User Manual

TOP-10
T300/H300/VR-300 series
PCM Recorder

Made in Korea
Caution in use

Please read the following cautions carefully and use it properly.

▶ Caution in use ◀

* Please do not put it in the following places. That can be the cause of breakdown.
  - place where temperature is very high (60°C)
  - place where there is much moisture like bathhouse
  - sealed car (especially in summer)
  - place where there is much dust
  - place where there is direct sunlight or near heating appliances
* Please do not drop it or give a shock. That can be the cause of breakdown.
* When excessive force is inflicted on LCD, that can be the cause of breakdown and display error can occur in terms of LCD characteristics.
* When the kinds of card using magnetism like cash card, commuter ticker, etc. are put near speaker, card can be broken by the influence of magnetic.
* When you listen to recordings, please adjust volume properly, or that can have bad effect on hearing ability.
* The printings of this device can be erased by long-time use or other causes (strong pressure, friction, etc.).

▶ Caution for safety ◀

* Please do not repair, decompose, remodel it at the discretion of user.
* Please do not use it in airplane or in the place where the use of electronic devices is limited.
* As a small product, when a child puts it in mouth or uses it, danger can be caused and do not neglect this device or this device’s accessory around a child or prevent a child from using it.
* This device is treated with paint finishing which can be harmful to the human body and please do not put it in mouth.

▶ Matters of notification for user ◀

* Please understand that manufacturer is not responsible for the damage caused by the use of this device and for the claims of third party.
* Recording of broadcasting or music of downloading is for personal use only and is prohibited to use commercially.
* Please understand that manufacturer is not responsible for the damage from the loss of recordings caused by breakdown, repair, other reasons. Please back up the important recordings into other device.

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Characteristics of product

- Made in Korea
  Design, programming, production, after-sale service are made in Korea as one-stop which you can count on.
- SVOS (Super Voice Operated System)
  Standby recording for the longest time (max. 31 days) is possible thanks to the recording by sound detection and power management. (ex. about 8 hour continuous recording is possible even after 15 day standby)
- Rechargeable lithium battery is built-in.
- ALC (Auto Level Control)
  Short-distance, long-distance recording is convenient thanks to the built-in auto level control equipment.
- Security function
  Security function is reinforced thanks to the setting of password.
- PCM
  High-quality recording is realized thanks to PCM recording of CD sound quality.
- Date & time stamping function
  The recorded date and time of recording file can be checked.
- Compact size
  It is simple to carry thanks to small size and light weight.
- Line-in recording (ear microphone)
  The conversation recording of wired telephone and mobile phone is possible thanks to the recording function of external device.
- Learning function
  Learning function is supported thanks to section repeat, play speed control.
- No battery
  It is possible to record continuously (up to applied memory capacity) by the use of external power through USB jack without battery.
- USB MSC (mass-storage device class) data storage

※ 999 recording files per folder are saved in each folder of A, B, C, D and recording files after "full" are saved in next folder automatically.

Naming of each part

Top side
- Built-in microphone
- Reset

Left side
- Earphone jack
- File deletion
- Menu/Stop
- Volume+
- Volume-

Front side
- LCD
- Power on (Record/Pause)
- Prev. (REW)
- Next (FF)
- Power on (Play/Pause)

Right side
- External microphone jack
- Folder change (Voice, MP3)
- Repeat, Section repeat, Play speed control

*SVOS: sound detection recording
Recording method selection
*NOR: Button operation recording

Explanation of LCD

- Recording folder/music folder
- Recording sound quality
- Recording mark
- File no./detailed menu
- Progress mark
- Battery remains
- Repeat mode
- File split saving
- Sound detection recording method
- Remaining recording time mark
- Play/Recording time, Date, Time, Menu, etc.
Product composition

Basic composition

- USB cable
- Pin microphone
- User manual
- Earphone
- Tel adaptor
- Audio cable
- Ear microphone

Option

Preparation before use

- Charging
  This product has built-in rechargeable battery. Please be sure to use after charging because it could be discharged. (Charging time: about 1 hour 30 minutes)
  Charging method: Connect USB cable into the USB terminal of product and connect into the USB port of PC or USB DC adaptor (5V, 500mA) and charging starts.

  ![During charging](charging_icon)
  ![Charging completed](completed_icon)

  During charging, battery remains indicator is blinking totally and it stops in completion.

