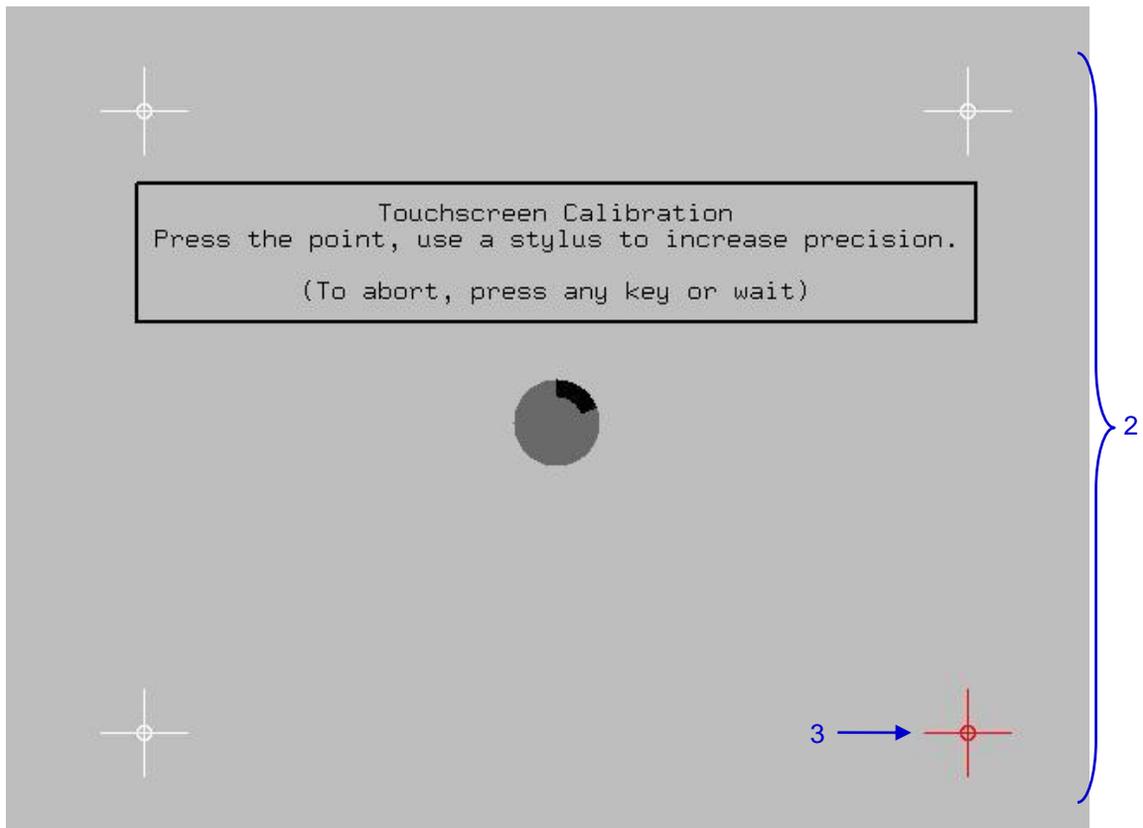


Figure 119 Calibrating the touchscreen by 4-pt calibration method.

3	Touch the blinking symbol until it stops. Continue touching the blinking symbols on each of the four (4) corners of the screen to complete the calibration of the touchscreen.
----------	--

