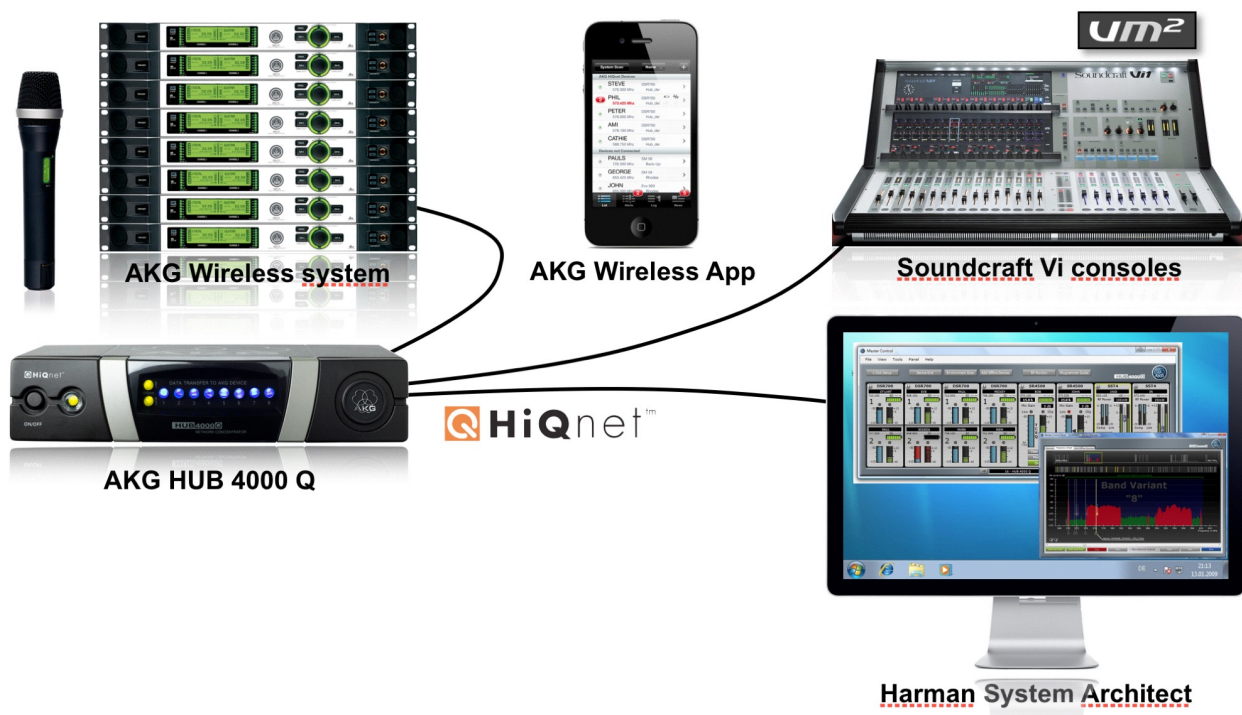


# FAQ - AKG Wireless Systems



## HiQnet® Remote Control and Setup

These Frequently Asked Questions (FAQs) may help if there are issues with working or setting up the HUB 4000 Q.

The FAQs help you to get started quickly with setting up and remote control of your **AKG wireless system** with the PC software **Harman System Architect™**, the **AKG Wireless iPhone® App** and **Soundcraft Vi consoles VM<sup>2</sup>** feature based on **Harman HiQnet®** protocol using the **HUB 4000 Q**.

If you have further questions check out the quickstart guide and manuals which can be found online at <http://www.akg.com/hiqnet>.

If you need further help please send an email to [hiqnet@akg.com](mailto:hiqnet@akg.com).



**FAQ 1: How do I setup my HUB 4000 Q(s) and my wireless system together with System Architect/AKG Wireless iPhone App?**

See **Quick Start Guide steps 1 - 3** and **FAQs**.

**FAQ 2-1: System Architect starts up and no HUB 4000Q is detected!**

If the HUB 4000 Q is not showing up at HiQnet Explorer, System Architect has no network connection to the HUB 4000 Q.

