This document was written to provide answers to many common questions that individuals may have about the Sony digital voice recorders. Although the devices are small in size, they are powerful personal as well as effective business tools with many capabilities if used in the proper manner.

The Guide is divided into sections to make it easy to obtain the answers to each subject area. If there is a question that you have about Sony’s digital voice recorders and it is not answered in this document, please do not hesitate to contact Sony by e-mail at “dvrfeedback@am.sony.com”.

The Guide will include information on the individual models that are currently in the product line. The models covered are:

ICD-MS515 & ICD-MS515VTP
ICD-ST10 & ICD-ST10VTP
ICD-P17
ICD-B17
ICD-B7
FS-85USB (covered in the Transcription Section)

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NEW FOR 2003
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INTRODUCTION

The Digital Voice Recorder is a relatively new device having matured from a simple 15 second low quality recording to a sophisticated PC connectable business tool with hours of recording capability. This exciting device brought many new features and functions which are not available with analog (cassette based) products.

Long Recording Time: the largest recommended length of a standard business cassette is 45 minutes per side. Now with digital technology, more than 5 hours of high quality recording is available.

Individual Files: each dictation is a separate recording with its own date and time. The advantage is that each recording can be accessed, listened to, new information can be added, and the recording can be deleted without affecting other recordings.

Overwrite Function: although the analog user could rewind and dictate over the previous recording, if the new dictation was shorter on length than the dictation being talked over, there would remain parts of the old dictation which would confuse the transcriptionist. With digital voice recorders, when the user listens through the last correct word and then overwrites, the old dictation in that document from that point onward is automatically erased resulting in a perfectly corrected document.

High Quality Audio: digital technology provides a very high quality recording without any motor noise.

Small Compact Lightweight Design: much smaller and lighter than a tape recorder. There’s no excuse not to slip one in your pocket so it’s ready when you need it.

Insert and Delete: additional material can be inserted in the middle of a previously recorded dictation without losing any of the original material. Also, material can be deleted leaving the good dictation in place.

PC Connectivity: dictation can be downloaded to the PC and various actions can take place including transcription, file storage and e-mailing.

dictation can be e-mailed back to the office or to an outside transcription service for processing. The traditional cassette based transcribing machine has been replaced by the PC as the transcriber.
Voice To Print: dictation can be automatically converted into text using a high quality software such as Dragon NaturallySpeaking Preferred from Scansoft, Inc.

These are just a few of the many things that can be done with the new exciting digital voice recorder products which are available from Sony.

WHO CAN USE A DIGITAL VOICE RECORDER

Although the analog cassette recorder continues to serve as an important business tool, the new digital voice recorders, because of their many new and improved capabilities, have revitalized and expanded the use of recording devices. It’s hard to identify an occupation area that cannot use one of these devices in some way or another. Here are just a few:

Accounting
Architecture
Chemistry
Construction
Education
Engineering
Fireman
House Manager
Insurance
Law Enforcement
Legal
Medical
News
Nursing
Sales
Science
Transportation

These devices are used to: make notes, provide information, provide instructions, remember details, give directions, dictate memos and letters, generate reports and anything else that can be done with the user’s voice. The material that is recorded is timely, detailed and available for review in an audible format that is easy to understand.
<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-MS515 and ICD-MS515VTP</td>
<td>Memory Stick Digital Voice Recorder, USB Connectivity or Memory Stick.</td>
<td>Record Time (8 MB Memory Stick): 64 min SP, 171 min LP</td>
</tr>
<tr>
<td>ICD-ST10 and ICD-ST10VTP</td>
<td>PC Compatible with USB Connectivity, Stereo Recording Mode.</td>
<td>Record Time: 41 min ST, 125 min SP, 334 min LP</td>
</tr>
<tr>
<td>ICD-P17</td>
<td>PC Compatible with USB Connectivity.</td>
<td>Record Time: 278 min. 5 Files</td>
</tr>
<tr>
<td>ICD-B17</td>
<td></td>
<td>Record Time: 300 min. 2 Files</td>
</tr>
<tr>
<td>ICD-B7</td>
<td></td>
<td>Record Time: 150 min. 2 Files</td>
</tr>
<tr>
<td>FS-85USB</td>
<td>Digital Voice Recorder PC Based Transcription Kit.</td>
<td>Includes: CD-ROM, USB Connected Foot Control, Professional Style Chin Band Listening Device</td>
</tr>
</tbody>
</table>
**NEW FOR 2003**

**Digital Voice Editor Software 2.1:**

**One common software for all PC connected models**

Having a separate voice editor software for each model made it difficult to learn the operation of the PC connectivity function when different digital recorder models were being used. In some office situations, authors used different Sony recorders, which required the office administration staff to learn the various voice editor software versions. The look and operation of each version was slightly different. Now there is only one common Digital Voice Editor software GUI (Graphical Unit Interface) design, the new v2.12 which will be shipped with all DVR models beginning in May.

**Larger Display**

Increasing the size of the playback control section and the character font made it easier to see and control the operation.

**Built-in PC Keyboard Controlled Transcription function**

Using the F Keys (Function Keys) on the computer keyboard, the playback of the audio can be controlled for Play, Stop, Rewind and Fast Forward as well as a secretarial automatic rewind function. The choice of which key performs a specific function can be customized in the software.

**Plays .msv, .dvf, .wav, mp3 files**

The new software allows the user to play files which have been recorded in .msv, .dvf, .wav or .mp3 without having to convert them. This means that when a dictation has been e-mailed back to the office in the .dvf format, for example, the file can be played without converting it into .wav at the office if the person has the digital voice editor software on their PC.

**Batch CODEC Conversion**

Previously, when someone e-mailed the dictation to another location, they kept the file in the original compressed format to speed up the transmission. Unfortunately, however, when multiple dictations were sent, the person receiving the work had to convert each file individually into the desired format to enable them to listen and transcribe. With the new Batch Conversion Feature, all the similar type file formats can be highlighted and converted into the desired format at one time.

**Digital Pitch Control**

This feature allows the audio to be speeded up or slowed down without affecting the pitch of the playback which makes the playback more pleasant to listen to.

**Simplified E-Mail Process**

The process has been improved making it easier to attach dictation to an e-mail by allowing up to 10 dictations to be attached to a single e-mail in one step directly from the digital voice recorder or Memory Stick.
New PC Connected Model: ICD-P17

278 Minutes of Recording Time: more than enough time to record a full day of classes or notes.

Overwrite Function on the ICD-P17
This professional dictation feature found on higher priced models allows the user to listen through the last correct word of the recording in playback and then press the Record button. All the dictation from that point is automatically erased and replaced with the new dictation.

NOTE: you cannot have the Overwrite Function and the Add Record function activated at the same time.

5 Message Folders: allows different types of dictation to be placed in separate folders
USB Connectivity: Designed for USB1.0. It will work with USB2.0, just at the USB1.0 speed.
Add Record Function: At any time in playback the user can press the Record button and new dictation is added at the end of the original recording automatically.
Author Name: the name of the user can be part of the file structure so that every dictation from that specific recorder includes the user name. This function is activated using the ICD-P17 connected to the PC with the USB cable with the Digital Voice Editor software.

New Digital Voice Recorder with Stereo Recording: ICD-ST10

Up to 334 minutes of recording time: Stereo 41 min. SP 125 min LP 334 min.
Built-In Rolling Directional Stereo Microphone
The microphone can be positioned in 3 settings. 90 degrees, 45 degrees from the body of the recorder and parallel with the body of the recorder for various recording situations.

External Stereo Mic Jack: to connect an external stereo microphone
External Stereo Earphone Jack: allows the use of a stereo listening device
Directional Mic Function:
For improved conference and lecture recording. Activated in the SP and LP modes, it narrows the recording pick-up field focusing on the sound coming from approximately 45 degrees to either side of the unit.