5.4. User Manager

5.4.1. Access to User Manager

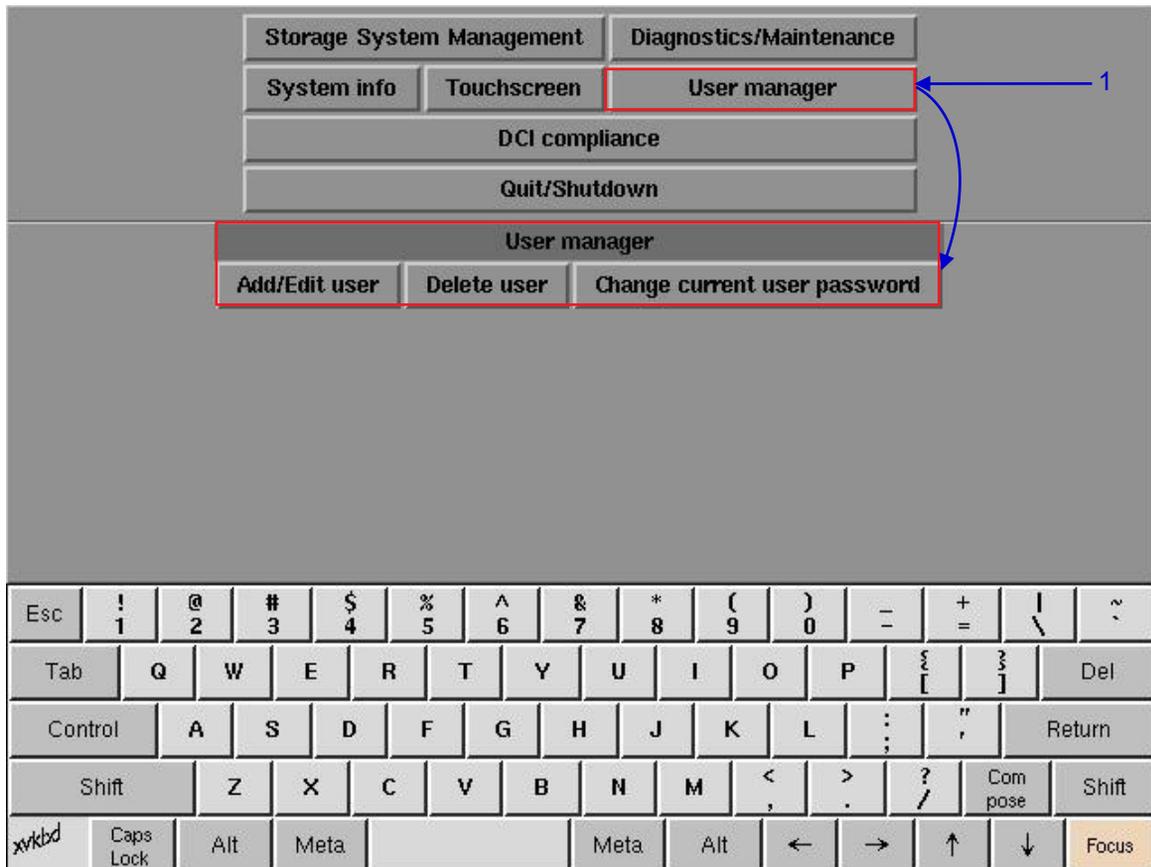


Figure 120 User Manager menu.

- 1 On the **Main** menu, select **User Manager**. A small window for **User Manager** menu appears.

5.4.2. Add/Edit user



Figure 121 User manager [Add/Edit user].

- 1 On the **Main** menu, select **Add/Edit user**. A new window for username and password entries will appear as shown in **Figure 122**.

