

4K MULTICAMERA
PROCESSOR
KMU-100
Instruction Manual

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Disclaimer of Product & Services

The information offered in this instruction manual is intended as a guide only. At all times, Datavideo Technologies will try to give correct, complete and suitable information. However, Datavideo Technologies cannot exclude that some information in this manual, from time to time, may not be correct or may be incomplete. This manual may contain typing errors, omissions or incorrect information. Datavideo Technologies always recommend that you double check the information in this document for accuracy before making any purchase decision or using the product. Datavideo Technologies is not responsible for any omissions or errors, or for any subsequent loss or damage caused by using the information contained within this manual. Further advice on the content of this manual or on the product can be obtained by contacting your local Datavideo Office or dealer.

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

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

Warnings and Precautions



- 1. Read all of these warnings and save them for later reference.
- 2. Follow all warnings and instructions marked on this unit.
- 3. Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- 4. Do not use this unit in or near water.
- 5. Do not place this unit on an unstable cart, stand, or table. The unit may fall, causing serious damage.
- 6. Slots and openings on the cabinet top, back, and bottom are provided for ventilation. To ensure safe and reliable operation of this unit, and to protect it from overheating, do not block or cover these openings. Do not place this unit on a bed, sofa, rug, or similar surface, as the ventilation openings on the bottom of the cabinet will be blocked. This unit should never be placed near or over a heat register or radiator. This unit should not be placed in a built-in installation unless proper ventilation is provided.
- 7. This product should only be operated from the type of power source indicated on the marking label of the AC adapter. If you are not sure of the type of power available, consult your Datavideo dealer or your local power company.
- 8. Do not allow anything to rest on the power cord. Do not locate this unit where the power cord will be walked on, rolled over, or otherwise stressed.
- 9. If an extension cord must be used with this unit, make sure that the total of the ampere ratings on the products plugged into the extension cord do not exceed the extension cord rating.
- 10. Make sure that the total amperes of all the units that are plugged into a single wall outlet do not exceed 15 amperes.
- 11. Never push objects of any kind into this unit through the cabinet ventilation slots, as they may touch dangerous voltage points or short out parts that could result in risk of fire or electric shock. Never spill liquid of any kind onto or into this unit.
- 12. Except as specifically explained elsewhere in this manual, do not attempt to service this product yourself. Opening or removing covers that are marked "Do Not Remove" may expose you to dangerous voltage points or other risks, and will void your warranty. Refer all service issues to qualified service personnel.
- 13. Unplug this product from the wall outlet and refer to qualified service personnel under the following conditions:
 - a. When the power cord is damaged or frayed;
 - b. When liquid has spilled into the unit;
 - c. When the product has been exposed to rain or water;
 - d. When the product does not operate normally under normal operating conditions. Adjust only those controls that are covered by the operating instructions in this

manual; improper adjustment of other controls may result in damage to the unit and may often require extensive work by a qualified technician to restore the unit to normal operation;

- e. When the product has been dropped or the cabinet has been damaged;
- f. When the product exhibits a distinct change in performance, indicating a need for service.

Warranty

Standard Warranty

- Datavideo equipment is guaranteed against any manufacturing defects for one year from the date of purchase.
- The original purchase invoice or other documentary evidence should be supplied at the time of any request for repair under warranty.
- Damage caused by accident, misuse, unauthorized repairs, sand, grit or water is not covered by this warranty.
- All mail or transportation costs including insurance are at the expense of the owner.
- All other claims of any nature are not covered.
- Cables & batteries are not covered under warranty.
- Warranty only valid within the country or region of purchase.
- Your statutory rights are not affected.

Two Year Warranty

All Datavideo products purchased after 01-Oct.-2008 qualify for a
free one year extension to the standard Warranty, providing the
product is registered with Datavideo within 30 days of purchase.
For information on how to register please visit
www.datavideo.com or contact your local Datavideo office or
authorized Distributors.



• Certain parts with limited lifetime expectancy such as LCD Panels, DVD Drives, Hard Drives are only covered for the first 10,000 hours, or 1 year (whichever comes first).

Any second year warranty claims must be made to your local Datavideo office or one of its authorized Distributors before the extended warranty expires.

Disposal

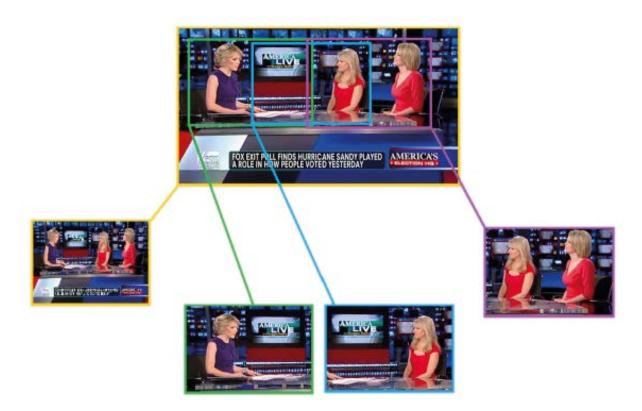


For EU Customers only - WEEE Marking

This symbol on the product indicates that it will not be treated as household waste. It must be handed over to the applicable take back scheme for the recycling of Waste Electrical and Electronic Equipment. For more detailed information about the recycling of this product, please contact your local Datavideo office.

