IPCorder KNR-5016/20/32/40
Quick Installation Guide

Thank you for purchasing this KOUKAAM product. 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.ipcorder.com*.

Important safety instructions

The purchased device works under voltage. If wrongly handled the device could be damaged or cause injury to the person handling the device.

- The manufacturer is not liable for potential damage caused by incorrect usage or placing the device in an unsuitable environment.
- The device is not designed for outdoor use.
- Do not use the device in an environment with strong vibrations.
- Unauthorized modification of this device can damage it or cause a fire.
- Prevent from contact with fluids; do not expose the device to high temperatures.
- Protect the device from falling.
- It is permitted to use accessories only intended for the device (hard disks, cables, etc.).
- In case of the malfunction of the device, contact your dealer.

This guide is intended for IPCorder KNR-5016/5024/5032/5040. Individual models differ by the maximum possible number of simultaneously connected cameras or videoservers:

- **KNR-5016:** up to **16** cameras or videoservers
- **KNR-5024:** up to **24** cameras or videoservers
- **KNR-5032:** up to **32** cameras or videoservers
- **KNR-5040:** up to **40** cameras or videoservers

1. Package contents

In the package you will find your IPCorder, power cable, power adapter 48 V / 3.125 A, network cable, five holders for the removal of the disk, an installation CD, two screws for securing the back panel, the installation guide and licence agreement.
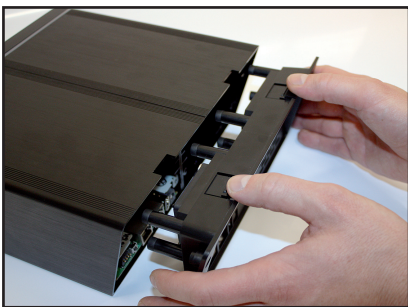

2. How to install IPCorder in several minutes

- Up to five 3.5 inch SATA I, SATA II or SATA III disks (in various combination) can be inserted in the IPCorder KNR-5016/5020/5032/5040, the individual positions are numbered as follows:
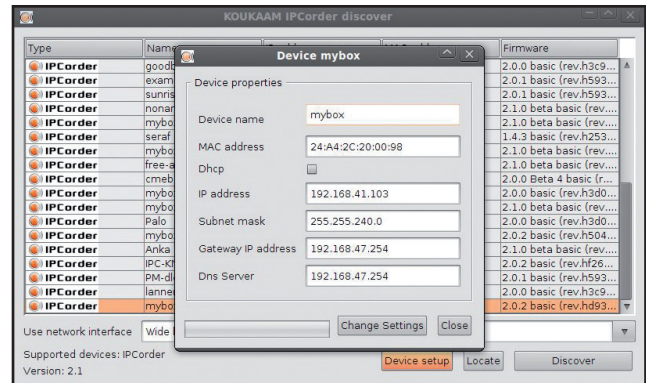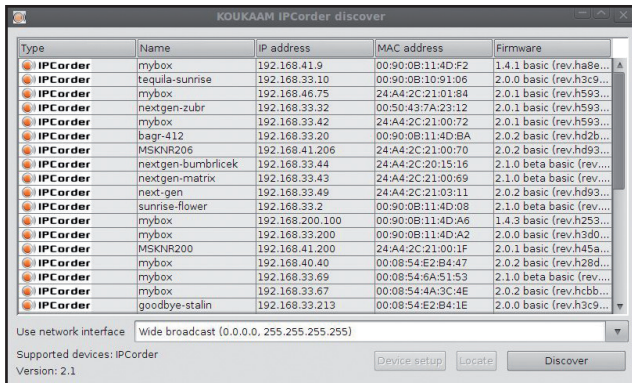
- Use the following procedure for the installation of hard disks:

  1) Press down both top locks and remove the back panel. If you have secured it in the past with two screws, unscrew them. The device is supplied by the manufacturer with a clipped in back cover. Screws for securing the back cover are part of the package.

  2) Attach the holder for the removal of the disk to the hard disk.

  3) Slide the disk into the free disk position. The order of the occupied positions does not matter.

  4) Attach the back panel and clip in both top locks. The back panel can be secured by the two supplied screws to ensure greater safety.

