# KRAMER





# VS-411UHD Quick Start Guide

This guide helps you install and use your VS-411UHD for the first time.

Go to www.kramerav.com/downloads/VS-411UHD to download the latest user manual and check if firmware upgrades are available.

## Step 1: Check what's in the box

- VS-411UHD UHD 4x1 Auto Switcher
- 4 Rubber feet  $\mathbf{\mathbf{V}}$
- IR remote control transmitter with batteries

- ✓ 1 Power supply (5V DC)
- - 1 Quick start guide

- $\mathbf{\mathbf{V}}$
- Step 2: Get to know your VS-411UHD



#	Feature	Function
1	IR LED	Lights when the unit accepts IR remote commands
2	IR Receiver	Accepts IR remote commands
3	ON LED	Lights when power is connected to the unit
4	AUTO/MAN. Selector Button and LED	Toggle switch to select between automatic (LED on) or manual switching (LED off)
5	LAST/PRIO. Selector Button and LED	When in the AUTO mode, switch toggles to select switching to the last connected input (LED on) or the highest priority input (LED off).
6	INPUTS Selector Buttons	Press the INPUT button to select the input to switch to the output (from 1 to 4). Button LED indication: A selected input – the button illuminates An active input that is not selected – the button is dim A non-active button that is not selected – the button is dark
7	OFF Button	Press to mute the video output (lit when muted)
8	EDID Button	Press to copy the EDID (button is illuminated)
9	LOCK Button	Press to lock the front panel buttons (button is illuminated)







#	Feature	Function	
10	AUDIO INPUT 3.5mm Mini Jack	Connect to the unbalanced stereo audio inputs (from 1 to 4)	
11	AUDIO BALANCED OUT Terminal Block Connector	Connect the balanced stereo audio output to a balanced stereo audio acceptor	
12	MODE/PRESET DIP-switches	See Step 6	
13	AUDIO SELECT DIP-switches	Set audio embedding for inputs 1 to 4 (the switch number corresponds to the input number):	
		Set down (ON) to always embed the analog audio	
		<ul> <li>Set up (OFF) embeds analog audio only if the HDMI video does not have audio (DVI), see Step 6</li> </ul>	
14	PROG mini-USB Port	Connects to a PC to upgrade the firmware	
15	5V DC	+5V DC connector for powering the unit	
16	INPUT HDMI Connectors	Connect to the HDMI sources (from 1 to 4)	
17	OUTPUT HDMI Connector	Connect to the HDMI acceptor	
18	INPUT SELECT Terminal Block Connector	Connects to a contact closure switch, see Step 6	
19	RS-232 Terminal Block Connector	Connect to the PC or the Remote Controller	

## Step 3: Install the VS-411UHD

Attach the rubber feet and place on a table or mount the VS-411UHD in a rack (using an optional RK-1 rack mount).

## Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **VS-411UHD**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to the **VS-411UHD**.



## Step 5: Connect the power

Connect the 5V DC power adapter to the VS-411UHD and plug it into the mains electricity.

Safety Instructions



Caution: There are no operator serviceable parts inside the unit.

Use only the Kramer Electronics power supply that is provided with the unit. Disconnect the power and unplug the unit from the wall before installing. Warning:

Warning: See www.KramerAV.com for updated safety information.

# Step 6: Set the DIP-switches

MODE/PRESET 12345678 N

Set the Audio Select DIP-switches as shown in the lower table:



Set the Mode/Preset DIP-switches as shown in the following table:

