Avenview

Control Your Video...

VIDEO WALLS VIDEO PROCESSORS
VIDEO MATRIX SWITCHES
EXTENDERS **SPLITTERS** WIRELESS
CABLES & ACCESSORIES

1x4 HDMI TRUE 4K@60 SPLITTER
W/ EDID & HD Support

HDMI 2.0 | **HDCP 2.2** | **4K 60HZ 4:4:4 ULTRA HD** | **x.v.Colour** | **HD ready 1080p** | **RoHS Compliant** | **FC C€**

Model #: SPLIT-HDM2-T4K-4/8

Product Application & Market Sectors

Corporate

House Of Worship

Military

Residential

Education

Industrial

Medical

Aviation

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SECTION 1: GETTING STARTED

1.1 IMPORTANT SAFEGUARDS

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

What the warranty does not cover

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
- Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
- Repair or attempted repair by anyone not authorized by us.
- Any damage of the product due to shipment.
- Removal or installation of the product.
- External causes to the product, such as electric power fluctuation or failure.
- Use of supplies or parts not meeting our specifications.
- Normal wear and tear.
- Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

1.2 SAFETY INSTRUCTIONS

The SPLIT-HDM2-T4K-4 4/8Port HDMI Splitter has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the SPLIT-HDM2-T4K-4 should be used with care. Read the following safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

⚠ Do not dismantle the housing or modify the module.

⚠ Dismantling the housing or modifying the module may result in electrical shock or burn.

⚠ Refer all servicing to qualified service personnel.

⚠ Do not attempt to service this product yourself as opening or removing housing may expose you to dangerous voltage or other hazards

⚠ Keep the module away from liquids.

⚠ Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.

⚠ Have the module checked by a qualified service engineer before using it again.

⚠ Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.

This equipment has been tested and found to comply with Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

Warning symbols	Description
	ONLY USE THE PROVIDED POWER CABLE OR POWER ADAPTER SUPPLIED. DO NOT TAMPER WITH THE ELECTRICAL PARTS. THIS MAY RESULT IN ELECTRICAL SHOCK OR BURN.
	DO NOT TAMPER WITH THE UNIT. DOING SO WILL VOID THE WARRANTY AND CONTINUED USE OF THE PRODUCT.
BEWARE **this unit** **contains** **static** **sensitive devices**	THE VIDEO BOARDS ARE VERY SENSITIVE TO STATIC. PLEASE ENSURE IF RACK MOUNTED OR INSTALLED ON A SURFACE, IT SHOULD BE IN A GROUNDED ENVIROMENT.

⚠WARNING

Read & understand user guide before using this device.

Failure to follow the proper installation instructions could result in damage to the product and preventing expected results.

2.   INTRODUCTION

The Avenview SPLIT-HDM2-T4K-4 4/8 port HDMI Splitter can support the new industry of video signals 4K@60 and UHD. This device allows the INPUT (source as 4K GPU graphic card or UHD Digital Player) to be duplicated onto 4 4K@60 or UHD displays. Supporting both video and audio signal simultaneously reproducing the same quality via HDMI cable with EDID management.

Video Signals: 4K@60 HDR(4:2:0 10bits) / (4:4:4 8bits), 4K@30, UHD, 3D, Deep Color, and 1080p 24-bit color depth.

Audio Signals: DTS-HD Master Audio, Dolby TrueHD Dolby Digital,DTS, DVD-Audio, LPCM, SACD, MPCM

The SPLIT-HDM2-T4K-4 includes one unit: 4 Port SPLITTER with one(1) HDMI Input that can be up to 5m (16ft) and four(4) output ports which allows the user to extend over HDMI cable video and audio up to 5m (16ft).

- **INPUT:** HDMI 2.0 /DVI 1.0 support
- INPUT 4K@60 HDR(4:2:0 10bits) / (4:4:4 8bits), 4K@30, UHD, 3D, Deep Color, and 1080p 24-bit color depth;
- HDCP 2.2 Compliance;
- COLOR SPACE: xvYCC, x.v.Color & Deep Color;
- VIDEO RESOLUTIONS: 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz/3D, 1080i@50/60Hz,1080p @ 24Hz /50/60Hz/3D, ULTRA HD (3840x2160)@24/30/60Hz 4K (4096x2160)@24/30/60Hz
- PC RESOLUTIONS: 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x720@60Hz,
- 1280x768@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1600x900@60Hz,1680x1050@60Hz, 1920x1080@60Hz 1920x1200@60Hz ULTRA HD
 (3840x2160)@24/30/60Hz 4K (4096x2160)@24/30/60Hz