- Attach one or both network adapters to the computer network (see. Redundant Network Connection).
- Firstly connect the original power adapter to IPCorder and then plug it into an electric outlet.
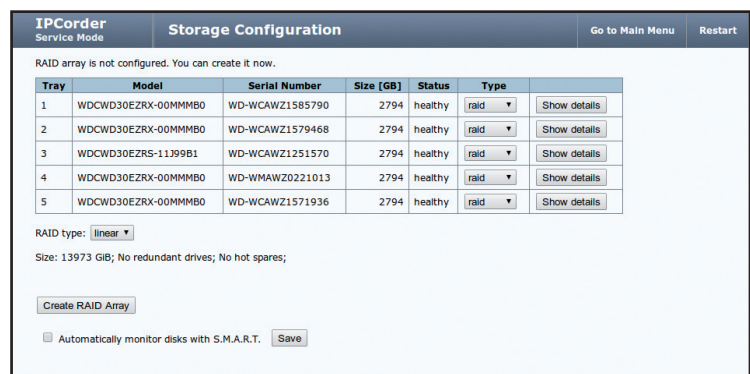

- On start-up IPCorder will attempt to obtain the IP address automatically via DHCP. If unsuccessful it is set up to the default value of **192.168.1.78**. If the IPCorder is in the same subnet as the PC used to access it, it should appear in the **Network Places** folder under Microsoft Windows.

- **IPCorder Discover** – the utility for discovering the IPCorder device in your network - can be used to find the IP address of your IPCorder. You will find this application on the enclosed CD or on the manufacturer's website **www.ipcorder.com**. Users of the Windows operating system can use the **IPCorderDiscover.exe** file, other users the **IPCorderDiscover.jar** file. You need to install Java SE version 6 or newer (**http://java.com/en/download**) for the correction function of the Discover program.

KOUKAAM IPCorder discover

Type	Name	IP address	MAC address	Firmware
IPCorder	mybox	192.168.41.9	00:90:0B:11:4D:F2	1.4.1 basic (rev.ha8e...
IPCorder	tequila-sunrise	192.168.33.10	00:90:0B:10:91:06	2.0.0 basic (rev.h3c9...
IPCorder	mybox	192.168.46.75	24:A4:2C:21:01:84	2.0.1 basic (rev.h593...
IPCorder	nextgen-zubr	192.168.33.32	00:50:43:7A:23:12	2.0.1 basic (rev.h593...
IPCorder	mybox	192.168.33.42	24:A4:2C:21:00:72	2.0.1 basic (rev.h593...
IPCorder	bagr-412	192.168.33.20	00:90:0B:11:4D:BA	2.0.2 basic (rev.hd2b...
IPCorder	MSKNR206	192.168.41.206	24:A4:2C:21:00:70	2.0.2 basic (rev.hd93...
IPCorder	nextgen-bumbrlicek	192.168.33.44	24:A4:2C:20:15:16	2.1.0 beta basic (rev...
IPCorder	nextgen-matrix	192.168.33.43	24:A4:2C:21:00:69	2.1.0 beta basic (rev...
IPCorder	next-gen	192.168.33.49	24:A4:2C:21:03:11	2.0.2 basic (rev.hd93...
IPCorder	sunrise-flower	192.168.33.2	00:90:0B:11:4D:08	2.1.0 beta basic (rev...
IPCorder	mybox	192.168.200.100	00:90:0B:11:4D:A6	1.4.3 basic (rev.h253...
IPCorder	mybox	192.168.33.200	00:90:0B:11:4D:A2	2.0.0 basic (rev.h3d0...
IPCorder	MSKNR200	192.168.41.200	24:A4:2C:21:00:1F	2.0.1 basic (rev.h45a...
IPCorder	mybox	192.168.40.40	00:08:54:E2:B4:47	2.0.2 basic (rev.h28d...
IPCorder	mybox	192.168.33.69	00:08:54:6A:51:53	2.1.0 beta basic (rev...
IPCorder	mybox	192.168.33.67	00:08:54:4A:3C:4E	2.0.2 basic (rev.hcbb...
IPCorder	goodbye-stalin	192.168.33.213	00:08:54:E2:B4:1E	2.0.0 basic (rev.h3c9...

