65" Glasses-Free 3D Display
User Manual

Version: 1.0

seeCube

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seeCube

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Disclaimer

The information in this document is subject to change without notice. Furthermore, the manufacture reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation to notify any person of such revision or changes.

Compliance Information

Federal Communication Commission Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

U.S. Responsible Party: _____

Address: _____

Tel. No.: _____

Type of Product:

Equipment Classification:

Model:

We hereby declare that the equipment specified above conforms to the technical standard as specified in the FCC Rules.

seeCube

Canadian Department of Communications Compliance Statement

DOC: This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

C-UL: Bears the C-UL Mark and is in compliance with Canadian Safety Regulations according to CAN/CSA C22.2 No.60065-03.

FCC Information:

Use the attached specified cables with the seeCube Glasses-Free 3D monitor so as not to interfere with radio and television reception.

(1) Please use the supplied power cord or equivalent to ensure FCC compliance.

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.

FCC CAUTION

To assure continued compliance and avoid possible undesirable interference, ferrite cores may be used when connecting this display to video equipment. Maintain at least 400mm spacing to other peripheral devices.

FCC warning

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

Cables

Connections to this device must be made with shielded cables with metallic RF / EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Canadian notice

CAN ICES-3 (B) / NMB-3(B)

Standard Television Receiving Apparatus-Appareil de réception télévision ordinaire, Canada, BETS-7/NTMR-7

If necessary, the user should contact the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: "How to Identify and Resolve Radio-display Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402, Stock No.004-000-00345-4.

Do not throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

Limited Warranty

seeCube Glasses-Free 3D makes the following limited warranties during the warranty period: (a) the Product will function properly under normal use; (b) the Product will be free from defects in materials or workmanship.

About this Manual

This document provides information related to functionality of this seeCube Glasses-Free 3D device. Although it provides basic information related to equipment connections, this document is not intended to provide hardware specifications.

1. Safety Precaution

Please read the following recommended safety precautions carefully for your safety.

1.1. Power

To disconnect your seeCube Glasses-Free 3D from the power source, shut down the seeCube Glasses-Free 3D first, then unplug the AC cable from the power source.

1.2. Cleaning

Disconnect your seeCube Glasses-Free 3D from the power source before cleaning.

Do not clean your seeCube Glasses-Free 3D while it is switched on. Use a soft and damp cloth to clean the surface of product. Do not use chemical cleaners to clean the screen. Do not apply cleanser directly on your display.

Do not use the following cleaning products:

- Alkaline lye (e.g. pure soap, certain textile detergents),
- Lye (e.g. toilet cleaner),
- Acids (e.g. hydrochloric acid, vinegar, lemon),
- Decalcification Agents (e.g. citric acid),
- Degreasing Agents (e.g. acetone, methylene chloride),
- Ammonia, chlorine or hypochlorite detergents (e.g. toilet cleaner),
- Solvents (e.g. Ethyl alcohol, Isopropyl alcohol, alcohol, acetone, trichloroethylene, benzene, hexane, petrol).

Do not use coarse millinery such as abrasives, steel wool, sponge with abrasives, cloth with thread made of steel, hard cloth or paper tissue.

1.3. Vent Holes

Vent holes on the cabinet of your seeCube Glasses-Free 3D product ensure optimum performance of your display without overheating. Do not block the openings in any way.

1.4. Temperature & Fire

Do not expose your seeCube Glasses-Free 3D to fire or high heat sources.

1.5. Lightning

Disconnect your product's power cord during an electrical storm to prevent a potential electrical shock from lightning.

1.6. Installation and Important Information

Installation of a Pedestal Stand (Optional)

Warning:
To prevent damage to the monitor or personal injury, read all safety information as provided by the pedestal stand manufacturer before beginning any installation procedures.

Warning:
To prevent damage to the monitor or personal injury, make sure the pedestal stand meets all requirements for the size and weight of the monitor prior to installation.

Warning:
The installation procedure requires no less than four individuals to move the monitor. To prevent damage to the monitor or personal injury, do not attempt to move the monitor with fewer individuals than the recommended number.
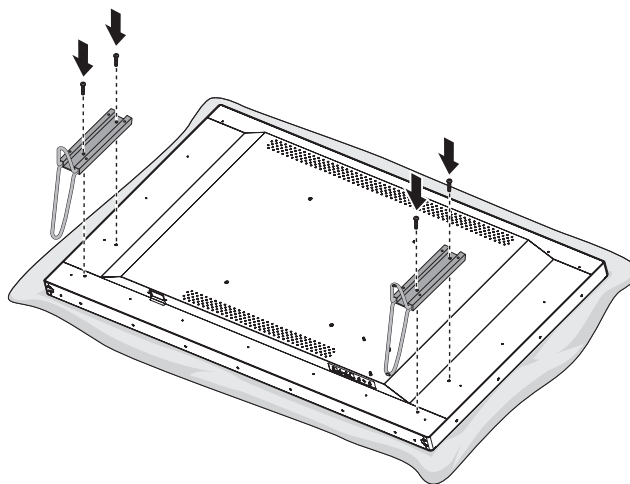
1. Unplug and remove all cabling from the bottom of the display.
2. Clear a work surface and prepare it to allow space for the monitor.
3. Place a soft cover over the work surface to prevent scrateches or other damage to the monitor display.

4. Carefully place the monitor (front side facing down) over the work surface and slowly lay it on the work surface. Make sure the monitor is secure before releasing the monitor.

5. Remove the 4 plastic caps that cover the screw holes (left side x 2, right side x 2) for attaching the stand.
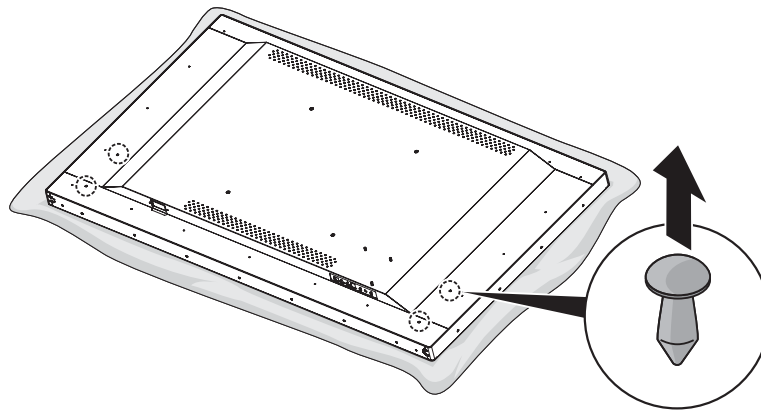
6. Align the holes on the stand with the holes on the rear side of the seeCube Glasses-Free 3D.

7. Secure the stand with the provided screws.

The following screw type is recommended for use in a pedestal stand installation: M6 x 9mm.

NOTE:

It is not recommended to insert the screws into the screw holes without first installing the pedestal stand.

Installation of a Wall Mounting Bracket

Please use a wall bracket appropriate for the size and weight of the display. The seeCube Glasses-Free 3D is compatible with a standard VESA mount.

- Four people are required for installation
1. Unplug and remove all cabling from the bottom of the display.
2. Clear a work surface and prepare it to allow space for the monitor.
3. Place a soft cover over the work surface to prevent scrateches or other damage to the monitor display.
4. Follow the instructions provided with your wall bracket. Before mounting, make sure the appropriate brackets are attached to the wall and the back of the display as described in the instructions provided with the wall bracket.
5. Always use the provided screws (M8 x 14mm) by the wall mount manufacturer.
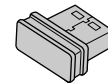
2. Overview

