

DIGITAL AUDIO RECORDER EQUIPMENT



PKI ELECTRONIC INTELLIGENCE GmbH GERMANY

RECORDER APPLICATION POSSIBILITIES

- 1) Recorder Standard**
- 2) Recorder Stethoscope**
- 3) Recorder + Remote Control**
- 4) Recorder + Long Time**
- 5) Recorder + Mains Adapter**
- 6) Recorder + Telephone Tapping**
- 7) Recorder + Directional Microphone**
- 8) Recorder + Needle Microphone**
- 9) Recorder + Vox**
- 10) Recorder + Audio Transmitter**
- 11) Recorder + Body Worn**

PKI 2100

Digital Audio Recorder Equipment

For the first time, **PKI** herewith presents various new developments in digital recorder surveillance. Here, too, **PKI** sets international standards and offers an undreamt of variety of applications:

10 special features to be highlighted are

- 1) Miniature design
- 2) Continuous recording for up to 50 days, incl. VOX remote or telephone up to 250 days
- 3) Excellent audio quality with great dynamics 20 Hz - 20 kHz
- 4) Microphone sensitivity up to 10 m
- 5) Memory capacity 16 GB and higher
- 6) Use of rechargeable Li-ion batteries
- 7) Support systems via Windows 2000/XP/Vista/Win7/Win8
- 8) Bit rate of 32 kbps - 256 kbps
- 9) Wireless data playback possibility
- 10) Combined recorder and online transmitter

PKI 2105 Digital Miniature Recorder

PKI 2110 Digital PCB Microrecorder

PKI 2115 Digital Stethoscope Recorder

PKI 2120 Digital Remote Control Recorder

PKI 2125 Digital Long-Term Recorder

PKI 2130 Digital Mains Recorder

PKI 2135 Digital Telephone Recorder

PKI 2140 Digital Directional Microphone Recorder

PKI 2145 Digital Needle Microphone Recorder

PKI 2150 Digital VOX Recorder

PKI 2155 Digital Body-Worn Recorder

PKI 2160 Digital Transmitter Recorder

PKI 2165 Digital Data Transmission Recorder

PKI 2170 Digital Stereo Recorder

PKI 2175 Digital Amplifier Audio Box

PKI 2180 Professional Modul Stethoscope Recorder

PKI 2185 Professional Quadro Stethoscope Recorder

Please find descriptions of the different versions under the respective **PKI** number. Special combinations not mentioned here are possible on request or on order, e.g. long-term recorder + Vox control or mains recorder + remote control, etc. As a special accessory, we offer a playback box with amplifier and tone control for direct recorder playback without PC.


PKI 2105

Digital Miniature Recorder

With its integrated microphone, the digital recorder records conversations up to a distance of 10 m. As a result of its compact dimensions, monitoring operations can be easily handled. The playback quality of the **PKI 2105** always amazes, especially as the transmission rate is 256 kbps. Contrary to wireless monitoring operations, the **PKI 2105** is not traceable. A double-faced adhesive film allows for a simple and fast installation. With the delivered earphones, a direct playback without PC is possible. For larger rooms, it is recommended to use several recorders so that no information gets lost.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in

- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 9 x 23 x 70 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition


PKI 2110

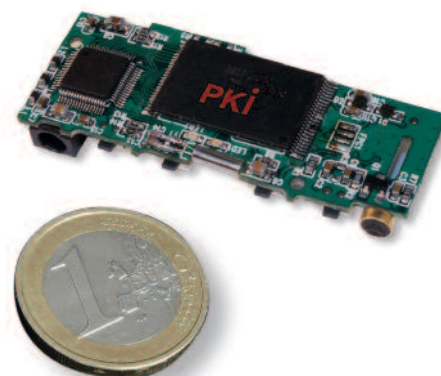
Digital PCB Microrecorder

With dimensions of no more than 7 x 20 x 50 mm and an excellent recording quality, this masterpiece is designed for the installation in different objects such as candleholders, ashtrays, books, etc. Apart from that operation is identical with the **PKI 2105**. This also applies to all technical data.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm

- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 7 x 20 x 50 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2115