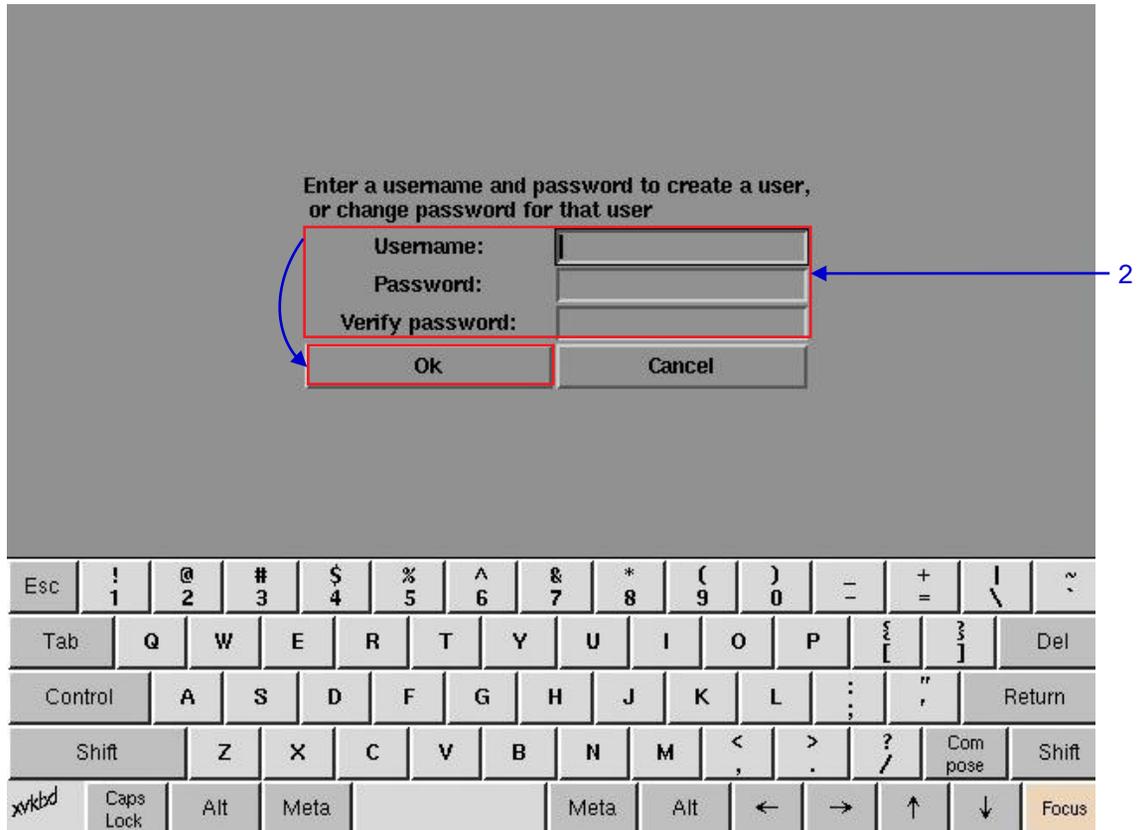
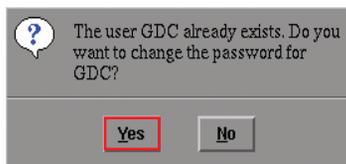


Figure 122 Username and Password entries.

2	Type in your desired Username and Password using the on-screen keyboard to create a new username and password, and press OK .
3	<p>A small window will appear after creating your username and password.</p> <div data-bbox="647 1381 1016 1541" style="border: 1px solid gray; padding: 5px; text-align: center;">  New user added: gdcuser OK </div> <p>Press OK to confirm and exit.</p>

- 4 To edit the password, enter your current username and type in your new password.
A small window pops up asking if you want to change the password. Press **Yes** to confirm.



A new window appears to confirm the password has changed. Press **OK** to exit and return to **User Manager** menu.



5.4.3 Delete User



Figure 123 User manager [Delete user].

- 1 Select **Delete user**. A new window appears showing a list of usernames as seen in **Figure 124**.

