# DB-VRC4H

4K HDMI Compact Video Wall Controller with 45 degree screen rotation

The DigiBird® DB-VRC4H Video Wall Controller is the simplest and most cost-effective solution to build an eye-catching and creative video wall. It is an ideal video wall solution for retail stores, shopping malls, restaurants, sport bars, hotel lobbies, trade shows and entertainment venues.

The DB-VRC4H breaks the limitations of the traditional video wall alignment. Unlike traditional video wall controllers or processors, each DB-VRC4H output can be independently flipped or rotated 45°, 90°, 135°, 180° 225°, 270° or 315°. It also supports the alignment of varying resolutions and display sizes to build an asymmetrical, distinctive video wall. The DB-VRC4H is a compact video wall controller/processor that features one 4K HDMI input which provides stunning 4K UHD input capability, flexibly routing the input to four full HD output displays.
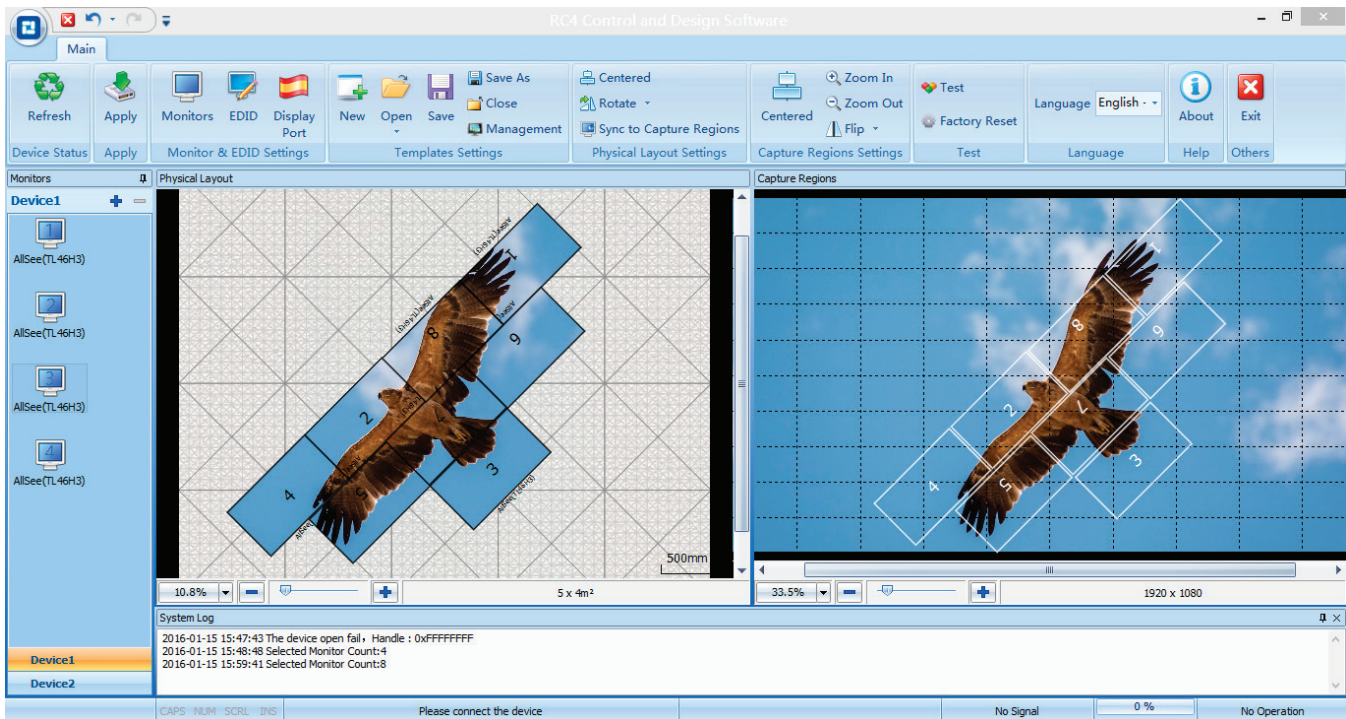
## Key Features of the DB-RC4 Video Wall Controller

- Controls up to four displays in a wall configuration.
- Cascades multiple units to create walls with more than four displays using the HDMI 1.4 loop out port.
- Automatically compensates for the screen bezels of the video wall.
- Supports image rotation and mirroring. Each output can be independently rotated 45°, 90°, 135°, 180° 225°, 270°, or 315° and flipped or mirrored horizontally or vertically.
- The displays aligned in the video wall can be of different sizes and of native resolution.
- Supports automatic frame lock. When the timings of the four monitors are the same, genlock will be activated. The genlock feature guarantees fluid motion video and minimizes latency to a single frame.
- Accepts HDMI 1.4 input signal format, HDCP 1.4 compatible, maximum resolution up to 3840×2160@30Hz
- Supports connections to four HDMI displays, and all VESA resolutions up to 1920×1200@60Hz.
- The input source can be cropped at the user's discretion and copied to output monitors. The smallest cropping area is one pixel.
- Embedded HDMI Audio
- Supports flexible EDID management.
- Automatic input and output signal detection.
- Configured using Windows-based software (Windows® XP, Windows® 7, Windows® 8 compatible) installed on a PC connected via USB.
- Durable, steel chassis.