Record / Pause Control:
Allows the user to operate one control to dictate and pause while recording. Press Record to dictate and then press the same button to Pause. To continue recording press the Record button again. When finished with the dictation just press the Stop button.

DPC Function: -50% to +100%
Playback the recording at various speeds without distortion
Hi / Med / Low Microphone Sensitivity:
Adjust the microphone sensitivity according to the situation
?? Low for Dictation
?? Med for small meetings and hands free operation
?? High for conferences and lectures

Transcription Kit FS-85USB with USB Connected Foot Control
Includes MDR-U10M Stereo Type Chin Band style listening device and Digital Voice Editor SW 2.1
-Transcribe dictation in .dvf, .msv, .wav, and mp3 formats without converting
-Using an optional stereo listening device, the audio separation when the recording was in the stereo mode can be heard
-Batch file conversion
-Digital Pitch Control

VTP Bundle with Dragon Naturally Speaking Preferred v 7.0
-the high quality recording of the Sony Digital Voice Recorders enables some of them to be bundled with Dragon Naturally Speaking Preferred voice to print software.
-the benefit of using a digital voice recorder as the source for the dictation is that the recording can be done wherever and whenever it needs to be done.
-it’s important that the user file, the file that the voice to print software uses to create a sample of your voice, is made on the Sony digital voice recorder. In this way, when dictation is uploaded to the PC and processed with the Dragon Naturally Speaking software, the recognition rate will be increased.
-the models that are bundled with Dragon software are the ICD-ST10 and the ICD-MS515

NEW v. 7.0 FEATURES
?? Automatically add contact names from e-mail address books
?? Natural punctuation
?? Vocabulary Optimizer to improve accuracy
?? Text read back
SECTION A: Specifications  
Note: Specifications are subject to change.

ICD-B7  
HWD: 4-1/7” x 1-3/4” x 5/9” (105.3 x 44.5 x 14 mm)  
Weight: 2.4oz (68 grams)  
Recording Time: up to 150 minutes  
File Folders: 2  
Maximum # of Messages: 198  
Battery Life: Record-10 hours Play-8 hours  
Flash Memory Size: 8MB  
CODEC: TRC (Triple Rate Codec)  
Speaker Size: 1-1/4" (32mm)  
Sampling Frequency: 8KHz  
Power Output: 150mW

ICD-B17  
HWD: 4-1/7” x 1-3/4” x 5/9” (105.3 x 44.5 x 14 mm)  
Weight: 2.4oz (68 grams)  
Recording Time: up to 300 minutes  
File Folders: 2  
Maximum # of Messages: 198  
Battery Life: Record-10 hours Play-8 hours  
Flash Memory Size: 16MB  
CODEC: TRC (Triple Rate Codec)  
Speaker Size: 1-1/4" (32mm)  
Sampling Frequency: 8KHz  
Power Output: 150mW

ICD-P17  
HWD: 4-1/7” x 1-3/4” x 5/9” (105.3 x 44.5 x 14 mm)  
Weight: 2.4 oz (68 grams)  
Recording Time: up to 278 minutes  
File Folders: 5  
Maximum # of Messages: up to 495  
Battery Life: Record-10 hours Playback-8 hours  
Flash Memory Size: 16MB  
CODEC: TRC (Triple Rate Codec)  
Speaker Size: 1-1/4" (32mm)  
Sampling Frequency: 8KHz  
Power Output: 250 mW  
PC Connectivity: Digital Voice Editor v2.12
ICD-ST10

HWD: 4” x 1-5/8” x 5/9” (103.6 x 41.5 x 13.3 mm)
Weight: 2.54 oz (72 grams)
Recording Time: STEREO- 41 min. SP-125 min LP-334 min.
File Folders: 5
Maximum # of Messages: up to 495
Battery Life:
  - Record ST-10 hours, SP-12 hours, LP-14.5 hours
  - Playback ST-6.5 hours, SP-7.5 hours, LP-8.5 hours
Flash Memory Size: 16MB
CODEC: LPEC
Speaker Size: 1-1/9” (28mm)
Sampling Frequency: ST-44.1kHz, SP-16kHz, LP-8kHz
Power Output: 350 mW
PC Connectivity: Digital Voice Editor v2.12

ICD-MS515

HWD: 4” X 1-3/8” X 23/32” (106.3 X 34.1 X 18 mm)
Weight: 75g (2.65 oz)
Recording Time: 64 minutes (SP), 171 minutes (LP)
File Folders: up to 340
Maximum # of Messages: up to 965
Battery Life: Record 10 (SP)12 hours (LP), Playback 12 hours
Memory Stick Size & Capacity:
  - 8MB included. Can use up to a 128 MB Memory Stick
CODEC: LPEC
Speaker Size: 29/32”
Sampling Frequency: SP-16kHz, LP-11kHz
Power Output: 200mW
PC Connectivity: Digital Voice Editor v2.12
### SECTION B: Controls, Jacks and Connections

<table>
<thead>
<tr>
<th></th>
<th>ICD-B7</th>
<th>ICD-B17</th>
<th>ICD-P17</th>
<th>ICD-ST10</th>
<th>ICD-MS515</th>
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<tbody>
<tr>
<td><strong>Jacks &amp; Connections</strong></td>
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<tr>
<td>Earphone Jack 3.5mm</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Stereo Earphone Jack 3.5mm</td>
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<tr>
<td>Plug-In Power Microphone Jack 3.5mm</td>
<td>O</td>
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<tr>
<td>Stereo Microphone Jack 3.5mm</td>
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<td>USB</td>
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<td>Memory Stick Slot</td>
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<tr>
<td><strong>Controls &amp; Buttons</strong></td>
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<tr>
<td>A-B Repeat</td>
<td>O</td>
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<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Bookmark</td>
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<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Digital Pitch Control</td>
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<td>O</td>
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<tr>
<td>Directional Mic Function</td>
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<td>O</td>
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<td>Display</td>
<td></td>
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<td>O</td>
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<tr>
<td>Divide</td>
<td>Use Index Button</td>
<td>Use Index Button</td>
<td>Use Index Button</td>
<td></td>
<td>O</td>
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<tr>
<td>Eject</td>
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<tr>
<td>Erase</td>
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<td>Folder</td>
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<tr>
<td>Hold</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Index</td>
<td>O</td>
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<tr>
<td>Jog Lever</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Menu Button</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Mic Sensitivity</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Multi-Function Control</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Operation LED</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Pause</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Playback Speed Control</td>
<td>O</td>
<td>O</td>
<td>DPC</td>
<td>DPC</td>
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<td>Priority</td>
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<td>O</td>
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<tr>
<td>Record / Stop</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>Record / Pause</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<td>Stop</td>
<td>O</td>
<td>O</td>
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<td>Volume</td>
<td>O</td>
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<td>O</td>
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<td>O</td>
</tr>
</tbody>
</table>

**Definition / Explanation:**

**Jacks & Connections:**

Earphone Jack: allows an external earphone to be connected to
Stereo Earphone Jack: identified by the green color around the connection indicates that a stereo type listening device can be connected providing stereo sound.

Plug-In Power Microphone Jack: allows the use of a battery powered external microphone without inserting the battery in the external mic. This eliminates the concern about not recording because the battery lost power in the external mic or they forgot to insert it.

Stereo Microphone Jack: identified by a red color around the connection point identifies the ability to use an external stereo microphone if the recorder is set in the stereo recording mode.

USB: connection allows the use of the USB cable which comes with the recorder to be connected between the recorder and the PC. This enables the Digital Voice Editor software to read the contents of the recorder and transfer dictation to the PC.

MEMORY STICK SLOT: to insert the Memory Stick into the recorder. The recorder can use either the white or the blue Memory Sticks.

Controls/Buttons:

A-B Repeat: in playback, point “A”, the starting point and point “B”, the ending point can be marked and the playback will continue to play and replay the recording contained between these two points until you press the PLAY button or the STOP button.

