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.

CE Class A (EMC)

This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2004/108/EEC.

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 to correct this interference.

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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.

Class 2 Laser Product



LASER RADIATION DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT

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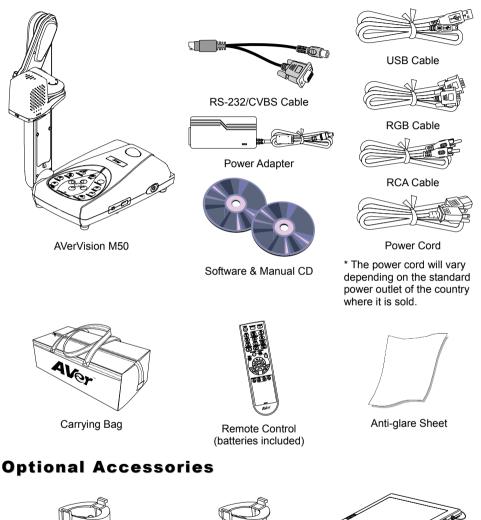
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Package Contents

Make sure the following items are included in the package.



Light Box

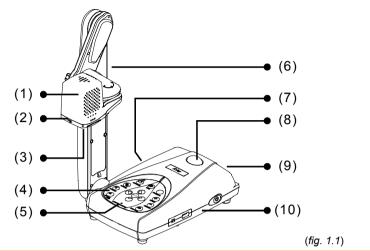
34mm Microscope Adapter



28mm Microscope Adapter

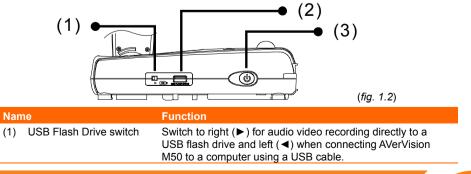


Get Familiar with the AVerVision M50



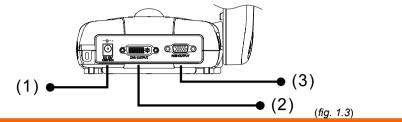
| Name | Function |
|----------------------|---|
| (1) Camera head | Contain the camera sensor. |
| (2) LED light switch | Turn on & off among 3 different light settings. |
| (3) Camera lens | Focus the image in the camera. |
| (4) Control panel | Easy access to various functions. |
| (5) Built-in MIC | Record audio when recording video clip. The recorded sound will be in monophonic. |
| (6) Arm | Extendable for viewing coverage. |
| (7) Left panel | Connections for microphone, speaker, and computer, SD card, and TV-RGB display output switch. |
| (8) IR sensor | Receive remote control commands. |
| (9) Rear panel | Connections for power and external display device. |
| (10) Right panel | On off switch for USB flash drive port. |

Right Panel



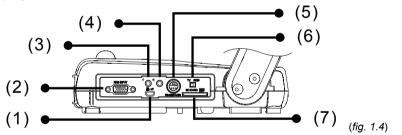
| Name | Function |
|--------------------------|---|
| (2) USB Flash Drive port | Insert a USB flash drive for audio video recording. |
| (3) Power button | Turn the unit on/standby mode. |

Rear Panel



| Name | Function |
|-----------------------|---|
| (1) DC12V port | Connect the power adapter into this port. |
| (2) DVI-I OUTPUT port | Connect the AVerVision M50 to any display device with DVI cable. |
| | If the display device does not support DVI-I, you can only view in Camera and Playback mode. |
| (3) RGB OUTPUT port | Connect the AVerVision M50 to any display device with RGB cable |

Left Panel



| Name | Function |
|----------------------|---|
| (1) Mini USB port | Connect to a USB port of a computer with a USB cable and use AVerVision M50 as a USB Camera or transfer the captured images/videos either from the memory source to computer. |
| (2) RGB INPUT port | Input the signal from a computer or other sources and pass it through to the RGB OUTPUT port only. Connect this port to the RGB/VGA output port of a computer. |
| (3) MIC port | Connect a 3.5mm plug microphone. The built-in mic will be disabled when an external MIC is connected to this port. |
| (4) Speaker port | Connect to an amplified speaker to playback recorded audio & video clip. |
| (5) 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. |



| Nai | | Function |
|-----|---------------|---|
| (6) | TV-RGB switch | TV switch to output display video from RS232/CVBS (via RCA connection), and RGB to RGB and DVI-I OUTPUT ports. |
| (7) | SD card slot | Insert the SD card with the label facing up. |
| ont | trol Panel | |
| | (1) • | (6) |
| | (2) • | MENU MENU |
| | (3) • | |
| | (4) | |
| | (5) • | |
| | | REEZE/ STOP AVer Vision M50 (12) (fig. 1.5) |
| Nam | ie | Function |
| (1) | MENU | Open and exit the OSD menu. |
| (2) | RECORDING | Start/Stop audio & video recording. Audio and video recording can be saved on a SD card or an USB Flash drive only. See <u>External</u> <u>Memory Storage</u> . |
| (3) | CAP/DEL | - Capture picture in Camera mode. In continuous capture mode, press this button again to stop. |
| (4) | PLAYBACK | - Delete the selected picture/video in Playback mode. |
| `` | - | View & playback captured still images and audio video files. |
| (5) | FREEZE / STOP | Pause or resume image display in Camera mode. Stop audio & video playback in Playback mode. |
| (6) | CAMERA / PC | Switch between Camera and Computer. |
| (7) | ▲,▼,◀, & ► | Pan any zoom-in image (above 10x zoom level) in both live and playback mode. |
| | | - Select options in OSD menu. |
| | | Use ▲&▼ to increase and decrease the video playback volume. |

- Use **◄**&► to play the video backward and forward.
- Move the Spotlight frame and Visor screen cover. ZOOM IN (8) Increase the image magnification in camera and picture playback mode. (9) ZOOM OUT Decrease the image magnification in camera and picture playback mode. (10) ENTER - Make a selection in Playback mode and OSD menu. - Start/Pause video playback. (11) AUTO FOCUS Adjust the focus automatically. (12) Built-in MIC Record audio automatically when recording video clip

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 M50 with the remote.

| | Nai | ne | Function |
|--|------|-------------------|---|
| (2) | (1) | POWER | Turn the unit on/standby. |
| (1) (3) (4) (26) (3) (4) (25) (3) (3) (4) (25) (3) (3) (5) (25) (3) (3) (5) (5) (24) (3) (3) (3) (4) (3) (4) (5) (5) (5) (5) (6) (5) (6) (7) (6) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7 | (2) | CAMERA / PC | Switch between Camera and computer mode. Camera mode displays the video signal from the built-in camera. PC mode displays the video signal from the RGB INPUT port of AVerVision M50. |
| | (3) | PLAYBACK | View the captured picture/video from the memory in 16-thumbnail images. |
| | (4) | SPOTLIGHT | Overlay a box frame on the presentation screen, you can move it around and adjust the box size |
| (17) • • • • • (15) • • (16) | (5) | VISOR | Cover part of the presentation screen and allow presenter to reveal the material as desire. |
| AVer | (6) | SPLIT SCREEN | Divide the screen into two. One side displays the live image from the built- in camera and the other side displays 8-thumbnail size picture/video from the memory. |
| (fig. 1.6) | (7) | PIP | Show a thumbnail size captured picture/video from the memory at the corner of the screen in Camera mode. |
| | (8) | SLIDE SHOW | Start/Stop automatically showing the captured picture/video one-by-one. |
| | (9) | EFFECT | Convert and display the image in BW, Negative or Color in Camera and Playback mode only. |
| | (10) | CAPTURE | Capture still image in Camera mode. In continuous capture mode, press this button again to stop. |
| | (11) | RECORDING | Start/Stop audio & video recording. Video recording can only be saved either in a SD memory card or a USB flash drive. |
| | (12) | DEL | Delete the selected picture/video in Playback mode. |
| | . , | AUTO IMAGE | Automatically adjust and set the white balance and exposure setting. |
| | (14) | BRIGHTNESS +/- | Adjust the brightness. |
| | | F | |



