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SHOWCAST 100

4K 4-Channel SHOWCAST Studio

7in1

- 07 Audio Mixer
- Video Switching 01
- 06 Recorder
- Subtitle Overlay 02
- 05 Touch Panel Control
- Camera Control 03
- 04 Video Streaming

4K

datavideo

4K 50/60 UHD

Radio Station

House of Worship

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Conference Hall

SHOWCAST 100

Innovation

Compact

Easy to Use

All in One

The ShowCast 100 is a brand new 4K 4 Channel Touch Panel Switcher housing 7 major functions such as video switching, subtitle overlay, camera control, video streaming, touch panel control, recording and audio mixing in a single box. Like a tablet, the 14 inch touch panel allows easy and intuitive access to switcher functions. Each button is assigned to do one function so that by simply pushing the button, you will be able to generate any desired video effects. This professional switcher is easy to learn. Supporting 4K 50/60p, it gives you high quality resolutions and viewing experience. To use the ShowCast 100's built-in controls to pan, tilt and zoom the connected PTZ cameras and access the relevant settings, simply connect the cameras to the switcher with a standard Ethernet cable.

Education

4K
50/60 **UHD**

07 Audio Mixer
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SHOWCAST 100

4K 4-Channel Touchscreen Switcher

The touch panel allows easy and intuitive access to a variety of switcher functions.

1	2	3	4	5	6	7
Video Switching	Subtitle Overlay	Camera Control	Video Streaming	Touch Panel Control	Recorder	Audio Mixer

The Showcast 100 houses many functions with easy system setup.

The 4K switcher's 7 major built-in functions complete your video production workflow, reducing the number of external devices that you need to connect. Showcast 100 is light and compact with high mobility at any production sites.

Easy installation with four HDMI inputs, portable and innovative for a wide range of programs.

You can connect three cameras to the Showcast 100 for precise control and configurations. You can also connect a laptop to make presentations, show graph information, etc.

SHOWCAST 100

Professional audio mixing

Audio delay fixes the audio video out of sync issue, usually the audio leading the video. The switcher also supports ± 6 dB audio level calibration and mono/stereo switching. Connect the headphone to the audio port for audio monitoring.

Streaming and recording

The Showcast 100 provides dual streaming service or can be used in conjunction with Datavideo dvCloud server to stream to a maximum of 25 streaming platforms. HD videos recorded in H.264 format can be saved on the SD card.

PTZ Camera Control

Multiple control protocols such as RS-422, DVIP and VISCA are provided to control up to 3 PTZ cameras. With the 12 memory presets for saving camera settings, a single person would be adequate to do all the tasks during video production.

Video switching and the 14 inch touch panel control

Supporting 4K 50/60p video switching, the switcher brings you extra clarity and fine details in the video. The 14 inch touch panel offers an intuitive UI control. Each button is assigned only one function so that by simply pushing the button, you will be able to generate any desired video effects.

Stream

The stream port allows you to stream your video live and record to the SD card at the same time.

4K HDMI Output

4 4K HDMI PGM outputs allow connection of monitors, recorders, big screens, etc. sources such as cameras, laptops, etc.

STREAM

VIDEO OUT

CG PREVIEW   PGM 3   PGM 2   PGM 1

VIDEO IN

HDMI 4   HDMI 3   HDMI 2   HDMI 1
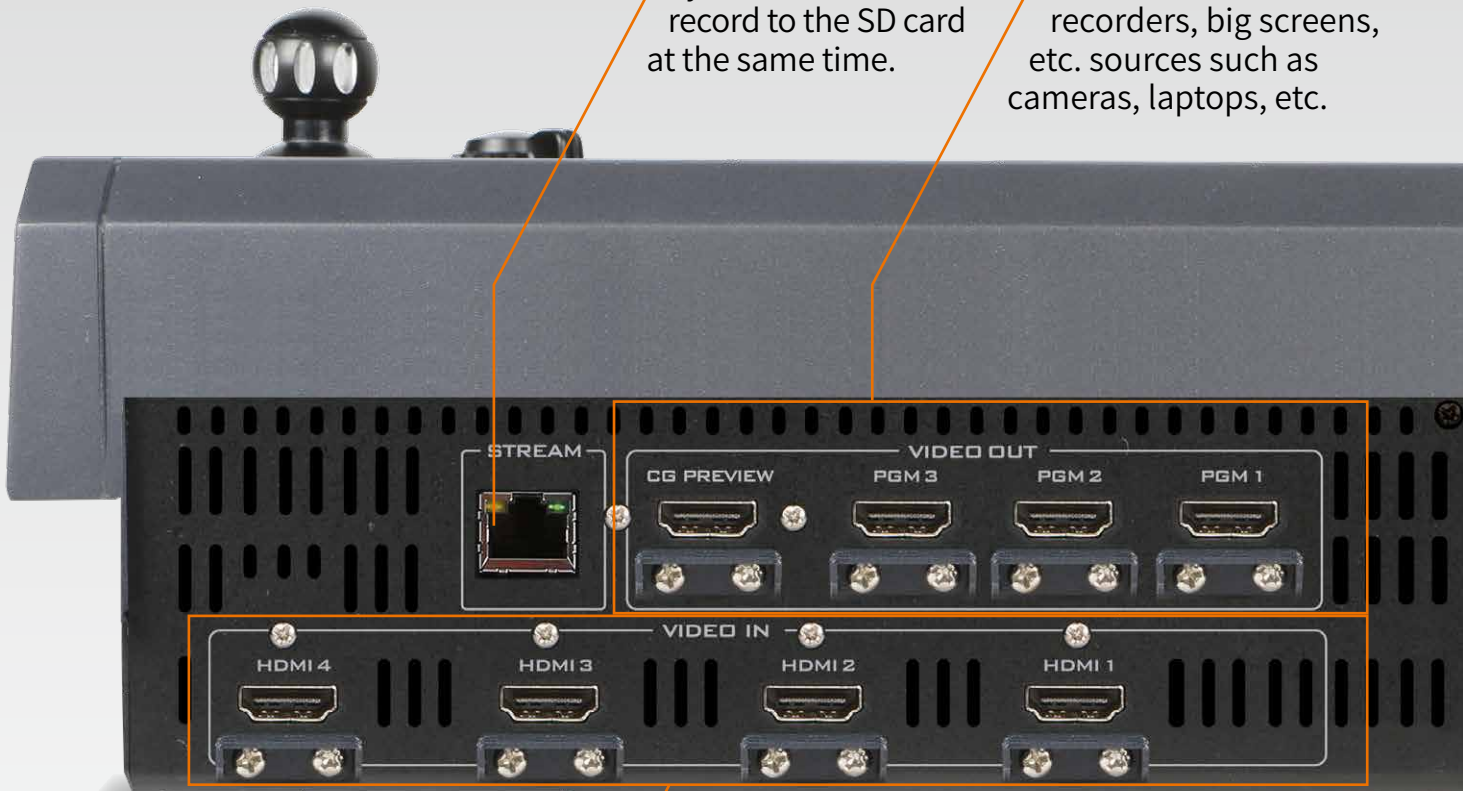
4K HDMI Inputs