2.1. Packing Checklist
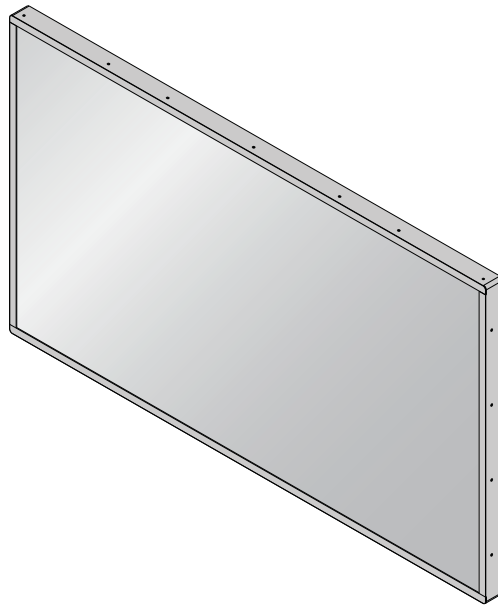
seeCube Glasses-Free 3D
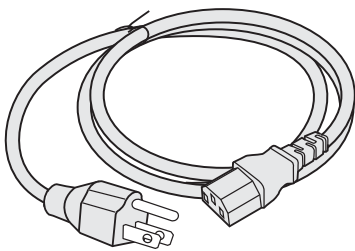
Power Cord   Remote Control(XY1041)   Remote Control USB Receiver(XY1041)

seeCube

2.2. Display Overview
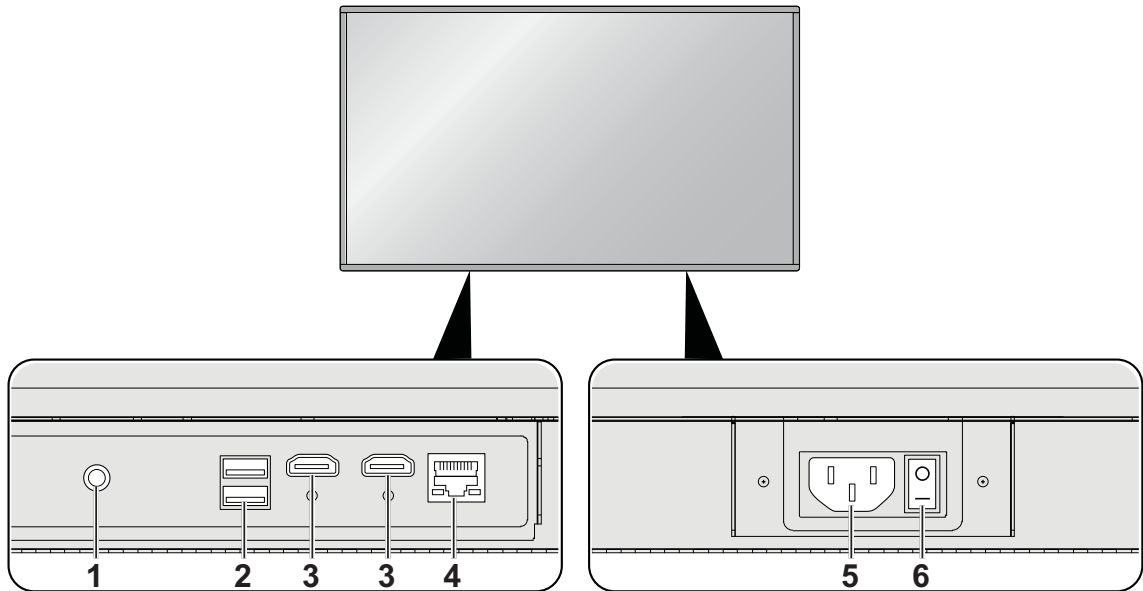
No	Item	Description
1	Audio jack	Connect to an external speaker.
2	USB ports	Connect to remote control USB receiver or USB device (for playback of Ultra-D formatted content).
3	HDMI ports	Connect to the HDMI device.
4	LAN port	Connect to the RJ45 cable for internet software update.
5	Power socket	Connect a power cord.
6	Power switch	Turn on or off the display.

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2.3. Remote Control Overview
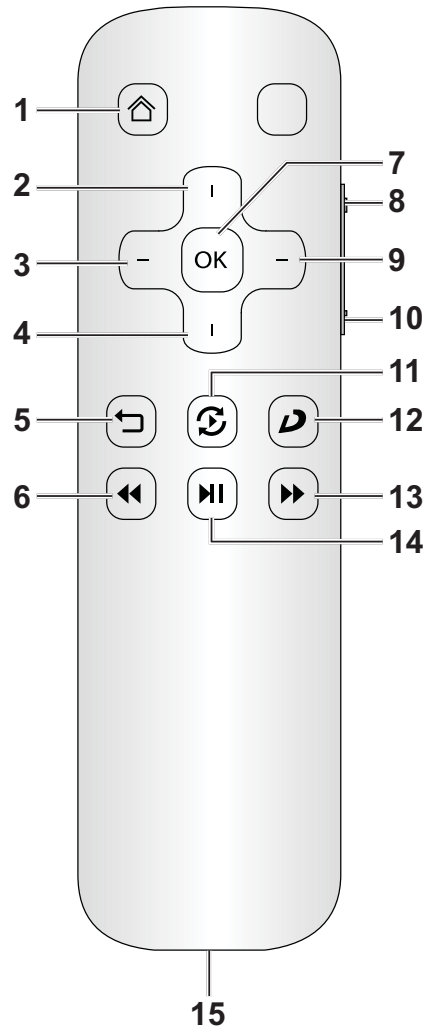
No	Item	Description
1	Home	Press to display or hide the OSD.
2	Up	Navigates and changes settings in the OSD.
3	Left	Navigates and changes settings in the OSD.
4	Down	Navigates and changes settings in the OSD.
5	Back	Press to return to the previous level or exit the OSD menu.
6	Previous	Press to go to the previous Ultra-D file in Load & Play mode.
7	OK	Press to confirm the new settings.
8	Volume +	Increase the volume.
9	Right	Navigates and changes settings in the OSD.
10	Volume -	Decrease the volume.

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No	Item	Description
11	Conversion	Press to display the **CONVERSION** menu (OSD).
12	3D Depth	Press **3D Depth** and press ◄ or ► to adjust the depth factor.
13	Next	Press to go to the next Ultra-D file in Load & Play mode.
14	Play/Pause	Press to play or pause the Ultra-D file in Load & Play mode. (Currently no support this function)
15	Release button	Press to release the battery cover.

3. Setup

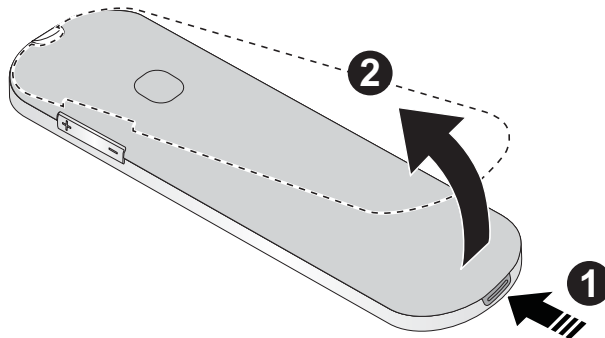## 3.1. Setting up the Remote Control

The remote control comes with one 3V lithium battery (CR2025). The battery is pre-installed in the remote control.

To begin using the remote control, remove the plastic tab from the battery compartment.
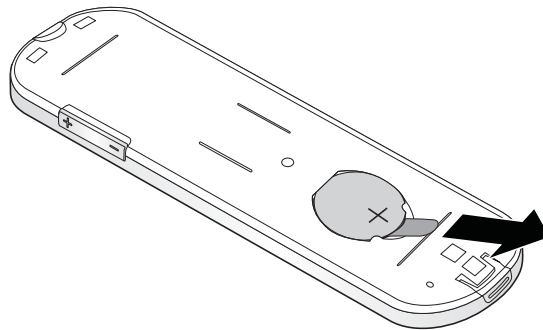
Changing the Battery

1. Press and lift up the battery cover.

2. Remove the old battery.
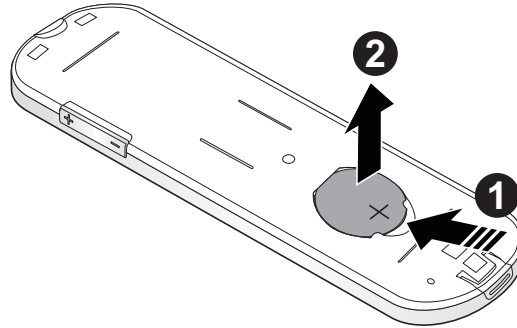
3. Insert the new battery with the positive terminal facing up.
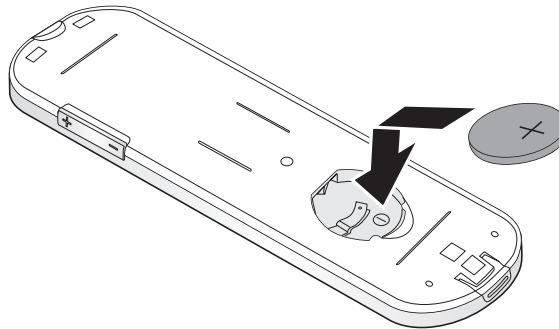
4. Angle the battery cover into the remote and insert it.
5. Flip down to close the battery cover.
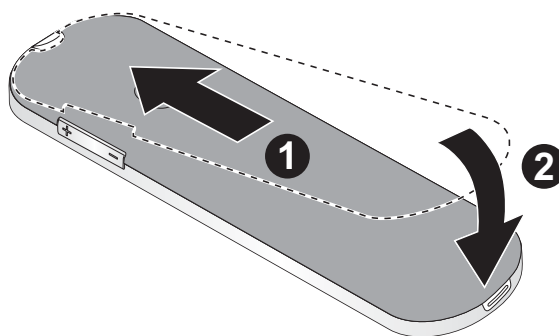
CAUTION:
- *Use only a 3V lithium battery (CR2025).*
- *Dispose of used batteries according to local ordinance regulations.*
- *Remove the battery when not using the display for prolonged periods.*

