



IPCoder KRR-416/424

Quick Installation Guide

Thank you for purchasing this product of the company KOUKAAM a.s. Before you start using it, please read this installation guide which will quickly guide you through the setup process. For more information please refer to the *User manual* available on the enclosed CD or download it from <http://www.ipcoder.com>.

Important safety instructions

The device you purchased requires a certain voltage to function. The device may be damaged in case of incorrect manipulation with it, and/or the person who performs the manipulation may be injured.

- The manufacturer is not responsible for any possible damage caused by operating the device outside the permitted or intended uses or by using the device in an unsuitable environment.
- The device can't be used outdoors.
- Do not use the device in the presence of strong vibrations.
- Unauthorized modifications of the device may damage it or set it on fire.
- Protect the device from liquids and high temperatures.
- Do not drop the device.
- Use only the intended attachments (hard disks, cables, etc.).
- If the device doesn't work properly, contact your dealer.

This guide describes IPCoder KRR-416/424. All models differ in the maximum number of simultaneously connected cameras:

- **KRR-416:** up to **16** cameras or videoservers
- **KRR-424:** up to **24** cameras or videoservers

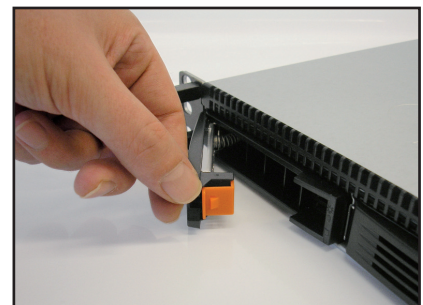
1. Package contents

Package contains IPCorder KRR-416/424, power cable, network cable, installation CD, installation guide and licence agreement.

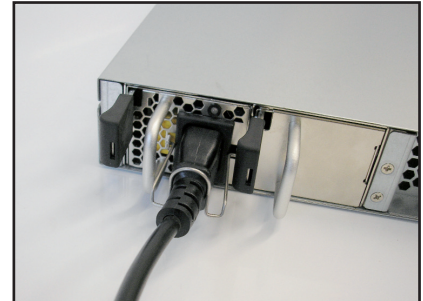
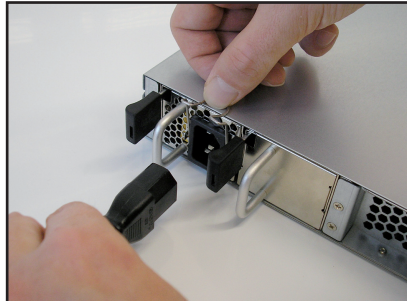


2. How to set up IPCorder in a few minutes

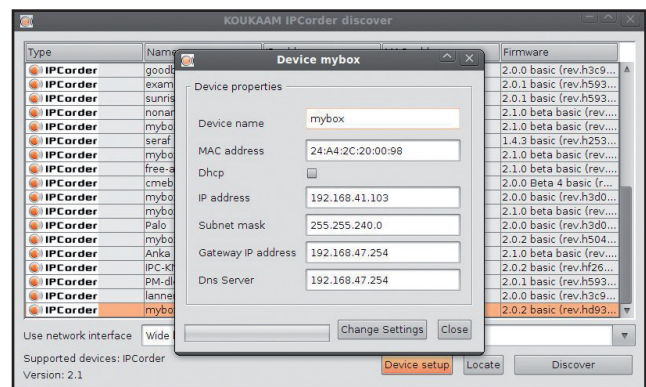
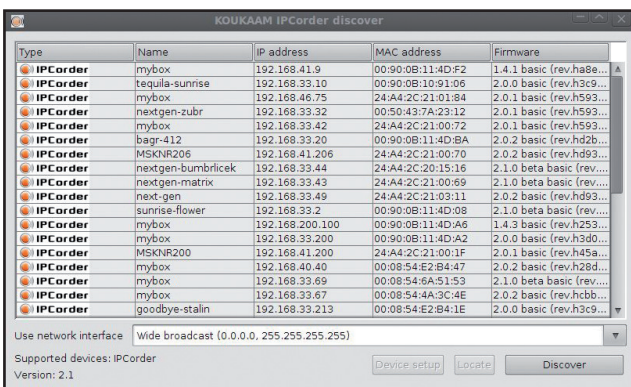
- Install your IPCorder to a 19" rack and place it to a free 1U position.
- IPCorder KRR-416/424 supports up to four 3.5" SATA I, SATA II or SATA III hard disks (you can use all types together). To install the disk:
 - 1) Release the safety lock of the box and take it out.
 - 2) Screw the disk to the box.
 - 3) Insert the box with the disk back into your IPCorder and secure the safety lock.



