

Dragon Solutions Using A Digital Voice Recorder



COMPLETE REPORTS ON THE GO USING A DIGITAL VOICE RECORDER

Professionals across a wide range of industries spend their days in the field traveling from location to location to gather information. Patrol officers and detectives respond to accidents and suspected crimes. Case workers log countless miles to visit families in crisis. Building and health inspectors examine sites to ensure public safety and regulatory compliance. Claims adjustors assess property damage. And the list goes on.

But information gathering is just the beginning. These busy professionals are also responsible for completing detailed documentation based on the information captured out in the field. Traditionally field workers rely on handwritten notes which they jot down on the fly and later type up in reports from their home or office computers. This tedious, time-consuming process can add hours to an already long work week, making it difficult to meet reporting deadlines and causing high rates of employee burnout.

Dragon® NaturallySpeaking® provides a better way. The industry's leading speech recognition software, Dragon enables field professionals to dictate notes, reports, and other documents into a portable digital voice recorder for automatic transcription when they connect to a PC back at their home or office. Dragon turns speech into text three times faster than most people type with up to 99% accuracy using virtually any Windows-based application. As a result, field professionals can complete critical paperwork in a more timely and efficient manner for bottom-line results:

- Higher employee productivity
- Increased employee satisfaction and retention
- Faster turnaround of detailed documentation
- Improved client service

With Dragon and a digital voice recorder, faster and more efficient field reporting is just a few simple steps away.





SELECTING A DIGITAL VOICE RECORDER

Although Dragon is most often associated with direct dictation (i.e., using a headset to dictate directly to your PC to create documents or control applications by voice), one of the greatest productivity benefits of Dragon is the software's ability to transcribe recordings, including audio files captured on a digital voice recorder.

Digital recorders, such as devices from Olympus, Phillips or Sony, have largely replaced traditional analog, or cassette-based, recording devices. These small hand-held devices have USB capability to download voice files to a computer. If you're already using a digital voice recorder to capture your notes in the field, it's easy to maximize your existing hardware investment and link your current digital voice recorder with Dragon. If you're new to the recorder market, there are a variety of factors to consider when selecting your device, ranging from style, size, convenience and price to audio quality, display, storage size, battery life, playback capabilities and other advanced features.

There are many digital recorders tested and approved for use with Dragon (see Figure 1). For the highest levels of both accuracy and convenience, Nuance encourages users to consider the following digital recorders:

- Philips 9600 digital voice recorder, which includes the easy-to-configure SpeechExec Pro software
- Olympus WS-210
- Sony ICD-MX20

Model	Manufacturer	Accuracy Scale Dragon Score
Digital Pocket Memo DPM 9360	Phillips	666
Digital Voice Tracer 660	Phillips	66666
Digta 4010	Grundig	666
Digta 4015	Grundig	666
Digta 410 / 415	Grundig	666
DS-2300	Olympus	66
DS-2400	Olympus	666
DS-30 / 40 / 50	Olympus	6666
DS-3300	Olympus	66
DS-5000 / 5000iD	Olympus	6666
DS-55 / 61 / 65 / 71 / 75	Olympus	6666
ICD SX-Series	Sony Corporation	66666
ICD-BM1	Sony Corporation	66666
ICD-MX20	Sony Corporation	666666
ICD-P620	Sony Corporation	666

Figure 1: Excerpt from the Dragon Hardware Compatibility List. For a list of recorders that yield the highest levels of accuracy when used with Dragon, ranging in price from \$40 to \$300, please go to http://support.nuance.com/compatibility/





USING A DIGITAL VOICE RECORDER

Although individual voice recorders will vary, follow these basic guidelines when dictating into your recorder for optimal recognition results:

- Always hold the recorder at the same distance from your mouth. Some users choose to rest the device on their jaw for the most consistent results.
- For better quality recordings, consider connecting your headset microphone to your device rather than talking into the built-in microphone. (The headset microphone often offers superior noise-cancelling capabilities so that Dragon can focus on your voice rather than potential background noise.)
- Use the Restricted Command Set in recorded dictation to best control the formatting and to make corrections while dictating. For example:

SCRATCH THAT - a command that deletes the previous utterance

RESUME WITH - a command that allows you to back up if you misspeak or change your mind after dictating a phrase. For example, if you dictate "the suspect fled on foot east down Pleasant Street," you can change the street name by dictating "**RESUME WITH** the suspect fled on foot east down Prospect Street."

• Use different modes while recording to suit your specific dictation needs. Dragon NaturallySpeaking transcribes in Normal Mode by default. However, there are instances where you may find it helpful to switch modes. Dictating a series of numbers? Switch to Numbers mode. Not sure how to spell a specific name or technical term? Try using Spell Mode.

[Mode-Name] MODE ON or START [Mode-Name] MODE - Turn a mode on.

[Mode-Name] MODE OFF or STOP [Mode-Name] MODE - Turn a mode off.

SWITCH TO [Mode-Name] MODE - To switch modes.

TRANSFERRING RECORDED TEXT

You've dictated notes in the field and are ready to transfer the audio file from your digital voice recorder to your home or office PC. You need to physically connect your recorder to your PC to perform the file transfer. Connection methods vary depending on the brand and model of your recorder.

Most digital voice recorders that allow you to transfer voice data to a PC use a USB interface, but some use docking stations and USB cables. We recommend that you follow the instructions included with your recorder to ensure a proper connection. In addition, some recorders include desktop software to manage the audio files on your desktop. (Simply follow the recorder manufacturer's installation instructions to load the software on your PC.)

