

Repeater for WiFi Kit

RKK-EXT3



Installation Manual

How to install a repeater in a wifi kit



What did you buy?

The RKK series WiFi kits allow a maximum distance between cameras and NVR of approximately 3-4 rooms. If you place the RKK-EXT3 repeater in the coverage area of the kit you will boost the signal for further 3-4 rooms. You can use maximum 2 repeaters in one kit.

If you purchase the repeater together with the wifi kit, it will be delivered already configured with the kit

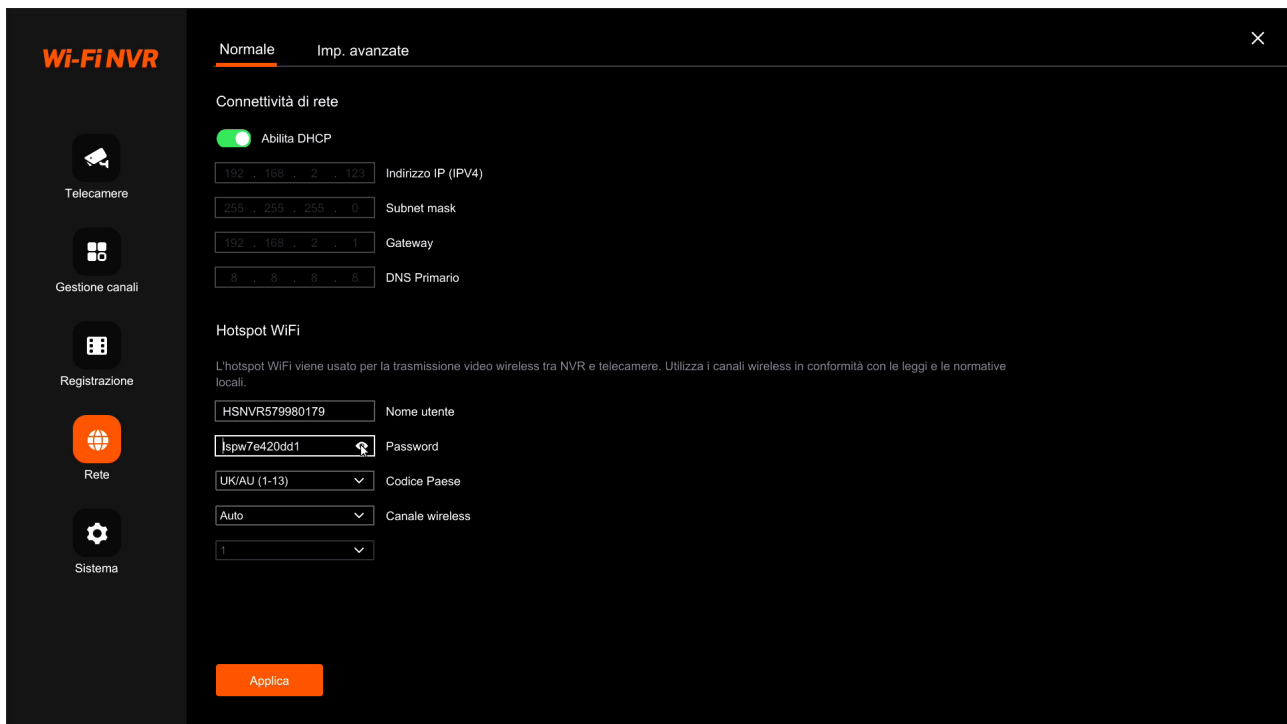
This manual explains how to install the repeater you purchase later, by connecting it to one of our already functioning wifi kits.

Kit RKK-KIT5A...

Discover the NVR WiFi network

The first thing you need to do to install a wifi repeater in your kit is to check the wifi network of the your NVR. All our NVR for wifi kits generate their own WiFi network with their own name (SSID) and an access password. You can check with a mobile phone that this wifi network is visible among available wifi networks.

You can find the data relating to the wifi network generated by the NVR in the network settings of your NVR, inside the WiFi Hotspot section



The important data in this section are the network name (SSID) and the access password, which you can read it by clicking the icon in the password box.

ATTENTION: If you do not see the network name and password on your screen, please visit our website and download the latest firmware update in the software section.