The four HDMI inputs supporting up to 3840p50/60 video resolutions accept video sources such as cameras, laptops, etc.

Audio

The XLR/6.3mm composite ports allow connection of various audio sources. The dual channel RCA ports are designed for analog audio connection. The RCA output serves to connect external audio equipment for audio monitoring.

DVIP

DVIP is a network protocol developed by Datavideo for camera control.

RS-232/422

Three RS232/422 serial ports can connect three cameras for control.

01 / Video Switching

Easily Accessible 4 HDMI Input/Output Channels

The four HDMI input/output channels are designed for basic video production flow of meetings, speech conference, church events, etc. They allow you to create professional and quality live programs.

Virtual buttons	Physical buttons

Four camera multiview   Program view

Switching between different video effects

Touchscreen UI

4K Clarity with Fine Details

Supporting 4K 50/60p, the Showcast 100 provides high clarity and fine details. With other 4K devices, they form a complete 4K video production system for a variety of programs.

Built-in Extended Display Identification Data

The Showcast 100's EDID function allows the HDMI output port to identify the highest supported resolution of the connected display device then automatically adjust the output resolution to the detected resolution, thereby optimizing the entire work flow.


EDID

Useful and Simple Transition Effects

Cut, Mix and Wipe are the three useful and simple transition effects built into the switcher. Via an easy-to-use 14 inch touchscreen UI, the transition settings will be immediately accessible after selection of a particular effect. For example, if you've selected WIPE, you can easily adjust the transition speed by dragging a slider with your finger or tap to select a color for the border.
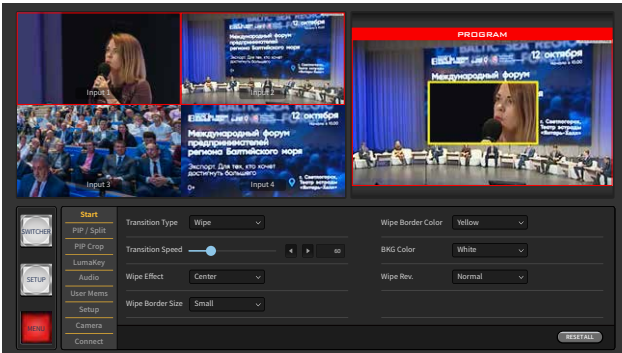

Mix   Wipe:Center
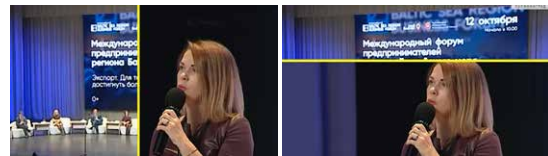
Wipe:Left Right   Wipe:Up Bottom

PIP and Split

PIP is often required in video production. Most of the time, the PIP window size need to be adjusted for the program view. The Showcast 100 allows you to drag different sliders on the touchscreen UI with your finger to set the aspect ratio of the PIP window. The split window is usually used for interview program, speech conference, etc.
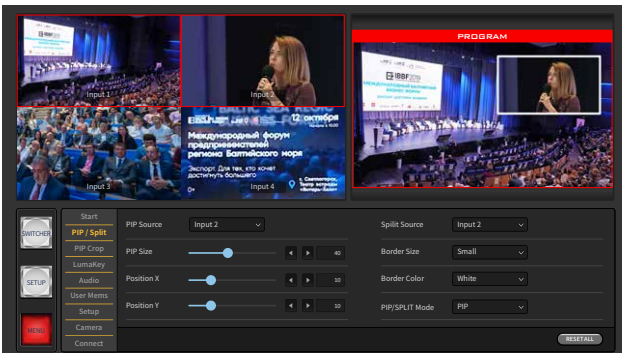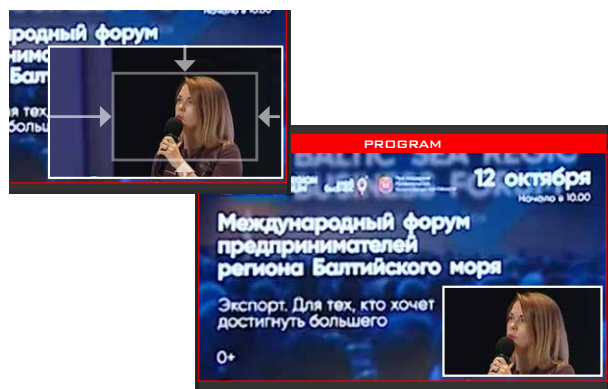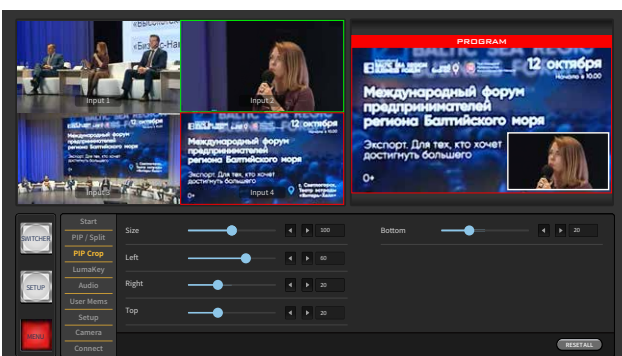

PIP

Split

PIP Crop

It is surprisingly easy to crop your PIP window. In addition to cropping the top and bottom of the window, you can also crop the left and right edges.


