



## Manual and Installation guide

### CatX AV Dual VGA receivers

#### Cat5/6 extenders

Audio + VGA Video with Dual VGA outputs over Cat5/6 UTP cable



Product	Product type	Connectors	
CatX AV Rx2	150m receiver	1 x RJ45 input 1 x RJ45 output	2 x 15HD male output, 1.3mm DC Jack 2 x 3.5mm stereo Jack output
CatXQ AV Rx2	300m receiver		

## Overview - CatX AV receivers

**CatX AV** receivers provide a flexible solution for outputting **VGA video + Audio** over Cat5/6 UTP cable up to either **150m** or **300m**.

The **CatX AV Rx** receiver can be used for distances up to **150m**

The **CatXQ AV Rx** receiver can be used for distances up to **300m**

An external power supply is required for both types of **AV** receivers. Please refer to the '**External power**' section in the technical specification at the end of this manual. **CatX AV** receivers are Video and audio compatible with **CatX Mini AV** and **VP** transmitters and receivers.

## Connecting the AV receiver to your transmitter (Tx) unit

Connect your **AV** receiver to the transmitter using correctly terminated Cat5/6 UTP cable (refer to the **Termination of UTP** Cable section of this manual).

### Power options for your AV receiver unit

An external **5V PSU** (part no: **PS-5V1A-1.3-\*\***) is required to power each **AV** receiver.

**Please Note:** If any outputs of a **CatX AVP Tx4** or **Tx8** unit are connected to **AV** receiver units, it is possible to power the transmitter using a USB power lead connected to any suitable USB port.

### Audio

An audio source will only be output by your **AV** receiver if it is connected to a **CatX Mini AV Tx** transmitter or an **AVP** transmitter that has **AV** mode selected on the Cat5/6 output. A stereo audio speaker can be connected to the unit, using one of the audio output sockets on the **CatX AV** receiver.

## Connecting multiple AV receivers in series

**CatX AV** receivers have an input and output for Cat5/6 UTP cable. This allows multiple **AV** receivers to be connected in series. Every **AV** receiver is also a transmitter, allowing the distance from any **VGA and audio** source to be extended up to **2000m**. This allows greater flexibility in planning your extender system beyond **300m**.

The maximum overall distance from the source transmitter to the final receiver unit should not exceed **2000m**.

**150m** and **300m** AV receivers may be mixed together in series. The distance between the transmitter, first **AV** receiver unit and each subsequent receiver is either **150m** or **300m**, depending on the type of each receiver unit in the daisy-chain.

**CatX AV** receivers are completely video and audio compatible with **CatX Mini** transmitters and receivers. A **CatX mini** transmitter can be connected to an **AV** receiver and a **CatX Mini** receiver can be used as the final receiver in a daisy-chain of multiple **AV** receivers. **CatX Mini VP** receivers will require an external power supply if connected to an **AV** receiver.

## Connection of CatX units to Cat5/6 UTP cable

Before connecting any Cat5/6 UTP cable to the input/output of your **AV** receiver unit please refer to the '**termination of UTP cable**' section of this manual.

Connecting any CatX transmitter or receiver to incorrectly terminated cable will damage the unit. Any unit damaged in this way is not covered by the manufacturers' warranty.

### Distance adjustment (CatX AV Rx2 and CatXQ AV Rx2 units)

There is a tune adjustment control on the front panel of your **AV** receiver. You should use this control to optimise the quality of the display on your VGA output device.

When tuning multiple **AV** receivers that are connected in series, tune the closest receiver to the transmitter first, followed by each additional receiver in sequence.

Turn the **Tune** control anti-clockwise and then slowly turn it clockwise until a sharp clear image is displayed.

Once this adjustment has been made, no further adjustment is required unless the length of cat5/6 cable attached to the receiver RJ45 input is altered.

### Skew correction (CatXQ AV Rx2 only)

In addition to the distance adjustment control, the **CatXQ AV Rx2** receiver also includes '**S**' and '**Q**' skew correction controls.