Possible reasons:

- *The HUB is physically not connected to the HiQnet network*  
→ check your ethernet/network cables and check if your router and/or switches are powered on  
→ If you connect the HUB 4000 Q directly to your PC than you have to use a crossover network cable
- *The HUB 4000 Q is not powered on*  
→ check the power connection of the HUB 4000 Q
- *The HUB 4000 Q has no or wrong IP address/subnet settings*  
→ See **FAQ 3**

**FAQ 2-2: AKG Wireless iPhone App shows no list entries/devices at it's main list screen!**

→ See **FAQ 2-1**

**FAQ 2-3: Soundcraft Vi console VM2 shows no list entries/devices at it's HiQnet list screen!**

→ See **FAQ 2-1**

**FAQ 2-4: What are the minimum requirements for a PC running System Architect?**

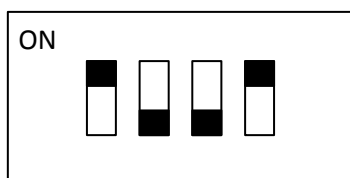
- Windows 7, Windows Vista, Windows XP SP2, Windows 2000 SP4 or Windows 2003 Server SP1, Windows 7
- Only 32 bit Windows operating systems are supported
- Processor - 2 GHz (Dual Core)
- RAM - 2 GB
- Screen Resolution - 1024x768
- 200 MB Hard Drive space available

HUB 4000 Q – FAQ



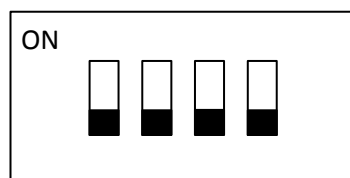
**FAQ 3: My HUB 4000 Q has wrong network settings!**

- Open **Network Troubleshooter** at System Architects – *Ribbon/Tools/Network/Network Troubleshooter* – and follow the instructions.
- If the Network Troubleshooter doesn't help open **Readdress Devices** at System Architects – *Ribbon/Tools/Network/Readdress Devices*
- The **Readdress Devices** panel is opened. There you can configure your devices network settings.
- If all of your HUB 4000 Qs are powered on and connected to the HiQnet network and no HUB 4000 Q is shown in the list at the **Readdress Devices** panel, your HUB 4000 Q has no network connection to System Architect (detection of devices needs up to 60 seconds).
- Please follow these steps:
  - o On the right side of the HUB 4000 Q, behind the AKG logo, a DIP switch can be found which changes the IP address negotiation. Set the DIP switch to the following setting:



DIP 1, 4: ON - DIP 2, 3: OFF

- o Power cycle the HUB 4000 Q (Switch the Power OFF and ON)
- o Wait till the 8 slot LEDs went from the left and right side to the middle and back again periodically.
- o Set the DIP switch to the following setting:

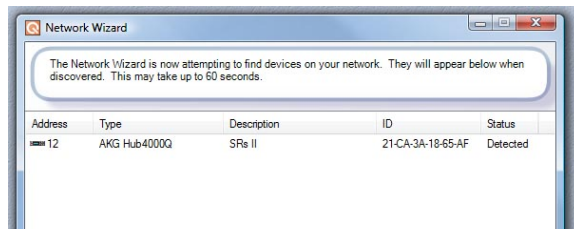


DIP 1, 2, 3, 4: OFF

- o Now the HUB 4000 Q starts first with trying to find an IP address with DHCP. If the HUB 4000 Q doesn't get an IP address over DHCP (if no DHCP server is connected to your HiQnet network) the HUB 4000 Q tries to get an IP address with AutoIP (IP range 169.254.1.1 to 169.254.254.255 with a subnet mask 255.255.0.0)
  - **The data LED is blinking periodically every second.**
  - **All slot LEDs are off.**
  - The address negotiation can take up to 5 minutes.



- Now the HUB 4000 Q should have a valid IP address
  - **The data LED is showing the network traffic (it should blink non periodically and very fast)**
  - **The slot LEDs are ON if a AKG Device is connected**
- If the HUB 4000 Q has a valid IP address, the **Readdress Network** panel should show up a new entry with your HUB 4000 Q because System Architect has now a network connection to the HUB 4000 Q
  - o If the new entry has also entries at columns 'Type' and a 'Description' the network is configured right (see following picture).

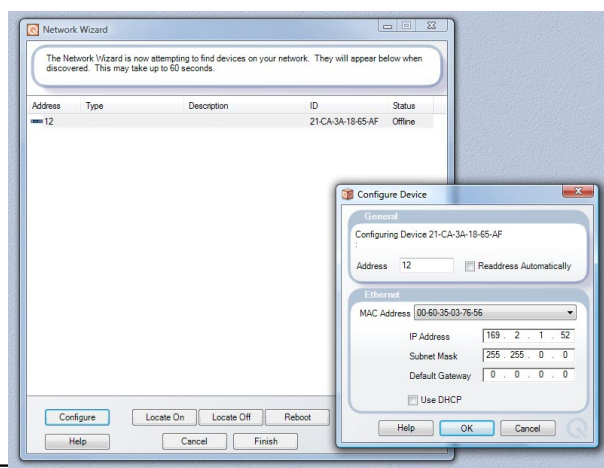


- o **You can now start working with System Architect/AKG Wireless iPhone App, VM2, HUB 4000 Q and the AKG wireless system.**
- o If the new entry has NO entries at columns 'Type' and a 'Description' the IP address and subnet settings of the HUB 4000 Q are wrong.



