

# AVerVision W30

## User Manual

## Federal Communications Commission Statement(Class A)



NOTE- 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 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 tuning 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/television technician for help.

### Class A ITE:

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:

**Warning** - This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

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THE MARK OF CROSSED-OUT WHEELED BIN INDICATES THAT THIS PRODUCT MUST NOT BE DISPOSED OF WITH YOUR OTHER HOUSEHOLD WASTE. INSTEAD, YOU NEED TO DISPOSE OF THE WASTE EQUIPMENT BY HANDING IT OVER TO A DESIGNATED COLLECTION POINT FOR THE RECYCLING OF WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT. FOR MORE INFORMATION ABOUT WHERE TO DROP OFF YOUR WASTE EQUIPMENT FOR RECYCLING, PLEASE CONTACT YOUR HOUSEHOLD WASTE DISPOSAL SERVICE OR THE SHOP WHERE YOU PURCHASED THE PRODUCT.

## **Remote Control Battery Safety Information**

- Store batteries in any cool & dry place.
- Do not dispose used batteries in domestic waste. Dispose batteries at special collection points or return to stores if applies.
- Remove the batteries if they are not in use for long period of time. Battery leakage and corrosion can damage the remote control, dispose batteries safely.
- Do not mix and use old and new batteries.
- Do not mix and use different types of batteries: alkaline, standard (carbon-zinc) or rechargeable (nickel-cadmium).
- Do not dispose batteries in a fire.
- Do not attempt to short circuit the battery terminals.

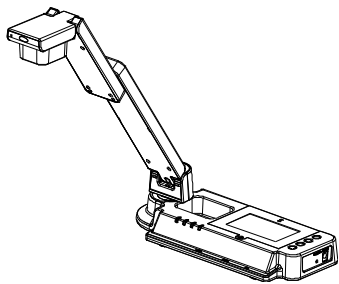
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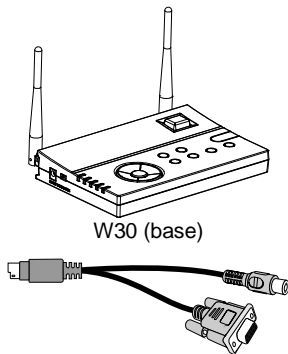
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## Package Contents

Make sure the following items are included in the package.

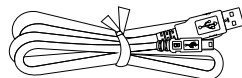


W30 (camera)

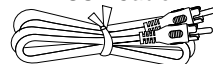


W30 (base)

RS-232/CVBS Cable



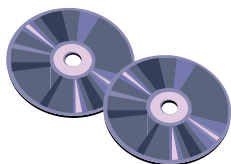
USB Cable



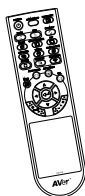
RCA Cable



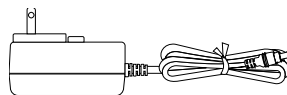
RGB Cable



Software & Manual CD



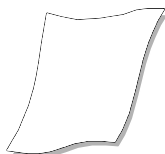
Remote Control  
(batteries included)



x2 Power Adapter (12V, 3A)

\* The power adapter will vary depending on the standard power outlet of the country where it is sold.

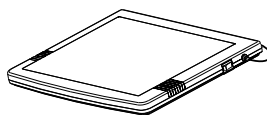
## Optional Accessories



Anti-glare Sheet



Carrying Bag



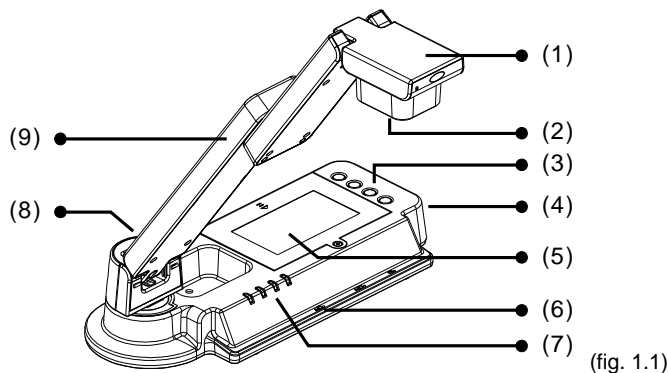
Light Box



Microscope Adapter  
(28mm Rubber Coupler & 34mm Rubber Coupler)

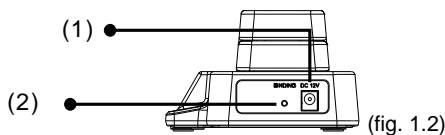
# Get Familiar with the AVerVision W30

## Camera



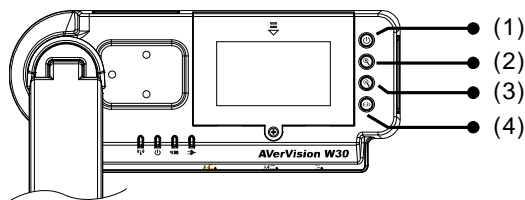
Name	Function
(1) Camera Head	Contain the camera sensor.
(2) Camera Lens	Focus the image in the camera.
(3) Control Panel	Easy access to various functions.
(4) Right Panel	Connection for the power adapter to charge the battery and binding button to tie up with the W30 base.
(5) Battery Compartment	Rechargeable battery location.
(6) Paper Guide	Guide to position the A4 size paper.
(7) LED Light	Indicate the wireless signal condition, power status, battery life, and power connection mode.
(8) Label Slot	Label the W30 camera.
(9) Swivel Arm	Fold and unfold the arm of the W30 camera.

## Right Panel



Name	Function
(1) DC12V	Connect the power adapter into this port to charge the battery.
(2) Binding	Use a pen and poke to bind the W30 camera with the W30 base.

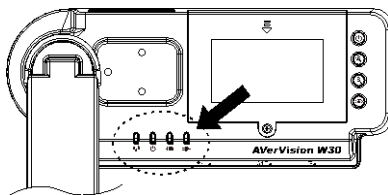
## Control Panel







(fig. 1.3)

Name	Function
(1) Power	Turn the W30 camera on/off.
(2) Zoom +	Increase the magnification of the W30 camera image.
(3) Zoom -	Decrease the magnification of the W30 camera image.
(4) Auto Focus	Adjust the focus automatically.

## LED Light

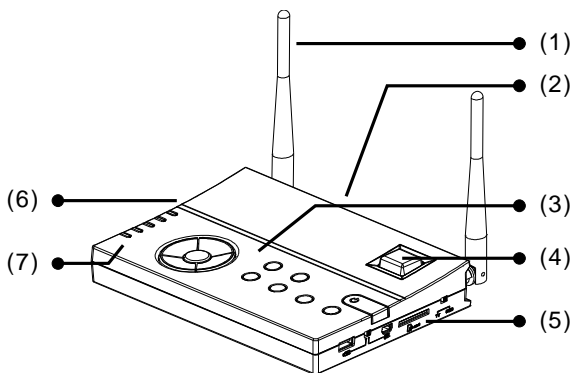


(fig. 1.4)

Symbol	LED Pattern	State
(1) 	Steady Green	Binding the W30 camera with the W30 base.
	Continuous Green Flashing	Data transition. It sends the W30 camera data to W30 base.
(2) 	Steady Blue	W30 camera is power on.
	No Light	W30 camera is power off.
	Green	Good charge.
(3) 	Orange	Medium charge.
	Red	Low charge. The camera battery has to be charged soon.
	Blinking Red	Very low charge. The camera battery has to be charged immediately.
(4) 	Green	Battery is fully charged. You may unplug the power adapter or continue to use the power source from the power adapter.
	Red	Charging the battery.
	No Light	The power adapter is not connected.



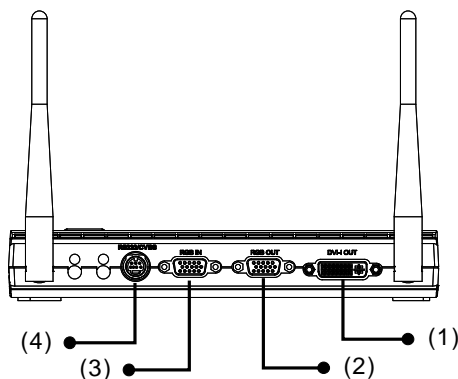
## Base



(fig. 1.5)

Name	Function
(1) Antenna	Send and receive data signal to and from W30 camera and base.
(2) Rear Panel	Connections for computer, RGB/DVI-I/RCA external display device, and RS-232 communication port.
(3) Control Panel	Easy access to various functions.
(4) IR Sensor	Receive remote control commands.
(5) Right Panel	Switches for USB and output display selection, and SD card slot
(6) Left Panel	Connection for power and output resolution selection switch.
(7) LED Light	Indicate the display output selection, USB switch selection, and wireless signal condition.

