







EYE SAFETY WARNINGS

Avoid staring/facing directly into the projector beam at all times. Keep your back to the beam as much as possible.

A stick or laser pointer is recommended to avoid the need for the user to enter Δ the beam

When projector is used in a classroom, adequately supervise students when they are asked to point out something on the screen.

In order to minimize power, use room blinds to reduce ambient light levels.

A.2.9.31 GLOSS OF HOUSING OF PERIPHERAL DEVICES (15TH / 22 MEETING AG1 EK1):

The requirements for the gloss of housing apply to peripheral devices used at the visual display workplace according to BildscharbV. Peripheral devices intended for use outside the visual display workplace can receive a GS-Mark if the scope is indicated in the User's Manual as well as the certificate

That means the following wording is possible in situations where the use within the field of view is not intended and where sufficient hints are given in the User's Manual for the avoidance of such situations to ensure that display work is not affected.

Wording in the certificate: "This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflexions at visual display workplaces this device must not be placed in the direct

REGULATION & SAFETY NOTICES

This appendix lists the general notices of your Projector.

FCC notice

This device 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 device 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 device does cause harmful interference to radio or television reception, which can be determined by turning the device 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 device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected
- · Consult the dealer or an experienced radio/television technician for help.

Notice: Shielded cables

All connections to other computing devices must be made using shielded cables to maintain compliance with FCC regulations.

Caution

Changes or modifications not expressly approved by the manufac-turer could void the user's authority, which is granted by the Federal Communications Commission, to operate this device.

Operation conditions

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

this device must accept any interference received, including interference that may cause undesired operation.

Notice: Canadian users

This Class B digital apparatus complies with Canadian

Remarque à l'intention des utilisateurs canadiens Cet appareil numerique de la classe B est conforme a la e NMB-003 du Canada

Declaration of Conformity for EU countries EMC Directive 2004/108/EC (including

- Low Voltage Directive 2006/95/EC • R & TTE Directive 1999/5/EC (if product has
- RF function)

IMPORTANT SAFETY INSTRUCTION

- 1. Do not block any ventilation openings To ensure reliable operation of the projector and to protect from over heating, it is recommended to install the projector in a location that does not block ventilation. As an example, do not place the projector on a crowded coffee table, sofa, bed, etc. Do not put the projector in an enclosure such as a book case or a cabinet that restricts air flow
- 2. Do not use the projector near water or moisture. To reduce the risk of fire and/ or electric shock, do not expose the projector to rain or moisture
- 3. Do not install near heat sources such as radiators, heaters, stoves or any other apparatus such as amplifiers that emits heat.
- 4. Do not use the projector in direct sunlight.
- 5. Do not use near any appliance generating a strong magnetic field.
- 6. Do not use the projector in areas susceptible to excessive dust and dirt.
- 7. Turn off the product before cleaning. 8. Turn off the product before removing the battery
- 9. Disconnect the battery if the product is not being used for a long period of time.
- 10. Ensure that the ambient room temperature is within 5-35°C
- 11. Relative Humidity is 5 35°C, 80%
- (Max.), non-condensing, 12. Do not expose the battery to
- temperatures above +60°C (+140°F) 13. New or idle batteries can have shortterm reduced capacity. Fully charge the battery before initial use
- 14. Do not put the battery into your mouth. 15. Do not let the battery contacts touch another metal object.
- 16. Do not drop, throw or try to bend your product.
- 17. May explode if disposed of in fire. 18. Clean only with dry cloth.

- 19. Only use attachments/accessories
- specified by the manufacturer. 20. Do not use the unit if it has been physically damaged or abused. Physical damage/abuse would be (but not limited to):
 - Unit has been dropped.
 - Charger or plug has been damaged. ■■ Liquid has been spilled on to the
 - projector. Projector has been exposed to rain or
 - moisture Something has fallen in the projector
 - or something is loose inside. Do not attempt to service the unit yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please contact your local reseller or service center before you send the unit for repair.
- 21. Do not let objects or liquids enter the projector. They may touch dangerous voltage points and short out parts that could result in fire or electric shock.
- 22. See projector enclosure for safety related markings.
- 23. The unit should only be repaired by appropriate service personnel.
- 24. Do not touch the projector for a long time while the projector is used
- 25. CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type
- 26. Dispose of Used Batteries According to the Instructions.