| | Name | Function |
|--|--------------------|---|
| | (15) DEFAULT | Reset at factory default setting. |
| | (16) NEAR / FAR | Adjust the focus manually. |
| | (17) ZOOM RESET | Reset zoom level to 100%. |
| (25) (25) (24) (23) (23) (23) (25) (25) (25) (25) (25) (25) (25) (25 | (18) ZOOM +/- | Increase/decrease the image magnification in camera and picture playback mode. |
| (22) (10) (21) (21) (21) (21) (21) (21) (21) (21) | (19) ENTER | Make a selection in Playback mode and OSD menu. Start/Pause video playback. |
| (19) (18) (14) | (20) ▲, ♥, ◀, & ► | Pan the image when image is above 10X zoom in live mode or in playback captured image mode. |
| | | Move the selection in Playback mode and in OSD menu. |
| (16) | | Use ▲&▼ to increase and decrease the video playback volume. |
| | | Use ◀ &▶ to play the video backward and forward. |
| AVer | | Move the Spotlight frame and Visor screen cover. |
| (fig. 1.6) | (21) MENU | Open and exit the OSD menu. |
| (iig. 1.0) | (22) AUTO FOCUS | Adjust the focus automatically. |
| | (23) FREEZE / STOP | Freeze live images.Stop video playback. |
| | (24) ROTATE | Rotate the image by 90° in Camera mode and Playback mode. |
| | (25) MIRROR | Flip the image in Camera mode. |
| | (26) TIMER | Start/Pause timer countdown. |



Making the Connections

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 AVerVision M50 with.

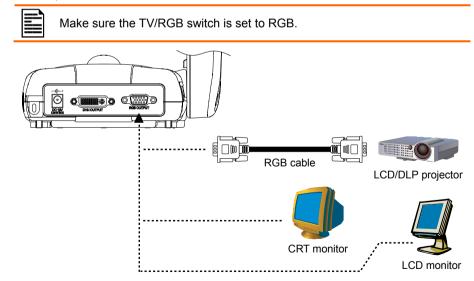
Set the TV-RGB Switch Setting

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. 1.4 # 6)

| Switch | AVerVision Port | | Display Device Port |
|--------|--|----|--|
| RGB | C CONTROL CONT | | C CONTROL CONT |
| | DVI-I OUTPUT | То | DVI-I INPUT |
| τν | RS232/CVBS (use RS-232/CVBS cable) | | VIDEO IN |

Connect to a Monitor or LCD/DLP Projector

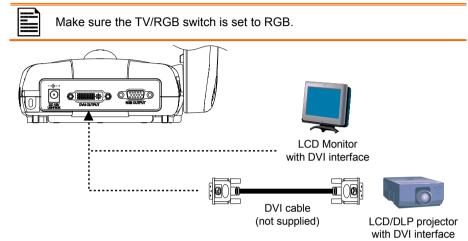
Locate the RGB (VGA) input port of the graphics display device and connect it to RGB OUTPUT port of AVerVision M50.





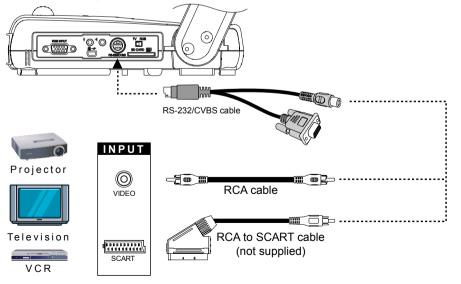
Connect to a Monitor or LCD/DLP Projector with DVI-I interface

Locate the DVI-I input port of the display device and connect it to DVI-I OUTPUT port of AVerVision M50.



Connect to a TV

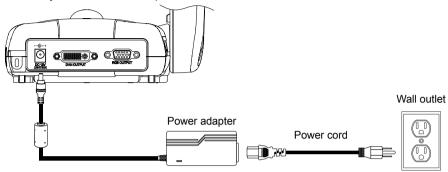
Locate the VIDEO or SCART RGB (if applicable) input port of the TV or Video equipment (i.e., VCR) to record your presentation and connect it to RCA jack of RS-232/CVBS cable.



8

Connecting the Power

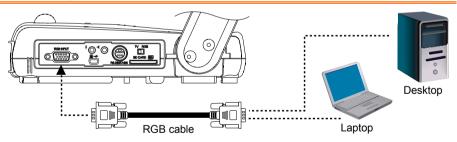
Connect the power adapter to a standard 100V~240V AC power outlet. The unit automatically turns on once the power is connected.



Connect to a Computer

Locate the RGB (VGA) output port of the computer or laptop and connect it to RGB INPUT port of AVerVision M50. The video signal from the RGB INPUT port is streamed to RGB and DVI-I OUTPUT port.

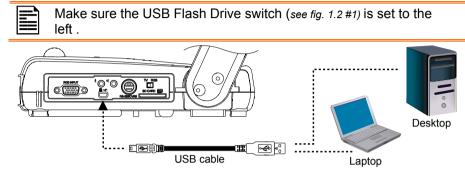
- To display computer image, press Camera/PC button on the control panel or remote control to switch AVerVision M50 to computer mode.
- For laptop to output display image, use the keyboard command (FN+F5) to switch between the display modes. For different command, please refer to your laptop manual.





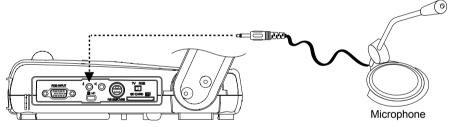
Connect to a Computer via USB

Locate the USB port of the computer or laptop and connect it to USB port of AVerVision M50. This enables you to use AVerVision M50 as a USB Camera or to transfer the captured pictures/videos from the memory and to computer. Also see "Transfer File from AVerVision M50 to PC".



Connect an External Microphone

Plug a 3.5mm mono microphone to b port. The built-in microphone on the control panel will be disabled when an external microphone is connected. The recorded audio will be in monophonic sound.



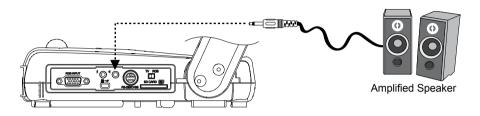


Connect an Amplified Speaker

Plug a 3.5mm plug amplified speaker to \P port. Only the audio from the video playback is supported.



We recommend connecting an amplified speaker to the Audio output port. Take caution when using earphones. Adjust the volume down on the remote to prevent hearing damage due to loudness.



