

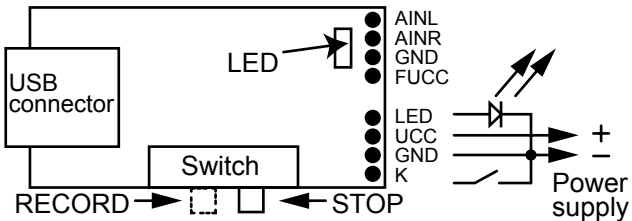
EMM Tiny Stereo Model
1120/2240/4480/8960/17920

- Board;
- dimensions: 27.5x14.5x6 mm;
- weight;
(without miniSD flash card and power source): <2 g;
- recording mode: mono/stereo;
- current consumption in recording mode
(sampling rate 8 K Hz, without compression): <2 mA;
- current consumption in VAS mode
(audio signal below threshold): 350 mA;
- current consumption in stand-by mode: 25 mA;
- supply voltage: 3 V.

Package Content

- Module;
- USB cable;
- CD with drivers and programs;
- user manual.

Description



Contact Assignments

Label	Assignment	Parameters	Notes
AINR	Right channel input	2.9 Vpp voltage audio source with 1.5 V constant component	
AINL	Left channel input		
GND	Ground		
FUCC	+power supply of external audio source (microphone)	voltage is 3+/-0.2V, maximum load current is 10 mA	The connector is alive while recording
LED	Indicator signal	For external light diode connection	Red LED is recommended
UCC	+ module's power supply	3+/-0.2 V voltage	
GND	Ground		
K	External control input	When it is connected with ground – recording if disconnected - stop	The module's switch has to be in the STOP position

Connection of the Module

The UCC (+) and GND (-) connectors are used for power supply connection.

Attention! Check polarity while connecting the module to a power source! Otherwise, the module could be damaged.

The AINL and AINR connectors serve for connecting to the 2.9 V_{pp} voltage audio source with a 1.5 V constant component. If the audio source provides mono audio signal, the source should be connected to the AINR connector.

The FUCC connector serves to provide power supply for external audio sources. As recording is turned on, the connector becomes alive: the voltage is 3± 0.2 V, maximum load current is 10 mA.

As audio signal sources the Telesystems' microphones for the USB Recorder Mini can be used.

The LED and K connectors serve for connecting an external indicator and external control. It is recommended to use LED as an external indicator. An external control has to provide

connection between The K and GND connectors to start recording and should be disconnected to stop recording. Pay attention that the module's switch has to be in the STOP position if the external control is used.

When you turn on the module, set the switch in the RECORD position for 2-3 seconds and then back to the STOP position. The indicator will flash 3 times showing that the module started self-testing. If this does not occurred, check the module's power supply.

After 5-10 seconds the module will flash for the fourth time and will be ready to start recording. The length of this flash depends on memory capacity and can be dozens of seconds.

Attention!

The module is sensitive to static electricity. Use an antistatic bracelet while soldering. The soldering equipment has to be grounded.

To estimate the module's operation in different modes, use the table below:

Current Consumption (mA) in Different Recording Modes with 3 V Voltage Supply

	5,5 kHz		8 kHz		11 kHz		16 kHz		22 kHz	
	Mono	St.	Mono	St.	Mono	St.	Mono	St.	Mono	St.
Without compression	1,7	2,3	2	3	2,7	3,6	3,6	4,5	3,5	5,9
u-Law	1,9	3	2,3	3,5	2,9	5	3,8	6,1	5	-
4-bit ADPCM	2,1	3,2	2,8	4,1	3,2	5,4	4,4	6,7	5,4	-
2-bit ADPCM	2	3	2,5	3,7	3,1	5,3	4	6,4	5,4	-

Start/Stop Recording

To start recording, set the switch into the “START” position. The voice recorders' LED will flash five times and then start blinking in a sequence while the recording is in progress. To stop recording, set the switch into the “STOP” position.

Blinking sequences indicate the supply voltage level and

available memory space. The first sequence indicates that the supply voltage level is: 1 flash –maximum, 2 flashes – enough for work, 3 flashes –not enough for work. The second blinking sequence indicates the amount of memory available: 1 flash – 76-100%, 2 flashes -51-75%, 3 flashes – 25-50%, 4 flashes – 1-25%.

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The Manufactory Warranty Coupon

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 (5 years). The manufacturer reserves the right to refuse in repair after the expiration of recorder operation life
This warranty is voided if the recorder is:

- improperly used
- mechanical damaged
- received without supplier warranty tag on this document

All questions regarding product exchange and return must be solved with the seller's company according to Protection of Consumers Law.

EMM Tiny-STEREO Model

Models:

- | | |
|--------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> EMM Tiny STEREO - 1120 | <input type="checkbox"/> EMM Tiny STEREO - 2240 |
| <input type="checkbox"/> EMM Tiny STEREO - 4480 | <input type="checkbox"/> EMM Tiny STEREO - 8960 |
| <input type="checkbox"/> EMM Tiny STEREO - 17920 | |

Number _____ QC _____

Selling date _____ Seller _____

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