DISPOSAL OF OLD ELECTRICAL & ELECTRONIC EQUIPMENT

(Applicable throughout the European Union and other European countries with separate collection programs)

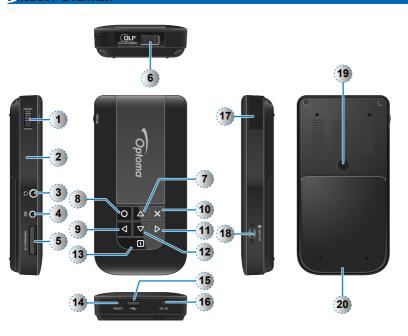
This symbol found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources.



This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



PRODUCT OVERVIEW



- 1. Focus Dial
- 2. Speaker
- Audio Out Connector
- 4. AV Input Connector
- 5. VGA Input Connector
- 6. Lens
- 7. Up Button (△)
- 8. OK Button (O)
- 9. Left Button (◄)
- 10. Cancel / ESC Button (x)
- 11. Right Button (▷)
- 12. Down Button (♥)
- 13. Power / Home Button (1)
- 14. Reset Button
- 15. Micro USB port 16. DC Input
- 17. Air vent
 - . Air vent
- 18. MicroSD card Slot
- 19. Screw Hole for Tripod Converter
- 20. Battery Cover

<Note> Items 7~12 are also function buttons. Functions vary depending on the current mode.

PACKAGE OVERVIEW



<Note>

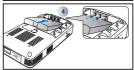
<Note>

The standard accessories may vary in each region due to different applications.

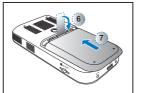
The inclusive power plug head varies per

INSTALL THE BATTERY









Standard Accessory

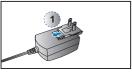
- 1. Power adaptor with AC Plug
- 2. VGA Cable
- USB Male Cable
- 4. Battery
- 5. AV Cable
- 6. Carrying Case
- b. Carrying Case
- 7. Warranty Card and Quick Guide
- 8. Extra Bezel

Optional Accessory

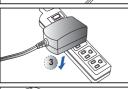
- 9. iPod Connection Kit
 - a. USB cable for iPod Connector
 - b. iPod Cable
 - c. iPod Connector

- 1. Remove the battery cover. (①~③)
- 2. Align the battery contacts with the contacts in the battery compartment. (④)
- 3. Completely insert the battery with the battery pull tab extending underneath. (⑤)
- Slide the battery cover back into place with the battery pull tab inserted inside. (⑥~⑦)

CHARGE THE BATTERY









When the LED indicator lights red, the battery is low. Replace the battery immediately or connect the power adapter to charge the battery.

- 1. Insert the plug. (1)
- 2. Connect the charger. (2~3)
- 3. During charging, the LED indicator lights amber. (4)
 - The battery will not charge while the projector is operating. Turn the projector off.
- 4. The LED Charge Indicator lights green when the battery is fully charged. This process may take up to 2.5 hours.

1. For LED indicator information, see page 18

2. After the projector is turned off, the battery may not start charging right away due to over temperature protection. The projector will automatically start charging once it cools off.

 The battery has a lifespan and ages every time it is charged and discharged. It will gradually loose its charging capability as it ages. Replace the battery at the end of its

Switch On / Off



Press the Power button for 3 seconds to switch the projector on or off.

For first time use, the Language screen

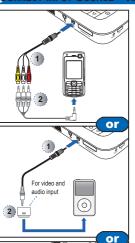
- 1. Highlight the desired language. $(\Delta \nabla \Delta D)$
- 2. Select the item. (O)

CONNECT INPUT SOURCE - VGA



Connect the VGA device. (①~②) ♠ Insert the universal connector with the arrow mark facing up.

CONNECT INPUT SOURCE - VIDEO IN



- 1. Connect the AV input source.
- 2. Connect external speakers to the audio out connector of the projector.

<Note>

1. All other brand and product names are trademarks or registered trademarks of their

respective companies 2. The cables connecting the video output

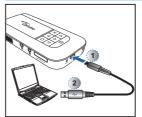
devices are not supplied, please contact the device vendor. 3. iPod nano/iPod touch/iPhone/iPod classic

(version 5 and above)

Designed for iPod/iPhone/Mobile phone/ PMP with TV out functions. Using with devices with audio signal voltage > 0.3Vrms is not recommended

5. The optional USB cable for iPod Connector is used to charge the iPod device using a computer.

ONNECT INPUT SOURCE DATA TRANSFER

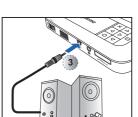


Connect a laptop or PC using the supplied Male USB Cable to transfer data to the Projector internal memory or the inserted microSD card. After connecting, switch the projector on.