If you now explore the available wifi networks, with a mobile phone or a tablet, you will find the NVR network among wifi networks. The name of the network is called SSID.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:4



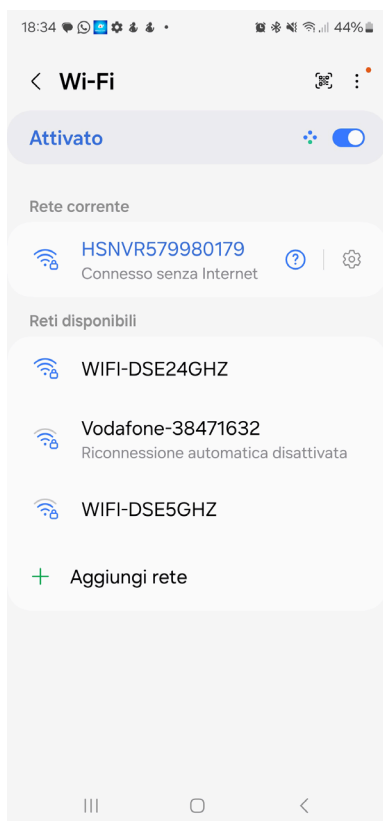
You can try to connect, for verification, by entering the password you read in the configuration of the network.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:5

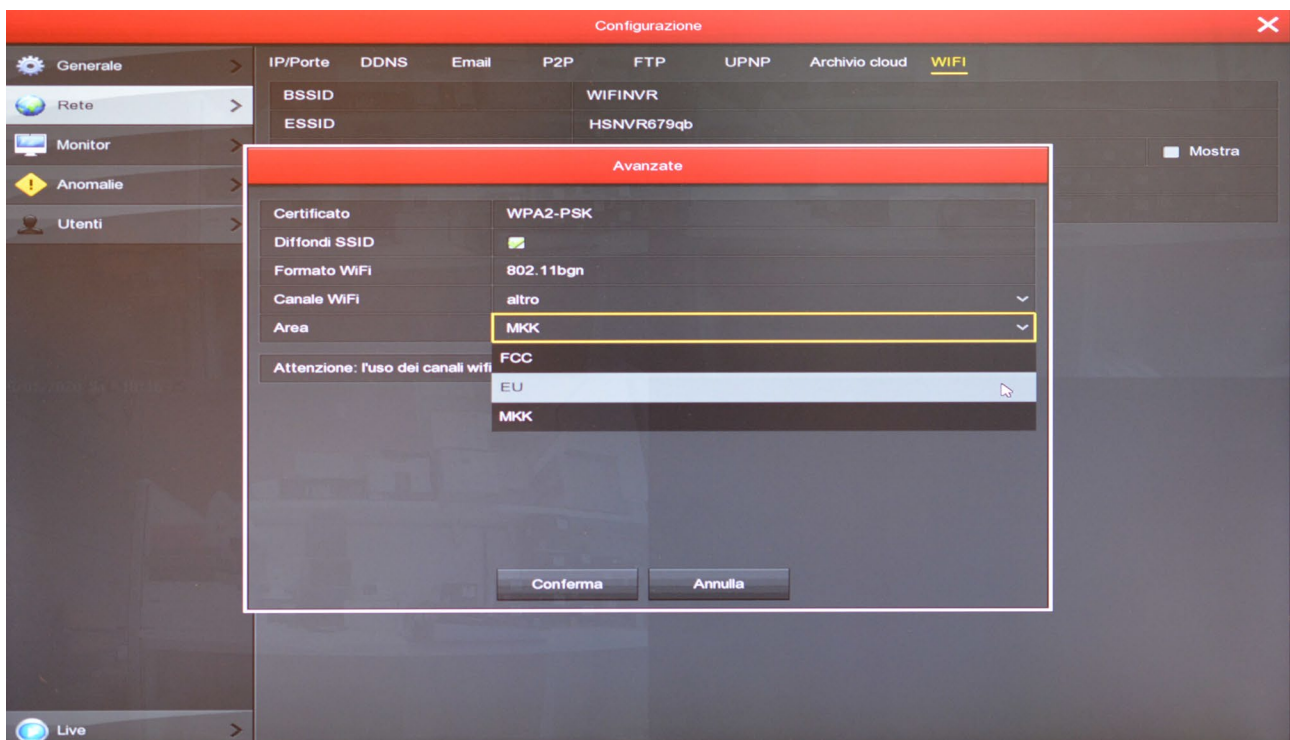


Now you have full control of your NVR's wifi network: you can view the NVR's wifi network with others devices, you know its name (SSID) and access password.

Kit RKK-KIT2.. and RKK-KIT8..