- Connect the device to the computer network (use network adapter number 1) and plug it into an electric outlet.



- On start-up, IPCorder tries to obtain an IP address automatically via DHCP; if unsuccessful, the IP address is set to the default value of **192.168.1.78**. If the IPCorder is in the same subnet as the PC used to access it, it should appear in the **Network Devices** folder under Microsoft Windows.
- To obtain the IP address of your IPCorder you can use the **IPCoder Discover** – an application for discovering IPCorder device in your network. You can find it on the enclosed CD or download it directly from <http://updates.ipcoder.com>. Windows users can use the file **IPCoderDiscover.exe**; for other operating systems use the file **IPCoderDiscover.jar**. The utility requires Java SE 5 or higher installed on your computer (<http://java.com/en/download>).

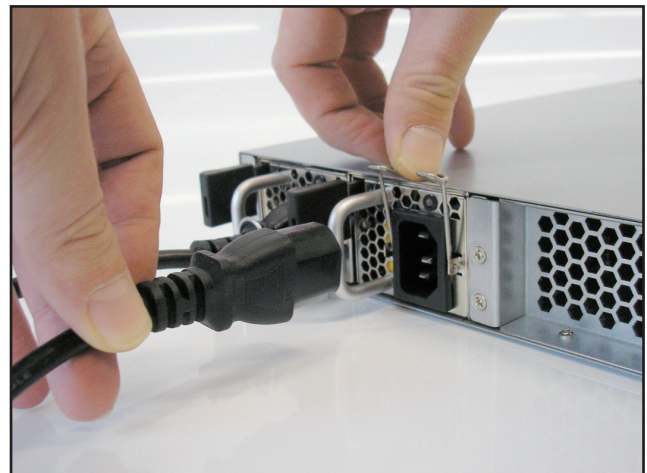
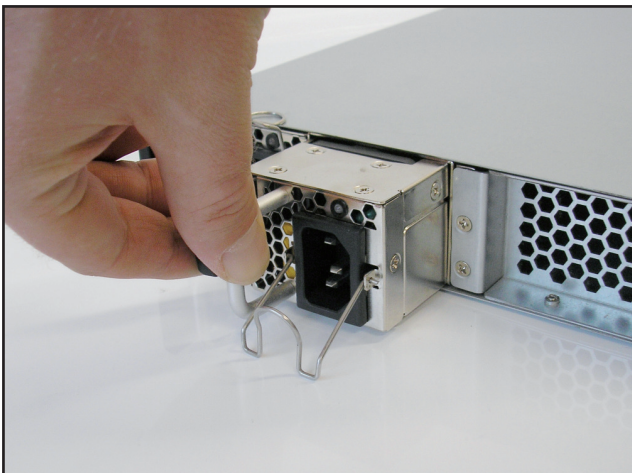


- After starting the utility click the **Discover** button and the application will list all IPCorder devices it can access. In case the utility fails to find your IPCorder, turn off your local personal firewall and/or antivirus. If the IPCorder is running in Service mode (formerly known as Rescue mode), you can change its network settings in the application by the **Device setup** button. You can use **Locate** button for easier physical localization – red diode (exclamation mark) on your IPCorder will start blinking.

- Double click the device you wish to set up in the list of discovered devices and the web interface in **Installation & Rescue** mode will appear in your default internet browser. You can configure the RAID array on **RAID Array Configuration** screen. After the RAID array is created, restart to Normal mode. While Service mode is running, the red exclamation mark on the front panel will be lighting.