1. Introduction

KMU-100 is an advanced video converter allowing conversion of **UHD** input signals into 4 different streams with resolution up to **Full HD**. Each device has two **UHD** inputs which work simultaneously and interchangeably.



You can define 4 output windows (Frame 1/2/3/4/) for each **UHD** source signal. The resolution of the **Frame 1 window** can be up to **3860x2160**, while **Frames 2**, **3 and 4** support resolution of up to **1920x1080 pixels**. Every frame window can be animated. Animation is created by defining the Start and End positions of the frame window, along with their motion mode (**single**, **loop**, **ping-pong**). The frame window can change its size while it is animated, featuring the virtual **digital zoom**.

1.1 Functions and Features

The KMU-100 is an advanced video converter that allows processing and conversion of UHD signals with the resolution of 3840x2160 (12G SDI or HDMI 2.0) into four or eight different high-quality streams at resolutions up to Full HD.

The KMU-100 offers the user two independent conversion channels. The device allows simultaneous and parallel processing of two **UHD** signal sources (3840x2160). The input signals are converted into 8 3G SDI outputs, which can be additionally synchronized to a **Genlock** input.

This solution is ideal for professionals who deal with production and broadcasting of video materials adopting a variety of sources and signal types. It is a perfect solution for various program scenes and live coverage of events.

In addition, the **KMU 100 converter** is really easy to use. The device comes with a complete software package, and the control over all of its functions and parameters is exercised on a LAN connected computer on which the application is installed. The device portability due to its small size, a user-friendly interface, and the **DV Link platform** will give the user a very pleasant experience with the **KMU-100**.

1.2 KMU 100 Operations

KMU 100 is able to simultaneously convert signals from two video inputs with resolutions up to UHD (3840x2160) into eight different output video streams. It supports a variety of video formats and allows the connection of SDI and HDMI signal sources including 12G SDI and HDMI 2.0 technologies.

As many as **8 channels** of output signals can be generated. Each channel outputs an active area of the input signals defined by the user. To define these areas, a software application is installed on a computer which is connected to the **KMU-100** via a LAN interface.

The definition of the area, which will determine the output content, is nothing more than a simple positioning of a frame rectangle in the MultiViewer preview for a given channel. Each of the frame rectangles is marked with a different border color. For one of the frames you can scale the signal from full **4K** resolution to **Full HD**, and there is also up and down scaling **(zoom)** possible for all other outputs. The output area (position of each frame rectangle) may be a function of a variable, which means the output can be in constant motion. For each frame rectangle, there are simple animations available. The user just needs to select one of the available **Motion** modes. The start and end positions of the frame rectangle as well as all other related settings are configured on a user friendly interface of the application software installed.

The areas defined by the frame rectangles create 8 SDI outputs (2 x 4 or 1 x 8).

Two multiviewer (HDMI) outputs are used for preview and device configuration.

The **KMU 100** can be used in different various applications for multiple purposes as this device is capable of generating a variety of effects that will satisfy every professional engaged in production, TV broadcast and event live coverage with the use of audiovisual materials.

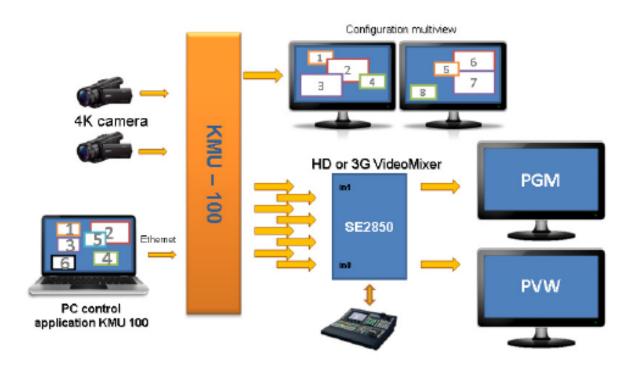
2. Product Applications

The **KMU 100** is basically a bridge interfacing **4K** technologies with current video systems solutions. This device has a very wide range of applications in virtually every area where the high quality image viewing is required such as sporting events, industrial automation, visual effects used during all kinds of live events or in postproduction.

You can find several applications shown in the diagrams below. These are examples of possible uses of our device.

2.1 Video Production and Postproduction

KMU – 100 4K MULTI CHANNEL UNIT application - Postproduction



The **KMU 100** capabilities are perfect for video postproduction compared to other similar products on the market. The video material is recorded with one or two video cameras at **4k** resolution.