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02 / Subtitles

Two Ways to Overlay Subtitles

The Showcast 100 offers two ways to overlay the subtitle. A lumakeyed subtitle is usually used for logo, text animated texts, etc. Lumakeyed subtitles can be previewed on the multiview screen and transitioned to the program view during video production. Another way is to overlay the subtitle using the built-in network streaming server. On the web UI of the streaming server, enter the subtitle texts in the text field of the CG page after which the subtitle will be shown on your stream video as streaming starts and recorded on the SD card along with the video. If lumkeyed subtitle and CG texts are shown at the same time, they will all be recorded on the SD card.

Lumakeyed Subtitle

Luma key is an image processing technique that deals with the brightness level of an image or a video, thereby generating a foreground subtitle or logo. Showcast 100's luma key function is designed for logos, text and animated images.
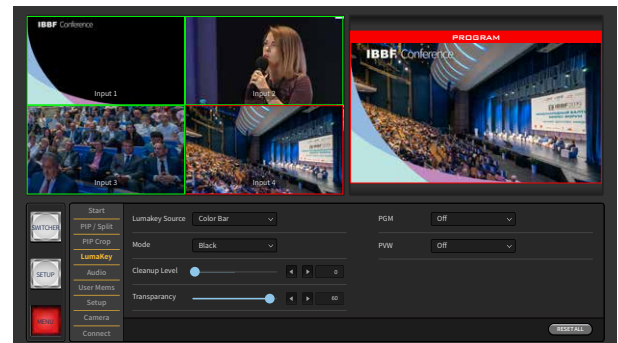
Character Generation using the Network Streaming Server

The CG texts or image generated using the network streaming server can be overlaid on the video during streaming. The text size and color can be customized with a border added. The text or image position can also be adjusted accordingly.
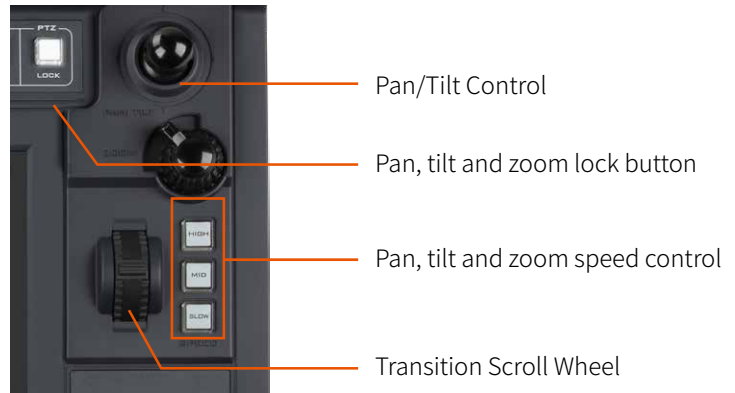
03 / Camera Control

Joystick

The joystick can be used to pan and tilt the camera lens. After configuring the camera's pan and tilt settings, you can lock the joystick by pressing the PTZ lock button.

Zoom Scroll Wheel

Push the scroll wheel up to zoom in and down to zoom out. Three PTZ speeds are available to help you achieve broadcast quality video effects.

Transition Scroll Wheel

Move the scroll wheel up and down to activate the transition effects.

Pan/Tilt Control

Pan, tilt and zoom lock button

Pan, tilt and zoom speed control

Transition Scroll Wheel

A Standard Ethernet Cable to control Three Cameras

The Showcast 100's built-in camera control functions allow you to simultaneously control three PTZ cameras. You can directly save the lens position presets, pan and tilt camera lens in real time, zoom in and out of an image, and adjust the white balance, iris and mirror mode.

Pan   Tilt   Zoom   Speed   CONTROL

Multiple Control Interfaces

The Showcast 100 provides different control methods. You can use the RS-422 interface to control the connected cameras. You can also use the DVIP port to establish connection with the switcher via a router for remote control and greater flexibility of the system setup. The VISCA protocol allows you to reach more range of cameras.

RS-422Connection

DVIPConnection

RS-422   DVIP

Powerful camera presets are equivalent to having 12 PTZ cameras

With only three PTZ cameras, and each given 4 presets of camera angles, you will be able to pre-save a total of 12 memory presets to simulate a 12 camera environment for your production. The 12 memory presets allow the director to instantaneously switch between different camera angles on ShowCast 100 by pushing corresponding preset buttons without the cameraman.

A total of 12 presets for storing camera positions

4 presets   4 presets   4 presets
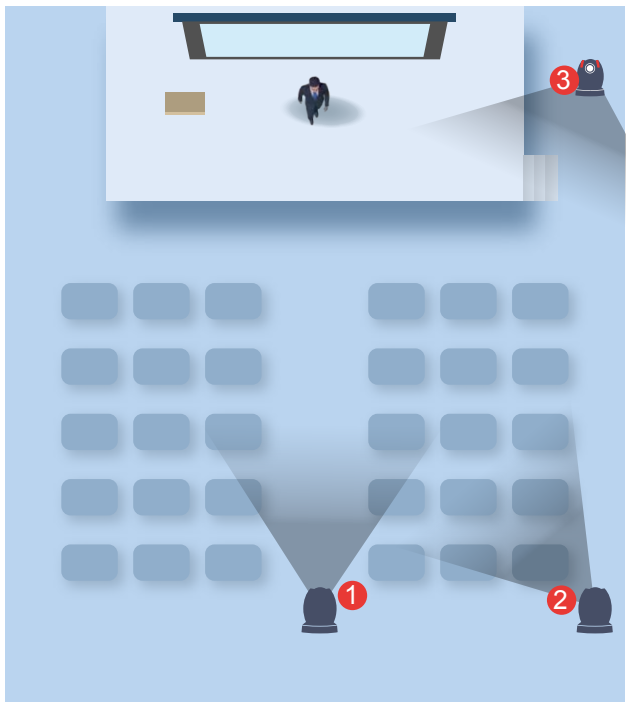
Fine Tuning the Camera Parameters

On the intuitive touchscreen UI, you can easily adjust the camera's focus, iris and white balance settings. Settings of a particular program can be saved in memory presets for future use.