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Install Remote Control USB Receiver
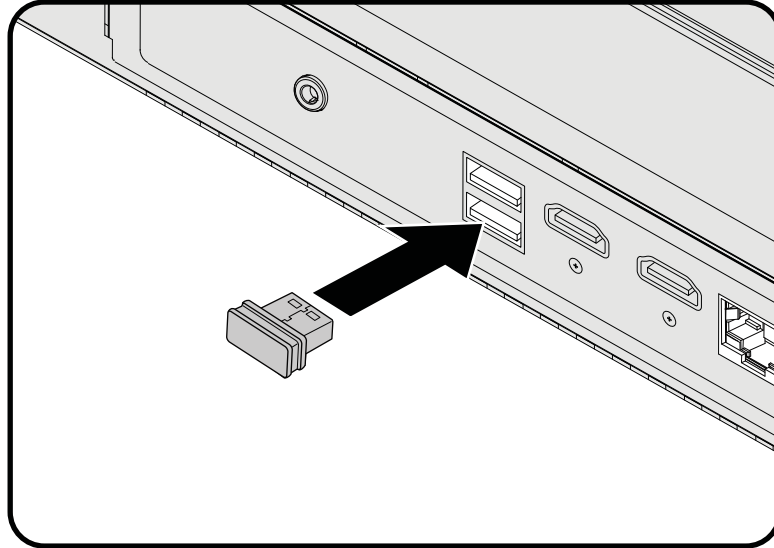
Pairing the Remote Control

1. Connect the USB receiver to the seeCube Glasses-Free 3D.
2. Press **Right** and **Back** buttons on the remote control 3 minutes.

One the USB receiver and remote control are paired to the display, they can not be used with a different display without first pairing again.

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3.2. Connecting the Display

Connecting to HDMI Device

Real-Time Conversion

Real-Time conversion mode converts 2D or 3D stereoscopic video from the HDMI input into the Ultra-D format for display on the monitor. This process adds depth to the video, allowing the Ultra-D display to produce a 3D viewing experience without requiring the viewer to wear 3D glasses.

A variety of video formats are supported. See *"Video Input Limitations" on page 36* for information.
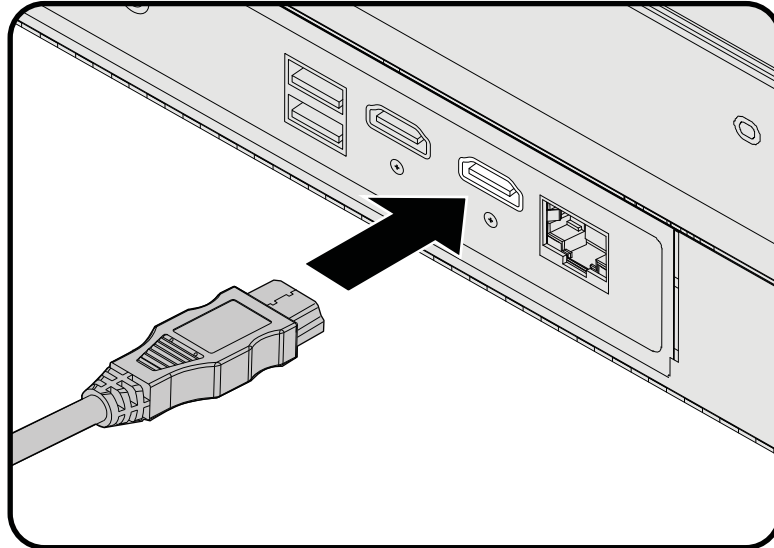
3D stereoscopic sources can be viewed in either half resolution (side-by-side or top-and-bottom) or full resolution formats. The latter format is standard for 3D Blu-ray discs played back on a 3D Blu-ray player. Full-resolution or "frame packed" playback is auto-detected by the display, but half-resolution formats require a manual selection which can be found in the **CONVERSION** > **MODE** menu.

If no video signal is present, "NO HDMI INPUT" displays on the Ultra-D display.

Real-Time conversion mode is the default mode of operation unless there is a USB storage device plugged in with pre-converted Ultra-D content which will cause the system to enter Load & Play mode.

Connecting A USB Device
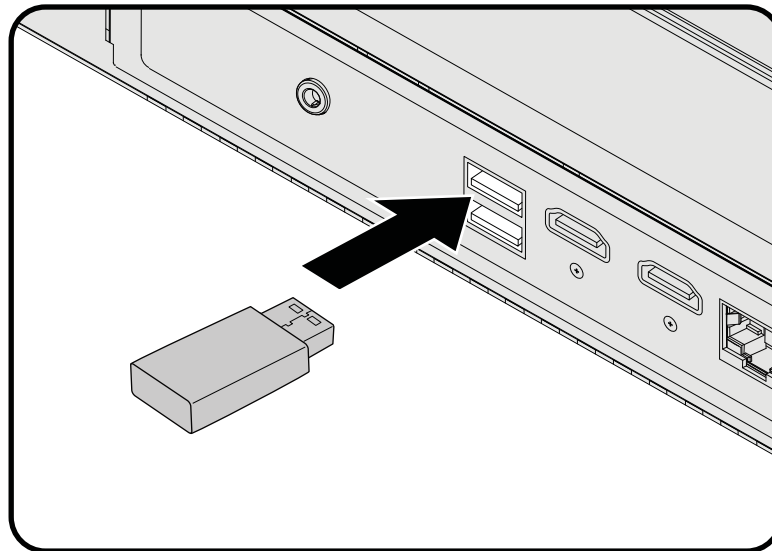
Load & Play

Load & Play is a feature that lets you play back pre-converted content encoded in the latest version of the Ultra-D format (Ultra-D v2, file extension ".ultrad") on the display. Playback of other file types, including legacy Ultra-D file formats is not supported and may result in a black screen. To use this feature you must have a USB storage device formatted with FAT16 or FAT32 format. The ".ultrad" files must be saved in the root directory of the USB storage device to be recognized.

To use Load & Play:
1. Boot the system up in Real Time Conversion mode.
2. Insert the USB storage device into a USB port.

Once the system detects the files, it switches to Load & Play mode. Playback of the content is automatic.

To stop playback during Load & Play mode:
1. Press the **BACK** button twice or remove the USB device.
   Or
   Press **HOME** menu.
2. Press ▲ or ▼ to select **CONVERSION**.

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3. Press **OK** and press ▲ or ▼ to select **STOP ULTRA-D PLAYBACK**.

4. Press **OK** to return to Real Time Conversion mode.

If the system does not recognize any of pre-converted Ultra-D content, it displays "No Ultra-D files detected" and remains in Real Time Conversion mode.

The system plays back every valid ".ultrad" file detected in the root directory of the USB storage device. Playback of the files is based on an alphabetical ordering of the files. Once the list is finished, the function cycles from the beginning. It will continue to loop through all ".ultrad" files it finds until the USB storage device is removed or you exit Load & Play mode.

NOTE:

Only one USB storage device may be connected at a time. Multiple devices are not supported and may result in a system error. To correct this issue, remove all USB devices from the display and only re-plug a single USB device.

Certain USB device brands may not exhibit expected results-- unplugging them does not exit Load & Play mode. A message "Unfortunately, seeCube has stopped" may display. When a USB device is not functioning, discontinue use of that USB device and replace it.

Connecting the Audio Device

An external speaker may be connected via the 3.5mm stereo jack.
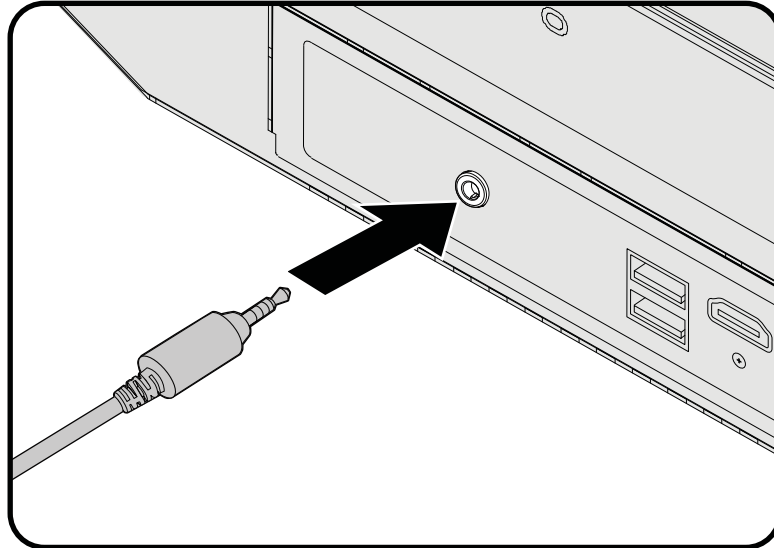
Connecting to Ethernet

The Ethernet port is provided solely for doing firmware updates and is not intended for accessing streaming content or other data.