Discover the NVR WiFi network

The RKK-KIT2.. and RKK-KIT8... kits, now out of production, required making the network visible of the NVR, before you can use the repeater. You can do this in the NVR settings in the NETWORK/WIFI section and pressing the ADVANCED button



The important item is AREA. Select AREA: EU and check that the checkbox is present BROADCAST SSID. When finished press CONFIRM and then APPLY. Once the operation is finished, restart the NVR.

Don't worry about your kit, this modification does not change anything in the communication between NVR and cameras, but simply makes the NVR's wifi network visible, which will come in handy in the repeater installation.

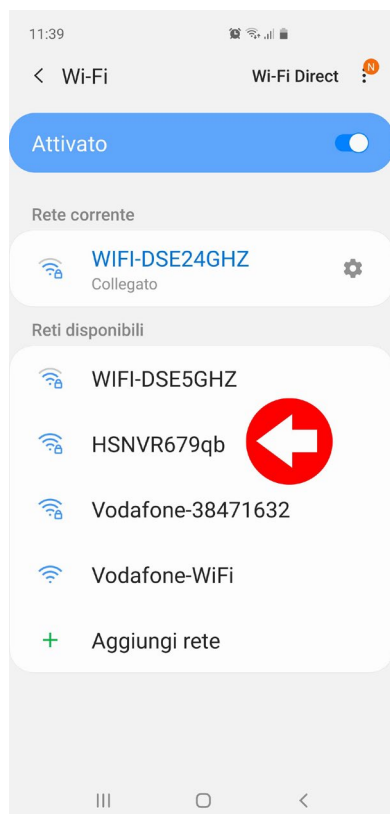
If you now explore the available wifi networks, with a mobile phone or a tablet, you will find the NVR network among wifi networks. The name of the network is called SSID.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:7



In the NVR wifi settings you can also find the

The password for accessing the WiFi network, which by default is “*lspassword*”

(the first letter is a lowercase L)

In these kits the password is fixed and cannot be changed.

Now you have full control of your NVR's wifi network: you can view the NVR's wifi network with others devices, you know its name (SSID) and access password.

Select the repeater location

To install a RKK-EXT1 repeater you just need to plug it into the power socket. The position that
However, choosing is essential for proper functioning.

1 – ONE RKK REPEATER ONLY

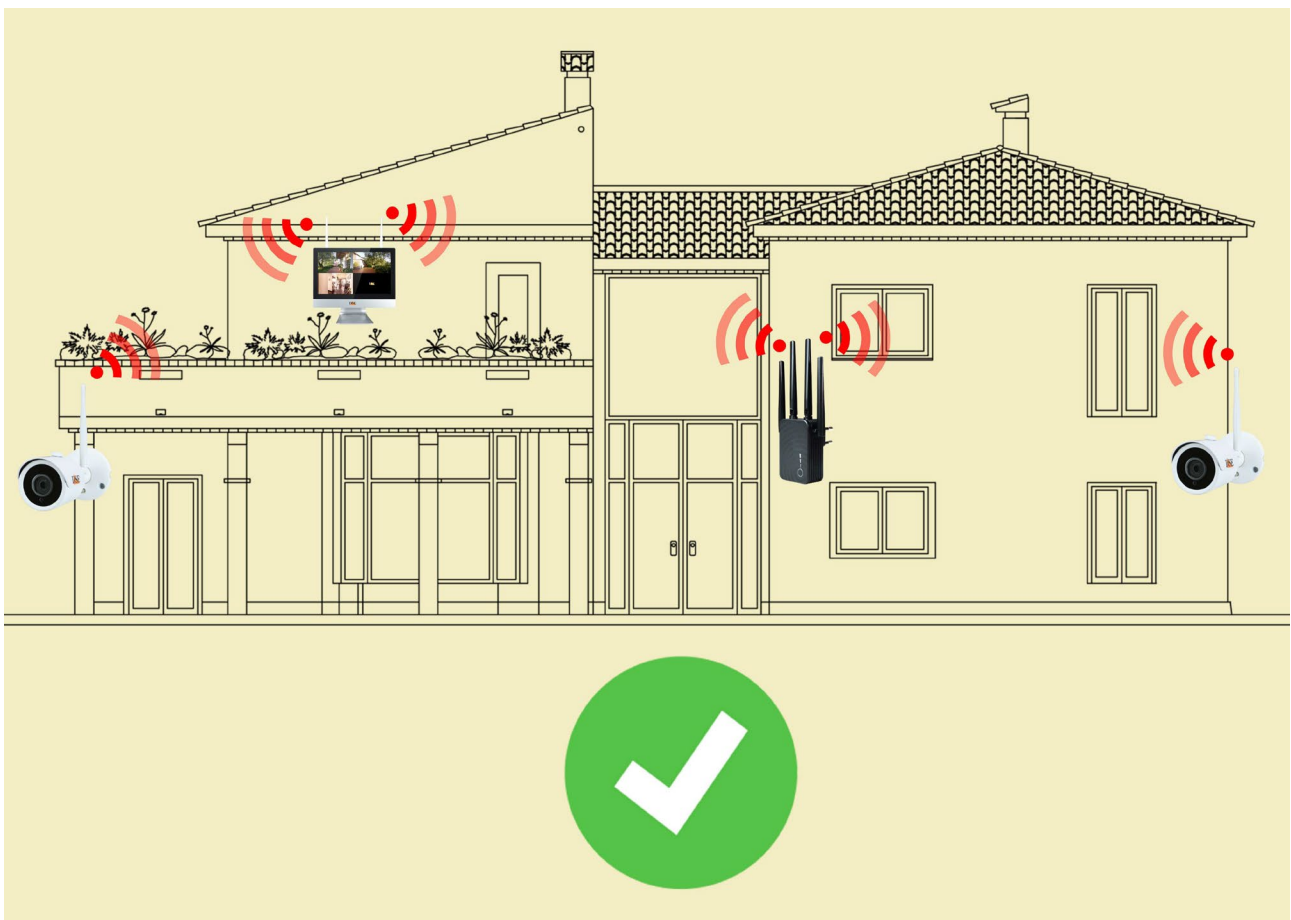
The repeater must be installed at a certain distance from the NVR, but without leaving its wifi coverage.

