Quick Start Guide
This quick start guide applies to D412, D220, D20H, D20S

Items included in the camera box

- D412/D220 Dante AV Camera x 1
- VCC-P12-4 Power Adaptor x 1
- Power Cord x 1 (Type: US, EU, UK)
- VCC-RC-2 IR Controller x 1 (Batteries not included)
- VCC-CC45232 RJ45 to RS232 Control cable x 1
- Safety Hook x 1
- User Manual Download Navigation Card x 1
- HDMI Cable Mount*1
- M4*6PW Screw X3 For camera bracket mounting
- M2.5*3C Screw x 2 For HDMI cable secure mounting

Items included in the decoder box

- D20H/D20S Dante AV Decoder x 1
- VCC-P12-4 Power Adaptor x 1
- Power Cord x 3 (Type: US, EU, UK)
- VCC-CC45RS RJ45 to RS422 Control cable x 1
- B-SM10 Surface Mount Kit x 1
- M4-6PW Screw x 8 For Surface Mount Kit mounting
- M2.5*3C Screw x 8 For HDMI cable secure mounting
- M3*8K Screw x 4 For base mount kit mounting
- M5*12P Screw x 4 For TV surface mounting
- Mini Pole Bracket x 1
- Cable Tie x 4
- HDMI Cable Mount x 1

Note: The Dante AV Decoder is mandatory for Dante AV video output.

Optional Accessories

- BL-WM-01 Wall mounting kit - For Camera or Decoder
- BL-CM-01 Ceiling mounting kit - For camera
- BL-PP97 Bolin 97W POE power supply - For Camera and Decoder
- B-DR10 DIN Rail Mounting Kit - For Decoder
- B-RM10 Single Rack Mounting Kit - For Decoder
- B-RM11 Dual Rack Mounting Kit - For Decoder
Camera HDMI Output Setup

1. Item List

- Supports HDMI 2.0

2. Connection Diagram

3. Resolution Configuration

Use a flat screwdriver to set the circular speed dial to the desired resolution. The table below indicates the video formats the camera supports. Choose 1, 2, or 3 on the IR Select to control the camera.

<table>
<thead>
<tr>
<th>NO</th>
<th>Video Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>720p50</td>
</tr>
<tr>
<td>1</td>
<td>720p60</td>
</tr>
<tr>
<td>2</td>
<td>1080p23.98</td>
</tr>
<tr>
<td>3</td>
<td>1080p25</td>
</tr>
<tr>
<td>4</td>
<td>1080p28.97</td>
</tr>
<tr>
<td>5</td>
<td>1080p30</td>
</tr>
<tr>
<td>6</td>
<td>1080p50</td>
</tr>
<tr>
<td>7</td>
<td>1080p59.94</td>
</tr>
<tr>
<td>8</td>
<td>1080p60</td>
</tr>
<tr>
<td>9</td>
<td>2160p23.98</td>
</tr>
<tr>
<td>A</td>
<td>2160p25</td>
</tr>
<tr>
<td>B</td>
<td>2160p29.97</td>
</tr>
<tr>
<td>C</td>
<td>2160p30</td>
</tr>
<tr>
<td>D</td>
<td>2160p50</td>
</tr>
<tr>
<td>E</td>
<td>2160p59.94</td>
</tr>
<tr>
<td>F</td>
<td>2160p60</td>
</tr>
</tbody>
</table>

Note: Power off the camera prior to changing dial settings. Resolution can also be changed via OSD menu once the camera is powered on. Camera will follow the latest configured resolution. Refer to the camera manual for further detail.

4. Power the Camera

When powering via both DC 12V and POE++, DC 12V takes precedence. Using only one powering method to power the camera is highly recommended.

1. Power Adaptor (DC 12V 4A) to power the camera.
2. When using POE++, use IEEE802.3bt certified switch to power the camera.
5. Dante AV Camera Startup

![Camera Startup Diagram]

The Power indicator stays solid green when the camera is powered on.

Wait after the camera finishes turning, tilting and scanning its range.

 составляет зелёный цвет, когда камера включена.

Потребуйте после перехода, наклона и сканирования диапазона.