With the **KMU 100**, you can not only change the composition, but also the shots. The end result will resemble the use of several cameras. With the switcher connected, the transitions between the output images will then be smooth and natural. At the same time, this solution allows the material to be realized by a single camera operator, thus reducing the production cost while keeping the resulting material at a high quality and **Full HD** resolution. The final effect will be as if it were realized by several operators.

2.2 High Quality Security Systems

KMU-100 4K MULTI CHANNEL UNIT application - 8K Hi security system Configuration multiview KMU - 100 3 5 7 4 x 4K camera 4 6 2 8 Ethernet 9 13 11 15 12 14 10 16 PC control application KMU 100

The **KMU-100** is an invaluable tool in creating a top-notch security system. It allows you to get obtain **3G HD** outputs from a single **4K** camera.

As the **KMU-100** processes the signal in real time, you obtain the effect of **8 high-quality mobile video cameras** but without their actual movement.

In this way, the converter provides new opportunities and possibilities to cut down the costs by reducing the number of video cameras and the cables used, and at the same time increases precision and quality in capturing all important details.

3. Connection to the KMU-100 – DV Link

A platform that unites all!

The **DV Link** platform is a very simple and useful software developed for configuration, diagnostics and control of multiple devices (for example four **KMU 100** converters) communicating through a common **DVIP** protocol.

A camera operator or operators can easily change the functions of each of the visible devices or a group by triggering the pre-defined presets, without the need to use the main **KMU-100** management application. **DV Link** application thus allows quick reconfiguration of the equipment for a specific task.

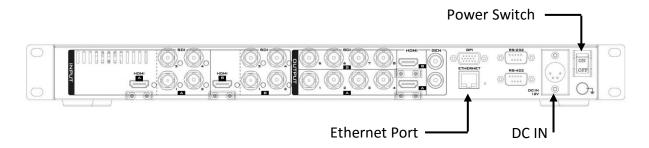
The **DV Link** platform connects multiple devices to control them on a single application.

We invite all the KMU 100 users to download the DV Link application for free.

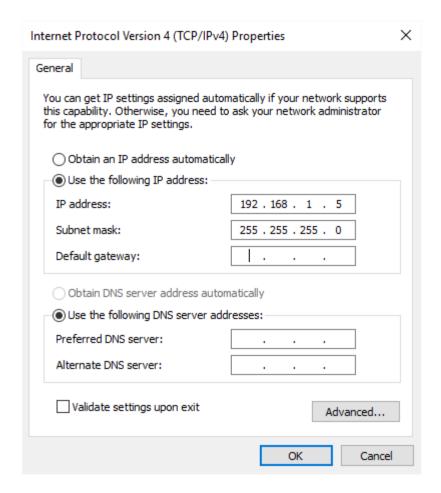
The technical specifications, manual and the download link can be found on the product page.

3.1 Hardware Connection

Prior to the use of the KMU-100, you must first set up the hardware system and configure the IP settings between the PC and the KMU-100. The subsections below will guide you through the connection process step by step.



- 1. First of all, connect the DC 12V power to the KMU-100 device.
- 2. Turn ON the power switch to enter the device into standby mode.
- 3. Connect the PC to the KMU-100 device via an Ethernet cable.
- 4. Lightly touch the power switch button on the front panel for 2-3 seconds to switch ON the KMU-100 device.
- 5. The default IP address of the KMU-100 device is 192.168.1.10.
- 6. The PC IP address and the subnet mask are respectively configured to 192.168.1.5 and 255.255.255.0.



7. After the network connection is configured, you can then start the DV Link application to establish the connection between the KMU-100 and the PC.

3.2 Launching DV Link application



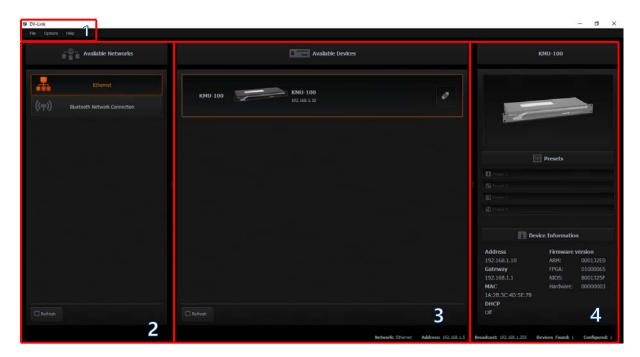
After the **DV Link** application is downloaded and installed on your computer, simply click the **DV Link** desktop icon to open the application.

While **DV** Link application is loading, a screen with a progress bar at the bottom will be displayed as shown in the diagram below.



