Remote AV Broadcast<sup>®</sup> Smart Media Extender

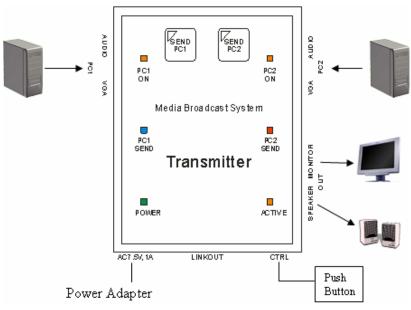
# AV Media Extender IE-500 User Manual

One-Port Transmitter: IE-500T1, Receiver: IE-500R1 Four-Port Transmitter: IE-500T4, Receiver w/ Two Outputs and Local Channels: IE-500R2 4/8/16/32-Port Transceiver: IE-500TR4, IE-500TR8, IE-500TR16, IE-500TR32

## 1. IE-500 Basic Model: Installation and Operation

#### (1) **IE-500T1 Transmitter Installation:**

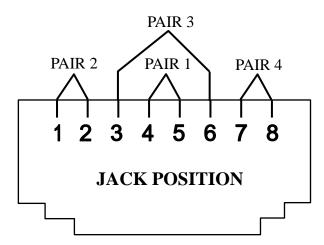
- Α. Site Selection: In your first time installation, place Transmitter near the PC or AV devices (Audio and Video outputs); you can use magnetic pad or attachable rack mounting kit to fix the system box.
- Connecting Monitor and Speaker: Plug power adapter to the Transmitter and Β. connect monitor and speaker to the "OUT" port. The POWER led will turn on green to indicate the POWER ON status and the "PC1 ON", "PC2 ON", and "ACTIVE" LEDs will blink orange to indicate the unconnected status. Then, prepare VGA and audio cables to connect the signal from your AV device to the "PC1" port of Transmitter box, and connect second AV source to "PC 2" port.
- C. Function Test: Power on your first set of AV devices, the "PC1 ON" led of Transmitter will turn on orange. Press "SEND PC1" button on the panel and test the function of monitor display and audio. If the second AV source connected, please press "SEND PC2" to test the basic function of second channel. The "ACTIVE" led will turn on to indicate the connection of AV signal and action of broadcasting.
- D. Select Broadcasting Signal: You can connect external push button for ease of switching different channels.



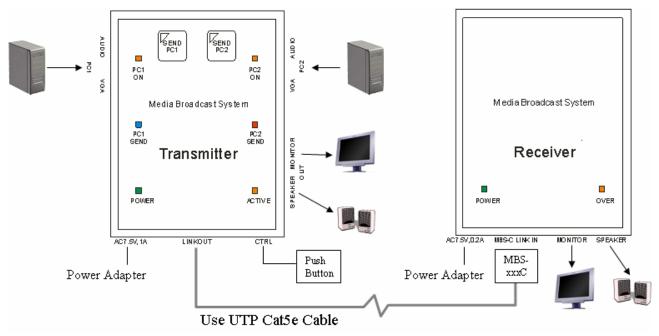
Installation Diagram of System Transmitter IE-500T1

#### (2) Receiver IE-500R1 installation and UTP Connection:

- A. **Site Selection:** Please place Receiver in an appropriate place and have the UTP cable settled for later connection.
- B. Power Up: Plug power adapter to the Receiver and connect monitor and speaker to the "OUT" port. The POWER led will turn on green to indicate the POWER ON status.
- C. Connect Distance Changer, MBS-xxxC: According to the distance extended, please select proper Distance Changer. The three digit number of the model number indicates the length (in meter) that can be applied. For example, MBS-300C indicates a Distance Changer for 300m length. And under the model number, there will have a list of the range of distance extended. Please connect a Distance Changer to "MBS-C LINK IN" port.
- D. Selection of UTP Cable: For best VGA resolution, please use Cat5 Enhanced cable (350MHz bandwidth) for connection. Following models are suggeated: Belden DataTwist 350 UTP #1700A Solid, Belden DataTwist 350 patch #1752A Stranded, or Belden DataTwist Category 5e 1583A Paired. The connector must be made by 568B/568B type. The EIA/TIA defination 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.



E. Connect UTP Cable: Plug two ends of UTP cable to Transmitter and Receiver's RJ45 UTP link ports, the Receiver's connected monitor and speaker should work now. (Please make sure that these two ends should be made by 568B/568B type.) If a longer Distance Changer is used, the OVER led will turn on orange and the monitor might not be able to display, please change a shorter Distance Changer. If you use a Distance Changer and the distance supported is too short, the OVER led will not turn on, but the image will become unfocused, please use a longer Distance Changer. If the color turns wrong, please check connected cable or RJ45 connector.