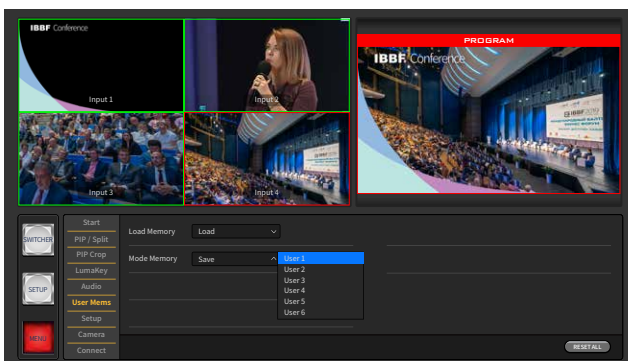White Balance adjustment

IRIS adjustment
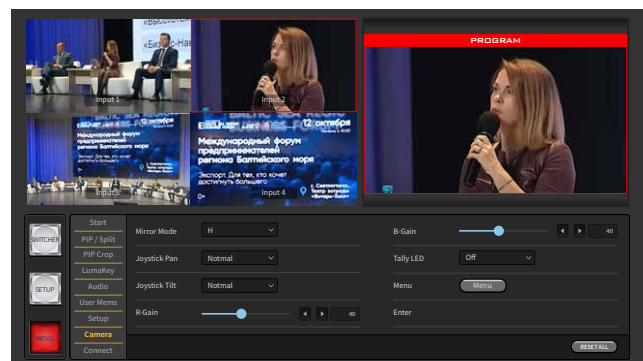

Focus adjustment

Shutter adjustment

User memory presets

Settings of different programs or events can be saved in these user memory presets for future use.

Mirror mode and tally light settings

The mirror mode sets the display orientation of the camera image; you can flip the image horizontally or vertically. In addition, you can disable the tally light or enable it as a red or green tally.

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Live Streaming Encoder

The built-in dual live streaming encoder contains many functions for your innovations. You can use the encoder as simply a video streaming server or a recorder. If necessary, you can also stream and record the videos at the same time. Depending on the bandwidth available, you can set the bitrate to low, medium or high. To meet growing demand for mobile viewing, the portrait view can now be easily activated on the Showcast 100 by simply pressing the VERTICAL button so that viewers will be able to view the program on their mobile devices by holding them upright without having to change the orientation.


The bitrate of your stream | Video streaming in portrait view | Record start button | Stream start button

Dual Streaming

During video production, you can simultaneously stream to two live streaming platforms such as Facebook, Youtube and Twitch. With Datavideo dvCloud, you can stream to 25 live streaming platforms at the same time and automatically back up your video files on the cloud server.
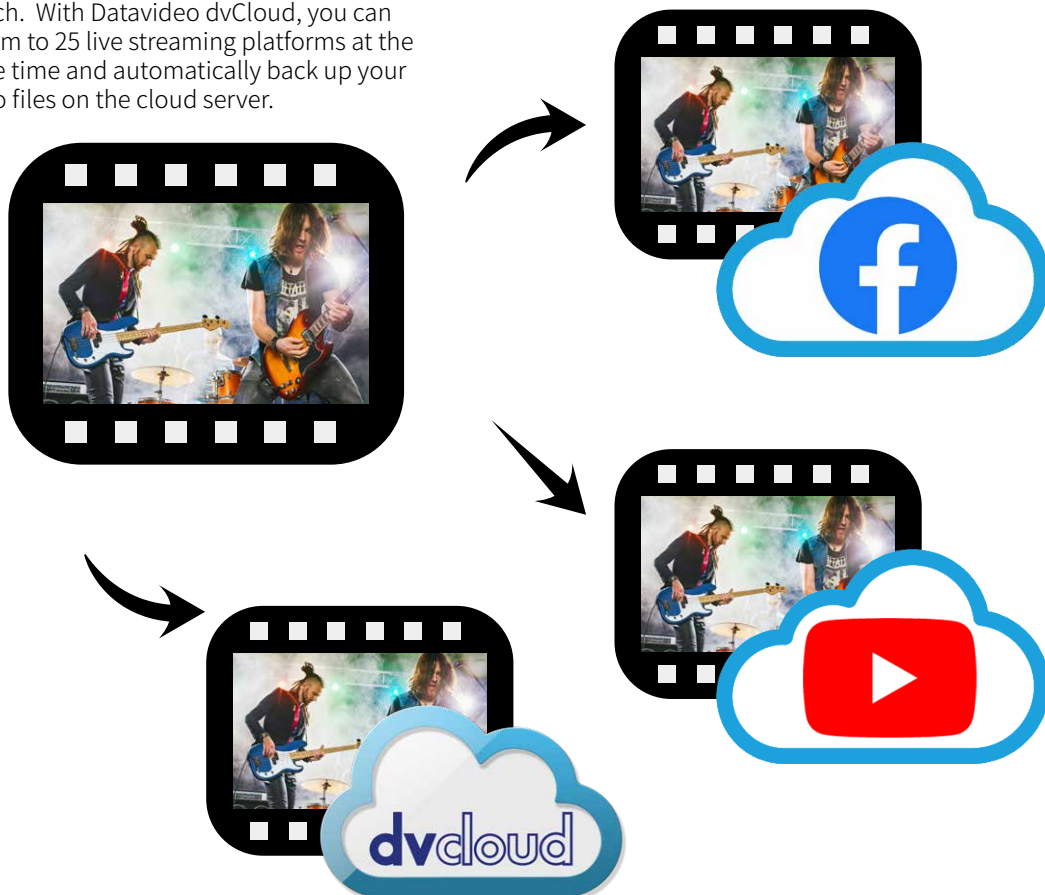
dvCloud and SRT

dvCloud is a professional live streaming platform developed by Datavideo. After login, you will be allowed to create and manage all video streaming channels on dvCloud and stream your video to 25 live stream servers without any time constraints. The best part about dvCloud is that it allows you to back up video files on the cloud server for future downloads. The Showcast 100 forms a low latency, secure and reliable streaming work flow with the SRT protocol and the dvCloud server.