  * Battery remains mark *
  - about more than 70%
  - about more than 70~30%
  - about less than 30%
  - about less than 3%

  In case of no battery remains, power can not be turned on or recording can not be proceeded and be sure to charge before use. After full charging, continuous recording time is about 16 hours and playback time is about 20 hours (earphone standard).

- Reset
  1. In case that charging is not possible or USB recognition or other operations is not possible, please reset the product.
  2. In case that charging or operation is not possible after leaving alone for a long time, please reset the product.
  3. After reset, please turn on the power by pressing play button more than 1 second long in state of power-off.

  When you reset the product during recording, please note that recording file is not saved and lost.
**Caution**

- Please be careful that recording file number after PC connection is different from the display number of product.

<table>
<thead>
<tr>
<th>Ex.) product display</th>
<th>file creating number after PC connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>001-Voice.mp3</td>
</tr>
<tr>
<td>002</td>
<td>002-Voice.mp3</td>
</tr>
<tr>
<td>003</td>
<td>003-Voice.mp3</td>
</tr>
<tr>
<td>004</td>
<td>004-Voice.mp3</td>
</tr>
<tr>
<td>005</td>
<td>005-Voice.mp3</td>
</tr>
</tbody>
</table>

- In case of deleting
- fin case of recording again after deleting the above 2 files, continuous numbers from 006-Voice.mp3 are created.

**Recording method selection**

**SVOS**: SVOS (sound detection auto recording) method

When you move switch to the direction of SVOS, recording starts automatically after detecting the sound of constant loudness and shuts off power automatically when there is no sound.

It is a function of sound detection auto long-time recording(max 31 days) which is only Esonic's original technology.

("SVOS recording file has a name of SVOS like 001-SVOS.MP3"

**NOR**: NORMAL (manual recording by each function button) method

When you move switch to the direction of NOR, the operations of recording, stop, play, etc. proceed manually by designated function button.

("NOR recording file has a name of Voice like 001-Voice.MP3"

**Power on/off**

1. **SVOS**: SVOS (sound detection auto recording) method

   In SVOS mode, power is turned on and sound detection recording lasts and power is turned off when it is changed to "NOR" mode.

   **What is the recording of SVOS (Super Voice Operated System)?**

   It is a function to record and save only when there is sound and to stop by when there is no sound.

   1. It is a function to extend the hours of battery use innovatively by minimizing standby power when there is no sound and sound detection standby time is about 31 days.
   2. It is very useful to record voice which occurs every a few days or dozens of days.
   3. It supports sound detection standby for about 70 days in case of the recording of wired telephone.
   4. It is the operation for a kind of secret recording and battery mark only is displayed on LCD.
   5. In SVOS method, any buttons except for the recording method selection switch do not work.

2. **NOR**: NORMAL (manual recording by each function button) method

   When you press the button of Play/Pause( ) for more than 1 second, power is turned on and when you press the button of Record/Pause( ), power is turned on and recording starts immediately.

   When you do not use it more than 3 minutes, power is turned off automatically.

   When you press the button of Play/Pause( ) more than 1 second, power is turned off.

   - Power on
   - Memory capacity
   - Program version

   When you press the button of Play/Pause more than 1 second, power is turned off.

**Button function**

- Play/Pause( ): power on/off, file play, pause
- Record/Pause( ): power on, recording start, recording pause
- Menu/Stop( ): play stop, recording stop, menu entry
- Prev./Next( ): search, previous, next
- Volume( ): volume control
- Erase( ): recordings deletion
- Folder( ): folder/music, repeat, section repeat, recording remaining time, intro, play speed
Using voice recorder

1. **SVOS**: SVOS (sound detection auto recording) method
   1) When you move switch to the direction of SVOS, according to sound, power is automatically turned on and recording starts. When there is no sound, it saves a recording file automatically and moves to standby mode. When battery mark is on, it means recording is proceeding. When you move switch to the direction of NOR, it saves the recording file and gets off. (* SVOS method performs the functions of recording start, standby mode, recording stop only with recording method selection switch and the check of recording file is possible in NOR mode only.)

2. **NOR**: NORMAL (manual recording by each function button) method
   1) Make power on by pressing the button of Play/Pause ( ), or Record/Pause ( ).
   2) When you press the button of Record/Pause ( ) long after pointing microphone to sound source, recording starts with next number from last file in the designated folder.
   (In state of power off, press the button of Record/Pause ( ) more than two seconds, and power is turned on and recording starts too.)

3) Press the button of Record/Pause ( ) to pause recording and press the button of Menu/Stop ( ) to stop recording.
   * When you press the button of Play/Pause ( ) after recording, last file is played back.
   * Please make trial recording in advance to prevent recording failure.

