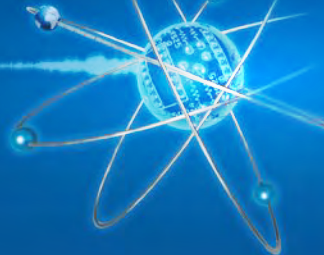


Choose your own
Honest Witness



Product Catalogue

Security Products

...unique*, professional, indispensable

*due to extremely small size
or exclusive technical characteristics



We believe we all – employees, distributors and customers alike – share the enthusiasm and commitment: we are all doing our part to help make the world better with new technologies.

Our company, TS-Market Ltd., was established in 2001 as export agent for trade activity overseas. We started promoting miniature professional digital audio recorders and audio-video recorders produced by the leading Russian producer of suchlike devices. We are proud to have been selling these unique products up till now – they have world's miniature size (confirmed by Guinness World Records).

Today TS-Market exports various security products of Russian origin worldwide to 20 countries. Among them are the United States, Great Britain, Canada, France, Germany, Italy, Israel, Australia and many others. Vigorous demand for our high-end devices shows that they do appeal to professionals due to their technical features and convenient dimensions.

Why us?



- **Rapid** shipping from the Russian and US stores.
- **Favorable** terms of payment.
- **Guarantee** repairs of the product within 1 year from the date of sale.
- **Support** our distributors with advertising and exhibition materials, free dummies.
- Providing devices for testing on **special terms** and a lot more!

TS-Market is not limited by the products and services of our producers, we also ready to promote other professional products. We welcome cooperation with domestic and foreign companies regarding our mutual marketing and export-import activity.

We strive in everything we do to meet interests and requirements and high standards, to develop cost-saving solutions of high end and versatile audio and video recording techniques.

We welcome new business contacts, be it our new partners, distributors or customers!

Everything you need to gain profit by effective cooperation with us is provided!

We invite dealers to distribute our products.

TS-Market always has a Special Offer for new partners, willing to promote our products.



TS-Market Company promotes 5 major groups of professional security products:



• Nine series of the Edic-mini miniature professional Digital Voice Recorders –

Latest series Edic-mini Tiny+ and 16+ have innovative features. Edic-mini Tiny series includes the Guinness World Records winners – the world's smallest professional audio recorders. All voice recorders have extremely long recording time and battery life, low power consumption and miniature size together with a great number of extra features.



• Professional miniature Audio-Video recorders and Video Surveillance Systems –

mAVR audio-video recorders and Tral Patrol 2 automatic tracking system provides high quality of recording. This efficient means will provide you with profession videos for any purpose.



• Edic-mini Tiny Audio Recording Modules –

which can be mounted into various devices of different design according to the needs of the client. The models have been modernized and now have cases, which makes the devices look and operate as regular audio recorders, which carry out such tasks as search and location of electronic devices; preventing cellular communication in designated areas; detection and localization of radio emitters; measurement frequency and power of radio signals.



• Non-linear Junction Detectors, Cellular Phones Jammers, Frequency and Power Meters –

which carry out such tasks as search and location of electronic devices; preventing cellular communication in designated areas; detection and localization of radio emitters; measurement frequency and power of radio signals.

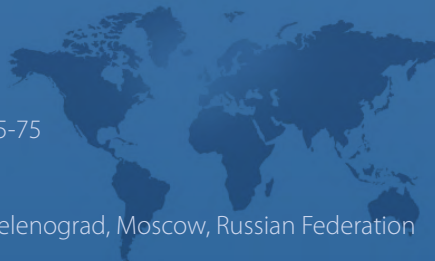


• Selective RF Detectors –

RAKSA iDet Selective RF Detector can be used to detect and locate in near field a wide variety of radio transmitters used for secret access to information. RAKSA iDet detects bugs, hidden cameras and tracking beacons. The device will help you to protect business and private life.

TS-Market

Website: www.ts-market.com
Phone: +7 (495) 638-88-00, +7 (499) 940-95-75
Fax: +7 (499) 735-04-91
E-mail: info@ts-market.com
Address: B.10-1, Sosnovaya alleya, 124489, Zelenograd, Moscow, Russian Federation



Miniature digital audio recorders

EDIC-mini Tiny series

Tiny voice recorders are of extremely small size and weight, have a long record duration and autonomy operation, a wide dynamic range and a highly sensitive built-in microphone.

Easy-to-use and versatile software allows selectable sample rate and compression algorithms to extend recording duration with recording modes - voice activation, continuous loop, single pass & scheduled timer. Windows software controls the device configuration, file transfer and message listings, which allow you to listen to recordings through your PC. Recorders of this series use ADPCM compression method, which makes possible perfect compressing of any sounds without specific distortions.

Voice Activating System (VAS), supported by Tiny audio recorders, effectively compresses pauses in messages, therefore increasing the actual record time. Using this system saves memory during pauses, but the time intervals remain. When downloading records to PC, the pause length can be either restored (as silence) or passed, depending on the settings made.

Stylish design makes the models ideal for custom surveillance installations.

Having traditionally small size, the models of Edic-mini Tiny series feature the following:

- Recording time: up to 300 hours;
- Battery life: up to 200 hours;
- Extended recording frequency band (100-10000 Hz), sampling rate: from 5.5 to 22 K Hz;
- 4 compression modes: without compression, u-law (64 K bit/sec), ADPCM2, ADPCM4 (16K bit/sec);
- Recording mode - Mono;
- Built-in microphone sensitivity 7-9 m;
- Signal/noise ratio: - 64 dB;
- Data exchange and charging with the PC through the supplied USB adapter (USB 1.1 interfaces);
- Built-in real time clock;
- Timer recording;
- Information protection system;
- Unique digital signature of the recordings made;
- Opportunity to use the recorder both for message recording and as a flash-disc to store and transfer data of any format.



The Edic-mini Tiny series is the Guinness World Records winner.

B21 and A31 models were registered in Guinness World Records as the world's smallest professional audio recorders.





EDIC-mini Tiny A45-1Gb

Miniature digital audio recorder

Thinner, then a pen! Unprecedented shape and continuous recording during up to 50 hours.

Opportunities and advantages

The new Tiny series model is produced in thin cylindrical case made of aluminum, just 9 mm in diameter. Record control is performed by a switch at the front edge of the case. The recorded data is uploaded onto the PC with the help of USB cable included into the package.

A45 is a professional device with well-implemented voice-recording features: modest, but sufficient recording time, long battery life, fast and convenient transfer to computers.

Technical characteristics

- Dimensions: 79x9 mm;
- Weight: 13 g;
- Case: Metal;
- Power supply: rechargeable battery;
- Recording time: 150h;
- Battery life in record mode: 50h;
- Battery life in VAS mode: 3000h;
- Battery life in stand-by mode: 7 months;
- Built-in flash memory: 1Gb;
- Interface: USB 1.1
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -64 dB;
- Sample rate: 5.5, 8, 11, 16, 22;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

in the mode:

2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec

Modification	Recording time, hour	Memory size, Gb
150 h	150	1

Modifications

A45-1Gb-150h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Voice recorder



USB cable



Software CD



Instructions

Optional accessories

- External microphone with compressor
- Programmed external microphone with AGC

Please note!

This model is also available with leather case, handworked with application of the most exquisite technologies in various color tints and design - every case is individual and unique.

EDIC-mini Tiny xD A69

Miniature digital audio recorder



Audio recorder has handy & solid metal case. Power consumption of the device was minimized up to record level, which provides high autonomy & miniature size of A69.

Opportunities and advantages

The new model of Tiny series operates under plug-in memory card with the capacity of 2Gb. The recorder is distinguished by high autonomy (battery life in record mode is up to 200 hours). A69 audio recorder is a professional recorder supplied with the following features: timers to start recording at preset time, circular recording mode; Voice Activating System (VAS), information protection system, LED indication.

Data reading can be carried out directly from the recorder via USB (0,7 Mb/sec) or from the card by a special reader via USB (up to 5,5 Mb/sec)

Technical characteristics

- Dimensions: 62 x 44 x 7,5 mm
- Weight: 23 g
- Case: Metal
- Power supply: Li-Ion BL-5x rechargeable battery
- Battery life in record mode: up to 200 hours
- Battery life in stand-by mode: up to 12 months
- Built-in flash memory: 2 Gb
- Interface: USB 1.1, USB 2.0 (via reader)
- Audio recording format: Mono
- Frequency band: 100 — 10000 Hz
- Dynamic range: -80 dB
- Sample rate: 5.5, 8, 11, 16, 22
- Voice Activating System: YES
- Timer recording: YES

Recording duration

in the mode:

2 bit ADPCM and sampling rate 8 kHz, 16 Kbit/sec

Modification	Recording time, hour	Memory size, Gb
300 h	300	2

Modifications

A69-300h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours

Delivery set



Voice recorder



USB cable



Software CD



xD Reader



xDM memory card



Instructions

Optional accessories

External microphone with compressor [+/-6 dB] for Edic-mini Tiny

EDIC-mini Tiny B47

Miniature digital audio recorder



Compact digital Edic-mini Tiny B47 is able to match many special requirements operating up to 160 hours from a single charge and recording up to 1200 hours without a break. Voice Activation System provides with even longer recording time within the fixed memory volume.

Opportunities and advantages

B47 features high sensitivity microphone and wide frequency band, password protection and timer-recording function. And all this is realized in the extremely small size with the simplest control. Pleasant cylindrical shape and metal case of the recorder are very convenient. B47 is powered by three batteries, G 13-A or zinc-air batteries that provide continuous recording for 160 hours. Such batteries can be easily purchased in any store.

Technical characteristics

- Dimensions: 50x15 mm;
- Weight: 19 g;
- Case: Metal;
- Power supply: G13-A battery or air-zinc batteries;
- Battery life in record mode: 40h from G13-A and 160h from air-zinc batteries;
- Battery life in VAS mode: 168h;
- Battery life in stand-by mode: 4,5 months;
- Built-in flash memory: 2Gb, 4Gb, 8Gb;
- Interface: USB 1.1
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -64 dB;
- Sample rate: 5.5, 8, 16, 22;
- Voice Activating System: YES;
- Timer recording: YES.