6. Camera Control via IR Remote

![Camera Remote Control Diagram]

Remote controller Camera ID needs to match the IR Select on the camera for control. Recommended control distance to be within 10 meters.

Remote controller Camera ID должен соответствовать IR Select на камере для контроля. Рекомендуемая дистанция контроля должна быть не более 10 метров.

<table>
<thead>
<tr>
<th>Menu</th>
<th>Camera OSD menu</th>
<th>For slow zooming</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T Slow Zoom</td>
<td>W</td>
</tr>
<tr>
<td>Direction control</td>
<td>For fast zooming</td>
<td>T Fast Zoom W</td>
</tr>
</tbody>
</table>

**Note:** For detailed IR remote operation instruction, please refer to camera product manual.

**Dante AV Video Output Setup**

1. Item List

Dante AV Decoder x1
HDMI 2.0 Cable x1
(Deluxe)
Cat6 Network Cable x3
(Not Included)
POE++ 1Gbps Network Switch
(Not Included)
Display Output Device x 1
(Supports 4K60)
Dante Controller x 1
(Supports 1GHz processor)
Computer
(Deluxe)
Dante Controller (Not Included)
HDMI 2.0 Cable x1
(Not Included)

2. Install Dante Controller Software


Dante Controller Hardware Requirements:
- CPU: Minimum of 1GHz processor
- Storage: At least 512MB
- Network Card: Ethernet connectivity port (1000 Mbps)

Dante Controller OS Requirements:
- Windows: Windows 7/8/10
- Mac OSX: 10.13.6 / 10.14.6 / 10.15 Note: Does not support PPC.
3. Connection Diagram

Note:
① DHCP network configuration is recommended.
② If network does not support DHCP, please manually configure IP details on the camera and decoder to match the same gateway.
③ Switch Requirement:
   · Nonblocking Layer 2
   · Green Ethernet must be OFF (Recommend not using Green Ethernet capable switches)
   · Use reputable "Managed" switches
   · Support QoS with strict priority and 4 queues
   · IGMP Snooping ON
   · Please refer to product manual at www.bolintechnology.com for IP configuration instructions

4. Power on the Decoder
Both DC12V and POE are workable, when powering the camera, DC 12V preferably.
① Power Adaptor (DC 12V 4A) to power the decoder.
② When using POE ++ , use IEEE802.3bt certified switch to power this decoder

Note: For Dante AV camera startup tips, please refer to its respective diagram.
5. Dante AV Decoder Startup

Switch on the decoder after connecting the power

Note: For Dante AV camera startup tips, please refer to its respective diagram.

6. Display Camera Video via Decoder

1. Click to choose network interface
   This is mandatory when there are multiple network connectivity methods on the device.

2. Click to see all connected Dante devices.

3. Click to see specific transmitter routing options.

4. Click to see specific receiver routing options.
5. In Device Info tab, all connected Dante devices are displayed, if the device is not listed please check its network connectivity.

6. Select the Clock Status tab for clock leader. This is optional, Dante Controller software will automatically select a leader if left undefined.

7. Check ✔️ to subscribe HDMI TX to RX connection route.

8. Subscribe Audio TX (Left/Right) to Audio RX (Left/Right), you can subscribe to the left channel or the right channel, or you can subscribe both.
7. Camera Remote Control Setup

① Connection Diagram

② Camera VISCA Address, Communication Protocol, and Baud Rate Settings

Example: For VISCA ID 1 with RS422 Protocol and 9600 baud rate then set the DIP switch (1-8) to ON, OFF, OFF, OFF, ON, OFF, ON position.

Note: The camera should be powered off prior to changing the DIP switch setting. When there are multiple DanteAV cameras involved, refer to the table above for unique VISCA address to each camera. Up to seven unique address can be assigned to cameras at any given time.

③ Subscribe RS-422 Channel on Dante Controller

Check to subscribe for RS-422 control

Note: Rs422 channel needs to be subscribed in the Dante controller for remote control. Please refer to the keyboard controller’s product manual for detail.
You can also use the infrared remote control to remotely control the camera through the DanteAV decoder. For detailed IR remote operation instruction, please refer to camera product manual.
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