Digital Stethoscope Recorder

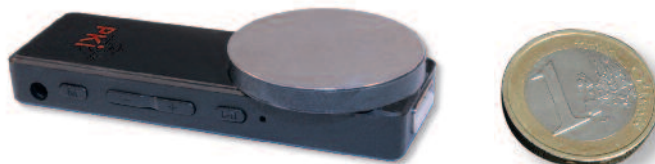
If other monitoring options have been exhausted or the risk of discovery is too big to perform direct active monitoring in the building, this digital stethoscope recorder **PKI 2115** is used. Here, too, **PKI** sets international standards. This lightweight 20 g digital stethoscope recorder including piezo transducer is fastened at walls/windows, door frames as quick as lightning using the new „adhesive paste“.

As a result of its small dimensions of only 9 x 23 x 63 mm this is possible inconspicuously. Playback is realized via a laptop or directly with the delivered earphones. Conversations can thus be recorded through walls and windows at any time without effort and difficulty using the **PKI 2115**.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB

- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 9 x 23 x 63 mm, sensor 30 x 5 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2120

Digital Remote Control Recorder

This device enables controlled, time-dependent audio surveillance and this for an extremely long period. In order to use the power supply and recording capacity only if the circumstances really require it. This way month-long surveillance or recording is possible. The remote control has an operating range of 100 m and can be easily operated by simply switching it on or off. Apart from that all technical data are maintained in excellent voice quality, only the standard height of 9 mm is increased to 18 mm. The standby time is several months.

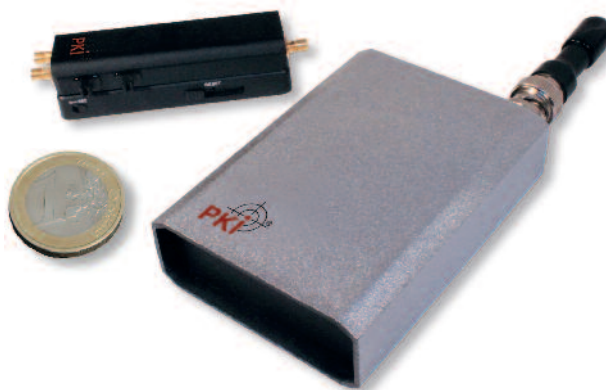
Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system

- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 20 x 23 x 70 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition

Remote Control Transmitter

- Frequency: 300 - 450 MHz coded
- Transmitting range: up to 100 m (depending on surrounding conditions)
- Power supply: 9V DC standard block battery
- Dimensions: 90 x 60 x 23 mm
- Weight: 350 g



PKI 2125

Digital Long-Term Recorder

This version surpasses all previous recorders with regard to its recording time of 50 days. This is only possible thanks to the used rechargeable Li-ion battery with 3.7 V and 18 Ah. It enables the **PKI 2125** to operate completely independently of any connected power supply so that it can be placed and used universally and immediately. The playback quality leaves nothing to be desired, despite the transmission speed reduction to 32 kbps. Moreover, battery packs with smaller dimensions can be delivered for 10 or 20 days.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in

- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 17 x 70 x 130 mm
- Weight: 240 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2130

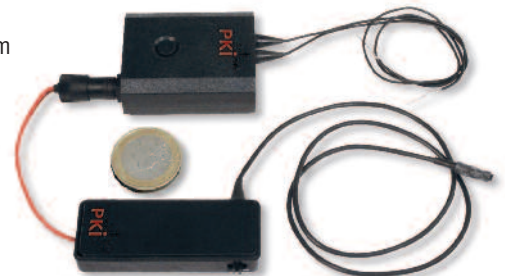
Digital Mains Recorder

The mains power supply enables the **PKI 2130** to achieve uninterrupted recording times of up to 50 days with smallest dimensions and this with an excellent audio quality during playback. In order to enable long-term recording, we reduced the transmission speed to 32 kbps, just as with the **PKI 2125**. This digital mains recorder is of course suitable for installation in socket outlets, junction boxes, lamps and other electrical devices. The **PKI 2130** is used wherever you want to be independent of battery life and attach importance to long runtimes, but nevertheless prefer smallest possible dimensions for camouflaged installation. In case of a power failure, further recording is guaranteed by the built-in rechargeable battery.