Modifications

- B47-300h
- B47-600h
- B47-1200h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Optional accessories

- External microphone with compressor
- Programmed External Microphone with AGC

Recording duration

in the mode: 2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec

Modification	Recording time, hour	Memory size, Gb
300 h	300	2
600 h	600	4
1200 h	1200	8

EDIC-mini Tiny xD B68

Miniature digital audio recorder



The recorder is in convenient and light plastic case. Energy consumption has been minimized to record figures, which is reflected in the autonomy level of the device and its dimensions.

Opportunities and advantages

The Edic-mini Tiny xD B68 Recorder operates under plug-in memory card with the capacity of 2 Gb. Such a device has a number of advantages:

- There is no dependency on particular memory capacity. If the card is full, you can insert another one and continue operating with it.
- You can give the card to anyone without giving the Recorder itself. This is important if you don't convert recording to text yourself. The card can easily be hidden, put into safe-deposit box or sealed envelope. Law enforcement authorities and courts trust sealed cards more.

The recorder has the option to read data from memory cards by a special USB 2.0 Reader (up to 5.5 Mbs).

Technical characteristics

- Dimensions: 56 X 30 X 8 mm
- Weight: 9 g
- Case: Plastic
- Power supply: CR 2450 battery
- Battery life in record mode: up to 100 hours
- Battery life in stand-by mode: up to 11 months
- Built-in flash memory: 2 Gb
- Interface: USB 1.1, USB 2.0 (via reader)
- Audio recording format: Mono
- Frequency band: 100 — 10000 Hz
- Dynamic range: -80 dB
- Sample rate: 5.5, 8, 11, 16, 22
- Voice Activating System: YES
- Timer recording: YES

Recording duration

in the mode:

2 bit ADPCM and sampling rate 8 kHz, 16 Kbit/sec

Modification	Recording time, hour	Memory size, Gb
300 h	300	2

Modifications

B68-300h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours

Delivery set



Recorder



USB cable



Software CD



Instructions



xD Reader



xDM memory card



2 batteries

Optional accessories

External microphone with compressor [+/-6 dB] for Edic-mini Tiny

Miniature digital audio recorders

EDIC-mini Tiny16 series

Voice recorders of the Edic-mini Tiny16 series are professional devices, intended for making high quality record of voice messages into the built-in flash memory. You can playback recorded messages using the headphones and save them into your PC as standard sound files.

Tiny voice recorders are of extremely small size and weight, have a long record duration and autonomy operation, a wide dynamic range and a highly sensitive built-in microphone.

This series of recorders is distinguished by higher recording quality because of its 16 bit audio codec that provides more accurate signal digitizing. Built-in AGC system provides flexible adjustment of settings according to the acoustic conditions. All these characteristics including microphone's high sensitivity allow get high-quality recording in challenging environment: disturbances, noise, or a long distance.

Easy-to-use and versatile software allows selectable sample rate and compression algorithms to extend recording duration with recording modes - voice activation, continuous loop, single pass & scheduled timer. Windows software controls the device configuration, file transfer and message listings, which allow you to listen to recordings through your PC. Recorders of this series use ADPCM compression method, which makes possible perfect compressing of any sounds without specific distortions.

Voice Activating System (VAS), supported by Tiny16 audio recorders, effectively compresses pauses in messages, therefore increasing the actual record time. Using this system saves memory during pauses, but the time intervals remain. When downloading records to PC, the pause length can be either restored (as silence) or passed, depending on the settings made.

Stylish design makes the models ideal for custom surveillance installations.

Having traditionally small size, the models of Edic-mini Tiny16 series feature the following:

- Recording time: up to 1200 hours;
- Battery life in record mode: up to 110 hours;
- Recording frequency band (100-10000 Hz), sampling rate: from 50 to 20 KHz;
- 4 compression modes: without compression, u-law (64 K bit/sec), ADPCM2, ADPCM4 (16K bit/sec);
- Recording mode: Mono
- Built-in microphone sensitivity 10-12 m;
- Signal/noise ratio: - 80 dB;
- Data exchange with the PC through the supplied USB adapter (USB 1.1 interfaces);
- Built-in real time clock;
- Timer recording;
- Information protection system;
- Unique digital signature of the recordings made;
- Opportunity to use the recorder both for message recording and as a flash-disc to store and transfer data of any format.



EDIC-mini Tiny16 A64

Miniature digital audio recorder

Simple, at first glance, appearance of this model carries the convenience and versatility!



Opportunities and advantages

This recorder, just like all the models of the series, is remarkable for high quality of sound due to much sharper signal digitizing by 16-bit audio codec. The recorder can provide more than 50 hours of battery life at fully charged battery in record mode and up to 4,5 months in stand-by mode.

Edic-mini Tiny 16 A64 is distinguished by its multitasking functionality. A record is protected against forgery by a specially developed system of markers. Built-in AGC system (Automatic Gain Control) enables it to provide high-quality recording in noisy areas automatically lowering too heavy sounds and enhancing faint ones.

Technical characteristics

- Dimensions: 60×31×8 mm;
- Weight: 21 g;
- Case: metal;
- Power supply: rechargeable battery;
- Battery life in record mode: up to 50h;
- Battery life in VAS mode: up to 7 days;
- Battery life in stand-by mode: up to 4.5 months;
- Built-in flash memory: 2Gb;
- Interface: USB 1.1;
- Audio recording format: mono;
- Frequency band: 100 — 10000 Hz;
- Dynamic range: -80dB;
- Sample rate: 5.5, 6.6, 8, 10, 13.3, 20;
- Voice Activating System: YES;
- Timer recording: YES.

Modifications

A64-300h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Voice recorder



USB cable



Software CD



Instructions

Recording duration

in the mode: 2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec

Modification	Recording time, hour	Memory size, Gb
300 h	300	2

EDIC-mini Tiny16 U49

Miniature digital audio recorder

Thanks to 5 divided microphones the U49 voice recorder can record audio from certain direction at a distance of 15 m and considerably reduce background noise of the microphone.



Perfect choice for professional recording.

Opportunities and advantages

U49 will help you to record exactly what you need without anything irrelevant - 5 built-in microphones form operation coverage area, which bears resemblance to an oval, and provide sensitivity up to 16 m! The result - background noises reduced, recorded sound is clear.

The model consumes power from AAA rechargeable or standard batteries, built-in AGC system and password protection are provided.

Among additional features - linear and circular recording, digital signature of recordings, daily timer and once timer.

Technical characteristics

- Dimensions: 143x13x18 mm;
- Weight: 24 g;
- Case: Metal;
- Power supply: AAA rechargeable battery or battery;
- Battery life in record mode: 220h;
- Battery life in VAS mode: 456h;
- Battery life in stand-by mode: 36 months;
- Built-in flash memory: 2Gb, 4Gb;
- Interface: USB 1.1
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -80 dB;
- Sample rate: 5.5, 6.6, 8, 10, 13.3, 20;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

Index	Recording time, hours	Memory size
300 h	300	2 Gb
600 h	600	4 Gb

Sampling rate 28 kHz, 16 K bit/sec

Modifications

U49 - 300h

U49 - 600h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2bit ADPCM).

Delivery set



Voice recorder



USB cable



3AAA batteries



Instructions



Optional accessories

- Miniature amplifying external microphone (+10 dB)
- Programmed External Microphone with AGC
- Telephone adapter RecAdapter for Tiny16

Miniature digital audio recorders

EDIC-mini Tiny+ series

Digital records made by the recorders of the Edic-mini Tiny + series are counterfeit proof owing to the custom developed system of markers.

These distinctive marks being unnoticeable for the user go through all the recording stages and help to define the integrity of the recorded voice information. These marks help to identify the recorder's model, its serial number, record start time as well as the attempt to modify it.

This system of markers is more reliable as compared to the previous one.

The main difference is that now record's integrity can be checked not only by RecManager, but also by a specific program used in the Ministry of Internal Affairs.

If a record has been modified, the recorder won't identify it as authentic.

This is an important step for broader implementation of digital recording as proof in court enabling to apply the Recorder as an incorruptible witness to record precisely and objectively all the conversations and sounds within a radius of up to 12 meters and save it for any period of time. Besides it won't change evidence as opposed to what some people do.

Having traditionally small size, the models of Edic-mini Tiny series feature the following:

- Recording time up to 150 hours (for 150HQ models);
- System of digital markers: inaudible markers are added to the record allowing it to identify the record's time and date as well as the recorder's type and its serial number; and the attempts to modify it;
- Low power consumption;
- Password protection of records;
- Broad frequency band up to 100-10000 Hz;
- Continuous high-quality audio recording without signal's compression at the distance of up to 12 meters;
- Recording is enabled with Switch, Voice Activation System (VAS), or daily and once timers;
- Linear and circular record modes;
- LED Indication of the recorder's operation.



EDIC-mini Tiny+ series with technical characteristics

Model	Case	Dimensions, mm; Weight, g.	Power Supply	Built-in microphone sensitivity, Meters
A77	Metal	29×15×12 mm; 7 g.	Li-Pol 105 mAh rechargeable battery	up to 12
A81	Metal	78×13×13 mm; 19 g.	Li-Pol 500 mAh rechargeable battery	up to 12
B73	Metal	46×14×6 mm; 7 g.	Battery of LR43 type	up to 12
B76	Metal	31×25×6 mm; 16 g.	Battery of CR2016 type	up to 12

E71 Metal 32×14×6 mm; 6 g. External power supply 3,5-6V up to 12



EDIC-mini Tiny+ A77

Miniature digital audio recorder

The recorder has extremely small dimensions (29×15×12 mm), small weight (only 7 grams), high sensitivity and large memory capacity.



Opportunities and advantages

This is the tiniest recorder in the world, enabling it to conduct recording from built-in rechargeable battery for more than two days. Owing to these extreme characteristics, high recording quality and a wide range of functions, the recorder is perfectly suited for everyday use, recording everyday events and unexpected situations in life.