### Please follow the next steps:

- Double click on the list entry or click the Configure Button at the bottom of the **Readdress Devices** panel:



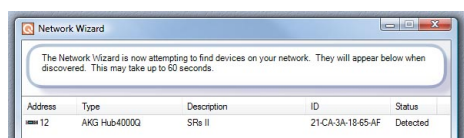
- The Configure Device Dialog is opened. At this example the Device has the IP address **169.2.1.52** and is in the subnet **255.255.0.0**. The computer has in this example the IP address **192.168.1.1** and the subnet **255.255.255.0**.

HUB 4000 Q – FAQ



That means that the device has the wrong IP address and subnet. - See **FAQ 6-1**

- Now you can check the *Use DHCP checkbox* if you want to use a DHCP server for getting a valid IP address and subnet from the DHCP server
- Configure your PC operating system for retrieving automatically an IP address and subnet – See **FAQ 14**
- Or you type in a static IP address and subnet by hand, for example IP address 192.168.1.10 and subnet 255.255.255.0. See **FAQ 6-2**.
- Click OK and your HUB 4000 Q should have now the right IP address and subnet. The PC and the HUB 4000 Q should be now in the same subnet and should have valid and unique IP addresses
- Now the HUB 4000 Q should show up at **Readdress Devices** panel. The HUB 4000 Q is now configured right and should show up also at the HiQnet Explorer and can be used at the Venue View



Please also refer to System Architect Online help for further information on how to set-up a HiQnet™ network.

Chapter '**Troubleshooting**' – Section '**Missing Devices**'

#### **FAQ 4: If my HUB 4000 Q is shown at Venue View, System Architect asks me to perform a firmware update of my HUB 4000 Q.**

If you have downloaded a new version of System Architect and start System Architect and a HUB 4000 Q is detected you have to perform a firmware update.

Mixed configurations of an old HUB 4000 Q firmware together with the newest System Architect version are not supported. It is recommended to use always the latest version of System Architect which also includes the latest versions of HUB 4000 Q firmware.

Please download the latest version of System Architect from

<http://hiqnet.harmanpro.com/downloads.php>

#### **FAQ 5: What is the IP address range of the HUB 4000 Qs AutoIP?**

The IP range for the Auto IP function of the HUB 4000 Q is 169.254.1.1 to 169.254.254.255 with a subnet mask 255.255.0.0.

HUB 4000 Q – FAQ

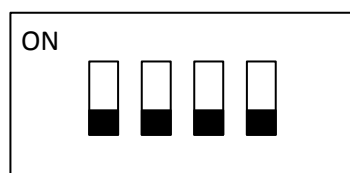


**FAQ 6-1: What IP address is used by the HUB 4000 Q?**

The IP address negotiation of the HUB 4000 Q depends on the DIP switch setting of the HUB 4000 Q. Also see **FAQ 6-2, 6-3, 6-4, 6-5**.

**DIP switch settings:**

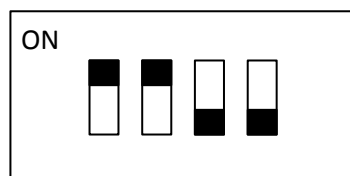
On the right side of the HUB 4000 Q, behind the AKG logo, a DIP switch can be found which changes the IP address negotiation. DIP switch changes take only effect after the HUB is power cycled. It is recommended to use the default DIP switch setting (all switches OFF). This setting uses the stored IP address setting.

**Configuration 1:**

DIP 1, 2, 3, 4: OFF

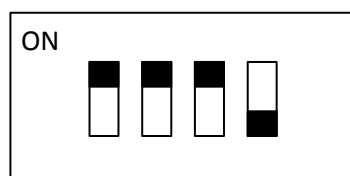
Default, recommended configuration:

- Use stored settings – Uses System Architect settings
- At shipping – first start up: DHCP & AutoIP

**Configuration 2:**

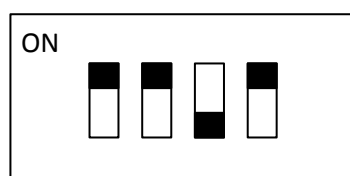
DIP 1, 2: ON - DIP 3, 4: OFF

- DHCP & AutoIP – Overrides System Architect setting

**Configuration 3:**

DIP 1, 2, 3: ON - DIP 4: OFF

- DHCP only – Overrides System Architect settings

**Configuration 4:**

HUB 4000 Q – FAQ



DIP 1, 2, 4: ON -DIP 3: OFF

- AutoIP only – Overrides System Architect settings

## FAQ 6-2: What IP address and subnet should i choose?

Normally the PC with System Architect, Wireless iPhone app or Vi console with VM2 are supposed to operate in the same HiQnet LAN (Local area network) as the AKG HUB 4000 Qs.