After the **DV Link** application is loaded, you can see the **DV Link start screen** as shown in the diagram below. The **DV Link** application window can be divided into 4 areas listed as follows:

- 1. Tool Bar
- 2. Available Networks
- 3. Available Devices
- 4. Single device Control Area (KMU-100)



Tool Bar

A **Tool Bar** is located at the upper left corner of the screen where you will be able to find three main options, **File**, **Options** and **Help**.



File – Click Exit to quit the application;



Options – this option contains the following sub-options:

Language – allows you to select the language of the application.

- English
- Chinese / PRC
- Chinese / Taiwan
- Polski



Help – this option contains the following suboptions:

About – End User License Agreement (EULA), Version.

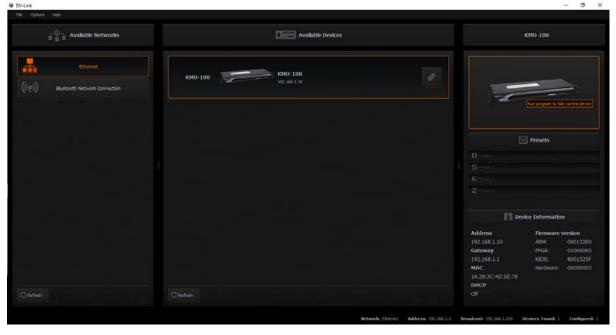
QR Code – Provides the link to the KMU-100 product page.

Available Networks area

In this area, the available networks are displayed as shown in the diagram below.

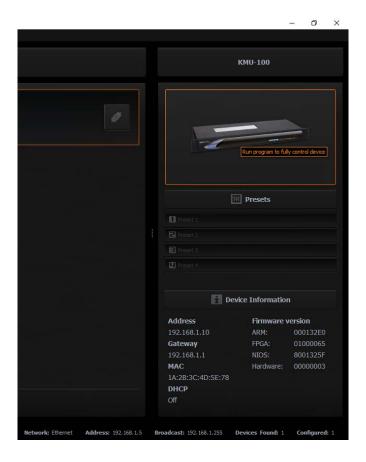


After moving the cursor over and clicking on a given network icon, the available devices in this network will appear in the **Available Devices** area.



After adding a couple of devices, you can easily switch between them in the **Available Devices** area. In order to better identify the devices, you can also rename the connected KMU-100 devices.

After moving the cursor over and click the **KMU-100** device icon in the **Available Devices** area and the device will appear as visible in the **control area**, along with its IP address as shown in the diagram below.



For the selected **KMU 100** device, you can load the presets with user settings from one of **four Preset slots**. You can double click the **KMU-100** device icon in the **control area** (the rightmost KMU-100 column) to open the **KMU-100 Control Interface** as shown in the diagram below.



In summary, at the DV Link application level, you will be able to search for KMU 100 devices in the network, establish connection with them, select the presets and finally launch the KMU 100 Control Interface and operate thereon.

Good luck!

4. Control Application

The Control Application allows you to configure the device and saves presets in the device internal memory. While the **KMU 100** control application is loading, a screen with a progress bar at the bottom will be displayed.



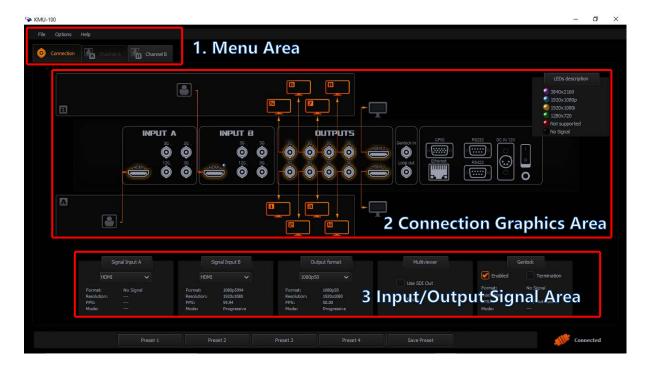
4.1 App Window Descriptions: Connection Tab



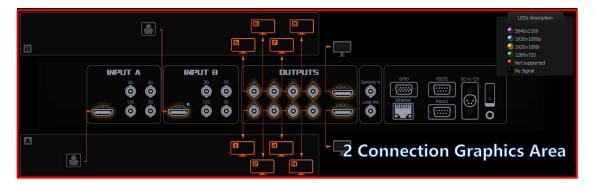
The Connection tab allows you to define input signals connected to **Channel A** and **Channel B**. It is also possible to use the signal from **Input A** to process in **Channel B**, and vice versa, i.e. processing of **Input B** in **Channel A**.

After clicking the Connection tab, you will see a diagram with visualization of necessary cable connections. The **Connection screen** window can be divided into 3 areas as shown in the diagram below.