## Rear Panel

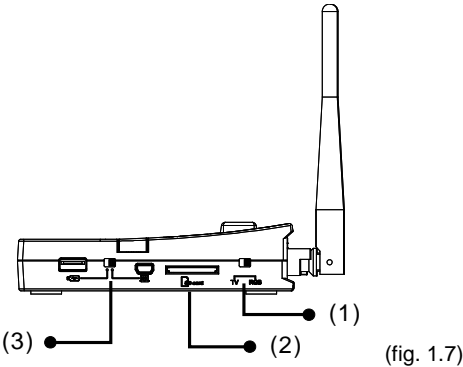


(fig. 1.6)

Name	Function
(1) DVI-I OUT	Connect the W30 base to any display device with DVI cable.
(2) RGB OUT	Connect the W30 base to any display device with RGB cable.
(3) RGB IN	Input the signal from a computer or other sources and pass it through to the RGB OUT port only. Connect this port to the RGB/VGA output port of a computer.

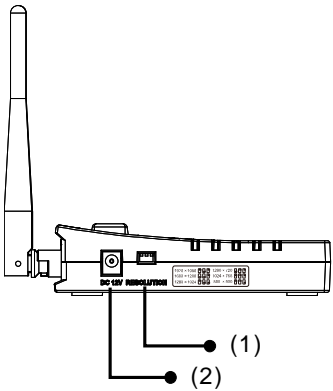
Name	Function
(4) RS-232/CVBS port	Connect the supplied RS-232/CVBS cable into this port. The RCA jack outputs the video signal from the camera to a TV or video equipment. The RS-232 jack is used to connect to computer serial port or to any control panel or for centralized control if desire.

# Right Panel



Name	Function
(1) TV-RGB switch	TV switch to output display video from RS232/CVBS (via RCA connection), and RGB to RGB OUT and DVI-I OUT ports.
(2) SD card slot	Insert the SD card with the label facing up.
(3) USB switch	Switch to  for saving /displaying the captured image directly to a USB flash drive and  when connecting W30 base to a computer via USB cable and use it as computer webcam or transfer the captured image to computer.

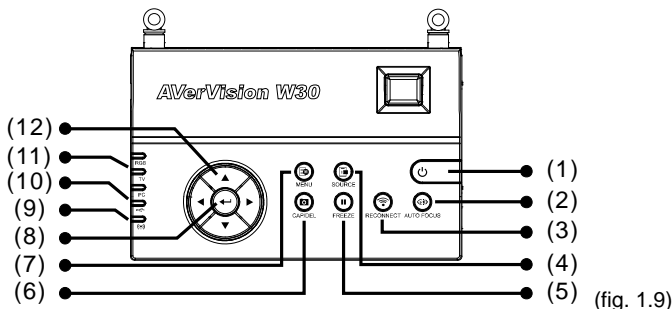
# Left Panel



Name	Function
(1) Resolution	Set the output resolution. You may refer to the table printed on the side.
(1) DC12V	Connect the power adapter into this port.

1920 × 1080		1280 × 720	
1600 × 1200		1024 × 768	
1280 × 1024		800 × 600	

## Control Panel

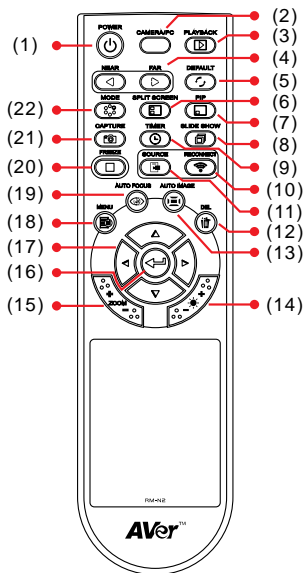


Name	Function
(1) POWER	Turn the unit on/standby mode.
(2) AUTO FOCUS	Adjust the focus automatically.
(3) RECONNECT	Reconnect the W30 camera and base.
(4) SOURCE	Select from 6 types of display options. <ul style="list-style-type: none"> <li>▪ <b>CAM</b> – display the video signal from the W30 camera.</li> <li>▪ <b>RGB IN</b> – display the video signal from the W30 base RGB IN port.</li> <li>▪ <b>PLAYBACK</b> – display the picture from the memory source.</li> <li>▪ <b>CAM/RGB IN</b> – half of the screen display the video signal from the W30 camera and the other half display the video signal from W30 base RGB IN port.</li> <li>▪ <b>SPLT SCRIN</b> – half of the screen display the video signal from the W30 camera and 8-thumbnail picture from the memory.</li> <li>▪ <b>PIP</b> – display a thumbnail picture from the memory at the corner of the screen over the full screen video signal from the W30 camera.</li> </ul>
(5) FREEZE	<ul style="list-style-type: none"> <li>- Freeze live images in camera mode.</li> <li>- Pause slide show in playback mode.</li> </ul>
(6) CAP/DEL	<ul style="list-style-type: none"> <li>- Capture still image in Camera mode. In continuous capture mode, press this button again to stop.</li> <li>- Delete the selected picture in Playback mode.</li> </ul>
(7) MENU	Open and exit the OSD menu.
(8)	<ul style="list-style-type: none"> <li>- Make a selection in Playback mode and OSD menu.</li> <li>- Play/Pause picture slide show.</li> </ul>
(9)	<p>Show the wireless signal condition.</p> <p>Steady Green - binding the W30 camera with the W30 base.</p> <p>Continuous Green Flashing - data transition. It sends the W30 camera data to W30 base.</p>
(10) USB Switch LED	<p>Indicate the USB switch selection to show which USB port is activated.</p> <ul style="list-style-type: none"> <li>▪  allowing you to use the W30 as USB camera or transfer the captured images from the memory to computer.</li> <li>▪  allowing you to save still image in the USB flash drive.</li> </ul>

Name	Function
(11) OUTPUT LED	Indicate TV-RGB switch selection to show which port the video signal is sent out. <ul style="list-style-type: none"> <li>▪ RGB indicates the video signal is sent out thru RGB OUT and DVI-I OUT ports.</li> <li>▪ TV indicates that the video signal is sent out thru RS232/CVBS port via RCA connection.</li> </ul>
(12) ▲, ▼, ◀, & ▶	<ul style="list-style-type: none"> <li>- Pan the image when image is magnified in playback and camera mode.</li> <li>- Move the selection in Playback mode and in OSD menu.</li> </ul>

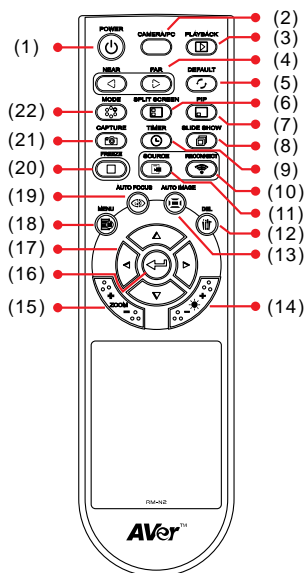
## Remote Control

The remote control requires two (2) “AAA” size batteries (supplied), make sure batteries are installed properly before use. You can access all the features of AVerVision W30 with the remote.










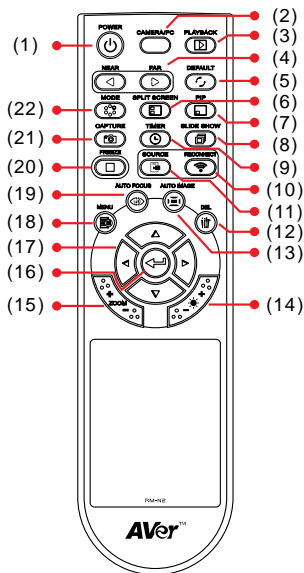
(fig. 2.0)

Name	Function
(1) POWER	Turn the unit on/standby.
(2) CAMERA / PC	Switch between Camera and computer mode. <ul style="list-style-type: none"> <li>- Camera mode displays the video signal from the W30 camera.</li> <li>- PC mode displays the video signal from the RGB IN port of W30 base.</li> </ul>
(3) PLAYBACK	View the captured picture from the memory in 16-thumbnail images.
(4) NEAR / FAR	Adjust the focus manually.
(5) DEFAULT	Reset to factory default setting.
(6) SPLIT SCREEN	Divide the screen into two. One side displays the live image from the W30 camera and the other side displays 8-thumbnail size picture from the memory. <ul style="list-style-type: none"> <li>▪ Press  to only display the selected image and again to revert back to 16-thumbnail preview.</li> <li>▪ Use ◀, &amp; ▶ buttons to pan the single image preview to the left and right.</li> <li>▪ To change the split screen layout, press MENU &gt; PRESENTATION &gt; PBP and press  to enter. Use the ◀, &amp; ▶ to choose from the selections and press  to make a selection.</li> </ul>



(fig. 2.0)

Name	Function
(7) PIP	<p>Display a thumbnail size picture from the memory at the corner of the screen and on top of the W30 camera live image.</p> <ul style="list-style-type: none"> <li>Press  to only display the selected image in full screen and again to revert back to thumbnail size picture.</li> <li>Use  &amp;  to switch to the next and previous picture.</li> <li>To change the thumbnail location, press MENU &gt; PRESENTATION &gt; PIP and press  to enter. Use the  &amp;  to choose from the selections and press  to make a selection.</li> </ul>
(8) SLIDE SHOW	Start/Stop automatically showing the captured picture one-by-one.
(9) TIMER	Call the Timer submenu. Select to Start/Pause/Stop the timer countdown and set the timer duration.
(10) RECONNECT	Reconnect the W30 camera with the base.
(11) SOURCE	<p>Select from 6 types of display options.</p> <ul style="list-style-type: none"> <li><b>CAM</b> – display the video signal from the W30 camera.</li> <li><b>RGB IN</b> – display the video signal from the W30 base RGB IN port.</li> <li><b>PLAYBACK</b> – display the picture from the memory source.</li> <li><b>CAM/RGB IN</b> – half of the screen display the video signal from the W30 camera and the other half display the video signal from W30 base RGB IN port.</li> <li><b>SPLT SCRIN</b> – half of the screen display the video signal from the W30 camera and 8-thumbnail picture from the memory.</li> <li><b>PIP</b> – display a thumbnail picture from the memory at the corner of the screen over the full screen video signal from the W30 camera.</li> </ul>
(12) DEL	Delete the selected picture/video in Playback mode.
(13) AUTO IMAGE	Automatically adjust and set the white balance and exposure setting.