<Note>

The laptop/PC can only detect the input source when the projector is switched on. The projection will stop when this connection is made.

INSERT MICROSD CARD





The projector is designed to project image from the internal memory or via a microSD card.

Insert a microSD card into the slot with the gold contacts facing down.

<Note>

- · To remove the microSD card, push the card to eject it from the slot.
- · Do not remove the microSD card while the projector is projecting image from the card. This can cause data loss or damage the card. · Supports microSD card size up to 32GB.



Audio input

2

0

USE A TRIPOD STAND

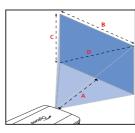


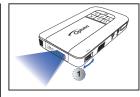
Screw a standard tripod into the screw hole on the projector.

Note>
The tripod is an optional accessory.

ADJUST THE PROJECTED IMAGE

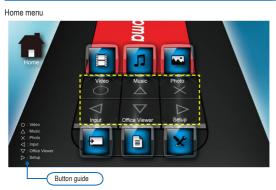
Projection I	Distance (A)	Screen Size -	Width (B)	Screen Size - I	Height (C)	Screen Diag	onal (D)
Meter	inch	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)
0.500	19.7	227	8.9	128	5.0	261	10.3
0.700	27.6	318	12.5	179	7.0	365	14.4
0.975	38.4	443	17.4	249	9.8	508	20.0
1.500	59.1	682	26.8	384	15.1	782	30.8
2.000	78.7	909	35.8	511	20.1	1043	41.1
2.500	98.4	1136	44.7	639	25.2	1304	51.3
3 215	126.6	1461	57.5	822	32.4	1677	66.0

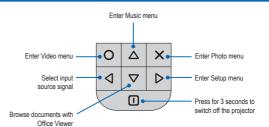




Adjust the focus $(\textcircled{\scriptsize 1})$ until the image is clear.

How to Use the Menu





- Press the corresponding button of the desired option.
- Press x to go back a previous screen.
- Press to return to the Home menu.
 Or, press for 3 seconds to switch off the projector.

<Note>
A button guide appears on the lower left
corner of most screens. The guide varies
depending on the current mode.
Press the corresponding button to select
the option or operation.