Installation Diagram of Receiver IE-500R1

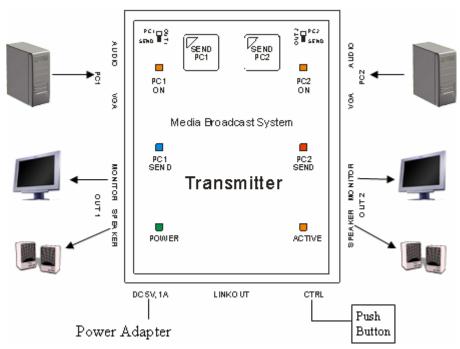
- F. **Function Test:** After above installation, you will be able to broadcast the AV signal to Receiver's connected monitor and speaker.
- G. **Problem and Solving:** If you find unstable image or audio problems after installation, please confirm following list or contact your direct vendor for further 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.

## (3) IE-500 Multi-Port Model: Installation and Operation

- A. **Site Selection:** In your first time installation, place Transmitter (IE-500T4) near the PC or AV devices; you can use magnetic pad or attachable rack mounting kit to fix the system box.
- B. Connecting Monitor and Speaker: Plug power adapter to the Transmitter and connect two sets of monitor and speaker to "OUT 1" and "OUT 2" ports. The POWER led will turn on green to indicate the POWER ON status and the "PC1 ON", "PC2 ON", and "ACTIVE" LEDs will blink orange to indicate the unconnected status. Then, prepare VGA and audio cables to connect the signal from your AV device to the "PC1" port of Transmitter box, and connect second AV source to "PC 2" port.
- C. **Function Test:** Power on your two sets of AV devices, the "PC1 ON" and "PC2 ON" LEDs of Transmitter will turn on orange, then switch the dip switches on the top of the panel to "PC1" and "PC2" to monitor corresponding LOCAL signals. Check the

signals of two sets of monitor and speaker, and then adjust the dip switches to "SEND", and the monitor and speaker connected to the output port will switch to the signal broadcasted. Try to press the button of "SEND PC1" or "SEND PC2" to check the function of monitoring the signal broadcasted, and the leds of "PC1 SEND" or "PC2 SEND" will also turn on to indicate the signal broadcast.

D. Select Broadcasting Signal: You can connect external push button for ease of switching different channels. And you can take the advantage of these two dip switches to monitor LOCAL or BROASCAST signal.

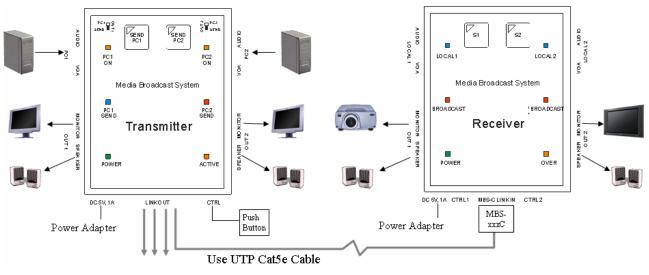


Installation Diagram of System Transmitter IE-500T4

## (4) Installation of the Receiver IE-500R2 with local channel

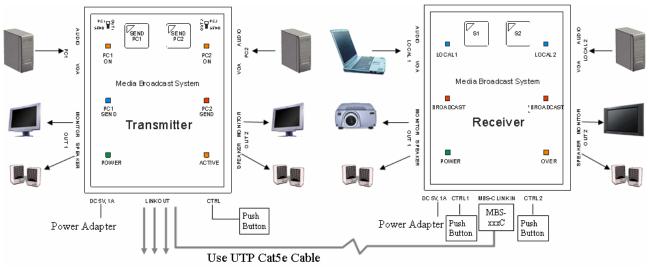
- A. Site Selection: Please place Receiver in an appropriate place and have the UTP cable settled for later connection. This Receiver build in two independent AV outputs, please select proper locations to install the monitors and speakers (HDTV, PDP, LCD, CRT, or Projector, and Speaker)
- B. **Power Up:** Plug power adapter to the Receiver and connect two sets of monitor and speaker to the "OUT 1" and "OUT 2" ports. The POWER led will turn on green to indicate the POWER ON status.
- C. Connect Distance Changer, MBS-xxxC: According to the distance extended, please select proper Distance Changer. The three digit number of the model number indicates the length (in meter) that can be applied. For example, MBS-300C indicates a Distance Changer for 300m length. And under the model number, there will have the range of distance extended. Please connect a Distance Changer to "MBS-C LINK IN" port.
- D. Selection of UTP Cable: Please refer to previous section to select proper cable and make correct connection.