* When memory is used out or file numbers in the folder exceed 999 files, it moves to next folders of B, C, D automatically in order and starts recording.

The case that all folders of A, B, C, D have 999 file numbers

The case that 9 files use out whole memory.

* Volume can not be controlled during recording.

**Heating recordings**

1. When power is turned off, please make power turned on by pressing the button of Play/Pause ( ).
2. Please select file number which you want to hear with button.
3. When you press the button of Play/Pause ( ), it plays back up to the final recording file in folder continuously.
4. Please control volume with the button of.
5. Please press the button of Play/Pause ( ) or Stop ( ) to stop playback.

* Menu entry is not possible during playback.

**Deleting recording file**

<deleting one file>

1. After you select a file with button in state of stop, when you press the button of Erase ( ) more than 2 seconds, Erase mark on LCD blinks and then leave the button of Erase ( ) and when you press the button of Erase ( ) one more time slightly, data is deleted and backward file number is pulled forward.

* When Erase mark blinks, the front of file is played back to confirm the file.
* Erased recording file can not be recovered and please delete after confirmation.
Using voice recorder

### Convenient information

#### Comparison between SVOS recording and VOS recording in NOR mode

<table>
<thead>
<tr>
<th>Item</th>
<th>SVOS (Super Voice Operated System)</th>
<th>VOS (Voice Operated System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound detection standby time of battery</td>
<td>Max 31 days</td>
<td>Max 18 hours</td>
</tr>
<tr>
<td>Recording starting after sound detection</td>
<td>Recording starts after five second</td>
<td>Recording starts right away</td>
</tr>
<tr>
<td>Recording file creation</td>
<td>New files are created as per sound detection</td>
<td>Continuous recording in one file</td>
</tr>
<tr>
<td>Using environment</td>
<td>Recording voice occurred sporadically for a long period</td>
<td>Recording voice occurred relatively for a short time</td>
</tr>
<tr>
<td>Sound detection standby time in recording telephone conversion</td>
<td>Max 70 days</td>
<td>Max 18 hours</td>
</tr>
</tbody>
</table>

### Convenient information

**< Changing folder >**

When you press the button of Folder( adoles ) every one time in state of stop, the folders of A,B,C,D,M(Music) are changed in order.

- Folder change is possible only in state of stop.
- Music folder : you can copy and play back audio files like MP3, WMA file.

**< INTRO >**

1. When you press the button of Folder( adoles ) long more than 2 seconds in state of stop, the first part of each file in the current folder is played back for 10 seconds in order and you can find the recording file easily.

- [button does not work during the playback of first part and when you press the button of Play/Pause( on ) one time, INTRO is released and it plays normally.

**< Using external power >**

1. Using PC USB power
   - When it is connected into PC, the letter of PC LINK is shown on LCD.
   - Then, press the button of PLAY long, and it is changed to operation mode to use external power.
   - When you press the button of PLAY long again, it is changed to PC communication mode.

2. Using DC 5V USB adaptor
   - When you connect USB cable into USB adaptor and connect the other side into product, power is turned on and is changed to operation mode.
   - (* In using external power, power off is not possible)

### Convenient function during recording

**< Display of remaining recording time >**

When you press the button of Folder( adoles ) more than 2 seconds during recording, recordable empty memory is displayed by the time.

**< Recording monitoring >**

When you insert earphone during recording, you can hear recordings.

**< Index addition >**

When you want to separate file during recording, press the button of Next( next), and file number is increased after file is saved and a new recording file is creased.

- In case of short battery remains, to preserve recording data, the words of LOW BATT is displayed and it save a file being recorded and gets out.
- In case battery remains display is low, recording does not proceed any more.
Using voice recorder

■ Convenient function during playback

< Volume control function >
- It adjusts volume from 0 to 30 with the button of Volume ( ) for the suitable volume during playback.
- Basic setting unit is 20.

< Pause >
- When you press the button of Play/Pause ( ) during playback, playback pauses and when you press the button of Play/Pause ( ) again, pause is released.

< Repeat setting function >
- 1. Make pause status by pressing the button of Play/Pause ( ) during playback.
- 2. Whenever you press the button of Folder ( ) long more than 2 seconds, you can select one among REPEAT 1 (infinite repeat of one file), REPEAT ALL (infinite repeat of all files in the current folder), GENERAL REPEAT (one-time playback & stop of all files in the folder)

* When power is turned off and turned on again, basic setting "GENERAL REPEAT" is set.

