

**SPECIFICATIONS**

**CAT-RGB212T/AP3, 224T/AP3**

**INPUT:** 2x5 BNC connector, RGBHV  
2x3.5mm block connector for balance/un-balance audio

**OUTPUT:** 12xRJ45 Connector (for CAT-RGB212T/AP3)  
24xRJ45 Connector (for CAT-RGB224T/AP3)

**SELECTABLE INPUT:** 2 : 1

**COM PORT:** 1x9 pin D-Sub Female Connector

**POWER SOURCE:** 100 to 230 VAC, 50/60Hz

**DIMENSIONS:** (430 x 240 x 44)mm | Weight : 1350 g

**HOUSING:** Metal

**ACCESSORIES:** Power Cord

**SPECIFICATIONS**

**CAT-GA111R/AP3**

**INPUT:** 1xRJ45 Connector

**OUTPUT:** 1x VGA/Stereo Audio (D-Sub 15pin/ 3.5mm mini jack)  
1xRJ45 Connector (for loop out)

**SKEW COMPENSATION:** Digital adjustment

**LEVEL CONTROL:** Yes

**EQ CONTROL:** Yes

**MAX RESOLUTION:** 1920 X 1200

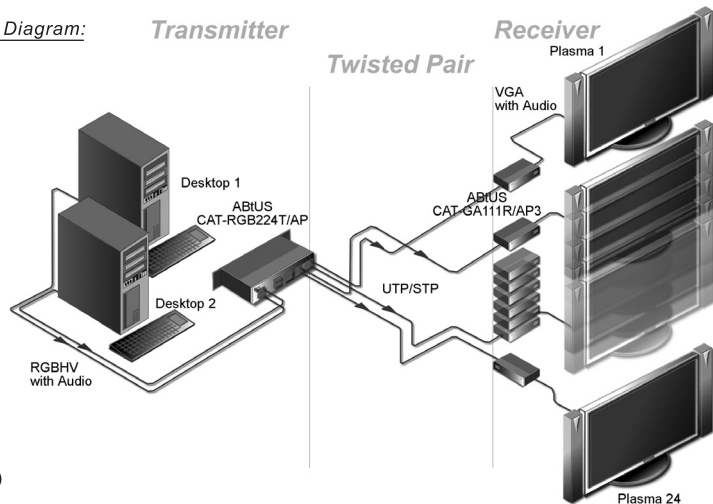
**DIMENSIONS:** (130 x 94 x 26)mm | Weight : 340 g

**HOUSING:** Metal

**ACCESSORIES:** AC-DC Power Adaptor 12V DC, 1A

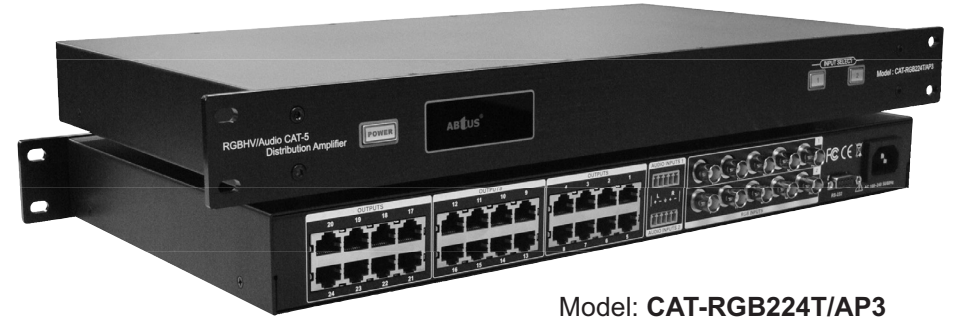
\*\* For detail and updated RS-232 Command protocol for programming, please visit and download from [www.abtussingapore.com](http://www.abtussingapore.com)  
\* Specifications are subject to changes without notice.