Technical characteristics

- Dimensions: 29×15×12 mm
- Weight: 7 g
- Case: metal
- Power supply: Li-Pol rechargeable battery 105 mA/h
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: -65 dB
- Sample rate: 8, 11, 16, 22
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB cable

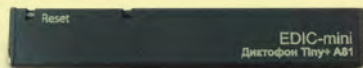


Instructions

EDIC-mini Tiny+ A81

Miniature digital audio recorder

Thanks to powerful rechargeable battery A81 can provide up to 250 hours of continuous recording!



Opportunities and advantages

Edic-mini Tiny+ A81 is the most powerful representative of the series, built-in Li-Pol rechargeable battery provides up to 250 hours of operation in record mode, and up to 500 hours in VAS mode! Miniature size (78x13x13 mm) and light weight (19 g) unites in solid metal case. A81 is easy-to-use: there is one switch to control operation of the recorder.

Technical characteristics

- Dimensions: 78x13x13 mm
- Weight: 19 g
- Case: metal
- Power supply: Li-Pol rechargeable battery 500 mA/h
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: -65 dB
- Sample rate: 8, 11, 16, 22
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB adapter



Instructions

EDIC-mini Tiny+ B73

Miniature digital audio recorder

*The tiniest recorder for the time being!**



Opportunities and advantages

Owing to many years of experience in developing and manufacturing professional audio recording devices with extreme characteristics, we managed to produce Edic-mini Tiny+ B73, the size of which amounted only 46x14x6 mm, with the weight of 7 grams. In spite of a tiny case, the device combined the characteristics of a professional device, namely: high recording quality and broad opportunities.

Technical characteristics

- Dimensions: 46x14x6 mm
- Weight: 7 g
- Case: metal
- Power supply: battery of LR43 type
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: -65 dB
- Sample rate: 8, 11, 16, 22
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB cable



Instructions

**among the recorders produced by Telesys Ltd.*

EDIC-mini Tiny+ B76

Miniature digital audio recorder

The recorder is remarkable for tiny dimensions (30×25×6 mm), small weight (only 16 grams), high sensitivity and large memory capacity.



Opportunities and advantages

Professional recorder Edic-mini Tiny+ B76 features tiny dimensions (37×25×6 mm), high recording quality, broad functionality being easy and convenient to use at the same time. Owing to standard battery as a power supply, B76 is flexible and effective in operation. It is perfectly suited both for everyday use and for those who keep the recorder handy without recording too much.

Technical characteristics

- Dimensions: 30×25×6 mm
- Weight: 16 g
- Case: metal
- Power supply: CR2016 battery
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: -65 dB
- Sample rate: 8, 11, 16, 22
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB cable



Instructions

EDIC-mini Tiny+ E71

Miniature digital audio recorder

High quality recording, miniature size and external power supply makes the recorder attractive for people who quality and convenience.



Opportunities and advantages

Miniature size (32x14x6 mm), built-in memory of 4 GB, the option of record not only in the linear, but also in the circular mode allows the recorder Edic-mini Tiny+ E71 to conduct continuous high quality audio recording. The application of external power supply provides stable continuous audio recording until the recorder's memory is full. And when enabling circular record mode, E71 can serve as "black box" to restore the latest details and events of your life.

Delivery set



Voice recorder



Software CD



USB cable



Instructions

Technical characteristics

- Dimensions: 32x14x6 mm
- Weight: 6 g
- Case: metal
- Power supply: external power supply 3,5-6V
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: -65 dB
- Sample rate: 8, 10, 13.3, 20
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Miniature digital audio recorders

EDIC-mini Tiny16+ series

Digital records made by the recorders of the Edic-mini Tiny16+ series are counterfeit proof owing to the custom developed system of markers.

These distinctive marks being unnoticeable for the user go through all the recording stages and help to define the integrity of the recorded voice information. These marks help to identify the recorder's model, its serial number, record start time as well as the attempt to modify it.

16-bit audio codec

The main difference of the Edic-mini Tiny16+ series is the application of 16-bit audio codec, which made it possible to significantly improve record quality. A new algorithm of sound digitizing made it possible to reduce digital noise. Thus noise disturbance that distort human speech sound has disappeared.

Automatic Gain Control (AGC)

The recorders of the Edic-mini Tiny16+ series provide the option of AGC enabling it to control recording sound level. That makes it possible to perfectly record very loud sounds and amplify silent ones. This adjustment can be performed either manually (using the corresponding settings in the software) or automatically. There are 5 types of AGC for recording:

- to record in silent area;
- to record in noisy area;
- to record from long distances;
- to record in large noisy areas;
- to record in busy street.

Having traditionally small size, the models of Edic-mini Tiny series feature the following:

- recording time up to 150 hours (for 150HQ models);
- low power consumption;
- checking records' integrity;
- password protection of records;
- 16-bit audio codec;
- acoustic sensitivity up to 15 meters;
- built-in AGC system;
- Voice Activation System (VAS) ;
- daily and once timers ;
- models with solar cells available.



EDIC-mini Tiny16+

series with technical characteristics

Model	Case	Dimensions, mm; Weight, g.	Power Supply	Built-in microphone sensitivity, Meters
A75	Metal	77x27x3,5 mm; 13 g.	Li-Pol 105 mAh rechargeable battery	up to 15
A82	Metal	90x13x13 mm; 21 g.	Li-Pol 500 mAh rechargeable battery	up to 15
E72	Metal	42x14x6 mm; 7 g.	External power supply 3,5-6V	up to 15
S78	Plastic	41x29x8 mm; 14 g.	Li-Pol rechargeable battery 105 mA/h, two solar batteries	up to 15



EDIC-mini Tiny16+ A75

Miniature digital audio recorder

*Very thin voice recorder
in a metal case*



Opportunities and advantages

Professional voice recorder Edic-mini Tiny16 + A75 is the thinnest among the recorders of the Tiny16 + series (77x27x4 mm), and it weighs only 12 grams. Despite its dimensions the recorder is a professional recording device designed for high-quality audio recording in complicated acoustic environment and from long distance. Portability and ease of operation, high-quality and broad functionality make this recorder applicable for a wide range of tasks.

Technical characteristics

- Dimensions: 77x27x3,5 mm
- Weight: 14 g
- Case: metal
- Power supply: Li-Pol rechargeable battery 150 mA/h
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: 80 dB
- Sample rate: 8, 10, 13.3, 20
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB cable



Instructions

EDIC-mini Tiny16+ A82

Miniature digital audio recorder

Stylish recorder with highly sensitive microphone, 16-bit audio codec and low power consumption.



Opportunities and advantages

A82 provides high quality recording, long operation (up to 160 hours) from built-in rechargeable battery with low power consumption. Also the device is equipped with the system of digital markers. Inaudible markers are added to the record allowing it to identify the record's time and date as well as the recorder's type and its serial number; and the attempts to modify it.

Technical characteristics

- Dimensions: 90x13x13 mm
- Weight: 21 g
- Case: metal
- Power supply: Li-Pol rechargeable battery 500 mA/h
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: 80 dB
- Sample rate: 8, 10, 13.3, 20
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

Delivery set



Voice recorder



Software CD



USB adapter



Instructions

EDIC-mini Tiny16+ E72

Miniature digital audio recorder



E72 provides high-quality audio recording in complicated acoustic environment



Opportunities and advantages

Miniature dimensions (46x14x6 mm), built-in memory of 8 GB, the option of record not only in the linear, but also in the circular mode, as well as an external power supply allow the recorder Edic-mini Tiny16 + E72 to continuously perform high-quality audio recording in all situations and from long distances, which makes it an ideal "black box" to reconstruct the sequence of events and important parts of your life.

Delivery set



Voice recorder



Software CD



USB cable



Instructions

Technical characteristics

- Dimensions: 46x14x6 mm
- Weight: 7 g
- Case: metal
- Power supply: external power supply 3,5-6V
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: 80 dB
- Sample rate: 8, 10, 13.3, 20
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

EDIC-mini Tiny16+ S78

Miniature digital audio recorder

*Unique voice recorder
with two solar batteries*



Opportunities and advantages

In addition to the built-in rechargeable battery, S78 has two solar batteries, allowing it to perform real-time battery charging while recording. This solution will help to avoid situations when rechargeable battery or batteries get low at the critical moment. And by placing S78 in the place to be exposed to a sufficient amount of light to operate, and setting circular record mode, you turn it into a "black box" to record everything that sounded in the room in the last 150 hours (depending on the settings specified). And that will help you restore the entire course of events.

Technical characteristics

- Dimensions: 41×29×8 mm
- Weight: 14 g
- Case: plastic
- Power supply: Li-Pol rechargeable battery 105 mA/h, two solar batteries
- Interface: USB 2.0
- Audio recording format: mono
- Frequency band: 100-10000 Hz
- Dynamic range: 80 dB
- Sample rate: 8, 10, 13.3, 20
- Voice Activating System: yes
- Timer recording: yes

Modifications

150HQ (4Gb)

Last digits in the models' name show the maximum recording duration in hours (sampling rate 8kHz, u-Law)

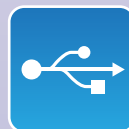
Delivery set



Voice recorder



Software CD



USB cable



Instructions

Miniature digital audio recorders



Edic-mini Pro Series

The Edic-mini PRO miniature digital recorders are intended for professional voice recording with an opportunity to play the recording back, using the headphones. High-quality recording, reliable battery life (up to 240 hours) and convenient high speed interface are the distinguishing features of this series. The recordings can be uploaded on to a computer. Rich experience and new technologies application helped to noticeably improve the quality of audio recording and make the recorder's autonomy more reliable by means of reduced power consumption. The recorders have remarkable characteristics: miniature sizes, the opportunity to play the recording back promptly, using the headphones and a wide range of accessories.

Pro series recorders are distinguished by OLED indicator, which provides high contrast and wide-angle viewing. Added date label function.

Advantages of Pro series of the recorders:

- Wide functionality together with miniature size.
- Professional quality of audio recording (16 bit audio codec that allows to digitize the signal more precisely).
- Built-in memory provides recording for 300-1200 hours allowing to choose the model that fits your demands.
- Low power consumption that makes the recorder's autonomy more reliable (longer battery life: up to 240 hours – Edic-mini Pro).
- High speed built-in USB 2.0 interface data exchange: 5.5Mb/s.
- Recordings playback using headphones and upload to PC as standard audio files.
- Wide frequency band: 100-6000 Hz.
- Date label – the date of the beginning and end of the recording are printed in the recording data.
- Recorders have a built-in clock and calendar, password protection, Voice Activation System, a timer to turn recording on at a certain time, digital watermark.
- Wide choice of the accessories.