Vertical Streaming

For each live streaming video, 50% of the audience view on mobile phones, and 94% of the mobile users prefer holding the phone upright to view the video. It takes only a few basic setups for the vertical streaming function of the Showcast 100 to generate a portrait view of your streaming video.
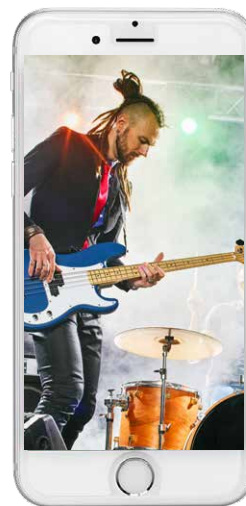
14 Inch Touch Screen

The traditional physical keyboard of the switcher is replaced by a professional touchscreen UI to allow video switching, activation of subtitle overlay, camera control, video recording, audio mixing, etc. Operation of these functions is intuitive and easy to learn, even to non-professional users.

## The Showcast 100 has an anti-reflection film layer on the touch panel.

This ensures that you will not be distracted under all circumstances and finish your creations with a smooth workflow.

Resolution 1920x1080

Intuitive Operation using the Touchscreen UI

The Showcast 100's intuitive touchscreen UI has several buttons with each assigned of one function only. The pane-like design divides the functions into different groups. Like a tablet, the touchscreen UI is intuitive and easy to use, giving you a pleasant user experience.
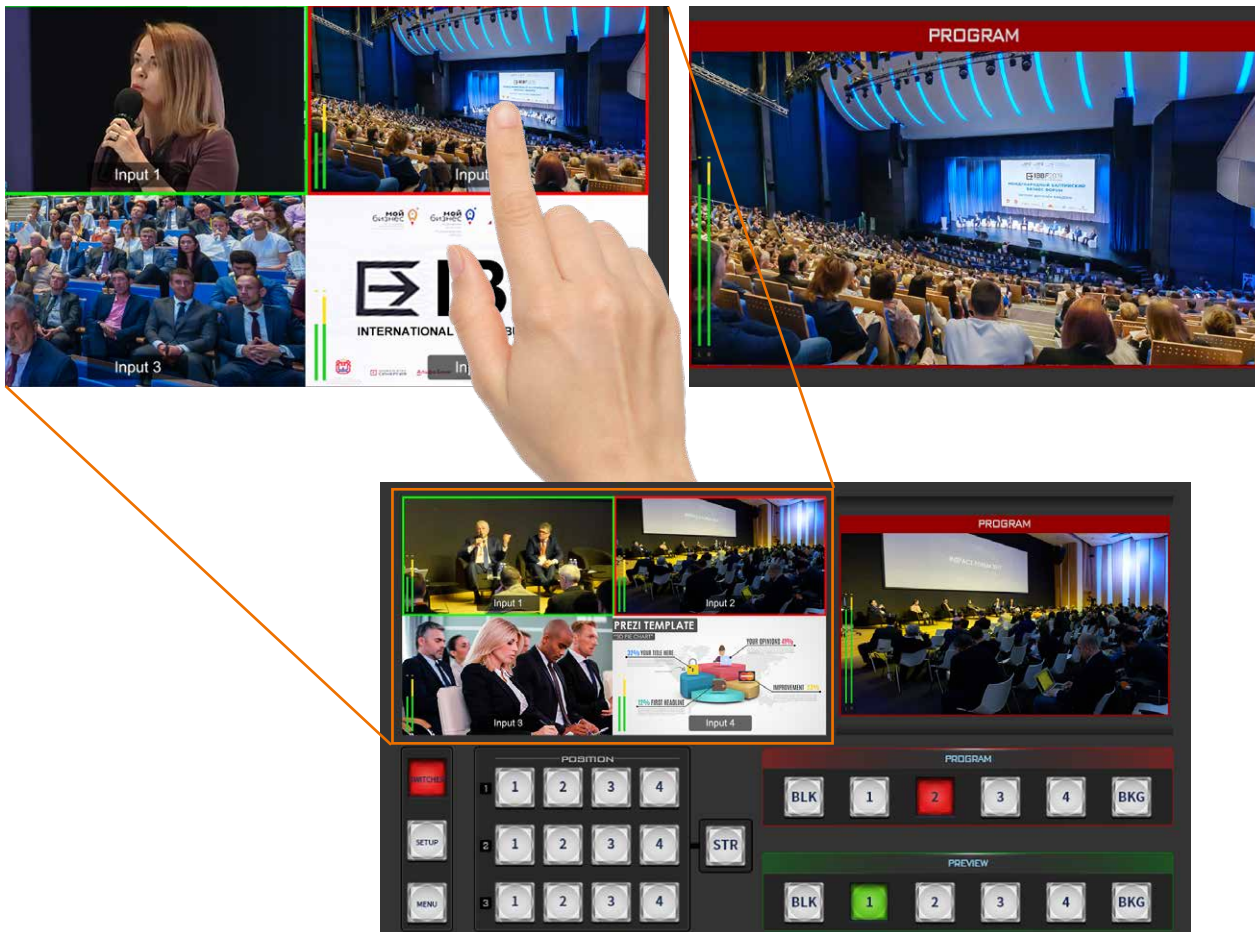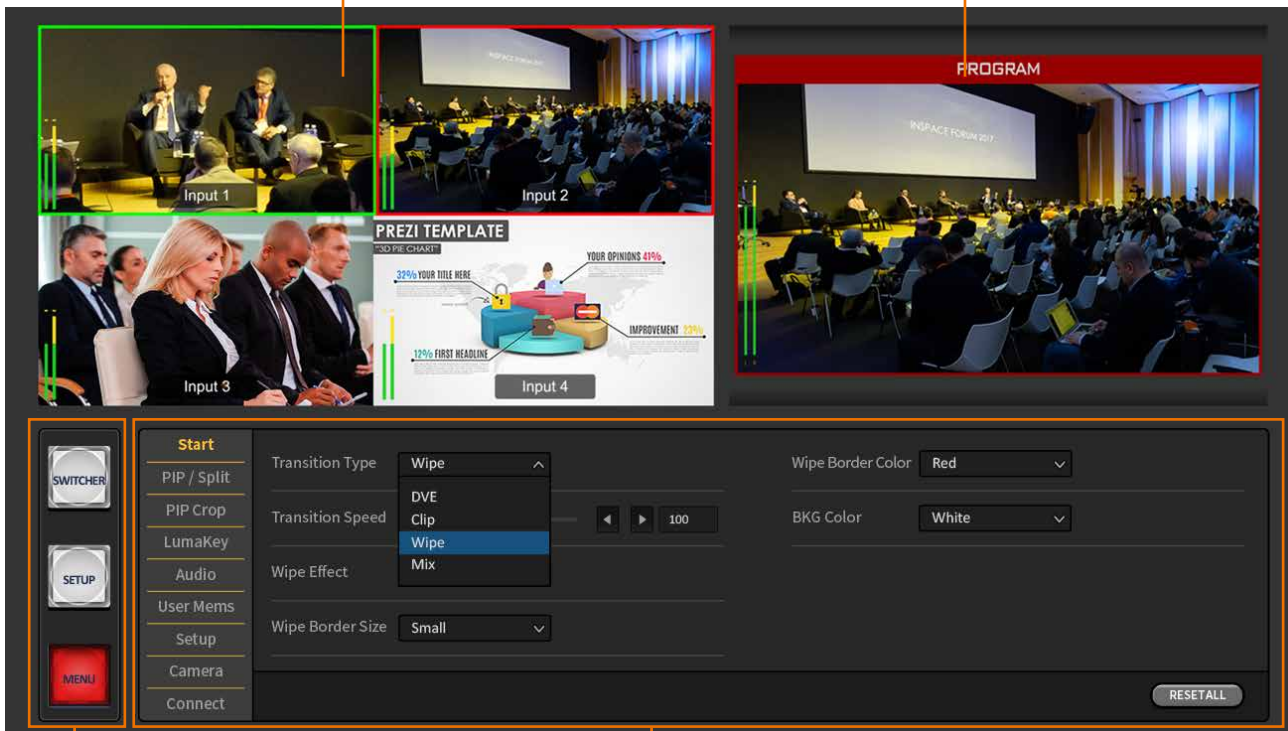
User Interface