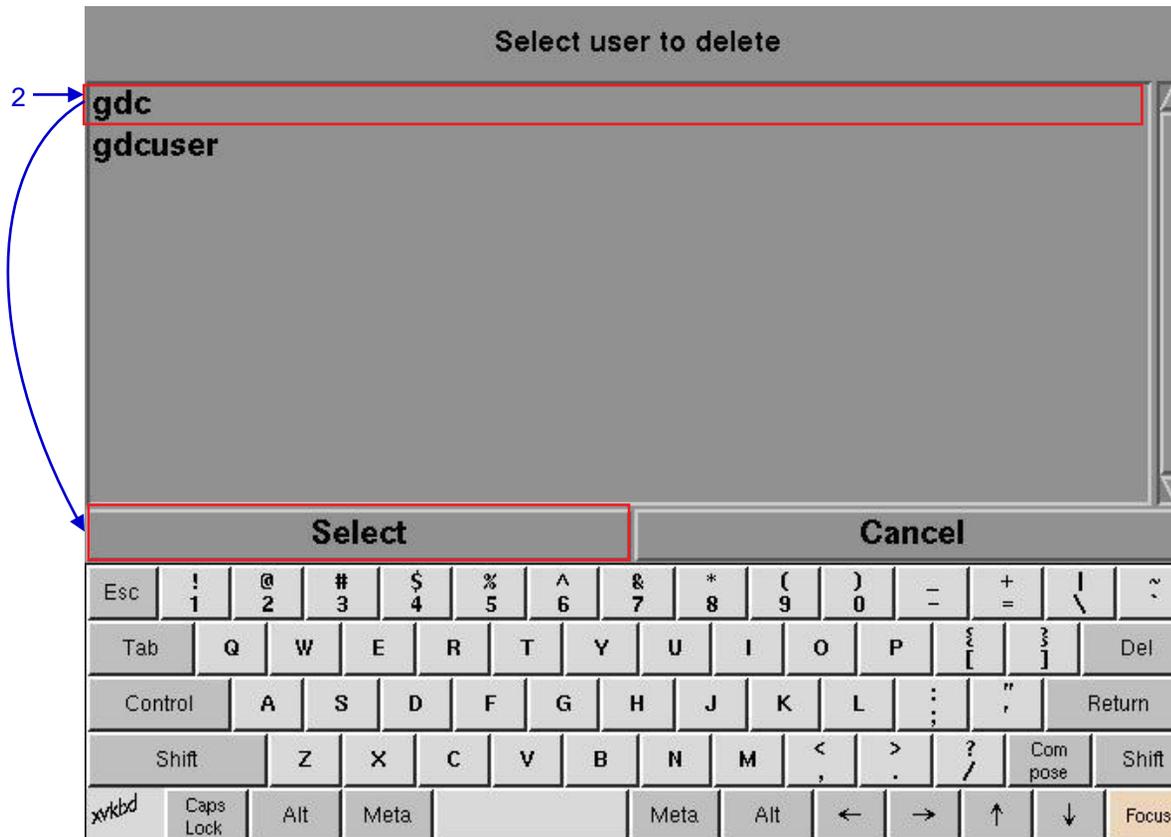
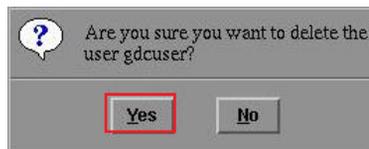


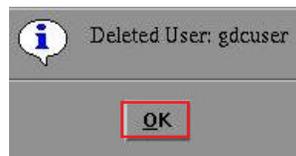
Figure 124 Selecting the username to be deleted.

- 2 Select the username you want to delete and press **Select**. A small window pops up to confirm if you want to continue to delete the user.

Select **Yes** to confirm. A small window appears confirming the user has been deleted.



Press **OK** to exit and return to **User Manager** menu.



5.4.4. Change Current User Password

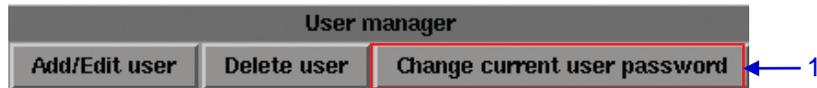


Figure 125 User manager [Change current user password].

- 1 Select **Change current user password**. A new window for password entry appears as seen in **Figure 126**.