	Model	Case	Dimensions, mm; Weight, g.	Power Supply	Battery Life			Rec. time, hours
					in record mode, h	with VAS, h	in stand-by mode, months	
	A38	Metal	65x44x7; 23	Li-pol 600 mAh rechargeable battery BL-5x standard bat-	240	500	12	300, 600, 1200
	B42	Metal	94x13x13; 16	tery or AAA rechargeable battery	108	240	12	300, 600, 1200

And a lot more:

Recording modes

Circular and linear modes of recording. When the linear mode is on, the duration of the recording is limited by the recorder's memory capacity only. The circular recording mode allows to continue recording when there is no free memory left, in this case the recorder starts recording newer data over the oldest ones.

Data protection

When using password protection, only an authorized user has access to the recorder's data and settings. Every recording made with the audio recorder has a time and date of the beginning of the recording, giving it a digital watermark that allows to detect exactly in which recorder the recording was made and if the recorded file was modified.

Timer recording

Recorder can start recording automatically, for this the recorder has two timers: a once timer (the beginning and end of the recording are to be set) and a daily timer (the time and date of the beginning and end of the recording are to be set).

Voice Activation System

Voice Activation System (VAS) allows to save memory consumption (increasing a real recording's duration) and power consumption. When VAS is on, the recorder does not record pauses, but saves the pauses' durations so after the recordings are uploaded onto a computer the pauses can be restored as silence depending on previous settings.

Control button.

A LED (models A38, B42) provides the indication of the recorder's operating modes.

Connecting to a computer

Connect the recorder to a computer USB port using the shipped USB cable. The supplied software is available for Windows 98/2000/ XP/Vista and Windows 7, 32bit and 64bit. The software allows to save the recorded data as standard audio files, set the recorder's settings, and use the recorder as a flash drive to save files 2-8Gb, depending on the modification. The recorder's firmware can be updated using the recorder's USB interface.

Time marking

Time marking is a new function that allows to print the time of the beginning and the end of the recording on the recorded data. For instance, if you know that the data were recorded between 3 pm and 5 pm, you will find this recording easily. This function is especially useful when your recorder has a big memory capacity.

Optional Accessories

All models can work with the external microphones that improve the recording quality when the recorder is in an acoustically closed place, for instance, in a pocket. Microphones allow to increase low signals and decrease loud ones.



EDIC-mini PRO A38

Miniature digital audio recorder

A remarkable device with extra-long battery life, attractive metallic case with convenient OLED display. Headphones included in the package.



Opportunities and advantages

We present one of the brightest models ever, which is performed in durable and light metal case and has an OLED-indicator with large contrast range and wide angle of view. The device has removable rechargeable battery, which allows recording during up to 10 days, features new function: time marking and an opportunity to listen to the recordings with the headphones.

Build-in USB 2.0 interface allows high speed data exchange between the recorder and the computer. There are 8 user settings of recording parameters and an opportunity to delete recordings optionally. A38 provides high recording quality due to 16 bit audio codec.

Technical characteristics

- Dimensions: 65x44x7 mm;
- Weight: 23 g;
- Case: Metal;
- Power supply: removable Li-Ion rechargeable battery BL-5x, 600mA/h;
- Battery life in record mode: 240h;
- Battery life in VAS mode: 500h;
- Battery life in stand-by mode: 12 months;
- Built-in flash memory: 2Gb, 4Gb, 8Gb;
- Interface: USB 2.0;
- Audio recording format : Mono;
- Frequency band: 100-6000 Hz;
- Dynamic range: -72 dB;
- Sample rate: 4, 8, 16 kHz;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

in the mode: 2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec

Modification	Recording time, hour	Memory size, Gb
300 h	300	2
600 h	600	4
1200 h	1200	8

Modifications

- A38-300h
- A38-600h
- A38-1200h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Voice recorder



USB cable



Software CD



Instructions



Headphones

Optional accessories

- External Microphone + Remote Control Unit
- Impulse power supply unit with USB (5V, 1A)

EDIC-mini PRO B42

Miniature digital audio recorder

Attractive long metallic case available in five colours.
Power supply - battery or rechargeable battery.
Convenient OLED display.



Opportunities and advantages

Extending the new Pro series, our company offers a new professional recorder – this is Edic-mini Pro B42. This model is distinguished by its peculiar design as well as by OLED display and control buttons on the recorder's case. That makes the control process very easy and informative! The option to play the records from the device itself with the help of mono headphones (included into the package) is preserved.

The new originally shaped model is produced in metallic case, available in five colors. The device gets power supply from a standard battery or AAA rechargeable battery. OLED display offering high contrast ratio as well as control buttons on the case of the device considerably simplify the recorder's setting and provide easy menu navigation. The records can be played both from the device itself and with the help of headphones included into the package.

Technical characteristics

- Dimensions: 94x13x13 mm;
- Weight: 16 g;
- Case: Metal;
- Power supply: standard battery or AAA rechargeable battery;
- Battery life in record mode: 108h;
- Battery life in VAS mode: 240h;
- Battery life in stand-by mode: 12 months;
- Built-in flash memory: 2Gb, 4Gb, 8Gb;
- Interface: USB 2.0;
- Audio recording format : Mono;
- Frequency band: 100-6000 Hz;
- Dynamic range: -72 dB;
- Sample rate: 4, 8, 16;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

in the mode: 2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec

Modifications

- B42-300h
- B42-600h
- B42-1200h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Optional accessories

- External Microphone + Remote Control Unit for PRO and PLUS
- Impulse power supply unit with USB (5V, 1A)

Modification	Recording time, hour	Memory size, Gb
300 h	300	2
600 h	600	4
1200 h	1200	8




Miniature digital audio recorders

EDIC-mini LCD series

Voice recorders of the Edic-mini LCD series are professional devices intended for making high quality record of voice messages into the built-in flash memory. You can playback recorded messages using the headphones and save them into your PC as standard sound files. LCD voice recorders are of extremely small size and weight, have a long record duration (varies with the modification - up to 1200 hours) and autonomy operation (up to 350 hours), a wide dynamic range and a highly sensitive built-in microphone. Having no moving parts, the DVR is able to function within a wide range of temperatures, under strong vibration and dustiness. For the user's convenience while operating the recorder, there is a push-button manipulator (joystick) and a liquid-crystal display to indicate all the information needed, including a built-in clock / a real-time timer.

Having traditionally small size, the models of Edic-mini LCD series feature the following:

- Three-line LCD display;
- Joystick to control the recorder;
- Dynamic range, extended by 8 times (16 bit codec, and 18 bit when using an external microphone);
- Signal/noise ratio improved by 12 dB;
- Extended recording frequency band (100-6000 Hz), sample rate selection 4/8/16 kHz;
- Lower current consumption: half in recording mode, 5 times lower in standby mode and 20 times lower in VAS;
- Faster data exchange with the PC through the supplied USB adapter;
- Timer for automatic scheduled recording;
- Antialiasing program median filter available to improve recorded and played signal quality;
- Firmware upgraded by the user;
- New functional software for PC.

Model	Case	Dimensions, mm; Weight, g.	Power Supply	Battery Life			Rec. time, hours
				in record mode, h	with VAS, h	in stand-by mode, months	
 A10	Metal	51x50x13; 47	Li-pol 950 mAh rechargeable battery	350	500	24	300, 600, 1200, 2400
 B8	Plastic	59x38x9; 20	CR2450 battery	80	2500	24	300, 600, 1200, 2400
 xDm A67	Metal	51x50x13; 47	Li-pol 950 mAh rechargeable battery	168		24	2Gb card – up to 150 h

And a lot more:

The recorders with changeable Flash memory (mSD-A and xD) are very popular in the market. Their convenience is evident:

- option to vary the memory capacity depending on the card's size
- option to keep the information on the card without uploading it to a computer
- standard memory card can be used not only in the recorder.

Once a suitable card is chosen, it provides the recorder with necessary memory capacity. When the card is full, you can simply replace the card and continue recording.

Recording modes

Circular and linear modes of recording. When the linear mode is on, the duration of the recording is limited by the recorder's memory capacity only. The circular recording mode allows to continue recording when there is no free memory left, in this case the recorder starts recording newer data over the oldest ones.

Data protection

When using password protection, only an authorized user has access to the recorder's data and settings. Every recording made with the audio recorder has a time and date of the beginning of the recording, giving it a digital watermark that allows to detect exactly in which recorder the recording was made and if the record was modified

Timer recording

Recorder can start recording automatically, for this the recorder has two timers: a once timer (the beginning and end of the recording are to be set) and a daily timer (the time and date of the beginning and end of the recording are to be set).

Voice Activation System

Voice Activation System (VAS) allows to save memory consumption (increasing a real recording's duration) and power consumption. When VAS is on, the recorder does not record pauses, but saves the pauses' durations so after the recordings are uploaded onto a computer the pauses can be restored as silence depending on previous settings.

Connecting to a computer

Connect the recorder to a computer USB port using the shipped USB cable. The supplied software is available for Windows 98/2000/ XP/Vista and Windows 7, 32bit and 64bit. The software allows to save the recorded data as standart audio files, set the recorder's settings and use the recorder as a flash drive to save files 2-8Gb, depending on the modification. The recorder's firmware can be updated using the recorder's USB interface.

Time marking

Time marking is a new function that allows to print the time of the beginning and the end of the recording on the recorded data. For instance, if you know that the data were recorded between 3 pm and 5 pm, you will find this recording easily. This function is especially useful when your recorder has a big memory capacity.

Optional Accessories

Models of this series can work with external microphones that improve the recording quality. You can choose a suitable one from the wide range of accessories.



EDIC-mini A10

Miniature digital audio recorder



If your tasks require long continuous recording of voice messages, digital audio recorder A10 will undoubtedly suit you! With up to 2400 hours of built-in memory capacity, it can record up to 350 hours without charging at all!

