

# **APD Test Software**

Auditory Processing Disorders

Test Data Records and Report Generation Software



## **User Manual and Installation Guide**

**Version 1.2**

**October 2020**

**© AudiPro Audiology Clinic Inc.**

**Developed by Ayyala Studio**

## Contents

System Requirements.....	1
APD Test Software Installation Process.....	1
Installation of MiKTeX Distribution for PDF Report Generation.....	4
Installation of Required MiKTeX Packages.....	7
APD Test Software – Starting the Program.....	10
APD Test Software Main Screen.....	11
Creating a new file.....	11
Patient Data Filename and Data Format.....	12
Loading an existing file.....	12
Set Data Folder for Patient Data Files.....	12
MyAPD – Program and Document Settings for PDF Report Printing.....	12
APD Test Battery Data and Questionnaires.....	14
Opening an APD Test Data or Questionnaire Form.....	14
Save and Menu Buttons.....	14
Questionnaires & Forms.....	14
Speech in Quiet & Noise Test.....	15
Staggered Spondaic Words (SSW) Test.....	18
Word Correctness and Delays.....	18
Reversal and Word Order.....	18
Cardinal Responses and Re-Instruction.....	19
Phonemic Synthesis Test.....	19
Phonemic Error Analysis.....	20
Phonemic Error Types and Description.....	20
Phonemic Error Counts and Summarization.....	21
PDF Report Generation.....	22

# APD Test Software Program Version 1.2 (Trial)

## User Manual and Software Installation Guide

Thank you for choosing to install APD Test Software Version 1.2 (trial). This user manual and software installation guide is designed to help with installing and running APD Test Software. Users can install the software from the Windows installer (APDTestSoftwareInstaller.msi) package. The software is available for download from AudiPro Audiology's website at <https://audiproaudiology.ca/apdtestsoftware.html>.

### System Requirements

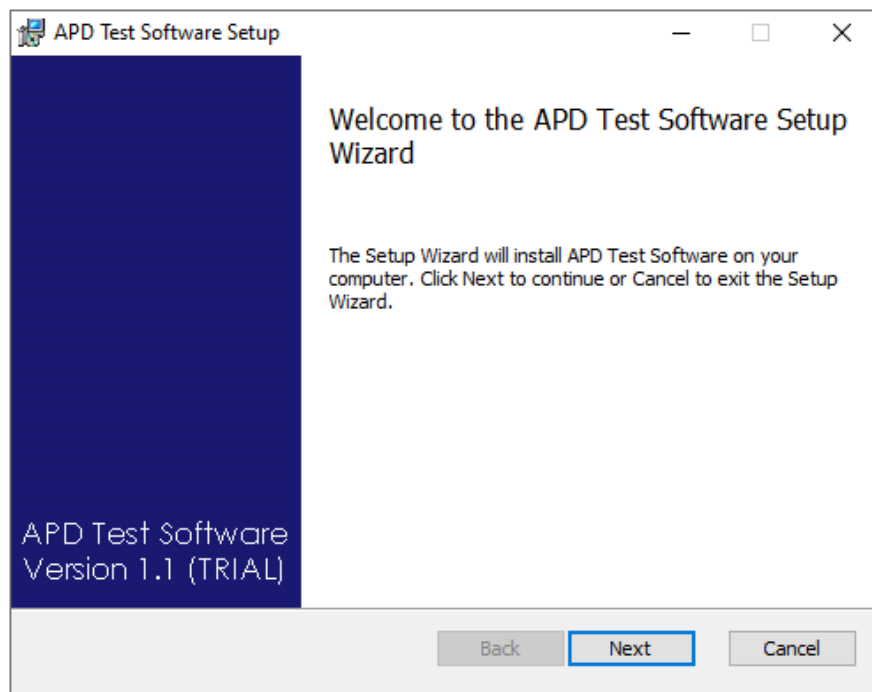
Minimum system requirements for running APD test software program are as follows:

- Windows 10 (preferred) or Windows 7 (minimum)
- 4GB RAM

The software has not been tested on systems running Windows 7 or Mac OS. The procedure for setting up a LaTeX distribution is also different for Unix-based OS such as Mac or Linux.