Items ······



Video menu



Music menu



Photo menu



Input source screen



Office Viewer menu

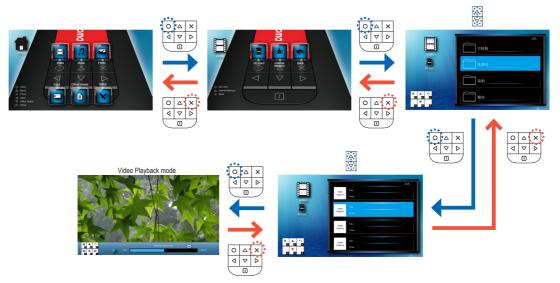


Setup menu

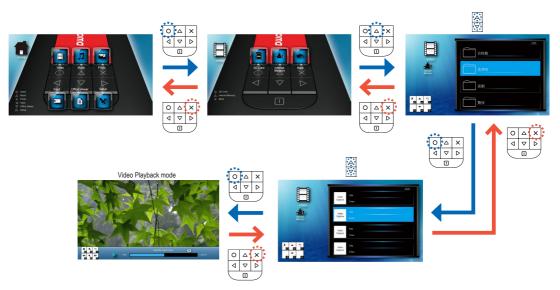


How to Play Videos - Source: Internal Memory / MicroSD Card

Playing Videos from the MicroSD Card

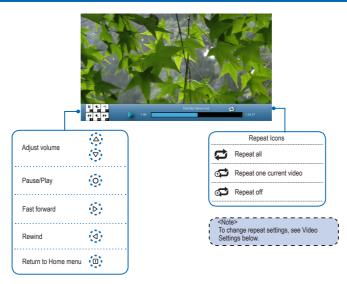


Playing Videos from the Internal Memory

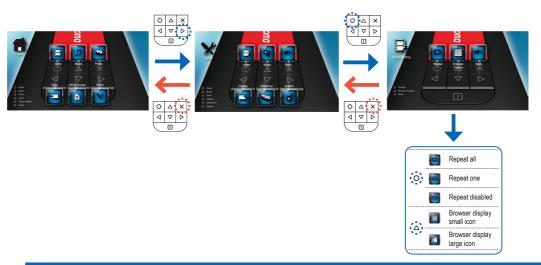




How to Play Videos - Playback Mode



VIDEO SETTINGS



COMPATIBILITY: VIDEOS

Compatible Video Format

File Format	Video Decoder	Audio or Speech Decoder
.3gp	H.263 H.264 MJPEG	HE-AAC AMR-NB AMR-WB
.avi	H.263 H.264 MJPEG MPEG4	MP3 HE-AAC PCM/G.711

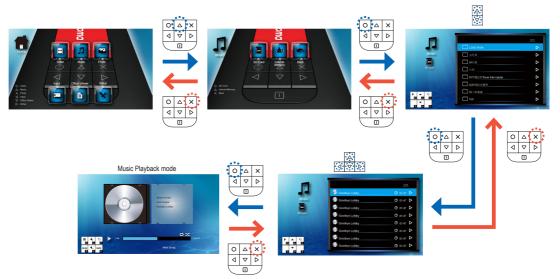
File Format	Video Decoder	Audio or Speech Decoder
.cmb	H.264	HE-AAC
.flv	Soreson Spark	MP3
.mp4	H.263 H.264 MPEG4	MP3 HE-AAC AMR-NB AMR-WB

File Format	Video Decoder	Audio or Speech Decoder
.mov	H.263 H.264 MJPEG MPEG4	MP3 HE-AAC PCM/G.711 AMR-NB AMR-WB
.wmv .asf	MPEG4 SP VC-1 (WMV9)	WMA

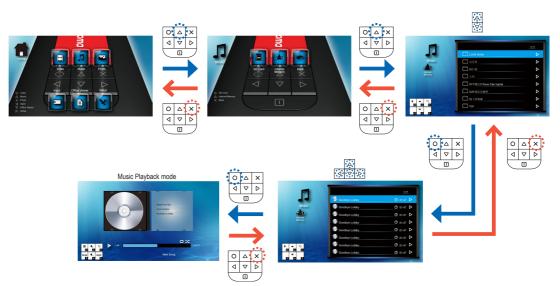
<Note>
Video format does not support content with B-Frame function.

How to Play Music - Source: Internal Memory / MicroSD Card

Playing Music from the MicroSD Card

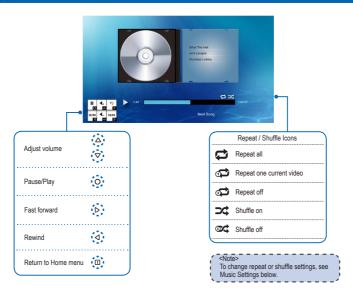


Playing Music from the Internal Memory

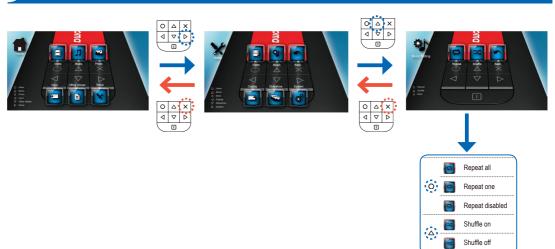




How to Play Music - Playback Mode



Music Settings



COMPATIBILITY: MUSIC

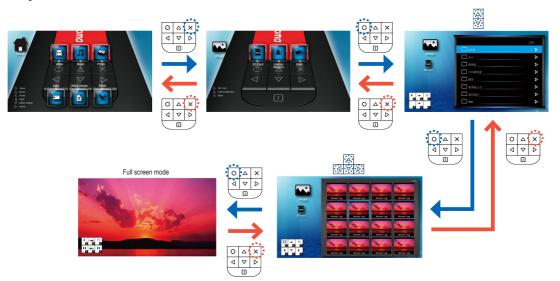
Compatible Audio Format

File Format	Audio Decoder
.aac	HE-AAC
.adif	HE-AAC
.adts	HE-AAC
.amr	AMR-NB
.ape	APE
.ape	G.726
.asf	WMA9
.awb	AMR-WB

