

# VGA and Audio CAT-5 AV Extender

AVE-M180T  
AVE-M180R

## User Manual

◀ V1.1 ▶



**DataBay**

[www.DataBay.com.tw](http://www.DataBay.com.tw)

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## Certifications

### FCC

This equipment has been tested and found to comply with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### CE

This equipment is in compliance with the requirements of the following regulations:

EN 55022: CLASS B

### RoHS

All contents of this package, including products, packing materials and documentation comply with RoHS.



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## 1. Product Introduction

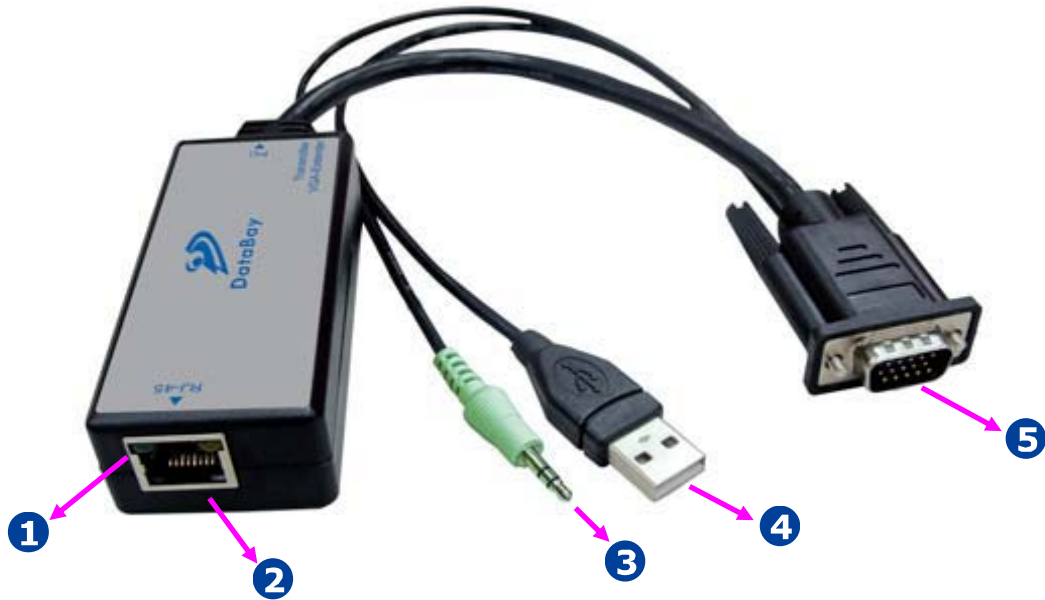
AVE-M180 is the smallest AV Extender in the industry; the main body is as big as a VGA connector and able to transmit VGA + Audio by a single Cat5e cable up to 180m. With its simplified design, you can install the extender very easily and save space. You can use it to broadcast AV signal from PC, KVM switch, matrix AV switcher and applied in the device extension of projector, plasma TV, LCD TV, LCD monitor, HDTV, and CRT. It can also be integrated with splitter and selector to fulfill different AV application.

## 2. Product Features

- This system can send VGA and Audio signal from Transmitter by Cat5/5e/6 cable, and broadcast to Receiver. The standard maximum broadcasting distance is 180m
- Compact design with VGA and Audio transmit function
- Maximum supported distance and resolution: 2048x1536@180m
- Use CAT-5 Enhance UTP cable (350MHz bandwidth) for better video quality
- Receiver and Transceiver build in video gain and focus control to adjust the video quality
- Software free, pure hardware design, support Plug & Play
- Transmitter and Receiver build with LEDs to indicate system status
- Transmitter takes DC5V power from USB port
- Receiver build in EQ to adjust image quality
- Stackable capacity to expand the AV broadcasting