(fig. 2.0)

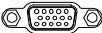
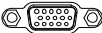




Name	Function
(14) BRIGHTNESS +/-	Adjust the brightness.
(15) ZOOM +/-	<ul style="list-style-type: none"> <li>- Increase/decrease the image magnification in camera and picture playback mode.</li> <li>- Use to easily page up and page down 16-thumbnail picture preview.</li> </ul>
(16)	<ul style="list-style-type: none"> <li>- Make a selection in Playback mode and OSD menu.</li> <li>- Play/Pause picture slide show.</li> </ul>
(17) ▲, ▼, ◀, & ▶	<ul style="list-style-type: none"> <li>- Pan the image when image is magnified <b>in playback and camera mode</b>.</li> <li>- Move the selection in Playback mode and in OSD menu.</li> </ul>
(18) MENU	Open and exit the OSD menu.
(19) AUTO FOCUS	Adjust the focus automatically.
(20) FREEZE	<ul style="list-style-type: none"> <li>- Freeze live images in camera mode.</li> <li>- Pause slide show in playback mode.</li> </ul>
(21) CAPTURE	Capture still image in Camera mode. In continuous capture mode, press this button again to stop.
(22) MODE	<p>Select from 4 type of modes:</p> <p><b>Sharp</b> - adjust the contrast along the edges making text appear more visible.</p> <p><b>Graphics</b> - adjust the gradient of image.</p> <p><b>Motion</b> - increase frame rate. Sufficient lighting is required when using this mode.</p> <p><b>Microscope</b> - automatically adjust optical zoom for microscopic viewing.</p>

## Making the Connection

Before making the connection, make sure the power of all devices are turned off. If you are not sure on where to connect, simply follow the illustrated connections below and also refer to the user manual of the device you are connecting the W30 base with.

### Set the TV-RGB Switch Setting

The TV-RGB switch determines the display output selection. Switch it to RGB (right) to output signal using RGB/DVI-I connection and TV (left) to output signal using RCA connection. (see fig. 1.7 # 1)

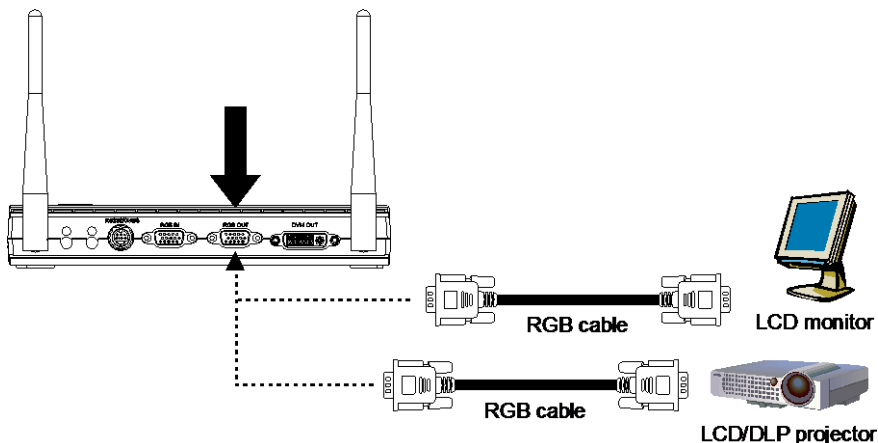
Switch	AVerVision Port		Display Device Port
RGB	 RGB OUTPUT	To	 RGB INPUT
	 DVI-I OUTPUT		 DVI-I INPUT
TV	 RS232/CVBS (use RS-232/CVBS cable)		 VIDEO IN

### Connect to a Monitor or LCD/DLP Projector

Locate the RGB (VGA) input port of the graphics display device and connect it to RGB OUT port of W30 base.



Make sure the TV/RGB switch is set to RGB.

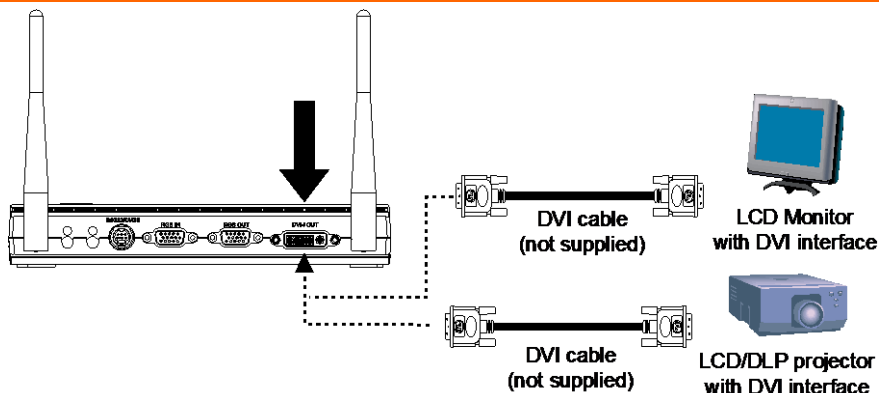


## Connect to a Monitor or LCD/DLP Projector with DVI-I interface

Locate the DVI-I input port of the display device and connect it to DVI-I OUT port of W30 base.

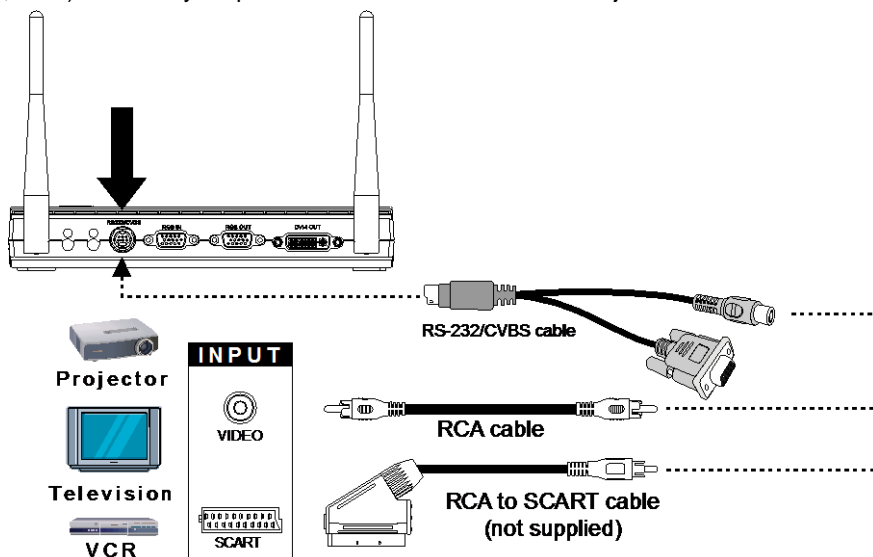


Make sure the TV/RGB switch is set to RGB.




## Connect to a TV

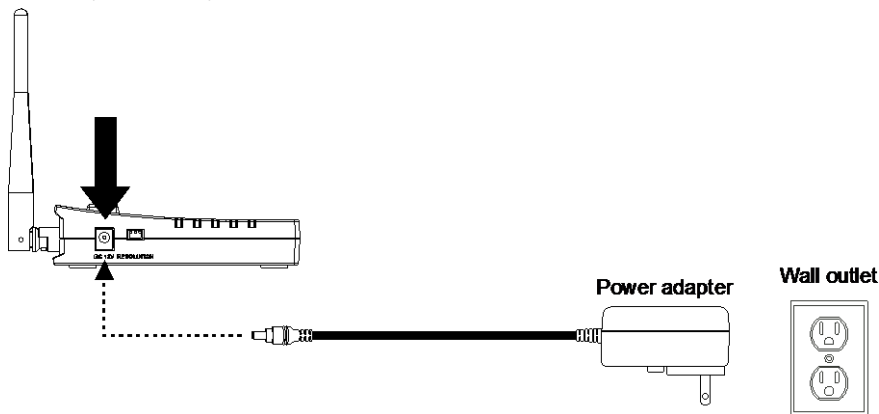
Locate the VIDEO or SCART RGB (if applicable) input port of the TV or video equipment (i.e., VCR) to record your presentation and connect it to RCA jack of RS-232/CVBS cable.