Multiview Pane
It is easy and intuitive to activate a video input on the program view, simply touch the respective quadrant on the Multiview pane.

Program view
Allows you to monitor the program view.

Function settings
Press the respective buttons to activate switcher settings, PTZ camera setup options, and the OSD menu.

The Next Menu Hierarchy Level
The popup menu and sub menus allow adjustment of the relevant settings.

SD Card Recording

With the Showcast 100's recording capability, you can easily back up the recorded video files for post-edits, etc without much effort.

Record HD video using H.264 video encoding

The built-in professional cameras record videos using H.264 video encoding and allow adjustment of resolution, frame rate, video bitrate, etc.

Back up your video on dvCloud

You can create and manage multiple stream channels on dvCloud. You can save the recorded video files on dvCloud for backup purpose or future downloads.

Connect the Datavideo HDR-80 broadcast quality recorder (optional) to record 4K videos

The Datavideo HDR-80 broadcast quality recorder completes your 4K video production system. The HDR-80 records broadcast quality 4K videos and provides live replay.

07 / Audio Mixing

Built-in Audio Mixer

The 4 Channel Audio Mixer accepts embedded audio, two LINE input channels, one AUX channel and one HDMI audio channel, giving you the ability to mix the audios while processing the image.

Audio Monitoring by Headphone
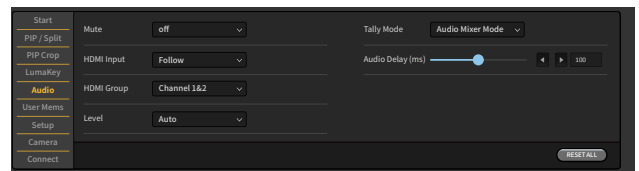
Mixer

Audio Playback

1   2

A wide variety of audio I/O ports

The Showcast 100 has two XLR/6.3mm composite ports for dynamic MIC inputs. The dual channel RCA port is designed for analog audio input. The RCA output serves to connect external audio equipment for audio monitoring.

Showcast 100 has an audio delay

function with a default value of 100. By setting an appropriate audio delay, you will be able to solve the audio video out-of-syn issue.

+- 6dB Audio Calibration

In order to meet the audio requirement of video production, you can use the Showcast 100's audio mixer to adjust the audio level of the input video. The adjustable range is ±6dB.