## Technical Specifications

| | |
|---|---|
| Input Connector | (1) HDMI Type A, 19-pin, female, locking |
| Input Format | HDMI 1.4 |
| Input Resolution | 3840×2160@30Hz |
| Input Clock Rate | 297MHz |
| Input Bandwidth | 8.91Gbps |
| Input/output Sync | Yes, 2 × Ethernet Port |
| Output Connectors | (4) HDMI Type A, 19-pin, female, locking |
| | (1) power connector female |
| | (1) USB-B female |
| | (1) HDMI Loop Out |
| | (1) Ethernet Port |
| Output Format | HDMI 1.3 |
| Loop Out | HDMI Type A, 19-pin, female, locking, HDMI 1.4 |
| Output Resolution | Up to 1920x1200 60Hz |
| Output Display Sizes | Different display size for each output channel |
| LED Indicators | Power, Input, Status |
| Features | 45°, 90°, 135°, 180° 225°, 270° or 315° rotation |
| | Unlimited up-scaling for original cropped area |
| | EDID management |
| | Bezel compensation |
| | Cropping |
| | Flipping |
| | Cascading |
| Control | USB-B connector (USB 2.0) |
| Control Software | Windows-based GUI software |
| Power | Input: 100-240 VAC, 0.8 Amps |
| | Output: 12 VDC, ≤ 2 Amps |
| | Consumption: ≤ 24 Watts |
| Operating Humidity | 90% non-condensing |
| Operating Temperature | 32° to 104°F (0° to 40°C) |
| Dimensions (without rackmount) | 1.75"H x 8.07"W x 8.39"D (44.5mm x 205mm x 213mm) |
| Dimensions (with rackmount) | 1.75"H x 9.92" W x 8.39" D (44.5mm x 252mm x 213mm) |
| Package Dimensions | 3.74"H x 17.72"W x 12.20"D (95mm x 450mm x 310mm) |
| Net Weight | 2.09 lbs / 0.95 Kg |
| Shipping Weight | 6.33 lbs / 2.87 Kg |

# DB-VRC4H Control & Design Software

The DB-VRC4H Control and Design Software is a Microsoft® Windows®-based application that is used to control the DB-VRC4H Video Wall Controller from your computer via a USB cable with the DB-VRC4H processor. DB-VRC4H Control and Design Software is included with the DB-VRC4H and available for download at digibirdtech.com.



## Features of the Control and Design Software

- The user interface is organized into a series of tasks so that you can easily navigate through them and set up the video wall.

- Supports quick setup. Once the dimension and position of the monitors are set up, the software is able to calculate the display area automatically.

- The monitors in the physical layout and the white frames in the capture regions can be moved by using the up (↑), down (↓), left (←), and right (→) arrows on the keyboard.

- The DB-VRC4H Control and Design Software provides a monitor database, and most well known manufacturers are already included at launch. Users can add their own monitors as well.

- Monitor information such as screen dimensions (in pixels and millimeters), bezel sizes and refresh rates are all included.

- Supports arbitrary cropping of input sources and supports previewing of cropped regions.

- A virtual canvas provides on-screen layout for the video wall where monitors are positioned and rotated.

- Custom video wall configurations can be saved as templates for future use.

# Video Wall Layout Examples



Windmill



Doughnut



Asymmetric



2×2 Layouts



Windmill



Doughnut



Asymmetric



45°



135°



135° & 225°



135° & 315°



Crop Layouts



Matrix Mode



Landscape and Portrait

## 6 screen video wall with 45 degree rotation



HDMI Output 1

HDMI Output 2

HDMI Output 3

HDMI Output 4

HDMI Output 5

HDMI Output 6

Ethernet Cable for Sync

DigiBird Compact Video Wall Controllers
DB-VRC4H

HDMI Input

Loop Out

HDMI Input

HDMI 2.0 Cable for Loop Out

HDMI Cable

USB 2.0 Cable

ULTRA HD
Blu-ray

Input Source

USB 2.0 Cable

DB-VRC4H Control Software