This means that the IP address of the PC, iPhone or Vi consoles must be in the same subnet as the HUB 4000 Qs IP addresses. So for proper operation all subnets of all devices in the HiQnet LAN must be the same.

It is strongly recommended to use an **Ethernet DHCP router** in your HiQnet network. If you connect a DHCP network router (which has a built in DHCP server for automatic IP address management in your ethernet network) setting up the system is much more easier and faster because you don't have to care about IP addresses (that's done by the DHCP server inside your DHCP router).

*Note: It is possible to operate several HUB 4000 Qs throughout several subnets from a single System Architect. This needs advanced network configuration and is only recommended for advanced users. Please contact [HiQnet@akg.com](mailto:HiQnet@akg.com) for further assistance.*

**IP address:** Each device in a LAN must have a unique IP address

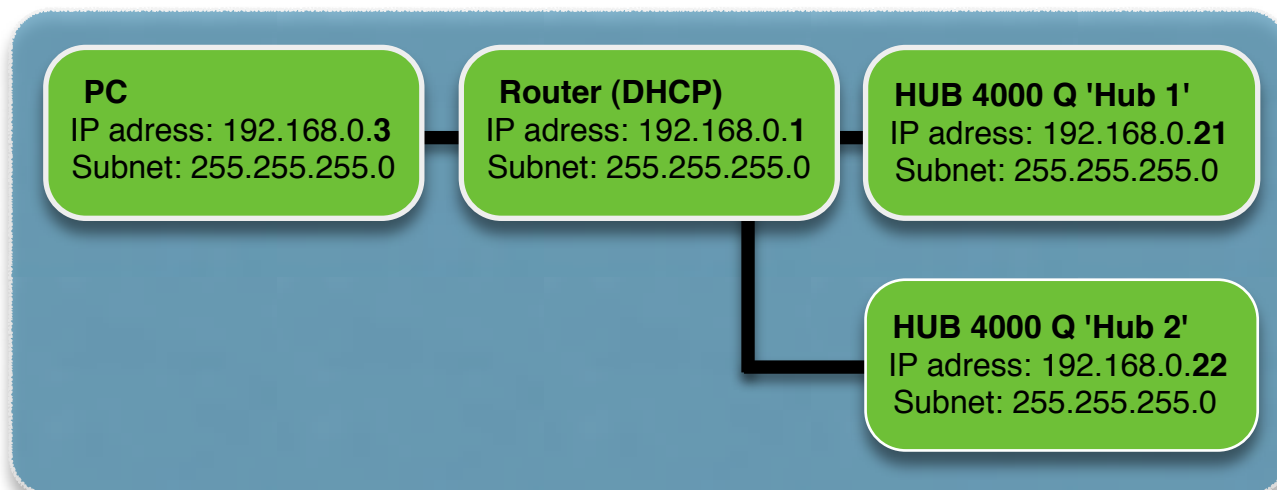
**Subnet:** The subnet defines the digits of the IP address which are unique in a subnet

**EXAMPLE:** If the subnet is **255.255.255.0** The first **9** digits of all IP addresses in the subnet have to have the same numbers. They define the subnet. Only the last 3 digits of the IP addresses are allowed to be different.

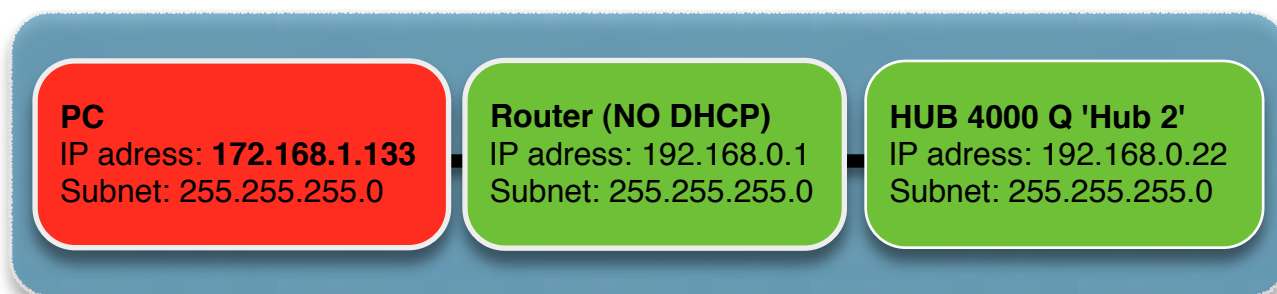
Devices with IP addresses like **192.168.0.1**, **192.168.0.123**, **192.168.0.204** would be in the same subnet (The subnet is then **192.168.0.xxx**) whereas a device with a IP address of **172.168.0.3** won't be in the same subnet as the first digits are not **192.168.0.xxx**

