

**SAMSUNG TECHWIN**

# **DIGITAL PRESENTER**

User Manual

SDP-760



**SAMSUNG**



# Digital Presenter


## User Manual

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❖ Design and specifications are subject to change without prior notice.

## IMPORTANT SAFETY INSTRUCTIONS

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1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lighting storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



# overview

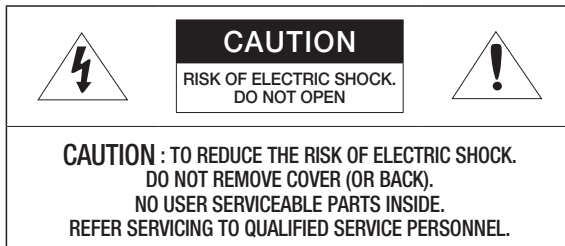
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## WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

Apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

## CAUTION



## EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

## CAUTION

These servicing instructions are for use by qualified service personnel only.

To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.



This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

# overview

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## PRODUCT FEATURES

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Thanks for purchasing the product.

This product is high quality video presenter which enables simple and easy video display from all sources onto a computer monitor and video projector devices.

- **3M pixel CMOS Imaging Device**

By adopting 1/2.8" 3M pixel CMOS, it implements high-resolution and color reproduction.

- **Supports XGA to 1080P (30 frame/sec) Video Output**

Supports VGA output of 1080p resolution in XGA and C-VIDEO output, any type of video projectors can be utilized.

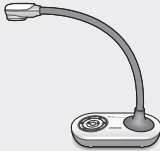
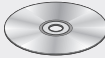
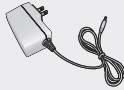


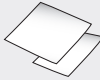
# overview

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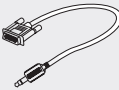

## WHAT'S INCLUDED

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Check if the main unit and all the following accessories are included in the product package.

		
Main Unit	Software / User Manual CD	Power Adapter
		
VGA Cable	USB Cable	Diffusing Sheet

### Accessories

	
RS-232C Cable	Microscope adapter



- RS-232C cables and adapter lenses from other brands may not be compatible with this product.



Samsung Techwin cares for the environment at all product manufacturing stages, and is taking measures to provide customers with more environmentally friendly products. The Eco mark represents Samsung Techwin's devotion to creating environmentally friendly products, and indicates that the product satisfies the EU RoHS Directive.

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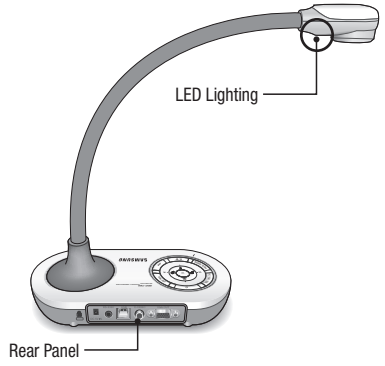
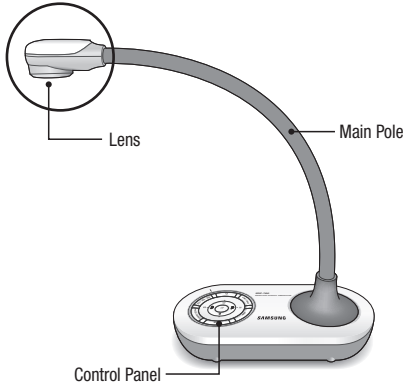


# PRODUCT AT A GLANCE

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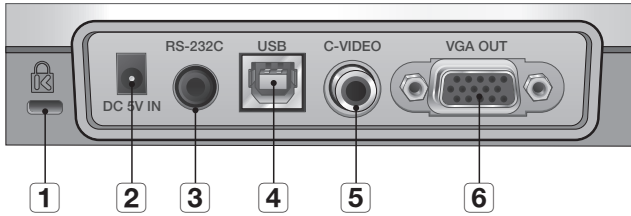
## Front View