## Connecting the Power

Connect the power adapter to a standard 100V~240V AC power outlet. The unit automatically in standby mode once the power is connected. Press  to turn on.

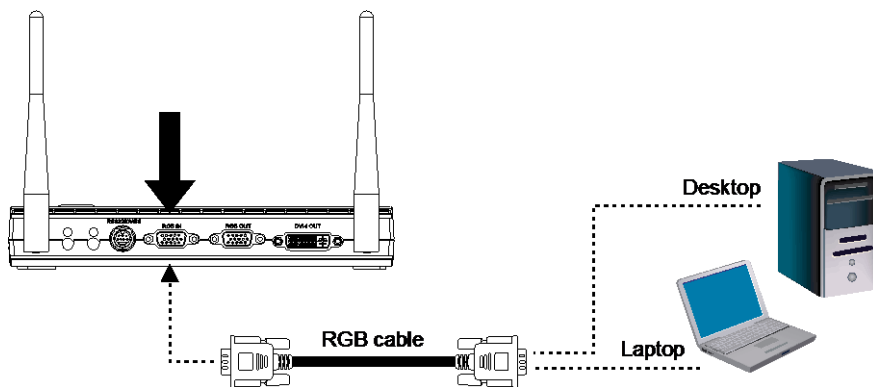


## Connect to a Computer



Locate the RGB (VGA) output port of the computer or laptop and connect it to RGB IN port of W30 base. The video signal from the RGB IN port is streamed to RGB OUT port.

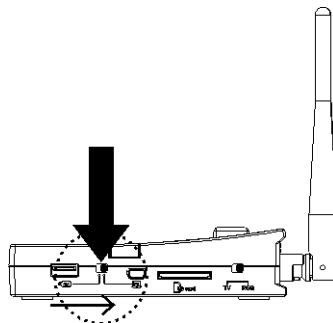



- To display computer image, press Camera/PC button on the remote control or SOURCE button and select RGB IN.
- For laptop to output display image, use the keyboard command (FN+F5) to switch between the display modes. For different command, please refer to your laptop manual.

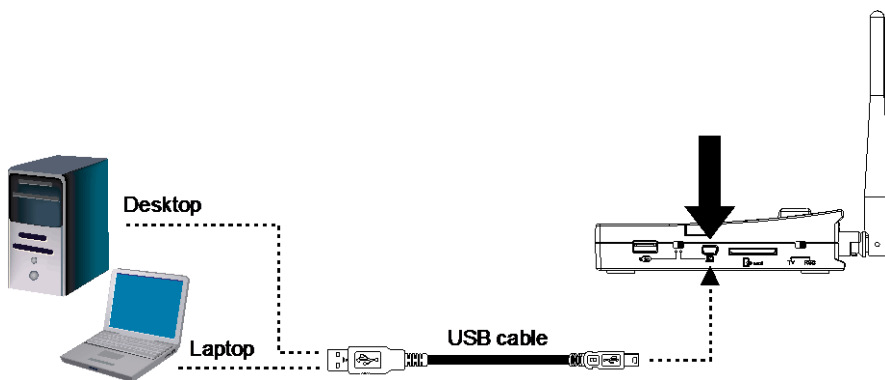


## Connect to a Computer via USB

1. Set the USB switch on W30 base right panel to  and the  LED on the control panel will light up. This enables you to use W30 as a USB Camera or to transfer the captured pictures from the memory source and to computer. Also see "Transfer File from W30 to PC".




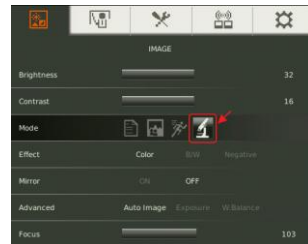
2. Locate the USB port of the computer or laptop and connect it to  port of W30 base.



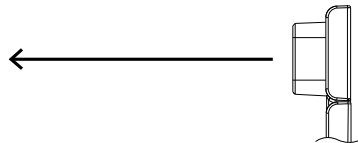
## Connect to a Microscope

Connect the W30 camera to a microscope enables you to examine microscopic objects on a big screen.

1. Change the image display mode to Microscope. Press **MENU** > select **IMAGE** tab > select **MODE** > select **(microscope)** and press .



2. Aim the camera head at the farthest point and press **AUTO FOCUS**.
3. Adjust the focus of the microscope.

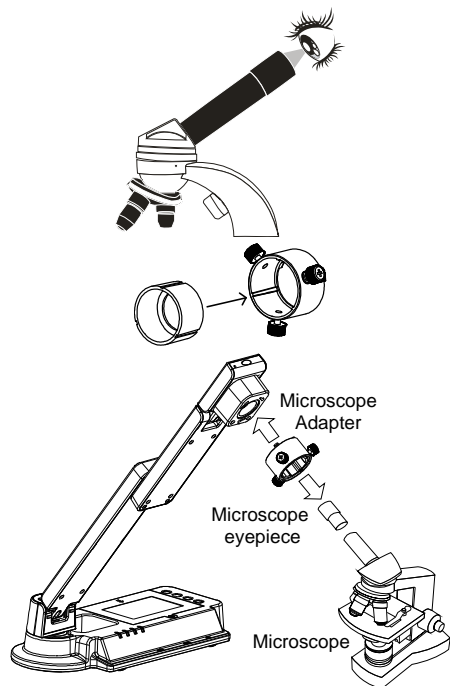


4. Select the appropriate rubber coupler size for the microscope eyepiece and insert it in the microscope adapter.
5. Remove the microscope eyepiece from the microscope and connect it to the microscope adapter with the rubber coupler inserted. Fasten the 3 bolts until the adapter secures the eyepiece.

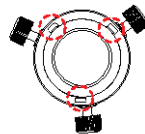
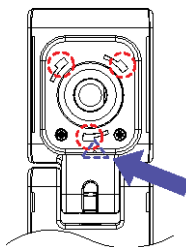


For the eyepiece, we suggest using 15.5mm eye relief or higher.

6. Attach the microscope adapter to the W30 camera head. Then connect the eyepiece to the microscope.



Be sure to match the latches to the holes and the arrow on the microscope adapter and W30 camera head are on the same side. Connect and then twist counterclockwise to lock.

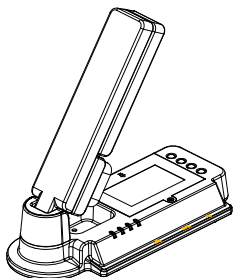


## Setting Up and Operating W30

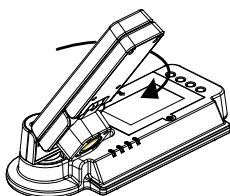
This section provides useful tips on how to adjust the W30 to meet your needs.

### Unfolding the W30 camera

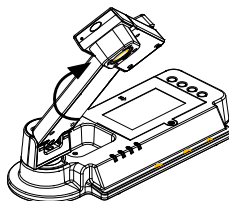
Follow the step by step procedure below to setup the unit.



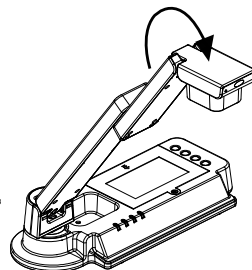
(1) Unfold the arm.



(2) Turn 90° to the left.



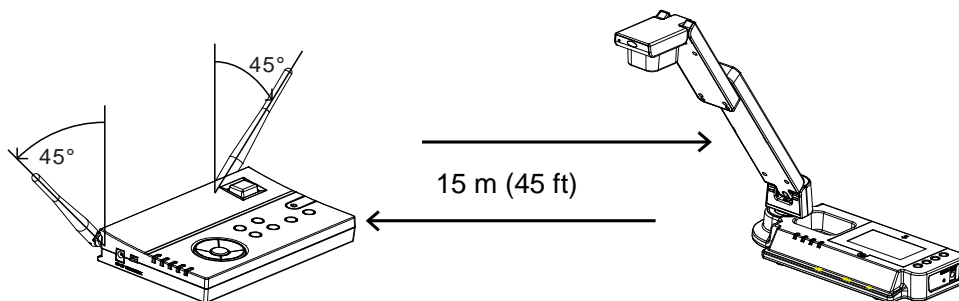
(3) Swivel up to the left.



(4) Fold the camera down.