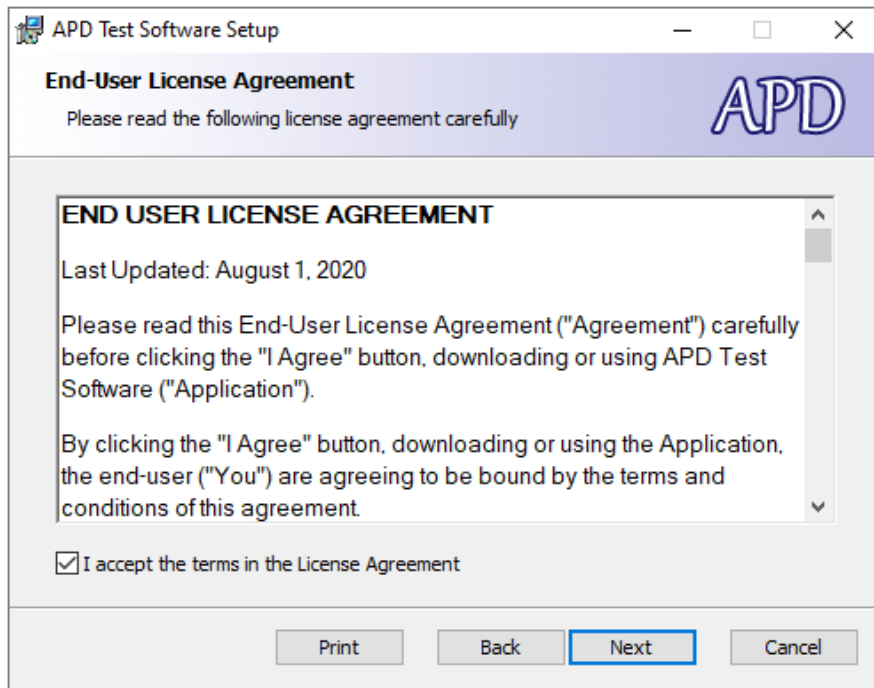
### APD Test Software Installation Process

Please run the APDTestSoftwareInstaller.msi package to begin installation. Click on *Next* to proceed to the next step. Continue to click *Next* whenever the option is provided during the process unless there are any additional instructions.