It is important to note that different recorders save dictation files in different audio file formats. When transferring your audio files from your recorder to your PC, be sure the files are saved in one of the following Dragon-compatible audio file formats to ensure seamless transcription of the recorded text:

· .wav

• .wma

• .VOX

• .sri

• mp3





TRANSCRIBING YOUR TEXT

Before you can transcribe your audio files from the digital voice recorder for the first time, you'll need to set up Dragon to receive the input from your device. This requires creating a user profile specifically adapted to the sound of your recorded voice to ensure optimal speech recognition accuracy. The user profile contains information about the unique characteristics of your voice along with a customized set of words, known as a vocabulary.

Note: For existing Dragon users, the best option is to add the digital voice recorder as a NEW SOURCE for your existing user profile, rather than creating a completely new user profile for the digital voice recorder. This way, any customization that you created for Dragon (e.g., custom-added words and phrases, spoken forms and individual pronunciations, optional settings, custom commands, etc.) are captured and saved within your user profile. If your digital voice recorder is set up as an entirely new user profile, it would be like starting from scratch: the refinements you have made to Dragon will not be available from your recorder. This means that your recorder transcripts would contain many preventable errors -- errors due to the absence of your desired custom words, for instance.

Dragon NaturallySpeaking makes it easy to create a user profile in just a few simple steps:

- **1.** Select a reading from the Dragon Setup Wizard to use for creating your user profile. The readings vary in difficulty and orientation. Some are more business oriented and some geared toward specific age ranges. By creating your voice profile using the most appropriate reading, you'll enjoy greater speech recognition accuracy from the first time you use Dragon.
- 2. Reading the text from your computer screen or from a printed hard copy, dictate for at least 16 consecutive minutes. When reading the text, try to speak clearly and at a moderate pace. Do not dictate punctuation. It may take as long as 30-40 minutes to dictate the reading in its entirety. A longer recording will result in a more accurate user profile. However, in most cases Dragon can create a sufficient acoustic model of your voice from a 16-minute recording.

When you have completed your training dictation, Dragon will import the voice file and use it to create your individual user profile. Depending on the speed of your computer and the length of the recording, this process could take about an hour. Once the profile is set, you will not need to repeat this step.

Once your profile has been created and your audio files have been transferred to your PC, there are several ways to perform transcription:

- **1.** Say "Transcribe recording" or click Transcribe Recording under the Sound menu of the DragonBar. Then browse your desktop to select the specific file you want to transcribe. You can select several files to transcribe at the same time by holding down the Control key and clicking the selected files.
- 2. Drag and drop a .wav file onto the DragonBar (see Figure 2), and Dragon will automatically transcribe it.



Figure 2: DragonBar showing the Extras toolbar which includes the Transcribe button and controls for the playback of dictation.

3. If your recorder comes with Dragon-compatible software, use that software's interface to transcribe your audio file.





When you open the audio file in Dragon or use your recorder's Dragon-compatible software to submit the file for speech recognition, the Transcription Options window (see Figure 3) enables you to specify the application in which you want the transcribed text to appear.

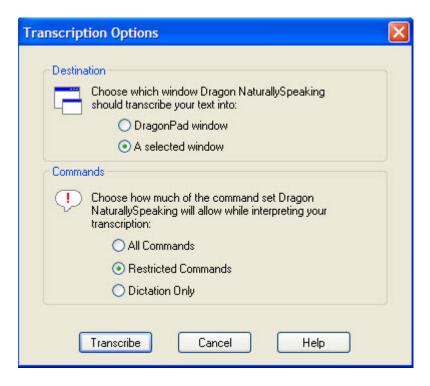


Figure 3: Transcribe a Recording dialogue box

You can either send the transcribed text to DragonPad, Dragon's word processing software, or to a Selected Window. If you choose Selected Window, Dragon will automatically insert the transcribed text wherever you place the blinking cursor in an active window on your computer screen. This will enable you to insert the transcribed text directly into a Microsoft Word document or even a specific field within virtually any Windows-based application. You can even insert the transcribed text directly into a field on a custom form or report. This feature is particularly useful for quickly inserting dictated notes into field report templates.

REVIEWING AND EDITING TRANSCRIBED TEXT

Once your text has been transcribed from the audio file into your selected application, review the text for accuracy. Select the text you want to correct (by mouse or voice), and then use the buttons on the Extras toolbar of the DragonBar to play back your dictation.

The transcribed words will be highlighted on the screen as the audio is played back. If you see an error, press the Correction hot key (normally the minus (-) key on the numeric key pad) or click the Correction button on the DragonBar Extras toolbar. The Correction menu appears with the selected text, and you can use the keyboard or your voice to make any necessary corrections.

After you correct any "misrecognitions," Dragon will automatically update your user profile to reflect your changes. In this way, Dragon will deliver even better recognition results in subsequent transcription sessions.





CONCLUSION

Using Dragon NaturallySpeaking with a digital voice recorder is simple and straightforward. Best of all, it can drive new levels of productivity and service at organizations with heavy field reporting demands. Three key Dragon advantages include:

Mobility -- Stay productive on the go. While traveling from appointment to appointment, dictate detailed notes into a portable recorder while they are still fresh in your mind. Use time on the road to get a jumpstart on field reporting and avoid a paperwork pile-up.

Productivity -- By using Dragon to automatically transcribe digital voice recordings made in the field, you can create reports and other documentation three times faster than typing. This adds up to significant productivity gains over time.

Affordability -- Dragon implementation costs will vary depending on the size of your enterprise deployment, related hardware and software needs, and the level of customization, training, and support desired. In most cases, this investment will quickly pay for itself by streamlining the field reporting process for enhanced employee productivity and improved client service.

ABOUT NUANCE COMMUNICATIONS

Nuance is a leading provider of speech and imaging solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with information and how they create, share and use documents. Every day, millions of users and thousands of businesses experience Nuance's proven applications and professional services. For more information, please visit **www.nuance.com**.