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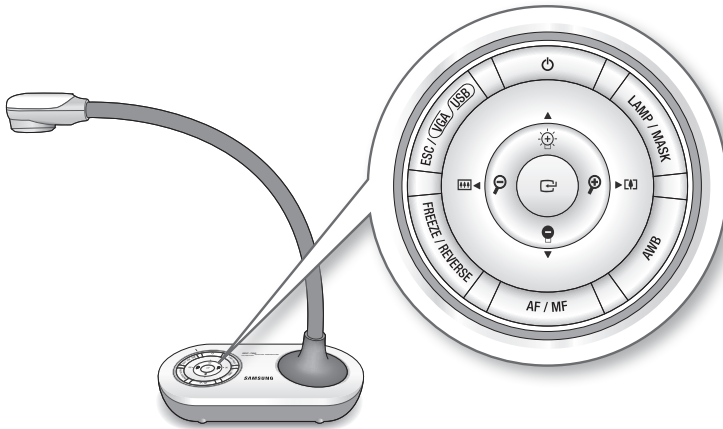
# overview





## Rear View



Item	Description
<b>1</b> Kensington Lock	Insert the Kensington security cable. For preventing a product theft or the security purpose, use the Kensington security cable to tie up this product with a fixed object.
<b>2</b> DC 5V IN	Connect the power jack of the DC adapter to this port.
<b>3</b> RS-232C	Connect the RS-232C cable to this port.
<b>4</b> USB	Connect this port to a computer that supports USB communications.
<b>5</b> C-VIDEO	Connect C-VIDEO to the TV for watching the TV.
<b>6</b> VGA OUT	Connect this port to a video input device such as PC monitor or projector. Use this port if you want to play the video incoming from the presenter on the monitor or projector.

## Control Panel



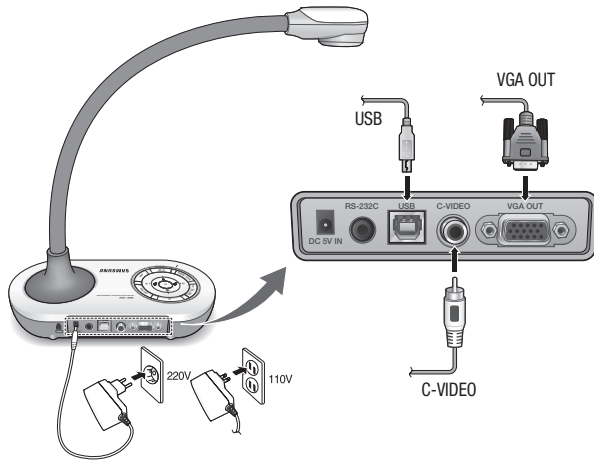
Item	Description	
	LIVE	Menu setup mode
	Power On/Off When powered, the LED turns to blue.	
	Adjust the screen brightness	Move up or down
	Zoom In/Out	Move left or right
	Open the menu	Run the selected menu
<b>LAMP/MASK</b>	Lighting On/Off Press and hold the button to run MASK function.	
<b>AWB</b>	Auto Color Adjustment	
<b>AF/MF</b>	Auto Focus Press and hold the button to run manual focusing.	
<b>FREEZE/REVERSE</b>	Freeze Press and hold the button to rotate the played video by 180°.	
<b>ESC/VGA/USB</b>	Cancel your work Press and hold the button to switch video between VGA ↔ USB.	

-  ■ Some buttons marked with </> has multiple functions. Press it briefly to use former function of </>, press and hold it for more than 3 seconds to use the latter.

