

## VIDEO QUALITY ISSUES AND HOW TO FIX THEM

A common problem that can arise with IP cameras is decreased video quality, typically in the form of skipping frames or lagging footage. This is not a fault with the camera, but rather a function of incorrect placement of the components.

WiFi effective ranges can vary significantly based on the types of material they are passing through. Even thin plate glass presents a major obstacle for WiFi signals compared to brick, which is by nature porous. Thick wood and full bookshelves, and especially double-glazed glass, can have a negative effect on the ability of a camera to send a strong signal back to the base station.

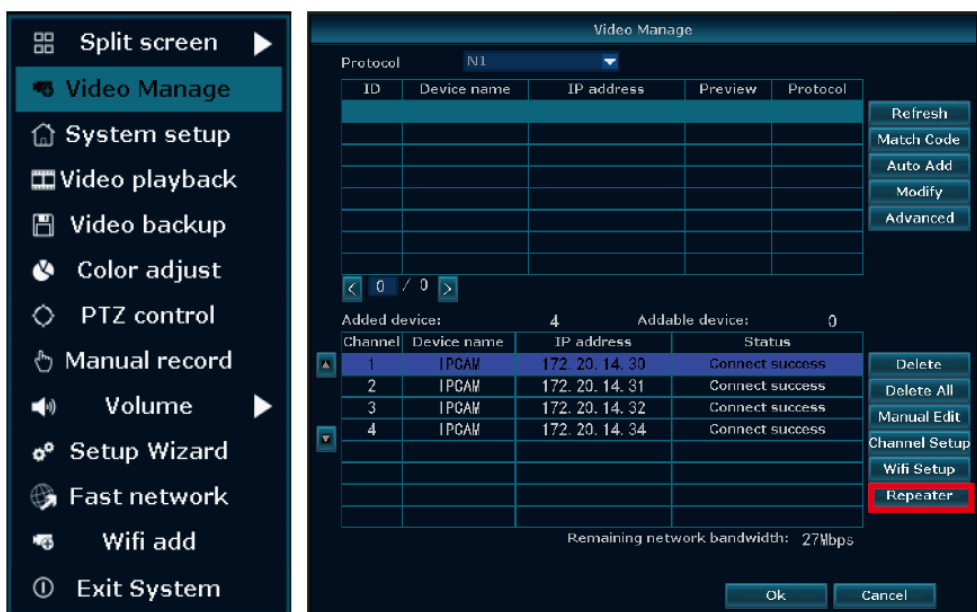
### HOW TO FIX:

First, try to determine what obstacle could be blocking the signal. Simply moving the base station or camera into a clearer line-of-sight should solve or at least pinpoint the problem. If their locations are fixed or it is otherwise impractical to change their location, then there are some easy solutions.

**1)** The first is to use a camera with a stronger signal as a 'repeater', meaning that the signal is first sent between the base station and a camera with a stronger signal or better position, and that camera is then configured to pass the signal on to a more distant camera. This is especially useful for receiving clear imagery when unavoidable obstacles such as walls, windows or even longer distances impact on signal quality. This linking and unlinking of devices can easily be done within the DVR/NVR software.