- FREQUENCY RANGE: 25MHz~600MHz
- LINK TRANSMISSION: Up to 18Gbps (600MHz)
- DISTANCE: Up to 5 meters (16ft) w 24AWG High Speed Ethernet HDMI Cable
- EDID: Multi mode selection & EDID learning from Display
- FIRMWARE: Update by mini USB connector
- PLUG & PLAY

NOTE: HDR- (High-dynamic-range imaging)

2.1   PACKAGE CONTENTS

Before you start the installation of the splitter, please check the package contents.

1	SPLIT-HDM2-T4K-4	X 1	
2	POWER ADAPTER 5V 2A	X1	
3	Mounting Brackets	X 2	
4	USER'S MANUAL	X 1	

2.2   BEFORE INSTALLATION

- Put the product in a level and stable location. If the product falls, it may cause damage or malfunction to components within the casing.
- Do not place the product in temperatures under 0˚C or over 50˚C. High humidity may also cause the unit to malfunction.
- Use the DC power adapter with correct specifications supplied with the unit. If the improper power supply is used, this may result in malfunction of the unit and may cause fire.
- Do not twist or pull by force the ends of the HDMI cable. It can cause malfunction.

Pro AV/IT Series High Speed HDMI Cables

Featuring ProGrip®, SureLength® Indicators and Color Identification

4K UHD

Original Pro AV/IT	Active	MicroFlex	Plenum
Heavy Duty, 26/24 Gauge Construction	Long Lengths Featuring Redmere® Technology	Perfect for Racks. Up to 40% Smaller	Heavy Duty CL2P Plenum Rated

We highly recommend achieving best results with our SPLIT-HDM2-T4K-4 you acquire a high quality 26 or 24 AWG HDMI cable with the below specifications to maintain signal integrity and distances.

Features

- Full UHD 4K/ 60 to 18Gbps High Speed at up to 48 Bit Deep Color
- UHD 4K/60 to 10.2 Gbps High Speed Deep Color up to 50ft (Active Series), 25ft Passive
- Full HD Up to 1080p/60 up to 75ft
- True Professional grade heavy-duty 24 or 26 gauge oxygen-free construction
- ProGrip connector utilizes up to 16 lbs of retention force to help keep connector in place
- SureLength length indicators on the connector heads make
- it easy to organize for installations
- Available in 7 colors for easy cable identification
- Up to 32 audio channels and 21:9 aspect ratio

- Simultaneous delivery of dual video and audio streams to multiple users
- Pro Grade Triple Shielding with 2x 100% coverage and 85% Premium Tinned Copper Braid construction
- Ethernet Capable
- 3D Ready
- Supports Deep Color and x.v. Color (Up to 48 Bit)
- 5.1/7.1 Lossless Dolby TrueHD and DTS-HD Surround Sound
- Audio Return Channel & Lip-sync
- ATC Certified
- 99.9% High Purity Copper Center Conductor
- Molded 24k Gold Plated HDMI male connectors on each end
- X-tra Flex CL3 rated jacket for easy installation
- RoHS Certified
- Lifetime Warranty

HDMI Premium Certified Cable label
This label ensures that the product was tested under the Premium HDMI Cable Certification Program

SECURE QR Code
Encrypted data in the QR code to identify the product with the Premium HDMI Cable app

SECURE fingerprint
Random elements in the hologram are recognized by the Premium HDMI Cable app, thus each label has its unique "fingerprint" and ensure the authenticity and quality of the product