Configuration Diagram:



# RGB/Audio CAT-5 Extender Distributor Amplifier

2:1x24 VGA/Audio over Cat-5 Transmitter



Model: CAT-RGB224T/AP3

1:1 VGA/Audio over Cat-5 Receiver with Loop Out and Skew Control



Model: CAT-GA111R/AP3

# User Operation Guide

## PRODUCT DESCRIPTION

The **CAT-RGB224T/AP** is a Distribution Amplifier Extender System that allows either 1 of the 2 video signal/stereo audio to be send to multiple display (\*up to 24 displays or 12 displays for CAT-RGB112T/AP3) over long distances of Cat-5e cable (\*300meter point-to-point). It supports resolutions from VGA (640x480) to WUXGA (1920x1200). Its receiver has a built-in equalization and gain control to adjust the focus and brightness as well as a enhanced RGB Skew Compensation adjustment. This improves the VGA signal going thru the CAT- 5e cable with changes to R, G & B signals adjusted individually, signals are delayed as required for images to be overlaid properly. It also come with a memorized & lock function features when properly adjusted.

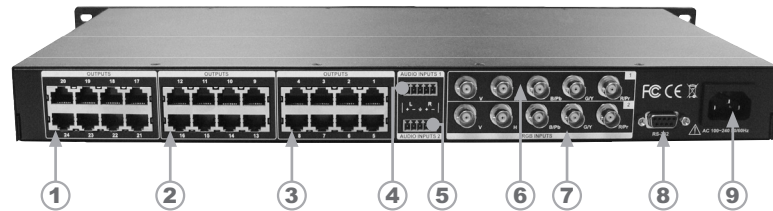
## PRODUCT HIGHLIGHTS

- Extends VGA signal /stereo Audio over CAT-5e cabling
- Receives computer video and stereo audio up to 1000 feet (305 meters) over CAT-5e UTP, CAT-5e STP or CAT-6 UTP cable.
- Works well with monitors, projectors, HDTV and flat panels display
- Connects to multiple video screen from either one of the two Input sources
- Supports resolutions from VGA (640x480) to WUXGA (1920x1200)

## FRONT PANEL VIEW (TRANSMITTER)



Item	Description	Item	Description
1. POWER	Push Power to turn ON or OFF system	3. CH-1	Signal Input Select CH-1 : Signal Input from CH-1
2. IR	Inferred Receiver	4. CH-2	Signal Input Select CH-2 : Signal Input from CH-2



Item	Description	Item	Description
1. RJ-45 Output port 17 to 24		6. 5xBNC RGBHV Input port 1	
2. RJ-45 Output port 9 to 16		7. 5xBNC RGBHV Input port 2	
3. RJ-45 Output port 1 to 8		8. RS-232 I/O control port	
4. Balance/Unbalance Audio Input port 1		9. Power Input. Before plugging in the power, please check if power is AC 100~230V, 50/60Hz	
5. Balance/Unbalance Audio Input port 2			

## PANEL VIEW (RECEIVER)



Item	Description
1.	EQ Adjustment
2.	Gain Adjustment
3.	R, G, B (LED, selection Indication)
4.	Select Button
5.	Selection of R, G or B for Slew adjustment
6.	Color Delay Adjustment "Left"
	Color Delay Adjustment "Right"



## BALANCE/UNBALANCE AUDIO & RJ-45 CONNECTION

Unbalanced Stereo Audio Input

Balanced Stereo Audio Input

Unbalanced Stereo Audio Output

Balanced Stereo Audio Output

3.5mm Stereo Plug Connector

RCA Connector

EIA/TIA 568B

PIN No.	Wire Color
1	Orange/White
2	Orange
3	Green/White
4	Blue
5	Blue/White
6	Green
7	Brown/White
8	Brown

## RS-232 PROTOCOL AND CONTROL CODE

### 1. Communication Protocol

Baud Rate : 9600 bps  
 Data Length : 8 bits  
 Parity Bit : Non Parity  
 Stop Bit : One bit  
 X on/off : None

### 2. RS-232 Connection

Pin	Function
1	- Not used
2	Tx Transmit Data
3	Rx Receive Data
4	- Not used
5	Gnd Signal Ground
6	- Not used
7	- Not used
8	- Not used
9	- Not used

### 3. RS-232 Control Code

Control code format are of standard ASCII code.  
 Following are the detail code and description:

Item	Function	Transmitted Code	Returned Code
1	Power ON	SETC10P31	RETC10P31
2	Power OFF	SETC10P30	RETC10P30
3	Source Select	SETC60S3xxx001	RETC60S3xxx001
		xxx is Source Select	xxx is Source Select
		xxx = 001~002 001 = Channel 1 002 = Channel 2	xxx = 001~002 001 = Channel 1 001 = Channel 2