You can check the signal strength with a mobile phone. Once the repeater is installed

It also features a light around the front button: the red light indicates that the

Main network signal is insufficient, blue light instead of correct reception.

Here is an example of a repeater installation. Note that the left camera communicates with the NVR, while the right camera connects to the repeater



2 – TWO RKK REPEATERS

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:9

To cover even large areas you can install up to 2 repeaters in your system. If you do this remember that the two repeaters must be placed in opposite directions to the NVR and never in the same direction. If you install the two repeaters on the same side in the NVR you risk them connecting to each other of them and your system would not work. It is not advisable to install more than two repeaters in a plant.

See below an example of an installation with two repeaters.

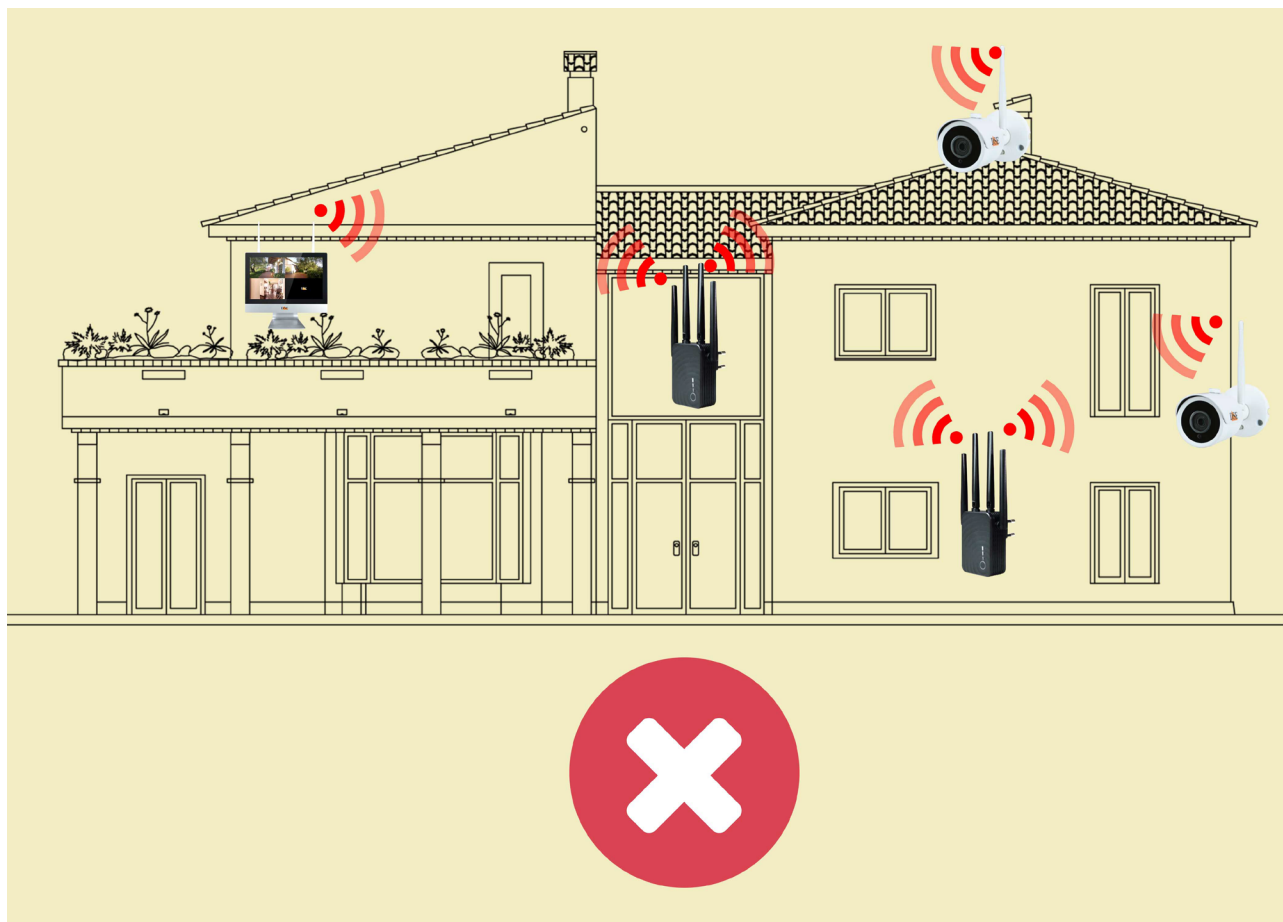


INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:10



Power-on sequence with repeater

If you use a repeater you must avoid that distant cameras, which must connect to the repeater, mistakenly connect to the NVR, which has the same SSID. This could happen if the network of the NVR reaches, albeit weakly, distant cameras.

To avoid this you can respect this ignition sequence when you start up the plant

- 1 - Turning on the repeater
- 2 – Turn on the remote cameras that need to connect to the repeater
- 3 - Powering on the NVR
- 4 – Turn on nearby cameras that connect to the NVR

Connect the repeater purchased together with the RKK wifi kit

If you purchased the wifi repeater together with your wifi kit you don't have to worry about any configuration, because it is delivered to you already paired with your NVR, ready to work. cameras will automatically connect to the repeater in case the NVR network is not available. you are unavailable because you are too far away.