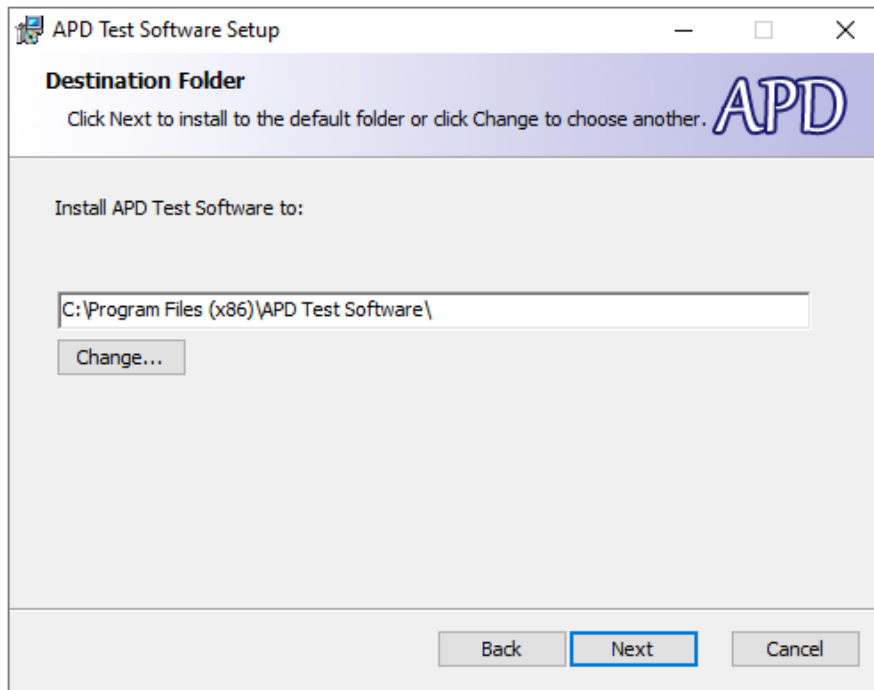


**Figure 1 Software Installation Step 1 – Running the Installer**

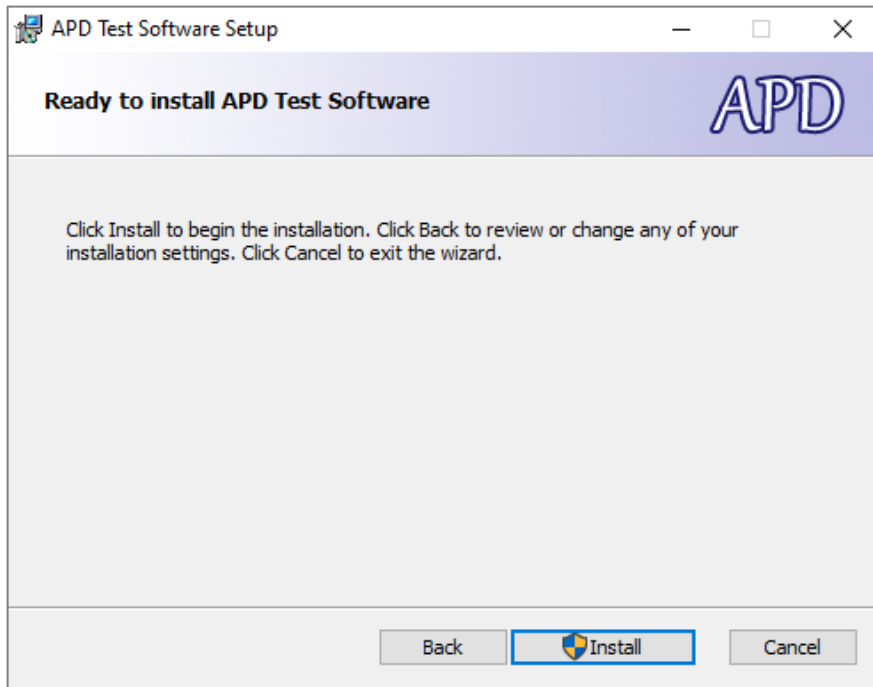
Select the option that says “I accept the terms in the License Agreement” in the End-User License Agreement. The agreement strictly governs only the trial version of the software.



**Figure 2 Software Installation Step 2 – License Agreement**



**Figure 3 Software Installation Step 3 – Installation Folder**




**Figure 4 Software Installation Step 4 – Installing the Program**

Click on the **Install** button to begin installing the program. Click on **Allow** if your computer prompts you for permission to install the software. Once the software has been installed, click on the **Finish** button to complete the installation.

After the program has been installed, you will find a Start Menu entry as well as a desktop icon. You are now ready to start using APD Test Software program.