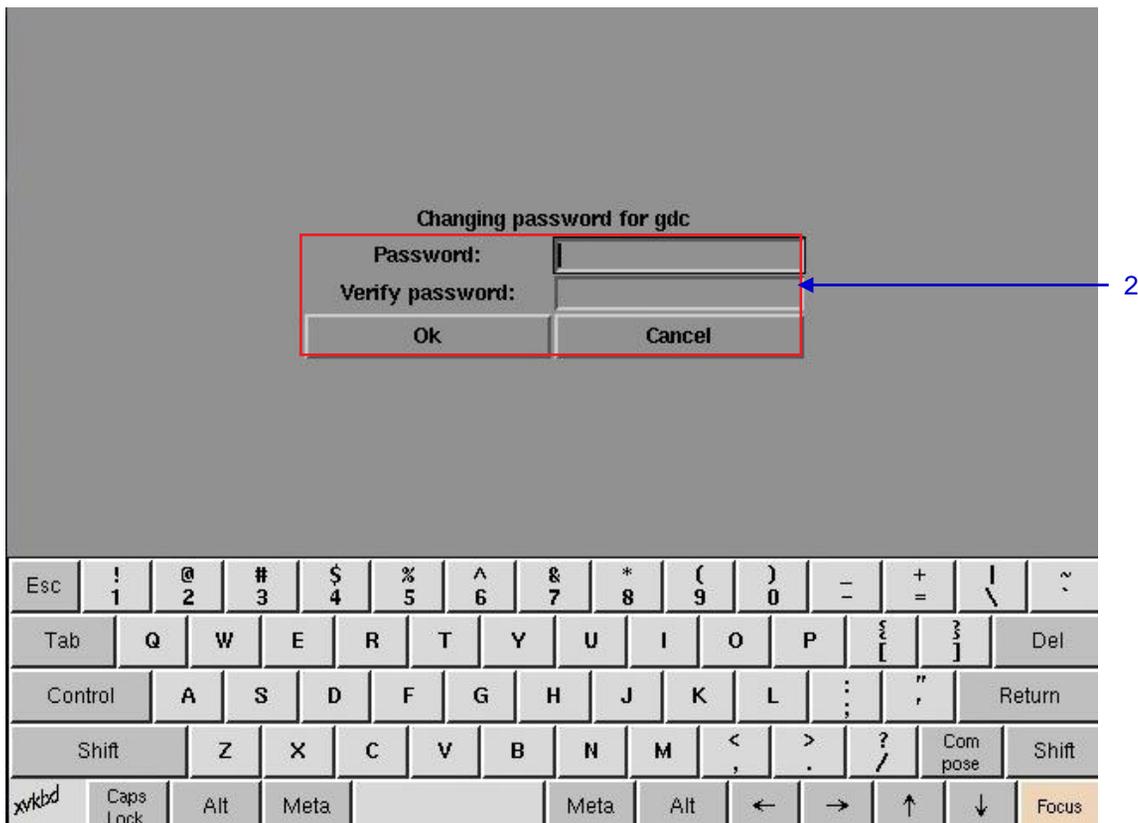


Figure 126 Password entry to change password.

- 1 Type in your new password and press **OK**. A small window appears confirming the change in password.



Press **OK** to exit and return to **User Manager** menu.