Opportunities and advantages

This recorder is characterized by high recording quality as well as low power consumption and long battery life in record mode, which is especially important as the recorder is supplied with built-in memory capacity up to 2400 hours. Like in all recorders of the LCD series there is an option to listen to the records via the headphones. A10 has light aluminum case, LCD indicator with size 22,2 x 12,9 mm and easy joystick control.

Technical characteristics

- Dimensions: 51x50x13 mm;
- Weight: 47 g;
- Case: Metal;
- Power supply: 950 mAh Li-Pol rechargeable battery;
- Battery life in record mode: 350h;
- Battery life in stand-by mode: 24 months
- Built-in flash memory: 2 Gb, 4 Gb, 8 Gb, 16Gb;
- Interface: USB 1.1
- Audio recording format : Mono;
- Frequency band: 100-6000 Hz;
- Dynamic range: -72 dB;
- Sample rate: 4, 8, 16 kHz;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

*in the mode:
2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec*

Modification	Recording time, hour	Memory size, Gb
300 h	300	2
600 h	600	4
1200 h	1200	8
2400 h	2400	16

Modifications

A10-300h A10-1200h
A10-600h A10-2400h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Voice recorder



USB adapter



Software CD



Headphone



Instructions

Optional accessories

- Programmed external microphone with AGC for LCD
- Telephone adapter for LCD series

EDIC-mini B8

Miniature digital audio recorder



Bestseller of the series! This model is the most popular of all in LCD series - time-proved! B8 has a convenient shape and remarkable characteristics: very long recording duration and battery life + variety of accessories.

Opportunities and advantages

This recorder is characterized by high recording quality as well as low power consumption (battery life in record mode up to 250 hours), which is especially important as the recorder is supplied with built-in memory capacity up to 2400 hours. Like in all recorders of the LCD series there is an option to listen to the records via earphone. B8 has plastic case, battery power supply and easy joystick control.

Technical characteristics

- Dimensions: 59x38x9 mm;
- Weight: 20 g;
- Case: Plastic;
- Power supply: CR2450 battery;
- Battery life in record mode: 250h;
- Battery life in VAS mode: 2500h;
- Battery life in stand-by mode: 24 months;
- Built-in flash memory: 2 Gb, 4 Gb, 8 Gb, 16Gb;
- Interface: USB 1.1
- Audio recording format : Mono;
- Frequency band: 100-6000 Hz;
- Dynamic range: -72 dB;
- Sample rate: 4, 8, 16;
- Voice Activating System: YES;
- Timer recording: YES.

Recording duration

*in the mode:
2 bit ADPCM, and sampling rate 8 kHz, 16 K bit/sec*

Modification	Recording time, hour	Memory size, Gb
300 h	300	2
600 h	600	4
1200 h	1200	8
2400 h	2400	16

Modifications

B8-300h B8-1200h
B8-600h B8-2400h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Voice recorder



USB adapter



Software CD



2 batteries



Headphone



Instructions

Optional accessories

- External microphone with AGC and compressor for B8 LCD
- Programmed external microphone with AGC for LCD
- Remote control unit+ external microphone (+/- 6 dB) for B8 LCD
- Telephone adapter for LCD series

EDIC-mini LCD xDM A67

Miniature digital audio recorder

Edic-mini LCD xDM A67 model provides recording onto a replaceable xD memory card. The model is powered by a built-in rechargeable battery with up to 90 hours of autonomy operation.



Opportunities and advantages

The main distinctive feature of this model is the ability to record into a replaceable xD card, which is very convenient. Cards are extremely popular when using electronic devices of various kinds. When storing the recorder's memory you may not download the whole information onto the PC: you can simply replace the card and continue recording. The device is powered by a built-in Li-Pol rechargeable battery, providing up to 90 hours of autonomy operation.

To make your work with the recorder easier we have included "xD card reader" into the delivery set. The device makes it possible to upload the recordings from xD cards onto the PC, as well as to exchange files of any standards between them. The reader supports USB2.0 protocol, providing the maximum of exchange speed with the PC (up to 5,5 Mb/s).

The recorder is also remarkable for its solid light metallic case, which defends the device against electromagnetic interference.

Modification

Audio recorder with changeable xD card.
Maximum record duration depends on the xD flash card capacity, maximum – up to 2 Gb.

Technical characteristics

- Dimensions: 51 X 50 X 13 mm
- Weight: 47 g
- Case: Metal
- Power supply: Li-Pol rechargeable battery
- Battery life in record mode: up to 168 hours
- Battery life in stand-by mode: up to 2 years
- Interface: USB 1.1, USB 2.0 (via reader)
- Audio recording format: Mono
- Frequency band: 100 — 6000 Hz
- Dynamic range: -72 dB
- Sample rate: 4, 8, 16
- Voice Activating System: YES
- Timer recording: YES

Delivery set



Voice recorder



USB cable



Software CD



Instructions



xD Reader



xD 2 Gb memory card



Headphone

Optional accessories

- Programmed external microphone with AGC for LCD
- Telephone adapter for DVR Edic-mini LCD

Miniature digital audio recorders

Edic-mini Ray and Daily series



Recorders of the Edic-mini Daily and Ray series are professional devices intended for making high quality record of voice messages into a built-in flash memory. The recordings can be further uploaded onto the PC or played back with headphones.

Voice recorders of Daily and Ray series have a long record duration (up to 1200 hours) and high autonomy due to low power consumption (up to 300 hours).

High-contrast OLED display shows important information: free memory capacity (in hours at current compression mode), day of the week/date followed by the temperature inside the case and the battery charge level.

Advantages of Ray and Daily series

- Solid metal case of the device is reliable and easy to hold
- Bright OLED display which is highly visible even in darkness
- High autonomy of the recorder due to low power consumption (battery life up to 300 hours)
- The option to record while charging
- High quality of audio recording (16-bit audio codec)
- Built-in Automatic Gain Control (AGC) system with the opportunity to adjust the record mode to the environmental conditions
- High speed of data exchange with PC using USB SPI interface
- The recorders are equipped with self-teaching guide of English words

	Model	Case	Dimensions, mm; Weight, g	Power supply	Battery life			Rec. time, hours
					in record mode, h	In VAS mode	in stand-by mode, months	
	A36	Metal	98.5x35x8; 40	Li-Pol 520 mAh rechargeable battery	300	12 days (As in profile mode only)	36	300, 1200
	A53	Metal	80x35x8; 35	Li-Pol 520 mAh rechargeable battery	300	500 hours	36	300, 1200

And a lot more:

Software

The software includes RecManager program and inbuilt firmware of the recorder. RecManager operates under Windows XP(SP3)/Windows Vista/Windows 7 operating systems enables the user to save recorded messages as sound files in wav format, as well as to program recorder's parameters.

Connecting to a computer

When connecting to the PC carefully observe the consistency: first connect USB-SPI to USB port, and then connect the adapter to the Recorder. The Recorder switches automatically to charging mode. Flashing LED states that the charging is in progress. To connect the Recorder to the PC and to work with the software see operational manual for RecManager.

Voice Activation System

Voice Activation System (VAS) can significantly (up to 100 times) reduce both memory consumption and energy consumption from the power source. The principle of the VAS is as follows: after the user starts recording, the recorder starts tracing signal from the microphone. If the signal is less than the one specified in settings, it is not the sound from a microphone that is stored in memory, but only the time value during which the threshold is not exceeded.

Timer recording

Recording can start automatically, for this the recorder has two timers: a once timer (the beginning and end of the recording are to be set) and a daily timer (the time and date of the beginning and end of the recording are to be set).

Circular Recording

The option of circular recording enables it not to stop recording when the Recorder runs out of memory. After there is no more free memory the Recorder begins to record new data over old ones. Thus, the memory will always contain the most recent records that are no longer written off at the time of writing. The user can devote to circular recording the whole or only a part of the recorder's memory. The volume of the memory specified determines the duration of the resulting circular record.

English Dictionary

The recorders of Daily and Ray series are equipped with self-teaching guide of English words. The word base of the guide is uploaded from the PC by a special utility.

Data Protection

To protect the Recorder's information there is the option to set password forbidding access to the Recorder's contents and settings without entering the password. Each record performed by the Recorder has a mark of time and date of start time supplied with "digital signature" to identify the model of the Recorder to have performed the recording and the attempts to modify it.



EDIC-mini Daily A53

Miniature digital audio recorder

The multifunctional model is in solid metallic case which is easy to hold due to which the recorder can be controlled with one touch only.



Opportunities and advantages

To set Edic-mini Daily A53 you needn't a PC. The built-in program enables it to adjust record modes which are programmed in 8 profiles of the Recorder with the option to change their names to the recognizable ones (Home, Outside, Club) as well as the parameters of the recorder itself (display brightness, clock face type etc). The records can be played back with headphones.

The high-contrast OLED display reads information on current time, free memory capacity in hours to record under current settings, temperature inside the case, current date and day and battery charging level. Edic-mini Daily A53 has 6 types of clock face.

Technical Characteristics

- Dimensions: 80 X 35 X 8 mm
- Weight: 30 g
- Case: Metal
- Power supply: rechargeable Li-Pol battery
- Battery life in record mode: up to 300 hours
- Battery life in VAS mode: up to 12 days
- Battery life in stand-by mode: up to 3 years
- Built-in flash memory: 2 Gb, 8 Gb
- Interface: USB-SPI (micro-USB connector)
- Audio recording format: Mono
- Frequency band: 100 — 10000 Hz
- Dynamic range: -80 dB
- Sample rate: 4, 8, 13.3, 20, 40
- Voice Activating System: YES
- Timer recording: YES

Modifications

A53-300h
A53-1200h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Recorder



USB-SPI adapter



Software CD



Instructions



Headphones

Recording duration

in the mode: 2 bit ADPCM and sampling rate 8kHz, 16 Kbit/sec

Modification	Recording time, hour	Memory size, Gb
300h	300	2
1200h	1200	8

EDIC-mini Ray A36

Miniature digital audio recorder

Edic-mini Ray A36 is the world's first recorder featuring tracking direction pattern.



Opportunities and advantages

Edic-mini Ray A36 is equipped with 8 microphones to generate a direction pattern. These microphones form so-called phased array (similar to the one used in radar). The application of 8 microphones also reduces the inherent noise by 2.5 times.