SPLIT-HDM2-T4K-4

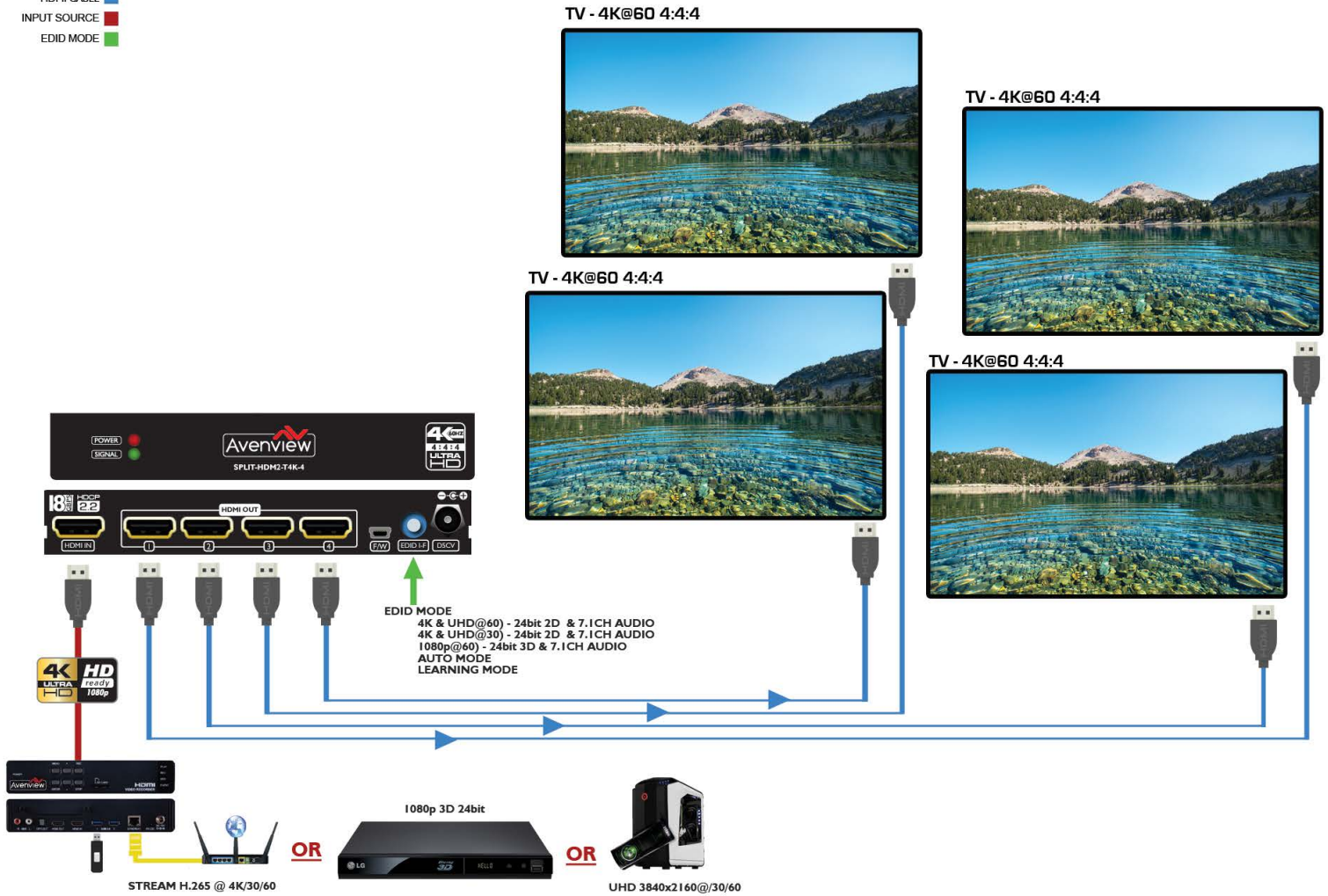**LAYOUT 1**

CABLE INDEX

HDMI CABLE
INPUT SOURCE
EDID MODE

TV - 4K@60 4:4:4

TV - 4K@60 4:4:4

TV - 4K@60 4:4:4

TV - 4K@60 4:4:4

POWER
SIGNAL

Avenview

SPLIT-HDM2-T4K-4

4K 60Hz
4:4:4
ULTRA HD

18Gbps HDCP 2.2

HDMI OUT

1   2   3   4

HDMI IN   F/W   EDID I-F   DSCV

EDID MODE
4K & UHD@60) - 24bit 2D & 7.1CH AUDIO
4K & UHD@30) - 24bit 2D & 7.1CH AUDIO
1080p@60) - 24bit 3D & 7.1CH AUDIO
AUTO MODE
LEARNING MODE