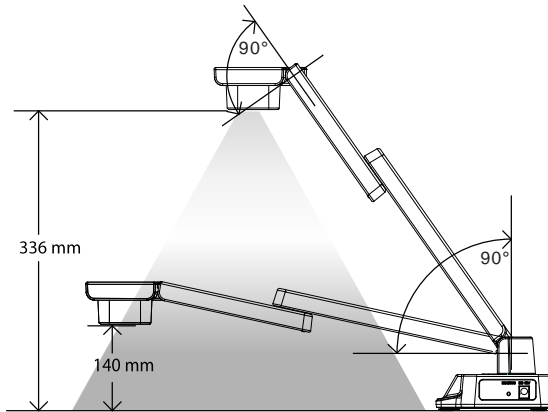
### Orient the W30 base Antenna

Orient the W30 base antennas sloping away at 45 degree. The best reception range between the W30 camera and base is within 15m (45 ft). The W30 camera and base are already pre-bound in the factory. If the signal from the camera is not detected, press RECONNECT button.



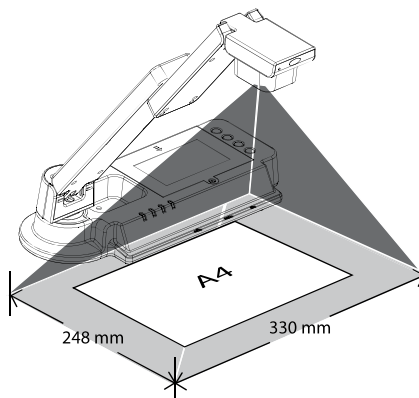
## W30 Camera Operating Height & Angle

The approximate height of W30 camera should be at 336mm and angled at 55° to display a A4 size landscape document.



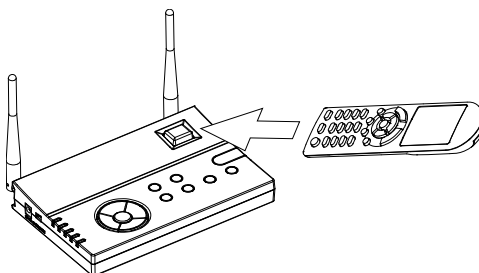
## Paper Guide

The A4 paper marks serve as a guide for placing the A4 document under the camera. The approximate shooting area of W30 camera is 330mm x 248mm.



## Infrared Sensor

The IR sensor is located on the W30 base only. Aim the remote control at the infrared sensor to operate the unit.

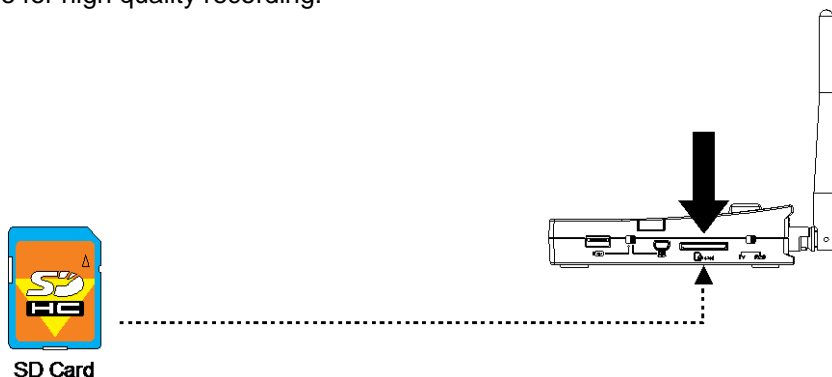


## External Memory Storage



W30 supports both SD memory card and USB flash drive for more image capture capacity. It can detect when there is an external storage media and automatically switch to the last detected storage. If no external storage is connected, all captured still images will be saved in the built-in memory.

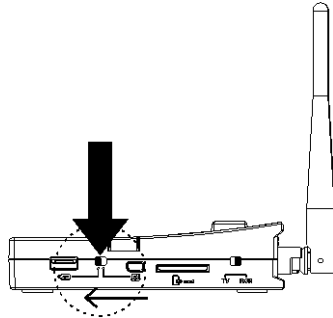
### Insert an SD Card

Insert the card with the contact facing down until it reaches the end. To remove the card, push to eject and pull the card out. The supported SD card capacity is from 1GB to 32GB (FAT32). We recommend using SDHC card with class-6 or above for high quality recording.

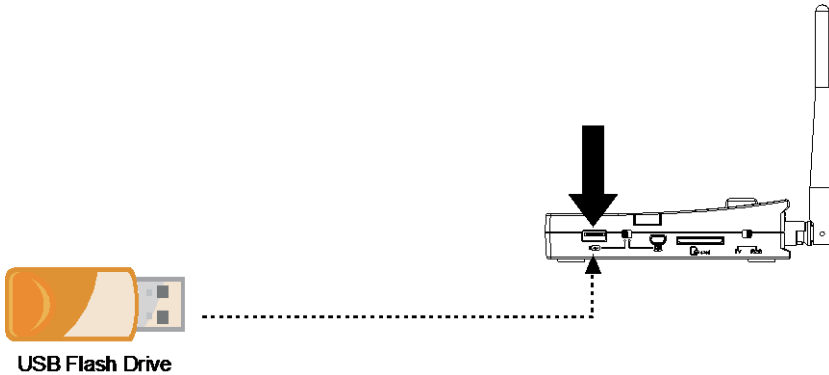


## Insert a USB Flash Drive

1. Set the USB switch on W30 base right panel to . W30 will then detect the USB flash drive and the  LED on the control panel will light up.



2. Connect the USB flash drive in the USB slot. W30 can support USB flash drive from 2GB to 64GB (FAT32). **Best to format the USB flash drive using W30.**

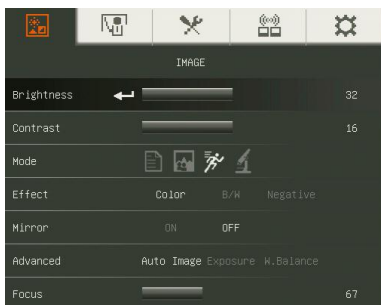


## OSD MENU

There are 5 tabs on the OSD menu: IMAGE, PRESENTATION, SETTING and SYSTEM. In Playback mode, you can access PLAYBACK OSD menu to enable the Slide Show feature and modify Slide Show interval and transition setting if desire.



For TV output, the RESOLUTION will be disabled in SETTING menu list.



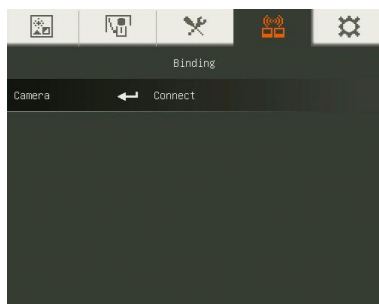
IMAGE



PRESENTATION



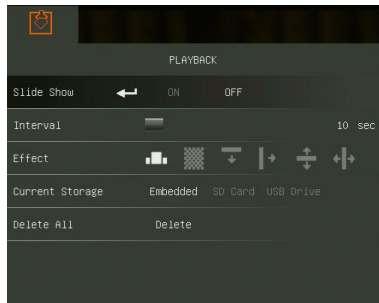
SETTING



BINDING



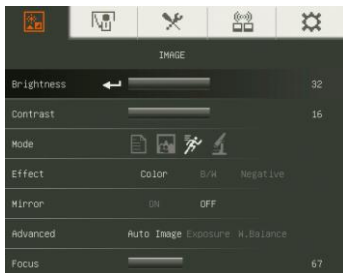
SYSTEM



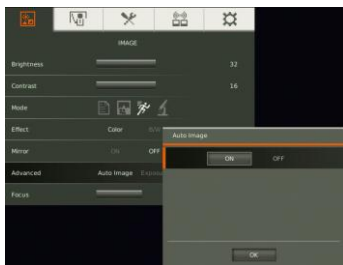
PLAYBACK



## Navigate the Menu and Submenu

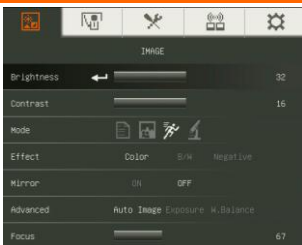


1. Press MENU button on the remote or control panel.
2. Press ► and ◀ to toggle between tabs
3. Press ▼ and ▲ to choose a selection in the menu list.
4. Press ◀ to make a selection.
5. Use ► and ◀ to adjust the setting or make a selection.
6. Press ◀ to enter submenu.
7. Press MENU to close the OSD menu.



## Image

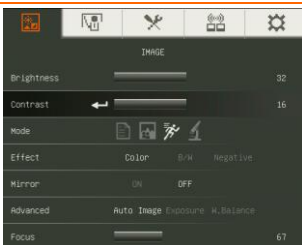
### Menu Screen



### Function

#### Brightness

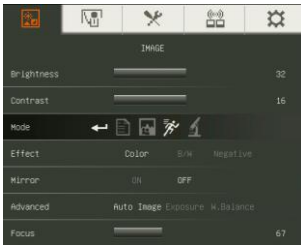
Adjust brightness level manually between 0 and 63.



#### Contrast

Adjust the contrast level manually between 0 and 255 under bright and dark environments.

## Menu Screen



## Function

### Mode

Select from the various image display settings.



**Sharp** - adjust the contrast along the edges making text appear more visible.



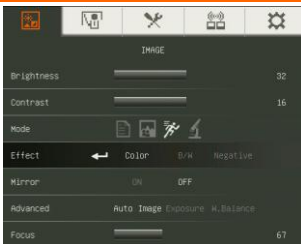
**Graphics** - adjust the gradient of image.