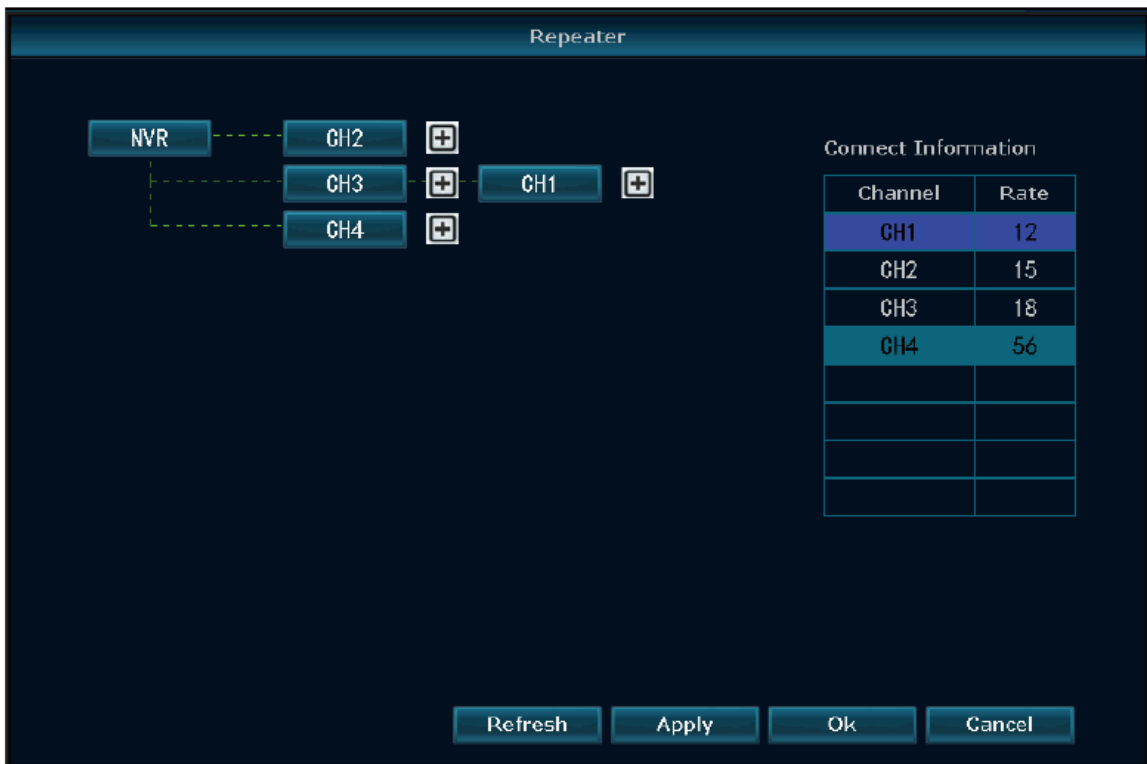
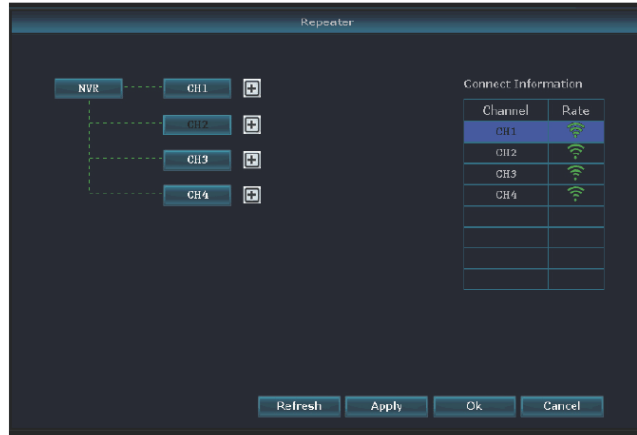
#### Step 1: Access the Repeater Setting

Right click the mouse to select the "Video Manage", then click "Repeater"



## Step 2: Set up Repeater

If CH1 is far from NVR, you can select CH3 as a repeater. Firstly click the button "+" behind the CH3, then add the CH1, finally click "Apply" to save the settings (It will take about 1 minute).





As the picture shown above, when the IPCAM1 is placed at somewhere that is out of NVR wifi range, and the IPCAM3 in the between with strong WiFi signal, users can put the IPCAM3 close to the NVR and plug it into power supply, setup repeater for the IPCAM1 through the IPCAM3, and then install the IPCAM1 to the presupposed place.

### Step 3: Delete the repeater

Move the mouse to the CHx (x is the channel number) which is required to be deleted, left click the mouse to delete, and then click "Apply" and "OK".