BOOKMARK: allows a specific point in each dictation to be marked for easy access at a later time.

For example, while listening to a long recording the user has to stop listening and dictate some notes. Once they leave the playback and begin dictating, the next time they access the recording they were listening to without the Bookmark, they would be at the beginning of the recording, not where they stopped listening. By placing a Bookmark (press and hold the Bookmark button for more than one second) an indicator
will be seen on the LCD screen. To start playback at the bookmarked point, press the Jog lever up or down during stop so that the Bookmark indicator flashes 3 times. Then press the Jog lever to play.

DIGITAL PITCH CONTROL: speeds up or slows down the playback without the usual distortion associated with speed changes.

DIRECTIONAL MIC FUNCTION: available on the ICD-ST10 in the SP and LP modes, the recording field is narrowed to 45 degrees to either side of the unit when activated. The purpose is to minimize sounds coming from the sides and focusing on the source in front of the recorder.

DISPLAY: enables the LCD screen to display different information for the user.
- Current Time (In Military time)
- Current Date: Month/ Day/ Year
- Length of the dictation in H/M/S (hours, min, sec) while recording
- Overall recording time remaining on the digital recorder in H/M/S

REMAIN TIME-

IN PLAYBACK:
Time left for the playback to be completed before the end of the recording. At the end of the playback the word END will be displayed on the LCD.

IN RECORD:
Shows the total amount of recording time left in H/M/S

- ELAPSE TIME- shows the elapsed time of the current recording which is being played back. At the end of the playback the word END will be displayed on the LCD.

DIVIDE: enables the user to add an index mark anywhere in the dictation dividing the recording into two separate documents. This enables the author to add recording to the first part of the dictation without changing any of the original recording or to delete a segment of the dictation.

EJECT: to eject the Memory stick from the recorder

ERASE: press and hold until the word ERASE appears in the
LCD screen and you will hear some of the dictation repeated over and over again. To erase this dictation press the ERASE button again. If you do not wish to erase the dictation, press the STOP button.

To erase all the dictation in a Folder, press the ERASE button and the STOP button at the same time and the phrase ERASE ALL will appear on the LCD screen. Press the ERASE button again and all the dictations in that Folder will be erased.

FOLDER: changes the Dictation Folder from A to B

HOLD: makes all buttons and controls inactive preventing accidental operation.

INDEX: allows recordings to be divided into multiple parts or combined into fewer dictations by adding or removing index marks.

JOG LEVER (MULTI-FUNCTION CONTROL):
- Push In: push in to play the dictation and push in while playing to stop the playback. If you press it again the playback will continue from where you stopped.
- Push Down or Up while the recorder is stopped to select a different recording for playback.
- Hold Down in playback will rapidly rewind the dictation.
- Hold Up in playback will rapidly advance the dictation
- Push to the Right will reveal the Menu options
- Push to the Left will change folders

MENU Button:
- Allows the user to set and change the various settings on the digital voice recorder.

NOTE: all options listed below are not available on all of the digital voice recorders. Please review the chart in this guide.
### PRODUCT MENU CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>ICD-B7</th>
<th>ICD-B17</th>
<th>ICD-P17</th>
<th>ICD-ST10</th>
<th>ICD-MS515</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm</td>
<td>Plays a message at a set date and time</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Set Date /Time</td>
<td>In play mode will continue to play into the next message</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Cont(inuous)</td>
<td>Choose between Record Overwrite or Record Add functions</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beep</td>
<td>ON or OFF</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>LED</td>
<td>ON or OFF</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mic Sensitivity</td>
<td>Sets the microphone sensitivity</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mode</td>
<td>ST, SP or LP</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Display</td>
<td>Elapsed Time, Remaining Time, Recording Date, Recording Time, CODEC or Message Name, Time Counter</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy Search</td>
<td>ON or OFF</td>
<td>O</td>
<td>O</td>
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<td></td>
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</tr>
<tr>
<td>DPC</td>
<td>ON or OFF and % + / -</td>
<td>O</td>
<td>O</td>
<td></td>
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<tr>
<td>VOR</td>
<td>ON or OFF</td>
<td>O</td>
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<tr>
<td>Format</td>
<td>Erase Memory Stick</td>
<td></td>
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</tr>
<tr>
<td>New Folder</td>
<td>Create New Folder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Folder Name</td>
<td>Name Folder: choose between pre-named templates or create your own name using the ALPHABET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O</td>
</tr>
<tr>
<td>Msge Name</td>
<td>Name a Message</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O</td>
</tr>
<tr>
<td>User Name</td>
<td>Enter the User Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>O</td>
</tr>
</tbody>
</table>

ALARM ON/OFF: by activating this mode the recorder immediately after recording or playing back a previously recorded message, that message can be set to play automatically on the pre-set date and time.

BEEP ON/OFF: turns ON or turns OFF the Beep tone which is heard each time a function button is pressed. This confirms that the function has been activated. Sometimes the user might turn off the Beep tone in order to make the recording process silent and not disturb others.
CONT ON/OFF: in the OFF setting, the playback will stop at the end of the recording. In the ON setting, during playback, the recordings will continue to play from the current recording to the next without interruption.

EASY SEARCH ON/OFF: With the Easy Search function in the ON position, when rewinding or fast forwarding in the dictation, each time the user presses the control, the playback advances approximately 10 seconds or rewinds approximately 3 seconds.

LED ON/OFF: turns the operation LED ON or OFF during use.

MIC SENSITIVITY: Low/High—the Low microphone sensitivity is generally used for dictation whereas High microphone sensitivity is used for recording meetings and lectures.

MODE: ST, SP or LP:
  ST (Stereo): Highest quality recording
  SP (Standard Play): good for voice to print
  LP (Long Play): lower quality longer recording time

MULTI-POSITION ROLLING MICROPHONE: on the ICD-ST10 allows the use to position the built-in microphone for various recording situations. The three (3) settings are 90 degrees, 120 degrees and parallel to the body of the recorder.

REC-OP ON/OFF: in the ON position the user has a choice of activating the Add Record mode (to add dictating automatically at the end of the dictation being played back) or the OVERWRITE function which enables the user to listen through the last correct word of the playback and then place the unit in the Record mode overwriting and erasing all the previous dictation from that point forward.

SET DATE: to set the date and time
  NOTE: the time is in a 24 hour format (14:00 = 2:00PM)

VOR ON/OFF: places the recorder in the Voice Operated Recording mode. In the ON position, the recorder will start when an audio signal is of sufficient volume. Sony’s Digitally Buffered VOR Circuit is active in this mode and all audio first passes through this circuit to prevent any first words or syllable being clipped or lost.
When the VOR circuit does not sense a sufficient audio signal, the recorder stops recording and flashes “VOR Pause” on the LCD Screen. It stops and continues recording when the author starts dictating again.

MIC SENSITIVITY: allows the microphone sensitivity to be set on High or Low

OPERATION LED:
- RED= recording
- RED Flashing = in the Pause mode while in record
- Amber Flashing= the recorder is going through an operation mode: wait until it turns RED or GREEN
- GREEN= playing back

PAUSE: press while in record to gather your thoughts and in playback to pause the playback while listening. To continue recording or playing back just press the pause button again. When the recorder is in the Pause mode, the word PAUSE flashes on the LCD screen.

PLAY SPEED Switch: allows the playback of the recording to be played at the original speed, a slower speed or a faster speed.

PRIORITY: enables the user to mark a dictation in the STOP or PLAYBACK modes as a Priority Dictation. Adding up to 3 asterisks by pressing the Priority button and holding it down until the asterisk appears on the LCD screen next to the dictation number causes the recording to be moved to the front of the queue so that it is played before dictations with fewer asterisks or none. 3 asterisks is the highest priority. To add more than one (1) asterisk, press the Priority button again.