Specifications:

- Power supply of 100 - 240V AC, automatically controlled
- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: 220/110V AC

- Dimensions of mains adapter: 9 x 12 x 30 mm
- Dimension of recorder: 9 x 23 x 70 mm
- Weight: 10 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2135

Digital Telephone Recorder

This miniature digital telephone recorder is connected to the telephone network with 2 wires; phone surveillance can't be easier and safer. No transmitter, no locating. The **PKI 2135** records both conversation partners and this for months. The **PKI 2135** will only be activated if there is a phone call, otherwise it remains on standby. The power supply is uncomplicated as the phone current is sufficient and rechargeable batteries are not required. The normal runtime of the **PKI 2135** given a bit rate of 32 kbps is 50 days uninterrupted. For an average phone conversation utilization of 20%, this means 250 days. A special version with room and phone surveillance is possible. The recording time reduces to 50 days.

- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8

- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 9 x 23 x 63 mm, adapter 23 x 10 x 30 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours

PKI 2140

Digital Directional Microphone Recorder

The **PKI 2140** still records conversations from a distance of 20 m with the special integrated directional microphone. The opportunities offered by this device are simply amazing. With its dimensions of only 9 x 23 x 63 mm plus directional microphone tube of Ø 5 x 30 mm and a weight of only 20 g, important conversations can be recorded almost unnoticed, and that automatically, without a person having to be present and this in an excellent audio quality in the standard version for up to 14 hours. (longer runtimes on request, via the delivered earphones, a direct playback without PC is also possible).

- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8

- Power supply: internal 3.7 V rechargeable lithium ion battery, 120 mAh
- Dimensions: 9 x 23 x 63 mm, microphone Ø 15 x 40 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours

PKI 2145

Digital Needle Microphone Recorder

The **PKI 2145** records conversations through keyholes, wall bores and other openings of at least 3.0 mm in Ø. This is possible because of the 2.5 mm strong metal tube with attached special electret microphone. Direct listening-in via the delivered earphones is possible or the recorder automatically records for up to 14 hours. The microphone needle can be variably extended by 2 further attachable metal tubes. So, lengths of 5/15/20 cm can be achieved. For the wall bores, we can recommend our **PKI 8040** Silent Drill.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz

- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista / Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 9 x 23 x 63 mm, socket 15 x Ø mm, needle 5 + 15 + 20 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2150

Digital VOX Recorder

In order to have the possibility of longer recording, the **PKI 2150** is provided with a VOX control, i.e. recording is only activated if there are really conversations. After the conversation, the **PKI 2150** automatically switches to „standby“. This way, the pure recording time is multiplied.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm

- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 7 x 25 x 70 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2155

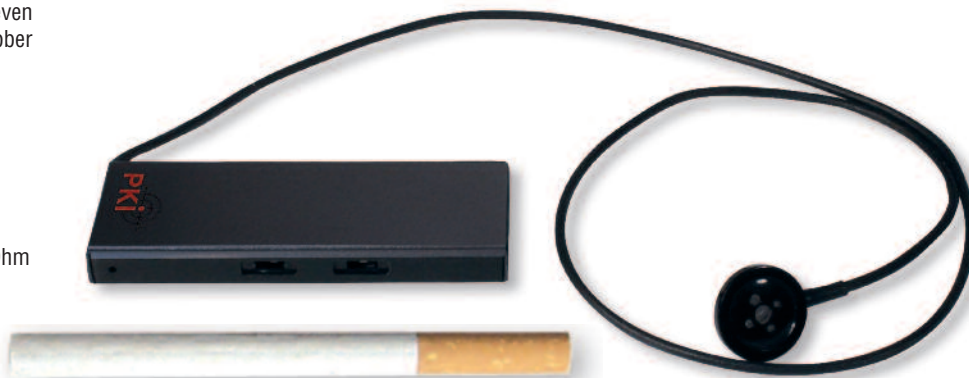
Digital Body-Worn Recorder

This miniature recorder **PKI 2155** can of course also be worn on the body. In order to suppress the rubbing noise caused by the clothes while walking, the **PKI 2155** is equipped with a lapel microphone. It ensures optimum recordings. This special version is particularly protected against moisture and dust and ensures even rugged operations made possible by a rubber sleeve.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz

- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 7 x 25 x 70 mm
- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2160

Digital Transmitter Recorder

This design is very interesting. The **PKI 2160** is coupled to a transmitter. With a receiver, it will wirelessly receive data up to 300 m, i.e. during monitoring, direct listening-in over a larger distance is feasible and recording is simultaneously realized by the **PKI 2160** recorder. This is particularly important if the sources of interference impede the wireless transmission or the monitoring operation has to be realized for a longer period. When connecting the transmitter, the monitoring time changes to 7 hours. Larger runtimes can be delivered on request.

Specifications:

- Recording file: output format WAV
- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 20 x 23 x 70 mm
- Weight: 15 g

- Special: Playback via earphone possible, electronic time recognition



PKI 2165

Digital Data Transmission Recorder

The highlight of the **PKI** digital recorder development is our **PKI 2165**. Once installed, the records can be wirelessly called on the delivered laptop using our transmitter/receiver system operating in the GHz range and can be evaluated or processed there.

In case of mains supply, audio surveillance lasting for months is thus possible. Depending on the requirements, you get the information you need without ever having to enter the room again where the **PKI 2165** is installed.

Specifications:

- Recording file: output format WAV

- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 20 x 23 x 70 mm

- Weight: 15 g
- Special: Playback via earphone possible, electronic time recognition



PKI 2170

Digital Stereo Recorder

For monitoring operations with extreme parasitic noise, we recommend the **PKI 2170**. Via the built-in directional microphones, the stereo unit once records the left side and once the right side. During playback, switching over or fading out is possible depending on the level of parasitic noise so that an acceptable audio signal can be understood. In case of particularly difficult circumstances, we recommend our **PKI 2175** for playback.

Specifications:

- Recording file: output format WAV

- Microphone: electret, built-in
- Battery recording time: 14 hours
- Battery playback time: 20 hours
- Earphone: output power > 5 mW x 2 x 16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 120 mAh
- Dimensions: 7 x 25 x 70 mm
- Weight: 15 g

- Special: Playback via earphone possible, electronic time recognition



PKI 2175

Digital Amplifier Audio Box

For direct audio playback, our product range includes the **PKI 2175** as special accessory. Via the analog and digital input, this digital amplifier audio box with built-in loudspeakers allows the direct playback of our different digital recorders. This small, portable, battery-operated loudspeaker box with adjustable volume spares you the PC, which of course is also very well suited for playback.

Specifications:

- Playback connections: USB, TF/Micro SD card up to 32 GB
- Line in analog: 3.5 mm jack
- Line in digital: USB connector
- Power supply: Integrated rechargeable lithium battery 600 mAh
- Dimensions: 160 x 50 x 50 mm
- Weight: 190 g



PKI 2180

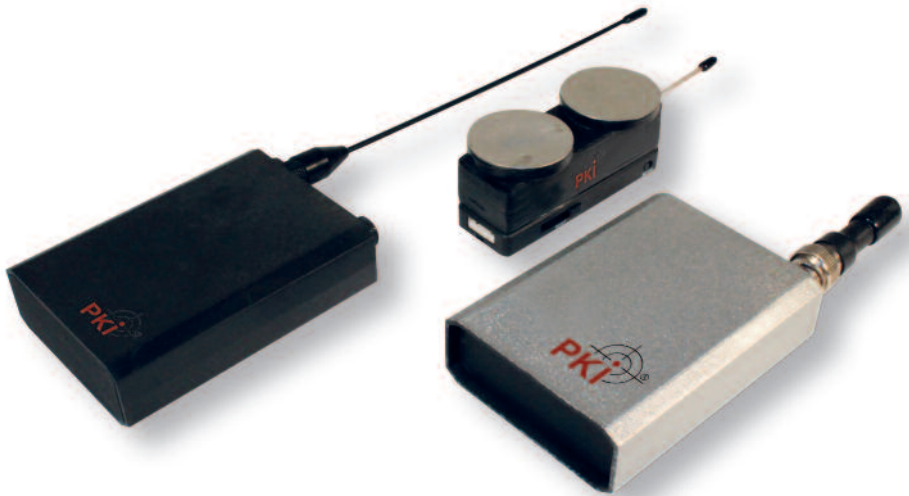
Professional Module Stethoscope Recorder