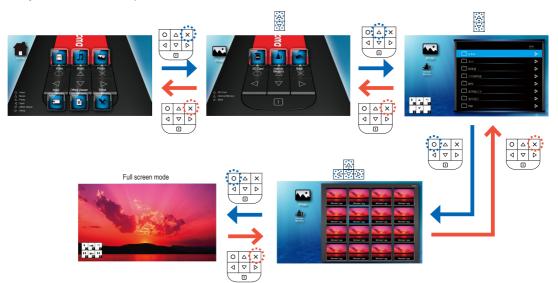
File Format	Audio Decoder
.flac	FLAC
.m4a	HE-AAC
.mp3	MP3
.ogg	Vorbis

How to View Photos - Source: Internal Memory / MicroSD Card

Viewing Photos from the MicroSD Card



Viewing Photos from the Internal Memory



COMPATIBILITY: PHOTO

Compatible Photo Format

File Format	File Extension
BMP	*.bmp,
JPG	*.jpg
JPEG	*.jpeg

<Note>
The projector supports the following photo resolution:

Bitmap file up to 2M (megapixels) each
 Jpeg file up to 10M (megapixels) each
If a photo resolution is over these limitations,

If a photo resolution is over these limitations, the file will not be shown in the file directory screen.

<Note>
For optimum display performance of static photos or slide show playback, it is recommended to use smaller file size and lower resolution photos.



How to View Photos - Mode: Full Screen / Slideshow

Full Screen Mode

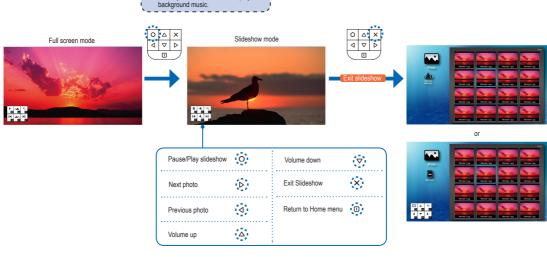


Slideshow Mode

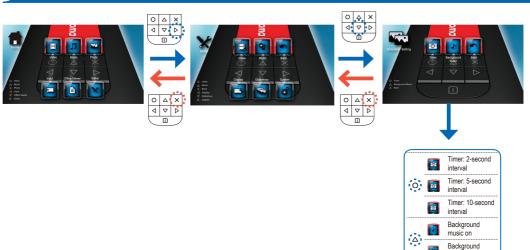
In Slideshow mode, photos are played continuously at a specified interval time while playing music stored in the internal memory as background.



<Note>
To change slideshow interval settings and enable/disable background music, see Slideshow Settings below.



SLIDESHOW SETTINGS



music off

How to View Documents - Source: Internal Memory / MicroSD Card

Viewing Documents from the MicroSD Card



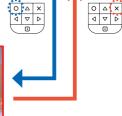






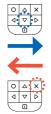


View mode Report



Viewing Documents from the Internal Memory



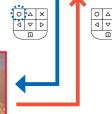












COMPATIBILITY: DOCUMENT

The projector uses Picsel File Viewer to open and view Microsoft® Word files and Adobe® PDF files.

Supported Versions

Supported versions	
Version	
Microsoft® Word 95	
Microsoft® Word 97	
Microsoft® Word 2000	
Microsoft® Word 2003	
Microsoft® Word 2007	
Adobe [®] PDF 1.0 ~ 1.4	
	_

Compatible Document Format

onipatible Boodinont Connac			
File Format	File Extension		
Microsoft® Office Application (Word, Excel, Power Point) HTML Adobe® PDF	.doc .docx .ppt .pptx .xls .xlsx .htm .html		

Font / Language Support

The projector has limited font support. When a document with unsupported font is opened, Office Viewer automatically substitutes the unsupported font with default system fonts. This may cause the document layout to look different.

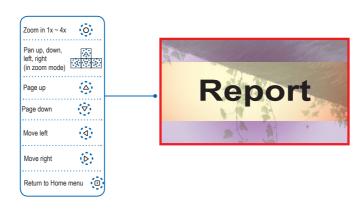
- Office Viewer supports embedded fonts in Adobe®PDF documents but not in Microsoft® Word documents.
- · Embedded fonts are used in priority over the projector system fonts.