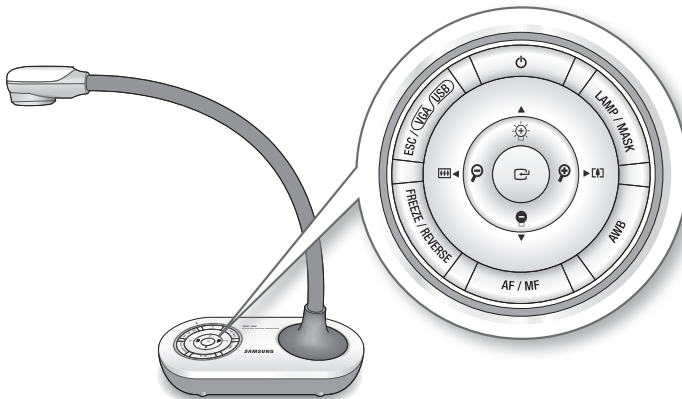
# installation & connection

## PREPARATIONS

1. Connect the necessary cables of VGA OUT, C-VIDEO, USB and Power.



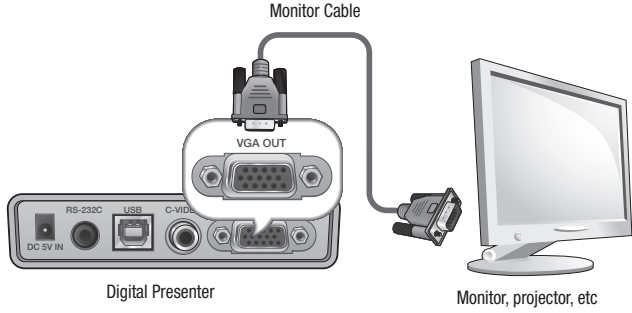
2. Press  of the presenter to turn on the digital presenter.



## CONNECTING THE OUTPUT DEVICE

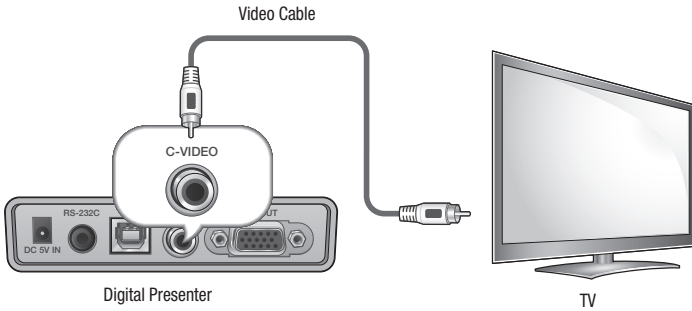
### Connecting to the monitor

To display video on a monitor, the monitor should be connected to the presenter with monitor cable.



### Connecting the TV

To display video on a TV, the TV should be connected to the presenter with C-VIDEO cable.



# installation & connection

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## Connecting to the PC

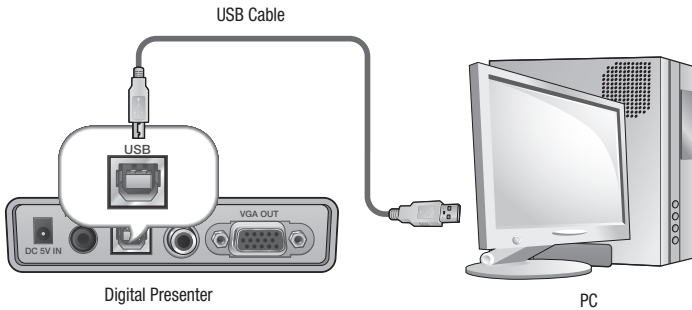
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To connect the presenter and PC, use USB or RS-232C cable.

Using USB cable enables control as well as video transfer, while RS-232C only enables control as defined in the protocol.

### Connecting a PC with USB Cable

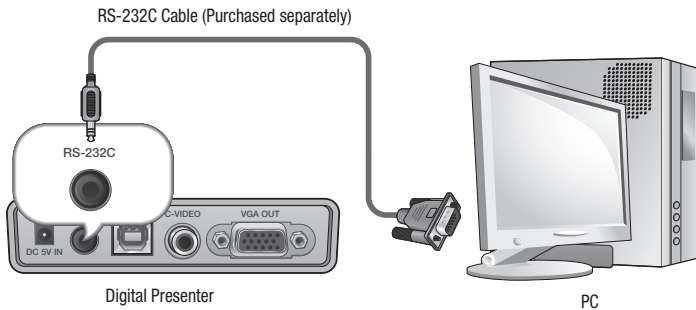
1. Connect the cable to the USB port of the PC.
2. Connect the USB cable's the other end to the presenter's [USB] port.



- ! It is recommended to connect the USB cable to the USB port on the main board of your PC. (Using an extension front port or the bus-power USB hub may cause a problem, depending on the manufacturer.) Use only the USB cable of less than 4.0m in length.
- Use the USB cable provided by Samsung Techwin. (Using a cable from different manufacturer may cause problem depending on the cable specifications.)
- If using the USB cable for the connection, install the provided USB driver and SDP USB Viewer on your PC. For more information, refer to the provided program manual.

