



KnowBrainer Review of [DPI \(Dragon Pro Ver. 15\)](#)

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The following review covers the Ver. 15 edition of Dragon which is now referred to as [DPI 15](#) (Dragon Professional Individual) and [DLI 15](#) (Dragon Legal Individual). Nuance will soon be releasing [DPG 15](#) (Dragon Professional Group) and [DLG 15](#) (Dragon Legal Group). The primary difference between Group and Individual is that Group adds Network Roaming and is available in OLP pricing (multiple license discounts). This review will be subject to revisions/updates as we continue working with the application, or in the event that Nuance releases a service release patch. Whenever we edit this review, we will note it at the top of the page.

Note #1: Beginning with DPI 14 Nuance changed their every 2 year release schedule to every year on September 1 which means you can “probably” expect a DPI 16 release on September 1, 2017.

Note #2: DMPE 4 (DMPE 3 is not available in North America) is not likely to be released, until the 3rd quarter of 2017 but this release date is completely up in the air. At that time, we will create a separate review.

What's New in Dragon 15

• The BIG news is the introduction of the 1st consumer standalone Deep Learning speech engine

Note: All other speech recognition engines, including previous versions of Dragon, utilize the now dated HiddenMarkovModel technology circa 1997. The new Deep Learning speech engine reconfirms Nuance as the leader the pack.

- Deep Learning adapts to the user's active vocabulary by inspecting texts the user has created in the past, both by adding custom words to its active vocabulary and by learning the typical phrases and text patterns the user employs.
- During each session, it does a fast adaptation of its acoustic model (capturing how words are pronounced) based on just a few seconds of speech from the user. By doing this, it can also adapt to how a user's voice sounds in the moment; for instance are they impacted by a cold, using a different microphone or is there a change in environment.
- During the optional enrollment step, or later after a dictation session ends, Dragon will do some more intense learning in an offline mode. It continues to adapt models very well over time to a specific user's speaking patterns. (Courtesy of Nuance)

Additional details: Dragon uses Deep Neural Networks end-to-end both at the level of the language model — capturing the frequency of words and in which combinations they typically occur — and of the acoustic model, deciphering the smallest spoken units, or phonemes of a language.

These models are quite large and before they leave our labs, they have already been trained on lots and lots of data. One of the reasons why Neural Networks have taken off only now and not in the late 20th

century when they were invented is that training is quite a computing intensive process. We use significant amounts of GPUs (Graphical Processing Unit) to train our models. GPUs were originally invented for computer graphic applications like video games. Computing images and training Deep Neural Networks have a lot in common as both tasks require the application of relatively simple calculations towards lots of data points at the same time, and this is what GPUs are good at. We use multiple GPUs in parallel in one training session to speed up the training process

But how do we apply this outside of our data centers? Adapting those Deep Neural Networks that make up the acoustic model to the speech coming from the user is similar to training them, and we want to make that happen on the user's PC, Mac or laptop – and we want it to be fast. It is a demanding task as we need to make sure adaptation works with just a little data and computationally it is a very efficient process.

Packaging this process in a way that allows the individual to run it on their desktop or laptop is the culmination of many years of innovation in speech recognition and machine learning R&D. Enjoy the result of a highly accurate Dragon experience that is fully personalized to you and your voice. (Courtesy of Nuance)

- **New Improved Digital Recorder Transcription Features**

 - Simplified direct transcription menu improvements over DPI 14

- **Windows 10 Tablet Mode and Touchscreen support**

- **Saves and backups User Profiles significantly faster**

- **Nuance PowerMic III now supported in DPI/DPG 15 and DLI/DLG 15**

- **Improve Dragon Anywhere synchronization** (no need to login or out for synchronization)

- **Simplified microphone set up**

 - Built-in microphone support

- **New pop up contextual guidance** (variation on DNS 13 What Can I Say)

 - Pop-up prompts such as say “scratch that” when you click {Backspace} in a Select-&-Say enabled application

 - Webpage tips when browsing

 - Dictation Box tips

 - Tablet mode tips

 - Tutorial videos

Expanded navigational text pop-up hints

- **Nearly double speed Dictation over Ver. 13/14 (KnowBrainer VERIFIED)**

- **This appears to be the first version of Dragon that is smart enough to adapt to your vocabulary changes.** For example, DPI 15 types the phrase “ Dictation Box ” in Title Case. Previous versions of Dragon have struggled with some specialized phrases.