**Motion** - increase frame rate. Sufficient lighting is required when using this mode.

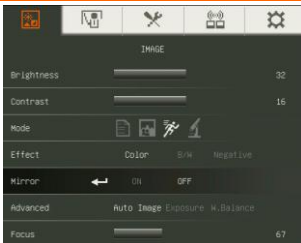


**Microscope** - automatically adjust optical zoom for microscopic viewing.



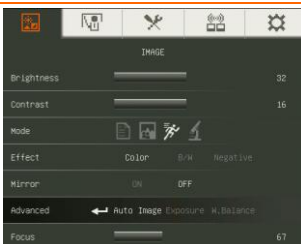
### Effect

Convert the image into positive (true color), monochrome (black and white) or negative.



### Mirror

Select to flip the image in Camera mode.

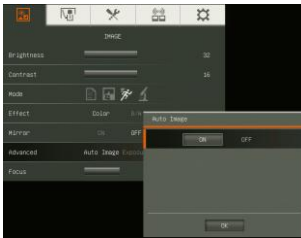


### Advanced

Select to set the Auto Image, Exposure, and White Balance settings.

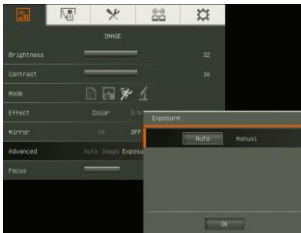
## Menu Screen

## Function



### Auto Image

Select ON or OFF to automatically adjust the white balance and exposure setting, and correct the color and exposure compensation.

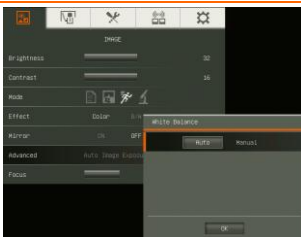


### Exposure

Select the exposure setting.

**AUTO** - automatically adjust the camera exposure and the amount of light required.

**MANUAL** - manually adjust the exposure level. The exposure can be adjusted up to 100.

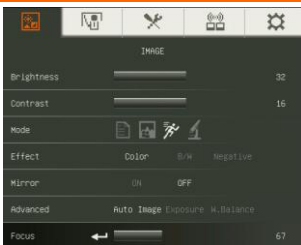


### White Balance

Select the White Balance setting for various light conditions or color temperature.

**AUTO** - automatically adjust the white balance.

**MANUAL** - manually adjust the red and blue color level. The color level can be adjusted up to 255.



### Focus

Manually adjust the focus.

# Presentation

## Menu Screen



## Function

### CAM / RGB IN

Select to change the layout of the CAM/RGB IN. The display layout can only be changed when W30 is in CAM/ RGB IN mode. To switch to this mode, press SOURCE button and select CAM/RGB IN.

This divides the screen into two parts. Half of the screen displays the image from W30 camera and the other half display the image from RGB IN.



CAM Right



CAM Below



CAM Left



CAM Top



### Split Screen

Select to change the layout of the Split Screen. The display layout can only be changed when the W30 is in SPLIT SCREEN mode. To switch to this mode, press SOURCE button and select SPLIT SCRN.

This divides the screen into two parts. Half of the screen displays the 8-thumbnail pictures from the memory source and the other half display the image from the W30 camera.



Pictures Left



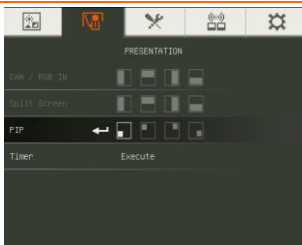
Pictures Top



Pictures Right



Pictures Below



### PIP

Select to change the location of the single thumbnail picture viewer. The location can only be changed when the W30 is in PIP mode. To switch to this mode, press SOURCE button and select PIP.

This displays the single thumbnail picture viewer at the corner of the screen and on top of the W30 camera live image.



Lower Left



Upper Left



Upper Right



Lower Right

## Function



## Setting

## Function

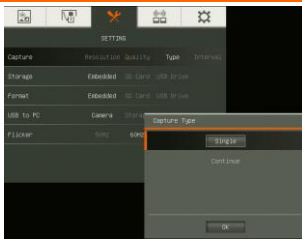


## Resolution

## Quality

## Menu Screen

## Function

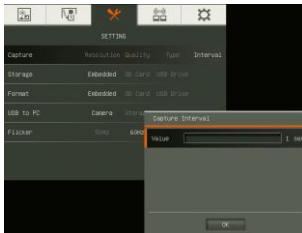


### Type

Select the capture type.

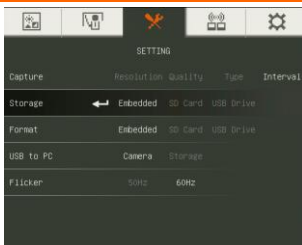
**Single** - capture one picture only.

**Continuous** - capture successive pictures.



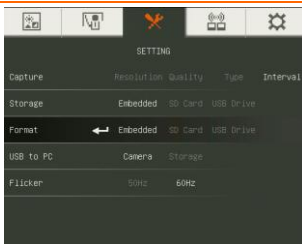
### Interval

Set the time interval for continuous capture. The length can be set up to 600 sec (10 min).



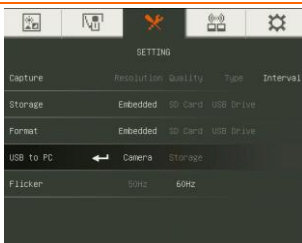
### Storage

Change the storage location.



### Format

Format to delete all the data in the selected memory.



### USB to PC

Select the status of the W30 when it is connected to the computer via USB. Make sure the USB switch on the right panel is set to **PC**.

**Camera** - can be used as a computer webcam or with our bundled software to record video and capture still image.

**Storage** - transfer the captured pictures from the memory to computer hard disk.

## Menu Screen



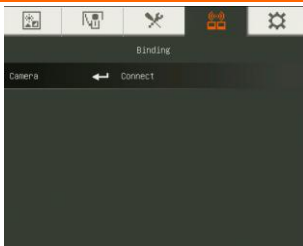
## Function

### Flicker

Select between 50Hz or 60Hz. Some display devices cannot handle high refresh rates. The image will flicker a couple of times as the output is switched to another refresh rate.


## Binding

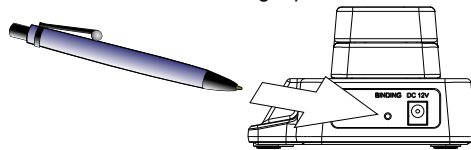
### Menu Screen



## Function

### Binding

Use this to bind the W30 camera with the base. To bind, Select Connect and press  to start binding. Then use a pen and poke the bind button on the right panel of W30 camera.



## System

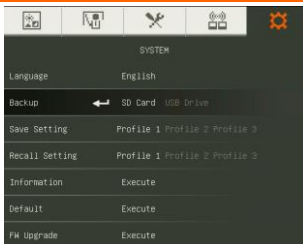
### Menu Screen



## Function

### Language

Change and select different language.



### Backup

Copy the image from the built-in memory to SD card or USB flash drive.

## Menu Screen



## Function

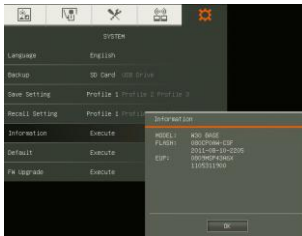
### Save Setting

Save current setting in the selected profile number. Only effect, mode, brightness and contrast settings can be saved.



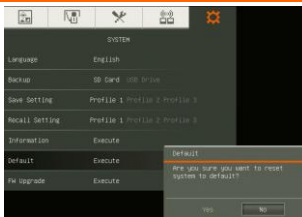
### Recall Setting

Restore the setting back to the selected profile number.



### Information

Display the product information.

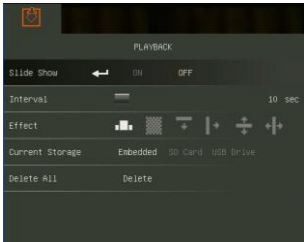
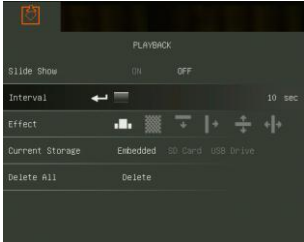










### Default

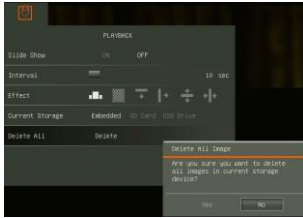
Restore all the settings into original factory default setting.



# Playback

Menu Screen	Function
	<b>Slide Show</b> Start/stop to display all captured images in an automated slide show.
	<b>Interval</b> Set the interval before displaying the next picture. The length can be set up to 100 sec.
	<b>Slide Show Effect</b> Select the slide show transition effect. <div>  Slide image              Wipe right           </div> <div>  Checker down              Split Vertical Out           </div> <div>  Wipe down              Split Horizontal Out           </div>
	<b>Current Storage</b> Select the source of the images.