4K ULTRA HD   HD ready 1080p

STREAM H.265 @ 4K/30/60
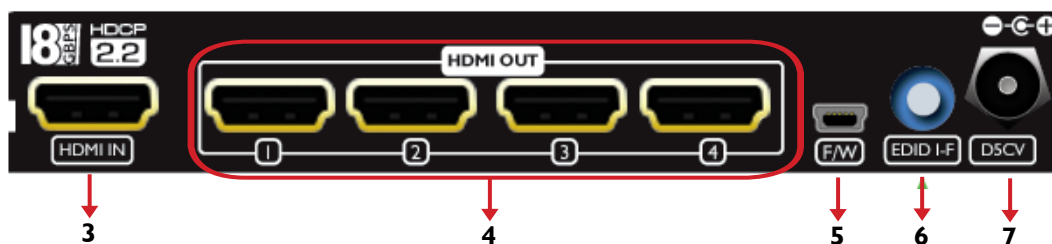
OR

1080p 3D 24bit

LG   HELLO   3D

OR

UHD 3840x2160@/30/60

2.4.1 INPUT PANEL (SPLIT-HDM2-T4K-4) Front Panel

1.	**LED INDICATOR:** Illuminates RED when the supplied 5V 2A power adapter is plugged into AC wall outlet.
2.	**LED INDICATOR:** When the source is connected to the unit and processing.

2.4.2 INPUT PANEL (SPLIT-HDM2-T4K-4) RearPanel

3.	**HDMI INPUT:** HDMI Type B Female Connector for connecting HDMI compilant source.
4.	**HDMI OUTPUT:** 1-4 port HDMI Type B Female Connector for connecting HDMI compilant display monitor.
5.	**MINI USB :** USB Type B Female Connector for Manufacturer Firmware upgrade.(Official use only).
6.	**EDID MODE:** 0-F The 15 mode dial allows the user to easily sync between source, unit and display timings.

0 - F/W update mode
1 - EDID Ultra-HD(4K/UHD@60) - 24bit 2D & 7.1ch audio
2 - EDID Ultra-HD(4K/UHD@60) - 24bit 2D & 2ch audio
3 - EDID Ultra-HD(4K/UHD@30) - 24bit 2D & 7.1ch audio
4 - EDID Ultra-HD(4K/UHD@30) - 24bit 2D & 2ch audio
5 - EDID Full-HD(1080p@60) - 24bit 2D & 7.1ch audio
6 - EDID Full-HD(1080p@60) - 24bit 2D & 2ch audio
7 - EDID Full-HD(1080p@60) - 24bit 3D & 7.1ch audio
8 - EDID Full-HD(1080p@60) - 24bit 3D & 2ch audio
9 - EDID Full-HD(1080p@60) - 36bit 2D & 7.1ch audio
A - EDID Full-HD(1080p@60) - 36bit 2D & 2ch audio
B - EDID HD(1080p@30)/1080i@60/720p@60)-24bit 2D & LPCM7.1ch/Dolby Digital
C - EDID HD(1080p@30/1080i@60/720p@60) - 24bit 2D & 2ch audio
D - Auto EDID analysis learning mode
E - Learn EDID from output1(DEFAULT)
F - Learn EDID from output 4

7.	**POWER JACK:** Power Soucre connection

To setup the Avenview SPLIT-HDM2-T4K-4 please follow the steps below to experience the best results:

1. Please ensure the connecting devices are powered off before proceeding.
2. Connect the HDMI video source to the INPUT(HDMI IN)- Example Bluray or 4K Digital player or Camera
3. Connect (4) four HDMI cables to the desired HDMI Displays
4. Please ensure all connections are seated securely and placed in the corresponding connections.
5. **IMPORTANT**- Please ensure the dial is not on 0 (F/W upgrade)
6. Firstly Power on the HDMI Source, after the boot sequence and the resolution is sync with the dial mode
7. Power on the compatible HDMI displays and experience the clear duplicated images on the 1 to 4 displays connected.