Place the repeater halfway between the NVR and a camera that is too far away to allow it to be seen. reception. The repeater allows you to boost the NVR's wifi signal to reach the cameras further away.

If you bought the repeater together with the kit, you can avoid studying the following chapters, where talks about setting up a separately purchased repeater.

Set up a repeater not purchased with the kit.

If you didn't buy a repeater with your kit, don't worry. It's quite common.

purchase it later to solve range problems due to unexpected obstacles.

In this case, before you can use the repeater, you need to connect it to your NVR's wifi network, following the instructions below.

Plug the repeater into a socket near the NVR. The front light will turn on.

1 – FIND THE REPEATER NETWORK

Search for wifi networks with your mobile phone and you will find the wifi network generated by the 2.4GHZ repeater as in this example with the name COM----



2 – CONNECT TO THE REPEATER NETWORK

Connect to the repeater network. By default, no password is required.

If your mobile phone warns you that this network does not have Internet, choose to continue and

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:14

maintain the connection. Make sure you have not activated any functions on your phone that automatically leave Wi-Fi networks that do not allow Internet access.

Make sure your phone remains stably connected to the new repeater network.

Don't worry if your phone will no longer be able to access the Internet via WiFi, after the operations you will be able to return to your normal network.

This is what your device looks like when connected to the repeater network.



2 – ACCESS THE CONFIGURATION WITH THE BROWSER

To configure the repeater you do not need to download any app, just an Internet browser.