- 1. Menu area
- 2. Connection Graphics area
- 3. Input/Output Signals area

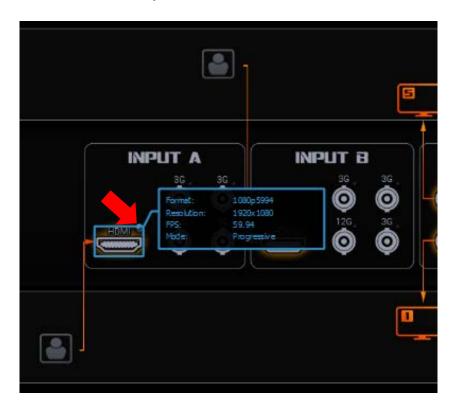


- 1. Menu area When the Connection tab turns orange, it indicates that you are working on this particular screen. Pressing the Channel A or Channel B tabs will switch your display from Connection mode to Channel A or Channel B setting (processing) mode. Detailed explanations of the Menu area is in later parts of the manual.
- 2. **Connection Graphics area** The Connection Graphics Area is basically a graphical visualization of the rear panel of the **KMU 100** device with all its available **inputs and outputs**. The active status and the introduced changes to the inputs and outputs are graphically shown on the screen in the form of arrows / orange icons.



In fact, the active **inputs / outputs** on the rear panel of the **KMU 100** device are indicated by glowing **LEDs** at each **input / output port**. Color of the diode represents the signal resolution. The LED lights up when a signal is detected at the input.

You can see the screenshot of the KMU 100 rear panel as shown in the diagram below. One of the LED locations is indicated by a red arrow.



The **LED** colors indicating current signal format are displayed on the screen in the top right corner of the **graphics area**. **The diagram below depicts the LEDs description**.

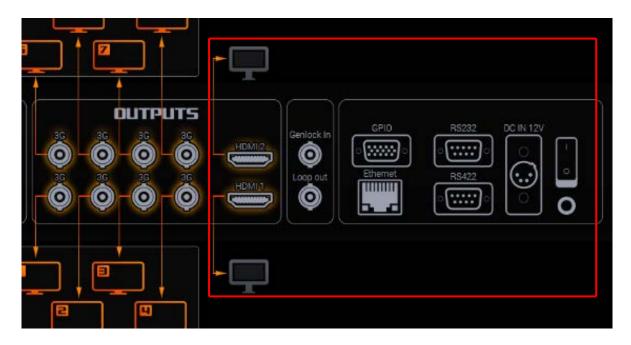


When you move the cursor over the **input port icon**, a preview of the detected format is displayed in a nearby window. In this window, properties such as **Format**, **Resolution**, **FPS** and **Mode** are displayed as illustrated in the diagram above.

The other ports shown in the **Connection Graphics Area** are listed as follows:

- Port: 2 x HDMI Video Output (HDMI type A) supporting 1080p60 allows connection of two monitors displaying Channel A and Channel B images as MultiViewer.
- Port: Sync Input (Genlock) allows the specification of the reference signal for synchronization of output channels.
- Port: Ethernet RJ45 for control, configuration and firmware updates.

- Port: RS-422 input connects the RMC-185 keyboard controller designed specifically for the KMU-100.
- Port: RS-232 input is currently unused.
- DC power supply socket.



3. Input/Output Signals area allows you to configure the KMU 100 device I/O.



Input Signal Configuration

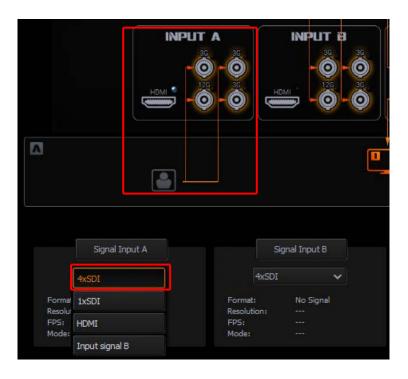
You can select an input signal option from the **Signal Input A** drop-down list as shown below as well as the **Signal Input B** drop-down list.



There are 4 input signal options in the Signal Input A drop-down list:

- 4xSDI
- 1xSDI
- HDMI
- Input Signal B

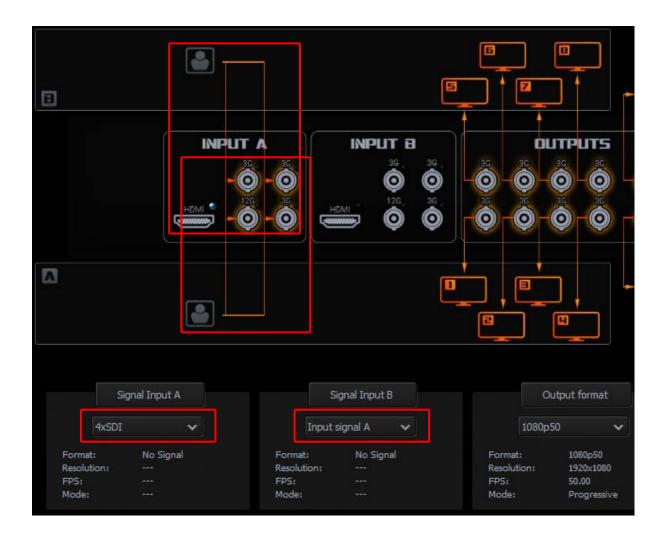
When you select the **4xSDI** option, the four SDI ports in the Input A area will then be highlighted by four orange arrows as illustrated in the diagram below.