EDID LEARNING MODE

1. When connecting a new monitor to the SPLIT-HDM2-T4K-4 when the dial mode is on **D (auto EDID) or mode E and F (EDID learning)**, the user may experience a blank screen for a short period. The Automatic EDID learning process will analyzes the connected monitor to verify the EDID table versus the HDMI input to calculate any changes to be made.
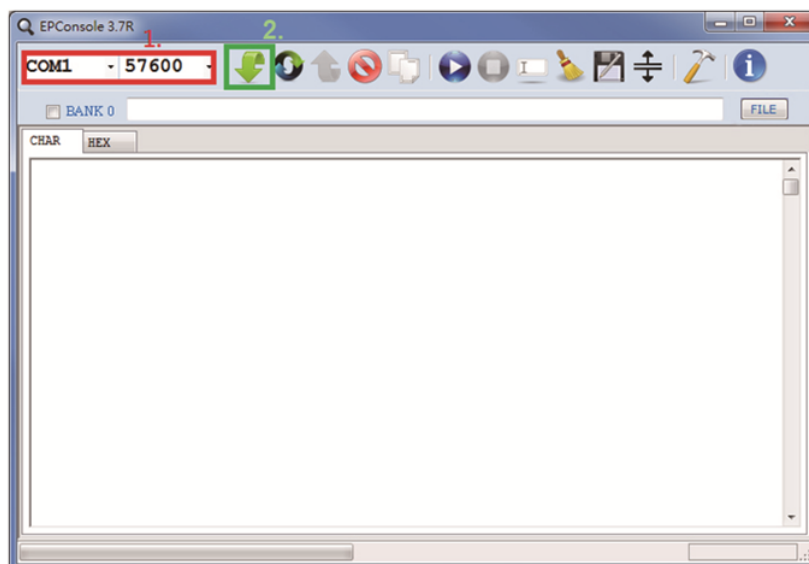
FIRMWARE UPGRADE

2. For firmware update through Mini-USB, users MUST first power off the unit , set the rotary switch to "0", and then connect the Mini-USB cable between PC and device.
Open the firmware update software-:
[STEP 1] set the correct com port and baud rate (57600 is recommended);
[STEP 2] click the "File" button to direct to the firmware HEX or BIN file, power on the device and press "Program MCU" symbol to firmware update. Once update process is done, please power off the device and set the rotary switch back to other mode (NOT to "0").

PROBLEM	POSSIBLE SOLUTION
NO IMAGE	• Check if ALL connection to the source and the display are in the correct position. • Ensure that display device supports 720p and 1080p, UHD, 4K@30/60 resolution • Please use the supplied power supply-DC 5V 2A • Check LED light on Front Panel see (Section 3 Panel Description) • Check EDID mode dial see (Section 3 Panel Description)
5M OR LONGER HDMI CABLE NO 4K2K IMAGE	• Ensure the HDMI Cable is 26 or 24 AWG High quality cable and supports Ultra HD video and audio

Notice

Resolutlions

3840×2160, also known as Ultra HD, is commonly known to be four times the resolution of 1080p, resulting from doubling both the horizontal and vertical pixel count of 1920×1080. Therefore, it has the same aspect ratio as FULL HD – 16:9. Most, but not all, 4K display devices have a native resolution of 3840×2160.

4096×2160, referred to as 4K DCI, is used manily in movie production and in commercial cineplexes. There are some display devices with a native resolution of 4096×2160, but it is not as common as 3840×2160.
Many 4K cameras and source devices can be set to either of the two resolutions listed.

In the AV world professionals will recall the SXGA PC resolution of 1280×1024, which had a non-standard aspect ratio of 5:4 when nearly every other signal was 4:3. This led to problems – displays and sources had to be carefully matched and correctly configured in order to display all of the information without unwanted cropping or stretching.

Please ensure your source device and the displays are fully compatible before attempting to connect and provide a full solution.
Extended display identification data EDID Readers -Monitor Asset Manager -http://www.entechtaiwan.com/util/moninfo.shtm High-bandwidth Digital Content Protection (HDCP) Compliance with source and display.

5.	SPECIFICATIONS

Item	Description	
UNITS	SPLIT-HDM2-T4K-4	SPLIT-HDM2-T4K-8
UNIT DESCRIPTION	ULTRA HD 4K SPLITTER	
HDCP COMPLIANCE	HDCP 2.2	
VIDEO BANDWIDTH	Single-Link 600MHz (18 Hbps)	
HDMI SUPPORTED RESOLUTIONS	HDR 4K2K@60 (4:2:0 10bits) / 4K2K@60 (4:4:4 8bits)	
HDMI CABLE	15meter (50feet)	
AUDIO SUPPORT	LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio	
ROTARY CONTROL SWITCH	EDID Mode Selection	
ESD PROTECTION	Human body model — ±8kV (air-gap discharge) & ±4kV (contact discharge)	
INPUT	1 x HDMI Type A (19 pin female)	1 x HDMI Type A (19 pin female)
OUTPUT	4 x HDMI Type A (19 pin female)	8 x HDMI Type A (19 pin female)
LED	Front Panel Indicators	
DIMENSIONS (L X W X H)	5.46" x 3.67" x 1"	9.5" x 3.9" x 1"
WEIGHT	0.88 lbs 0.40 kg	3.5 lbs 1.58 kg
POWER SUPPLY	5V / 2A DC (US/EU standards, CE/FCC/UL certified)	
POWER CONSUMPTION	1.6 Watt (max)	

