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### Key Digital KD-IP922ENC/DEC Unit and System Configuration Procedure

This document will walk you through building a Video Over IP system using KD-IP922ENCs and KD-IP922DECs.

Setup Steps:

- 1. Setup all Encoder units
- 2. Setup Decoders
- 3. Define switcher system
- 4. (Optional) Add Video Walls to switcher system
- 5. Load switcher file to units
- 6. Verify HDMI switcher system functionality

### Needs:

- 1. KD-IP922ENC 1 per video source
- 2. KD-IP922DEC 1 per video display
- 3. Verified Network Switch Configured according to VNS Setup Guide
- 4. PC with Key Digital Management Software
- 5. USB A to Micro Included with KD-IP922
- 6. Completed KD-IP922 Unit Configuration form
- 7. Video Source at least one
- 8. Video Display at least one



#### KD-IP922ENC/DEC System Configuration Questionnaire (continued)

Device Name	Group ID	Main IP Address	Video IP Address
Front Wall	1	192.168.1.11	192.168.1.31
Laptop	2	192.168.1.12	192.168.1.32
Cable	3	192.168.1.13	192.168.1.33
Blu-Ray 1	4	192.168.1.14	192.168.1.34
Blu-Ray 2	5	192.168.1.15	192.168.1.35
Video Conf.	6	192.168.1.16	192.168.1.36
Cam 1	7	192.168.1.17	192.168.1.37
Cam 2	8	192.168.1.18	192.168.1.38

1. Setup all Encoder units – one by one

- **a.** Connect one ENC unit to network switch using CAT6 cable.
- b. Power ENC using power supply (if not using PoE network switch)
- c. Connect ENC to PC using USB
- d. Open Key Digital Management software
- e. Detect unit: SCAN -> USB DEVICE
- f. Configure Unit. Refer to completed KD-IP922 Unit Configuration Form

#### g. Save (blue save icon) after updating each property cell

- i. Enter Device Name
  - **1.** Desired "friendly name" of video source
- ii. Device ID
  - **1.** Begin at 1 and go up (2, 3, 4 etc) for each KD-IP922 ENC
- iii. Main Network IP Address
- iv. Main Gateway
- v. Video Network IP Address
- vi. Video Gateway
- **vii.** (Optional) if Compass Control will be used, set Control Port 1, Control Port 2, and Control Port 3:
  - 1. Control Mode: Compass Control
  - 2. Configuration: IR Output
  - 3. Save
- viii. Review all settings are entered correctly
  - ix. Perform a final save using the RED SAVE ICON to ensure all settings are applied
- **h.** Connect next Encoder
- i. Repeat steps for each additional Encoder. Ensuring Device IDs and IP addresses are unique for each

Properties **μ**× 🔊 📳 関 Update Changed Device Settings Main Network Settings MAC Address: 60:89:B1:90:00:B5 DHCP IP Address: 192.168.001.51 IP Mask: 255.255.000.000 Gateway: 192.168.001.001 Port: 0023 Control Port 1 ontrol Mode Compass Control  $\sim$ TCP Port 4581 Output Signal Level: 1 7 V 7 1 Control RxD Group ID: 1 Control TxD Group ID: 2 Configuration: IR Output  $\sim$ 

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#### 2. Setup Decoders – one by one

- **a.** Connect one DEC unit to network switch using CAT6 cable.
- **b.** Power DEC using power supply (if not using PoE network switch)
- c. Connect DEC to PC using USB
- d. Open Key Digital Management software
- e. Detect unit: SCAN -> USB DEVICE
- f. Configure Unit. Refer to completed KD-IP922 Unit Configuration Form

#### Save (blue save icon) after updating each property cell

- i. Enter Device Name
  - **1.** Desired "friendly name" of video display
- ii. Device ID
  - **1.** Begin at 1 and go up (2, 3, 4 etc) for each DEC
- iii. Main Network IP Address
- **iv.** Main Gateway
- v. Video Network IP Address
- **vi.** Video Gateway
- vii. (Optional) if Compass Control will be used, set Control Port 1, Control Port 2, and Control Port 3:
  - 1. Control Mode: Compass Control
  - 2. Configuration: IR Output
  - 3. Save
- **viii.** Review all settings are entered correctly

ix. Perform a final save using the RED SAVE ICON to ensure all settings are applied

- **g.** Verify video and switching
  - i. Connect the Decoder to HDMI display using HDMI cable
  - ii. Connect Encoder to video source using HDMI cable
  - iii. SCAN -> NETWORK SCAN to ENCs and DEC
  - iv. Use KDMS Control GUI area to switch
- **h.** Repeat steps for each additional Decoder, Ensure Device IDs and IP addresses are unique for each.

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#### 3. Define switcher system

- a. Connect all ENC and DEC units to network switch using CAT6 cables
- b. In KDMS: SYSTEM -> MANUAL SWITCHER
- **c.** Name: ie "Dakota Dunes 17x29"
- **d.** Starting Group ID will always start at 1 unless otherwise noted



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- e. Number of Inputs: How many Encoders in system
- f. Number of Outputs: How many Decoders in system
- g. Press OK
- b. Drag ENCs / DECs from DEVICES window (at left) to respective Input / Output numbering assignment in the IP SYSTEM window (at center of screen)



according to Device ID numbering. Release the ENC/DEC over the Input/Output and the I/O will take the name of the ENC/DEC and the text will turn from **red** to **blue** 

- i. Save regularly using either blue save icon in the System tab or IP System window
- j. With all devices assigned, click the Link Devices icon 🥔

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### 4. (Optional) Add Video Walls to switcher system

Note: Skip this step if there are no video walls in the system. Refer to completed KD-IP922 Unit Configuration Form.

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Virtual Matrix Sys

192.168.1.\*\*\*

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õ 6 Add Add Delete Input Output Selected

Edit System

- a. Click the Add Video Wall button
- **b.** Enter friendly name for video wall (ie East Lobby)
- c. Starting Display is Device ID number of the top-left display in the video wall
- **d.** Enter number of horizontal and vertical displays and press OK
- e. Now the displays within the video wall appear as

one output



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Store # × IP System

IP Matrix System Configu

Save Save As

f. The video wall may be controlled by pressing the VIDEO WALL button at bottom center of the screen.



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#### 5. Load switcher file to units

- a. Ensure all Encoders and Decoders units are connected to the network switch
- b. Ensure the switcher file is created and opened (refer to step 3)
- c. Click the Load button
- d. Choose ALL DEVICES in the devices drop down
- e. After the switcher configuration file loads to all units, press OK



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### 6. Verify HDMI switcher system functionality

- a. Connect HDMI video sources to Encoders
- **b.** Connect HDMI displays to Decoders
- c. Connect all Encoders and Decoders to the network switch
- d. SCAN -> NETWORK SCAN
- **e.** Use the ALL OUTPUTS button in the control GUI section and verify successful video switching and signal by beginning with Source 1 and advancing to source 2, 3, 4, etc.

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