The device provides several record modes.

The recorded information can be played with the recorder (via built-in speaker or using standard stereo headphones) or downloaded onto the PC using RecManager program. When playing record on the recorder it is easy to control playback using buttons and, if necessary, delete the record without uploading it onto the PC.

Technical Characteristics

- Dimensions: 98 X 35 X 9 mm
- Weight: 40 g
- Case: Metal
- Power supply: rechargeable Li-Pol battery
- Battery life in record mode: up to 300 hours
- Battery life in VAS mode: up to 12 days
- Battery life in stand-by mode: up to 3 years
- Built-in flash memory: 2 Gb, 8 Gb
- Interface: USB-SPI
- Audio recording format: Mono, Stereo
- Frequency band: 100 — 10000 Hz
- Dynamic range: -72 dB
- Voice Activating System: YES
- Timer recording: YES

Modifications

A36-300h
A36-1200h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Recorder



USB-SPI adapter



Software CD



Instructions



Headphones

Recording duration

in the mode: 2 bit ADPCM and sampling rate 8 kHz, 16 Kbit/sec

Modification	Recording time, hour	Memory size, Gb
300h	300	2
1200h	1200	8

Miniature digital audio recorders

Edic-mini LED series

Series Characteristics

Edic-mini Led is the series of professional recorders, remarkable for high recording quality and ability to charge and record simultaneously.

The system of special markers helps to use the recordings made in court, they are completely acceptable for linguistic and phonoscopic expertise.

Distinctive features of the series:

- LED time indication
- Real time clock
- Information protection system
- Built-in microphone sensitivity: up to 10 m
- Digitizing by 16-bit codec, which reduce distortion of sound
- Built-in AGC system, which helps to regulate recording information volume
- Built-in memory from 300 to 1200 hours
- Models with rechargeable batteries are able to record and charge simultaneously
- High speed of data exchange with PC thanks to USB STI interface
- Signal-to-noise ratio: -80 dB
- Wide frequency band: up to 40 kHz

Software required for settings and conversion of records is located on the CD supplied with the recorder. The converted wav-files can be played in any standard media player. You can upgrade built-in program (firmware) of the recorder via USB interface. The recorders can be used as a flash media to store and transfer data of any standards.

Supplied Software makes it possible to:

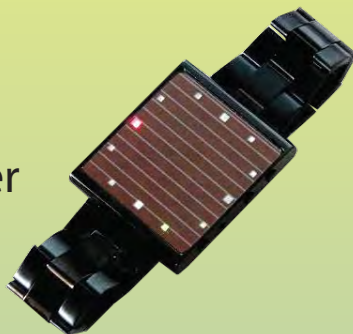
- Save the recorded messages on the PC as standard sound files;
- Restore compressed pauses when uploading files onto the drive;
- Set the Recorder's parameters;
- Apply password protection of the access to the Recorder's settings and information;
- Update software.

Model	Case	Dimensions, mm; Weight, g	Power supply	Battery life			Rec. time, hours
				in record mode, h	In VAS mode	in stand-by mode, months	
S51	Metal	42x32x7; 20	Li-Pol rechargeable battery, solar cell	Up to 70	Up to 5	Up to 12	300, 600

EDIC-mini LED S51

Miniature digital audio recorder

Professional digital recorder Edic-mini LED S51 is ideal for everyday life- it is always at hand starting in an instant when you need it.



Opportunities and advantages

Digital audio recorder Edic-mini LED S51 is intended for professional recording, it is easy to operate the recorder: you can play the records not only from the PC, but also from the device itself. Edic-mini LED S51 is equipped with the most comfortable indication of the Recorder's operation and condition executed in the form of 12 LEDs in different colours.

Operation and navigation through records as well as setting of Edic-mini LED S51 – all these are carried out with the help of three buttons suitably located on the Recorder's front edge.

Technical Characteristics

- Dimensions: 42X 32X 7 mm
- Weight: 20 g (without wrist band)
- Case: Metal
- Power supply: Li-Pol rechargeable battery, solar cell
- Battery life in record mode: up to 70 hours
- Battery life in VAS mode: up to 5 days
- Battery life in stand-by mode: up to 1 year
- Interface: USB-SPI
- Audio recording format: Mono
- Frequency band: 100 — 10000 Hz
- Dynamic range: -80 dB
- Voice Activating System: YES
- Timer recording: YES

Modifications

S51-300h
S51-600h

Last digits in the models' names show the maximum recording duration (sampling rate 8 kHz, 2 bit ADPCM) in hours.

Delivery set



Recorder



USB-SPI adapter



Software CD



Instructions



Headphones

Recording duration

in the mode: 2 bit ADPCM and sampling rate 8kHz

Modification	Recording time, hour	Memory size, Gb
300h	300	2
600h	600	4

Edic-mini Tiny E60

Miniature audio recording module (mounted in a case)



Opportunities and advantages

New modifications! This model has been modernized and now has a case, which significantly widens the application sphere of the device. You are free to choose if you wish to use the model as an audio recorder or as an audio recording module without a case - if needed, simply extract the module from the case and mount it wherever needed.

All modules are based on hardware of audio recorders Edic-mini Tiny series. They are intended for recording high quality mono audio signal onto the built-in flash memory. Recording time depends on the memory capacity. The module itself was designed in such a way that it can be implemented into various devices for them to function as voice recorders.

The model uses external power source, but has very low power consumption that provides very long battery life for any autonomous power source. The delivery set contains a cable for connecting an external power source.

The module has built-in USB controller and is connected to PC via USB cable. Hardware and software parameters of the module are absolutely the same as for Edic-mini Tiny audio recorders.

Audio records are saved in WAV format. Supplied software provides the possibility to change the recording settings and use the module as a flash drive.

The module itself without a case has miniature size and can be mounted to various kinds of devices according to the needs of the customers.

Technical characteristics

- Dimensions: 45x31x10 mm;
- Weight: 20 g;
- Case: Plastic;
- Power supply: may differ;
- Battery life in record mode: depends on the power source;
- Built-in flash memory: 2Gb, 4Gb, 8Gb;
- Interface: USB 1.1;
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -64 dB;
- Sample rate: 5.5, 8, 11, 16, 22;
- Voice Activating System: YES;
- Timer recording: YES.

Recording time depending on the modification

Index	Recording time	Built-in flash memory size
17920 (300h)	17920 min	2 Gb
35840 (600h)	35840 min	4 Gb
71680 (1200h)	71680 min	8 Gb

sample rate 8 kHz, 2-bit ADPCM

Modifications

- Edic-mini Tiny E60 - 300h
- Edic-mini Tiny E60 - 600h
- Edic-mini Tiny E60 - 1200h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Module



USB cable



Software CD



Instructions



Cable for connecting
an external power source

Optional accessories

- External microphone with compressor (+/- 6 dB) for EMM Tiny Stereo.

Current consumption

- In recording mode at 3V voltage: 2 mA,
- In VAS mode: 200 microA,
- In stand-by mode: 50 microA.

Supply voltage: 1-1.5 V or 2.7-3.3 V.

Edic-mini Tiny S3 E59

Miniature audio recording module (mounted in a case)



Opportunities and advantages

New modifications! This model has been modernized and now has a case, which significantly widens the application sphere of the device. You are free to use the model either as an audio recorder or as a audio recording module without a case - if needed, simply extract the module from the case and mount it wherever needed.

All modules of are based on hardware of audio recorder Edic-mini Tiny. They are intended for recording high quality mono audio signal from the one or two external microphones on the built-in flash memory. Recording time depends on the memory capacity. The module was designed in such a way that it can be implemented into various devices for them to function as voice recorders.

The model uses external power source but has very low power consumption that provides very long battery life for any autonomous power source. The delivery set contains a cable for connecting an external power source.

The module has built-in USB controller and is connected to PC via USB cable.

Hardware and software parameters of the module are absolutely the same as for DVR Edic-mini Tiny.

Audio records are saved in WAV format. Supplied software provides the possibility to change the recording settings and use the module as a flash drive. E59 supports two USB protocols – 1.1 and 2.0.

The module itself without a case has bigger size, compared to other modules, due to having larger memory capacity, which provides recording time up to 3600 hours. E59 can be mounted to various kinds of devices according to the needs of the customers.

Technical characteristics

- Dimensions: 58x43x10 mm;
- Weight: 25 g;
- Case: Plastic;
- Power supply: may differ;
- Battery life in record mode: depends on the power source;
- Built-in flash memory: 16Gb, 24 Gb;
- Interface: USB 1.1, USB 2.0;
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -64 dB;
- Sample rate: 5.5, 8, 11, 16, 22;
- Voice Activating System: YES;
- Timer recording: YES.

Recording time depending on the modification

Index	Recording time	Built-in flash memory size
143360 (2400h)	143360 min	16 Gb
216000 (3600h)	216000 min	24 Gb

sample rate 8 kHz, 2-bit ADPCM

Modifications

EMM Tiny S3 E59 - 2400h

EMM Tiny S3 E59 - 3600h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Module



USB cable



Software CD



Instructions



Cable for connecting an external power source

Current consumption

- In recording mode at 3V voltage: 2 mA,
- In VAS mode: 200 mA,
- In stand-by mode: 50 mA.

Supply voltage: 1-1.5 V or 2.7-3.3 V.

Edic-mini Tiny ST E61



Miniature audio recording module (mounted in a case)

Opportunities and advantages

New modifications! This model has been modernized and now has a case, which significantly widens the application sphere of the device. You are free to choose if you wish to use the model as an audio recorder or as an audio recording module without a case - if needed, simply extract the module from the case and mount it wherever needed.

All modules are based on hardware of audio recorder Edic-mini Tiny. They are intended for recording high quality mono audio signal on the built-in flash memory. Recording time depends on the memory capacity. The module was designed in such a way that it can be implemented into various devices for them to function as voice recorders.

The model uses external power source, but has very low power consumption that provides very long battery life for any autonomous power source. The delivery set contains a cable for connecting an external power source.

