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)
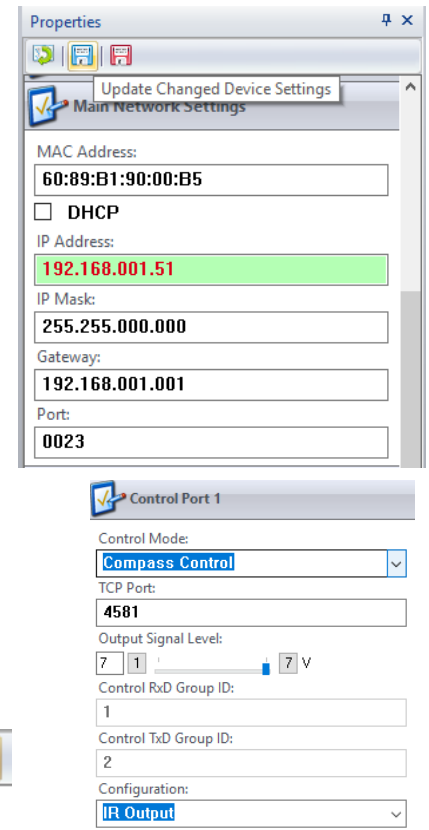
Configurations for each ENCODER (source) unit

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
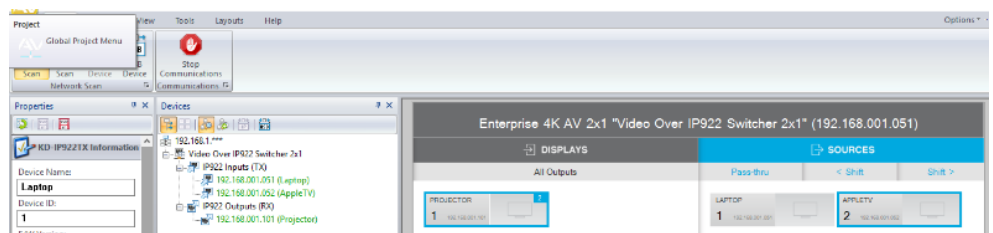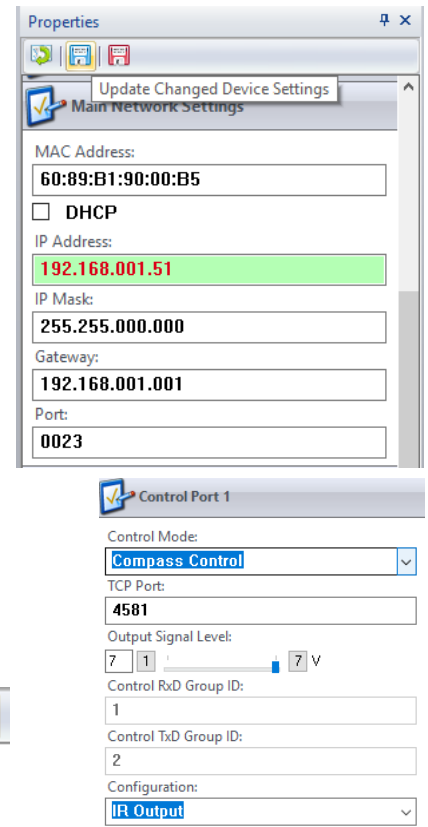   ix. **Perform a final save using the RED SAVE ICON to ensure all settings are applied**
   h. Connect next Encoder
   i. Repeat steps for each additional Encoder. Ensuring Device IDs and IP addresses are unique for each

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

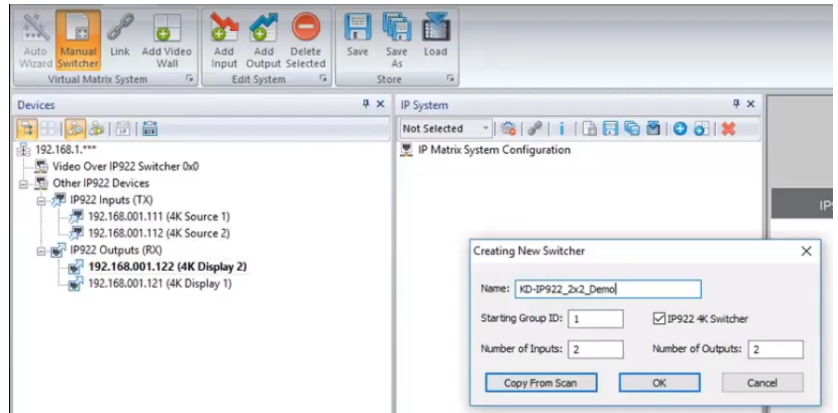   f. Configure Unit. Refer to completed KD-IP922 Unit Configuration Form

