

# Connecting a codec on Wi-Fi via a computer

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## 1. Introduction and prerequisites

This application note describes how to use a computer (designated as "PC" in the rest of this document) for connecting an AoIP codec to a network via a Wi-Fi link. This method can be useful in two cases:

- 1. The codec cannot directly access the Wi-Fi network.
- 2. Access to the Wi-Fi network is conditioned by a validation or authentication via an html page.

The method consists in connecting the PC (usually a portable computer) to the Wi-Fi network, and share this connection with the codec, which itself is linked to the PC by an Ethernet cable.

You should have first the following elements available:

- AoIP codec with at least an Ethernet interface
- Computer with an Ethernet interface and a Wi-Fi interface
- Ethernet cable
- Administrative rights on the computer
- All needed information and credentials for connecting the PC to the Wi-Fi network

Details and screen copies in this note refer to a PC under Windows 10 (1803 version). You should expect some differences if using a PC with another Windows OS version, in which case you will have to adapt the suggested settings.

## 2. Physical setup

Link the codec and the PC in the following way:





#### 3. Connection to the Wi-Fi network

Use the information you have got (procedure, login, password...) for connecting the PC to the Wi-Fi network. *This step is not in the scope of this document.* 

Check that the access is operative, for instance by opening a web site from a browser.

## 4. Configuration of the connection sharing on the PC

Open the "Windows Settings" menu on the PC, and click the sub-menu "Network & Internet":

Settings				- 🗆 X
	W	/indows Settings		
	Find a setting	9	Q	
Display, sound, notifications, power		Devices Bluetooth, printers, mouse		Phone Link your Android, iPhone
Network & Internet WiFi, flight mode, VPN	Ę.	Personalisation Background, lock screen, colours	E	Apps Uninstall, defaults, optional features
Accounts Your accounts, email, sync, work, family	。 A字	Time & Language Speech, region, date	8	<b>Gaming</b> Game bar, DVR, broadcasting, Game Mode
Ease of Access Narrator, magnifier, high contrast	0	Cortana Cortana language, permissions, notifications	۵	Privacy Location, camera
Update & Security Windows Update, recovery, backup				

Then in the "Change your network settings" section click "Change adapter options":





In the "Network connections" window that opens, a "Wireless Network Connection" icon represents the active Wi-Fi connection:



Right-click this icon and select "Properties":

Wireless Network Connection Properties	×
Networking Sharing	
Internet Connection Sharing Allow other network users to connect through this computer's Internet connection	
Allow other network users to control or disable the shared Internet connection	
Settings	
OK Cancel	

Click the "Sharing" tab, check "Allow other network users to connect through this computer's Internet connection". If there is a drop-down list underneath, select "Local Area Connection". Save the changes by clicking the "OK" button.

#### 5. Connection of the codec

Link the codec to the PC by connecting a cable the PC's Ethernet interface and the codec's Ethernet socket.

The Ethernet interface of the codec must be configured with DHCP on.

The codec than obtains an IP address. If the operation is correct, it can now for instance register on a SIP server if this is included in its configuration.

The codec can be operated like on a regular Ethernet connection.



### 6. Additional information

- For other versions of Windows, the exact setting procedure can differ from the above description, but the basic principle is the same: sharing the Wi-Fi connection for the Ethernet interface on which the codec is connected.
- The connection sharing can often be hindered or blocked by a firewall or antivirus software on the PC. In case of failure, try to disable such software and check if this solves the issue. If indeed this is necessary, remind to *reactivate the protection after the transmission session*!
- If you later have to connect the PC to a network via the Ethernet wired access, remind to disable the connection sharing.