Connect to a Microscope

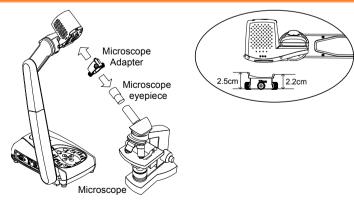
Connect the AVerVision M50 to a microscope enables you to examine microscopic objects on a big screen.

- 1. Change the image display mode to Microscope. Press **MENU** > select **MODE** > select **MICROSCOPE** and press **ENTER**.
- 2. Adjust the microscope and focus first. Then select the appropriate adapter size for the microscope eyepiece.
- 3. Remove the microscope eyepiece from the microscope and connect it with the microscope adapter. Fasten the 3 bolts until the adapter secures the eyepiece.
- 4. Attach the microscope adapter to the AVerVision camera head.



- Make sure to connect the longer hook to the front latch hole of the camera head.

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



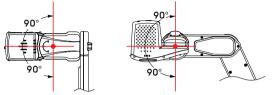


Setting Up AVerVision M50

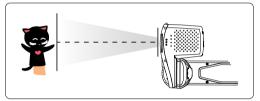
This section provides useful tips on how to adjust the AVerVision M50 to meet your needs.

Camera Head

The camera head can turn freely at 90° to the left and right and up and down.

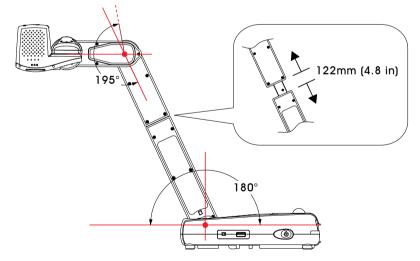


If the camera head is in upright position, you can also press ROTATE on the remote control twice to rotate the image in 180° .



Mechanical Arm

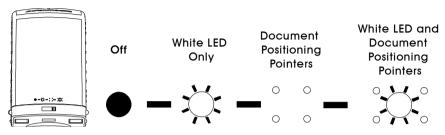
The mechanical arm design can extend for a full A4 paper viewing.





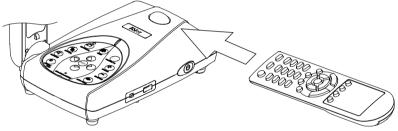
LED Light Switch

AVerVision M50 has patented four (4) laser positioning pointers feature that define the viewing area. This allows user quickly center the object underneath the camera. The three (3) various light and laser positioning pointers settings are indicated in the illustration below.



Infrared Sensor

Aim the remote control at the infrared sensor to operate the unit.



Anti-glare Sheet

The anti-glare sheet is a special coated film that helps eliminate any glare that maybe encountered while displaying very shiny objects or glossy surfaces such as magazines and pictures. To use, simply place the anti-glare sheet on top of the shiny document to reduce reflected light.



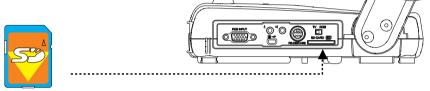


External Memory Storage

AVerVision M50 supports both SD memory card and USB flash drive for more image capture and audio & video recordings. AVerVision M50 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

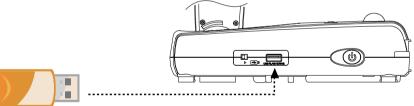
Insert the card with the contact facing down until it reaches the end. To remove the card, push to eject and pull the card out. The supported SD card capacity is from 1GB to 32GB.



SD Card

Insert a USB Flash Drive

Make sure to set the USB Flash Drive switch (*see fig. 1.2 #1*) to the right before inserting a USB flash drive. AVerVision M50 can support USB flash drive from 2GB to 64GB.



USB Flash Drive



OSD MENU

There are 5 tabs on the OSD menu: BASIC, ADVANCED, 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.







PRESENTATION



SYSTEM



ADVANCED

| - 🖓 🛛 🐯 | 1 🖅 1 🌱 |
|--------------------|---------|
| | SETTING |
| Capture Resolution | Normal |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

SETTING



PLAYBACK



Select Menu and Settings

| <u> </u> | | - | | Ĩ |
|------------|---|-------|----|---|
| * | - | | | |
| | | BASIC | | |
| Brightness | | | 17 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

- 1. Press MENU button on the remote or control panel.
- 2. Press ► and ◄ to toggle between tabs
- 3. Press ▼ and ▲ to select a menu option.
- 4. Press ENTER to make a selection and display the setting selection on the right.
- 5. Use ► and ◄ to adjust the setting or ▼ and ▲ to make a selection.
- 6. Press ENTER to make the new setting take effect.
- 7. Press MENU to close the OSD menu.

Basic

Menu Screen Basic Basic Contrast 128 Ruto Image On Mode Text Effect Color Default Execute

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.



Auto Image

Automatically adjust the white balance and exposure setting and correct the color and exposure compensation.



Menu Screen

| <i>-</i> | - All | 4 | 3 | |
|----------|-------|--------|-----------------------|--------------|
| | BASIC | | | |
| | | 21 | | |
| | | 140 | | |
| | | On | | |
| Mode | М | lotion | | P |
| | | 17 | | |
| | | Color | <u>Motic</u> Micro | on Iscope |
| | | ecute | | 0 |
| | | | | te |

Function

MODE

Select various image display settings.

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

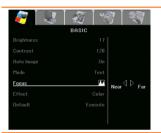
Graphics - adjust the gradient of image.

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

Microscope - automatically adjust optical zoom for microscopic viewing.

Macro - set to view when object is only 5 - 20 cm away from the camera.

Infinite - set to view when subject is at least 55cm away from the camera.



Focus

Manually adjust the focus.



Effect

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



Default

Restore all the settings into original factory default setting.



Advanced



<u> 1</u>

Auto

ADVANCED

White Balance

Function

Exposure

Select the exposure setting.

AUTO - automatically adjust the camera exposure and 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.



| 2 | [🐔 [💐 | ∛ [•₹ |
|--------------------|----------|--------------|
| | ADVANCED | |
| Exposure | | |
| Exposure Manual | | |
| White Balance | | |
| White Balance Blue | | |
| White Balance Red | | |
| Flicker | 60 Hz | 50 Hz |
| Night View | | <u>60 Hz</u> |
| | | |
| | | |

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.



Menu Screen

| - 🚑 🛛 🜉 | - A | ∛ \ ₹ |
|------------|----------|-------|
| | ADVANCED | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| Night View | Auto | Auto |
| | | Off |
| | | |

Function

Night View

Select to turn Night View OFF or AUTO.

When presenting in a low-light condition, Night View enables brighter images by automatically adjusting the exposure and the frame rate will be reduced.

Presentation

Menu Screen

Image: Second second

Function

Spotlight On/Off

Spotlight overlays a frame on the presentation screen. You can move the Spotlight around the presentation screen using the $\blacktriangle, \blacktriangledown, \blacktriangleleft, \And$ buttons.





PRESENTATION

E

Spotlight Shade

Change the opacity level of the area outside the box. The shaded area completely turns black when it is set to level 7.

Spotlight Color Select Spotlight frame color.



