iVu Color Demo Kit

DK-IVU Color Upgrade Kit (PN 805321)

Models	Description
iVu Color Sensor	Sensor with integrated screen, white light and 12 mm lens
SMBIVURAL	Right-angle bracket for mounting sensor from left
—	Stylus
—	Color Targets : Red, blue, yellow, green squares
Quick Start Guide	iVu Quick Start Guide (PN 178442)
Demo Setup Card	iVu Color Series Setup Card (PN 205950)
Sell Sheet	iVu Series Sell Sheet (PN 205332)

DK-IVU Color Complete Kit (PN 805322)

Models	Description
iVu Color Sensor	Sensor with integrated screen, white light and 12 mm lens
SMBIVURAL	Right-angle bracket for mounting sensor from left
SP-DPB1	24 V dc power supply
IVUC-E-406	RJ45 Ethernet to 4-pin threaded pico-style cordset (female)
PSG-4M-4005-USB	USB to 4-pin pico-style cordset (male), 0.15 m
IVU-USBFD1	USB drive
—	Stylus
—	Metal mounting surface
—	Flexible mounting stand with magnetic base
—	Color Targets : Red, blue, yellow, green squares
—	Padded carrying case (black mat included in case)
Quick Start Guide	iVu Quick Start Guide (PN 178442)
Demo Setup Card	iVu Color Series Setup Card (PN 205950)
Sell Sheet	iVu Series Sell Sheet (PN 205332)

Average Color Lab

Place the iVu sensor approximately 8” above a white piece of paper, at a slight angle.

1. Click  if present in upper left corner, then click  to go to **Main menu**
2. Click  > (scroll down) > **White Balance** > **Start** > **Continue**
3. Place all four colored tiles into the FOV of the sensor (2 x 2 array, centered in FOV)
4. Click  > (scroll up) > **Auto Exposure** > **Continue**
5. Adjust  (focus ring) until a clear image is achieved
6. Click 
7. Remove all but one of the colored tiles from the FOV
8. Click  to go to **Main Menu**
9. Click  > **Stored Inspections** > **Add New**
    a. Select **Sensor Type** > **Average Color**
    b. Click **Next**
    c. Click **Done**
10. Click on the Average Color ROI, then re-size ROI to be smaller than the tile, centered on the tile
11. Click the button in the upper left corner of the Home screen until you get to “Inspection Result”. Note the RGBI (Red, Green, Blue, Intensity) values for the current target. Place a different colored tile atop the first to see the color values shift).
12. Click  > **[inspection]** > **Sensors** > **AvgColor1** > **Color Space**. Change the Color Space from RGBI to HSI (Hue, Saturation, Intensity). Click 
13. Now the color values are reported in HSI instead of RGBI
14. Click the button in the upper left corner of the Home screen to the “Inspection Result” view

Color Compare Lab

Place the iVu sensor approximately 8” above a white piece of paper, at a slight angle.

1. Click  if present in upper left corner, then click  to go to **Main menu**
2. Click  > (scroll down) > **White Balance** > **Start** > **Continue**
3. Place all four colored tiles into the FOV of the sensor (2 x 2 array, centered in FOV)
4. Click  > (scroll up) > **Auto Exposure** > **Continue**
5. Adjust  (focus ring) until a clear image is achieved
6. Click 
7. Click  to go to **Main menu**
9. Click  > **Stored Inspections** > **Add New**
    a. Select **Sensor Type** > **Color Compare**
    b. Click **Next**
    c. Click **Done**
10. Click inside the Color Compare ROI > **Click Teach** > Click outside the Color Compare ROI
11. Rearrange the tiles (keeping the same amount of each color in ROI) and the inspection still passes
12. Remove one or more tiles and the inspection fails

Color Area Lab

Place the iVu sensor approximately 8” above a white piece of paper, at a slight angle.

1. Click  if present in upper left corner, then click  to go to **Main menu**
2. Click  > (scroll down) > **White Balance** > **Start** > **Continue**
3. Place all four colored tiles into the FOV of the sensor (2 x 2 array, centered in FOV)
4. Click  > (scroll up) > **Auto Exposure** > **Continue**
5. Adjust  (focus ring) until a clear image is achieved
6. Click 
7. Click  to go to **Main menu**
8. Click  > **Stored Inspections** > **Add New**
    a. Select **Sensor Type** > **Color Area**
    b. Click **Next**
    c. Click **Done**
9. Click  >  > **Sensors** > **ColorArea1** > **Color Select**
10. Click  then click on one of the colored tiles. This sets the color of pixels to be counted in the Color Area sensor. If necessary, click the “+” near the  until the tile you chose is completely filled in with green pixels.
11. Click  > **Pass Count** > **Set Min = 1, Max = 1.** Click 
12. Remove the tile selected to show the inspection fail