< Play speed control >
- When you want to change play speed, when you press the button of Folder ( ) long more than 2 seconds during playback, speed control function operates and you can select wanted speed among 110, 120, 70, 80, 90, 100 with ( ) button in state of 100 (normal speed).
- When there is no input for 2 seconds or the button of Stop is pressed, play speed is selected and it becomes play status.

< Noise filtering function >
- When you press the button of Record/Pause ( ) shortly every one time during playback, noise filtering function works.

< A-B section repeat >
- When you press the button of Folder ( ) shortly one time during playback, A point is selected and the point you press secondly becomes B point and A-B section repeat is played back infinitely.
Using voice recorder

Setting menu

Basic setting value

1. When power is off, please make power turned on by pressing the button of Play/Stop(○).
2. When you press the button of Menu(田) long in state of stop, 1.REC is shown and you can change the mode of 2.VOS(,[],4), 3.divIdE(3), 4.SECURI(7), 5.DATE(7), 6.FORMAT by using the button of Prev./Next(△, ▽) and you can enter the mode you want to set by pressing the button of Play/Pause(●).
3. After entering the understructure menu and selecting the setting value you want with the button of Prev./Next(△, ▽), press the button of Play/Pause(●), and it is saved and gets out to upper menu.
4. After finishing menu setting, press the button of Menu(田), and it gets out of menu.

Setting: [PCM] [HQ] [SP] [LP]

It is a function to set the sound quality(bit rate) of file to record. According to each setting value, recording sound quality and recording capacity are different.

PCM: 352Kbps, HQ: 128Kbps, SP: 64Kbps, LP: 16Kbps

(*Kbps: lower number means lower storage capacity and lower sound quality in recording at the same time.)

Setting: [OFF] [ON]

It is a function to proceed recording according to sound.
When there is no sound, recording pauses automatically and when there is sound, recording is continued.
(In VOS recording, battery consumption is same as normal recording.)

Setting: [OFF] [60] [120]

It is a function to divide and save the file automatically by the designated time unit in recording voice.
* For data management, even in case of OFF setting, file is divided automatically by the time unit of PCM -> 6 hours, HQ/SP/LP -> 10 hours.

Setting: [OFF] [ON]

It is a security function that you can not play back the recording file when designated 3 numbers do not coincide.
* After setting, you should pass the step of password confirmation even at the time when you select OFF or connect USB.

After selecting ON, select number with the button of Prev./Next(△, ▽) and confirm the number by pressing the button of Play/Pause(●) shortly.
Confirm second, third digits in the same way as above.

When you do not remember the password you set, press the buttons of Erase(田) and Play/Pause(●) long at the same time at the section of asking password, and password is released.
* “000” can not be used in setting password.

<Time writing method setting>

It is a function to set current time and date.
(In recording after setting, recording date and time is stamped on the recording file.)
Using voice recorder

**Time writing method setting**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dAt</td>
<td>dAt</td>
</tr>
<tr>
<td>24&quot;</td>
<td>12&quot;</td>
</tr>
</tbody>
</table>

**Time setting**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dAt</td>
<td>dAt</td>
<td>dAt</td>
</tr>
<tr>
<td>00:00:00</td>
<td>00:00:00</td>
<td>00:00:00</td>
</tr>
</tbody>
</table>

Setting: [NO] [YES]

It is a function to delete all the files of product and to initialize all the setting values. During formatting, progress bar works.

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Using voice recorder

**Telephone recording**

- Please connect tel adaptor, audio cable, tel cable, telephone line as the following picture and press the button of Record/Pause to record telephone conversation.
- In case of recording telephone by SVOS mode, you can record conveniently for max 70 days (standby time) without pressing the button of Record/Pause each time.

![Diagram of telephone recording setup]

**<Note>**

- If several telephones are connected to a telephone line, the other party's voice could be recorded in low volume. We recommend you to connect a single telephone to a telephone line.
- This product cannot support a digital telephone and the telephone with different modular jack.
Using voice recorder

- Connecting with external device
  1. recording with external microphone
  When you connect external microphone into MIC jack, built-in microphone is blocked and you can record with external microphone. (When you put external microphone in collar, you can act freely and record with clearer sound quality when it is close to sound source.)

- Connecting with PC
  When it is connected with PC as below picture, removable disk(TOP-10) is created and when you double-click it, there are A/B/C/D folders and music folder for downloading M3 music and listening to. A~D folders are for voice recording.