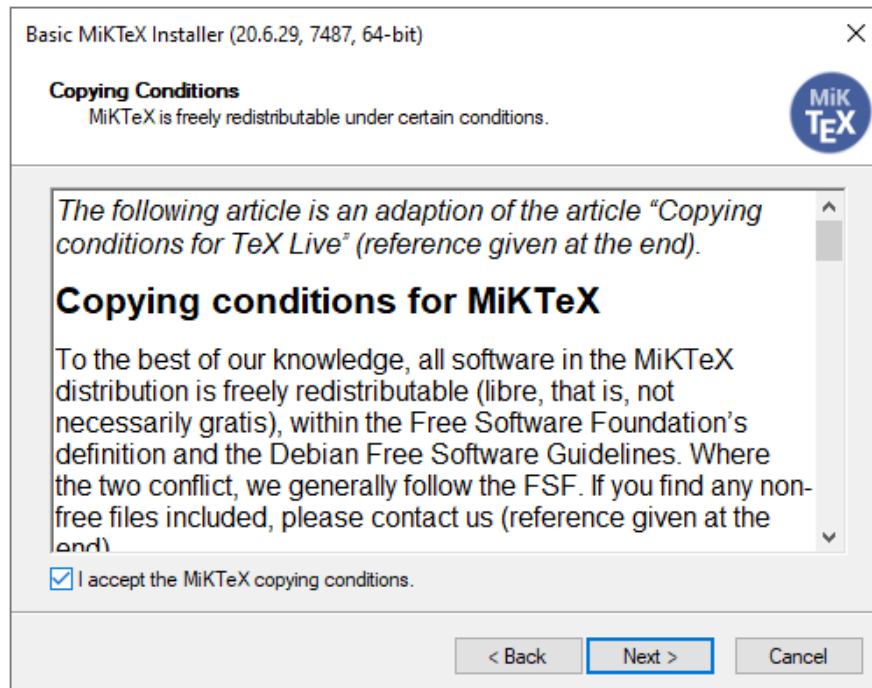
---

**HINT**  Words that are formatted like **THIS** in the user manual indicate a button that a user can click or press to execute an action.

---

## Installation of MiKTeX Distribution for PDF Report Generation

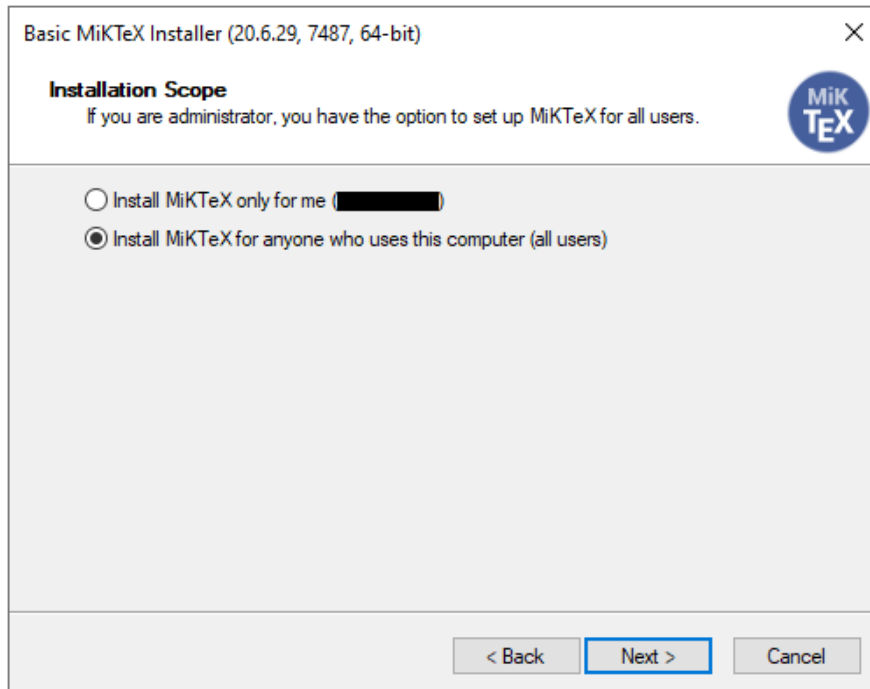
APD Test Software uses the MiKTeX distribution, which is a free-to-use LaTeX distribution to generate PDF reports from patient test data files. The installer for MiKTeX can be found at the MiKTeX website: <https://miktex.org/download>. Download and install the basic-miktex program from the website. The procedure to install MiKTeX, along with supporting screenshots are shown below.