### Tips:

1. You can configure repeater only when the transmission distance needs to be increased
2. As the coverage of the NVR wireless system can meet most of situations, it's suggested that do not configure repeater blindly.
3. Repeater configuration can not enhance the signal of the cameras, it's just to extend the distance by the relay way.
4. Only when the cameras be placed reasonably, it can achieve distance extension (The most effective way is to put the cameras and the NVR in the same line)

2) The second is to purchase our upgraded antenna with a 3 metre/10 foot cable attached. This means that the actual camera's signal transmitter can be located further away, typically to a location closer to the base station, or inside a house whilst the camera can remain outside. To use, simply unscrew the existing aerial from the camera, attach the upgraded antenna cable, and then place the antenna at the opposite end closer to the base station, or around obstacles. Often customers will drill a small hole so they can run the antenna cable from indoors to an external camera.

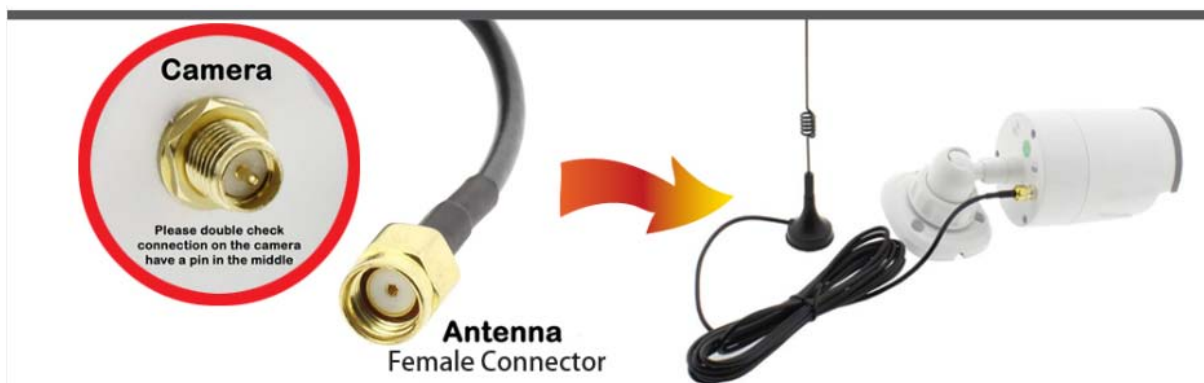
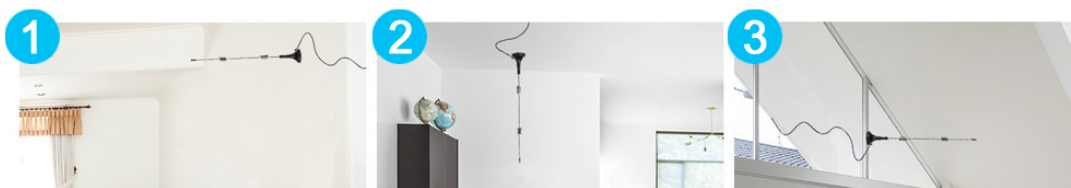
## Inside the House