RECORD/STOP: press to record and press again to stop the recording. This finishes the recording as one dictation.

RECORD/PAUSE: press to record and press again to pause and gather your thoughts. To continue dictating press the button again.

STOP: stops whatever function the recorder is in at that time.

VOLUME: increases or decreases the playback volume.
SECTION C: LCD Display

Display Contents:

Remaining Memory Indicator: a series of dashes (---) at the top of the screen. As the amount of recording increases, the number of dashes decreases giving the user a general idea as to how much recording time is available on the device. For a more accurate indicator, use the DISPLAY button and set the unit to show how much recording time remains. Above the line there is also a percentage guide of 0%, 50% and 100%.

Battery Level: an indicator which shows how much battery life remains. As the battery power depletes, the number of horizontal lines becomes fewer and fewer indicating it is time to replace the batteries.

Folder Letter: displayed as A, B etc indicating where the user is recording, playing back or moving the current recording to.

Folder Name: displays the name of the folder which the user is currently recording in or playing back.

Display Mode: a choice of options for the display which will enable the bottom line of the LCD screen to show:
- Current Time (Military Time Format)
- Year / Month / Day
- Length of current dictation which increases as you dictate
- Length of recording time remaining which counts down as you dictate

Message Number: in the display 04 / 10, the 04 is the individual message.
number. The 10 is the total number of messages in the dictation folder.

ST / SP / LP: shows the current recording mode the unit is in or the mode the dictation was in when it was recorded.

H/ M / L: indicates the microphone sensitivity setting—High, Medium, Low

Bookmark: shows that a recording has a bookmark

A-B Repeat: shows the function is active

**D. RECORDING MODES (ST/SP/LP)**

You can select a recording mode from the following:

?? ST: Stereo recording mode (for ICD-ST series only). Highest quality recording, but the file size increases reducing the total available recording time.

?? SP: Standard play mode. You can record a message in better tone quality. The file size becomes relatively larger than in the LP mode and reduces the total available recording time.

?? LP: Long time recording mode for the maximum available recording time.

<table>
<thead>
<tr>
<th>MODE</th>
<th>MODELS</th>
<th>USAGE</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>ICS-ST10</td>
<td>Dictation, Meetings</td>
<td>High quality sound, easier to listen to, very natural sound</td>
<td>Reduces the total available recording time, larger file space required</td>
</tr>
<tr>
<td></td>
<td>ICD-ST10</td>
<td>Dictation, Voice to Print,</td>
<td>Good recording quality, provides longer recording time</td>
<td>Limited recording time for all day conferences</td>
</tr>
<tr>
<td>SP</td>
<td>ICD-MS515</td>
<td>Dictating Notes, Personal Reminders Recording Lectures and conferences</td>
<td>Long recording time, sufficient to record many classes or long sessions</td>
<td>Audio quality is reduced</td>
</tr>
</tbody>
</table>

**Note**

?? Some IC recorder models may not be sold in your area.

?? When you install the Digital Voice Editor for ICD-MS/P/S/BP Series, you can create compatible file types except for the DVF (LPEC: for ICD-ST series) file. (You can play back the DVF (LPEC: for ICD-ST series) file.) When you install the Digital Voice Editor for ICD-MS/ST/S/BP Series, you can create all the file types.
except for the DVF (TRC) files. (You can play back the DVF (TRC) file.) When you install both types of the Digital Voice Editor software, you can handle all the compatible file types.


The DVF file is a sound file format used in recording messages on the Sony IC recorder ICD-ST series equipped with a USB port. The sound data is compressed so that the size of the file is relatively small. You can edit and play back the DVF files on the Digital Voice Editor. The DVF file can be added to the IC recorder ICD-ST series and can be played back and edited there. You can select ST, SP and LP recording modes.

**Note**
The DVF file has four formats: for ICD-BPx50 series, for ICD-BP100/BPx20 series, for ICD-ST series, and for ICD-P series.


The DVF file is a sound file format used in recording messages on the Sony IC recorder ICD-BP50 series equipped with a USB port. The sound data is compressed so that the size of the file is relatively small. You can edit and play back the DVF files on the Digital Voice Editor. The DVF file can be added to the IC recorder ICD-BP50 series and can be played back and edited there. You can select SP and LP recording modes.

**Note**
The DVF file has four formats: for ICD-BPx50 series, for ICD-BP100/BPx20 series, for ICD-ST series, and for ICD-P series.


The DVF file is a sound file format used in recording messages on the Sony IC recorder ICD-BP100/BPx20 series equipped with a USB port. The sound data is compressed so that the size of the file is relatively small. You can edit and play back the DVF files on the Digital Voice Editor. The DVF file can be added to the IC recorder ICD-BP100/BPx20 series and can be played back and edited there. You can select SP and LP recording modes.

**Note**
The DVF file has four formats: for ICD-BPx50 series, for ICD-BP100/BPx20 series, for ICD-ST series, and for ICD-P series.


The DVF file is a portable sound file format used in recording messages on the Sony IC recorder ICD-P series equipped with a USB port. The sound data is compressed so that the size of the file is relatively small. You can edit and play back the DVF files on the Digital Voice Editor. The DVF file can be added to the IC recorder ICD-P series and can be played back and edited there. You can select SP mode only.

**Note**
The DVF file has four formats: for ICD-BPx50 series, for ICD-BP100/BPx20 series, for ICD-ST series, and for ICD-P series.

**MSV(LPEC) file (Memory Stick Voice file/file extension: *.msv)**

The MSV(LPEC) file is a sound file format used in recording messages on the Memory Stick IC recorder ICD-MS515 and IC recorder ICD-S series. The sound data is compressed so that the size of the file is relatively small. You can edit and play back the MSV(LPEC) files using the Digital Voice Editor, write them on the Memory Stick to be restored and played back on the Memory Stick IC recorder and IC recorder ICD-S series.

You can select SP and LP recording modes.

**Note**

The MSV(LPEC) file, although having the same file extension, is not compatible with the MSV(ADPCM) file and cannot be played or edited on the ICD-MS1 or the Digital Voice Editor 1.0/1.1/1.2.

**MSV(ADPCM) file (Memory Stick Voice file/file extension: *.msv)**

The MSV(ADPCM) file is a sound file format used in recording messages on the Memory Stick IC recorder ICD-MS1. The sound data is compressed so that the size of the file is relatively small. You can play back and edit the MSV(ADPCM) files on the Digital Voice Editor. The MSV(ADPCM) files can be written on the Memory Stick to be restored and played back on the Memory Stick IC recorder. You can select SP and LP recording modes.

**Note**

The MSV(ADPCM) file, although having the same file extension, is not compatible with the MSV(LPEC) file, except that they can be played back or edited on the Digital Voice Editor.

**WAV file (WAV FILE [8/11/16/22/44.1 kHz 8/16 bit, monaural/stereo]/file extension: *.wav)**

The WAV file is a PCM sound file used in recorded sound in standard Windows application software. You can play back a WAV file on many Windows® brand software applications such as the "Windows Media Player" which is pre-installed on most PC’s or available as a download file on the internet. When saving or converting a file, you can select either format from an auto-conversion (8/11/16 kHz, 16 bit monaural or 44.1 kHz 16 bit stereo) WAV file, 11 kHz 16 bit WAV file for voice recognition, or 44.1 kHz 16 bit stereo sound WAV file. Usually, select the auto-conversion WAV file format. To use the file for voice recognition, select an 11 kHz 16 bit format.
MP3 file (MP3 file [8/11/16/22/44.1 kHz monaural/stereo]/file extension: *.mp3)

The MP3 file, short for MPEG-1 Layer 3 (Moving Pictures Expert Group), stores digital audio such as sounds or songs and is known to be used to distribute content over Internet. The file is compressed with little loss in sound quality. You can view the MP3 files in the PC message list in the Digital Voice Editor. An MP3 file displayed in the PC message list can be played back on your computer.