After configuring Signal Input A, you can do the same with Signal Input B. There are 4 options in the Signal Input B drop-down list:

- 4xSDI
- 1xSDI
- HDMI
- Input Signal A

It is also possible that **Input B** is not connected any signals, however, rather connecting **Input Signal A** to **Input B**, and then reconfigure the whole device, you can use a copy of the signal from **Input A** as **Signal Input B**. This option of setting the signal from the other input is also available for **Input A**. With this feature, you will thus be able to double the number of frame windows on the same image, i.e. 8 frame windows instead of 4.



Output Signal Configuration

There are several output signal format options in the **Output Format** drop-down list. The available formats are:

- SD PAL/NTSC
- SD 16:9 PAL/NTSC
- 720p 50/59.94/60
- 1080i 50/59.94/60
- 1080p 25/29.97/60
- 1080p 50/50.94/60

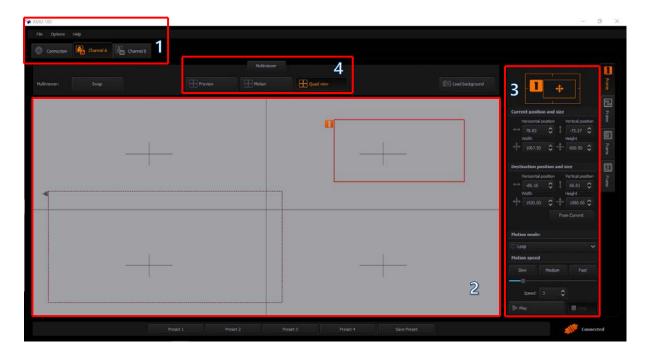
4.2 App Window Descriptions: Channel A and Channel B

The **Channel A** and **Channel B** tabs are used for defining the way the input signal is divided into 4 different outputs. It is done by placing 4 different **frame windows (1, 2, 3 and 4)**. Content of the area bordered by each frame rectangle will be send to a corresponding output channel.

The **Channel A (B)** screen window can be divided into 4 areas as illustrated in the diagram below:

- 1. Menu Area
- 2. Central Work Area

- 3. Frame 1, 2, 3 and 4 Setting (Control) Area
- 4. Multiviewer Preview on the Monitor



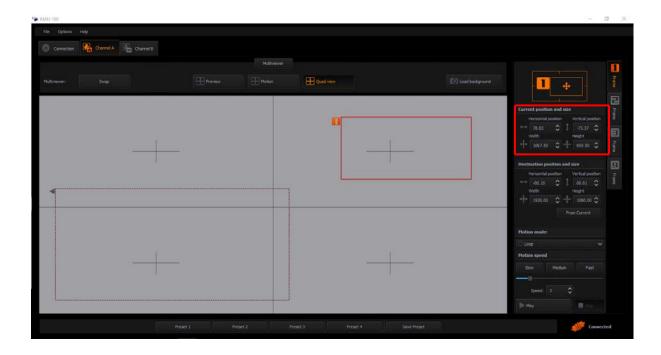
- 1. **Menu Area Channel A (B)** tab turns orange, indicating that the work is being done on this screen window. Clicking the **Channel B** tab will switch to the **Channel B** screen window.
- 2. **Central Work Area** In this area, the frame windows are defined and sent to the corresponding outputs.

To improve UI clarity, every output is configured in a separate tab, Frames 1/2/3/4.

Frame window size and position can be set with mouse clicks (on central work area) or by entering the exact size/position values in the Frame Setting Area on the right of the Channel A (B) screen window.

Frame Window Size – This can be configured on the **central work area** by clicking on any corner or edge of the frame window with the mouse cursor. The window proportions are always retained as the rectangle is in **16:9** aspect ratio.

Size of **Frame Window 1** is unrestricted as you can configure it up to the input format, **even 4K**. See the diagram below (current position and size).



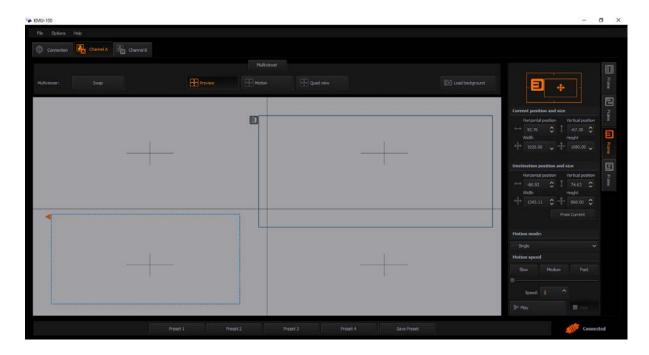
Frame Windows 2, 3 and 4 support resolution up to **1080p** and the application restricts them from extending further.