The module has built-in USB controller and is connected to PC via USB cable. Hardware and software parameters of the module are absolutely the same as for Edic-mini Tiny audio recorders. Audio records are saved in WAV format. Supplied software provides the possibility to change the recording settings and use the module as a flash drive.

Technical characteristics

- Dimensions: 50x31x10 mm;
- Weight: 20 g;
- Case: Plastic;
- Power supply: may differ;
- Battery life in record mode: depends on the power source;
- Built-in flash memory: 128 Mb;
- Interface: USB 1.1;
- Audio recording format : Mono;
- Frequency band: 100-10000 Hz;
- Dynamic range: -64 dB;
- Sample rate: 5.5, 8, 11, 16, 22;
- Voice Activating System: YES;
- Timer recording: YES.

Recording time depending on the modification

Index	Recording time	Built-in flash memory size
1120 (19h)	1120 min	128 Mb

sample rate 8 kHz, 2-bit ADPCM

Modifications

Edic-mini Tiny ST E61-19h

Last digits in the models' names show the maximum recording duration in hours (sampling rate 8 kHz, 2 bit ADPCM).

Delivery set



Module



USB cable



Software CD



Instructions



Cable for connecting
an external power source

Current consumption

- In recording mode at 3V voltage: 2 mA,
- In VAS mode: 200 - 350 microA,
- In stand-by mode: 50 microA.

Supply voltage: 1-1.5 V or 2.7-3.3 V.

mAVR H.264x4 TFT

Miniature Audio Video Recorder

The recorder provides the opportunity to insert up to 4 memory cards up to 32 Gb each, for a total of 128 Gb for both parallel and alternate recording.



Opportunities and advantages

Video recorder mAVR H.264x4 TFT is intended for professional recording of video and audio data either from an external source or from built-in video camera and microphone onto SD or SDHC flash memory cards to be further played back. The Recorder provides the opportunity to insert up to 4 memory cards for both parallel and alternate recording.

The main competitive advantages of are:

- Recorder can operate with four cards up to 32GB each, for a total of 128 GB recording!
- Parallel recording of the same video data onto 2 memory cards.
- The option of circular recording onto memory card (one or few).
- The recorder allows you to embed a picture in any text (e.g. car brand, your initials, place) and increase the value of records as evidence.
- Independent adjustment of bit rate for audio and video streams.

Among the main distinctions are:

- Recording of video signal either from an external source or from the built-in video camera (H.264) in AVC format, providing resolution of 640x480 for video camera or 720x576 for an external source
- Disposition of text onto video signal (date, time, GPS data, text line) – up to 2 lines with 24 symbols each depending on the resolution selected
- Option to set video signal parameters (brightness, contrast, saturation, colour)
- Manual or automatic adjustment of the amplification of audio channels
- Data recording is performed directly into MP4 format without any further converting
- Power supply either from an external source or by built-in Li-ion rechargeable battery. When powered from an external source rechargeable battery is being charged
- Setting of parameters through menu or with the help of “Manager” program

Additional options

- Flicker suppression to eliminate the affect of day electric lamps etc (at the frequency 50 and 60 Hz)
- Starting Recording by: “Rec” Switch on the sensor screen; Timer; Control input signal; Built-in motion detector; VAS (Voice Activating System); Signal from Analog-to-digital adapter; Prehistory recording
- Recording of audio signal either from an external sound source (MF input) or from built-in microphones in AAC format (mono or stereo)
- Option to work with GPS-receiver



Delivery set

- Audio and Video Recorder mAVR H.264x4
- Network adapter with the cable to charge the Recorder
- 4 Gb SD card
- Software CD with Instructions

Optional accessories

- Video input cable with remote control for mAVR H.264 S/TFT
- GPS-receiver for mAVR H.264 – to define the location of the video recorder during the recording process
- Car adapter for mAVR H.264x4 – to charge the mAVR recorder right in your car via cigarette lighter
- Analog-to-Digital Adapter for mAVR H.264 – widens security opportunities of the recorder: it allows to connect analog and digital detectors, that will activate the recording.
- External microphones for mAVR H.264 – for sound stereo recording

Technical characteristics

Dimensions		82 x 69 x 18.5 mm
Weight		145 g
Video	Compression of video signal:	AVC (h.264)
	Bit rate of video signal:	up to 1024 kb/sec up to 2048 kb/sec – only when duplication on the parallel card is off)
	Frame rate of recorded video input	up to 30 frames per second
Video input	Supported formats	NTSC, PAL, SECAM
	Maximum resolution	720 x 480 (NTSC) 720 x 576 (PAL, SECAM)
Audio	Amplification control range	60 dB
	Dynamic range	92 dB
	Frequency range	80–20 000 Hz
	Capacity	16 bit
	SD memory card capacity	up to 2 GB
	SDHC memory card capacity	4-32 GB
Additional	Rechargeable battery	Li-Ion (2200 mA/h)
	Battery life in record mode	8 hours
	Rechargeable battery charging time	5 hours
	External video camera current	150 mA
	Operating temperature range	0...+40° C (32...+104°F)
	Warranty period	1 year

RAKSA iDet

Selective RF Detector

We are happy to present you a unique device which can be used to detect and locate in the near field a wide variety of radio transmitters used for secret access to information.



Opportunities and advantages

RAKSA iDet Selective RF Detector is remarkable for its small dimensions (77x43x18). Scanning and analyzing cycle period is 1.0-1.5 sec. RAKSA iDet can operate within monitoring, sweep, search, difference search modes and monitoring of digital signals. Soundless alarm indication (vibration mode) and absence of external antenna helps the device to attract little attention.

Application

RAKSA field detector is designed to detect near-field location of radio transmitting equipment used for secret retrieval of audio and video information. Among them:

- Cell phones of GSM 850/900E/1800/1900, UMTS 850/900/1800/1900/2100, CDMA 450 (A-H)/ 800/1900 standards
- Cordless DECT phones
- Bluetooth and Wi-Fi devices
- Wireless video cameras
- Radio transmitters with analog modulation (AM, FM, PM)
- Radio transmitters with digital modulation and continuous carrier (FSK, PSK, etc.)
- Radio transmitters with wideband modulation up to 10MHz bandwidth
- Wireless microphones with analog, digital and broadband modulation

Technical characteristics:

Frequency band:	40-3800 MHz	Running time in guard mode:	4-12 h
Typical sensitivity:	70 mV/m	Running time in other modes:	3 h
Dynamic range:	50 dB	OLED display:	128x64
Bandwidth:	10 MHz	Dimensions:	77x43x18 mm
Period of full scanning cycle:	≤1.5 s	Weight:	35 g



RAKSA iDet Selective RF Detector is a superheterodyne receiver with low IF and frequency synthesizer. It provides continuous scanning of frequency range and analysis of spectrogram peaks. The standard digital signals are identified by their amplitude-time characteristic.

Scanning and analyzing cycle period is 1.0-1.5 sec. Filtration of short-term noise requires at least two scanning cycles, so the signal is detected in 2-3 seconds.

Any continuous radio signal with the amplitude modulation index ≤ 0.5 without frequency hopping is treated as an analog signal. Such are the analog signals of AM, FM, PM modulation and digital signals of FSK, PSK and the like modulations.

Special features:

- Signal detection against the background interference;
- High speed of scanning and analyzing;
- Detection of digital, analog and wideband signals;
- Adaptation to the background noise in Monitoring Mode
- Difference search mode;
- Audio monitoring through the built-in speaker;
- Signal frequency and level measurement;
- Alarm events log;
- Silent alert signal (vibration mode)
- No need for external antenna;
- Interface languages: English, German, Spanish, French, Italian, Russian.



Lornets Non-Linear Junction Detectors

The non-linear junction detectors Lornet are used for search and location of electronic devices both in active and switch-o state.

LORNET Compact locator of classical type

Allows to detect various kinds of electronic devices containing semiconductor elements, such as eavesdropping devices, microphone amplifiers, audio-recording devices, remote control devices etc., both in switched-on and switched-off modes.

Lornet simultaneously displays the 2d and 3d harmonics levels at its LED panel. Besides, the 2d and 3d harmonics levels can be estimated in turn aurally by click repetition rate reproduced through a built-in loudspeaker or wireless earphones.



- No analogues regarding size and weight.
- Easy-to-use

- Type of a probing signal: pulse, CW
- Power of pulse /CW signal: 15/1 W
- Sensitivity (at signal-to-noise ratio of 10): not worse, than -120 dBm
- Automatic and manual modes of power change of the probing signal
- It is possible to operate in hard-to-reach places and under conditions of limited space (antenna thickness does not exceed 18 mm).

LORNET-24 Compact non-linear junction detector of examination type

Lornet-24 is often used while conducting strategic and search work afield, in rooms, transport. An automatic system of frequency selection is integrated into the device and it can tune away from narrowband interference automatically (by a criterion of minimum noise of the receiving channel of the 2nd harmonic).

Lornet-24 simultaneously displays the 2d and 3d harmonics levels at its LED panel. Besides, the 2d and 3d harmonics levels can be estimated in turn aurally by the click repetition rate reproduced through a built-in loudspeaker or wireless earphones.

This device is very effective when it comes to identify a suspicious object (e.g. in the luggage), and compared to radio-metal locator, allows to detect even an unauthorized unpackaged audio-recorder in protected premises.

Detector of the returned RF signal envelope enables tapping radio microphones and using the acoustic feedback mode which facilitates search work.



- Unique due to its frequency, weight and dimensions
- High detection potential

- Type of a probing signal: pulse, CW
- Power of pulse /CW signal: 10/1 W
- Sensitivity (at signal-to-noise ratio of 10): not worse, than -108 dBm
- Automatic and manual modes of power change of the probing signal
- Low electromagnetic effect on a person
- It is possible to operate in hard-to-reach places and under conditions of limited space (antenna thickness does not exceed 18 mm).

LORNET-36 Superhigh frequency non-linear junction detector

Lornet-36 is an indispensable tool for quick and reliable location of unauthorized electronic devices during search operations in premises with a high density of electronic equipment.

The model was designed for detecting devices which contain semiconductor elements (diodes, transistors, circuits). Lornet36 detector operation is based on the property of semiconductor components to generate a response at the 2d and 3d harmonics when radiated by an RF probing signal.