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3.3. Powering on the Display

1. Connect the power cord to the display and the other end to a wall outlet.

2. Turn on the power switch.
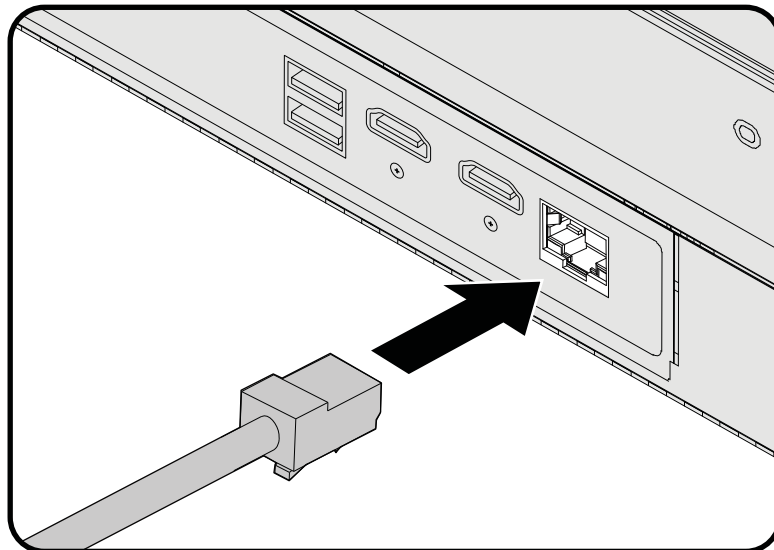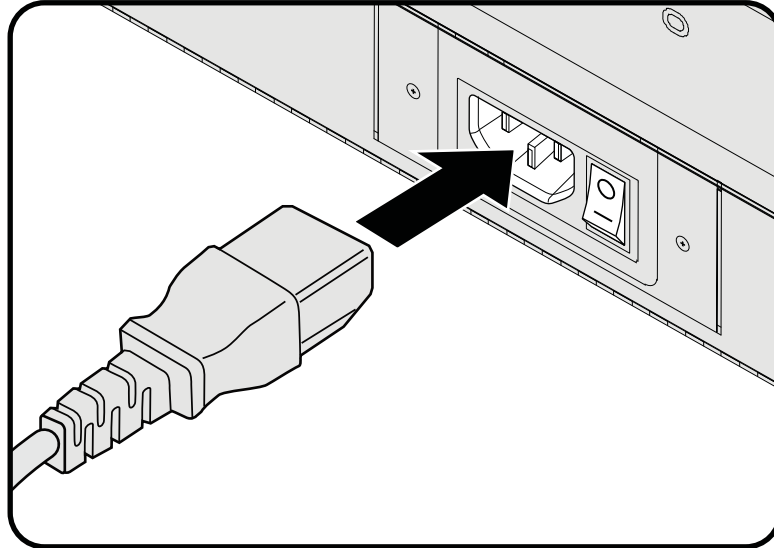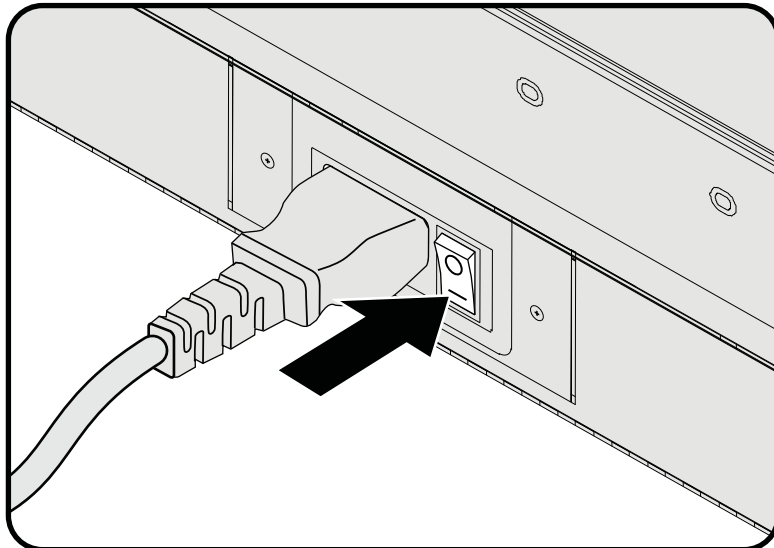
4. On-Screen Display Menu

This section introduces the On-screen Display (OSD) menus and provides information for the setup and configuration of the display functions.

4.1. Main Menu

The main menu is available by pressing the **HOME** button on the remote control. Press ▲ or ▼ to select the desired sub-menu.
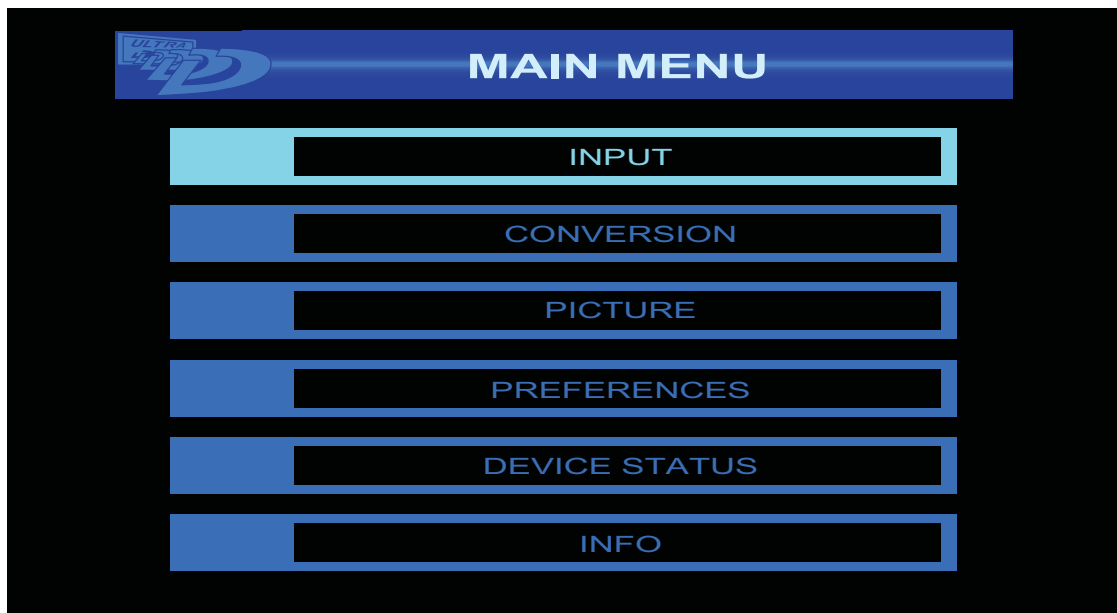
Label	Description
INPUT	Press **OK** to enter the **INPUT** menu and select an input source. See *"Input Menu" on page 18*.
CONVERSION	Press **OK** to enter the **CONVERSION** menu to select the desired 2D or 3D conversion mode. See *"Conversion Menu" on page 19*.
PICTURE	Press **OK** to enter the **PICTURE** menu and adjust image settings. See *"Picture Menu" on page 21*.
PREFERENCES	Press **OK** to enter the **PREFERENCES** menu to adjust factory, network, and upgrade settings. See *"Preferences Menu" on page 23*.

Label	Description
DEVICE STATUS	Press **OK** to enter the **DEVICE STATUS** menu to view display information. See *"Device Status Menu" on page 29*.
INFO	Press **OK** to enter the **INFO** menu to display brand information. See *"Info Menu" on page 30*.

4.2. Input Menu

The **INPUT** menu allows you to select the input source for display on the monitor.

To select the type of source input:

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **INPUT**.
3. Press **OK** to enter the source option.