Note:
When an MP3 file is added to the IC recorder or Memory Stick using the Digital Voice Editor Software (DVE v2.1), it is automatically converted to the appropriate CODEC that meets the destination IC recorder type. You cannot upload an MP3 file as it is without conversion. Sony Digital Voice Recorders do not play back MP3 files.

ICS file (Sony IC recorder Sound file/file extension: *.ics)

The ICS file is Sony's original sound file format used in recording messages on the IC recorder ICD-R100. The Digital Voice Editor Version 2.1 does not support an ICS file. To use an ICS file with the Digital Voice Editor Version 2.1, use the software compatible with the ICD file format such as “Sony ICD-PCLINK software”, "Digital Voice Editor Version 1.x", or "ICS Converter" to convert an ICS file into a WAV file.

The ICS Converter is available on the Sony web site as free software. See Section P: Software Upgrades

SECTION E: PC Connectivity

USB Connectivity: the USB connection with the supplied cable enables the dictation to be transferred to the PC as well as from the PC to the recorder. The dictation can be transferred to the PC in its original format or a choice of other file formats. When recording is transferred from the PC to the recorder it has to be converted back into the file format of the original recorder. This is done automatically by the digital voice editor software.

V1.0: the USB connectivity is designed to work with version 1.0.
V2.0: the USB connection will work with a USB v2.0 system, but will operate at v1.0 speeds. The fast transmission rate of the files built-in to the device makes the compatibility with USBv1.0 quite sufficient to make the transfer of audio files quick and easy.

Transfer Time: 5 minutes of dictation transfers to the PC in approximately one (1) second of time. 1 Hour of recording would take approximately twelve (12) to fifteen (15) seconds.

File Formats:

.dvf: file format used in the ICD-ST10 and ICD-P17
.msv: file format used in the ICD-MS515
SECTION F: Battery Life and Alternate Power Sources

Battery Type and Estimated Life:

All the digital voice recorders use “AAA” batteries

<table>
<thead>
<tr>
<th></th>
<th>ESTIMATED BATTERY LIFE IN HOURS (ALKALINE BATTERIES)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ICD-B7 ICD-B17 ICD-P17 ICD-ST10 ICD-MS515</td>
</tr>
<tr>
<td>Record</td>
<td></td>
</tr>
<tr>
<td>Stereo</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>10 10 10</td>
</tr>
<tr>
<td>LP</td>
<td>10 10 10</td>
</tr>
<tr>
<td>Playback</td>
<td></td>
</tr>
<tr>
<td>Stereo</td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>6.5 7.5 7.5 12</td>
</tr>
<tr>
<td>LP</td>
<td>8 8 8 8</td>
</tr>
</tbody>
</table>

AC Adaptors: the only digital recorder that has an DC-in jack for an optional AC adaptor is the ICD-ST10.

SECTION G: Recording Techniques

FUNCTION COMPARISON CHART

<table>
<thead>
<tr>
<th></th>
<th>ICD-B7</th>
<th>ICD-B17</th>
<th>ICD-P17</th>
<th>ICD-ST10</th>
<th>ICD-MS515</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-B Repeat</td>
<td>O</td>
<td>O</td>
<td></td>
<td></td>
<td>O</td>
</tr>
<tr>
<td>Add Recording</td>
<td>O</td>
<td>O</td>
<td>Add or</td>
<td>Add or</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overwrite</td>
<td>Overwrite</td>
<td></td>
</tr>
<tr>
<td>Alarm</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>BookMark</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Divide &amp;</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Combine (Index)</td>
<td></td>
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<td></td>
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<tr>
<td>Easy Search</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Erase 1 File</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Erase All Files</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>in a Folder</td>
<td></td>
<td></td>
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<tr>
<td>Move a Message</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Overwrite</td>
<td>O</td>
<td>O</td>
<td>Add or</td>
<td>Add or</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Overwrite</td>
<td>Overwrite</td>
<td></td>
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<tr>
<td>Playback /</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Pause</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PC Connectivity</td>
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<td>O</td>
<td>O</td>
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<td>Priority</td>
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<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>VOR</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

note (1): Using the menu and setting the “REC-OP” mode you can choose to either overwrite the recording for corrections or add recording at the end of the existing recording without affecting the original recording.
Recorder Placement:

Dictation: hold the recorder about 4 inches from your mouth. Do not talk directly into the microphone. Hold it in such a manner that the sound passes by the microphone not directly into it. Set the microphone sensitivity on Low.

Conference Recording: place the unit on a book, not directly on the surface of the table or the desk. This will eliminate or minimize sound transfer from the hard surface of the table created by any hand movements. Set the recorder in the High microphone sensitivity mode.

Lecture Recording: place the unit on a book, not directly on the surface of the table or the desk. This will eliminate or minimize sound transfer from the hard surface of the table created by any hand movements. Set the recorder in the High microphone sensitivity mode and activate the directional mic mode if available on your recorder. Face the microphone in the direction of the person speaking.

Rec / Pause: easy to use operation for dictating found on the ICD-ST10 and the ICD-MS515. Press the “Dictate” button to start recording and then press the “Dictate” button to pause and gather your thoughts. To continue recording press the “Dictate” button again. Note that each time you press the button you hear a beep tone to confirm that you have pressed the button. In addition, when you are in Pause, the LCD screen shows a flashing “PAUSE” and the red operation light also flashes. When you continue recording the red LED will stop flashing.

Note: the “beep” sound will not be recorded.

Rec / Stop: starts recording when you press the “Dictate” button and stops recording when you press the “Dictate” Button again. This also ends the dictation. When you press the “Dictate” button again it creates a new dictation.

Overwrite Function: available on the ICD-MS515, ICD-ST10 and the ICD-P17 enables the user to correct their dictation by listening through the last correct word of their existing dictation and pressing the Rec button. All the dictation in the current recording after the user presses the Rec button will be erased and replaced by the new dictation. For example: dictation “1 2 3 4 5 6 7 8 9 10” In playback press the “Rec” button after hearing the “5” in playback and dictate “A B” and then stop the recording. In playback you will hear “1 2 3 4 5 A B”. Even though the new dictation “A B” is shorter in recording time than “6 7 8 9 10”, you will only hear the “A B”. With some other digital recording devices because the recording which is overwriting is shorter than the original recording, there will be some of the old dictation still heard which confuses the person transcribing and could create some problems in the documentation. In this case, the playback might be heard as “1 2 3 4 5 A B 8 9 10”
**Insert Function:** the purpose of this function is to allow the user to insert new dictation in the middle of existing dictation. This is accomplished by playing back recording and pressing the index button at the point the user wishes to insert the dictation. What happens is that one dictation is now shown as two. Then go back to the first part of the dictation and using the “ADD RECORDING” function dictate the material that is to be inserted. After this is completed the index mark identifying the second part which separates the two documents can be deleted by pressing the Index and the Erase buttons at the same time.

**Record Add / Record Plus Function:** used to add recording to an existing dictation. If this function is active, having been turned on in the set-up process, Press the record button while playing back and the word “ADD” as well as the Operation LED and the word “REC” will flash. To dictate the added material press the Rec button and start talking. The new dictation will be placed automatically after the existing dictation.

**Erasing / Deleting:**

- **All recordings in a file folder:** press and hold the “erase” and “stop” buttons at the same time. The user will see the message “ALL ERASE” on the LCD screen flashing. Press the “erase” button again and all the recordings in that folder will be erased.

- **One recording in a file folder:** press and hold the “erase” button. The user will hear a brief sample of the dictation to confirm it is the right dictation they wish to erase. Press the “erase” button again and it will be erased.

- **All Recordings (Memory Stick):** menu select the “Format” option and follow the instructions to erase all the dictation in all files on the Memory Stick.