Trouble shooting

In case that there is an error in operation, please check the followings.

It can not display on LCD.
Check 1. Isn’t battery discharged?  ➤ Please charge it by connecting USB cable.
Check 2. Is battery shape only displayed?  ➤ Please check whether recording method selection switch is to the direction of SVOS.

It can not record.
Check 1. Isn’t recording number or space full?  ➤ Please delete unnecessary contents.
Check 2. Is battery remains mark “□”?  ➤ Please charge it by connecting USB cable.

It can not play back.
Check 1. Aren’t there any recording files?  ➤ Please check recording number.
Check 2. Isn’t battery discharged?  ➤ Please charge it by connecting USB cable.

Sound does not come out of speaker.
Check 1. Doesn’t the volume become "0"?  ➤ Please adjust the volume.
Check 2. Isn’t earphone inserted?  ➤ Please take out the earphone plug.

Sound does not come out of earphone.
Check 1. Doesn’t the volume become "0"?  ➤ Please adjust the volume.
Check 2. Is earphone inserted properly?  ➤ Please insert earphone plug completely.

* Recommendable PC environment
- more than PENTIUM 200MHz
- more than Windows 2000/XP
- USB port(2.0) support
- more than Direct X 9.0
## Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No.</td>
<td>TOP-10 / T300 / H300 / VR-300</td>
</tr>
<tr>
<td>Memory capacity</td>
<td>4GB (48GB)</td>
</tr>
<tr>
<td>Max recording time (PCM)</td>
<td>24 hours (48 hours)</td>
</tr>
<tr>
<td>Max recording time (HQ)</td>
<td>65 hours (130 hours)</td>
</tr>
<tr>
<td>Max recording time (SP)</td>
<td>130 hours (260 hours)</td>
</tr>
<tr>
<td>Max recording time (LP)</td>
<td>520 hours (1040 hours)</td>
</tr>
<tr>
<td>Hours of battery use</td>
<td></td>
</tr>
<tr>
<td>Normal recording (without earphone)</td>
<td>PCM: about 15 hours, HQ: about 15 hours, SP: about 15 hours, LP: about 16 hours</td>
</tr>
<tr>
<td>Sound detection (SVOS) voice recording</td>
<td>about 31 days</td>
</tr>
<tr>
<td>Sound detection (SVOS) telephone recording</td>
<td>about 70 days</td>
</tr>
<tr>
<td>Output</td>
<td>Built in speaker &amp; 3.5 Ø Mono Jack</td>
</tr>
<tr>
<td>Speaker</td>
<td>Dynamic 20mm, 8 Ohm</td>
</tr>
<tr>
<td>Dimension</td>
<td>32.5(W) X 92.5(H) X 15.5(D)mm</td>
</tr>
<tr>
<td>Weight</td>
<td>36g</td>
</tr>
<tr>
<td>Recording media</td>
<td>Built in Flash Memory</td>
</tr>
<tr>
<td>Power</td>
<td>DC 3.7V, Li-polymer, 300mA</td>
</tr>
<tr>
<td>Temperature</td>
<td>0°C ~ 40°C</td>
</tr>
</tbody>
</table>

* The specification and appearance of this product can be changed without prior notice for quality improvement.

## Warranty Card

1. This product is manufactured through the strict quality control and testing process.
2. The breakdown occurred under normal use within warranty period shall be repaired free of charge within one year.
3. In case that product breakdown is occurred, please contact the place where you purchase product.
4. Even within the warranty period, the cases relevant to the charged service of warranty card shall be charged at real cost.

* Charged service
- Defect caused by careless use.
- Defect caused by user’s internal modification.
- Defect caused by natural disasters like fire, salt damage, flood, earthquake, etc.
- Defect out of warranty period.

<table>
<thead>
<tr>
<th>Product Name</th>
<th>PCM voice &amp; phone recorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model No</td>
<td>TOP-10/T300/H300/VR-300</td>
</tr>
<tr>
<td>Purchasing Date</td>
<td></td>
</tr>
<tr>
<td>Purchasing Place</td>
<td></td>
</tr>
<tr>
<td>Telephone No.</td>
<td></td>
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<tr>
<td>Warranty Period</td>
<td>1 Year</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>Customer</td>
<td>Name</td>
</tr>
<tr>
<td></td>
<td>Address</td>
</tr>
<tr>
<td></td>
<td>Tel.</td>
</tr>
</tbody>
</table>