HDMI 1 : Active

HDMI 2

ULTRA−D PLAYBACK

BYPASS
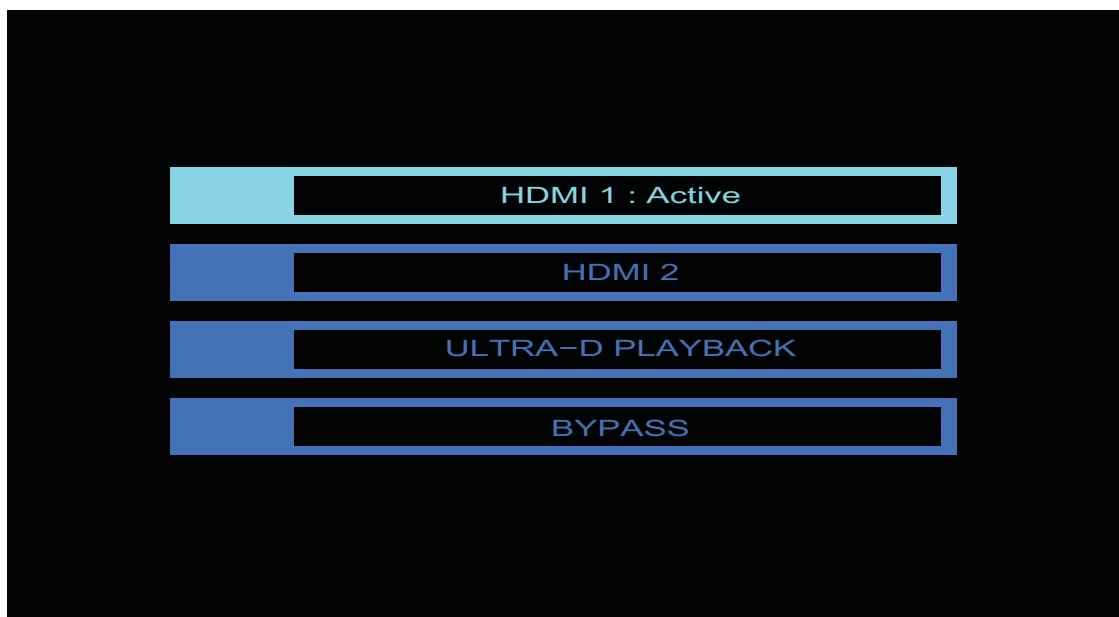
Label	Description
HDMI 1	Select HDMI 1 as the active input source.
HDMI 2	Select HDMI 2 as the active input source.

Label	Description
ULTRA-D PLAYBACK / STOP ULTRA-D PLAYBACK	Start or stop Load & Play of content from a USB storage device.
BYPASS	Stop Real Time Conversion and bypass the conversion process so the currently selected video input is displayed unprocessed. Menu interface is disabled while in BYPASS mode. To return to the Real Time Conversion mode, press **BACK** on the remote control.

4.3. Conversion Menu

The **CONVERSION** menu allows you to select the desired 2D or 3D conversion mode.

To select the type of conversion mode:

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **CONVERSION**.
3. Press **OK** to select the method.
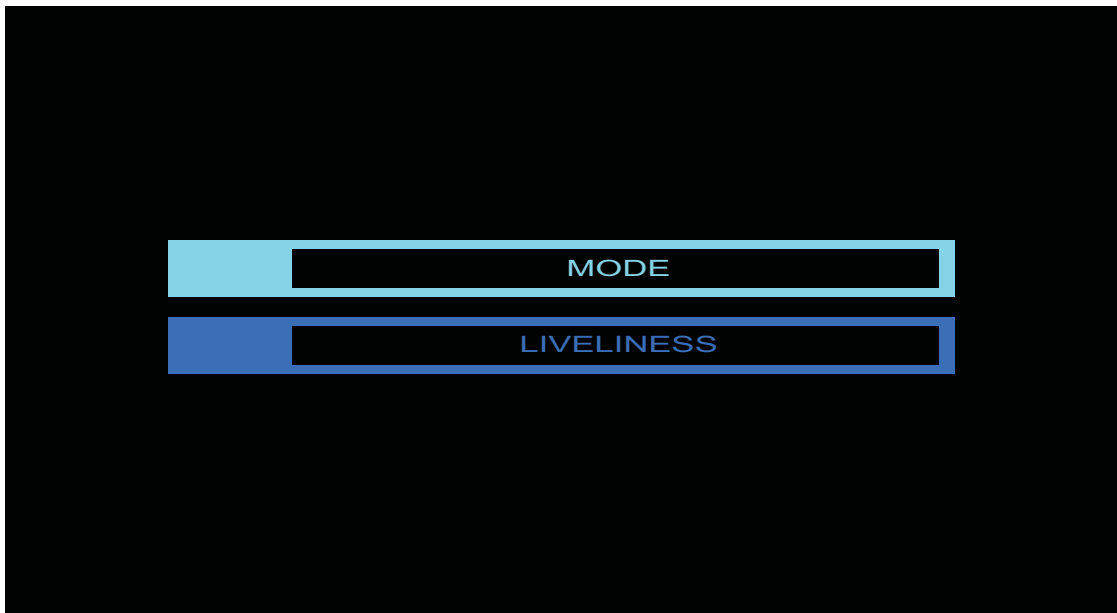
Label	Description
MODE	Press **OK** to enter the **MODE** rendering menu. See *"Mode Menu" on page 20*.
LIVELINESS	Adjust the brightness/vividness of the image. The function is only available if **MODE** is set to **2D TO ULTRA-D**.

Mode Menu

The **MODE** menu allows you to select the 2D or 3D input source. It also allows you to watch 2D as 2D without applying any conversion to Ultra-D.

To select the type of mode:

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **MODE**.
3. Press **OK** to select the method.

```
2D TO ULTRA-D
SIDE-BY-SIDE TO ULTRA-D
TOP-BOTTOM TO ULTRA-D
2D AS 2D
```

Label	Description
2D TO ULTRA-D	Convert 2D video to Ultra-D.
SIDE-BY-SIDE TO ULTRA-D	Convert side-by-side (SBS) formatted 3D stereoscopic video to Ultra-D format. Only select this option when the source video is in the side-by-side 3D format.
TOP-BOTTOM TO ULTRA-D	Convert top-and-bottom (TB) formatted 3D stereoscopic video to Ultra-D format. Only select this option when the video source is in the top-and-bottom format.
2D AS 2D	View 2D video without converting to Ultra-D.

4.4. Picture Menu

The **PICTURE** menu allows you to adjust the depth factor, depth offset, brightness, and contrast properties of the video source.

To select the type of property:

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **PICTURE**.
3. Press **OK** to select the method.

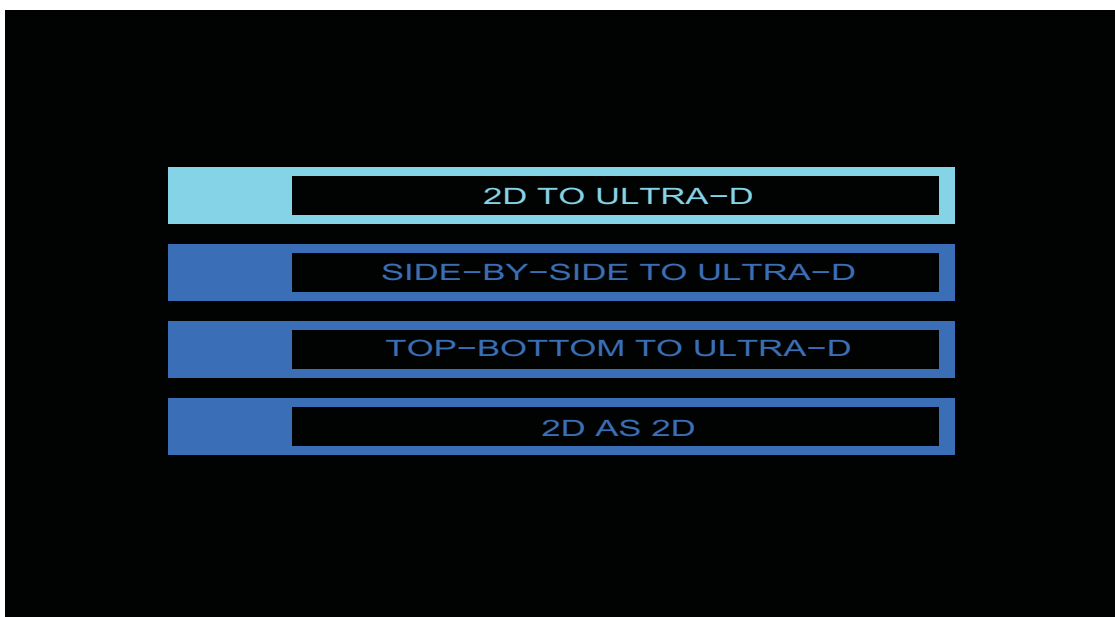| Label	Description
DEPTH FACTOR	Press **OK** to enter, then press ◄ or ► to adjust the depth factor (total amount of depth). The default value is 100.
DEPTH OFFSET	Press **OK** to enter, then press ◄ or ► to adjust the depth offset. This does not change to amount of 3D, but allows you to pull the scene forward or push the scene back into the screen (increase to move objects away from you). The default value is 0%.
BORDERS	Press **OK** to enter the **BORDERS** menu. See *"Borders Menu" on page 22*.
BRIGHTNESS	Press **OK** to enter, then press ◄ or ► to adjust the brightness of the image. The default value is 100.
CONTRAST	Press **OK** to enter, then press ◄ or ► to adjust the contrast of the image. The default value is 100.