5.5. DCI Compliance

5.5.1. Access to DCI Compliance

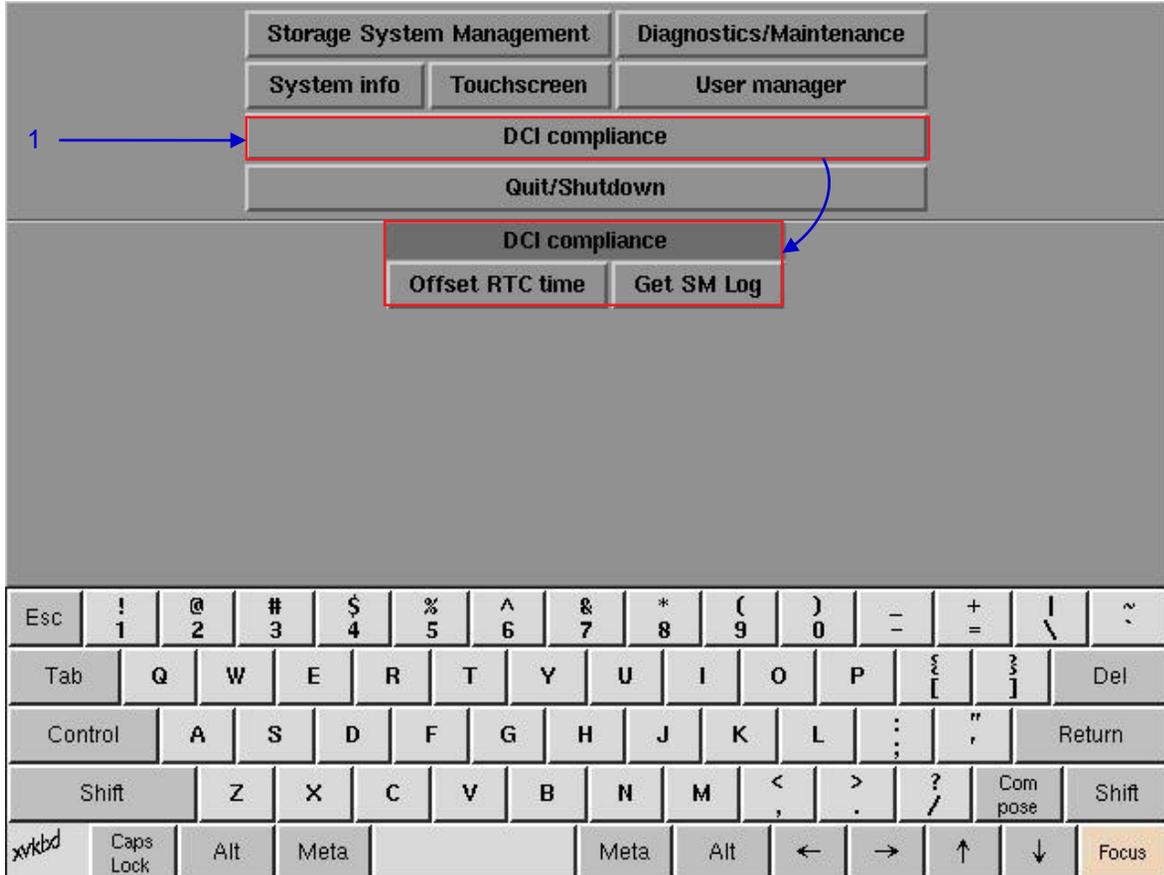


Figure 127 DCI compliance menu.

- | | |
|----------|---|
| 1 | Press the DCI compliance button to access the RTC time offset or extract the SM (Security Manager) logs. |
|----------|---|