IPCoder		RAID Array Configuration				Go to Main Menu	Restart
Installation & Rescue Mode							
RAID array is not configured. You can create it now.							
Tray	Model	Serial Number	Size [GB]	Status	Type		
1	ST3500410SV	9VMTCT82	465	healthy	raid		
2	WDCWD20EURS-63Z	WD-WCAVY6072614	1863	healthy	raid		
3	WDCWD3200KS-00P	WD-WCAPD3444999	298	healthy	raid		
4	ST3160318AS	9VYB543W	149	healthy	raid		
RAID type: <input type="text" value="linear"/>							
Size: 2776 GiB; No redundant drives; No hot spares;							
<input type="button" value="Create RAID Array"/>							

- After a while you should see the normal login window. Default user name is **admin**, default password is **admin**.
- After the first login you will see **Configuration Guide** which will lead you through the configuration of basic IPCorder settings. Please pay close attention to setting your password and the system time. You can also let the IPCorder find the cameras in your network and set up their recording options. All these actions are accessible via the **Settings** menu.
- To ensure higher reliability, IPCorder KRR 416/424 can be equipped with additional power supply (not included with the IPCorder). To install the additional power supply:
 - 1) Turn off your IPCorder and unplug it from the power supply.
 - 2) Take off the cover of the slot for the additional power supply.
 - 3) Insert the additional power supply.
 - 4) Connect power cables to both power supplies.



Backup Network Interface

IPCoder KRR-416/424 supports the Backup Network Interface function. This service prevents disconnection from the network in case of failure of one of network routes (both network adapters of the IPCorder must be connected). This can prevent unavailability of the IPCorder in case of unwanted removal of a network cable or switch failure. To set up this service:

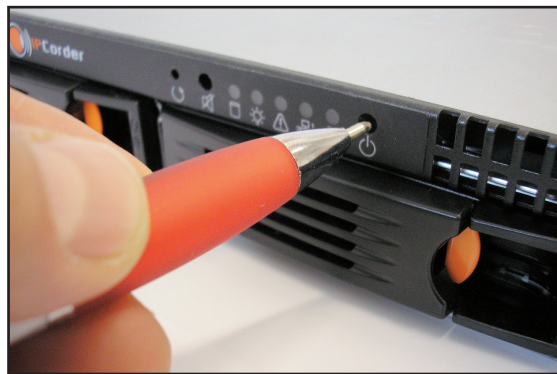
- 1) Connect the second network cable to your IPCorder (use network adapter number 2) and to the switch.
- 2) Go to the Network tab in the web interface of the IPCorder:
 - If Service mode is active – continue to the **Network** page and if needed set up the basic network settings.
 - If Normal mode is active - go to the **Settings** menu in the upper part of screen, then select **Configuration - Storage** and if needed set up the basic network settings.
- 3) Check the **Enable second network interface as backup** option in the **Backup Network Interface** section.
- 4) Choose how the connection failure will be detected:
 - **Link (cable connected)** – this option detects disconnection of the network cable. If the cable from network adapter no. 1 is removed, the connection through the network adapter no.2 will be automatically activated and vice versa.
 - **Network (ping address from the list)** – this option checks if there is any traffic running through the active network adapter of the IPCorder. If no network traffic is detected, the connection through the backup network adapter will be automatically activated. Type at least one IP address of the independent server to the **IP address list** text field.
- 5) In the **Check Interval** text field, set the interval for checking availability of the connection, the default value is set to 100ms, the typed value is used for both types of failure detection.
- 6) Click the **Apply** button to confirm the settings (use buttons **Apply Changes** and **Restart** if Service mode is active).

Note: The Backup Network Interface function is active only in Normal mode. If you are using DHCP server to obtain an IP address, it is possible that after the settings are confirmed, your IPCorder will temporarily obtain another IP address.





IPCoder Installation & Rescue Mode		Network Settings		Go to Main Menu	Restart
<p>In this section, the parameters which determine how and where the device will be accessed on the local network can be set. If you are uncertain about any item, please consult it with your network administrator.</p>					
Network configuration					
Hardware address: 00:50:43:E4:20:17					
<input type="radio"/> Automatic configuration (DHCP) <input checked="" type="radio"/> Static IP address					
IP address	192.168.1.15				
Net mask	255.255.255.0				
Gateway	192.168.1.1				
DNS server	192.168.1.1				
Apply Changes					
Backup Network Interface					
<input checked="" type="checkbox"/> Enable second network interface as backup <input type="checkbox"/> Enable load balancing					
Failure detection <input type="radio"/> Link (cable connected) <input checked="" type="radio"/> Network (ping address from the list)					
IP address list (comma separated)	192.168.1.254,192.168.1.120				
Check interval	100 ms				
Apply Changes					

- For optimal use of your IPCorder and all of its functions, make sure you have the latest stable version of firmware installed. Visit <http://updates.ipcoder.com> to get the latest stable version of firmware. You can learn more about firmware upgrade in the *User manual* in the *Firmware upgrade* section.