Open your phone's Internet browser and enter the following in the address bar:

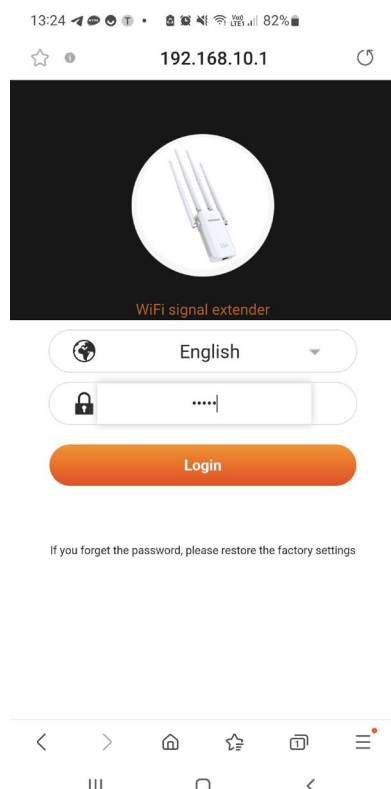
192.168.10.1, which is the factory IP address of the repeater.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:15



To access the device, choose the English language and then enter the factory password:
admin

FACTORY SETTINGS:

IP: 192.168.10.1

Password: admin

3 – CONNECT THE REPEATER TO THE NVR NETWORK

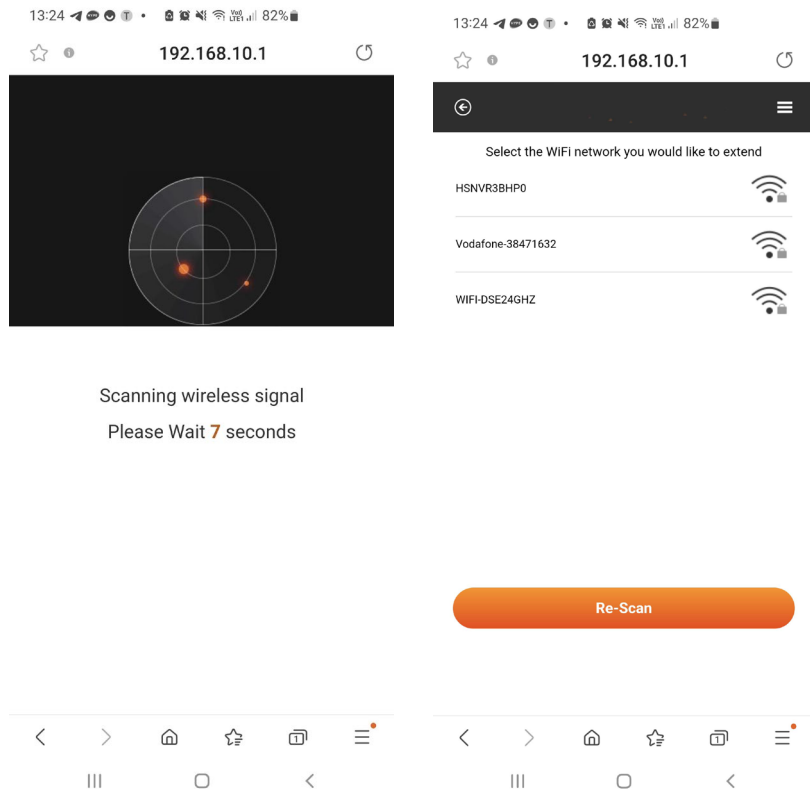
The repeater automatically searches for available wifi networks and will find the one of the wifi NVR named HS-----

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:16



Now it's time to connect the repeater to the NVR network. Tap the NVR network that start with HS--- and do these operations:

- enter the NVR's wifi network password (see previous chapters).
- in the THE DEVICE SSID box, delete the last characters “-plus”, which the system inserts automatically, so that the repeater network name is exactly the same as that of the NVR.
- press APPLY to connect to the NVR. The repeater will restart.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:17

It is very important to delete the final -plus characters in the SSID box to ensure that the SSID of the repeater is the same as the original network of the NVR. The cameras in our kits, in fact, they search for the SSID of their NVR and must find the same SSID in the repeater for to be able to connect.

4 – SET BRIDGE MODE

Now that the repeater is connected to the NVR network you need to set it to BRIDGE mode to prevent the repeater from creating its own subnet, with IP addresses different from those of the original network. This would not be good for your wifi system. You need to set the repeater to BRIDGE, so that it creates a network with the same address class as the main network, that of the NVR. Proceed as follows

- 1 - Turn off the NVR and leave only the repeater on. This is to be able to distinguish the network of the repeater from that of the NVR which have the same name.
- 2 – Search for the repeater network, which now has the name of the NVR network and connect by typing the NVR wifi network password. The repeater network in fact assumes the same password as the NVR “mother” network.