Use network interface: Wide broadcast (0.0.0.0, 255.255.255.255)

Supported devices: IPCorder
Version: 2.1

Device setup | Locate | Discover

KOUKAAM IPCorder discover

Device mybox

Device properties

- Device name: mybox
- MAC address: 24:A4:2C:20:00:98
- Dhcp: ☐
- IP address: 192.168.41.103
- Subnet mask: 255.255.240.0
- Gateway IP address: 192.168.47.254
- Dns Server: 192.168.47.254

Change Settings | Close

Use network interface: Wide

Supported devices: IPCorder
Version: 2.1

Device setup | Locate | Discover

- After starting the utility click on the **Discover** button and after a moment the application will find the available device (Discover in progress). If the utility does not find your IPCorder, try to switch off the firewall, or antivirus. If the IPCorder is in Service mode (formerly known as Rescue mode), you can help it by using the button **Device setup** to change the network parameters. In the event that the current IPCorder IP address is not in the same range of the network as the IP address of your computer, or the routing is not setup among those networks, the IPCorder address must be setup in the range of the network of your computer.

- For easier physical localisation of IPCorder you can click on the button **Locate** – a red diode with an exclamation mark symbol will begin to blink on IPCorder.

- Click twice on the required device. The interface of the IPCorder Service mode will be displayed in the default internet browser, this will be indicated by a lit red diode with an exclamation mark symbol.

- You will be asked to configure the RAID array on the **Storage Configuration** screen. After its successful creation, restart to the Normal mode.

IPCorder — Service Mode — Storage Configuration

Go to Main Menu | Restart

RAID array is not configured. You can create it now.

Tray	Model	Serial Number	Size [GB]	Status	Type	
1	WDCWD30EZRX-00MMMB0	WD-WCAWZ1585790	2794	healthy	raid ▼	Show details
2	WDCWD30EZRX-00MMMB0	WD-WCAWZ1579468	2794	healthy	raid ▼	Show details
3	WDCWD30EZRS-11J99B1	WD-WCAWZ1251570	2794	healthy	raid ▼	Show details
4	WDCWD30EZRX-00MMMB0	WD-WMAWZ0221013	2794	healthy	raid ▼	Show details
5	WDCWD30EZRX-00MMMB0	WD-WCAWZ1571936	2794	healthy	raid ▼	Show details

RAID type: linear ▼

Size: 13973 GiB; No redundant drives; No hot spares;

Create RAID Array

☐ Automatically monitor disks with S.M.A.R.T.   Save

- The Normal mode is indicated when the blue diodes light up. You will find more information about the configuration in the relevant user manual on the enclosed CD.

- The login window will shortly appear. The default user account is **admin**, the default password **admin**.
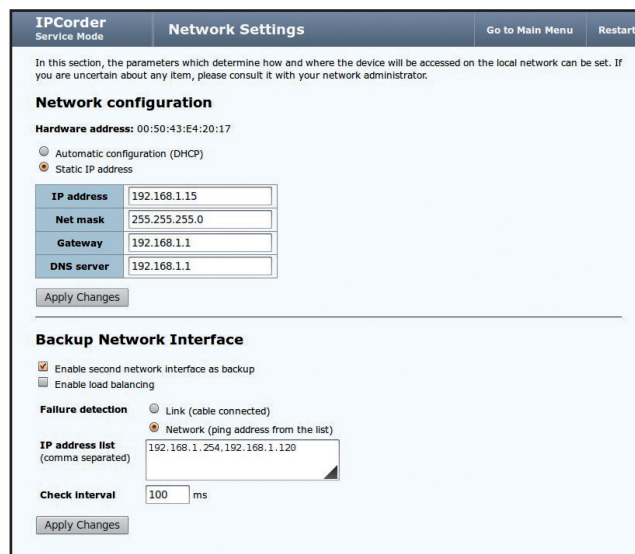
- After the first login the **Configuration Wizard** will appear which will help you with the basic IPCorder settings. Please pay close attention to setting your password and the system time. You can also let IPCorder find the cameras in your network and set up their recording options. All these actions are accessible via the **Settings** menu. You will find more information about the settings in the relevant user manual on the enclosed CD.

- Upgrade the firmware to the latest version for the optimal use of all the IPCorder functions. The on-line upgrade of your IPCorder is available at **http://ipcorder.com/support/ipcorder-firmware/**, where you will also find more information about the latest versions of firmware.

Redundant Network Connection

IPCorder KNR-5016/5024/5032/5040 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 Nework 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 – Network** 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 method of the **Failure detection**:

   • **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 100 ms, 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.