### 3. Panel Descriptions

#### ■ AVE-M180T Single-Port AV Transmitter



**1** Power Indicator

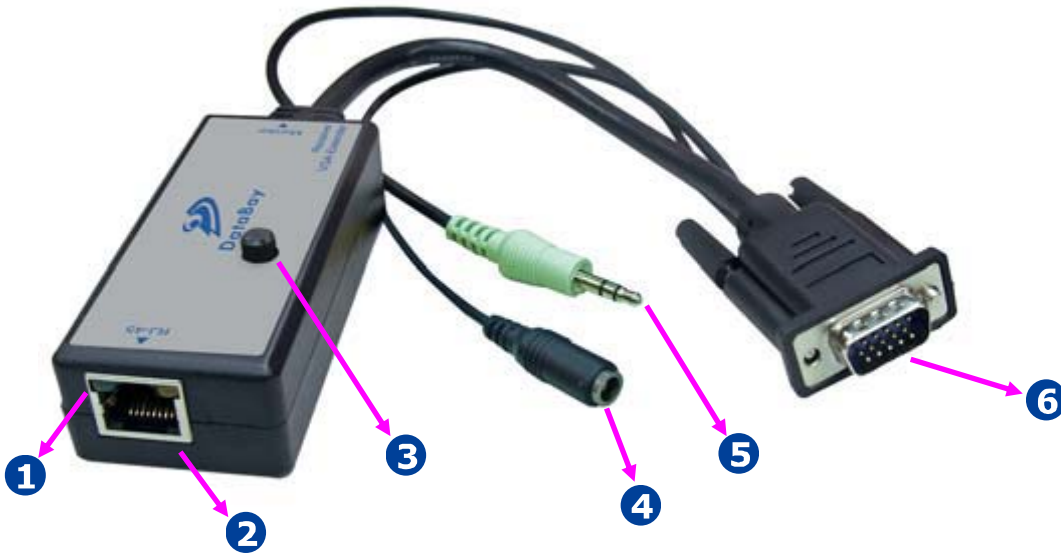
**2** RJ-45 System Link

**3** Audio Output

**4** To USB Power(DC 5V)

**5** VGA Output

■ AVE-M180R Single-Port AV Receiver



**1** Power Indicator

**3** Video Control

**5** Audio Input

**2** RJ-45 System Link

**4** Power Jack

**6** VGA Input

## 4. Installation and Operation

### 4.1 AVE-M180T Single-Port Transmitter Installation:

- (1) **Connecting Transmitter:** Take AVE-180T and connect the interface to computer's VGA, Audio and USB port. The Transmitter will take the DC5V power from computer's USB port.



- (2) **Function Test:** Turn on your PC or VGA player, the LED of Transmitter will turn on before VGA signal is turned ON and remain ON after VGA signal is turned ON.

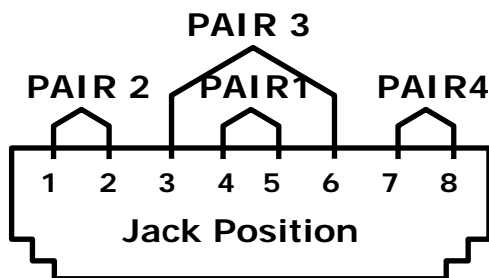
## 4.2 Receiver AVE-M180R installation and UTP Connection:

(1) **Power Up:** Plug power adapter to the Receiver and connect to monitor and speaker. The LED above RJ-45 port should blink to indicate the unconnected status of AV signal.

You can also use a short VGA cable (in the package) to connect in between Receiver and monitor and place the receiver in other place.



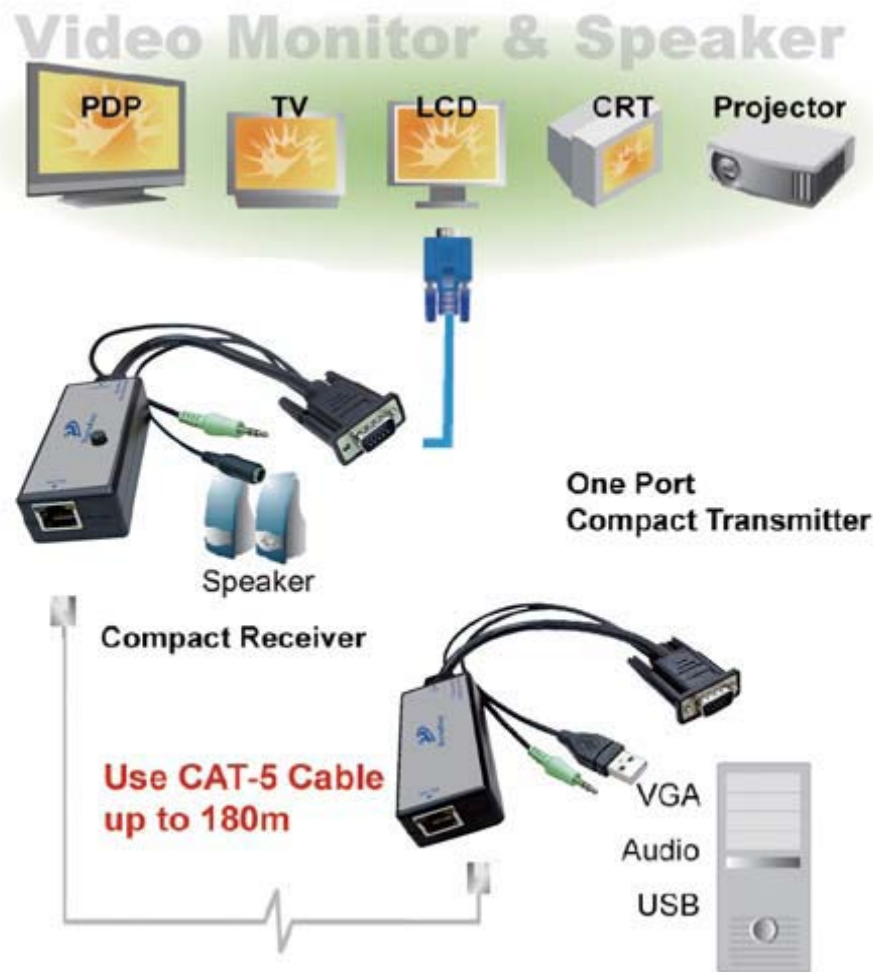
(2) **Selection of UTP Cable:** For best VGA resolution, please use Cat5 Enhanced cable (350MHz bandwidth), the maximum extended length of one section (one pair of Transmitter or Receiver) should not exceed 180 meters. The connector must be made by 568B/568B type.