   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

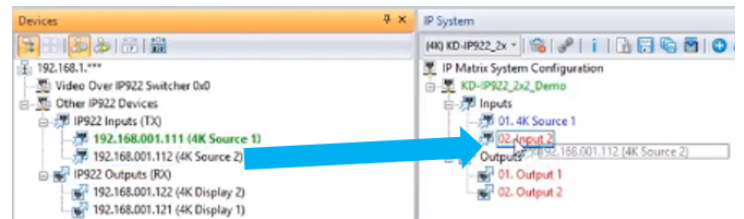   h. Repeat steps for each additional Decoder. Ensure Device IDs and IP addresses are unique for each.

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

e. Number of Inputs: How many Encoders in system

f. Number of Outputs: How many Decoders in system

g. Press OK

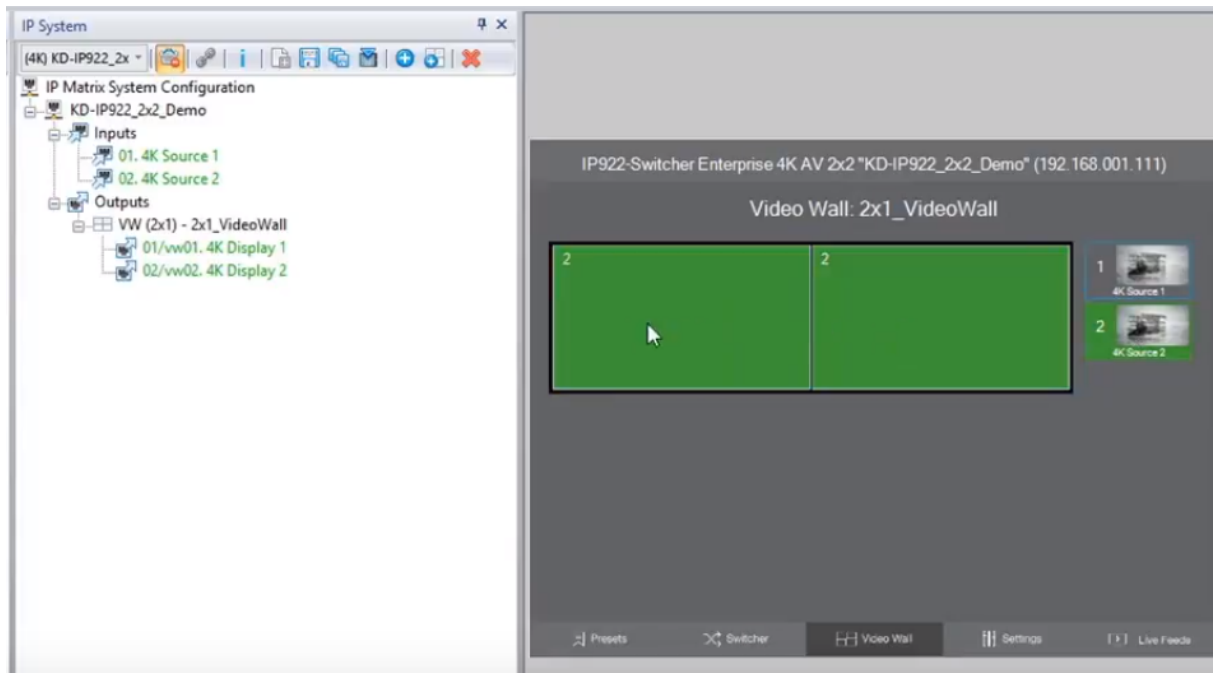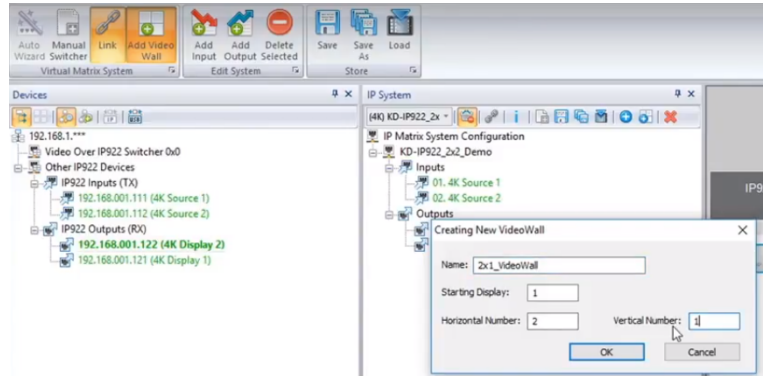h. Drag ENCs / DECs from DEVICES window (at left) to respective Input / Output numbering assignment in the IP SYSTEM window (at center of screen) according to Device ID numbering. Release the ENC/DEC over the Input/Output and the I/O will take the name of the ENC/DEC and the text will turn from **red** 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