The '**S**' and '**Q**' 'Skew' correction controls can be adjusted by hand or using a small flat blade screwdriver.

Refer to the '**Skew correction system user guide**' on how to use these controls to obtain a skew free image.

## CatX units compatible with AV receivers

The **CatX AV Rx2** and **CatXQ AV Rx2** receivers are compatible with the following CatX units

### Transmitters

**CatX AVP Tx2** – 2 port Audio + VGA Video or VGA Video + power transmitter up to **300m**

**CatX AVP Tx4** – 4 port Audio + VGA Video or VGA Video + power transmitter up to **300m**

**CatX AVP Tx8** – 8 port Audio + VGA Video or VGA Video + power transmitter up to **300m**

**CatX Mini VP Tx** – CatX Mini Audio + VGA Video transmitter up to **300m**

**CatX Mini AV Tx** – CatX Mini Audio + VGA Video transmitter up to **300m**

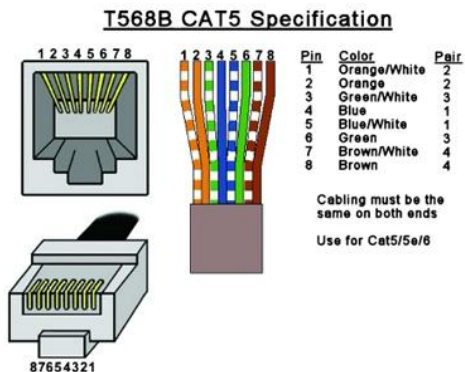
### Receivers

**CatX Mini VP Rx** – CatX Mini VGA Video + Power receiver up to **150m**

**CatX Mini AV Rx** – CatX Mini Audio + VGA Video receiver up to **150m**

## Termination of UTP cable

CatX units may be damaged or fail to operate unless the units are connected together using UTP cable that has been correctly terminated, as shown below. Any structured cable used for connection to CatX units must not be connected to any other network (Data or Voice). **Do not connect** CatX units using a crossover patch cable.



## VGA Resolutions

Resolution	1024x768	1280x1024	1600x1200	1920x1440	2048x1536
150m receiver	150m	150m	100m	60m	40m
300m receiver	300m	300m	220m	150m	100m

## Technical Specification

	CatX AV Rx2	CatXQ AV Rx2
<b>Maximum Distance</b>	150m of Cat5/5e/6 UTP cable	300m of Cat5/5e/6 UTP cable
<b>VGA Video</b>	75 Ohms RGB input/output; VGA --- UXGA compatible; 1080P compatible RGBHV, RGSB, YUV, Y/C, CVBS formats supported Separate or composite HV (TTL); Horizontal 15-130KHz; Vertical 30-150Hz	
<b>VGA outputs</b>	2 x Female HD15	
<b>Audio outputs</b>	2 x Summed Stereo	
<b>External Power</b>	5V PSU (1.3mm plug)	
<b>Housing</b>	All metal finish	
<b>Operating Temp.</b>	0 - 40 °C non Condensing	

## Product codes and accessories

	Product	Part Number	
<b>CatX AV Rx2</b>	CatX AVP Tx 2	CX-AV-R -2	Please specify PSU type by replacing ** with the following codes. UK - UK 3 pin EU - European Schuko US - US 2 pin
	5V PSU (1.3mm plug)	PS-5V1A-1.3-**	
<b>CatXQ AV Rx 2</b>	CatX AVP Tx 4	CXQ-AV-R-2	EU - European Schuko US - US 2 pin
	5V PSU (1.3mm plug)	PS-5V1A-1.3-**	
<b>Optional extras</b>	3.5 Jack audio cable	CA3.5J-300S	For a full range of CatX products, contact your supplier.
	USB 5V supply 0.35m	P-USB-1.3-350	
	USB 5V supply 0.7m	P-USB-1.3-700	