**EXAMPLE:** The following example shows a HiQnet system with a PC running System Architect, a DHCP router for automatic IP address management and 2 HUB 4000 Qs. All IP addresses and subnets are configured right. System Architect will discover the HUB 4000 Qs instantly and you are ready to work with the AKG wireless system.





**EXAMPLE:** The following example shows a HiQnet system with a PC running System Architect, a router (DHCP turned off) and one HUB 4000 Q. The PC is in the right subnet but it's IP address is configured wrong. System Architect will not discover the HUB 4000 Q because there is no proper network connection between the PC and the HUB 4000 Q. The IP address of the PC should be **192.168.0.10**. Then the PC would be configured right.



### FAQ 6-3: Do i need to configure my Windows firewall?

It is recommended to switch of your Windows firewall.

### FAQ 6-4: How do i setup my network router?

Normally you can do this within your internet browser by typing in the IP address of your wireless router in the address bar of internet explorer. By default most router use the IP address 192.168.0.1.

Please refer to the documentation/manual of your network router.





**FAQ 6-5: How should i configure my network?**

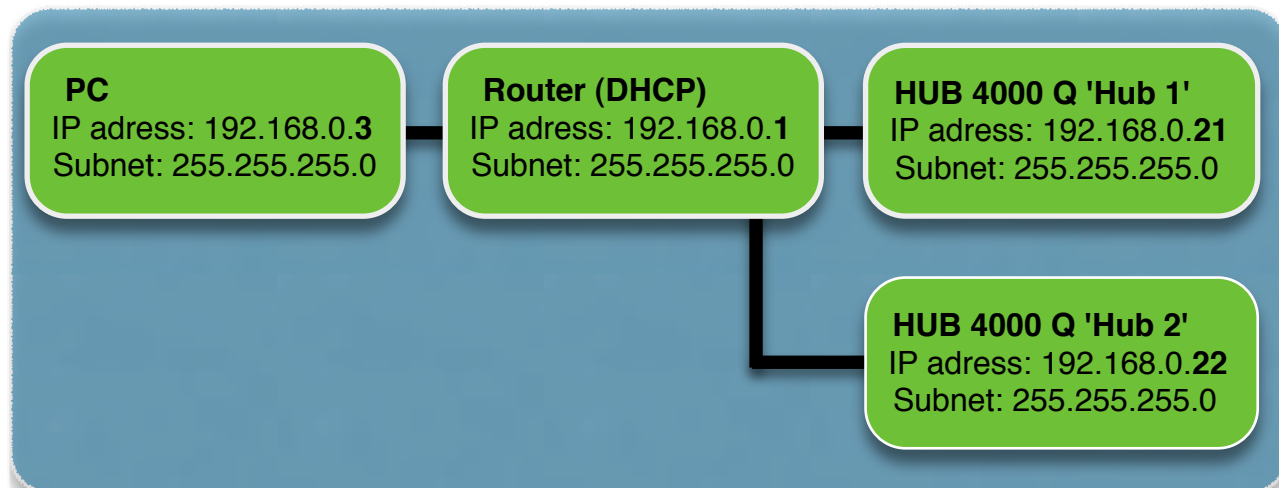
There are multiple possible configurations which are possible. The three most common configurations are:

**1 - PC, multiple HUB 4000 Qs, DHCP router**

This is the recommended configuration. The PC is connected via a network router with DHCP to the multiple HUB 4000 Qs. The network router takes care of the IP address and subnet settings of the PC and HUB 4000 Qs.

Make sure that the PC and the HUB 4000 Qs are configured to receive IP settings via DHCP.