**Move Function:** this function allows the user to move a dictation from one folder to another. This might be done for a number of reasons. One is that the dictation was accidentally recorded in the wrong file folder. Another reason might be that the original dictation was created as a draft in one file folder and once completed needs to be moved to a file folder that only contains work that will be e-mailed or transcribed.

To accomplish this, play back the dictation and while listening to it, change the file folder and then press the play button. When the file folder is changed, the word “move” will appear on the LCD screen and will flash. After the move is confirmed by pressing the play button, the “move” on the screen disappears.
SECTION H: Digital Voice Editor Software

Versions: v.2.12

GUI Layout:

TOOL BAR: a series of choices for the user to select to activate functions of the digital voice editor including set-up and saving to PC options.

RECODER FILE FOLDERS: shows the available file folders of the digital recorder for the user to choose from.

FOLDER CONTENT INFORMATION: provides detailed information on each dictation.

PLAYBACK INFORMATION: provides information as to what is being listened to as well as where in the dictation you are listening by showing the total recording time and current position in time.

PC HDD FILES: shows the PC’s HDD drive contents

PC HDD FILE CONTENTS: shows the individual dictations HDD file

CONTROL SECTION: a series of options to control the playback as well as e-mail and Voice to Print functions
**TOOL BAR:** a series of choices for the user to select to activate functions of the digital voice editor including set-up and saving dictated files to PC options.

**RECORDER FILE FOLDERS:** shows the available file folders of the digital recorder for the user to choose from.

**FOLDER CONTENT INFORMATION:** provides detailed information on each dictation. When a file folder in the RECORDER FILE FOLDER section of the GUI is clicked on, the dictations in that folder will appear in the this section of the GUI.

**PLAYBACK INFORMATION:** provides information as to what is being listened to as well as where you are in the dictation you are listening by showing the total recording time and current position in time.

**PC HDD FILES:** shows the PC’s HDD drive contents

**PC HDD FILE CONTENTS:** shows the individual dictations in the HDD file

**CONTROL SECTION:** a series of options to control the playback as well as e-mail and Voice to Print functions

**FILE STRUCTURE:**

The amount of information that is shown on the PC in the GUI of the Digital Voice Editor Software is based on the user set up. This is done in the Options selection from the Tool Bar. You can choose to display the following:

- Model Number
- Folder Number
- Folder Name
- Message Number
- User Name
- Message Name
- Record Mode
- Record Date
- Record Time
ICD-MS515 RECORDING:

File Name: 001_Demo Dict_001_SP_2003_04_09_14_03.msv

The contents of the file name are as follows:

001 ...............The number of the file folder on the recorder
Demo Dict.........The name of the file folder created by the user
001............... The number of the recording in the file folder. If there were multiple recordings the next one would be number 002
SP...............The recording mode [SP or LP]
2003..............The Year the recording was made
04..................The month the recording was made
09..................The date the recording was made
14..................The hour the recording took place (1400 = 2 PM)
03..................The minute the recording took place (3 minutes after the hour)
msv..............The file format the dictation was recorded in.

On the PC it will show the total recording length and if it was a priority message
**ICD-P17 RECORDING:**

File Name: `ICD-P17_001_A_001_Stephen Teplansky_2003_04_09_03_52.dvf`

ICD-P17……………. the model of the recorder  
001…………………. the number of the file folder  
A…………………… the letter of the file folder  
Stephen Teplansky….the name of the user of the recorder  
2003………………..the year the recording took place  
04…………………..the month the recording took place  
09…………………..the date the recording took place  
03………………..……the hour the recording took place [3:00 AM]  
52………………..……the minute the recording took place  
.dvf…………………....the file format the dictation was recorded in.

**ICD-ST10 RECORDING:**

File Name: `ICD-ST10_001_A_001_Stephen Teplansky_ST_2003_04_09_12_54.dvf`

ICD-ST10………….. the model of the recorder  
001………………….the number of file folder on the recorder  
A…………………..the letter of the file folder  
001………………….the number of the dictation in the file folder  
Stephen Teplansky….the name of the user of the recorder  
ST…………………..the recording mode [ST, SP or LP]  
2003………………..the year the recording was made  
04…………………..the month the recording was made  
09…………………..the date the recording was made  
12…………………..the hour the recording was made [12:00 noon]  
54…………………..the minute the recording was made  
.dvf…………………....the file format the dictation was recorded in

**File Size:**

Depending on the recorder, the size of a recorded file will be different. The advantage of the .msv and .dvf formats is that they are approximately 1/10th the size of a standard .wav file. This consumes less space on the recorder, maximizes recording time and speeds the transmission time.

**EXAMPLE:**

<table>
<thead>
<tr>
<th>Duration</th>
<th align="right">.wav</th>
<th align="right">.msv</th>
<th align="right">.dvf</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Min</td>
<td align="right">6627KB</td>
<td align="right">595KB</td>
<td align="right">595KB</td>
</tr>
<tr>
<td>60 Min</td>
<td align="right">79,524KB (79.5 MB)</td>
<td align="right">7,140KB (7.1MB)</td>
<td align="right">7,140KB (7.1MB)</td>
</tr>
</tbody>
</table>
SECTION I: Transcoding

The purpose of transcoding is to convert the file format from one form to another to allow the dictation to be listened to by others who don’t have the ability to work with the original recording format or used as part of another program such as using the recording in a PowerPoint® slide.

Sony uses two (2) different CODECs and file extensions

CODECS:
- LPEC: Long Term Predicted Excitation Coding [Sony proprietary]
- TRC: Triple Rate Codec [Generic Industry Standard]

FILE EXTENSIONS:
- .dvf: file format used in the ICD-ST10 and ICD-P17
- .msv: file format used in the ICD-MS515

File Format Compatibility:

The Digital Voice Editor can handle the following file formats. You can play them back, edit them, or attach them to an e-mail message on the Digital Voice Editor window.

?? DVF files [LPEC: For ICD-ST series]
?? DVF files [LPEC: For ICD-BPx50 series]
?? DVF files [LPEC: For ICD-BP100/BPX20 series]
?? DVR files [TRC: For ICD-P series]
?? MSV files [LPEC: for ICD-S/M5xx series]
?? MSV files [ADPCM: for ICD-MS1/MS2 series]
?? WAV files [auto-conversion]
?? WAV files (44.1kHz 16bit stereo]
?? WAV files [11 kHz 16 bit monaural]
?? ICS files (only when converted into a WAV file]
?? MP3 files
?? WAV files

File Format Conversion:

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>.msv</td>
<td>.wav</td>
</tr>
<tr>
<td>.dvf</td>
<td>.wav</td>
</tr>
<tr>
<td>.msv</td>
<td>.dvf</td>
</tr>
<tr>
<td>.dvf</td>
<td>.msv</td>
</tr>
<tr>
<td>.wav</td>
<td>.dvf</td>
</tr>
<tr>
<td>.wav</td>
<td>.msv</td>
</tr>
</tbody>
</table>
If using the Sony FS-85USB Transcription Hardware / Software kit, there is no need to convert the files from the format of dictation created on a Sony digital Voice Recorder. No matter which file format, .msv or .dvf, the software allows it to be listened to without conversion.

In order to allow dictation recorded on the digital voice recorders to be transcribed by other transcription softwares it may be necessary to convert the files to a .wav format. This can easily be done by converting the file format to .wav using the Sony Digital Voice Editor software. When saving a digital voice recorder message on your computer's hard disk, you can specify any one of the file formats mentioned above.