The detectors analyze the 2d and 3d harmonics response of the radiated objects, which enables a quick and reliable identification of electronic devices and natural oxide semiconductors.



- This model defines location of the SIM card of the cell phone at distance 1 meter.

- Type of probing signal: pulse
- Pulse signal ratio: 160 pulses per second
- Probing signal frequency range: 3580-3620 MHz
- Dynamic range: > 40 dB
- Time of continuous operation at the maximum probing power: 3,0 hours
- Fully equipped weight: 1,4 kg

LORNET 0836

Double probing frequency non-linear junction detector

The unique device combines two detectors at different frequencies in one case.

Operating principle

Lornet 0836 is an indispensable tool for quick and reliable detection of devices containing semiconductor components. It can be used for counter-surveillance search works in premises (covert transmitters identification), as well as for location of explosive devices outdoor. The DPF (double probing frequency) technology with a patent pending antenna system places it beyond comparison.



Main competitive advantages:

- **The first nonlinear detector** which combines the advantages of a **microwave detector** and **the detector of traditional range**.
- **Convenient display** and control elements, **easy to operate, light weight**.
- Unique opportunity to **detect semiconductor elements hidden by different materials** (detection through cracks, unearthed screens, reflections from smooth surfaces, **SIM card is detected at the distance of 60 cm**, etc.).
- An embedded parabolic antenna with high gain (20dB at 3600MHz) enables **highly precise detection** of semiconductor components **from a long distance (up to 10m)**.
- **Laser pinpointing** for a space selective object localization.
- **Significantly reduced electromagnetic impact on the operator** because of high duty ratio of the probing impulses and significant reduction of undesirable radiation towards the operator.

Technical characteristics:

Probing signal frequency	789.5-791.5 MHz; 3581.5-3607.5 MHz
Probing signal type	pulse
Duty cycle	0,3% and 5%
Transmitters peak power in each frequency range	40 W/20 W
Receivers sensitivity	<-110 dBm
Operation time with changeable battery (duty cycle 0,3% and 5%)	>3.0/1.5 h



Frequency and Power Meters

The devices of this series are designed for detection and localization of radio emitters, as well as for a measurement of radio transmitters' working frequencies.

MFP-8000

The device can detect any sources of radio emission within the frequency range from 100 kHz up to 8GHz featuring sensitivity of -53dBm with a typical S/N ratio of 5dB. That means that a transmitting device with an output power of +7dBm (5mW) coupled to a matched 1/4 wavelength antenna can be easily detected from the distance of up to 8m.



MFP-8000 provides the following functions:

- It can determine frequency of the input signal within a frequency range from 100 kHz to 8 GHz.
- It can measure power of the input signal within a level range from -50dBm to +30dBm.
- It can identify in the input signal characteristic features of the data transfer protocol for different communication standards (GSM 900/1800/1900, DECT), e.g. for GSM it can determine "SMS" and "Talk" operating modes, as well as the frequency channel.
- It can automatically tune radio receivers and spectrum analyzers to the measured signal frequency via a built-in interface (option, ordered separately).
- It can use its built-in memory, clock and calendar functions to protocol and store measurement results.
- It can be integrated into automated systems of radio monitoring via a serial interface.
- It can utilize acoustic feedback mode during search work.
- It supports surveillance mode when it responds to signals with a power level exceeding a specified threshold.

MFP-8000 has the following features:

- 30dB input attenuator adjusted in 10dB steps.
- Count time selection.
- Input frequency range selection.
- User level correction setting.
- Battery charge/discharge control.
- Real-time clock and calendar.
- Built-in light and acoustic indication.
- RS-232 interface.

Series Cellular Phones Jammers

"Baton" cellular jammer is the only representative of the series and is designed to prevent cellular communication in designated areas.

Based on advanced cellular jamming technology, the jammer transmits RF signal,

which blocks the communication between the mobile phone and the cellular base stations, thus paralyzing the operation of cell phones.

This neutralizes the threat of being tapped with the help of cell phones, prevents illicit telephone conversations and provides a silent work environment in a given area.

Pocket Jammer Baton

Pocket Jammer Baton provides an easy to operate solution against the universal threat of using cellular phones as bomb's triggers.

The product is used to block unauthorized work of cellular phones operating in the frequency ranges: GSM 900MHz, 1800 MHz, 1900 MHz, UMTS 2100 MHz.

A unique design enables to use the product almost under any application conditions: during confidential conversation in premises, cars, planes, etc.

The product is extremely easy-to-use.



Main characteristics:

- Dimensions: length 320 mm, diameter 45 mm
- Weight: 330 g
- Blocking can be implemented both simultaneously and selectively in the above ranges providing flexible control and wider usage.
- A unique design enables to use the product almost under any application conditions: during confidential conversation in premises, cars, planes, etc.
- Independent power control in each of 4 bands (3 dB in a step);
- Easy to use.

Voron

Video Camera Detector

The Voron device is designed for quick detection of hidden micro video cameras, including those with pinhole lenses.



Opportunities and advantages

Voron detector has wide detection distance: distance of concealed video cameras with pinhole lenses (lens diameter is 1 mm) can be from 1 to 50 m depending on operating conditions. The device is safe for operator, as Voron employs LED illumination of targets. Also the detector has excellent optical characteristics: high magnification, wide field of view and exceptional quality of image, and compact design. Voron is very simple to operate and does not require special skills.

Application

Principle of detection is based on effect of light reflection or "return flare". Thus, when a concealed target is detected, there is a bright red spot (reflection from video camera lens) in the Voron field of vision.

Operation in optical frequency range allows detecting any optical devices, not depending on their mode (on/off) and type of transmission (radio or cable). Radio interference, electromagnetic shielding, masking gauze and lens hoods do not prevent from detection of video cameras.

Technical characteristics:

Dimensions, mm	50 x 68 x 140
Weight, g	330
Angle of view, °	12
Linear field of view at distance of 10 m, m	2,1
Diopter correction range	±4
Diameter of exit pupil, mm	4,5
Voltage, V	1,5
Magnification	5X
Distance of 1 mm pinhole lens detection, m	1 x 50
Operation on one battery, h	6

Design

The VORON is a functionally complete and service free device. The milled metal casing provides mechanical reliability and electromagnetic shielding. The device casing made of lightweight aluminum alloy, has a hand strap and a soft rubber eye shade.



Operating principle

Operation principle of the device is based on “reverse glint” effect, when the ray from the light source, which is situated on the video camera optical axis, is reflected by the lens and video camera photo detector like by the mirror and directed back to the light source. So in case of finding hidden object in sight of the device bright red spot is observed.

The device operates in two modes:

- Active mode, with lighting of object by red LEDs in the near field
- Passive mode, without lighting

The optimal distance from the inspected surface to the operator is around 3 – 6 m.

Engineering solutions of the device (Roof prism system and multilayer blooming) enable to develop compact device with excellent optical features including high magnification, wide visual field and high image quality, which quicken scanning and lower object missing.

High-performance switching power supply provides long operation time from “AA” element with 1,5V voltage.

Tral Patrol 2

Online video surveillance system

Automatic tracking system Tral Patrol 2 – is a feature-rich device intended for online video surveillance at the square of 1 hectare.



Operating principle

Tral Patrol 2 automatic tracking system automatically focuses on the object of motion multiply zooming it, providing personal recognition within the radius of 100 m.

To focus to a moving object the system uses stationary cameras, from which the video signal is analyzed and the motion fields are estimated. The system ranges the moving objects in order of importance according to the priority observation areas set by the user. The RTZ camera is focused to the object in the highest priority area. Although the detector tracks all moving objects, the dome can track only one or a few in turns, dividing the observation time proportionally.

Application

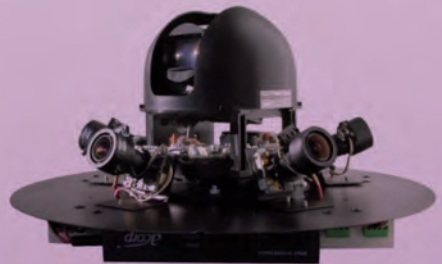
The system will operate most effectively at closed facilities where individual entries are needed to be tracked.

Main competitive advantages:

- Controlled camera focuses automatically on the moving object multiply zooming it and ensures recognition of a man's face within the radius of 100 m.
- The device settings allow specifying priority zones
- The tracking system provides area surveillance at the square of 1 hectare (the detailing is similar to the standard camera picture from 3-5 meters)
- The device has two modes: Day and Night, depending on the level of illumination
- Tral Patrol 2 requires minimum number of settings when performing self-supporting installation
- The detector can be supplied either separately or as a constituent part of the system
- The system provides 24/7 work without operator control

Modifications:

Tral Patrol 2 design styles 4-1, Tral Patrol 2 design styles 3-1



Tral Patrol 2 System is a dome temperature-proof housing of street design including high-speed dome camera, 4 review cameras, 3 detectors Tral Patrol, 1 Tral Patrol Master, video server Tral 5, network concentrator and power supply block. All the elements represent a whole optic and mechanical node which is fully ready to be installed. It requires no setting or overlapping of fields of vision between dome and review cameras. The user needs only to mark the priority observation areas, specify the desired standstill position and the main installation parameters.

Technical characteristics:

	Tral Patrol 2 design styles 4-1	Tral Patrol 2 design styles 3-1
Look-up angle	360°	210°
Number of built-in cameras		
Review	4	3
Operated	1	1
Man identification range	60 m	60 m
Video output interfaces from built-in operated camera	Analogue, television resolution Digital, Fast Ethernet 10/100 Base-T	

Compressed video parameters:

- Compression: H.264 or MPEG4
- Frames per second: 25
- Resolution: 704x576 (deinterlacing)
- Switch colour/b&w: automatic
- Video stream saving: SDHC-card, USB-Flash/HDD, external NAS
- Software: MultiVision 2

Power consumption

- Voltage: 12 V
- Power consumption (heating not included): less than 18 W
- Power consumption with heating included: less than 36 W

Dimensions

- Diameter: 226 mm
- Height with attachment fitting
- Operating temperature range: -30°C...50°C
- Weight: 6,7 kg
- Guarantee: 1 year of 24-hour operation