Environmental

OPERATING TEMPERATURE	32° ~ 104°F (0° to 40°C)	
STORAGE TEMPERATURE	-4° ~ 140°F (-20° ~ 60°C)	
RELATIVE HUMIDITY	20~90% RH (non-condensing)	

Avenview Warranty Certificate

AVENVIEW CORP. ("Avenview") warrants Avenview-branded product(s) contained in the original packaging against defects in materials and workmanship when used normally in accordance with Avenview's enclosed manual guidelines for a period of THREE (3) YEARS from the date of original retail purchase - Warranty Period. Avenview's published guidelines include but are not limited to information contained in technical specifications, user manuals and service communications.

LABOR: During the Warranty Period of THREE (3) YEARS, Avenview will repair or replace the product(s) at no cost using new or used parts equivalent to novel performance and reliability if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Labor applicable to product(s) after Warranty Period. For labor costs, please contact support@avenview.com.

PARTS: During the Warranty Period of of THREE (3) YEARS, Avenview will supply new or rebuilt replacements in exchange for defective parts of the product(s) at no cost if the product(s) is determined to have abide by Avenview's published guidelines. Cost of Parts applicable to product(s) after Warranty Period. For part(s) costs, please contact support@avenview.com.

To obtain Warranty: (a) proof of purchase in the form of a bill of sale or receipted invoice reflecting that the registered product(s) is within warranty period must be presented to obtain warranty service; (b) product(s) must be registered at time of purchase. Failure to do so will result in applicable parts and labor charges. Returning product(s) must be shipped in Avenview's original packaging or in packaging pertaining equal degree of protection to Avenview's. Both Avenview and purchaser are responsible for freight charges and brokerages when shipping the product(s) to the receiver.

NOT COVERED BY THIS WARRANTY

This warranty does not apply to any non-Avenview branded product(s); non-registered Avenview product(s). This warranty does not apply: (a) to cosmetic damage, including but not limited to scratches, dents and broken cords; (b) to damage caused by use with another product; (c) to damage caused by accident, abuse, misuse, liquid contact, fire, earthquake or other external cause; (d) to damage caused by operating the Avenview product(s) outside Avenview's manuals or guidelines; (e) to damage caused by service performed by anyone who is not a representative of Avenview or an Avenview authorized personnel; (f) to defects caused by normal wear and tear or otherwise due to the normal aging of the Avenview product(s), or (g) if any serial number has been removed or defaced from the Avenview product(s).

AVENVIEW IS NOT LIABLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO, COMPROMISE OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER.

Some states do not allow the inclusion or limitation of incidental or consequential damages, or allow limitations on duration implements of the Warranty Period; therefore the above limitations or exclusions may not be applicable to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Avenview

275 Woodward Avenue, Kenmore, NY 14217
1.866.508.0269

Control Your Video..

TECHNICAL SUPPORT

CONTACT US

Phone: 1 (866) 508 0269

Email: support@avenview.com

USA Head Office Avenview Corp. 275 Woodward Avenue Kenmore, NY 14217

USA Head Office	**Canada Sales**	**Avenview Europe**	**Avenview Hong Kong**
Office Avenview	Avenview	Avenview Europe	Unit 8, 6/F., Kwai Cheong Centre,
Corp. 275 Woodward Avenue	151 Esna Park Drive, Unit 11 & 12	Demkaweg 11	50 Kwai Cheong Road,
Kenmore, NY 14217	Markham, Ontario, L3R 3B1	3555 HW Utrecht	Kwai Chung, N.T.
Phone: +1.716.218.4100 ext223	Phone: 1.905.907.0525	Netherlands	Hong Kong
Fax: +1.866.387-8764	Fax: 1.866.387.8764	Phone: +31 (0)85 2100- 613	Phone: 852-3575 9585
Email: info@avenview.com	Email: info@avenview.com	Email: info@avenview.eu	Email: wenxi@avenview.com