Borders Menu

The **BORDERS** menu allows you to setup the 3D depth settings.

To navigate to the **BORDERS** menu:

1. Press **HOME** on the remote control.
2. From the **MAIN** menu, select **PICTURE** and press **OK**.
3. Press ▲ or ▼ to select **BORDERS** and press **OK**.
4. Use ▲ or ▼ to select the setting.

```
BORDER FACTOR
TOP BORDER
BOTTOM BORDER
LEFT BORDER
RIGHT BORDER
```
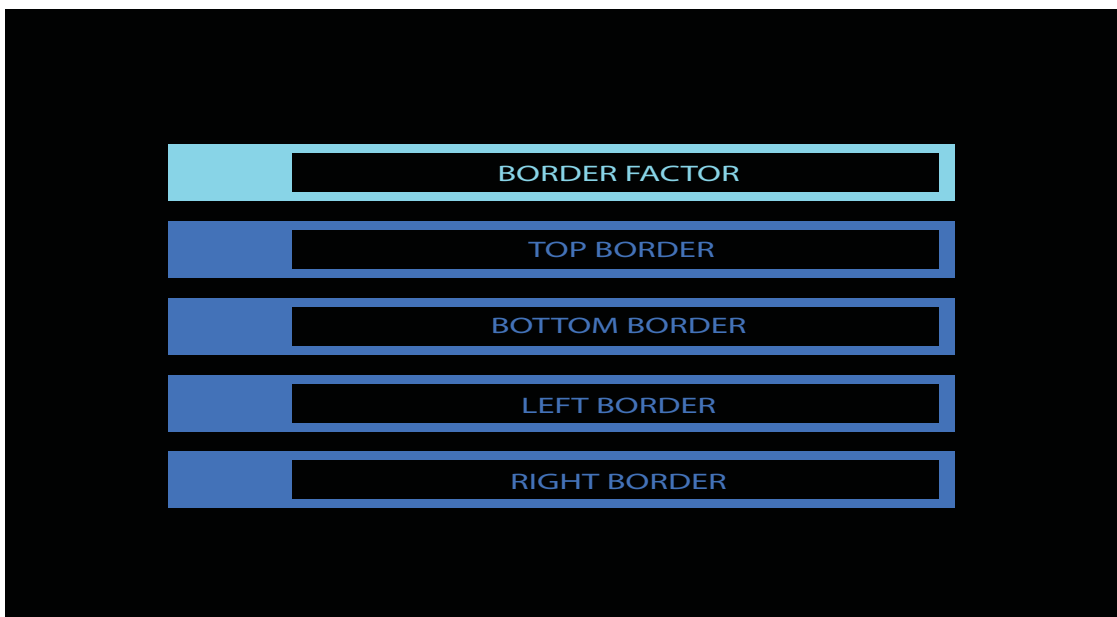
Label	Description
BORDER FACTOR	Press **OK** to reset the 3D depth to the factory preset values.
TOP BORDER	Press **OK** to enter, then press ◄ or ► to adjust the 3D depth for the top of the image. The default value is 0.
BOTTOM BORDER	Press **OK** to enter, then press ◄ or ► to adjust the 3D depth for the bottom of the image. The default value is 0.
LEFT BORDER	Press **OK** to enter, then press ◄ or ► to adjust the 3D depth for the left of the image. The default value is 0.
RIGHT BORDER	Press **OK** to enter, then press ◄ or ► to adjust the 3D depth for the right of the image. The default value is 0.

4.5. Preferences Menu

The **PREFERENCES** menu allows you to select certain utility functions.

To select a setting menu:

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **PREFERENCES**.
3. Press **OK** to select the method.

```
                    FACTORY RESET

                NETWORK MODE : DHCP

                    UPGRADE
```
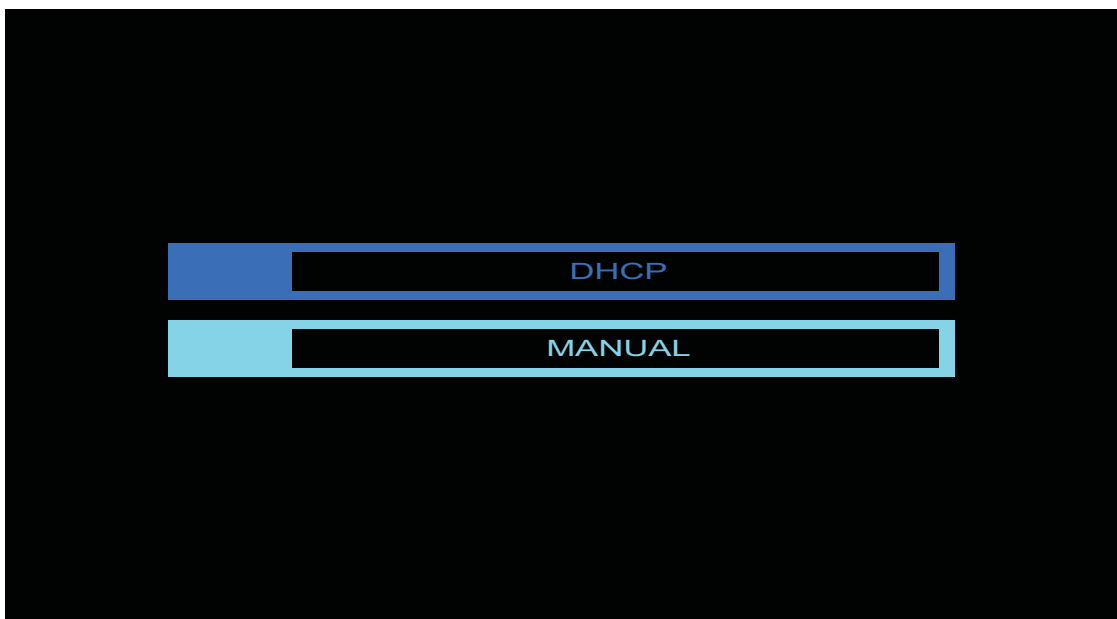
Label	Description
FACTORY RESET	Press **OK** to reset all functions to factory preset values.
NETWORK MODE	Press **OK** to enter the **NETWORK MODE** menu. See *"Network Mode Menu" on page 24*.
UPGRADE	Press **OK** to enter the **UPGRADE** menu to download the latest software version. See *"Upgrade Software" on page 26*.

Network Mode Menu

The **NETWORK MODE** menu allows you to setup the network settings.

To select the network setting type:

1. Press **HOME** on the remote control.
2. From the **MAIN** menu, select **PREFERENCES** and press **OK**.
3. Press ▲ or ▼ to select **NETWORK MODE** and press **OK**.
4. Use ▲ or ▼ to select the setting.

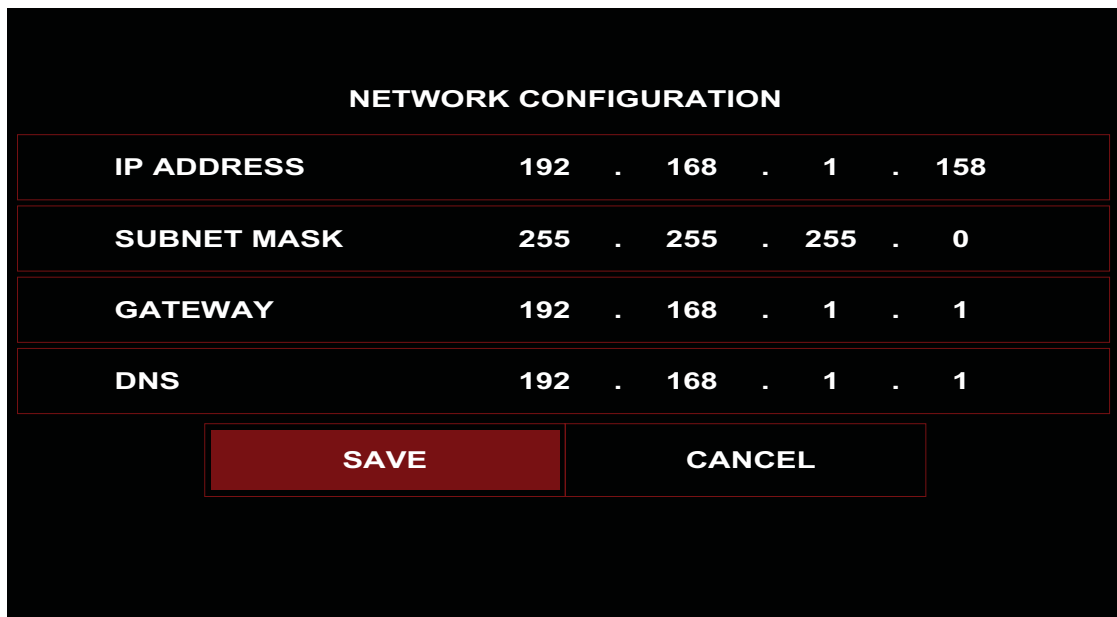| Label	Description
DHCP	Press OK to use the DHCP settings. Your network environment must be DHCP enabled.
MANUAL	Press **OK** to manually configure the network settings. See *"Setup IP Configuration" on page 25*.