Camera Connection Methods

The Showcast 100 provides a wide variety of connection methods. Depending on your production environment, you can either choose RS-422 or DVIP (an IP control protocol developed by Datavideo) as your control interface.
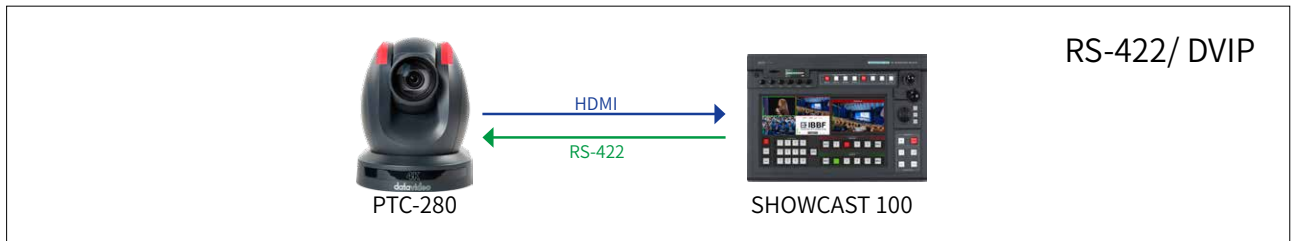

Camera Connection Range

Short Range   Max. 10M

When the connection distance is less than 10 meters, 4K 50/60p videos can be delivered over an HDMI cable. Control commands can be sent via RS-422, RS-232 or DVIP interface.
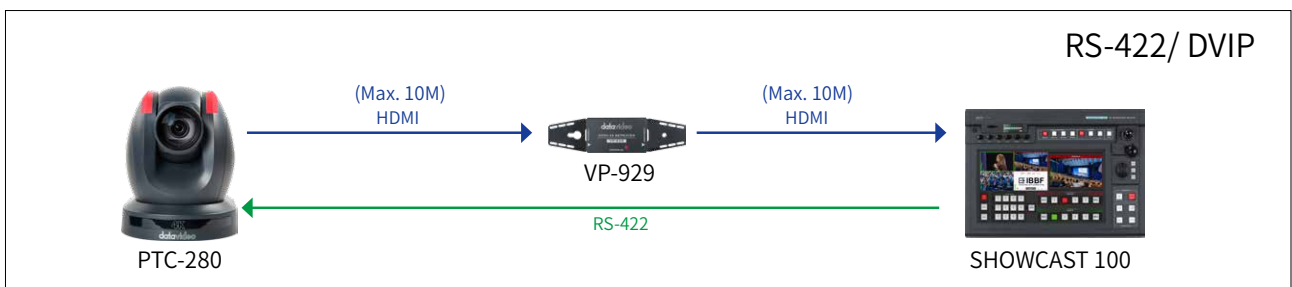

Mid-Range   Max. 20M

Cost effective and easy setup

With Datavideo's VP-929 4K HDMI Repeater, you can easily extend your HDMI connection to 60 meters by connecting up to three repeaters serially. Please note that extra power will be required if more than two VP-929 repeaters are used.
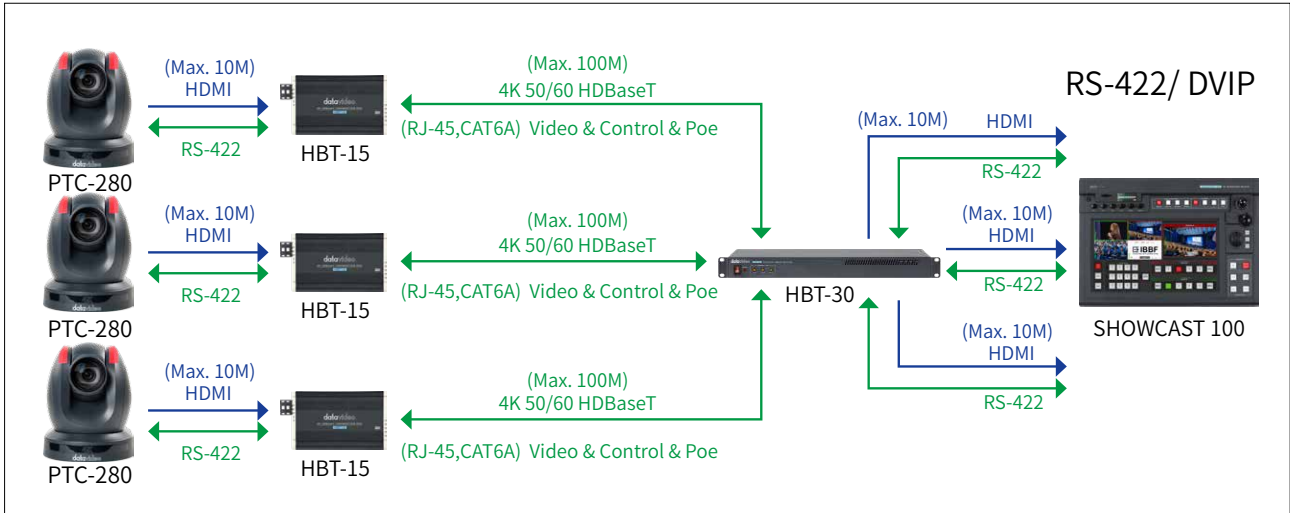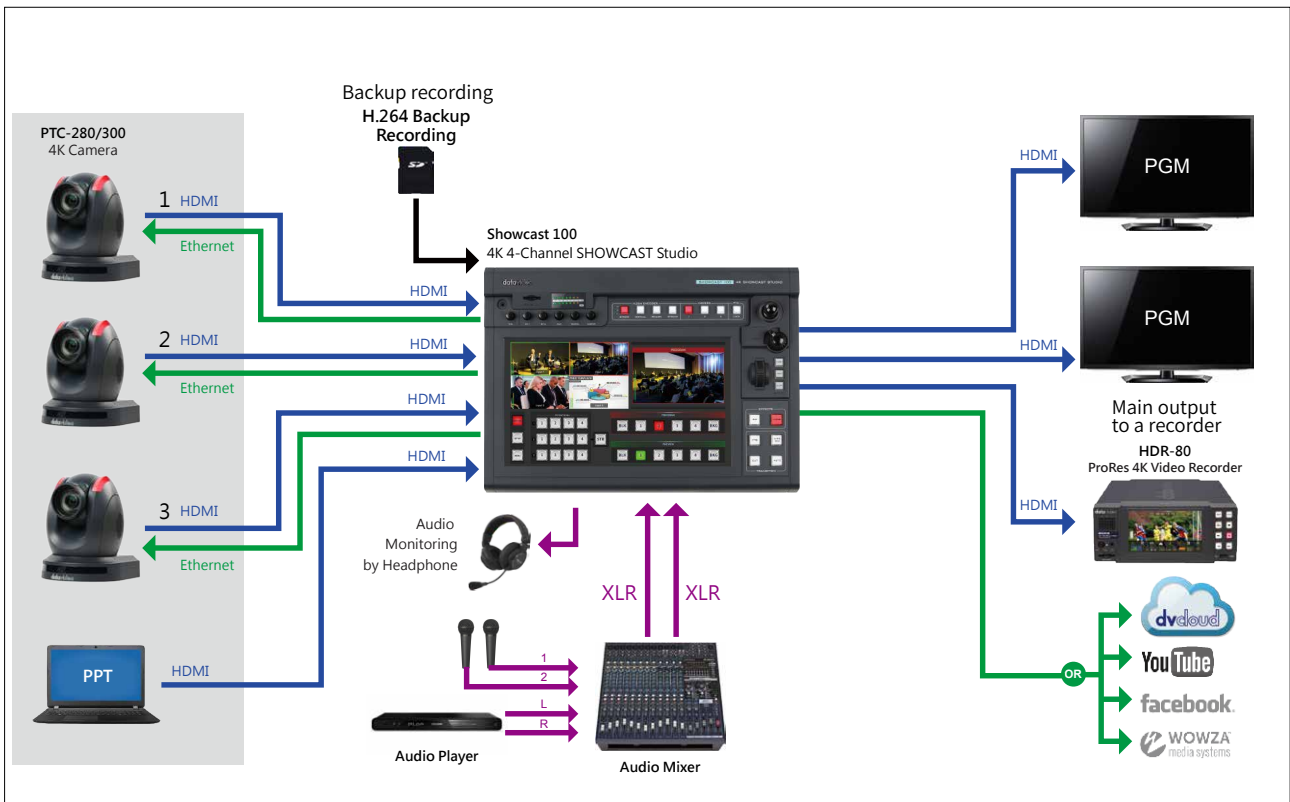
Long Range   Max. 120M

