

AVONE Deployment Guide

AVONE Deployment

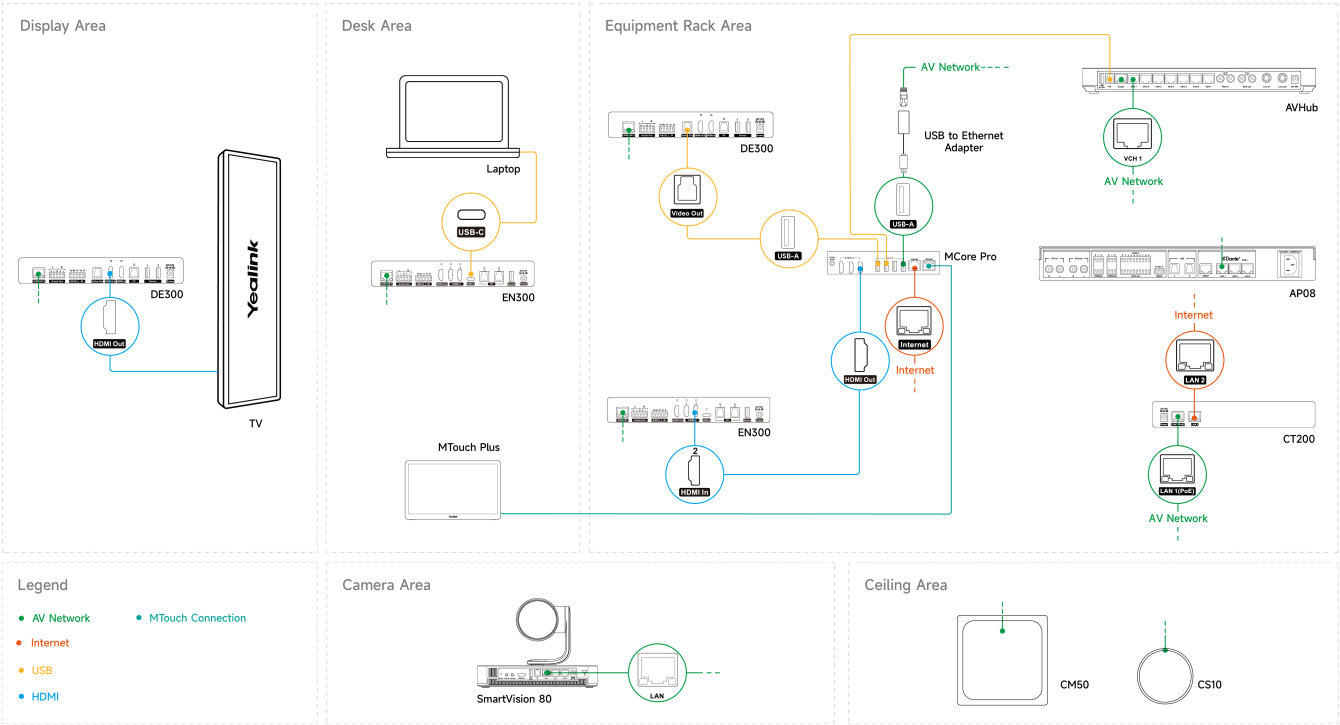
Deployment Overview

- Before deployment, make sure every device's firmware is updated to a version that supports the AVONE solution. It is important to note that **if the UVC86 firmware version in your solution is lower than 151.435.0.20 or the AVHub firmware version is lower than 153.435.0.25**, please be sure to follow the upgrade steps below to upgrade first. It is strictly forbidden to connect to the AV network without upgrading to a version that supports AVONE.
 1. Power on the device **without connecting it to the AV network**.
 2. Connect the device to a computer or MCore via **USB**. Use the Designer or YRC (Yealink Room Connect) software to upgrade the device to a version that supports AVONE.
 3. In the Device Settings interface, configure the VCH IP Assignment Mode to Zeroconfig IP.
 4. After completing the above steps, connect the device to the AV network and proceed with device connections following the deployment guide.

For other details, refer to the **Device Upgrade** section below.

- Connect all devices to the same local area network, which is the AV network, ideally to the same switch. If your solution includes devices that require internet access (e.g., MCore), make sure to connect them to the internet as well.
 1. If your solution does not include AVoIP and audio devices, any PoE-capable switch will work.
 2. If your solution includes AVoIP devices, we recommend using either a Yealink RCH80 or RCH240 network switch or a Netgear M4250 AV Line switch series. For details, refer to the **“AV Network Switch Requirements and Settings”** section below.
- For installation instructions of each device, please refer to its Quick Setup Guide.