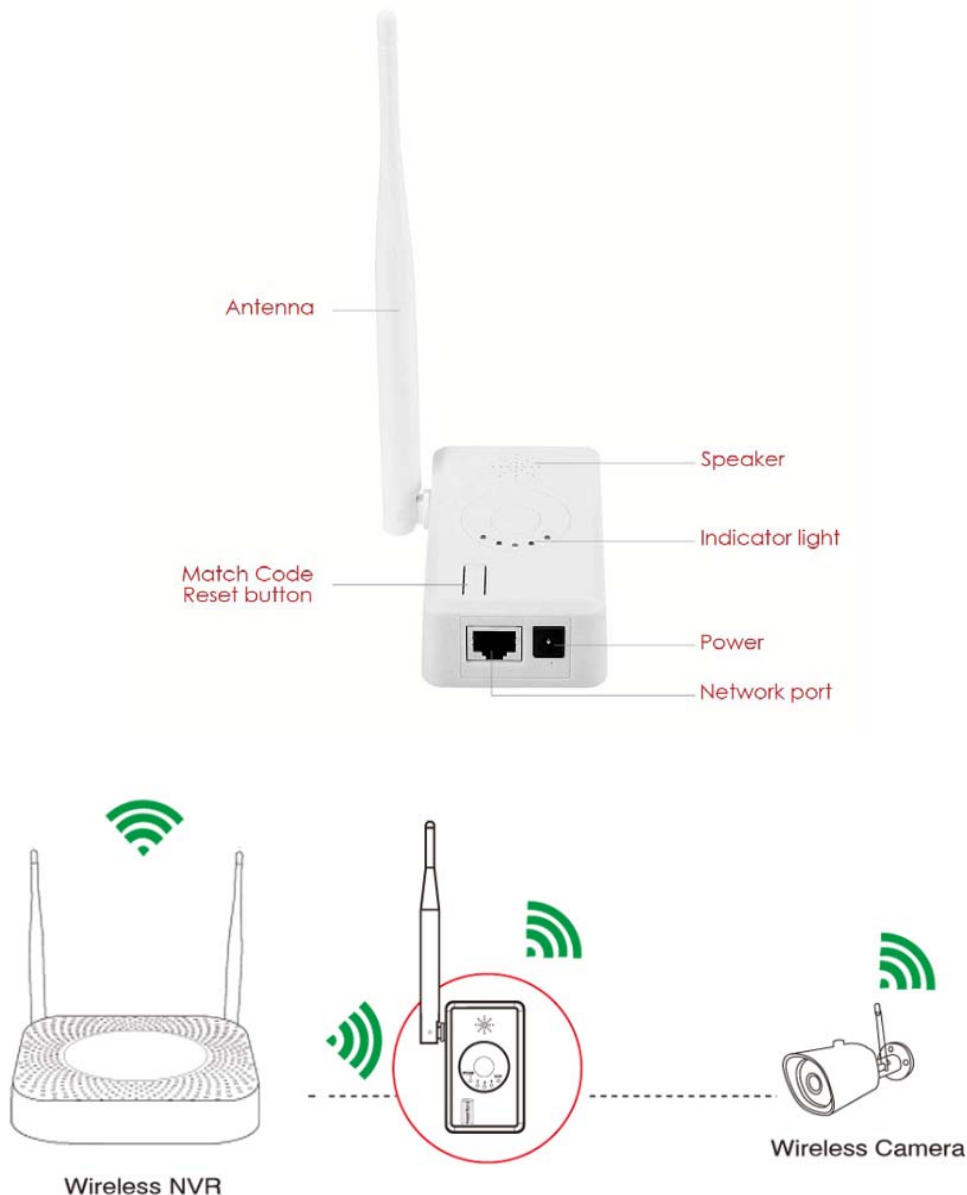
### Warm Tip:

If your camera is placed on the outside, please don't put the antenna cable outside. (The reception of wifi signals will be blocked)

The right method is: Connecting one end of the antenna to the camera and checking that it is connected tightly, the other end of the antenna is attached to the wall or glass inside the house to effectively enhance the signal.



3) Finally, for more extreme situations or longer distances, we supply a WiFi range extender. This functions similarly to using another camera as a repeater, but with the advantage of being able to connect up to 4 cameras to what will effectively become a second base station. These can be strategically placed to ensure strong signal for the surrounding area, and are particularly useful in large or multi-story dwellings. Up to 4 WiFi range extenders can be used, for a maximum of 16 video channels in total. (Note: Some base stations may only support 4 or 8 channels, meaning that is the maximum of cameras that can be connected, but can be set up as one camera per extender.)



## A magical lever to move the security market —— The IPC Router!



Support wireless NVR



Support ONVIF,  
Can be connected with any onvif NVR



Wired NVR

Cable