A double click on the edited window will switch it to the max available size and the second double click will restore it to its previous size. Aspect ratio is defined by the output resolution and automatically applied to frame window definition.

You can set a graphical background for the gray workspace of the **Central Work Area**, and the graphical background should help you better position the frame windows. The graphics file (**JPG**, **PNG**) can be loaded by selecting an image file from the hard drive.

3. Frame 1, 2, 3 and 4 Setting (Control) Area

Frame Window selection – Click the appropriate **Frame 1, 2, 3 or 4** tab on the rightmost side of the work space to start configuring selected **Frame Window**. The selected **Frame** is indicated by an orange tab **as shown in the diagram below**.



So far we've covered frame windows 1, 2, 3 and 4 defined as fixed (stationary) in their Start positions. However, every frame window can be animated.



To animate the Frame Window, all you need to do is to select the size and position of the Start rectangle and Stop rectangle. The position and the size of the Start and Stop rectangles can be defined using the mouse cursor or by entering the position coordinates in the Frame Setting Area (Current position and size and Destination position and size).

If you want to set the **final window** position exactly in the place where the **start window** is, you can simply click the **From Current** button. After the **From Current** button is clicked, you should be able to see **the Start window overlapping the Stop window** (in identical positions).

Stop rectangle is drawn in dash mode. In the picture below, you can see that the **Start rectangle** is indicated by a short arrow and the **Stop rectangle** is indicated by a longer arrow.



Motion Mode – You can select the motion mode in the **Frame Setting Area**. The available options are:



Off – No animation (default).

Single – Single movement from Start to Stop.

Ping-Pong – Swing cyclical movement, i.e. Start-Stop, Stop-Start, Start-Stop and so on (pendulum swing motion).

Loop – Cyclical movement, i.e. Start-Stop, Start-Stop and so on.

You will see the animation as virtual movement of the camera shot.

In addition to changing the window position, you can define its size as well, thereby effectively realizing a **virtual zoom function**. As shown in the diagram below, the **Stop window** is much smaller size than the **Start window**.



After selection of the motion mode, you are then allowed to select one of the three speed modes (slow, medium, or fast) as shown in the diagram below.



After the size and position of **start and stop windows**, **motion** type and **speed mode** are configured, you can start the animation by clicking **Play** button.

4. Multiviewer - Preview on the Monitor

You are allowed to select a Multiviewer mode to preview on the monitor. The three available modes are **Preview**, **Motion**, and **Quad View**.



Preview of the live input is only possible on the **Multiviewer** out. The three modes of the **Multiviewer** output are described as follows.

Preview – Four rectangles at their respective **Start positions** are visible on the live input. **In** the diagram below, frame window 1 covers the entire screen.



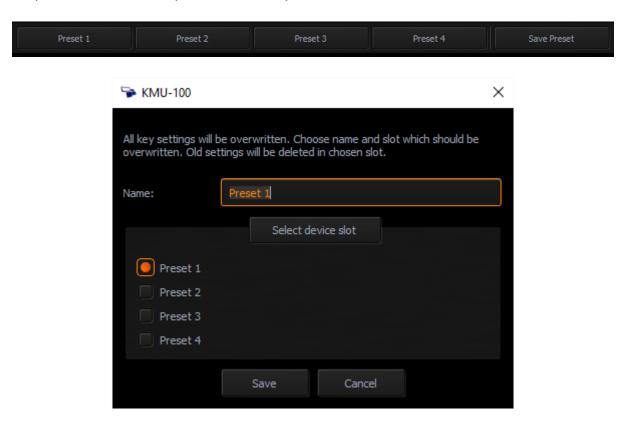
Motion preview – The **Start, Current** and **Stop** rectangles of the selected Frame tab are visible on the live input. The diagram below depicts the **rectangles of frame window 1**.



Quad view – In the Quad View mode, preview of contents of the four outputs is displayed on the monitor as shown in the diagram below.



After configuring the properties of frame windows such as position, motion mode, and etc., they can be saved directly to one of the **4 preset slots**.



4.3 Tool Bar

There is a **Menu bar** in the top left corner of your screen. You can find three main options which are **File**, **Options**, and **Help**. The table below shows the sub-options that pop up when you click on the respective main options.