The EIA/TIA definition of 568B in the pin assignment is (1)orange white, (2)orange, (3)green white, (4)blue, (5)blue white, (6)green, (7)brown white, and (8)brown.



(3) **Connect UTP Cable:**



**Installation Diagram of Receiver AVE-M180R**

Plug two ends of UTP cable to Transmitter and Receiver's RJ45 SYSTEM LINK ports, the Receiver's connected monitor and speaker should work now and the LEDs above RJ-45 port should remain ON. You can adjust the "FOCUS" control of Receiver to have the best VGA display.

(4) **Function Test:** After above installation, you will be able to broadcast the AV signal to Receiver's connected monitor and speaker.

(5) **Problem and Solving:** If you find unstable image or audio problems after installation, please confirm following list or contact your direct vendor for further assistance:

- a. Check if PC's VGA resolution and frequency over the limit of monitor display, if so, please change the VGA configuration from Windows Control panel.
- b. Try to connect Monitor and speaker directly to a PC, and ensure the basic function of these devices.

- c. When using LCD or same type monitor, there might have some image offset or blinking, please adjust the position, clock or phase of the LCD monitor, or simply press Auto Adjust / Tune to have a better image solution.

## 5. Specifications

Model Name	AV Transmitter	AV Receiver
Model No.	AVE-M180T	AVE -M180R
AV Output	RJ45 x1	VGA x 1 Audio x 1
AV Input	VGA x 1 Audio x 1	RJ45 x1
Audio	-	Stereo
Video CTRL	-	Video Focus
LED	Power	
Video Quality	PC: Support all VGA format and with a maximum capacity of 2048x1536@180m	
Power Consumption	DC 5V power from USB port	DC 5V, 1A
Environmental Condition	<ul style="list-style-type: none"> <li>• Operation Temp.: 0~50° C</li> <li>• Storage Temp.: -20~60° C</li> <li>• Humidity: 10~90%</li> </ul>	

## 6. Remarks

- I. Before operating this system, please read operation manual carefully.
- II. Please use correct power adapter and use high quality cable for optimum broadcasting.
- III. To prevent potential power damage, please don't use 2 -wire extension cord and ensure AC outlets at relative devices on the same electronic phase and have correct grounding.
- IV. Limited Warranty:
  - (1) In no events shall the vendor's liability for direct or indirect, special, incidental or consequential damages, loss of profit, loss of business, or financial loss which may be caused by the use of the product exceeds the price paid for the product.
  - (2) The vendor makes no warranty or representation, expressed or implied with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.
  - (3) The vendor also reserves the right to revise or update the product or documentation without obligation to notify any user of such revisions or updates. For further information please contact your vendor.

## 7. Notice

1. All other company or product names mentioned herein are trademarks or registered trademarks of their respective companies.
2. Specifications are subject to change without notice.
3. Please read user manual carefully before operating the device
4. Please use the power adaptor accompanied with this product. Warranty does not cover for damages caused by pairing other power adaptor
5. Please check all connecting devices are properly grounded to avoid electric failure
6. This product has limited warranty for one year from defects in material and workmanship. Items that are physically damaged, misused, tempered with or altered are void of warranty. For further details please contact your distributor. In case warranty sticker is damaged or missing, warranty is void. For further details please contact your distributor.