## Connecting a PC with RS-232C Cable

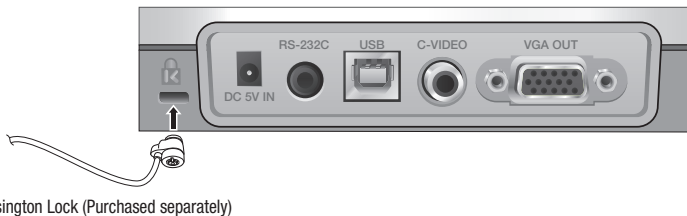
1. Connect the cable to the RS-232C port of the PC.
2. Connect the RS-232C cable's the other end to the presenter's [RS-232C] port.



- ! ■ The RS-232C cable is optional that is not included in the product package. Purchase it if needed. However, a third-party RS-232C cable (manufactured by other than Samsung Techwin) may not guarantee a proper operation.
- ✍ ■ If using the RS-232C cable, no specific driver is provided. Obtain the necessary programs on your own.

## KENSINGTON LOCK

Kensington lock is a theft-proof device that you can use to tie up the presenter to a fixed object such as showcase using a wire cable.





- ✍ ■ Kensington lock is an optional accessory (unbundled). Purchase it for you.

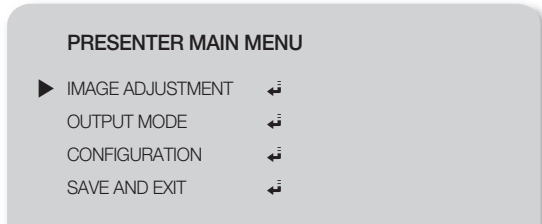
# setup & application

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## GETTING STARTED

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1. Press the  button.  
The power LED turns to blue.
2. Press the  button.
3. The main menu appears.



## SETUP

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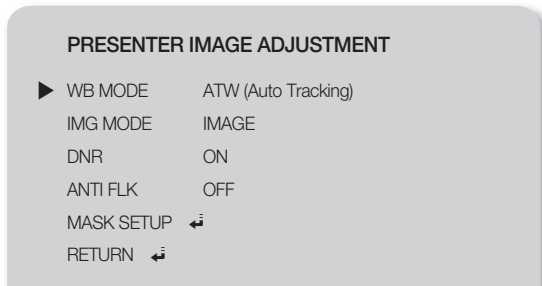
### Image Adjustment

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#### Setting the White Balance (WB MODE)

You can adjust the color tones of the image automatically in Live mode.

1. From the menu, select **IMAGE ADJUSTMENT → WB MODE**.



2. Each time you press [▶] the white balance mode will switch to in the order of: <ATW(Auto Tracking) → AWB(KEY) → MANUAL WB>.
  - Auto color adjustment 1: ATW(Auto Tracking)  
This will perform the white balance function according to the change of the color temperature of a light source.
    - Select **ATW(Auto Tracking)**.
    - When done, return to the Live screen.

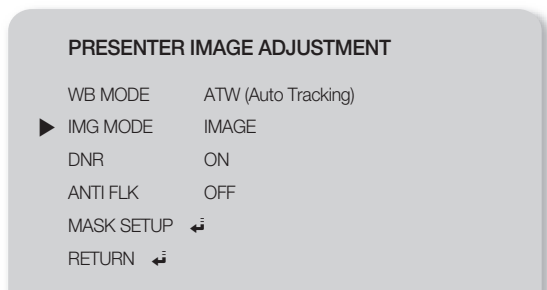


- Auto color adjustment 2: AWB(KEY)  
You can adjust the color tones of the displayed video automatically each time you press **AWB**.
  - Select AWB(KEY) from the menu and press **AWB** button in LIVE screen to adjust color automatically.
- Manual color adjustment: MANUAL WB  
You can adjust the settings of **RED GAIN** and **BLUE GAIN** manually before performing the white balance.
  - Select **MANUAL WB**.
  - Use the [◀▶] button to change the settings to your preference.
  - When done, return to the Live screen.