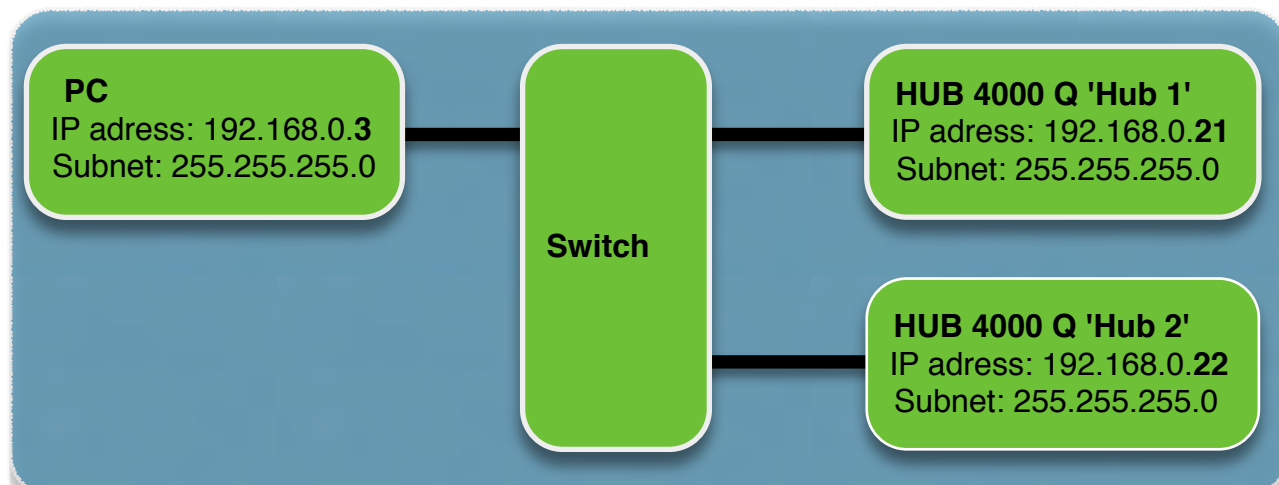
See **FAQ 3, 5, 6-1, 6-2, 6-4, 14.**

**2 - PC, multiple HUB 4000 Qs, network switch**

The PC is connected via a network switch to the multiple HUB 4000 Qs. The network settings must be set manually at the PC and HUB 4000 Qs.

Make sure that the PC and the HUB 4000 Qs have the right IP settings.

See **FAQ 3, 5, 6-1, 6-2, 6-4, 14.**



HUB 4000 Q – FAQ

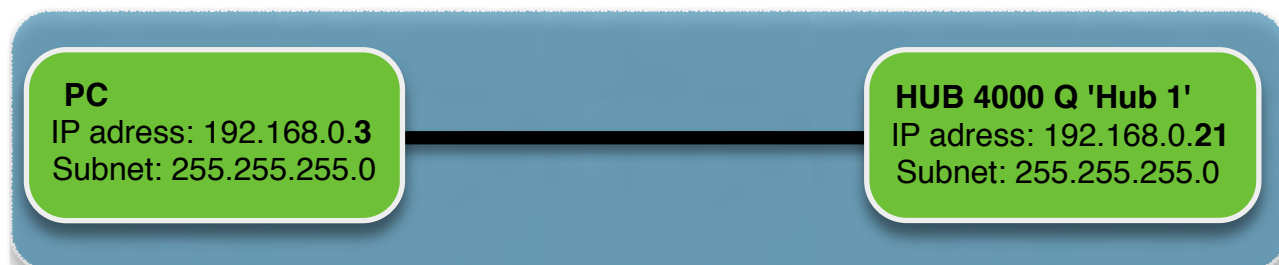


**3 - PC, a single HUB 4000 Qs, connected via a crossover network cable**

The PC is connected via a crossover network cable to a single HUB 4000 Q. The network settings must be set manually at the PC and the HUB 4000 Q.

Make sure that the PC and the HUB 4000 Qs have the right IP settings.

See **FAQ 3, 5, 6-1, 6-2, 6-4, 14.**

**FAQ 7: How long does it need till the HUB 4000 Q gets an IP address**

Be aware that the complete IP address negotiation process can last up to 5 minutes.

The first time the HUB 4000 Q receives an IP address, the address is stored in the device's memory. The next time the HUB 4000 Q starts, the HUB 4000 Q uses the stored IP address if DIP switch configuration 1 was chosen (see **FAQ 6-1**). That saves a lot of start-up time.

**FAQ 8: What is the functionality of the eight slot LEDs:**

Each of the eight slots of the HUB 4000 Q has a dedicated blue slot LED on the front of the HUB 4000 Q. The slot LED is off if no device is connected to that slot. The slot LED lights nearly permanently (actually corresponding to the net-traffic) if a device is connected to the HUB 4000 Q and the device is turned on. If the device is turned off the slot LED blinks periodically to indicate that the device is turned off.

**FAQ 9: I see 2 HUB 4000 Q at the Venue View, but if I click on one HUB 4000 Q icon I just can control one HUB 4000 Q.**

To be able to control multiple HUB 4000 Qs from a single window you have to create a Master Control Panel. Read through **FAQ 10** about how to create a Master Control Panel.