DIP	Function	Off (Up)	On (Down)
1	Audio EDID	Pass audio EDID of sink	Limit to 2-CH LPCM
2	Color EDID	Pass deep color parameter of sink	Limit to RGB 8bpp
3	Lock EDID	Pass EDID of sink	Lock current display EDID and the current settings of DIPs 1 and 2 (The settings of DIPs 1 and 2 cannot be changed when DIP 3 is locked) This state also allows copying the default EDID or an EDID file to the inputs. (If using EDID Designer, refresh after copying)
4	HDCP	Enable HDCP support When Off, if the output supports HDCP, the input declares HDCP support. It then handles HDCP on the output and input actively. If the output does not support HDCP then the input does not support HDCP	Disable HDCP support When On, the device does not support HDCP on its input, even if HDCP is detected on the output
5	ARC or Step-in for the 1st HDMI input	Step-in	ARC audio
6	Analog Output Audio From	Source	ARC audio
7	Output Off	Disable (to support audio only embedding)	Enable
8	Output Off Delay Settings	15sec default (configurable)	15min

#### Audio Select DIP-switches

DIP #	Function	Description		
		Off (Up)	On (Down)	
1	Input 1 audio embedding	Embed analog audio only if the HDMI video does not have audio (DVI)	Always embed analog audio	
2	Input 2 audio embedding			
3	Input 3 audio embedding			
4	Input 4 audio embedding			

## **Step 7: Operation**

### Manual Switch Mode

In Manual switch mode, the **VS-411UHD** does not automatically switch to another channel even if an input signal is not detected on the manually selected input.

#### To select the Manual switch mode:

- 1. Press the AUTO/MAN. button. The Auto LED turns off.
- 2. Press an INPUTS button (1 to 4) to route this input to the HDMI output. The keys respond as follows:

Input LED bright: input selected

Input LED dim: input active and not selected

Input LED off: input is not active and not selected

### Auto Switch Mode

In Auto switch mode, the **VS-411UHD** automatically switches one of four HDMI inputs to a predefined or the last connected input whenever the currently active video signal is interrupted or whenever a higher-priority video signal is detected.

### To select Auto switch mode:

- 1. Press the AUTO/MAN. button to turn the Auto LED on.
- 2. Press the LAST/PRIO. button to select an auto switch mode:

Last connected (LAST LED on) – The device always switches to a newly detected active video source. When the device is powered on, the output switches to the highest priority input

Priority (LAST LED off) – The device always switches to the highest priority input source. First priority is Input 1 then 2, 3, and 4.

### Manual Override Mode

Auto switch mode can be overridden by a manual command, such as pressing an input button or sending a control command. In such a case, the system switches to the manually selected source. If this manually selected source is not active, the system waits a set amount of time (10 seconds, default; can be changed using Protocol 3000 commands) and then switches back to auto mode. Manual override selection is not stored in non-volatile memory.

## **Step 8: Technical specifications**

INPUTS:	4 HDMI connectors, 4 unbalanced stereo audio on 3.5mm mini jacks
OUTPUTS:	1 HDMI connector, 1 balanced stereo audio on 5-pin terminal block
PORTS:	1 RS-232 on a 3-pin terminal block, 1 mini USB for programming
COMPLIANCE WITH HDMI STANDARD:	HDMI 1.4, Deep Color, 3D, ARC, up to 7.1 uncompressed audio channels
DATA RATE:	6.75Gbps (2.25Gbps per graphic channel)
SUPPORTED RESOLUTIONS:	Up 4K x 2K, 4K@60Hz (4:2:0)
CONTROLS:	Front panel buttons, contact closure, IR, RS-232 Protocol 3000
SOFTWARE SUPPORT:	Protocol 3000, EDID Designer, K-Upload
POWER CONSUMPTION:	5V DC, 520mA
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F)
STORAGE TEMPERATURE:	-40° to +70°C (-40° to 158°F)
HUMIDITY:	10% to 90%, RHL non-condensing
DIMENSIONS:	12cm x 7.15cm x 2.44cm (4.7" x 2.96" x 0.96") W, D, H
WEIGHT:	0.88kg (1.76lbs) approx.
SHIPPING DIMENSIONS:	23.2cm x 12cm x 8.9cm (9.1" x 6.7" x 3.5") W, D, H
SHIPPING WEIGHT:	1.51kg (3.3lbs) approx.
INCLUDED ACCESSORIES:	Power adapter, IR remote control
OPTIONS:	RK-1 19" rack adapter