The figure below illustrates a **sample deployment wiring diagram** for some of the devices in the AVONE system. The key points for deploying the interfaces of all devices can be found in the **Description of Key Device Interfaces** section.

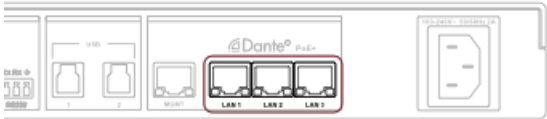
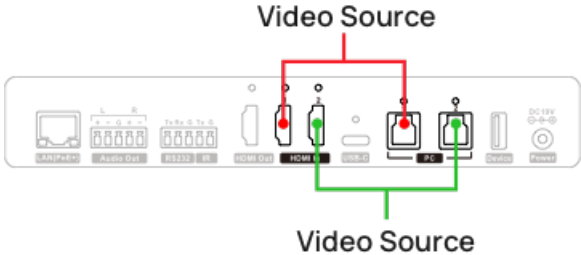


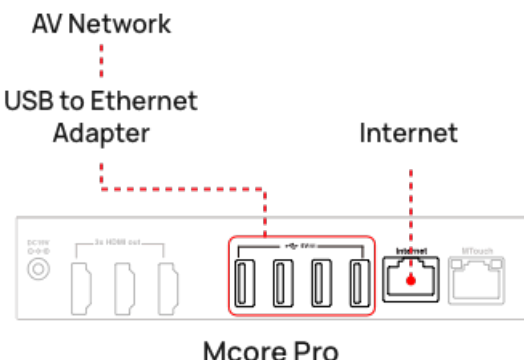
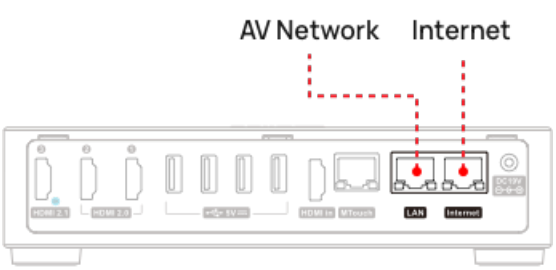
Description of Key Device Interfaces

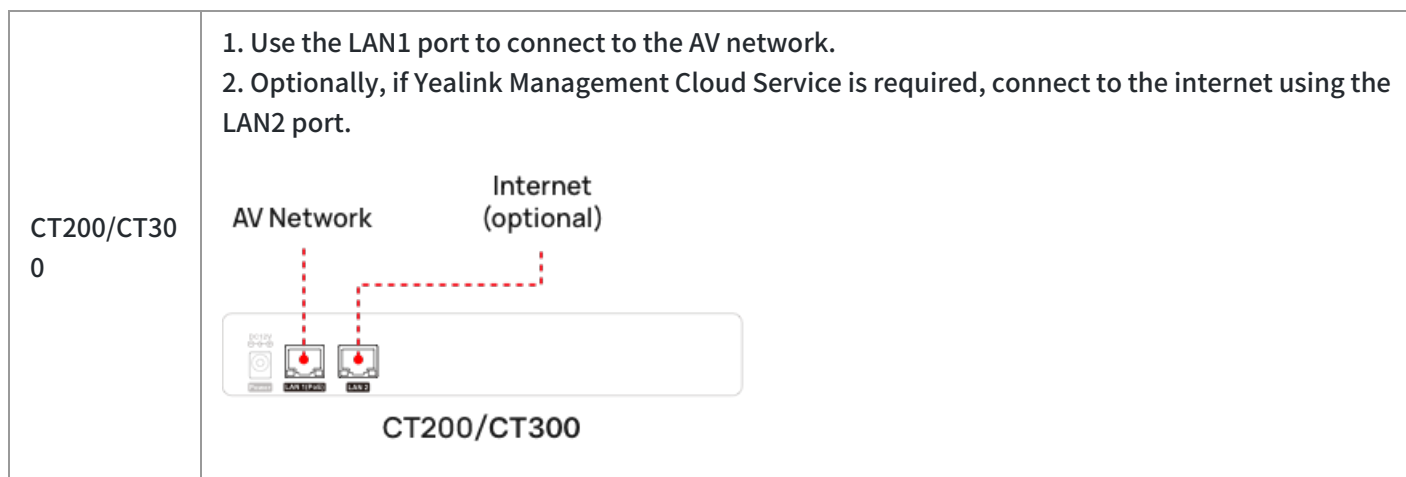
To better support deployment of the AV ONE solution, below is a description of the most critical deployment interfaces on key devices.