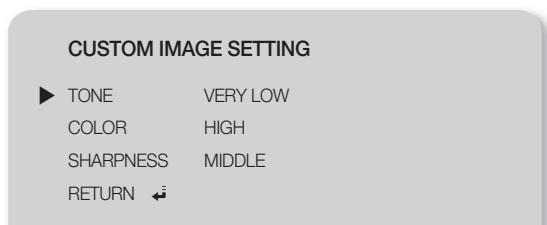
## Compensating Images (IMG MODE)

This will optimize the display of the image.

1. From the menu, select **IMAGE ADJUSTMENT → IMG MODE**.



2. Each time you press [▶], the IMG MODE will switch to <IMAGE → CUSTOM → TEXT> in this sequence.
  - TEXT : Optimize the display of a manuscript containing a large volume of text.
  - IMAGE : Optimize the display of a photo or picture.
3. If you select **CUSTOM**, you will see the following sub menu items.



- TONE : Select a gamma setting of luminance.  
Each time you press [▶], the tone setting will switch to <VERY LOW → LOW → MIDDLE → HIGH → VERY HIGH>.

# setup & application

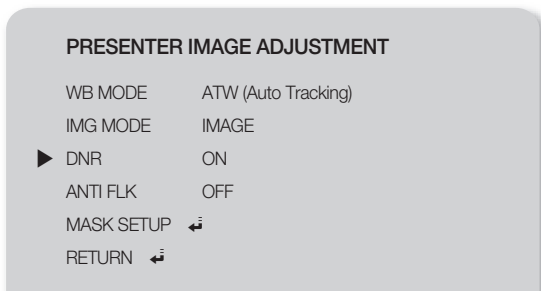
- **COLOR** : Select a GAIN setting.  
Each time you press [▶], the gain of color will switch to <HIGH → B/W → LOW → MIDDLE>.
- **SHARPNESS** : Set the sharpness of the displayed image.  
Each time you press [▶], the sharpness level will switch to <MIDDLE → HIGH → LOW>.

**!** ■ If you increase the sharpness level, the image may be displayed abnormally or it can cause a noise.

## Setting the Noise Reduction (DNR)

DNR stands for Digital Noise Reduction that provides a clear image through 2D/3D filtering.

1. From the menu, select **IMAGE ADJUSTMENT → DNR**.



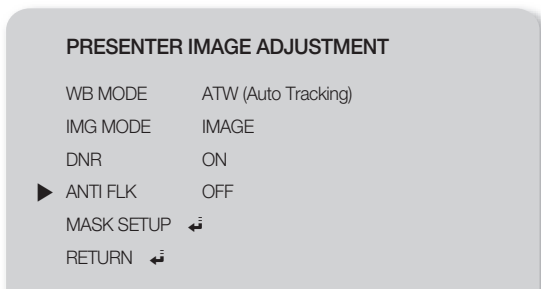
2. Press [▶] button to set whether to use DNR function.

**!** ■ A faster moving object may cause an afterimage if using DNR function.

## Setting the ANTI FLK Mode

You can use this feature if you encounter a flickering screen due to a frequency mismatch with the ambient lighting.

1. From the menu, select **IMAGE ADJUSTMENT → ANTI FLK**.

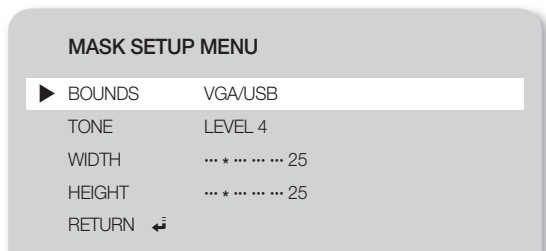



2. Use [▶] to specify the use of **ANTI FLK**.

## Setting the Mask

You can mask a portion or the whole of the screen so that it is hidden.