- **Nuance introduced Far Field algorithms (auto volume input gain control) in Dragon 13/14 but it worked out so well, that they made this an automatic feature in Ver. 15.** This was probably a good idea since most end-users were unaware of this valuable feature. You can now back away from your microphone and appreciate high accuracy as Dragon automatically increases the volume input. Note that Dragon 13/14 only featured Far Field algorithms for US and Canadian accents. This release should work well for all accents.

- **While we didn't notice an accuracy boost in our standard dictation (which was already 99.2% in Dragon 13/14), choppy dictation, noisy dictation, slurring dictation and overall sloppy dictation seems to be noticeably more accurate.** Anyone with an accent, speech impediment or specialized job (like court reporting with the steno mask), should see noticeably improve accuracy.

- **Up to 15% out-of-the-box improved accuracy over Ver. 13/14** (Nuance's claim)

- **Up to 26% out-of-the-box improved accuracy over Ver. 12** (Nuance's claim)

- **Continuous Learning (even during dictation)**

- **Increased Accuracy in noisy environments and accents**

- **WordPerfect 18 support**

- **Skype support**

- **Microsoft Excel no longer hangs if you close Dragon before Excel**

- **Outlook seems more fluid with less hitches. For example, if you delete a message, focus doesn't jump around as it did previously.**

- **Dictation appears less chunky and more fluid.**

- **Improved formatting**

Example: Say 8 pounds 50 to produce £8.50

The following is a list of DPI 15 Pros and Cons

Pros:

- You might not find a lot of new features in DPI 15 but you probably don't need much enticement since DPI 15 introduces the Deep Learning speech engine which replaces the circa 1997 dated HiddenMarkovModel technology.
- Nuance has reduced the SRP (on Ver. 14 and 15) to \$300 (1/2 off) but the new release no longer includes an OEM [microphone](#).
- Streamlined transcription of Recorded Dictation
- Digital recorder transcription has been raised to a new level. You not only cannot create a digital recorder profile, you no longer need to. As a test, I had my wife dictate a 200 word recording into my [Philips DPM-8000](#). My wife and I have the same accent but my speaking voice is nearly 2 octaves below hers. To make transcribing the recording even more difficult, I let Dragon add in the automatic punctuation (default setting). My wife's recording transcribed in my user profile with a stunning 99% accuracy and the punctuation was close to correct.

Cons:

- No longer bundles an OEM [microphone](#) which, from our point of view, is a very good idea because it requires customers to choose an appropriate sound system to fit their specific needs.
- Pro advanced scripting commands had a number of issues in Dragon Pro 12 through 14 where, when attempting to deploy an advanced scripting command in Outlook or Word 2013/2016, the commands would freeze the entire computer until you unlock the mouse by pressing {Alt+Ctrl+Del} to unlock Windows. Nuance's current 14/15 workaround is to change the behavior of SendDragonKeys to run nearly as slow as the SendSystemKeys script which, is not what we would call a realistic fix. This change slows our commands down to molasses. If you need advanced scripting commands to type text, we recommend substituting KnowBrainer Professional, VB or DVC command architecture over Dragon's legacy scripting.

- Dragon naming conventions have change. You can no longer use command names such as **D. S. 7000**. You will need to adopt command names such as **DS Seven Thousand**.
- When you attempt to respond to an Outlook message that goes over one page, you may experience annoying scrolling where you can't see the 1st few lines of your message unless you scroll up with your mouse wheel or use the KnowBrainer 2017 **Wheel <Direction> <1to20>** command by saying **Wheel Up 10**, for example. Even worse, your dictation may occasionally land in a different position from your cursor. This is extremely aggravating and may force you to using the Dictation Box. To make matters worse, Nuance solve this problem in a previous version of Dragon but managed to break whatever they previously fixed.
- Some end-users will experience out of focus issues when launching applications. For example, if you say start Microsoft Word, you may not be able to directly dictate into Microsoft Word until you click into the window with your mouse to bring the application into focus.