3. LED signalization, button actions and acoustic signalization

The front panel of IPCorder KNR-5016/5020/5032/5040 contains 4 types of LED diode signals:

- **The Network** Diode (⊟) (2x) indicates the activity of the individual network adapters.
- **The Storage** Diode (⊟) (5x) blinks green if the hard disk is active, it lights up red if the disk from the disk array fails.
- The blue **Power** Diode (⊚) and red **Info** Diode (!) signals the following:

Status	Power LED	Info LED
Service mode is active	-	on
Normal mode is active	on	-
Found by Discover	on	blinking
IPCorder is starting	blinking	-
IPCorder is switching off	blinking	-

The green diode on the back panel of the device signals the length of the pressed Reset button. If pressed for less than 5 seconds the diode is on, if pressed for more than 5 seconds it blinks slowly and if pressed for more than 15 seconds it blinks quickly.

Button function description

Button **ON/OFF** (⊚):

- If pressed for less than 3 seconds it will switch off the acoustic signal in defined cases (see below).
- If pressed for more than 5 seconds (accompanied by a short beep) it will switch the device on or off, a running application will end safely.

The **Reset** Button (↺) on the back of IPCorder:

- Pressed for less than 3 seconds it will restart the device from the Normal to the Service mode, if in Service mode it will return to the Normal mode if the Reset Button is pressed again.

- If pressed for more than 5 seconds and the power cable is connected simultaneously the factory settings will restore. We draw attention that in this case all the settings will be irretrievably lost including the saved recordings.

- If pressed for more than 15 seconds the device will be immediately switched off. We wish to point out that in such a case the saved recordings may be damaged.

The acoustic signals are activated in the following situations:

- By a brief sound when the device is switched on or off by pressing the ON/OFF button.

- By a continuous sound if there is a problem with the RAID disk array (can be switched off by briefly pressing the front ON/OFF button).

- By a continuous sound of the temperature of the device exceeds 42 °C and if the back panel of the device is removed or incorrectly attached (the signal cannot be switched off, it ends on its own once the temperature falls below 38 °C or the back panel is attached).

- By a continuous sound if the temperature of the device exceeds 60 °C (it can be switched off by briefly pressing the front ON/OFF button). IPCorder will also e-mail information (if the SMTP is setup) and will make an entry in the log.

- By a continuous sound if the temperature of the device exceeds 70 °C. The device in this case will make an entry in the log, send an information e-mail (if the SMTP is set up) and will be automatically switched off.

- If the temperature limits are exceeded the acoustic signal is accompanied by the blinking of a red light on the lightstrip.

4. System Requirements

The system requirements are partly dependent on the version of the installed firmware. The client computer should meet the following minimum requirements for the installed firmware:

- **Operating system:** Microsoft Windows 2003, 2008, XP, Vista, 7 (32 and 64 bit version); Mac OS X 10.5 (only Intel x86), 10.6 and 10.7; Linux 2.6 or newer (recommended JAVA ORACLE co.)

- **Internet browser:** Mozilla Firefox 10 ESR, 14 and newer (recommended); Internet Explorer 8 and 9 (only 32-bit version); Chrome 21 and newer; Safari 5 (only on Mac OS X).

- Enabled JavaScript and Cookies (check the settings of your internet browser).

- Version Java Oracle 6 or newer (always only 32bit version), we recommend Oracle JAVA 7 – freely available for downloading on the website **http://www.java.com**.

- **Hardware configuration:** depends on the type and number of monitored cameras, the minimum recommended is a 2 GHz processor and 1 GB RAM.

IPCorder allows the user to download entire videos and pictures from videos saved on a hard disk. The pictures are in standard JPEG format and can be displayed in every standard picture browser. You need an installed FFDShow codec or other similar filter to play a video. The simplest way is to play videos in a VLC player which already contains all the

necessary codecs. This is available for free download at *http://www.videolan.org*. The FFDShow codec can be downloaded for example from address *http://www.freecodecs.com/download/FFDshow.htm*.

5. Support

If the problems continue, contact your vendor, or directly contact the manufacturer's technical support department of KOUKAAM a.s. company at the address *support@koukaam.se*. Before you do so, please check that your IPCorder is equipped with the latest version of firmware (your problem is probably resolved in the new version). We also recommend visiting FAQ at *http://www.ipcorder.com* in the support section where the FAQs are fully answered.

We believe that you will be satisfied with our product. In case of queries or reminders concerning the functionality of IPCorder, please contact us.

The KOUKAAM Team

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