## Menu Screen



## Function

### Delete All

Permanently delete all the data in selected memory source. A Warning Message will appear. Select YES to continue and NO to stop deleting all the data.

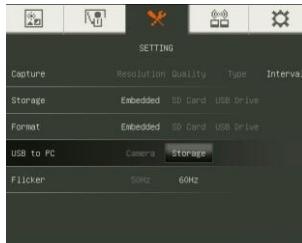
## Transfer Captured Images/Videos to a computer

This enables you to transfer the captured image from the built-in memory or SD to a computer.



The instruction below **MUST** be read and followed **BEFORE** connecting the USB cable.

1. Make sure to set the USB switch to **PC** for the computer to detect W30.
2. **MUST** set the USB to PC as STORAGE before connecting the USB cable.



3. When **"Mass Storage"** appears at the lower right corner of the presentation screen, you may now connect the USB cable.
4. Upon connecting the USB cable, the system automatically detects the new removable disk. You can now transfer the captured image(s) from the **W30 built-in memory** to the computer hard disk.

# Technical Specifications

## Image

Sensor	1/2" CMOS
Pixel Count	3 megapixels
Frame Rate	30 fps (max.)
White Balance	Auto / Manual
Exposure	Auto / Manual
Image mode	Sharp / Graphics / Motion / Microscope
Effect	Color / B/W / Negative / Mirror / Freeze
RGB output	1920 x 1080, 1600x1200, 1280x1024, 1280x720, 1024x768, 800x600
DVI-I output	HD 1080p 50Hz/60Hz; 1600x1200, 1280x1024, HD 720p 50Hz/60Hz; 1024x768, 800x600
Image Capture	240 Frames(XGA) ; 80 Frames(3M Pixel)

## Optics

Focusing	Auto / Manual
Shooting Area	330mm x 248mm
Zooming	16X (2X AVERZOOM™ + 8X Digital Zoom)

## Power

Power Source	DC 12V, 100-240V, 50-60Hz
Consumption	Base: 8W Camera: 5W

## Input/Output

RGB Input	15-Pins D-sub (VGA)
RGB Output	15-Pins D-sub (VGA)
CVBS/RS-232	Mini-DIN Jack (use CVBS/RS-232 Adapter cable)
Composite Video	RCA Jack
USB	USB2.0
DC 12V Input	Power Jack x 2

## Dimension

Camera Operating	520mm x 114mm x 336mm (+/-2mm include rubber foot)
Camera Folded	275mm x 114mm x 71mm (+/-2mm include rubber foot)
Camera Weight	1.6 kg (about 3.528lbs)
Base Operating	215mm x 155mm x 105mm (+/-2mm include rubber foot)
Base Folded	215mm x 155mm x 36mm (+/-2mm include rubber foot)
Base Weight	0.55 kg (about 1.213lbs)

## External Storage

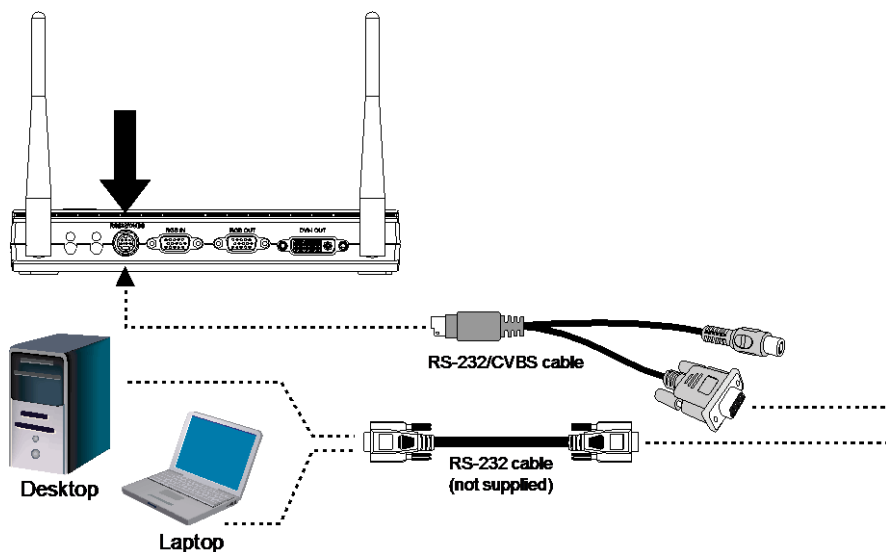
Secure Digital (SDHC)	1GB ~ 32GB (FAT32)
USB Flash Drive	2GB ~ 64GB (FAT32)

## Using the RS-232 Interface

W30 can be controlled using a computer or any centralized control panel through RS-232 connection. The command code for RS-232 is provided for the system integrator to be able to incorporate it with the system program.

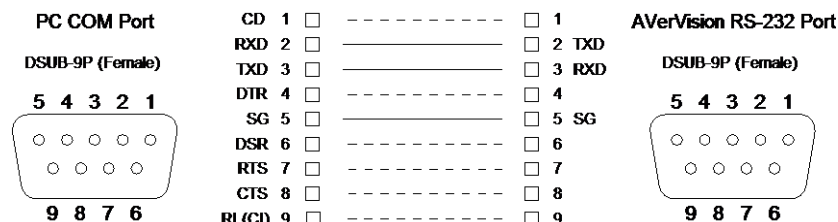
## Connect to the Computer RS-232

Locate the RS-232 port of the computer and connect it to RS-232 jack of RS-232/CVBS cable.



## RS-232 Cable Specifications

Make sure the RS-232 cable matches the cable specification design.



## RS-232 Transmission Specifications

- Start bit : 1 bit
- Data bit : 8 bit
- Stop bit : 1 bit
- Parity bit : None
- X parameter : None
- Baud rate(Communication speed) : 115200bps

## RS-232 Communication Format

Send Device Code(1 Byte) : 0x52  
 Type Code(1 Byte) : 0x0B  
 DataLength Code(1 Byte) : 0x03  
 Data Code(1 Byte) : See the Command Table for reference.  
 Data Code(2 Byte) : See the Command Table for reference.  
 Data Code(3 Byte) : See the Command Table for reference.  
 Receive Device Code(1 Byte) : 0x53  
 CheckSum Code(1 Byte) : See the Command Table for reference.  
 Format : Start + Type + DataLength + Data + CheckSum  
 Example : 0x52 + 0x0B + 0x03 + 0x3 + 0x01 + 0x00 + 0x00 + 0x53 + 0x5A (Command Power)

## RS-232 Send Command Table

Send Format : 0x52 + 0x0B + 0x03 + Data[0] + Data[1] + Data[2] + 0x53 + CheckSum

Receive Format : 0x53 + 0x00 + 0x02 + \*2 + \*3 + 0x52 + CheckSum

\*1 : CheckSum = 0x0B xor 0x03 xor Data[0] xor Data[1] xor Data[2] xor 0x53

\*2 : Receive data ok : 0x0B, ID error: 0x01, CheckSum error: 0x02, Not Command : 0x03, Function fail = 0x04

\*3 : Data[0], Return 0x00 if error

Function	Data[0]	Data[1]	Data[2]	CheckSum
POWER OFF	0x01	0x00	0x00	0x5A
IMAGE CAPTURE TYPE: SINGLE	0x02	0x00	0x00	0x59
IMAGE CAPTURE TYPE: CONTINUOUS	0x02	0x01	0x00	0x58
IMAGE CAPTURE CONTINUOUS INTERVAL INCREASE	0x03	0x00	0x00	0x58
IMAGE CAPTURE CONTINUOUS INTERVAL DECREASE	0x04	0x00	0x00	0x5F
IMAGE CAPTURE RESOLUTION: NORMAL	0x05	0x00	0x00	0x5E
IMAGE CAPTURE RESOLUTION: 3M	0x05	0x01	0x00	0x5F
TIMER START	0x06	0x00	0x00	0x5D