5.5.2. Offset RTC Time

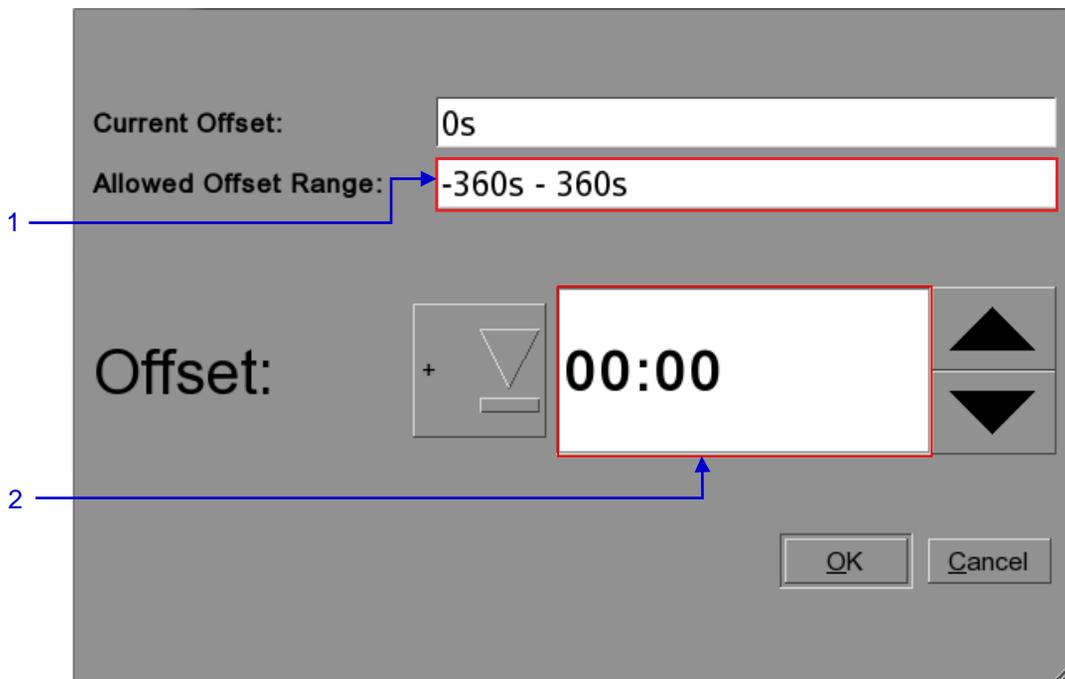


Figure 128 RTC Offset.

1	The allowed offset range is set to plus or minus 360 seconds
2	The Offset can be set + or – within the allowed offset range seen in field 1. The time is set in MM:SS (Minutes: Seconds)

5.5.3. Get SM Log

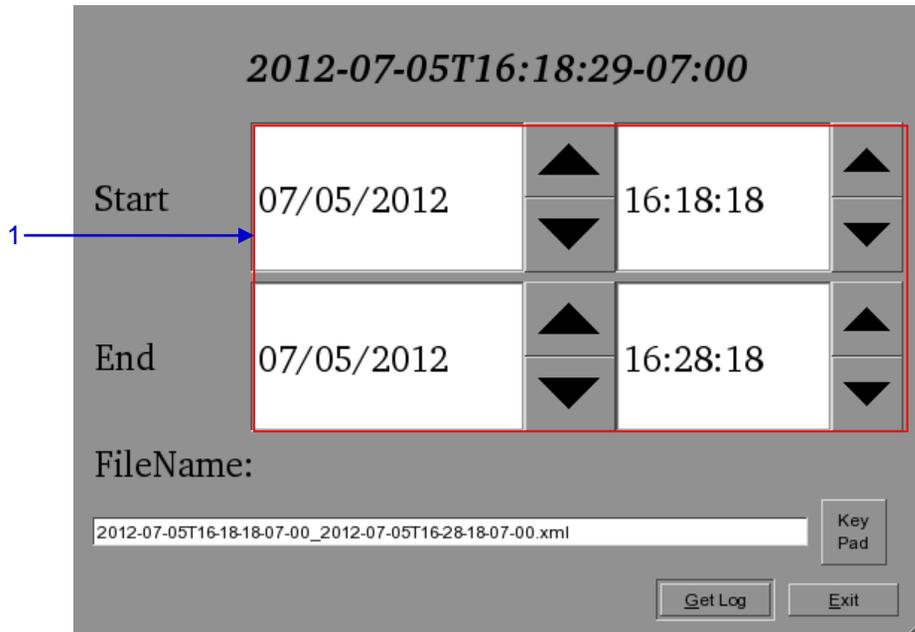


Figure 129 Set time for SM log.

- | | |
|----------|---|
| 1 | Choose the date and time range for SM log extraction. It is possible to alter the name of the output file with the Key Pad button. Once a USB drive has been inserted press the Get Log button. |
|----------|---|