**To Convert and Save All Recordings from the Digital Voice Recorder on the PC**

1. Click on the IC RECORDER icon on the Tool Bar
2. In the Drop Down box Select WHOLE then select SAVE
3. In the “Save All Message” box which appears
   - Choose the “Save-In location”
   - Re-Name the Folder (only if you want to)
   - Choose “Save as type”
   - Click on “Save”

**To Convert and Save All Recordings from a specific File Folder on the Digital Voice Recorder to the PC**

1. In the Recorder File Folder section of the GUI (Graphical Unit Interface)
   - click on the specific file folder
2. Right Click on the mouse and select “Save”
3. In the “Save Message” box which appears
   - Choose the “Save-In location”
   - Re-Name the Folder (only if you want to)
   - Choose “Save as type”
   - Click on “Save”

**To Convert and Save one recording in a specific file folder on the Digital Voice Recorder to the PC**

1. In the Recorder File Folder section of the GUI (Graphical Unit Interface)
   - click on the specific file folder
2. In the Folder Content Information Section of the GUI left click on the dictation you wish to convert and save (it will be highlighted)
3. Right Click on the mouse and select “Save”
4. In the “Save Message” box which appears
   - Choose the “Save-In location”
   - Re-Name the Folder (only if you want to)
   - Choose “Save as type”
   - Click on “Save”
Batch Conversion:

The Digital voice Editor software v2.1 provides the capability of converting multiple files from one format to another in a few easy steps.

#1 Launch the DVE 2.1
#2 Select the files that are to be converted
#3 Right Click on the mouse and select “Convert File Format”
#4 Choose where the converted files are to be saved
#5 Select the file format to convert the files into
#6 Click on the “Convert” button

SECTION J: Special Recorder Functions

Folder Name: A specific feature of the ICD-MS515, the folders can be named using the Folder Name option in the menu. There are a series of template names found in the menu which can be used or a special name can be entered for each folder using the jog lever.

Message Name: A specific feature of the ICD-MS515 that enables the individual message to be named using the menu and the “MSG Name function”.

User Name: The individual recorder’s user name can be stored in the flash memory or on the Memory Stick by using the Digital Voice Editor software with the USB cable connected between the PC and the recorder and selecting the IC Recorder Setting icon and typing in the user name. This user name becomes part of the dictation address each time a dictation is transferred to the PC.
SECTION K: Voice to Print

Dragon Naturally Speaking Preferred voice to print software: the ICD-MS515 and ICD-ST10 are compatible with Dragon Naturally Speaking Preferred voice to print software.

If the user has installed the Dragon software, by highlighting one of the individual dictations and then clicking the mouse on this icon, the voice to print process will be activated converting the dictation into text.

Some General Information and Tips:

?? When first installing the Dragon Naturally Speaking Preferred software, make sure you load the Dragon software first and then the Sony Digital Voice Editor Software. If you try to load the Sony software first, you will have to re-load it afterwards again. The process of loading the Sony software after the Dragon Software creates the link between the two which allows the use of the “ABC button” and automatic processing of the file.

?? Dictation Tips:
- Dictate in as quiet of environment as possible
- Set the Microphone Sensitivity to Low
- Create a separate User Profile for each person and each type of device or method of recording

For Example: Recording with an ICD-MS515 from a headset is different than using the built-In microphone of the recorder.

- Speak clearly-do not slur
- Use the Pause control while gathering your thoughts before continuing to dictate
- Take your time to dictate. You can speak as fast as 160 wpm
- Make the effort to fully train the system which can take about 20 minutes. It’s worth the time!
- Be patient- the more you use it the more accurate it will become
Headset Microphones

Sony headset microphones such as the DR-115DP with boom mic or the DR-140UP with flexible pipe microphone are excellent accessories for someone who creates a large volume of dictation which will be converted into text with Dragon NaturallySpeaking software. The mics have both a 3.5 mm microphone plug and 3.5mm earphone plug which connect to the corresponding jacks on the recorders. Playback is heard through the headset for convenience.

?? Voice To Print Transcribing Tips

Corrections and Proof Reading

One of the best features of the Dragon Naturally Speaking Preferred is the selective playback of the original dictation. After the dictation is converted into text, any word, phrase, sentence or paragraph can be highlighted with the mouse and pressing the Play icon on the Dragon Bar the actual recording will be played back in the author’s own voice. Proofreading couldn’t be easier.

Using Dragon software with e-mailed dictation

With the new v.2.1 Digital Voice Editor software, e-mail with recorded dictation can be sent from the originator’s location back to the office for processing in the compressed format. It does not have to be converted into .wav format. At the office, the attached recording can be saved on the HDD and then after opening the Digital Voice Editor software just highlight the file with the mouse and click on the ABC icon and the voice to print process will begin. There is no need to convert the file manually from .msv or .dvf before using the Dragon software.

Keep the Dragon Naturally Speaking Software open if more than one dictation is expected to be converted into text. It saves time not having to launch the software again.
SECTION L: E-mail (audible)

A special function of the digital voice recorder is the ability to record and e-mail dictation to others to listen. This can be a very affective business tool providing the ability to record a meeting or notes and then share the actual recording with others.

The process is accomplished by:

1. Launching the Digital Voice Editor
2. Highlight the document(s) [up to a maximum of 10]
3. Click the mouse on the icon which looks like a postage envelope.
4. The e-mail layout will appear with the recording attached.
5. Enter the e-mail address and any comments which need to be typed in.
6. Then send the document.

The file will be sent to the recipient in the original file format [.dvf, .msv]. The recipient can download the free player software from Sony’s website (See Section P: Software Upgrades) to listen to the recording. The file could be transcoded into a .wav format and sent, but the size of the file would be much larger than that of the Sony compressed file in the .dvf or .msv Codecs.

SECTION M: CODECS

CODEC: Acronym for coder-decoder. “definition: An assembly consisting of an encoder and a decoder in one piece of equipment”

LPEC CODEC: Developed and exclusively used by Sony, for high quality recordings especially suited for voice to print applications.
- Available on the ICD-ST10 and ICD-MS515

TRIPLE RATE CODEC: A generic consumer CODEC used for general applications not requiring a high quality audio signal.
SECTION N: PC Requirements and Compatibility

PC Connected Models: ICD-P17, ICD-ST10, ICD-ST10VTP, ICD-MS515, ICD-MS515VTP

IBM PC/AT or compatible
Operating Systems: Microsoft Windows® 98, 2000, ME, XP
CPU: 266MHz Pentium® II processor or higher
RAM: 64 MB or more
Hard Disk Space: 70 MB or more
CD-ROM Drive
USB Port
Sound Board
Display: High Color (16 bit) or more and 800 x 480 dots or more

SECTION O: Recorder Set-Up

In order to obtain the best results from your digital voice recorder it’s important to take the time set up the device properly. It only takes a few minutes and you’re ready to start dictating. Sony makes it very easy to accomplish most of these settings by uploading settings from the PC. Just connect the USB cable to the PC connectable units. Launch the digital voice editor and click on the IC Recorder Setting icon on the Tool Bar.

The only setting that is not handled in this process with USB connection is the date and time which has to be done on the recorder.

For non-PC connected units press the MENU button. You can also set up the PC connected units in the same way rather than using the Digital Voice Editor Software.

The various settings include:

Author Name: identifies the recorder by becoming part of the file name which is transferred to the PC.

Beep Tone: On or Off

Continuous: when ON, in playback will continue to play continuously through the recordings one after the other without stopping at the end of each one.
When OFF, the playback will stop at the end of each recording.

Counter: shows the amount of time you are recording or playing

Date and Time: enter the current date and time
Display Mode: Choose from one of the following:
(1) Recording Time: shows the time the recording was made
(2) Recorded Date: shows the Y/M/D the recording was made
(3) Remaining Time:
   In Play: shows the remaining recording time of the dictation you are listening to.
   In Record: shows the remaining recording time on the unit

DPC: sets the Digital Pitch Control in a percentage value range of +100% or -50% in increments of 10%. In the plus (+) range the playback is faster and in the (-) range the playback is slower.

