

# Digital voice recorder B70 of EM Tiny+ series

*Operation manual*

## Overlook

Recorders of the Edic-mini Tiny+ series are professional devices intended for making high quality record of voice messages into built-in flash memory. The recordings can be further uploaded onto the PC. These Recorders feature really unique characteristics, among which the tiniest size, maximum autonomy, and high acoustic sensitivity.

The recorders have proved themselves as personal means of recording audio information providing protection against fake records as well as unauthorized access to records. The recorders are meant for domestic use by a mass consumer. To operate the Recorder, use EMplus program, which is in the internal memory of the Recorder. To process records, use the SoundProcessor program, which is available for download from our website: [www.ts-market.com](http://www.ts-market.com). Both programs operate under Windows XP (SP2, SP3), Vista, Windows 7, 8.

## Main technical characteristics

Model	Power supply	Dimensions, mm	Weight, g	Autonomy, hours*	S / N ratio, dB	Sensitivity, m	Sampling rate, kHz	Frequency band, kHz
Tiny+ B70	LR43 battery	37x15x7	7	10	65	12	8; 11;16; 22	0,1-10

\* - it should be noted that the parameter of autonomy is specified for Record Mode 8KHz/8 bit; in case of higher sampling rate or bitrate, the autonomy value is lower (for 16 KHz/16 bit approximately by two times for the recorders with rechargeable batteries and by four times for the recorders with batteries). It is recommended not to use record mode 22 kHz/16 bit for the recorders with batteries. Autonomy value also considerably depends on the battery's manufacturer as well as its recency.

- Battery life in the mode 8 kHz/uLaw - 300 hours, 600 hours, 1200 hours or 2400 hours depends on model modification: 300HQ, 600HQ, 1200HQ, 2400HQ. Interface to connect to the PC: USB 2.0.

- Allowable operation-and-storage temperature .....0+50°C.

- Operating lifetime.....3 years. (The manufacturer reserves the right to refuse in repair after the expiration of recorder operation life).

## Main Specifications

1. VAS (Voice Activation System),
2. Timers to enable recording at the preset time.
3. Linear and circular recording
4. Built-in clock, calendar, attachment of records to time and date, password protection of the records made.
5. Built-in markers to provide records' authenticity
6. Control and indication: Switch and LED.

## Getting Started

Install the battery into the corresponding compartment. Shift the Switch to ON position and after 2 seconds to the OFF position. The LED flashes three times, and will be on for 40 seconds. When the LED goes off, the Recorder is ready to start operating.

**Attention!** When installing battery, always observe polarity (see marking on the Recorder's case). Inappropriate installing of battery may lead to failure of the Recorder system, which is not covered by the Warranty. Do not store the Recorder for a long time with a battery inserted, as the battery may leak and lead to Recorder failure, and that is not covered by the Warranty.

**Important!** Use only USB adapter from the delivery set. Using any adapters of other manufacturers may lead to the Recorder's failure.

## Recording

To start recording, shift the Switch to ON position. LED flashes five times, and the Recorder starts recording. During recording, the LED is flashing by two series of flashes, the number of flashes indicating:

Number of flashes	Battery charge level (1st series)	Free memory capacity (2nd series)
1	80 - 100%	75 - 100%
2	20 - 80%	50 - 75%
3	2 - 20%	25 - 50%
4		1 - 25%

To stop recording, shift the Switch to OFF position. The LED flashes for 10-12 seconds and the Recorder stops recording.

## Connecting the Recorder to the PC Record Playback

1. From page of the B70 recorder on our web-site [www.ts-market.com](http://www.ts-market.com), from section Product files (Software) download folder «B70 soft» to the PC.
2. Unzip the folder and install (using PC administrator name) the Recorder's driver, file B70\_DrvSetup\_1\_0.exe.
3. Slide the Recorder's cover with flash memory in the direction indicated by the arrow and remove it off the Recorder.
4. Place the Recorder's lid onto the USB adapter of the B70 recorder
5. Connect USB adapter of the Recorder to the USB port of the PC. The adapter's LED flashes.
6. From the 'B70 soft' folder run the EMPlus.exe program. Select type of connection USB 2.0 Reader.
7. The Recorder's contents is on the left of the program's window. Select record and press Play in the bottom left panel.
8. To transfer to the PC, right click the selected record and select Copy to default folder. The record will be converted to WAV and will be in the right window of the program.

## Reset

In case of malfunction of the Recorder, disconnect and then connect power again.

## Warranty

The manufacturer undertakes warranty repair liabilities for 1 year from the date of purchase, but no longer than 2 years from the date of manufacture of the product (warranty does not cover batteries). Paid repair is provided within recorder's operation lifetime (3 years). Other rules are regulated by the Law "On Protection of Consumers' Rights".

We are always grateful for any comments and proposals regarding our products, as well as the detailed description of the conditions and causes that led to failure. We appreciate time and skills of our customers, and if the problem is not that complicated,

we do not mind if you try to solve the problem yourself. If the attempt to repair was fairly neat, you do not lose your warranty. In case of major breakdowns and mechanical damage to the recorder, your warranty will be terminated. Our products have no seals.

If you are experiencing problems with the use of our products, we recommend the following:

- Go to [www.ts-market.com](http://www.ts-market.com) and see a list of common problems (FAQ section) and their solutions. Perhaps there is a solution to your problem.
- If the problem persists, contact technical support at [support@ts-market.com](mailto:support@ts-market.com) with the detailed description of your problem, the conditions it appeared, the exact product name according to the passport, firmware, software, operating system, and other relevant information. The better you describe the problem, the sooner it is resolved. E-mail correspondence is most effective because it preserves history and minimizes misunderstanding. You will receive a response to your request by e-mail within 24 hours (excluding weekends and holidays).

## In Box:

1. Recorder
2. USB adapter
3. 1 battery
4. Operating Instruction
5. Package box

## Technical Support

Technical support is available by e-mail: [support@ts-market.com](mailto:support@ts-market.com)

We are constantly working to improve the software and documentation. You can always download the latest version of the software for free and get information on products on our website: <http://www.ts-market.com>.