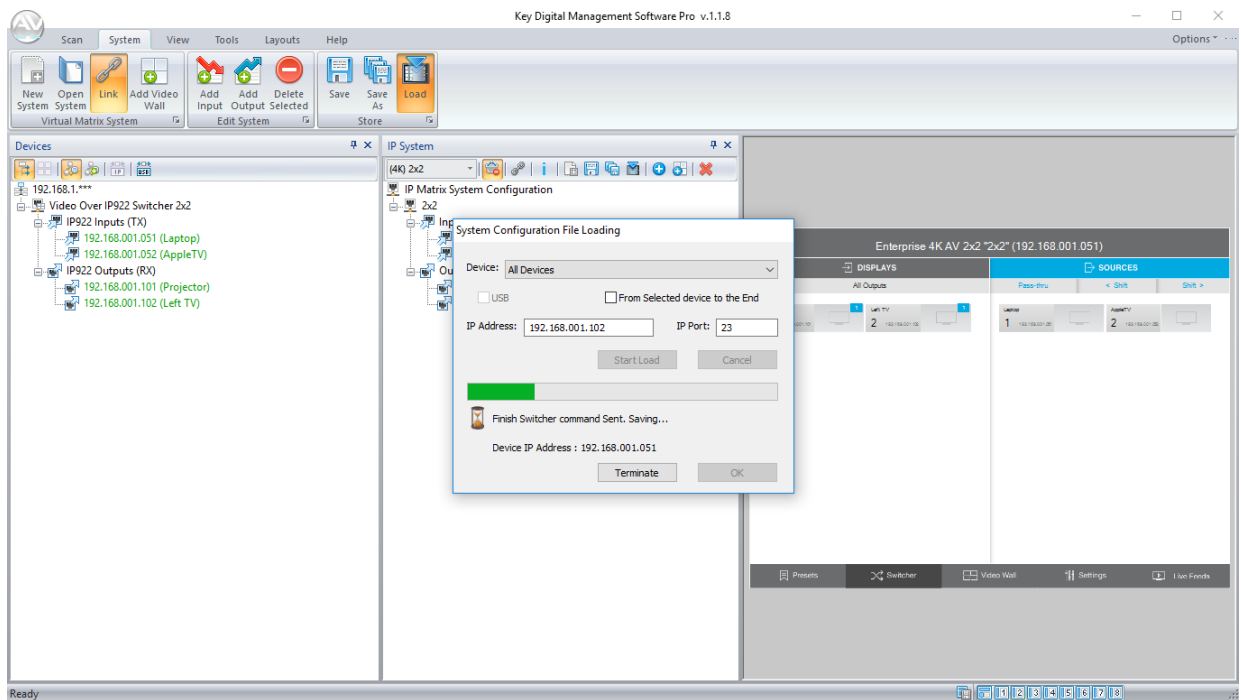4. **(Optional) Add Video Walls to switcher system**
    Note: Skip this step if there are no video walls in the system. Refer to completed KD-IP922 Unit Configuration Form.

    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

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

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

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.