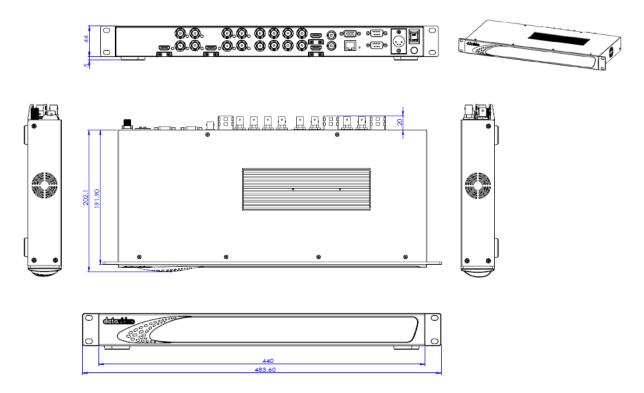
File	Exit	Quit the application
Options	Language	Select the language English Chinese/PRC Chinese/Taiwan
	Configuration	Polski Additional application settings Information about the device SDI 3G output type Firmware Network configuration Triggers Temperatures
Help	About	About KMU-100: End User License Agreement (EULA), Device, Version. A link to the KMU-100 product page.

5. Frequently-Asked Questions

This section describes problems that you may encounter while using the KMU-100. If you have any questions, please refer to related sections and follow all suggested solutions. If problem still exists, please contact your distributor or the service center.

No.	Problems	Solutions
1.	The DV LINK APP fails to connect.	Sometimes the DV LINK APP will be disconnected.
2.	The PC fails to communicate with the KMU-100	You might be using non-compliant cables which will cause signal failure after connected to the KMU-100.

6. Dimensions



All measurements in millimeters (mm)

7. Specifications

KMU-100 is an advanced video converter which allows the conversion of 2 independent UHD input signals into 2×4 or 1×8 different streams with resolutions up to FullHD.

Connections				
SDI Video Input	2 x (1) - 10 bit HD, 3G levels A and B, 12G UHD switchable			
	6 x (2,3,4) - 10 bit HD, 3G levels A and B switchable; Usable as			
	Quad SDI; 4x3G SDI input for UHD			
HDMI Video Input	2x HDMI type A connector with support for 2160p60			
SDI Video Output	8 x – 10 bit SD, HD, 3G levels A and B switchable			
HDMI Multiviewer Video	2x HDMI type A connector with support for 1080p50/59.94/60			
Output				
SDI Audio Input	16 channels in HD, 3G HD, and UHD			
SDI Audio Output	16 channels in HD, 3G HD, and UHD			
Multi Rate Support	SDI connections are switchable between standard definition,			
	high definition and UltraHD			
Sync Input (Genlock)	Blackburst or TriSync			
Computer Interface	Ethernet RJ45 for control, configuration and updates			
	RS-232 x 1 input for controlling configuration			
	Software			
Software Control	A dedicated software control utility application for changing			
	settings via Windows 7, Windows 8, and Windows 10 is included			
	free of charge.			
	Power Requirements			
Power Supply Included external 12V / 5A power supply				
	Environmental Specifications			
Operating Temperature	5° to 50 ° C (41° to 122° F)			
Storage Temperature	-20° to 45°C (-4° to 113°F)			
Relative Humidity	0% to 90% non-condensing			
Proce	ssing – Two independent channels			
Outputs Definition	Each channel has a definition of four rectangles indicating the			
	way the input signal is divided into 4 different outputs.			
	The content bordered by each frame window will be sent to a			
	corresponding output.			
Windows Animation	Animation is possible for every frame window. User selects the			
	size and position of Start and Stop rectangles.			
	Motion modes available:			
	Single – Single movement from Start to Stop.			
	Ping-Pong – Swing cyclical movement, i.e. Start-Stop, Stop-Start,			
	Start-Stop and so on (pendulum swing motion).			
	Loop – Cyclical movement, i.e. Start-Stop, Start-Stop and so on.			
Multiview Output	Preview of the outputs:			

	Preview – Four rectangles at their respective Start positions are			
	visible on the live input.			
	Motion preview – The Start, Current and Stop rectangles of the			
	selected Frame tab are visible on the live input.			
	Quad view – Preview of the content of four outputs.			
Standards				
SD Format	Support			
1.5 Gb/s HD Format	720p50			
Support	720p59.94			
	1080p25			
	1080p29.97			
	1080i50			
	1080i59.94			
3 Gb/s HD Format	1080p50, 1080p59.94 and 1080p60 levels A and B			
Support				
Ultra HD Format	2160p25, 2160p29.97, 2160p50, 2160p59.94			
Support				
SDI Compliance	SMPTE 259M, SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE			
	425M, SMPTE2082-1			
Audio Sampling	Television standard sample rate of 48kHz and 24-bit HD, 20-bit SD			
Video Sampling	4:2:2			
Color Precision	10-bit			
Color Space	REC 601, REC 709			

Service & Support

It is our goal to make your products ownership a satisfying experience. Our supporting staff is available to assist you in setting up and operating your system. Please refer to our web site www.datavideo.com for answers to common questions, support requests or contact your local office below.

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