Low cost and simple cabling solution

HBT-30 is a 3 Channel HDBaseT Receiver capable of accepting 4K 50/60p videos from three 4K 50/60p PTZ cameras over CAT6A cables, which are in turn delivered to Showcast 100. The cameras can be controlled via the RS-422, RS-232 or DVIP interface and powered by PoE, thus substantially mitigating the complexity of cabling as well as the costs.

Showcast100 Connection System

Specifications

	SHOWCAST 100
Video Standard	4K & HD
Video Format	**Input:** 3840x2160p: 60/59.94/50/30/29.97/25/24/23.98 1080p: 60/59.94/50/30/29.97/25/24/23.98 VGA, XGA (1024 x 768), SXGA (1280 x 1024), UXGA (1600 x1200), WUXGA (1920 x 1200) **Output:** 3840x2160p: 60/59.94/50/30/29.97/25/24/23.98 1080p: 60/59.94/50/30/29.97/25/24/23.98 720p: 60/59.94/50
Video Processing	4K60 YUV4:4:4 8bit, YUV 4:2:2 8/10bit, YUV 4:2:0 8bit, RGB 4:4:4 8bit 4K30 YUV4:4:4 8/10/12bit, YUV 4:2:2 8/10/12bit, YUV 4:2:0 8bit, RGB 4:4:4 8/10/12bit HD YUV4:4:4 8/10/12bit, YUV 4:2:2 8/10/12bit, RGB 4:4:4 8/10/12bit
Input Routable / Crosspoint	N/A
Video Input	4 x HDMI 2.0
Mix HD & SD Source	----
Computer Graphic Interface	4 via HDMI
Video Output	3 x HDMI 2.0 for PGM 1 x HDMI for CG Preview
Down-converted Output	Yes
Built-in Multi-view Monitoring Out	On 14" Touch Panel
Analogue Audio Input	2 x 3 Pin XLR / 1/4" (6.3mm) Combo Socket 1 x Stereo RCA set (L/R)
Analogue Audio Output	1 x Stereo RCA set (L/R) 1 x Stereo headphone (Mini Jack with volume control)
Digital Embedded Audio Support	Input 2 channels, Output 2 channels
Audio Delay Calibration	Up to 200ms
A+V Switching	Yes
Chromakey	----
Title Creator	Web GUI
USK	Lumakey
DSK	----
Picture in Picture	1
Logo Insertion	----
Still Store	----
Effects	Seamless Cut, WIPE, Mix
Transition Preview	----
Sync / Reference In/Out	Built-in Genlock (internal)
Tally Output	D-Sub -15 Male connector
PC Remote Control	Web browser UI for configuration and control Socket commands
Camera Control	DVIP/ RS-422/ RS-232
Built-in Audio Mixer	Yes
Storage	1 x SD Card Slot Supports SD, SDHC and SDXC card (UHS-I) (Class 10 above).
Recording file system	FAT, NTFS, exFAT
Recording file format	MP4
Video Encode	H.264 / AVC, Main/ High Profile Record Only: Up to 16Mbps (1080p 50/60) Stream Only: Up to 10Mbps (1080p 50/60) Rec and Stream: Up to 10Mbps (1080p 25/30) Rec and Stream: Up to 36Mbps (1080p50/60), Dual Stream
Audio Encode	AAC-LC Configurable bit rate range from 32Kbps to 384Kbps Sample rate: 48KHz, 16bit
Streaming Protocol	TS over TCP/UDP (unicast & multicast) RTSP over HTTP/TCP/UDP (RTSP Elementary Streaming) RTMP (Publish)
Firmware Update	USB
Special Features	14.0" Touchscreen Display
Chassis	Unibody
Dimension (LxWxH)	437.6 x 330.5 x 96.5
Weight	5.4 Kg
Power	DC 12V 82W
Operating Temp. Range	0~40 ° C
What's in the Box	1 x Showcast 100 product 1 x AD Switch DC 12V with AC Cord