Easy Search: when ON enables the playback to advance or rewind in increments each time you press the jog dial control.
   Advance Forward: 10 seconds
   Rewind: 3 seconds

Folder Names: (ICD-MS515 only) enables the recorder to have specific names for each folder. These folder names are part of the dictation file name when the recording is transferred to the PC

LED: ON or OFF

Microphone Sensitivity: High, Medium or Low

Rec-Operation: Overwrite or Add Recording

Recording Mode: ST, SP, LP

VOR (Voice Operated Recording): in the ON position the recorder will start and stop when the user is speaking and stops during pauses saving recording time. It is not recommended to use this feature in conference or lecture recording because there is usually a lot of noise taking place in the room and the recorder would not shut off.

Note: not all functions may be available on your recorder.

SECTION P: Software Upgrades and Downloads

Sony makes it easy to get software upgrades by using the internet and accessing www.sonystyle.com. At the top of the screen is a section titled “Product Service Support”. Click on this and then follow the steps below:
   ?? In the Section Service and Support click on the Launch Service box
   ?? Click on Electronics
   ?? Click on Portable Audio / Digital Voice Recorder

This will reveal a page with Software for the ICD Digital Voice Recorders.
SECTION Q: Transcription

Depending on the application, some or all of the recordings may be manually transcribed or automatically turned into text. Voice to print (voice to text) is certainly a growing technology, but many users still prefer to transcribe the dictation in the traditional fashion of using a foot control and hearing the words through a chin band style listening device. The person performing this task could be the originator of the dictation as well as an office assistant or professional transcriptionist.

Sony has introduced the FS-85USB Transcription Hardware/Software kit which includes a CD-ROM with a transcription program and a USB connected 3-function foot control and a chin band style listening device. Loading the software on a Windows® based PC provides the capability of easily transcribing the dictation into any word processing or e-mail application.

The appearance of the software is similar to that of the GUI (Graphical Unit Interface) of the Digital Voice Editor which comes with the PC compatible Digital Voice Recorders.

The upper right section of the DVE GUI on the PC side (right side) shows the location of the files which are available for transcription. Before the availability of the FS-85USB transcription kit, the files had to be converted into .wav format in order to transcribe them. With the new software in the FS-85USB, the dictation files can be transcribed and listened to in their original format (msv, .dvf, .wav, .mp3). This saves a number of steps and most important valuable time.

The Player Pane is the control and information panel for the transcriptionist.
AUDIO FUNCTIONS:

This section allows you to control the basic playback options including:

- Volume Control
- DPC (Digital Pitch Control)
  -50% to +100%

To return to normal click on the NORM button

Divide & Combine:
This function is used when connected through the USB cable and allows you to divide a message into two parts on the digital voice recorder or combine two messages into one message.

SPECIAL FUNCTIONS:

Repeat: Allows you to mark a specific segment of a recording that is either on the recorder (USB is connected) or on the PC and have it continuously play over and over again. It will play repeatedly until you press the STOP button on the Playback Operation Section or click OFF the Repeat function.

Bookmark: allows the user to mark a particular point in the recording. Then using the “jump” button, click on it and the playback will immediately go to the Bookmarked location.

E-Mail:

Allows you to attach dictation to an e-mail, address it and send. Note that there are a maximum of 10 recordings that can be attached and also consider the maximum size of the total files that can be accommodated by your internet service provider.
ABC Icon:

This is the automatic link to Dragon NaturallySpeaking Preferred Voice to Print Software. After the Dragon Software has been installed, a dictation can be automatically converted into text. The user highlights a dictation that is either on the recorder side of the GUI or on the PC hard disk drive and then clicks on the ABC icon. The dictation will be automatically converted to a standard .wav file and loaded into the Dragon NaturallySpeaking software and converted into text.

CURRENT DICTATION INFORMATION

This section provides the listener with information on the current dictation being listened to.

No.  ...............the number of the dictation in the selected file
User Name...... name of the user who’s recording the dictation is
Msg Name........message name if entered
Rec Date...........date of the recording
Length...............in Hours, Minutes and Seconds
Play Time Indicator (Upper Right Corner)

shows how much of the total dictation has been played. This time counter is also synchronized with the Playback Slider on the lower right hand portion of the Player Pane.
PLAYBACK SLIDER

Shows in a linear fashion where the playback is in relation to the entire length of the recording. The HH/MM/SS on the lower part of the slider changes according to the length of the document. You can manually move the slider using the mouse. Note that when you reposition the slider the time counter in the CURRENT DICTATION INFORMATION section of the Player Pane adjusts accordingly.

KEYBOARD AND FOOT CONTROL PLAYBACK CONTROL

In the Options section / Transcribing Key Folder of the toolbar the user can activate the USB foot control operation as well as the Transcribe Keys.

Enable Transcribing Keys: activates the keyboard so it can be used to manually listen to the recording and perform such actions as Play, Stop, Easy Search Backward, Easy Search Forward, Skip Backward, Skip Forward. The specific keys used to perform these keyboard commands can also be set.

Enable Foot Control: enables the FS-85USB foot control to be connected to the PC and operate with the ability to Play, Stop, Rewind and Fast Forward.
<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BATCH CONVERSION</td>
<td>ability to convert more than one file from one format to another in one step</td>
</tr>
<tr>
<td>CODEC</td>
<td>Compression Decompression</td>
</tr>
<tr>
<td>COMPRESSED FILE</td>
<td>a file format that is smaller in size</td>
</tr>
<tr>
<td>DIVIDE</td>
<td>the ability to take one dictation and divide it into two or more parts</td>
</tr>
<tr>
<td>DPC</td>
<td>Digital Pitch Control- plays back at a faster or slower rate without distortion</td>
</tr>
<tr>
<td>DVE</td>
<td>Digital Voice Editor-software used to download files to the PC</td>
</tr>
<tr>
<td>DVF</td>
<td>digital voice file- file format of the ICD-BP and ICD-P recorders</td>
</tr>
<tr>
<td>FILE</td>
<td>a dictation or recording</td>
</tr>
<tr>
<td>FLASH MEMORY</td>
<td>the non-removable memory of a digital voice recorder</td>
</tr>
<tr>
<td>FOLDER</td>
<td>a specific place to store recordings in the digital voice recorder</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical Unit Interface- the screen layout of a software program</td>
</tr>
<tr>
<td>HDD</td>
<td>Hard Disc Drive</td>
</tr>
<tr>
<td>LPEC</td>
<td>Sony’s exclusive CODEC</td>
</tr>
<tr>
<td>MODE</td>
<td>the recording mode of the digital voice recorder-SP, LP or Stereo</td>
</tr>
<tr>
<td>MOVE</td>
<td>the ability to move a recording from one folder to another</td>
</tr>
<tr>
<td>MSV</td>
<td>memory stick voice- file format of the ICD-MS515</td>
</tr>
<tr>
<td>OVERWRITE</td>
<td>the ability to correct dictation in the playback mode</td>
</tr>
<tr>
<td>SAMPLING FREQUENCY</td>
<td>the recording quality of the device. The higher the sampling frequency the better the recording quality</td>
</tr>
<tr>
<td>TRANSCODE</td>
<td>the ability to convert from one file format to another</td>
</tr>
<tr>
<td>TRANSFER TIME</td>
<td>the time it takes to upload a recording from the digital voice recorder to the PC</td>
</tr>
<tr>
<td>UPLOADING</td>
<td>the process of copying a recording from the digital voice recorder to the PC</td>
</tr>
<tr>
<td>USB</td>
<td>Universal Serial Bus - the connection and cable from the digital voice recorder to the PC</td>
</tr>
<tr>
<td>VOR</td>
<td>Voice Operated Recording- starts and stops with the voice or sound</td>
</tr>
<tr>
<td>VTP</td>
<td>Voice To Print</td>
</tr>
<tr>
<td>WAV</td>
<td>standard sound file used in Windows® application software</td>
</tr>
</tbody>
</table>