1. From the menu, select **IMAGE ADJUSTMENT → MASK SETUP**.



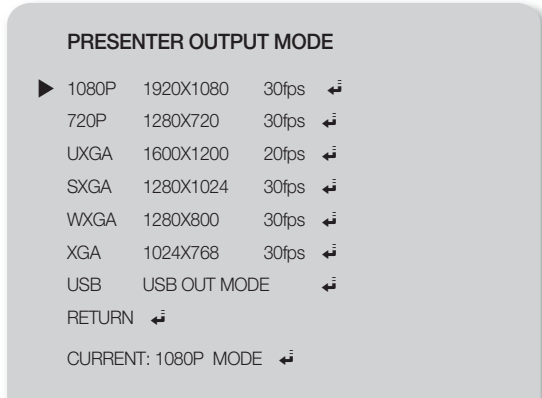
2. Select **MASK SETUP** to display the sub menu items.
    - **BOUNDS** : With BOUNDS, select the display device currently using.  
Press [▶] button to select BOUNDS mode in the order of <VGA/USB → C-VIDEO>.
    - **TONE** : Select a tone level.  
Each time you press [▶], the tone value will switch to <LEVEL 1-2-3-4>. The lower the level is, the greater the transparency of the masking area becomes.
    - **WIDTH** : Select a mask width.  
Press [◀] or [▶] button on the control panel to set the area between 1~100.
    - **HEIGHT** : Select a mask height.  
Press [◀] or [▶] button on the control panel to set the area between 1~100.
-  ■ When the mask setting is completed, press the **LAMP/MASK** button on the control panel to activate it. Use the left/right buttons to move the masking area.
- Note that the mask WIDTH/HEIGHT value is not absolute value but relative and proportional to the width/height of the video in applicable aspect ratio, which will differ from resolution setting.

# setup & application

## Setting the Output Resolution

You can set a different resolution according to the output device (monitor, projector).

1. Select **OUTPUT MODE** from the menu.



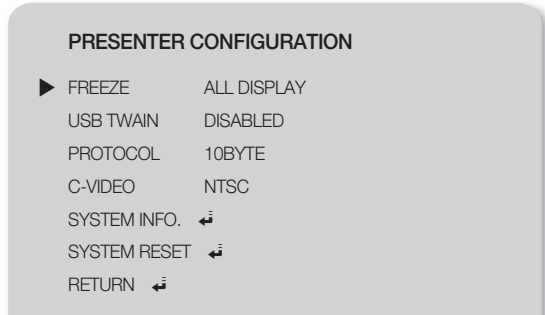
2. Move the cursor (▶) to a desired resolution and set the output resolution of the digital presenter.

- Setting to UXGA/USB or changing the mode from UXGA/USB to others requires restarting to apply the changed resolution.
- Supported resolutions are listed in the above example. Refer to the above image.

## Setting Supplemental Functions

### Setting the Freeze Mode

1. From the menu, select **CONFIGURATION** → **FREEZE**.



2. Select **ALL DISPLAY** or **EXCEPT C-VIDEO** mode.
  - If selecting <**ALL DISPLAY**> mode
    - If you press **[FREEZE/REVERSE]**, both VGA/ C-VIDEO connected video and USB connected video will be frozen.
  - If selecting <**EXCEPT C-VIDEO**> mode
    - If you press **[FREEZE/REVERSE]**, all videos will be frozen except the C-VIDEO connected video.

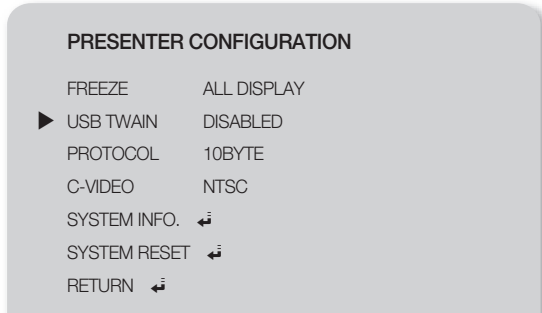
# setup & application

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## Setting the USB TWAIN

The USB TWAIN mode is available if you use the USB cable to connect between presenter and PC that has installed a graphic application in compliance with TWAIN (ex: Photoshop (Except CS5), ACDSEE, MS Office word 2003, etc).

1. From the menu, select **CONFIGURATION → USB TWAIN**.



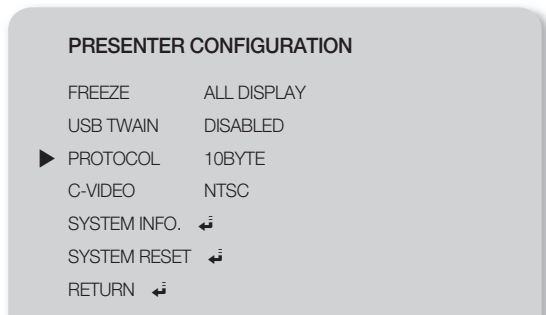
2. To activate TWAIN, set it to **ENABLED**.