INSTALLATION MANUAL

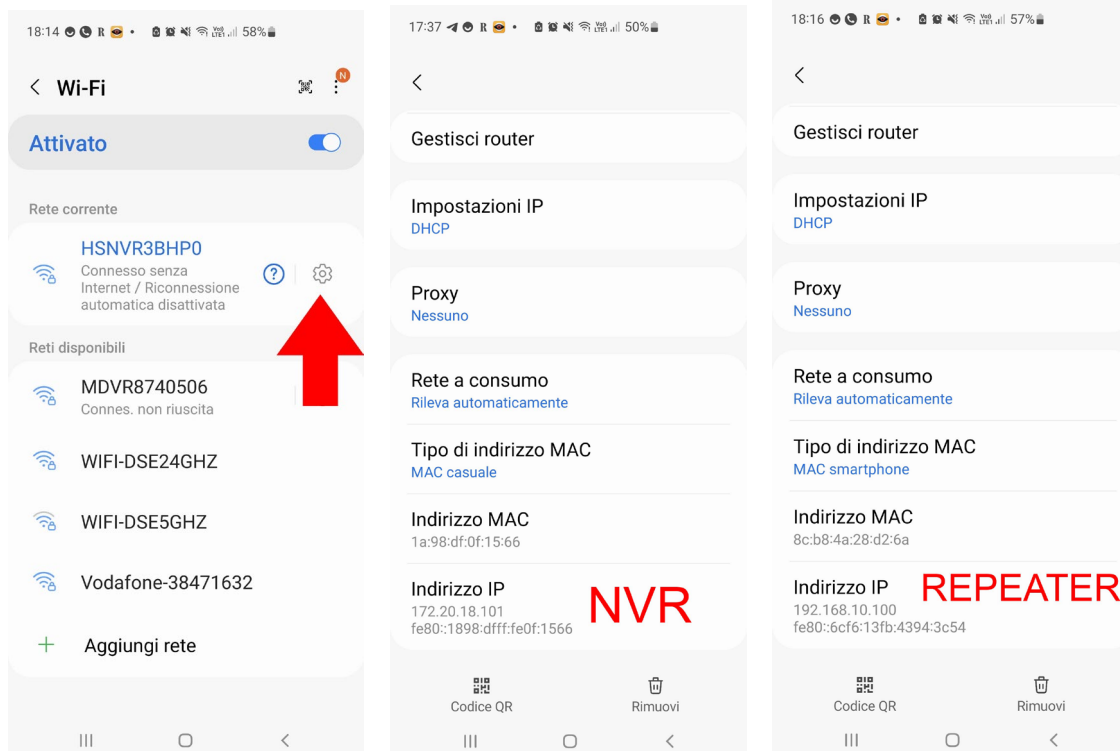
RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:18



3 – Make sure you are connected to the repeater's wifi network and not to the NVR. The two networks have the same name and if you have not turned off the NVR you may not distinguish them. To do this tap the icon settings near the wifi network and check what IP address your phone has taken



If the IP address is something like 172.20.18 it means that you have connected to the NVR network and you will not be able to