Setup IP Configuration

The following section demonstrates how to manually configure your network settings.

1. Press ▲ or ▼ to select IP address, subnet mask, gateway and DNS settings.
2. Press **OK** to enter a setting.
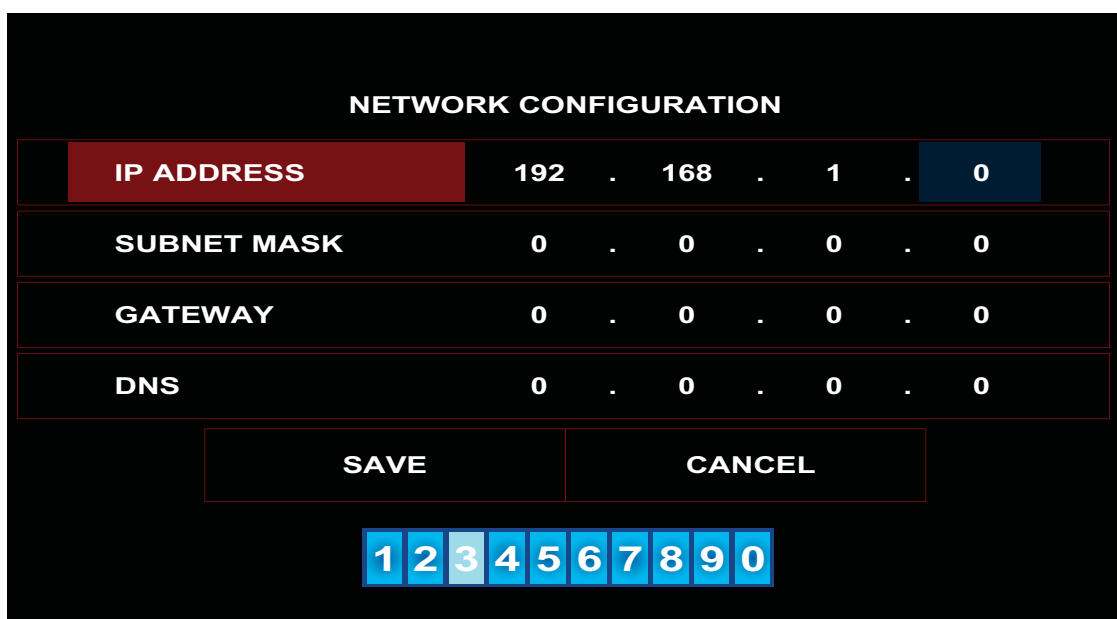
NETWORK CONFIGURATION

IP ADDRESS	192 . 168 . 1 . 158
SUBNET MASK	255 . 255 . 255 . 0
GATEWAY	192 . 168 . 1 . 1
DNS	192 . 168 . 1 . 1

SAVE   CANCEL

3. Press ◄ or ► to select a digit.
4. Press **OK** to enter.

NETWORK CONFIGURATION

IP ADDRESS	192 . 168 . 1 . 0
SUBNET MASK	0 . 0 . 0 . 0
GATEWAY	0 . 0 . 0 . 0
DNS	0 . 0 . 0 . 0

SAVE   CANCEL

1 2 3 4 5 6 7 8 9 0

5. Select **SAVE** to save the configuration or **CANCEL** to abort it.

Upgrade Software

The following section demonstrates how to perform the software upgrade procedure.

CAUTION:

Do not disconnect or power down the display at any time during the upgrade process to prevent damage or corruption to the firmware.

The Upgrade Software procedure requires a network connection with Internet access.

1. Press **HOME** on the remote control.
2. From the **MAIN** menu, select **PREFERENCES** and press **OK**.
3. Press ▲ or ▼ to select **UPGRADE** and press **OK**.
   The Upgrade function establishes a connection and retrieves any updates available for the display.
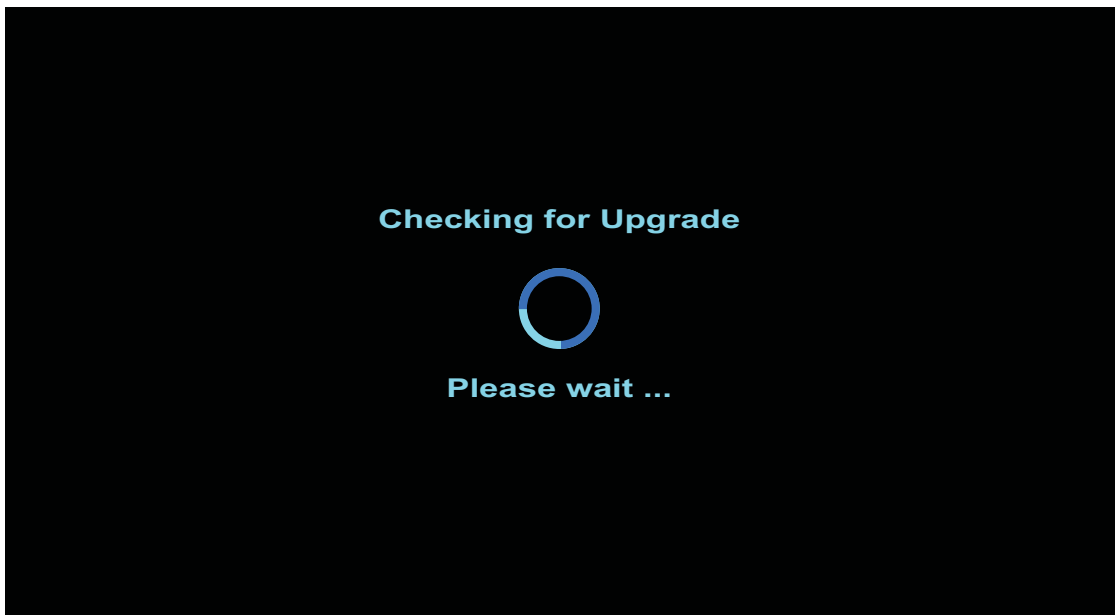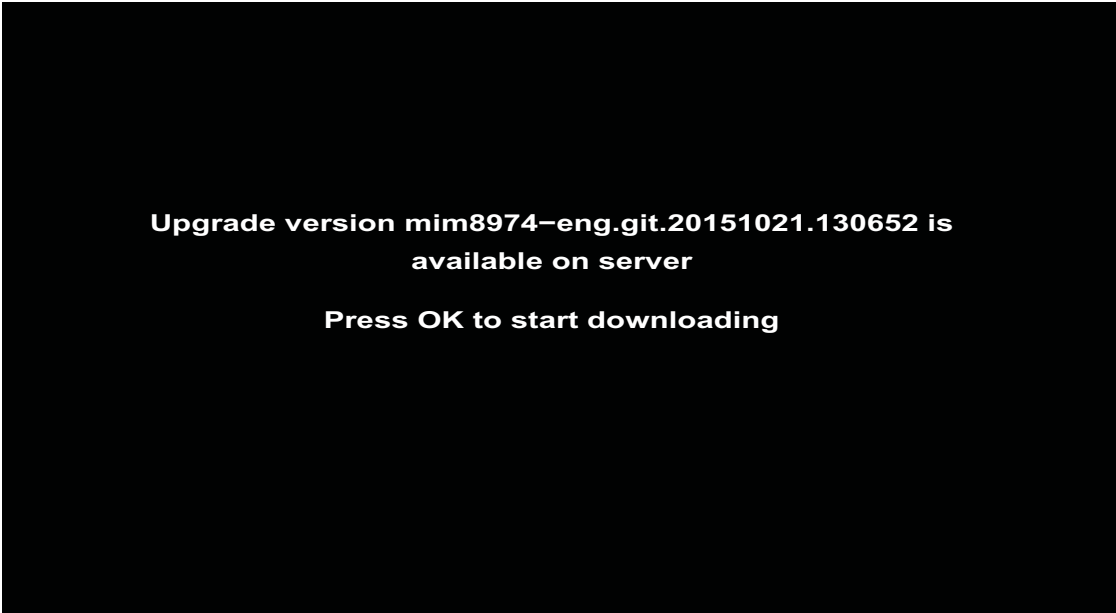
If there are no updates available, a System is up-to-date screen displays.