- For more information, refer to the relevant section of the application program's user manual.
- TWAIN can be performed even if **USB TWAIN** is set to **DISABLED**, where only a specific resolution of video can be played properly.  
If you want to use other than 320x240 and 640x480, set **USB TWAIN** to **ENABLED** under the **CONFIGURATION** menu.

## Setting the Protocol

Select the protocol appropriately for communicating with other devices.

1. From the menu, select **CONFIGURATION → PROTOCOL**.



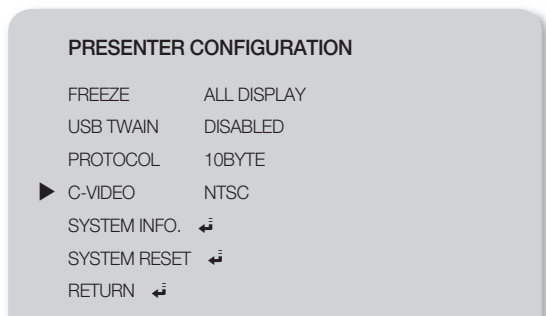
2. Press to select **10BYTE** or **6BYTE**.

The selected protocol will be applied after exiting the menu by **SAVE AND EXIT**.

## Setting the C-VIDEO

Use this mode to match the output signal between connected device and C-VIDEO.

1. From the menu, select **CONFIGURATION → C-VIDEO**.



2. Press to select **NTSC** or **PAL**.

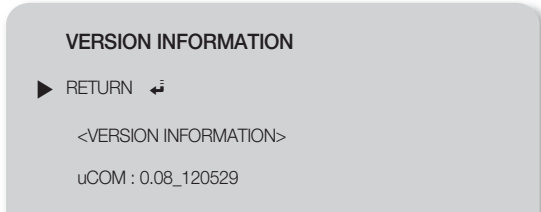
# setup & application

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## SYSTEM INFO.

You can check the current version information.

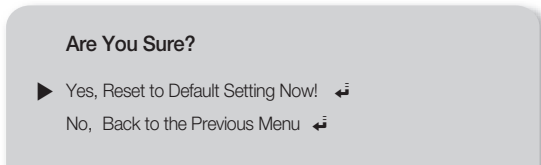
1. From the menu, select **CONFIGURATION → SYSTEM INFO..**





## SYSTEM RESET

Configured settings for all menu items will be initialized.

1. From the menu, select **CONFIGURATION → SYSTEM RESET.**



2. Press  button to select **Yes** or **No**.
3. Press  to perform the operation.
4. Selecting **YES** initializes to the factory defaults, and automatically restarts.

## DISPLAY HOT KEY

- Forced SXGA mode : Turn on, press and hold  for more than 5 seconds to force Output mode to SXGA.
- Forced USB mode : Turn on, press and hold  for more than 5 seconds to force Output mode to USB.



# appendix

## SPECIFICATIONS

For enhanced performance, the product specification is subject to change without prior notice.

Item		Description	
Optical Lens	Recording Lens	F=2.0, f=5.0mm	
	Effective Range	Max : 364 X 257 mm (14.3"x10.1") [B4 size or more]	
	Zoom	Digital 16X	
	Focus	Auto/Manual	
	Exposure	AUTO (fine-tuning)	
Video System	Recording Device	1/2.8" Progressive Scan CMOS image sensor	
	Gross pixels	2,144(H) x 1,588(V), 3.40M pixels	
	Valid pixels	2,096(H) x 1,561(V), 3.27M pixels	
	Frame Rate	Max 30 fps (2M)	
	VGA Out	Native signal output - Full HD (1,920 x 1,080)	
		Converted signal output - UXGA (1,600 x 1,200), SXGA (1,280 x 1,024), WXGA (1,280 x 800), HD (1,280 x 720)XGA (1,024 x 768)	
	Video Output	Available (NTSC/PAL)	
Resolution	750 TV lines		
Functions	White Balance	ATW / AWB (One-push) / Manual	
	Image Correction	Image Mode/Text Mode/Custom Mode	
	DNR	Available (Low light presenter with 2D/3D NR)	
	Preset	Max of 4 user-defined preset numbers	
	Mask	Available	
	Freeze	Available	
	Rotate	Available (180°)	
	USB I/F	USB 2.0 protocols supported - UVC for Web Camera - Twain Driver	
Interface	I/O Port	Output Port	VGA Out – 15-pin D-SUB connector × 1 C-VIDEO Output - C-VIDEO connector × 1
		I/F Port	RS-232C - Ø3.5 jack × 1 USB - USB Type B Connector x 1 (USB device port)
	Power port		DC IN