Font / Language				
Dutch English French German Italian Japanese Korean Polish	Portuguese Spanish Swedish Traditional Chinese Simplified Chinese Russia Greek			

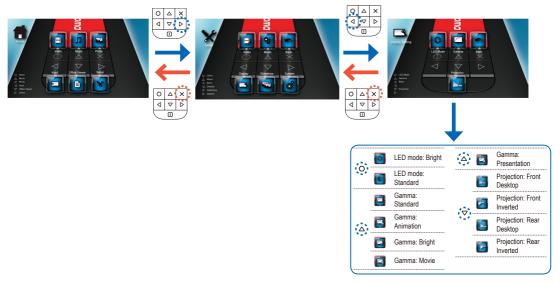
The projector supports one default font for each language.



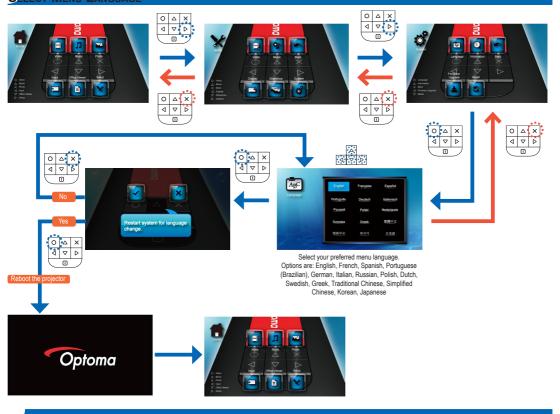
How to VIEW DOCUMENTS - VIEW MODE



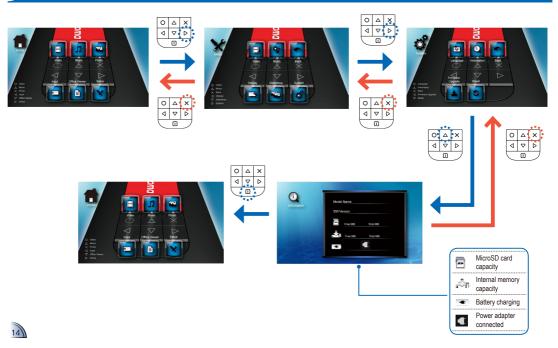




SELECT MENU LANGUAGE



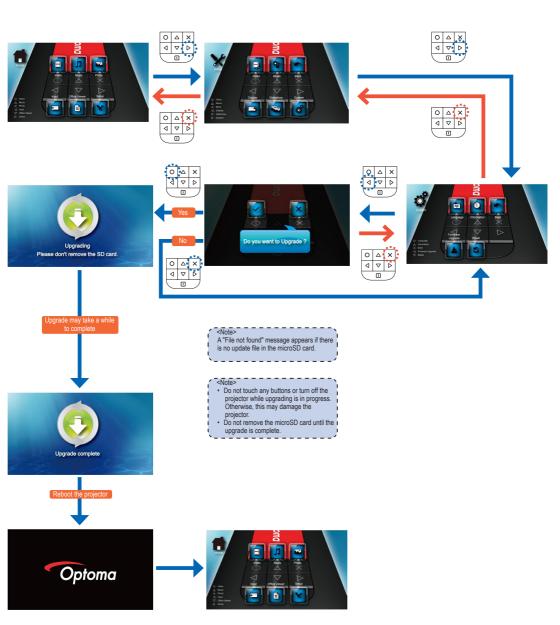
VIEW PROJECTOR INFORMATION



Upgrade Firmware

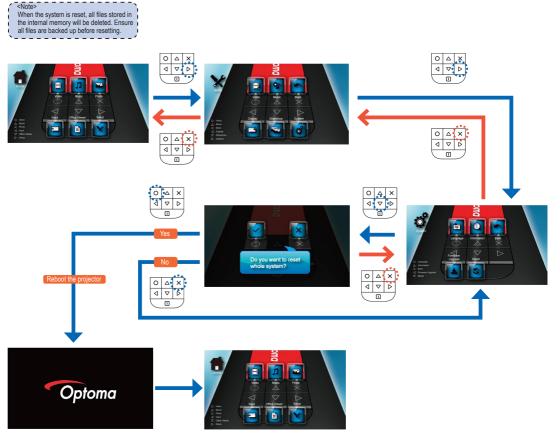
Software updates can be obtained from the OPTOMA website (www.optoma.com / www.optoma.eu /www.optoma.com.tw).