Function	Data[0]	Data[1]	Data[2]	CheckSum
TIMER PAUSE	0x07	0x00	0x00	0x5C
TIMER STOP	0x08	0x00	0x00	0x53
TIMER SET TIME	0x09	Value[1~120]	0x00	*1
PREVIEW MODE: TEXT	0x0B	0x00	0x00	0x50
PREVIEW MODE: GRAPHIC	0x0B	0x01	0x00	0x51
PREVIEW MODE: HIGH FRAME	0x0B	0x02	0x00	0x52
PREVIEW MODE: MICROSCOPE	0x0B	0x03	0x00	0x53
PLAYBACK FULL SCREEN	0x0C	0x00	0x00	0x57
MIRROR OFF	0x0E	0x00	0x00	0x55
MIRROR ON	0x0E	0x01	0x00	0x54
EFFECT: COLOR	0x10	0x00	0x00	0x4B
EFFECT: BW	0x10	0x01	0x00	0x4A
EFFECT: NEGATIVE	0x10	0x02	0x00	0x49
CONTRAST	0x11	Value[0~63]	0x00	*1
BRIGHTNESS	0x12	Value[0~255]	0x00	*1
AUTO IMAGE OFF	0x13	0x00	0x00	0x48
AUTO IMAGE ON	0x13	0x01	0x00	0x49
EXPOSURE: AUTO	0x14	0x00	0x00	0x4F
EXPOSURE: MANUAL	0x14	0x01	0x00	0x4E
EXPOSURE MANUAL INCREASE	0x15	0x00	0x00	0x4E
EXPOSURE MANUAL DECREASE	0x16	0x00	0x00	0x4D
WHITE BALANCE: AUTO	0x17	0x00	0x00	0x4C
WHITE BALANCE: MANUAL	0x17	0x01	0x00	0x4D
WHITE BALANCE BLUE INCREASE	0x18	0x00	0x00	0x43
WHITE BALANCE BLUE DECREASE	0x19	0x00	0x00	0x42
WHITE BALANCE RED INCREASE	0x1A	0x00	0x00	0x41
WHITE BALANCE RED DECREASE	0x1B	0x00	0x00	0x40
FLICKER: 50Hz	0x1C	0x00	0x00	0x47
FLICKER: 60Hz	0x1C	0x01	0x00	0x46

Function	Data[0]	Data[1]	Data[2]	CheckSum
FLICKER: AUTO	0x1C	0x02	0x00	0x45
PIP: OFF	0x23	0x00	0x00	0x78
PIP: ON	0x23	0x01	0x00	0x79
PIP POSITION: BOTTOM LEFT	0x24	0x00	0x00	0x7F
PIP POSITION: TOP LEFT	0x24	0x01	0x00	0x7E
PIP POSITION: TOP RIGHT	0x24	0x02	0x00	0x7D
PIP POSITION: BOTTOM RIGHT	0x24	0x03	0x00	0x7C
SPLITSCREEN: OFF	0x25	0x00	0x00	0x7E
SPLITSCREEN: ON	0x25	0x01	0x00	0x7F
SPLITSCREEN DIR: UPPER SCREEN	0x26	0x01	0x00	0x7C
SPLITSCREEN DIR: LOWER SCREEN	0x26	0x02	0x00	0x7F
SPLITSCREEN DIR: LEFT SCREEN	0x26	0x03	0x00	0x7E
SPLITSCREEN DIR: RIGHT SCREEN	0x26	0x04	0x00	0x79
STORAGE: EMBEDDED	0x2E	0x00	0x00	0x75
STORAGE: SD CARD	0x2E	0x01	0x00	0x74
STORAGE: THUMB DRIVE	0x2E	0x02	0x00	0x77
FORMAT: EMBEDDED	0x2F	0x00	0x00	0x74
FORMAT: SD CARD	0x2F	0x01	0x00	0x75
OUTPUT RESOLUTION: 1024x768	0x30	0x00	0x00	0x6B
OUTPUT RESOLUTION: 1280x720	0x30	0x01	0x00	0x6A
OUTPUT RESOLUTION: 1280x1024	0x30	0x02	0x00	0x69
OUTPUT RESOLUTION: 1600x1200	0x30	0x03	0x00	0x68
OUTPUT RESOLUTION: 1920x1080	0x30	0x04	0x00	0x6F
OUTPUT RESOLUTION: 800x600	0x30	0x05	0x00	0x6E
USB CONNECT: USB CAMERA	0x31	0x00	0x00	0x6A
USB CONNECT: MASS STORAGE	0x31	0x01	0x00	0x6B
BACKUP TO SD CARD	0x32	0x00	0x00	0x69
BACKUP TO THUMBDRIVE	0x32	0x01	0x00	0x68

Function	Data[0]	Data[1]	Data[2]	CheckSum
PROFILE SAVE: PROFILE 1	0x33	0x00	0x00	0x68
PROFILE SAVE: PROFILE 2	0x33	0x01	0x00	0x69
PROFILE SAVE: PROFILE 3	0x33	0x02	0x00	0x6A
PROFILE RECALL: PROFILE 1	0x34	0x00	0x00	0x6F
PROFILE RECALL: PROFILE 2	0x34	0x01	0x00	0x6E
PROFILE RECALL: PROFILE 3	0x34	0x02	0x00	0x6D
SLIDESHOW: OFF	0x36	0x00	0x00	0x6D
SLIDESHOW: ON	0x36	0x01	0x00	0x6C
SLIDESHOW EFFECT: NO EFFECT	0x37	0x00	0x00	0x6C
SLIDESHOW EFFECT: EFFECT 1	0x37	0x01	0x00	0x6D
SLIDESHOW EFFECT: EFFECT 2	0x37	0x02	0x00	0x6E
SLIDESHOW EFFECT: EFFECT 3	0x37	0x03	0x00	0x6F
SLIDESHOW EFFECT: EFFECT 4	0x37	0x04	0x00	0x68
SLIDESHOW EFFECT: RANDOM EFFECT	0x37	0x05	0x00	0x69
TVOUT MODE: NTSC	0x38	0x00	0x00	0x63
TVOUT MODE: PAL	0x38	0x01	0x00	0x62
TVOUT MODE: RGB	0x38	0x02	0x00	0x61
USBSWITCH: DEVICE	0x39	0x00	0x00	0x62
USBSWITCH: HOST	0x39	0x01	0x00	0x63
AUTO-TEST MODE: OFF	0x80	0x00	0x00	0xDB
AUTO-TEST MODE: ON	0x80	0x01	0x00	0xDA



## RS-232 Get Command Table

Send Format : 0x52 + 0x0A + 0x01 + Data[0] + 0x53 + CheckSum

Receive Format : 0x53 + 0x0C + 0x01 + ReData[0] + 0x53 + ReCheckSum

\*1 : ReCheckSum = 0x0C xor 0x01 xor ReData[0] xor 0x52.

Function	Data[0]	CheckSum Code	ReData[0]
Red Value	0x02	0x5A	Value[ ? ~ ? ]
Blue Value	0x03	0x5B	Value[ ? ~ ? ]
Power Status	0x04	0x5C	0 : OFF 1: ON
Lamp Status	0x05	0x5D	0 : OFF 1: ON
Display Status	0x06	0x5E	0: Camera Mode 1: Playback Mode 2: PC-1 Pass Through
Video Output Status	0x07	0x5F	0: VGA 1: TV
Freeze Status	0x08	0x50	0 : OFF 1: ON
Brightness Value	0x0A	0x52	Value[ ? ~ ? ]
Contrast Value	0x0B	0x53	Value[ ? ~ ? ]
LIGHT BOX Status	0x0C	0x54	0 : OFF 1: ON

## Troubleshooting

This section provides many useful tips on how to solve common problems while using the W30.

### There is no picture on the presentation screen.

1. Check all the connectors again as shown in this manual.
2. Check the on/off switch of the display output device.
3. Verify the setting of the display output device.
4. If you are presenting from a notebook or computer through the display output device, check the cable connection from computer RGB (VGA) output to RGB IN of W30 base and make sure W30 is in PC Mode.
5. Press RECONNECT button to reestablish connection with the W30 camera and base, or bind the W30 camera and the base again.

### I have set up the W30 and checked all the connections as specified in the manual but I cannot get a picture on the preferred presentation screen.

1. Once the power is connected the unit is set to standby mode. Press the POWER button to turn on.
2. If your display output device is on TV or any analog device, please switch the TV-RGB dip switch to TV.
3. The W30 camera could be power off, the battery needs charging,
4. The wireless signal could be low. Move the W30 camera closer to the base.

**The picture on the presentation screen is distorted or the image is blurry.**

1. Reset all changed settings, if any, to the original manufacturer default setting. Press MENU then go to SYSTEM > Default and select YES in the OSD menu.
2. Use the Brightness and Contrast menu functions to reduce the distortion if applicable.
3. If you discover that the image is blurry or out of focus, press the Auto Focus button on the control panel or remote control.


**There is no computer signal on presentation screen.**

1. Check all the cable connections among the display device, W30 base and your PC.
2. Connect your PC to the W30 base first before you power on your computer.
3. For notebook, repeatedly press FN+F5 to toggle between display modes and display the computer image on the presentation screen. For different command, please refer to your laptop manual.

**The presentation screen does not show the exact desktop image on my PC or Notebook after I toggle from Camera to PC mode.**

1. Return to your PC or Notebook, place the mouse on the desktop and right click, choose "Properties", choose "Setting" tab, click on "2" monitor and check the box "Extend my Windows desktop onto this monitor".
2. Then go back one more time to your PC or Notebook and place the mouse on the desktop and right click again.
3. This time choose "Graphics Options", then "Output To", then "Intel® Dual Display Clone", and then choose "Monitor + Notebook".
4. After you follow these steps, you should be able to see the same desktop image on your PC or Notebook as well as on the presentation screen.

**AVerVision W30 can't detect the inserted USB flash drive.**

Make sure the USB flash drive switch is set to  and check if the USB flash drive is properly inserted.

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