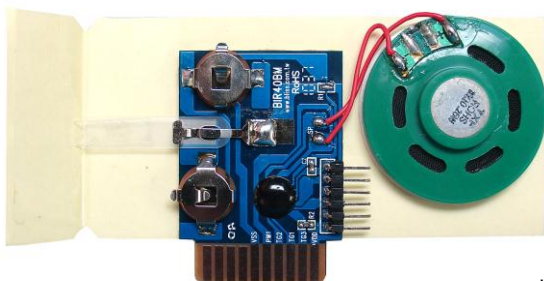
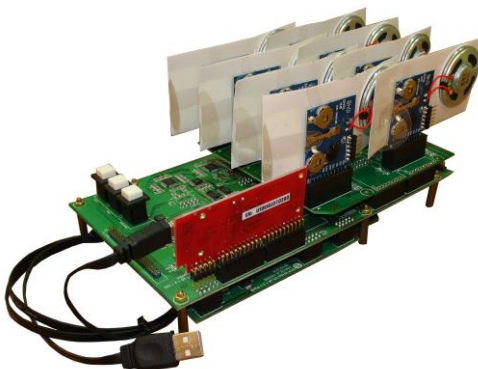




## Product Specification

|                                                                                       |  |                                                                                                |                       |                                                                                                                                 |                       |
|---------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Model:                                                                                |  | BIR40 series                                                                                   | OTP recordable module | Category:                                                                                                                       | Personal sound system |
|     |  |                                                                                                |                       | shown with optional quick pin                                                                                                   |                       |
|     |  |                                                                                                |                       | <b>BIR408TCD</b><br>BIR40 series 1-to-8 recorder with USB connection<br><br>USB cable and 100~240V 9V 1A AC/DC adapter included |                       |
| Optional add-on switch, sensor, and LED                                               |  |                                                                                                |                       |                                                                                                                                 |                       |
| <b>BP01M3R:</b> 3mm red LED                                                           |  | <b>BP01GD:</b> Green dice LED<br><b>BP01RD:</b> Red dice LED<br><b>BP01YD:</b> Yellow dice LED |                       | <b>BP02MC:</b> (non-RoHS)<br>CDS light sensor<br><b>BP02MP:</b> (RoHS)<br>Photo cell light sensor                               |                       |
|     |  |             |                       |                                             |                       |
| <b>BP02MCN:</b> (non-RoHS)<br>CDS light sensor without plastic housing                |  | <b>BP03M:</b><br>Rubber push switch                                                            |                       | <b>BP03MRW:</b><br>Push switch with plastic housing for plush toy.                                                              |                       |
|  |  |             |                       |                                             |                       |
| <b>BP04M:</b><br>Shake switch                                                         |  |             |                       |                                            |                       |

Note: Actual product maybe different in operation current, play time, loudness, etc,  
depends on customization and custom sound.



**Feature:**

- Ideal for vendor to record custom message on-site to fill small quantity orders.
- One time programmable.
- BIR40 series comes in 2 models
  - BIR40CM: records up to 20 seconds in total (12k sample rate, 4bit)
  - BIR40DM: records up to 40 seconds in total (12k sample rate, 4bit)
- Easy to use PC software. Configure switch function and add custom sound files.
- Standard USB connection on the 1-to-8 recorder.
- Comes with standard pull switch for greeting cards application.
- Support up to 2 switches and sensors, such as push switch, shake switch, or light sensor.
- Support optional red, yellow, green LED (blue and white LED support requires special order)
- Support up to 32 sections for switch 1, and support up to 29 sections for switch 2.

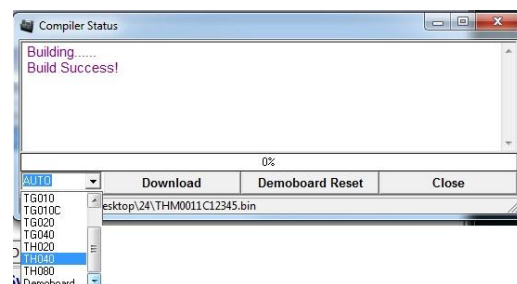
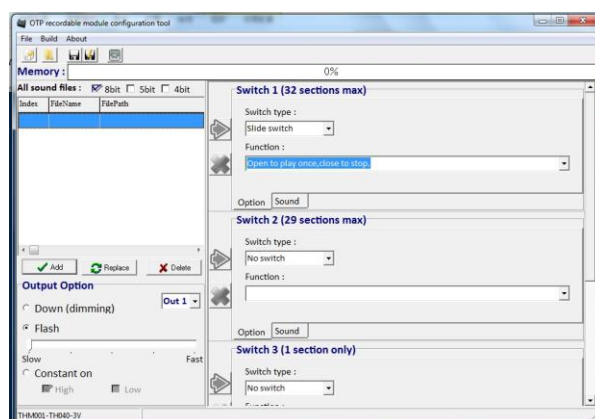
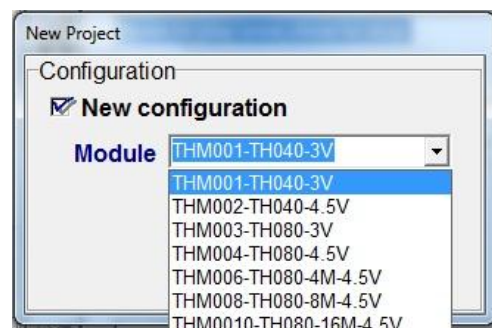
**Programming and recording**