3. LED signalization, button actions and acoustic signalization



The front panel of IPCorder KRR-416/424 contains 5 signal LEDs:

- **The Network** diode () (2x) lights if a network cable is connected to the network adapter.
- **The Storage** diode () lights if the storage is in proper condition, blinks if the disk array is degraded and blinks fast in case of storage failure.
- The meaning of **Power** () and **Info** () diodes is described in the following table:

Status	Power LED	Info LED
Service mode is active	-	on
Factory reset	on	fast blinking
Normal mode is active	on	-
Found by Discover	on	blinking
IPCoder is starting	blinking	-

Disk boxes are equipped with three LED diodes:

- The **blue** diode lights if the disk is connected.
- The **red** diode blinks in case of disk failure, blinks in combination with the green diode if the disk array is assembling or synchronizing, lights if the disk is not part of the disk array.
- The **green** diode indicates disk activity.

Button functions

Power button (⏻):

- Performs the software shutdown on short press.
- Performs the hardware poweroff if hold for 15 seconds (this is the same as unplugging the device from power supply).

Reset button (↺) at the front side of your IP Corder:

- Restarts to Service mode on short press (if the IPCorder is in Normal mode).
- Restarts to Normal mode on short press (if the IPCorder is in Service mode).
- Performs the factory reset if hold during the startup.

Reset button (↺) at the back side of your IP Corder:

- Restarts to Service mode on short press (if the IPCorder is in Normal mode).
- Restarts to Normal mode on short press (if the IPCorder is in Service mode).
- Performs the factory reset if hold for 15 seconds.

Mute button (🔇):

- Temporarily disable the acoustic signalization on short press.

The acoustic signalization will be activated if:

- The temperature reaches 60°C.
- The storage fails.

4. System Requirements

Your system has to meet the minimum system requirements otherwise the software may not work properly. The minimum requirements are:

- **Operating system:** Microsoft Windows 2000, 2003, XP, Vista, 7; Mac OS X 10.5 and 10.6; Linux 2.6.
- **Internet browser:** Mozilla Firefox 4 or higher (recommended); Internet Explorer 8 and 9 (32-bit versions only); Chrome 12 or higher; Safari 4 and 5 (only on Mac OS X).
- Enabled JavaScript and cookies (see the preferences of your web browser).
- Java SE 5.0 or higher, the latest Oracle JRE is recommended (the latest version of Oracle Java 6). You can download it for free from <http://www.java.com>.
- **Hardware configuration:** depends on the type and number of connected cameras, but at least 2GHz processor and 1GB of RAM is recommended.

The system allows users to download screenshots from videos as well as entire videos stored on the hard disk. The screenshots are in standard JPEG format and can be viewed in any common graphic viewer. The exported videos can be played using FFDSHOW decoder or another similar filter. The easiest way to watch the videos is to use VLC media player, which already contains all necessary filters. VLC player is available for free and can be downloaded from <http://www.videolan.org>. FFDShow filter can be downloaded for example from <http://www.free-codecs.com/download/FFDshow.htm>.

5. Support

Should you experience any issues with your IPCorder, please contact the dealer who sold you the device or directly the technical support of Koukaam a.s. company on the address support@koukaam.se. Before you do this, please check if your IPCorder has the latest firmware version (upgrade to the latest version could solve your problem).

We believe you will be satisfied with our product. If you have any questions or comments regarding functions of the IPCorder, please contact us.

Team Koukaam

KOUKAAM a.s.
Kaplanova 2252/8
148 00 Praha 4
www.koukaam.se

The manufacturer is not responsible for any technical or typographical mistakes and reserves the right to make any changes in the product or in this user manual without prior notice. These changes will be announced on manufacturer website www.koukaam.se.

The manufacturer doesn't provide any warranty in regard to information included in this user manual, the potential implied warranty of merchantability of this product or the warranty of fitness for a particular purpose.

The manufacturer warranty does not apply notably to damage caused by misuse of the device, to damage caused by not following instructions and recommendations from the user manual and to damage caused by unauthorized activities performed by anyone who is not member of authorized warranty service of the manufacturer.

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