NOTE
For other interfaces on these key devices, as well as for all other devices, please follow the connection guidelines outlined in the relevant solution documentation.

Device	Description
SmartVision 80	Use LAN port to connect to the AV network. Kindly note that the VCH port must not be connected to the AV network; otherwise, it will cause overall network abnormalities.
AVHub	Use any VCH or Codec port to connect to the AV network.

AP08	Use any LAN port to connect to the AV network. 
EN300	The input source can connect via HDMI In or USB-C port. When deploying the BYOM (Bring Your Own Meeting) setup, use one of the following cable combinations for the input source: • USB-C • HDMI In1 + PC1 port • HDMI In2 + PC2 port  Note 1. If you require the EN300 to provide reverse power to the connected PC, make sure the EN300 is powered via its DC input. 2. If you need to connect a Microsoft Teams Room (MTR) system to the EN300, use the HDMI In2 port for video ingestion.
DE300	When using the DE300 to provide content stream output to different MCore devices, the specific output port used depends on the target device: • MCore Pro: Video Out • MCore 4: HDMI Out 

MCore Pro	The corresponding network cabling differs depending on whether the solution includes a Device Navigator device (e.g. CT200/CT300). • Include: Connect a USB to Ethernet adapter to the MCore, then plug the adapter into your AV network. Connect the Internet port directly to the Internet.  Mcore Pro • Not Include: Connect the Internet port directly to the Internet. Note If the MCore is to be connected to the EN300, use the HDMI Out 2 and HDMI Out 3 ports on the MCore.
MCore 4	The corresponding network cabling differs depending on whether the solution includes a Device Navigator device (e.g., CT200/CT300). • Include: Use the LAN port to connect to the AV network and connect the Internet port directly to the Internet.  Mcore 4 • Not Include: Connect the Internet port directly to the Internet. Note 1. If your setup involves using HDMI In on the MCore (for example, DE300 HDMI Out → MCore 4 HDMI In), you must enable the HDMI In function before using it. Please refer to Via MCore 4 HDMI In port. 2. If the MCore is to be connected to the EN300, use the HDMI Out 2 and HDMI Out 3 ports on the MCore.



Deployment Notes

- All devices must be connected to the same local area network, which is the AV network, ideally via the same switch. If switch cascading is needed:
 - If your solution does not include AVoIP devices, no restrictions on cascading.
 - If your solution includes AVoIP devices, use an AV switch for cascading and ensure all AVoIP devices (e.g., EN300, DE300) and AVHub units are connected to the same switch.
- If your setup includes AVoIP devices (such as EN300/DE300), ensure that any HDMI cables connecting to these devices are HDMI 2.0 or higher, and the cable length should not exceed 5 meters to maintain reliable signal integrity. Meanwhile, use Cat5e or higher specification network cables, ensuring cable runs do not exceed 100 meters.
- For the installation of the YPS20, when connecting to the AP08 GPIO, please connect the pins in sequence from 1 to 8.

Appendix

AV Network Switch Requirements and Settings

If your solution includes AVoIP or Audio devices, we recommend using either a **Yealink RCH80 or RCH240 network switch**, or a **Netgear M4250 AV Line switch series**.

Configuration Guidelines

Situation	Network Switch Model	Configuration
Solution with audio devices, no AVoIP equipment (e.g. EN300, DE300)	Yealink RCH80 / RCH240	The default (factory) settings are sufficient.