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER

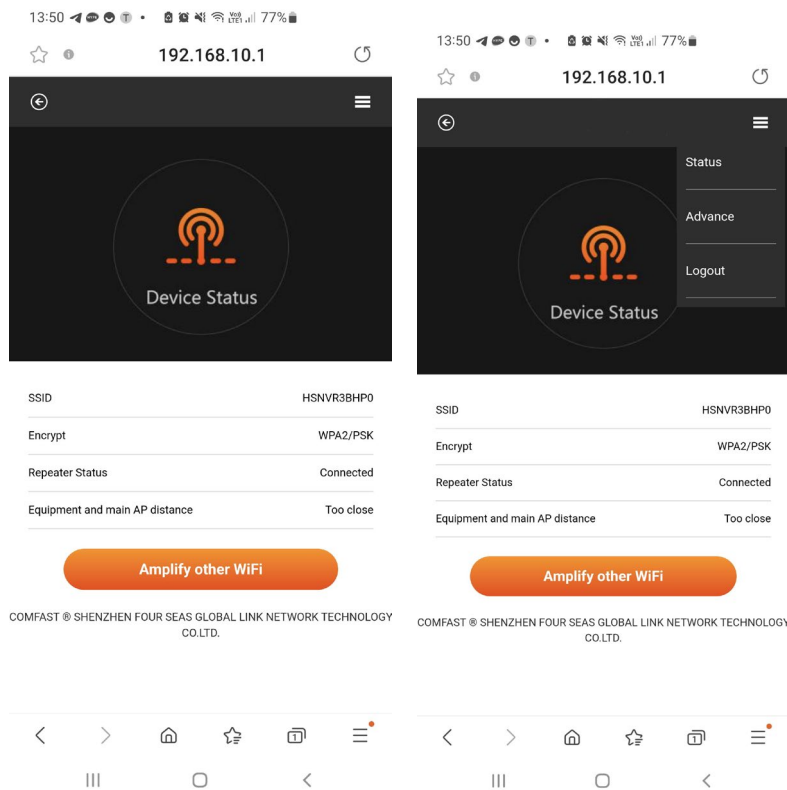


Page:19

check the repeater. If instead you see an address 192.168.10... then you are connected to the repeater and you can continue

4 – Access the repeater configuration by connecting with the browser to 192.168.10.1 and password: admin

5 - Click the menu at the top right and open the ADVANCE section



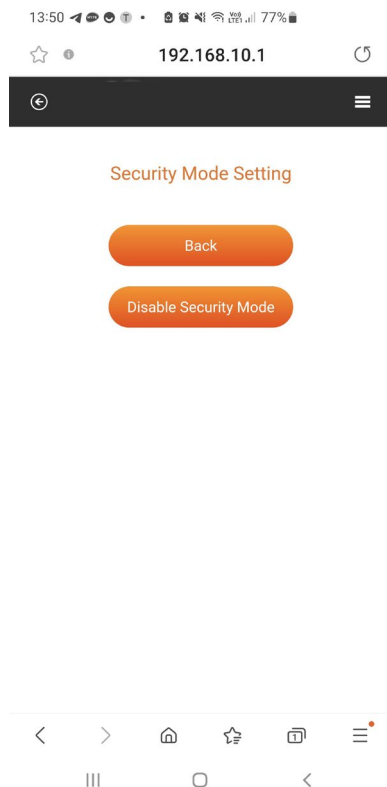
6 – Click SECURITY MODE SETTING and then DISABLE SECURITY MODE. This activates bridge mode. The repeater restarts.

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



Page:20



FINISHED!

Now the repeater has connected to the NVR's wifi network and is relaunching its signal. The settings remain stored even in the event of a power failure. You can now unplug the repeater from the socket and place it where it will actually need to operate.

VERIFY

To check the correct configuration of the repeater, place it where it will operate, halfway road between the NVR and the distant cameras. It should be within range of the NVR, with the LED fixed wifi. Then go near the far cameras and connect to the HS--- wifi network. Since the NVR it's far away, you will definitely connect to the repeater's network. Now check the IP address it has your phone into the wifi network. If the repeater works correctly in bridge mode you will need to see an IP of the same class as the NVR 172.20.18...

INSTALLATION MANUAL

RKK SERIES – RKK-EXT3 WIFI REPEATER



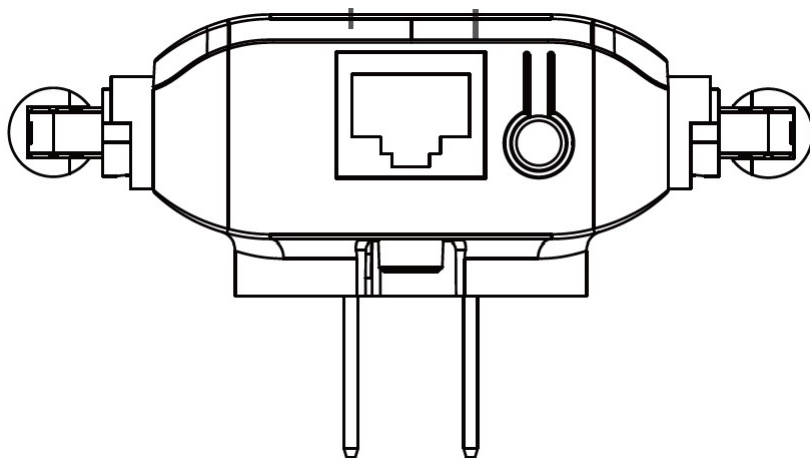
Page:21



Other features

FACTORY RESET

To return to the factory settings, with the repeater emitting its wifi networks, press and hold the front button for 8 seconds. After the reset, the repeater returns to the factory IP and, on the first login, requires you to set a new user password



FRONT LED

GREEN LED = indicates the device is in operation

RED LED = weak upstream line wifi signal

BLUE LED = wifi network connected and good wifi signal