# appendix

Item		Description
Others	Kensington Lock	Integrated
	Security Thread on Base	Integrated
General Operation	Operation Temperature	+5°C ~ +40°C (+41°F ~ +104°F)
	Operation Humidity	Below 90%
	Adapter	5V DC (Adaptor input : AC 100V~240V free voltage, 50/60Hz, output : DC 5V,2.2A)
	Power consumption	ABOUT 7W (MAX : 9W )
	Dimension (WXHxD)	- In-use : 235 (W) x431 (H) x 115 (D) mm/9.25" (W) x 16.97" (H) x 4.53" (D) - Off-use : 235 (W) x115 (H) x 290 (D) mm/9.25" (W) x 4.53" (H) x 11.42" (D)
	Weight	2.3Kg (5.07 lb)
	Accessories	Provided
Optional		Microscope adapter, RS-232C cable

## MENU SETTINGS & DEFAULT

Menu Item				Default
I	II	III	IV	
OUTPUT MODE	1080P (1920X1080) 30fps 720P (1280X720) 30fps UXGA (1600X1200) 20fps SXGA (1280X1024) 30fps WXGA (1280X800) 30fps XGA (1024X768) 30fps USB OUT MODE			1080P
IMAGE ADJUSTMENT	WB MODE	ATW(Auto Tracking)/AWB(KEY)/MANUAL WB		ATW (Auto Tracking)
	IMG MODE	TEXT		IMAGE
		IMAGE		
		CUSTOM	TONE - VERY LOW/LOW/MIDDLE/HIGH/ VERY HIGH COLOR - HIGH/BW/LOW/MIDDLE SHARPNESS - MIDDLE/HIGH/LOW	
	DNR	ON/OFF		ON
	ANTI FLK	OFF/ON		OFF
	MASK SETUP	BOUNDS - VGA/USB C-VIDEO		VGA/USB
		TONE - LEVEL 1/LEVEL 2/LEVEL 3/LEVEL 4		LEVEL 4
WIDTH - 1~100		25		
HEIGHT - 1~100		25		
CONFIGURATION	FREEZE	ALL DISPLAY/EXCEPT C-VIDEO		ALL DISPLAY
	USB TWAIN	DISABLED/ENABLED		DISABLED
	PROTOCOL	10BYTE/6BYTE		10BYTE
	C-VIDEO	NTSC/PAL		-
	SYSTEM INFO.	-		-
	SYSTEM RESET	Yes/No		-

# appendix

## TROUBLESHOOTING

Problem	Solution
<b>No video is displayed.</b>	<p>Check if the resolution of the output device matches with the presenter. Ex) If the projector's highest video mode is SVGA and the presenter's output resolution has been set to XGA or SXGA, no image will be displayed on the screen.</p> <ul style="list-style-type: none"><li>• Check if the output device has set a proper input source.</li><li>• Check if brightness and focus are adjusted properly.</li><li>• Check if video cable is properly connected to output port.</li><li>• Check if the OUTPUT MODE is set to VGA / USB.</li></ul>
<b>Displayed screen is out of focus.</b>	<ul style="list-style-type: none"><li>• Check if the subject is too close to the lens module.</li></ul>
<b>USB communication with the PC fails.</b>	<ul style="list-style-type: none"><li>• Check if the SDP program is installed on your PC properly.</li><li>• Check if the operating system is Windows XP or Mac OS X 10.5.8 or later. A lower version of Windows may cause a trouble.</li><li>• For further information, refer to the software user's manual (for Windows / Macintosh) provided with the product.</li></ul>



## SALES NETWORK

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