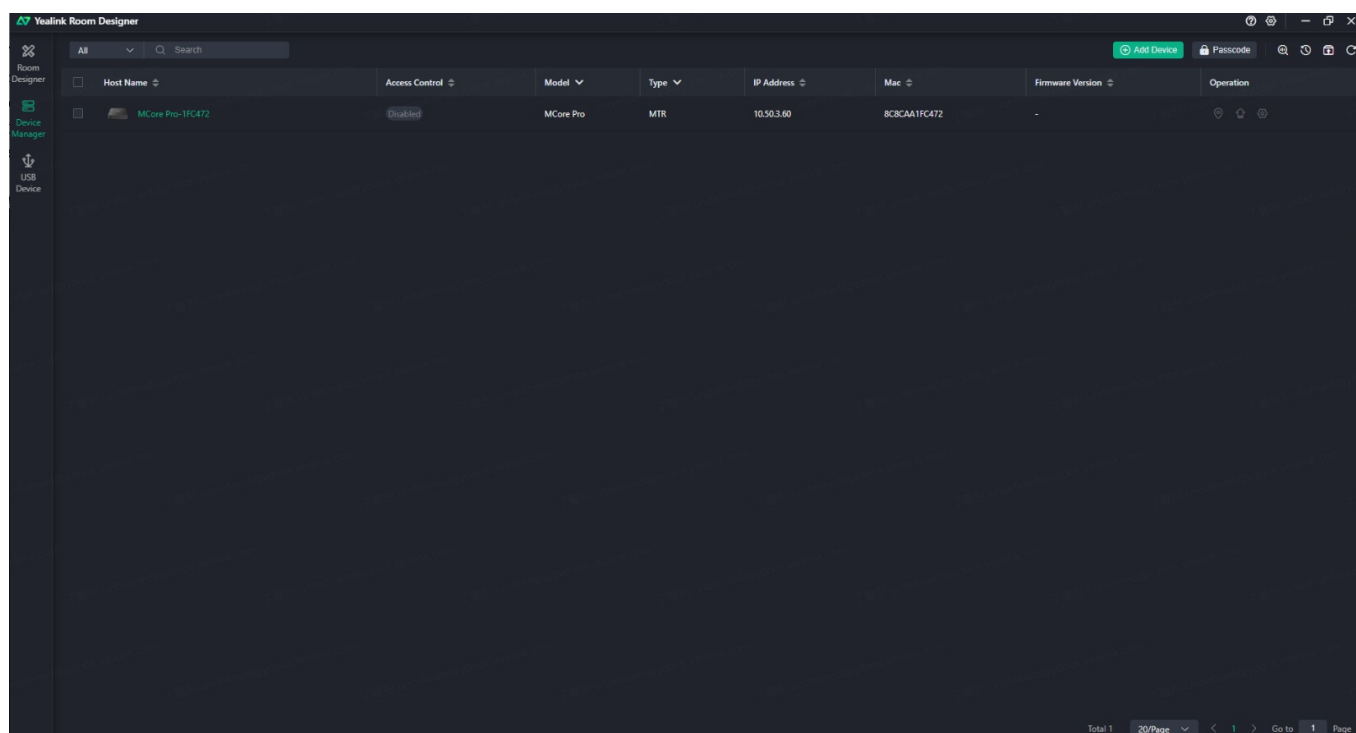
	Netgear M4250 AV Line switch series	Use one of the audio profile: “Audio Dante” or “Audio AES67” , select whichever matches your audio devices.
Solution with AVoIP equipment (e.g. EN300, DE300) , regardless of whether there are audio devices	Yealink RCH80 / RCH240	The default (factory) settings are sufficient.
	Netgear M4250 AV Line switch series	Use one of the video/AV profile: “Video” , “Video + AES67 Audio” , or “Video + Dante Audio” depending on whether the audio is AES67 or Dante.

Device Upgrade

All devices in the solution must be upgraded to firmware versions that support the AVONE before any deployment.

Upgrade Steps

1. Connect devices and computers to the same AV network.
2. Run the **Designer** software on the computer, navigate to the **Device Manager** interface within Designer, and perform the device upgrade.



NOTE

If your project uses UVC86 or AVHub, please verify their version numbers. If they are below the specified minimum versions, you need to upgrade them using the method described below.

Device Firmware Version	Upgrade Steps
UVC86: Lower than 151.435.0.20 version AVHub: Lower than 153.435.0.25 version	1. Power on the device without connecting it to the AV network. 2. Connect the device to a computer or MCore via USB. Use the Designer or YRC (Yealink Room Connect) software to upgrade the device to a version that supports AVONE. 3. In the Device Settings interface, configure the VCH IP Assignment Mode to Zeroconfig IP. 4. After completing the above steps, connect the device to the AV network and proceed with device connections following the deployment guide.

Device Firmware Requirements

The minimum firmware requirements for devices supporting the AVONE solution are as follows:

Device Model	Firmware
CM50	294.435.0.25
CM20	294.435.0.25
CS10	298.435.0.20
CS10-D	298.435.0.20
MSpeaker Pro	341.435.0.35
AP08	294.435.0.25
AVBridge	340.435.0.35
UVC86	151.435.0.30
SmartVision 80	321.435.0.40
AVHub	153.435.0.35
EN300	316.435.0.30
DE300	316.435.0.30
CT200	320.435.0.15
CT300	320.435.0.15