**FAQ 10: How can I control multiple HUB 4000 Qs within a single panel?****CREATE a MASTER CONTROL PANEL!**

Select all HUB 4000 Q icons at Venue View which should be added to the Master Control Panel. Right click on one of the selected HUB 4000 Q icons. Select from the Context Menu 'Create Master Control Panel' – 'AKG HUB 4000 Q'. Then a Master Control Panel for all the selected HUB 4000 Qs is created. The Master Control Panel is able to control all AKG devices of all HUB 4000 Qs from a single panel.

HUB 4000 Q – FAQ



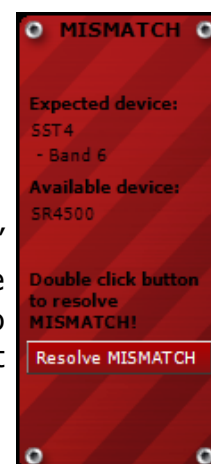
### **FAQ 11: After System Architect is coming online a stripe with red background is showing up on the HUB 4000 Q product panel**

The red background of a Stripe indicates a **MISMATCH** between the physical device, connected to the HUB 4000 Q and its dedicated Stripe.

The Mismatch can be resolved in two ways:

#### **1. Resolve at System Architect:**

Double click on the Mismatching stripe at the 'Resolve Mismatch' button. The Mismatch will resolve by deleting the offline plug-in Stripe and retrieving all information of the physical AKG Device connected to the hardware HUB 4000 Q and creating a new matching Stripe for that physical AKG Device.



**ATTENTION: All settings of the offline Stripe will be LOST!**

#### **2. Resolve at the physical HUB 4000 Q:**

User can resolve the Mismatch by changing the physical AKG Device which causes a Mismatch.

The 'Expected device' label gives you information about the expected device which was configured offline. Take a note which physical AKG Device is expected with which Band Variant, at which Slot. Disconnect the Mismatching physical AKG Device from the hardware HUB 4000 Q and connect a physical AKG Device of the Device Type with the Band Variant of the expected physical AKG Device. The Mismatch at the plug-in will be automatically resolved.

### **FAQ 12: The HUB 4000 Q is going Online/Offline after some time – or – The Meters, buttons and other controls are not/or very slow reacting**

See the **FAQ 13, 2-4!**

### **FAQ 13: The HUB 4000 Q is part of a Cobranet System and behaves very strange. The HUB goes Online/Offline, is not or slow reacting**

If the HUB 4000 Q is part of a Cobranet System the network settings must be set very carefully. If Cobranet Broadcast messages/streams are used the HUB is spamed with these messages and cannot receive or send HiQnet messages fast enough.

It is recommended to setup a separated VLAN for all HiQnet devices like the HUB 4000 Q and a separate Cobranet VLAN. Then the Cobranet messages are not received from the HUB 4000 Q.

You can also use networkswitches which support Ethertype filtering and filter the Cobranet Ethernet messages at the port of the switch to which the HUB 4000 Q is connected.

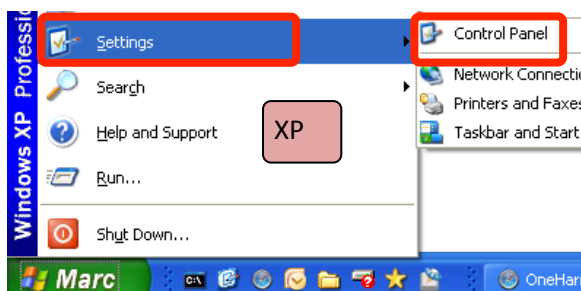
If you need further help on this issue please contact: [hiqnet@akg.com](mailto:hiqnet@akg.com)

HUB 4000 Q – FAQ



## FAQ 14: How can I set the IP settings of my PC?

- The IP settings of your PC can be found at the Windows Control Panel/Network Settings.