This **PKI** development outperforms all previous experiences you have made with respect to recorder surveillance so far. A wide variety of applications is possible and it is indispensable for professional surveillance. **PKI 2180** creates an audio transparency that has not at all been possible before. The double piezoelectric transducer records conversations and noise through walls, windows, door frames and this in optimum audio quality. Up to 60 hours of conversation are recorded. In order to fully exploit the capacity, **PKI 2180** is equipped with a remote control for ON/OFF, i.e. **PKI 2180** can thus be switched to sleep mode. This way, monitoring operations lasting for months are possible. **PKI 2180** is positioned at walls/windows or door frames as fast as lightning using the delivered „adhesive paste“. As a result of its small dimensions of only 70 x 24 x 27 mm camouflaged operation is possible. An integrated HF micro transmitter enables direct interception with the help of the delivered pocket receiver over a distance of 50 m. The HF micro transmitter can optionally be activated via the delivered remote control.

Specifications:

Recorder

- Recorder file: output format WAV
- Microphone: piezoelectric, double, built-in
- Battery recording: 60 hours
- Earphone output power: > 5 mW 2x16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB
- Flash memory: 1G - 8G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Power supply: internal 3.7V rechargeable lithium ion battery, 360 mAh



- Weight: 35 g
- Special: playback via earphone possible, PC or **PKI 2175** Digital Amplifier Audio Box

Remote control

- Frequency: 300 - 450 MHz coded
- Transmitting range: up to 100 m (depending on surrounding conditions)
- Power supply: 9V DC standard block battery
- Dimensions: 90 x 60 x 23 mm
- Weight: 350 g
- Channels: 2

HF Micro transmitter

- Frequency: UHF 400 MHz
- RF output power: 8 mW
- Modulation: NFM@5kHz
- Spurious suppression: better than 50 dB
- Microphone sensitivity: -62 dB

- Microphone: internal electret

Pocket receiver

- Dimension: 99 x 56 x 21 mm
- Weight: 110 g
- Frequency: UHF 400 MHz
- Receiver sensitivity: better than 0.4 µV at 12 dB sinad
- Modulation: NFM at 5 kHz
- Spurious suppression: better than 40 dB
- Frequency stability: better than +/- 2 ppm (0-50°C)
- Operating time: 30 h
- Power supply: 9 V block battery
- Features included: channel selector, squelch, volume control, headphone output and recorder, antenna connector
- Comes with: antenna

PKI 2185

Professional Quadro Stethoscope Recorder

This new development has been designed for professional long-term stethoscope monitoring. The 4 sensors with highly sensitive piezo elements record the lowest noise, especially voice, and save it on the integrated digital recorder and this for months thanks to the additional Vox control. The **PKI** device is positioned at walls/windows or door frames as fast as lightning using the delivered „adhesive paste“. A wide variety of applications is possible and these in optimum audio quality. **PKI 2185** offers highest possible audio transparency and nothing escapes its notice.



Specifications:

- Dimensions: 75 x 85 x 13 mm
- Weight: 110 g
- Power supply: internal 3.7V rechargeable lithium ion battery, 1080 mAh
- Recorder file: output format WV
- Recorder: piezo elements 4x, built-in

- Recording time: 180 hours or longer with VOX
- Earphone output power: > 5 mW, 2x16 Ohm
- Jack: 3.5 mm, stereo
- Communication: USB 2.0
- Recording frequency: 20 Hz - 20 kHz
- SNR: > 90dB

- Flash memory: 1 G - 8 G FAT 32 system
- Support system: Windows 2000 / XP/ Vista/ Win7/ Win8
- Memory capacity: 16 GB
- Battery charging: directly at the PC or via the delivered external battery charger plug