- 1. On your computer, create a folder named "upgrade".
- Download the latest firmware from <u>www.optoma.com</u> and save it in the "upgrade" folder.
- 3. Copy the "upgrade" folder to the root folder of the microSD card. $\label{eq:condition}$
- 4. Insert the microSD card into the microSD card slot of the projector.
- 5. Follow the steps below.

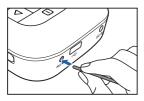


RESET THE SYSTEM

Resetting the System by Reset Menu



Resetting the System by Reset Button

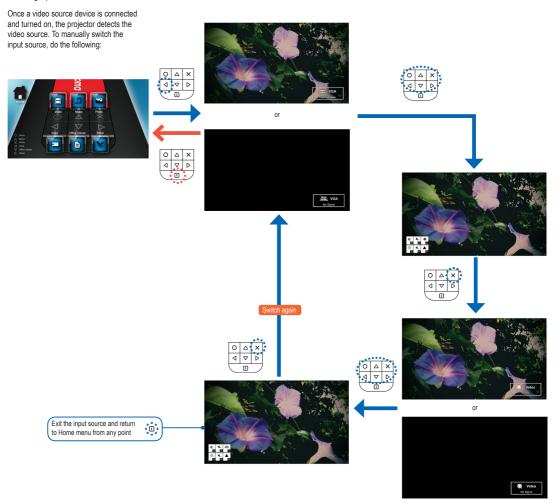


Use the Reset button to perform a hard reset on your projector.

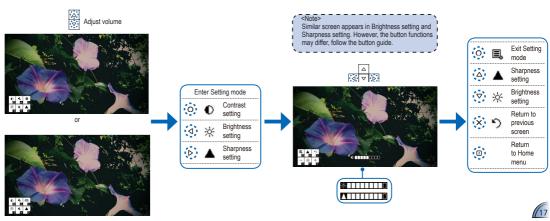
- Push the Reset button using a pointed object such as a tip of a pen or a paper clip.
- The projector resets the system and shuts down. Press
 for 3 seconds to reboot the projector.

How to Use External Input Source: VGA / Composite AV

Switching Input Source ·····



Adjusting Input Source Settings



OMPATIBLE VIDEO / VGA MODE

Timing Table				
Mode	Resolution	V-Sync (Hz)		
	640x480	60		
\/CA	800x600	60		
VGA	1024x768	60		
	1280x768	60		
	480i / 480P	60		
Video In	576i / 576P	50		
	720P	50 / 60		

<Note> Video format does not support content with B-Frame function

If you experience a problem with your projector, please refer to the following information. If a problem persists, please contact your local retailer or service

Image Problems

connected.

- No image appears on-screen
 - · Ensure the cables/charger/ battery are correctly and securely
 - · Ensure the pins of connectors are
 - not crooked or broken. · Make sure the projector is
- switched on. Image is out of focus
 - · Adjust the Focus Dial.
 - · Make sure the projection screen is between the required distance 9.6 to 126.6 inches (0.245 to 3.215 meters) from the projector. See page 5.
- Image is too small or too large · Move the projector closer to or further from the screen.
- Image is reversed
 - · Select "Setup --> Display --> Projection" from the OSD and set the projection direction.

Audio Problems

- No sound
 - · During video or music playback, press the button.

Battery Problems

- Pattery capacity is low
 - · Remove the battery and clean the connectors

· The battery may not charge

- · The battery is worn out and needs to be replaced.
- correctly after the projector is turned off due to the high temperature emitted by the projector. Let the projector cool for a while before connecting the charger.

LED Indicator

LED Color	Description
No light	In operation
Amber	Battery charging
Green	Charge complete
Green	Transferring data
Red	Battery low
Red (flashing)	Overheat; The projector temperature exceeds 80°C.

<Note>

- · The LED flashes red when the projector temperature reaches 80°C. It is recommended to switch off the projector to allow it to cool down.
- When the projector temperature reaches 85°C, the projector automatically shuts down due to the built-in temperature protection. This is not a malfunction. Let I the projector cool down before switching it on again.

Clause for Office / Document Viewer

The End User may not:

- · make copies of the Picsel Products or make them available for use by third parties.
- · reverse engineer, disassemble, reverse translate, or in any way decode the Picsel Products or any copy or part of it in order to derive any source code. Save only as is permitted by any applicable law.