Spotlight Color

Menu Screen



Function

Spotlight Resize

Change Spotlight frame size. The frame blinks when it is in resizable mode. Use the $\blacktriangle, \lor, \triangleleft, \& \succ$ buttons to adjust the frame size and press ENTER to set the desire size.

Spotlight On Spotlight 0n Spotlight Shade 7 Spotlight Color 00 System 00 Visor Shade 7 PiP 0 Spottsreen 0 Timer 5 top Timer Set 60

Visor

Visor covers the presentation screen. The upper part of the presentation screen is slightly exposed. Use the ▲, ♥, ◄, & ► buttons to reveal more of the covered area.



| | 2 | } | 9 | |
|-------------|-----------|---|---|---|
| PRE | SENTATION | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Visor Shade | 7 | 0 | 7 | 7 |
| | | U | | |
| | | | | |
| | | | | |
| | | | | |

Visor Shade

Change the opacity level of the covered area. The shaded area completely turns black when it is set to level 7.

| | 27 🕅 | |
|------------------|-----------|--|
| PRE | SENTATION | |
| Spotlight | | |
| Spotlight Shade | | |
| Spotlight Color | | |
| Spotlight Resize | | |
| Visor | | |
| Visor Shade | | |
| PIP | | |
| Split Screen | | |
| Timer | Stop 📑 | |
| Timer Set | 60 🗖 | |
| | | |

PIP

Select the thumbnail playback screen location and show the thumbnail playback screen at the corner of the screen to recall the captured image from the memory in Camera mode.

- Lower Left
- Upper Left
- Upper Right
- Lower Right



Menu Screen **Function** 2 🧟 Split Screen PRESENTATION Divide the screen into two parts. Half of the screen displays the 8-thumbnail images and the other half display the image from the AVerVision M50 camera. Select the display location of the 8- thumbnail playback images. Split Screen -l eft Right H Below Top Timer 21 PRESENTATION Start/Pause/Stop the timer. The timer automatically counts up after the count down reaches zero to show the elapsed time. Even when you switch between Playback, PC or Camera modes, the timer will continue. Timer Stop Stop Timer Set 21 PRESENTATION Set the timer value. The timer can be set up to 120 minutes (2 hours). 60 1 60 120

Setting

Menu Screen

| - 🖉 💐 | 20 | |
|--------------------|---------|--------|
| | SETTING | |
| Capture Resolution | Normal | Normal |
| | | 5M |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Function

Capture Resolution

Select the capture size. In Normal setting, the capture size depends on the output resolution.

| Mode | Output Resolution | Captured Size | |
|--------|-------------------|---------------|--|
| | 1024 X 768 | 1024 X 768 | |
| | 1280 X 720; | 1280 X 720 | |
| Normal | 1920 X 1080 | 1200 × 720 | |
| | 1280 X 960; | 1280 X 960 | |
| | 1600 X 1200 | 1200 × 900 | |
| 5M | - | 2592 X 1944 | |



| Menu Screen | Function |
|---|---|
| | Capture Quality |
| SETTING | Select the capture compression setting. |
| Capture Resolution Normal Capture Quality High Finest | celeor the capture compression setting. |
| Capture Type Single | |
| Capture Interval 1 | |
| Recording Format MOV | |
| Recording Quality High | |
| Current Storage III Format Storage 4 | |
| · · · · · · · · · · · · · · · · · · · | |
| | Capture Type |
| SETTING | Select the capture type. |
| Capture Resolution Normal | |
| Capture Quality High | Single - capture one picture only. |
| Capture Type Single Single Continuous | Continuous - capture successive pictures. |
| Recording Format MOV | |
| Recording Quality High | |
| Current Storage 😨 | |
| i uimat Stui age 🔹 | |
| | Capture Interval |
| SETTING | • |
| Capture Resolution Normal | Set the interval before capturing the next picture. The |
| Capture Quality High | length can be set up to 600 sec (10 min). |
| Capture Type Continuous Capture Interval 1 | |
| Recording Format MOV | |
| Recording Quality High | |
| Current Storage 😨 Format Storage 🖌 | |
| Format Storage 🦨 | |
| | Recording Format |
| SETTING | - |
| Capture Resolution Normal | Select the video recording format between MOV and AVI. |
| Capture Quality High | |
| Capture Type Continuous Capture Interval 1 | |
| Recording Format MOV MOV | |
| Recording Quality High | |
| Current Storage 😰 | |
| Format Storage 🦨 | |
| | Recording Quality |
| SETTING | |
| Capture Resolution Normal | Select the video recording compression setting. |
| Capture Quality High | |
| Capture Type Continuous Capture Interval 1 | |
| Recording Format MOV | |
| Recording Quality High | |
| Current Storage 30 High Normal | |
| Format Storage | |
| | |



Menu Screen

| | | N |
|--------------------|--------|----------|
| Capture Resolution | Normal | |
| Capture Resolution | | |
| Capture Quality | | |
| Capture Type | | |
| Capture Interval | | |
| Recording Format | | |
| Recording Quality | | |
| Current Storage | 5 | 4 |
| Format Storage | | R |
| | | æ |

Function

Current Storage

Change the storage location. Audio & video recording can only be saved in SD memory card or USB flash drive.



Built-in Memory



-

SD Memory Card

USB Flash Drive

Format Storage

Format to delete all the data in the selected memory. A Warning Message will appear. Select \checkmark to continue and \clubsuit to stop formatting the storage.

System

Format Storage

| Menu Scre | en | Function |
|-----------|-----------|---|
| | A 🗐 💐 | Language |
| | SYSTEM | Change and select different language |
| Language | English | Change and select different language. |
| | 1024×768 | |
| | | |
| | 8 | |
| | Profile 1 | |
| | Profile 1 | |
| | 0 | |
| | | |
| | | |
| | A 🗐 💐 | Output Resolution |
| | SYSTEM | Sat the resolution to diaplay the image on ecroop. This |
| | English | Set the resolution to display the image on screen. This |



Set the resolution to display the image on screen. This selection will be disabled in TV output mode.

| Device | RGB OUTPUT | DVI OUTPUT |
|---------|------------|---------------|
| | 1024X768 | 1024X768 |
| RGB | 1280X720 | 1280X720 |
| Monitor | 1280X960 | 1280X960 |
| WORITO | 1600X1200 | 1600X1200 |
| | 1920X1080 | 1920X1080 |
| | | HD 720P 50HZ |
| LCD TV | | HD 720P 60HZ |
| LCD IV | - | HD 1080P 50HZ |
| | | HD 1080P 60HZ |



SYSTEM Select the status of the AVerVision M50 when it is connected to the computer via USB. Make sure the USB Flash Drive switch is set to the left. USB Camera USB Camera USB State USB Camera - can be used as a computer webcam or with our bundled software to record video and capture still image. Mass Storage - transfer the captured pictures/videos from the memory to computer hard disk. Backup STI Copy the image from the built-in memory to SD or USB flash drive 18 50 Backup **Profile Save** 21 3 Save current setting in the selected profile number. Only effect, mode, brightness and contrast settings can be saved. Profile Save Profile 1 Profile 1 27 - A 1 **Profile Recall** 97 Restore the setting back to the selected profile number. Profile Recall Profile 1 Profile 1