CONCLUSIONS:

If you are already using Dragon Pro 13 or DPI 14, a cursory glance at the new [DPI 15](#) features might not entice you but we believe the new Deep Learning speech engine will tip the scale. In our opinion, this is a game changer. Dictation should be considerably faster, improve while you're using it and more accurate; especially in noisy environments, with accents and specialties like court reporting. The previous Dragon engine was highly accurate but didn't learn as well and required a slower approach of utilizing dual cores and BestMatch V. Deep Learning is considerably faster because it only requires BestMatch IV and a single core. Additionally, 90% of the time, the Deep Learning speech engine only requires a single pass instead of the usual dual pass approach.

PS: A new version of [KnowBrainer Professional 2016](#), appropriately dubbed KnowBrainer Professional 2017, is scheduled to debut with DPI 15 which are both introductory priced through the end of September 2016. If you are a current KnowBrainer 2016 user, you will be familiar with our artificial intelligence command introduction in 2015 but KnowBrainer 2017 will introduce new features and take artificial intelligence to a whole new level. If you would like to see what's changed between KnowBrainer 2016 and KnowBrainer 2017, click [What's New in KnowBrainer Professional 2017](#). If you are unfamiliar but curious about KnowBrainer Professional, click [What is KnowBrainer](#) for the details.

** Our customers will additionally receive a complimentary copy of our new **KnowBrainer Dragon Training Guide** which includes step-by-step pictorial installation instructions, basic, intermediate & advanced training, and 31 setting changes to make Dragon more accurate and prevent sand traps (like those pesky freezes).*

Nuance System Requirements:

4 Gb of RAM recommended (2 Gb Minimum) *At KnowBrainer, we recommend a minimum of 8 Gb of Ram and prefer 16 Gb.*

CPU: 2.2 GHz Intel® dual core or equivalent AMD processor. (Minimum 1 GHz Intel® Pentium® or equivalent AMD processor or 1.66 GHz Intel® Atom® processor). *At KnowBrainer, we recommend a 2.6 GHz i5 or i7 CPU.*

Processor Cache: 2 MB L3 cache. (Minimum: 512 KB L3 cache). *At KnowBrainer, we recommend 6 MB L3 cache.*

Free hard disk space: 4 GB

At KnowBrainer, we also recommend a [KnowBrainer Tested and Approved USB External Soundcard](#)

Supported Operating Systems:

- Microsoft Windows 10 64-bit
- Microsoft Windows 8 32-bit and 64-bit
- Microsoft Windows 7 32-bit and 64-bit
- Windows Server 2008 R2, SP2 and R2 64-bit
- Windows Server 2012 R2, SP2 Standard Edition 64-bit

Note: An Internet connection is required for automatic product activation (a quick, anonymous process).

Previous Reviews:

If you would like to see some of our previous reviews check out the following:

- [KnowBrainer TableMike Face-Off](#)
- [KnowBrainer Handheld Microphone Face-Off](#)
- [KnowBrainer Headset Microphone Face-Off](#)
- [KnowBrainer Telephone Microphone Face-Off](#)
- [KnowBrainer Digital Recorder Face-Off](#)
- [KnowBrainer Wireless Microphone Face-Off](#)
- [KnowBrainer USB Soundcard Face-Off](#)

Current Gold Standards:

The following is a list of speech recognition add-ons that we consider to be #1 in their microphone categories we:

- Best Wireless Microphone* = [Samson Airline 77](#)
- Best Combo Telephone Wireless Microphone* = [Sennheiser SD Pro1](#)
- Best Handheld USB Microphone* = Philips [SpeechMike Premium](#) USB Handheld/TableMike
- Best USB TableMike* = [SpeechWare 3-in-1](#) / [SpeechWare 6-in-1](#) / [SpeechWare 9-in-1](#)
- Best Mobile USB TableMike* = SpeechWare [TravelMike](#)
- Best Wired Headset Microphone* = SpeechWare [FlexyMike DEC](#)
- Best Bluetooth Microphone* = [VXi VoxStar UC](#)
- Best Digital Recorder* = Philips [DPM-8000](#)
- Best speech recognition application* = [Dragon 15](#)
- Best Third-Party Command Utility* = [KnowBrainer 2017](#)

[Lunis Orcutt](#) - Developer of [KnowBrainer Professional 2017](#) and founder of [KnowBrainer Speech Recognition Forums](#) (the world's largest speech recognition forum)

[Chat Live](#) w/a Nuance Gold Certified Speech Recognition Solutions Provider



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