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technical changes. Optoma assumes no liability for damages incurred directly or indirectly from errors, omissions, or discrepancies between the device and this documentation.

Other brands or logos are trademarks or registered trademarks of their respective companies.

This device is not intended for use in the direct field of view at visual display workplaces.

EDIA FILE SPECS: DEFINITIONS

Term	Description
LBR	HE-AAC
SP	HE-AAC
ASP	HE-AAC
MP	AMR-NB
ML	APE
BP	G.726

MEDIA FILE SPECS: AUDIO / IMAGE CONTAINERS

.ogg

<u>Audio Containers</u>				
Container	Audio Decoder			
.aac	HE-AAC			
.adif	HE-AAC			
.adts	HE-AAC			
.amr	AMR-NB			
.ape	APE			
.ape	G.726			
.asf	WMA9			
.awb	AMR-WB			
.flac	FLAC			
.m4a	HE-AAC			
.mp3	MP3			

inage Containers				
Container	Image Decoder			
BMP	*.bmp,			
JPG	*.jpg			
JPEG	*.jpeg			
	-			



MEDIA FILE SPECS: VIDEO CONTAINERS

<u>Video Containers</u>						
Container	Video Decoder	Audio or Speech Decoder		Container	Video Decoder	Audio or Speech Decoder
.3gp	H.263 H.264	4 AMR-NB G AMR-WB 3 MP3 4 HE-AAC G PCM/G 711		.cmb	H.264	HE-AAC
MJPEG	MJPEG			.flv	Soreson Spark	MP3
.avi	H.263 H.264 MJPEG MPEG4			.mp4	H.263 H.264 MPEG4	MP3 HE-AAC AMR-NB AMR-WB

Container	Video Decoder	Audio or Speech Decoder
.mov	H.263 H.264 MJPEG MPEG4	MP3 HE-AAC PCM/G.711 AMR-NB AMR-WB
.wmv .asf	MPEG4 SP VC-1 (WMV9)	WMA

MEDIA FILE SPECS: DECODERS

Audio and Speech Decoders

Audio or Speech Decoder	Layer, Version, or Mono/Stereo	Sampling Frequency	Maximum Bitrate	Compliance/Specification
ADPCM	4 variants, mono	48KHz	384kps	ITU-T G.726
AMR-NB	mono	8KHz	12.2kbps	3GPP TS 26.073
AMR-WB	mono	16KHz	23.85kbps	3GPP TS 26.073
APE	Fast, Normal, High	96KHz for Fast & Normal 48KHz for High	861kbps	Monkey's Audio source at http:// files.monkeysaudio.com/MAC_ SDK_406.zip
FLAC	stereo	96KHz, 24 bits per sampling	2.652Mbps	http://flac.sourceforge.net
HE-AAC	v1, L2	48KHz	256kbps	ISO/IEC 14496-3
MP3	MPEG-1 layer 1, 2, and 3 Audio	48KHz	320kbps	ISO/IEC 11172-3 for fully compliant audio decoder and ISO IEC 11172-4 for a Full Layer 3 decoder
PCM	-	48KHz	2304kbps	ITU-T G.711
Vorbis	stereo	48KHz	500kbps	http://xiph.org/vorbis/doc/Vorbis_l_spec.html
WMA8 WMA9	L1-3	48KHz	385kbps	Windows Media Audio Standard Decoder Specifications

<u>Video Decoders</u>				
Video Decoder	Profile, Level	Maximum Resolution & fps	Maximum Bitrate	Compliance/Specification
H.263	BP, L10 (Short Header Mode)	D1, 30fps	4Mbps	ISO/IEC 14496-2:2004
H.264	BP, L3	D1, 30fps	4Mbps	ISO/IEC 14496-2:2004
MJPEG	BP, non-interleave	800x480, 30fps	10Mbps	Support YUV444,422,420, and 411
MPEG4	ASP SP	D1, 30fps	4Mbps	ISO/IEC 14496-2:2004
Sorenson Spark		800x600, 30fps	4Mbps	H.263 variant
VC-1	SP@ML MP@ML	800x600, 30fps	2.6Mbps	SMPTE 421M

Image Decoders

Image Decoder	Layer, Version	Maximum Megapixels	Compliance/Specification	
JPEG	Baseline, non- interleave	12mp	ISO/DIS 10918-1	