Function

USB State

Menu Screen



| Menu Screen | | | Fu | |
|-------------------|--------|---------|----------------------------|------|
| | 2 | × | 7 💐 | Infe |
| | SYSTEM | | | Dis |
| Language | | | DSP1: | DIS |
| Output Resolution | | | 080CP0F3-BW7 0908172157 | |
| USB State | | | | |
| Backup | | | DSP2: | |
| Profile Save | | | 080CP0F3-BW6 0908171943 | |
| Profile Recall | | | 0.000 | |
| Information | | \odot | DSP3: 080CP0F3-BW5 | |
| | | | 0908172042 | |
| | | | | |

unction

nformation

Display product code

Playback

| Menu Screen | | |
|---------------------|----------|-----------|
| | | |
| 1 | PLAYBACK | |
| Slide Show | On | |
| Slide Show Interval | | <u>On</u> |
| Slide Show Effect | | |
| Current Storage | 30 | |
| Delete All | | |
| | | |
| | | |
| | | |
| | | |

PLAYBACK

1 100

Slide Show Interval

Function

Slide Show

Display all captured still pictures in an automated slide show. The video file will be skipped.

Slide Show Interval

Set the interval before displaying the next picture. The length can be set up to 100 sec.

| АЧВАСК | |
|---------|---------------|
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| <u></u> | |
| 50 | |
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| | |
| | 0n 1 20 |

Slide Show Effect

Select the slide show transition effect.



No effect



Blinds

Split Horizontal In



Split Vertical Out





| Menu Screen | Function |
|---|--|
| PLAYBACK Siide Show On Siide Show Interval 1 Siide Show Effect O <u>Ourrent Storage</u> Delete All Execute | Current Storage Select the source of the images. |
| PLAYBACK Slide Show Interval 1 Slide Show Effect O Current Storage IB Delete All Execute | Delete All Permanently delete all the data in selected memory source. A Warning Message will appear. Select ✓ to continue and 🗴 to stop formatting the storage. |

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 Flash Drive switch (*see fig. 1.2 #1*) to the right for the computer to detect AVerVision M50.
- 2. MUST set the USB STATE as MASS STORAGE before connecting the USB cable.



- 3. When "Mass Storage Start..." 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 AVerVision M50 built-in memory to the computer hard disk.



Technical Specifications

Image

| - | |
|---------------|--|
| Sensor | 1/2.5" Progressive Scan CMOS |
| Pixel Count | 5 megapixels |
| Frame Rate | 30 fps (max.) |
| White Balance | Auto / Manual |
| Exposure | Auto / Manual |
| Image mode | Sharp / Graphics / Motion / Microscope / Macro / Infinite |
| Effect | Color / B/W / Negative / Mirror / Rotate / Freeze |
| RGB output | HD 1080p 60Hz (Reduce blanking); HD 720p 60Hz; UXGA 60 Hz; XGA 60 Hz; 1280 x 960 |
| DVI-I output | HD 1080p 60Hz; HD 720p 60Hz; UXGA 60 Hz; XGA 60 Hz; 1280 x 960; 1080P 50HZ; 1080P 60HZ; 720P 50HZ; 720P 60HZ |
| Image Capture | 240 Frames(XGA) ; 80 Frames(5M Pixel) |

Optics

| Lens | F3.2 (Wide); F6.8 (Tele) |
|---------------|---|
| Focusing | Auto / Manual |
| Shooting Area | A4 Landscape/ Portrait 400mm x 300mm (47cm camera height) |
| Zooming | 10X AVEROPTICAL™ (5X Optical+2X AVERZOOM™) 8X Digital Zoom |

Power

| Power Source | DC 12V, 100-240V, 50-60Hz |
|--------------|---|
| Consumption | 18 Watts (lamp off); 20 Watts (lamp on) |

Lighting

| | Lamp Type | LED light with laser pointer |
|--|-----------|------------------------------|
|--|-----------|------------------------------|

Input/Output

| RGB Input | 15-Pins D-sub (VGA) |
|-----------------|---|
| RGB Output | 15-Pins D-sub (VGA) |
| DVI-I Output | DVI-I Type |
| CVBS/RS-232 | Mini-DIN Jack (use CVBS/RS-232 Adapter cable) |
| Composite Video | RCA Jack |
| USB | USB2.0 |
| DC 12V Input | Power Jack |
| MIC | Phone Jack |
| Speaker | Phone Jack |



Dimension

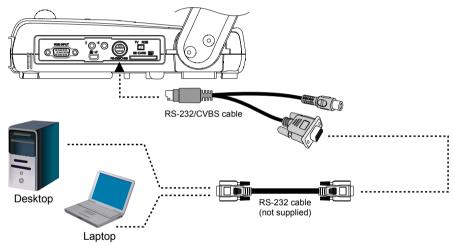
| Operating | 471mm x 174mm x 543mm (+/-2mm include rubber foot) |
|-----------|--|
| Folded | 367mm x 174mm x 63mm (+/-2mm include rubber foot) |
| Weight | 2.1 kg (about 4.629 lbs) |

External Storage

| Secure Digital (SD) | 1 GB ~ 32GB (FAT 32, 16, 12) |
|---------------------|------------------------------|
| USB Flash Drive | 2GB ~ 64GB (FAT 32, 16, 12) |

RS-232 Diagram Connection

AVerVision M50 can be controlled using a computer or any centralized control panel through RS-232 connection.



RS-232 Cable Specifications

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



RS-232 Transmission Specifications

- Start bit
- Data bit
- Stop bit
- Parity bit
- X parameter
- Baud rate(Communication speed)

- : 1 bit
- :8 bit
- : 1 bit
- : None
- : None
- : 9600bps

RS-232 Communication Format

| Start Code(1 Byte) | : 0xFF |
|-------------------------|--|
| Type Code(1 Byte) | : 0x70 |
| DataLength Code(1 Byte) | : 0x01 |
| Data Code(1 Byte) | : See the Command Table for reference. |
| CheckSum Code(1 Byte) | : See the Command Table for reference. |
| Format | : Start + Type + DataLength + Data + CheckSum |
| Example | : 0xFF + 0x70 + 0x01+ 0x1 + 0x70 (Command Power) |