E. Connect UTP Cable: Plug two ends of UTP cable to Transmitter and Receiver's RJ45 UTP link ports, the Receiver's connected monitor and speaker should work now. (Please make sure that these two ends should be made by 568B/568B type.) If a longer Distance Changer is used, the OVER led will turn on orange and the monitor might not be able to display, please change a shorter Distance Changer. If you use a Distance Changer and the distance supported is too short, the OVER led will not turn on, but the image will become unfocused, please use a longer Distance Changer. If the color turns wrong, please check connected cable or RJ45 connector. The Transmitter can support 4 RJ45 system outputs, the rest of installntions are the same as above.



Installation Diagram of Receiver IE-500R2

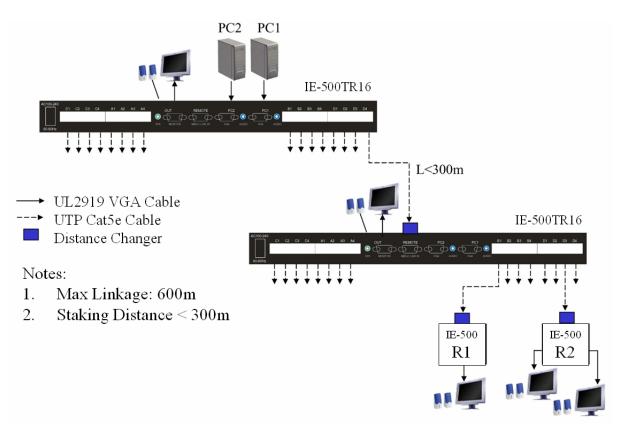
- F. **Function Test** : After above installation, you will be able to broadcast the AV signal to the monitor and speaker connected to Receiver.
- G. **Problem and Solving:** If you find unstable image or audio problems after installation, please refer to previous section or contact your direct vendor for further assistance:
- H. **Connect additional AV device besides Receiver:** You can connect additional two sets of AV signal in "LOCAL 1" and "LOCAL 2" ports, and press "S1" and "S2" to select the local signal to broadcast. The left and right sides will work independently and will auto switch to the signal ON channel. If you are connecting to a Notebook, please make sure you have activated the VGA output of the Notebook by relative function key



Connect Additional Two Sets of AV devices on Receiver IE-500R2

# (5) IE-500 Transceiver Model: Installation and Operation

- A. **Site Selection:** The transceiver builds in one system-input port and 4/8/16/32 output ports, with its rack mounted design, you can use rack mounting kit to fix the system box on the rack.
- B. Connecting Monitor and Speaker: Plug power adapter to the Transceiver and connect monitor and speaker to "OUT" port. Then, prepare VGA and audio cables to connect the signal from your AV device to the "PC1" port of Transmitter box, and connect second AV source to "PC 2" port. The "REMOTE" port can connect a Distance Changer to receive a signal from other Transmitter of Transceiver by UTP Cat5e cable.
- C. **System Outputs:** The transceiver has 4 different models with 4, 8, 16, or 32 ports, please refer to previous section to install the cabling and connect to system Receiver (IE-500R1, IE-500R2, or Transceiver.)
- D. Operation:
  - a. ON/OFF: The LEDs above the "ACTIVE" button on the front panel turns on Blue to indicate the power on status and with the LEDs turns on orange to indicate the Broadcasting status. You can press the "ACTIVE" button to switch the system into broadcasting or un-broadcasting status.
  - b. Channel Select: You can press "PC1", "PC2", or "REMOTE" button on the front panel to select different channel. The blue LED above each channel indicates the signal/PC ON status and the orange LED indicates the selected channel. You can only select one channel at a time.
- E. System Expansion: This series can stack into two layers to reach more AV outputs.



- F. **Other Integration and Application:** Please contact your local dealer or vender for further information.
- (6) System Capacity: You can have different arrangement of different models, like IE-500T1 + IE-500R2 or IE-500T4 + IE-500R1 or with 4/8/16/32-port Transceiver, and the overall linkage distance should less than 600m to ensure good quality. You can also expand the system into two layers to satisfy different situations. For more information, please contact your vender for specific project design.

#### 2. Remarks

- (1) Before operating this system, please read operation manual carefully.
- (2) Please use correct power adapter and use high quality cable for optimum broadcasting.
- (3) 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.
- (4) Limited Warranty:
  - A. In no events shall the direct 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.
  - B. The direct 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.
  - C. The direct 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 direct vendor.