1. Run "OTP recordable module configuration tool"
2. Select "New configuration" then select "THM001-TH040-3V" for BIR40CM or "THM003-TH080-3V" for BIR40DM.

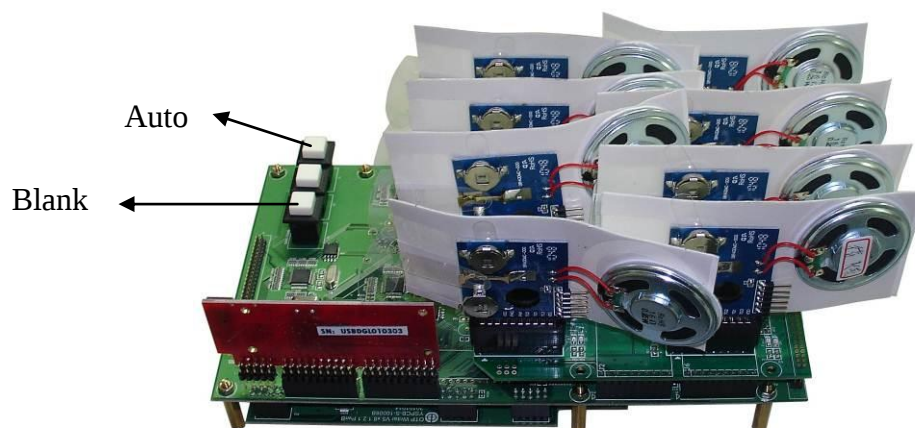
3. Load all sound files (\*.wav, PCM format) by click "Add"  
The top memory bar will show how full the memory is.  
Higher sound quality (sample rate) or longer sound duration would take more memory space. Sound quality can also be selected by choose "8bit", "5bit", or "4bit". Higher bit gives better sound quality.

Note: a simple shareware can be download at [www.goldwave.com](http://www.goldwave.com)

4. Click "option" under switch 1 or 2, choose the switch type and trigger type wish to use.
5. Click "sound" to assign sound file from the sound list. Select from sound list on the left and click the top arrow key or lower arrow key to assign to switch 1 or 2.
6. For the optional LED output, the flashing speed can be adjusted at the output option section, or can set as constant on when playback the sound.
7. Click "Build", and enter 5 digital of letter and number of your choice.
8. Select  
TH040 for BIR40BM,  
TH080 for BIR40CM.



Note: Actual product maybe different in operation current, play time, loudness, etc, depends on customization and custom sound.



9. Insert up to 8 modules as picture shown above.
10. Connect the recorder to PC and click download. Process to next step when screen shows download complete.  
Optional step: press blank to check if module is blank and ready to record.
11. Press “Auto” on the recorder. When the green lights up, the modules are ready.  
To record more, insert new blank modules and press “Auto” on the recorder again.
12. Connect the switch as programmed. If pull switch was selected for switch 1, please soldering short on TG1. Or place on jumper if you have the optional quick pin.

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Connecting add-on LED | The optional LED (BP01) can be connected to LED.<br>If the LED does not light up as programmed, please reverse it and try again. |
| Operation current     | $\geq 33\text{mA}$                                                                                                               |
| Play time             | $\geq 1,000$ times (40 seconds message, no optional LED)                                                                         |
| Standby current       | $\leq 5\mu\text{A}$                                                                                                              |
| Input / switch        | Standard pull switch for greeting card application                                                                               |
| Speaker size          | 40mm mylar speaker                                                                                                               |
| Sound Output          | $\geq 78 \text{ dB @ } 10 \text{ cm distance}$ (surrounding at $\leq 58\text{dB}$ )                                              |
| Operation Voltage     | 3.0V DC                                                                                                                          |
| Battery Type          | AG10 x2                                                                                                                          |
| Weight                | 15g (battery included)                                                                                                           |

Note: Actual product maybe different in operation current, play time, loudness, etc,  
depends on customization and custom sound.