RS-232 Command Table

Send Format : 0x52 + 0x05 + 0x01 + Command + 0x53 + CheckSum Receive Format : 0x51 + 0x00 + 0x01 + 0x05 + 0x51 + 0x55

| Function | Command Code | CheckSum Code | RS-232 Code |
|--------------|--------------|---------------|-------------------|
| POWER | 00 | 57 | 52,05,01,00,53,57 |
| PC/ CAMERA | 4A | 1D | 52,05,01,4A,53,1D |
| PLAYBACK | 0B | 5C | 52,05,01,0B,53,5C |
| TIMER | 01 | 56 | 52,05,01,01,53,56 |
| SPOTLIGHT | 02 | 55 | 52,05,01,02,53,55 |
| VISOR | 03 | 54 | 52,05,01,03,53,54 |
| MIRROR | 04 | 53 | 52,05,01,04,53,53 |
| SPLIT SCREEN | 05 | 52 | 52,05,01,05,53,52 |
| PIP | 06 | 51 | 52,05,01,06,53,51 |
| ROTATE | 07 | 50 | 52,05,01,07,53,50 |
| EFFECT | 08 | 5F | 52,05,01,08,53,5F |
| SLITE SHOW | 09 | 5E | 52,05,01,09,53,5E |
| FREEZE/STOP | 0C | 5B | 52,05,01,0C,53,5B |
| RECORDING | 0A | 5D | 52,05,01,0A,53,5D |
| CAPTURE | 0D | 5A | 52,05,01,0D,53,5A |
| AUTO FOCUS | 0F | 58 | 52,05,01,0F,53,58 |
| AUTO IMAGE | 10 | 47 | 52,05,01,10,53,47 |
| MENU | 0E | 59 | 52,05,01,0E,53,59 |



| Function | Command Code | CheckSum Code | RS-232 Code |
|----------------|--------------|---------------|-------------------|
| DEL | 11 | 46 | 52,05,01,11,53,46 |
| ARROW - UPPER | 12 | 45 | 52,05,01,12,53,45 |
| ARROW - LEFT | 13 | 44 | 52,05,01,13,53,44 |
| ARROR - ENTER | 14 | 43 | 52,05,01,14,53,43 |
| ARROW - RIGHT | 15 | 42 | 52,05,01,15,53,42 |
| ZOOM + | 17 | 40 | 52,05,01,17,53,40 |
| EXPOSURE + | 18 | 4F | 52,05,01,18,53,4F |
| ARROR - DOWN | 16 | 41 | 52,05,01,16,53,41 |
| ZOOM - | 4B | 1C | 52,05,01,4B,53,1C |
| EXPOSURE - | 4C | 1B | 52,05,01,4C,53,1B |
| ZOOM RESET | 19 | 4E | 52,05,01,19,53,4E |
| NER | 1A | 4D | 52,05,01,1A,53,4D |
| FAR | 1B | 4C | 52,05,01,1B,53,4C |
| DEFAULT | 1C | 4B | 52,05,01,1C,53,4B |
| PC PASSTHROUGH | 4D | 1A | 52,05,01,4D,53,1A |
| CAMERA | 4E | 19 | 52,05,01,4E,53,19 |

RS-232 Function Table

Send Format : 0x52 + 0x0B + 0x03 + Data[0] + Data[1] + Data[2] + 0x53 + CheckSum Receive Format : 0x51 + 0x00 + 0x01 + 0x0B + 0x51 + 0x5B

| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|--|---------|---------|---------|------------------|-------------------------|
| POWER OFF | 0x01 | 0x00 | 0x00 | 0x5A | 52,0B,03,01,00,00,53,5A |
| POWER ON | 0x01 | 0x01 | 0x00 | 0x5B | 52,0B,03,01,01,00,53,5B |
| IMAGE CAPTURE TYPE: SINGLE | 0x02 | 0x00 | 0x00 | 0x59 | 52,0B,03,02,00,00,53,59 |
| IMAGE CAPTURE TYPE: CONTINUOUS | 0x02 | 0x01 | 0x00 | 0x58 | 52,0B,03,02,01,00,53,58 |
| IMAGE CAPTURE CONTINUOUS INTERVAL INCREASE | 0x03 | 0x00 | 0x00 | 0x58 | 52,0B,03,03,00,00,53,58 |
| IMAGE CAPTURE CONTINUOUS INTERVAL DECREASE | 0x04 | 0x00 | 0x00 | 0x5F | 52,0B,03,04,00,00,53,5F |

| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|---|---------|--------------|---------|------------------|-------------------------|
| IMAGE CAPTURE RESOLUTION: NORMAL | 0x05 | 0x00 | 0x00 | 0x5E | 52,0B,03,05,00,00,53,5E |
| IMAGE CAPTURE RESOLUTION: 5M | 0x05 | 0x01 | 0x00 | 0x5F | 52,0B,03,05,01,00,53,5F |
| TIMER START | 0x06 | 0x00 | 0x00 | 0x5D | 52,0B,03,06,00,00,53,5D |
| TIMER PAUSE | 0x07 | 0x00 | 0x00 | 0x5C | 52,0B,03,07,00,00,53,5C |
| TIMER STOP | 0x08 | 0x00 | 0x00 | 0x53 | 52,0B,03,08,00,00,53,53 |
| TIMER SET TIME | 0x09 | Value[1~120] | 0x00 | *1 | *1 |
| NIGHTVIEW OFF | 0x0A | 0x00 | 0x00 | 0x51 | 52,0B,03,0A,00,00,53,51 |
| NIGHTVIEW ON | 0x0A | 0x01 | 0x00 | 0x50 | 52,0B,03,0A,01,00,53,50 |
| PREVIEW MODE: TEXT | 0x0B | 0x00 | 0x00 | 0x50 | 52,0B,03,0B,00,00,53,50 |
| PREVIEW MODE: GRAPHIC | 0x0B | 0x01 | 0x00 | 0x51 | 52,0B,03,0B,01,00,53,51 |
| PREVIEW MODE: HIGH FRAME | 0x0B | 0x02 | 0x00 | 0x52 | 52,0B,03,0B,02,00,53,52 |
| PREVIEW MODE: MICROSCOPE | 0x0B | 0x03 | 0x00 | 0x53 | 52,0B,03,0B,03,00,53,53 |
| PREVIEW MODE: MACRO | 0x0B | 0x04 | 0x00 | 0x54 | 52,0B,03,0B,04,00,53,54 |
| PREVIEW MODE: INFINITE | 0x0B | 0x05 | 0x00 | 0x55 | 52,0B,03,0B,05,00,53,55 |
| PLAYBACK FULL SCREEN | 0x0C | 0x00 | 0x00 | 0x57 | 52,0B,03,0C,00,00,53,57 |
| MIRROR OFF | 0x0E | 0x00 | 0x00 | 0x55 | 52,0B,03,0E,00,00,53,55 |
| MIRROR ON | 0x0E | 0x01 | 0x00 | 0x54 | 52,0B,03,0E,01,00,53,54 |
| ROTATE 0 | 0x0F | 0x00 | 0x00 | 0x54 | 52,0B,03,0F,00,00,53,54 |
| ROTATE 90 | 0x0F | 0x01 | 0x00 | 0x55 | 52,0B,03,0F,01,00,53,55 |
| ROTATE 180 | 0x0F | 0x02 | 0x00 | 0x56 | 52,0B,03,0F,02,00,53,56 |
| ROTATE 270 | 0x0F | 0x03 | 0x00 | 0x57 | 52,0B,03,0F,03,00,53,57 |



| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|--------------------------------------|---------|--------------|---------|------------------|-------------------------|
| EFFECT: COLOR | 0x10 | 0x00 | 0x00 | 0x4B | 52,0B,03,10,00,00,53,4B |
| EFFECT: B/W | 0x10 | 0x01 | 0x00 | 0x4A | 52,0B,03,10,01,00,53,4A |
| EFFECT: NEGATIVE | 0x10 | 0x02 | 0x00 | 0x49 | 52,0B,03,10,02,00,53,49 |
| CONTRAST | 0x11 | Value[0~63] | 0x00 | *1 | *1 |
| BRIGHTNESS | 0x12 | Value[0~255] | 0x00 | *1 | *1 |
| AUTO IMAGE OFF | 0x13 | 0x00 | 0x00 | 0x48 | 52,0B,03,13,00,00,53,48 |
| AUTO IMAGE ON | 0x13 | 0x01 | 0x00 | 0x49 | 52,0B,03,13,01,00,53,49 |
| EXPOSURE: AUTO | 0x14 | 0x00 | 0x00 | 0x4F | 52,0B,03,14,00,00,53,4F |
| EXPOSURE: MANUAL | 0x14 | 0x01 | 0x00 | 0x4E | 52,0B,03,14,01,00,53,4E |
| EXPOSURE MANUAL INCREASE | 0x15 | 0x00 | 0x00 | 0x4E | 52,0B,03,15,00,00,53,4E |
| EXPOSURE MANUAL DECREASE | 0x16 | 0x00 | 0x00 | 0x4D | 52,0B,03,16,00,00,53,4D |
| WHITE BALANCE: AUTO | 0x17 | 0x00 | 0x00 | 0x4C | 52,0B,03,17,00,00,53,4C |
| WHITE BALANCE: MANUAL | 0x17 | 0x01 | 0x00 | 0x4D | 52,0B,03,17,01,00,53,4D |
| WHITE BALANCE BLUE INCREASE | 0x18 | 0x00 | 0x00 | 0x43 | 52,0B,03,18,00,00,53,43 |
| WHITE BALANCE BLUE DECREASE | 0x19 | 0x00 | 0x00 | 0x42 | 52,0B,03,19,00,00,53,42 |
| WHITE BALANCE RED INCREASE | 0x1A | 0x00 | 0x00 | 0x41 | 52,0B,03,1A,00,00,53,41 |
| WHITE BALANCE RED DECREASE | 0x1B | 0x00 | 0x00 | 0x40 | 52,0B,03,1B,00,00,53,40 |
| FLICKER: 50Hz | 0x1C | 0x00 | 0x00 | 0x47 | 52,0B,03,1C,00,00,53,47 |
| FLICKER: 60Hz | 0x1C | 0x01 | 0x00 | 0x46 | 52,0B,03,1C,01,00,53,46 |
| FLICKER: AUTO | 0x1C | 0x02 | 0x00 | 0x45 | 52,0B,03,1C,02,00,53,45 |



| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|-------------------------------------|---------|---------|---------|------------------|-------------------------|
| SPOTLIGHT: OFF | 0x1D | 0x00 | 0x00 | 0x46 | 52,0B,03,1D,00,00,53,46 |
| SPOTLIGHT: ON | 0x1D | 0x01 | 0x00 | 0x47 | 52,0B,03,1D,01,00,53,47 |
| SPOTLIGHT SHADE Level 0 | 0x1E | 0x00 | 0x00 | 0x45 | 52,0B,03,1E,00,00,53,45 |
| SPOTLIGHT SHADE Level 4 | 0x1E | 0x01 | 0x00 | 0x44 | 52,0B,03,1E,01,00,53,44 |
| SPOTLIGHT SHADE Level 7 | 0x1E | 0x02 | 0x00 | 0x47 | 52,0B,03,1E,02,00,53,47 |
| SPOTLIGHT COLOR: RED | 0x1F | 0xF9 | 0x00 | 0xBD | 52,0B,03,1F,F9,00,53,BD |
| SPOTLIGHT COLOR: GREEN | 0x1F | 0xFA | 0x00 | 0xBE | 52,0B,03,1F,FA,00,53,BE |
| SPOTLIGHT COLOR: BLUE | 0x1F | 0xFC | 0x00 | 0xB8 | 52,0B,03,1F,FC,00,53,B8 |
| SPOTLIGHT RESIZE | 0x20 | 0x00 | 0x00 | 0x7B | 52,0B,03,20,00,00,53,7B |
| VISOR: OFF | 0x21 | 0x00 | 0x00 | 0x7A | 52,0B,03,21,00,00,53,7A |
| VISOR: ON | 0x21 | 0x01 | 0x00 | 0x7B | 52,0B,03,21,01,00,53,7B |
| VISOR SHADE Level 0 | 0x22 | 0x00 | 0x00 | 0x80 | 52,0B,03,22,00,00,53,79 |
| VISOR SHADE Level 4 | 0x22 | 0x01 | 0x00 | 0x83 | 52,0B,03,22,01,00,53,78 |
| VISOR SHADE Level 7 | 0x22 | 0x02 | 0x00 | 0x85 | 52,0B,03,22,02,00,53,7B |
| PIP: OFF | 0x23 | 0x00 | 0x00 | 0x78 | 52,0B,03,23,00,00,53,78 |
| PIP: ON | 0x23 | 0x01 | 0x00 | 0x79 | 52,0B,03,23,01,00,53,79 |
| PIP POSITION: BOTTOM LEFT | 0x24 | 0x00 | 0x00 | 0x7F | 52,0B,03,24,00,00,53,7F |
| PIP POSITION: TOP LEFT | 0x24 | 0x01 | 0x00 | 0x7E | 52,0B,03,24,01,00,53,7E |
| PIP POSITION: TOP RIGHT | 0x24 | 0x02 | 0x00 | 0x7D | 52,0B,03,24,02,00,53,7D |
| PIP POSITION: BOTTOM RIGHT | 0x24 | 0x03 | 0x00 | 0x7C | 52,0B,03,24,03,00,53,7C |
| SPLITSCREEN: OFF | 0x25 | 0x00 | 0x00 | 0x7E | 52,0B,03,25,00,00,53,7E |
| SPLITSCREEN: ON | 0x25 | 0x01 | 0x00 | 0x7F | 52,0B,03,25,01,00,53,7F |
| SPLITSCREEN DIR: UPPER SCREEN | 0x26 | 0x01 | 0x00 | 0x7C | 52,0B,03,26,01,00,53,7C |



| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|-------------------------------------|---------|---------|---------|------------------|-------------------------|
| SPLITSCREEN DIR: LOWER SCREEN | 0x26 | 0x02 | 0x00 | 0x7F | 52,0B,03,26,02,00,53,7F |
| SPLITSCREEN DIR: LEFT SCREEN | 0x26 | 0x03 | 0x00 | 0x7E | 52,0B,03,26,03,00,53,7E |
| SPLITSCREEN DIR: RIGHT SCREEN | 0x26 | 0x04 | 0x00 | 0x79 | 52,0B,03,26,04,00,53,79 |
| RECORD: OFF | 0x27 | 0x00 | 0x00 | 0x7C | 52,0B,03,27,00,00,53,7C |
| RECORD: ON | 0x27 | 0x01 | 0x00 | 0x7D | 52,0B,03,27,01,00,53,7D |
| RECORD FORMAT: MOV | 0x28 | 0x00 | 0x00 | 0x73 | 52,0B,03,28,00,00,53,73 |
| RECORD FORMAT: AVI | 0x28 | 0x01 | 0x00 | 0x72 | 52,0B,03,28,01,00,53,72 |
| MOVIE FAST REWIND | 0x29 | 0x00 | 0x00 | 0x72 | 52,0B,03,29,00,00,53,72 |
| MOVIE FAST FORWARD | 0x2A | 0x00 | 0x00 | 0x71 | 52,0B,03,2A,00,00,53,71 |
| MOVIE VOL INC | 0x2B | 0x00 | 0x00 | 0x70 | 52,0B,03,2B,00,00,53,70 |
| MOVIE VOL DEC | 0x2C | 0x00 | 0x00 | 0x77 | 52,0B,03,2C,00,00,53,77 |
| RECORD QUALITY: STANDARD | 0x2D | 0x00 | 0x00 | 0x76 | 52,0B,03,2D,00,00,53,76 |
| RECORD QUALITY: FINE | 0x2D | 0x01 | 0x00 | 0x77 | 52,0B,03,2D,01,00,53,77 |
| RECORD QUALITY: FINEST | 0x2D | 0x02 | 0x00 | 0x74 | 52,0B,03,2D,02,00,53,74 |
| STORAGE: EMBEDDED | 0x2E | 0x00 | 0x00 | 0x75 | 52,0B,03,2E,00,00,53,75 |
| STORAGE: SD CARD | 0x2E | 0x01 | 0x00 | 0x74 | 52,0B,03,2E,01,00,53,74 |
| STORAGE: THUMB DRIVE | 0x2E | 0x02 | 0x00 | 0x77 | 52,0B,03,2E,02,00,53,77 |
| FORMAT: EMBEDDED | 0x2F | 0x00 | 0x00 | 0x74 | 52,0B,03,2F,00,00,53,74 |
| FORMAT: SD CARD | 0x2F | 0x01 | 0x00 | 0x75 | 52,0B,03,2F,01,00,53,75 |
| OUTPUT RESOLUTION: 1024x768 | 0x30 | 0x00 | 0x00 | 0x6B | 52,0B,03,30,00,00,53,6B |
| OUTPUT RESOLUTION: 1280x720 | 0x30 | 0x01 | 0x00 | 0x6A | 52,0B,03,30,01,00,53,6A |



| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|---------------------------------------|---------|---------|---------|------------------|-------------------------|
| OUTPUT RESOLUTION: 1280x960 | 0x30 | 0x02 | 0x00 | 0x69 | 52,0B,03,30,02,00,53,69 |
| OUTPUT RESOLUTION: 1600x1200 | 0x30 | 0x03 | 0x00 | 0x68 | 52,0B,03,30,03,00,53,68 |
| OUTPUT RESOLUTION: 1920x1080 | 0x30 | 0x04 | 0x00 | 0x6F | 52,0B,03,30,04,00,53,6F |
| OUTPUT RESOLUTION: HD720P 50Hz | 0x30 | 0x05 | 0x00 | 0x6E | 52,0B,03,30,05,00,53,6E |
| OUTPUT RESOLUTION: HD720P 60Hz | 0x30 | 0x06 | 0x00 | 0x6D | 52,0B,03,30,06,00,53,6D |
| OUTPUT RESOLUTION: HD1080P 50Hz | 0x30 | 0x07 | 0x00 | 0x6C | 52,0B,03,30,07,00,53,6C |
| OUTPUT RESOLUTION: HD1080P 60Hz | 0x30 | 0x08 | 0x00 | 0x63 | 52,0B,03,30,08,00,53,63 |
| USB CONNECT: USB CAMERA | 0x31 | 0x00 | 0x00 | 0x6A | 52,0B,03,31,00,00,53,6A |
| USB CONNECT: MASS STORAGE | 0x31 | 0x01 | 0x00 | 0x6B | 52,0B,03,31,01,00,53,6B |
| BACKUP TO SD CARD | 0x32 | 0x00 | 0x00 | 0x69 | 52,0B,03,32,00,00,53,69 |
| BACKUP TO THUMBDRIVE | 0x32 | 0x01 | 0x00 | 0x68 | 52,0B,03,32,01,00,53,68 |
| PROFILE SAVE: PROFILE 1 | 0x33 | 0x00 | 0x00 | 0x68 | 52,0B,03,33,00,00,53,68 |
| PROFILE SAVE: PROFILE 2 | 0x33 | 0x01 | 0x00 | 0x69 | 52,0B,03,33,01,00,53,69 |
| PROFILE SAVE: PROFILE 3 | 0x33 | 0x02 | 0x00 | 0x6A | 52,0B,03,33,02,00,53,6A |
| PROFILE RECALL: PROFILE 1 | 0x34 | 0x00 | 0x00 | 0x6F | 52,0B,03,34,00,00,53,6F |
| PROFILE RECALL: PROFILE 2 | 0x34 | 0x01 | 0x00 | 0x6E | 52,0B,03,34,01,00,53,6E |
| PROFILE RECALL: PROFILE 3 | 0x34 | 0x02 | 0x00 | 0x6D | 52,0B,03,34,02,00,53,6D |



| Function | Data[0] | Data[1] | Data[2] | CheckSum Code | RS-232 Code |
|--|---------|---------|---------|------------------|-------------------------|
| SLIDESHOW: OFF | 0x36 | 0x00 | 0x00 | 0x6D | 52,0B,03,36,00,00,53,6D |
| SLIDESHOW: ON | 0x36 | 0x01 | 0x00 | 0x6C | 52,0B,03,36,01,00,53,6C |
| SLIDESHOW EFFECT: NO EFFECT | 0x37 | 0x00 | 0x00 | 0x6C | 52,0B,03,37,00,00,53,6C |
| SLIDESHOW EFFECT: EFFECT 1 | 0x37 | 0x01 | 0x00 | 0x6D | 52,0B,03,37,01,00,53,6D |
| SLIDESHOW EFFECT: EFFECT 2 | 0x37 | 0x02 | 0x00 | 0x6E | 52,0B,03,37,02,00,53,6E |
| SLIDESHOW EFFECT: EFFECT 3 | 0x37 | 0x03 | 0x00 | 0x6F | 52,0B,03,37,03,00,53,6F |
| SLIDESHOW EFFECT: EFFECT 4 | 0x37 | 0x04 | 0x00 | 0x68 | 52,0B,03,37,04,00,53,68 |
| SLIDESHOW EFFECT: RANDOM EFFECT | 0x37 | 0x05 | 0x00 | 0x69 | 52,0B,03,37,05,00,53,69 |

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

Troubleshooting

This section provides many useful tips on how to solve common problems while using the AVerVision M50.

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 input of AVerVision M50 and make sure AVerVision M50 is in PC Mode.

I have set up the AVerVision M50 and checked all the connections as specified in the manual but I cannot get a picture on the preferred presentation screen.

- 1. The unit POWER button turns orange in standby mode. Press the POWER button again to turn on and the LED light will turn blue.
- The default camera display resolution setting is on 1024x768. If your output device does not support this resolution; no image can be projected. Simply press hold the FREEZE and ► button to the change the resolution setting.
- If your display output device is on TV or any analog device, please switch the TV-RGB dip switch to TV.

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 **DEFAULT** on the remote or select Default in Basic tab 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, AVerVision M50 and your PC.
- 2. Connect your PC to the AVerVision M50 first before you power on your computer.
- 3. For notebook, repeatedly press FN+F5 to toggles 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.

- 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 M50 can't detect the inserted USB flash drive.

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

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