5.6. Quit/Shutdown

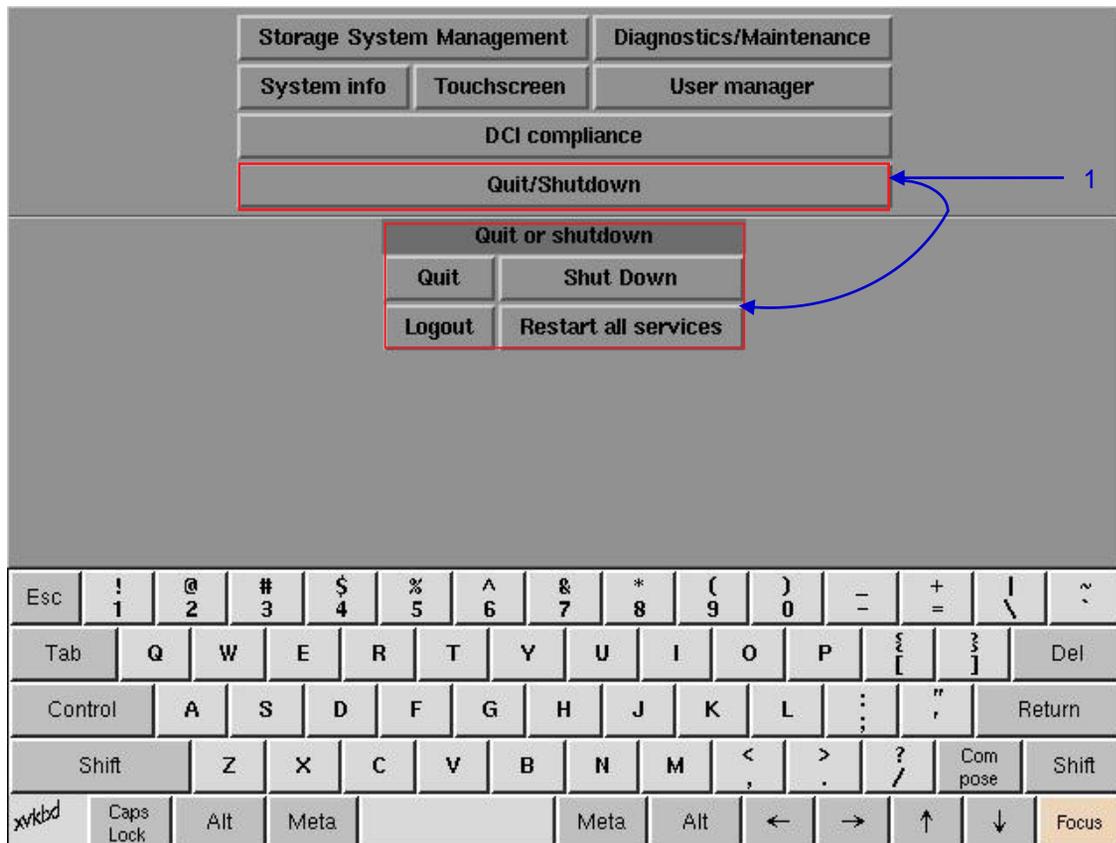
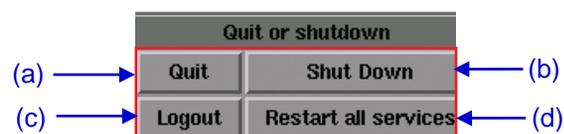


Figure 130 Quit/Shutdown menu.

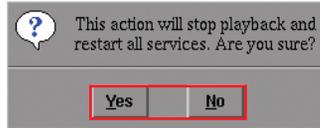
- 1 On **Main** menu, select **Quit/ Shutdown**. A small window shows the Quit/Shutdown menu.



- (a) Select **Quit** to switch to the **Control Panel** menu.
- (b) Select **Shut Down** to turn off the IMB.
- (c) Select **Logout** to logout the current user and return to the **Admin Panel** startup window.

(d) Select **Restart all services** to restart all automation, communications, playback, and content management services on the IMB. Playback will be stopped while services are restarted.

Select **Yes** to restart services or **No** to cancel.



A confirmation message will be displayed after all services are restarted. Press **OK** to exit.



6. IMB OPERATION NOTES

6.1. Power Up Sequence

Always power up any external storage (PSD-3000-U/P, or external NAS) before powering up the projector. The external storage must be powered up first to be correctly identified by the SX-3000.

6.2. Power Down Sequence

Always power down the SX-3000 system and projector with the following steps:

1. Power down the SX-3000 by using the SMS -> Shutdown button.
2. Power down the projector after the SX-3000 is powered down.
3. Power down any external storage attached to the SX-3000.

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