When a new upgrade version is available, you are asked to initiate the download.

4. Press **OK** to start the download process.

Once the download is complete, you will need to reboot the display to initiate the installation process.

5.   Press **OK** to reboot and install the new upgrade version.

4.6. Device Status Menu

The **DEVICE STATUS** menu lists information regarding the display's hardware and software state. It is only for display. The information is not configurable through this menu.

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **DEVICE STATUS**.
3. Press **OK** to display the **DEVICE STATUS** menu.

```
BSP Version:              1.2.19
Build Version:            msm8974eng.git.20150827.113616
Model Number:             msm8974
Serial Number:            222020206251500085
Firmware Version:         V2.0 build 3 type 12
Software Version:         0.9.0.1392 build 1

NETWORK STATUS:           Disconnected

UPGRADE STATUS:           No network connection to get software
                          information on server

HDMI Input Status:        1920x1080p@60Hz(1080p60)

HDMI Input Port 1:        Connected / Active
HDMI Input Port 2:        Connected
```

Label	Description
BSP Version	Display the current version of the software.
Build Version	Display the internal build version of the software.
Model Number	Display the internal model of the software.
Serial Number	Display the hardware (conversion board) serial number.
Firmware Version	Display the version information of the render board
Software Version	Display the version information of the Ultra-D library
NETWORK STATUS	Display the network status information
UPGRADE STATUS	Display the software upgrade information (if a newer version is on the server)

Label	Description
HDMI Input Status	Display the current input signal resolution from the active HDMI input. The information displays available resolution, Unknown for unrecognized resolution formats, and No HDMI Input if an HDMI signal is not detected.
HDMI Input Port 1	Displays the current signal status of HDMI port 1: • Connected if an HDMI source is detected. • Disconnected if an HDMI source is not detected. • Active if port 1 is the currently selected input source.
HDMI Input Port 2	Displays the current signal status of HDMI port 2: • Connected if an HDMI source is detected. • Disconnected if an HDMI source is not detected. • Active if port 2 is the currently selected input source.

4.7. Info Menu

The Info menu displays proprietary information.

1. Press **HOME** on the remote control.
2. Press ▲ or ▼ to select **INFO**.
3. Press **OK** to display the **INFO** menu.

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5. Troubleshooting

This section lists known issues with the software release. Future software releases may resolve these issues.

Question: Flashes and corrupted image during mode switch.

Answer: During a mode switch the system restarts the video capture stack, but the trigger for this process relies on invalid images being sent through the system which means the image displayed will be corrupted briefly while the system re-locks to the new HDMI signal. This is normal and does not indicate a malfunction. Once the system starts processing video at the new input resolution, the image will fix itself.

Question: Volume crackles if set too high.

Answer: If the volume is adjusted above its default setting, then the output of the DAC can be too high for the input of the speakers, resulting in clipping being heard. Do not adjust volume higher than the default setting of 75% unless the input volume is very, very low.

Question: Audio crackles.

Answer: The only currently supported input sample rate for audio is 48kHz. Attempting to play back 44.1kHz or other sample rates will result in the audio crackling. Please verify that the source is sending 48kHz audio.

Question: No video is shown on the screen.

Answer: This is a known issue. Either unplug and re-plug the HDMI input cable (HDMI In 1) and try again, or power down (turn off) the monitor, wait 5 seconds, then power up (turn on) the monitor.

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Question: Video plays black, then blinks.

Answer: This is a known issue. Either unplug and plug the HDMI input cable (HDMI In 1) and try again, or power down (turn off) the monitor, wait 5 seconds, then power up (turn on) the monitor.

Question: Video mode switch is slow.

Answer: This is a known issue which will be resolved in a future software update. Mode switches can take anywhere from 20 seconds to over a minute.

Question: Board boots up to black screen.

Answer: This is a known issue. Either unplug and re-plug the HDMI input cable and try again, or power down (turn off) the monitor, wait 5 seconds, then power up (turn on) the monitor.

Question: HDMI input status is incorrect.

Answer: This is a known issue that will be resolved in a future software update.

Question: Board drops frames / crashes / is unstable.

Answer: The conversion board generates a fair amount of heat and it is possible to overheat the board, especially in hot or confined environments. Allow the monitor to cool, then resume normal operation. It is preferable to operate the display in air-conditioned environments that do not exceed 33 degrees celcius/91 degrees Fahrenheit.

Question: Hiccups during Ultra-D Load and Play.

Answer: During Ultra-D Load and Play, you may encounter audio and visual hiccups (stutters, crackling, distortion, etc). Make sure the USB storage device remains in the USB port, then power down (turn off) the monitor, wait 5 seconds, then power up (turn on) the monitor and playback should return to normal. This issue usually occurs if you plug in a USB storage device while the conversion board is already running.

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*Question: Display flashes and returns with speckles/distortion/
black lines.*

Answer: This shows up as fringing around objects and is especially
visible in dark areas of the video. Power down (turn off) the
monitor, wait 5 seconds, then power up (turn on) the monitor
to resolve this.

6. FAQ

This section contains frequently asked questions and answers.

Question: I'm trying Load & Play but every time I play a pre-encoded file I get a black screen. What's going on?

Answer: The Load & Play feature only plays back files encoded using the latest revision of the Ultra-D file specification (Ultra-D v2 encoded files with a ".ultrad" extension). Earlier Ultra-D converted files (Ultra-D v1 files, usually with a ".v3d" extension but may also be ".ultrad") are not supported and result in a black screen being shown if they are attempted to be played. Other than a black screen, there is no feedback that this is happening.

Question: How do I exit Bypass Mode?

Answer: To exit bypass mode, press the Back button on the remote.

Question: The image seems "stuck" – how do I fix it?

Answer: If display shows only one image and no amount of rebooting the conversion hardware seems to fix it (especially if you do not see the startup animation when you reboot), then it's likely the monitor has "hung".
Turn the monitor off and turn it back on again to reboot the system.

7. Specifications

7.1. Specifications

Display	10-bit, 16.7 million colors
Visible Screen Size	3840 x 2160@60Hz 4:4:4
Power Supply	100-240 V, 50/60 Hz
Power Consumption	6A
Supported Video Resolutions	• 640 x 480p/60 • 480p/60 (4:3/16:9) • 720p/60 • 1080p/24 • 1080p/30 • 1080p/60 • 480i • 576i • 1080i/50 • 1080i/60 • 720p/60 3D FP • 1080p/30 3D FP • 2160 x 1080p/30 (2D as 2D only)
Connectors	• HDMI x 2 • USB x 2 • 3.5mm audio input jack
Aspect Ratio	16:9
Brightness	Up to 450 cd/m^2
Contrast Ratio	4000:1
Viewing Angle	178° horizontal, 178° vertical
Weight	71.14 kg (156.84 lbs)
Dimensions (W x H x D)	147 x 85 x 9.5 cm (57.87 x 33.46 x 3.74 inch.)
Operating Temperature	5°C - 35°C (41°F - 94°F)
Operating Humidity	20% - 80% (non-condensing)

7.2. Preset Modes

7.3. HDMI Timing

7.4. Video Input Limitations

The following is a list of video signals that are compatible with all units:

- 480p60 (both 4:3 and 16:9 aspect ratios are supported, however 4:3 content will be stretched horizontally)
- 576p50
- 720p50
- 720p60
- 1080p24
- 1080p30
- 1080p60
- 1080p24 3D Frame-Packing
- 720p60 3D Frame-Packing
- 720p50 3D Frame-Packing
- 480i
- 576i
- 1080i

The following HDMI sources are fully supported:

- Sony BDP-6200 Blu-Ray player
- MyGica v7 media player

NOTE:

The display may not fully support all HDMI sources. For a complete list of all fully supported HDMI device types, visit our website (www.Ultra-D.com/support) to view the list.

Signal rendering results in a slight delay in the display of the signal and may be apparent when gaming. It is recommended to use the BYPASS mode when playing games to eliminate the lag time from broadcast to display.

The device automatically detects the input signal format. When a supported format is detected, the device automatically adjusts for best use of the detected signal format.

Industry Canada statement:

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

低功率電波輻射性電機管理辦法
第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信。
低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。