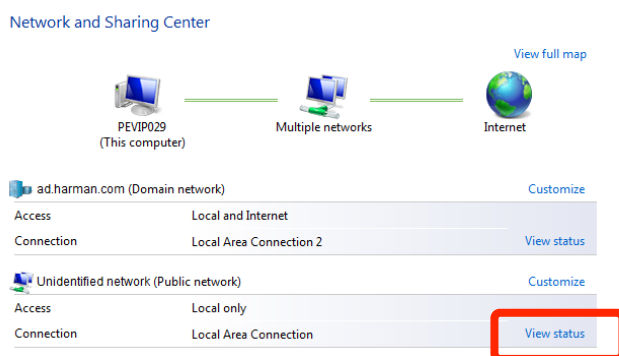
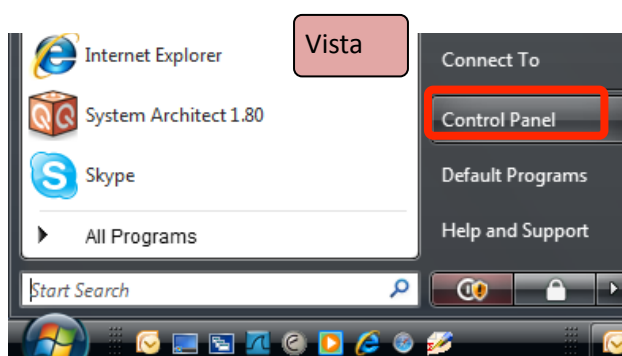


### o Windows XP:

- Click *Start Button/Settings/Control Panel*
- At *Control Panel* click at *Network Settings*
- At *Network Settings* double click the HiQnet network

### o Windows Vista:

- Click *Start Button/Control Panel*



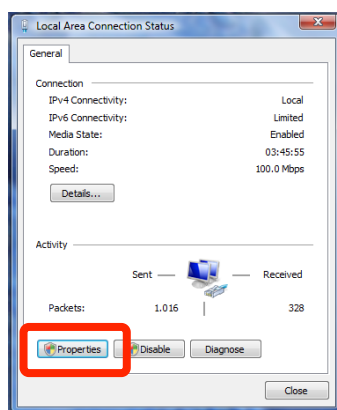
- At *Control Panel* click on '*Network and Sharing Center*' and click on the '*View status*' link of the HiQnet network (*Unidentified network* at this example)

HUB 4000 Q – FAQ

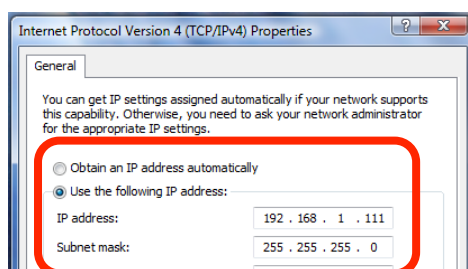
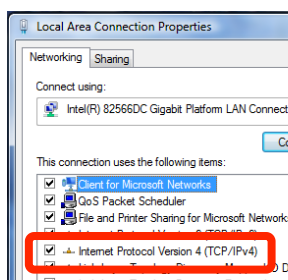


### o **Windows 7:**

- Click *Start Button/Control Panel*
- At *Control Panel* click on '*Network and Sharing Center*' and click on '*Connections*' link of the HiQnet network
- This opens the *Local Area Connection Status* panel. Here you can see the status of your network.



- Click at the *Properties* Button
- Double Click at the *Internet Protocol 4 (TCP/IPv4)* entry



- At the *Internet Protocol Version 4 (TCP/IPv4) Properties* panel you can set the PCs network settings for this network.  
If you choose '*Obtain an IP address automatically*' the PC tries to get an IP



address with DHCP or AutoIP.

You can also define a static IP address and subnet at 'Use the following IP address'. See **FAQ 6-2** for more information about setting an IP address

### **FAQ 15: System Architect crashes when starting 1 Click Setup!**

System Architect 1 Click Setup only works with 32 bit versions of Windows operating systems. With 64 bit versions of Windows operating system System Architect is crashing when launching 1 Click Setup. This issues is known and AKG is working on a solution to fix it.

### **FAQ 16: Environment Scan doesn't work, or is very slow!**

Normally your PC doesn't fulfil the minumum requirements if environment scan doesn't work. Please check your PCs specification and the minumum requirements at **FAQ 13+2-4**.

### **FAQ : At devicegrid at column 'Band' 'RF Error' is shown! At Stripe Info Menu , 'RF Error' is shown!**

This means that the band is not supported by System Architect. Please contact [HiQnet@akg.com](mailto:HiQnet@akg.com) for further assistance.

### **FAQ 17: SST 4 is not able to scan!**

The SST 4 is a stereo stationary transmitter of an In Ear Monitoring system which means that it is only able to transmit RF signals. It cannot receive RF signals and for that reason it is not able to perform an environment scan. If you want to perform an environment scan at the bands of your SST 4s you need to connect either SR 4000/4500 or DSR 700 to your HUB 4000 Qs.

### **FAQ 18: I cannot update the firmware of SR 4000!**

The firmware of SR 4000 cannot be updated due to technical reasons.

### **FAQ 19: After loading a venue file audio and RF meters are not working any more!**

This is a known issue. AKG will fix this bug as soon as possible. However closing all Custom control panels and docking and floating the product panel or master control panel solves the problem.

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