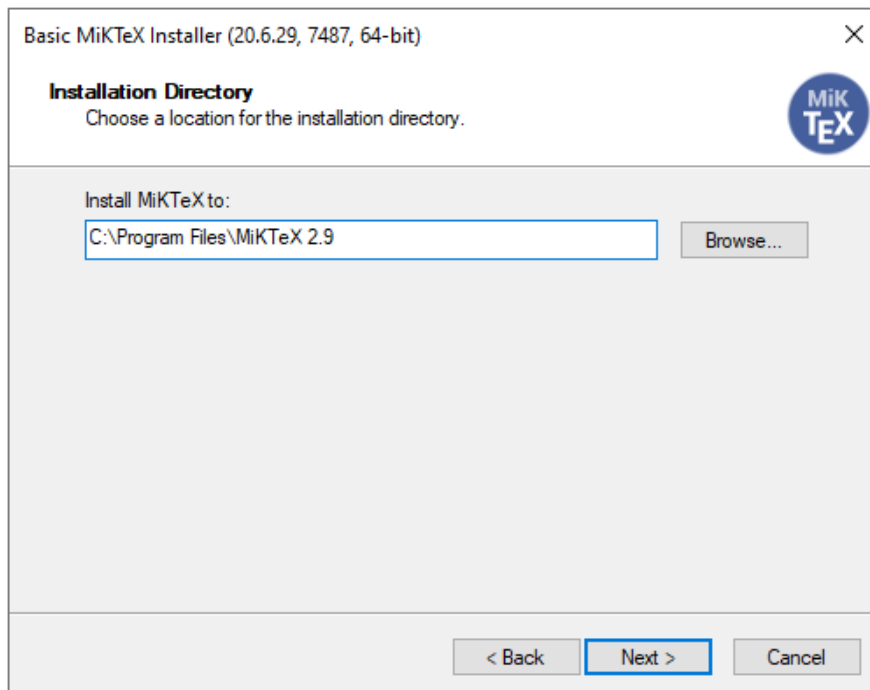
**Figure 5 MiKTeX Installation – Running the Basic MiKTeX Installer**

Select the option to install MiKTeX for all users, as this will allow any user who uses the computer to print reports from patient data files.

MiKTeX installation allows users to change the installation path (installation folder location as well as the installation name). It is recommended that you **do not** change the default installation path. If you do wish to change the install folder name, e.g. C:\Program Files\Miktex, it must be ensured that the folder path name contains the word “Miktex” (case insensitive), as APD Test Software must verify that MiKTeX is installed and accessible prior to printing PDF reports.

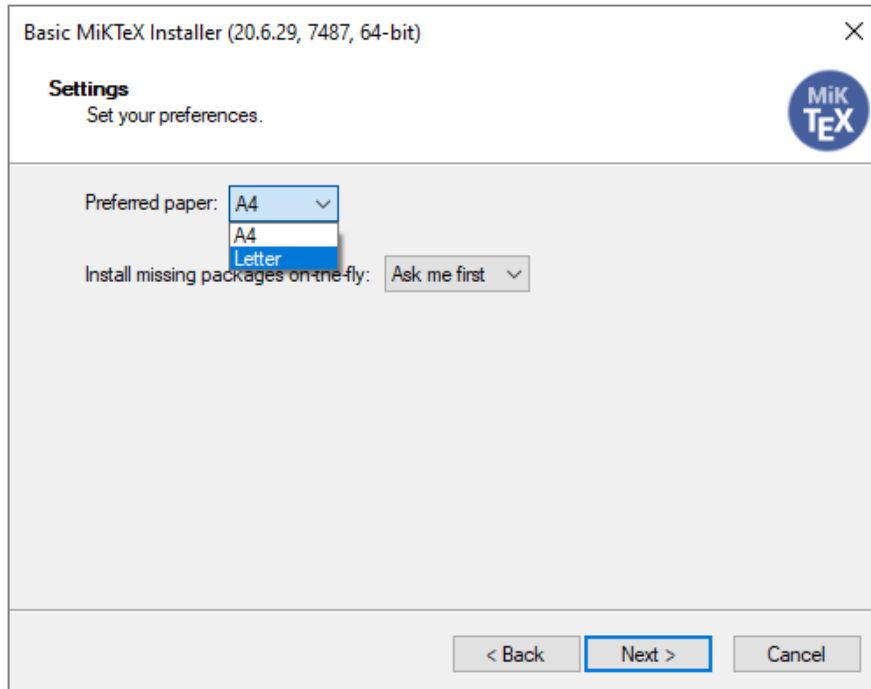


**Figure 6 MiKTeX Installation – Installing for All Users**



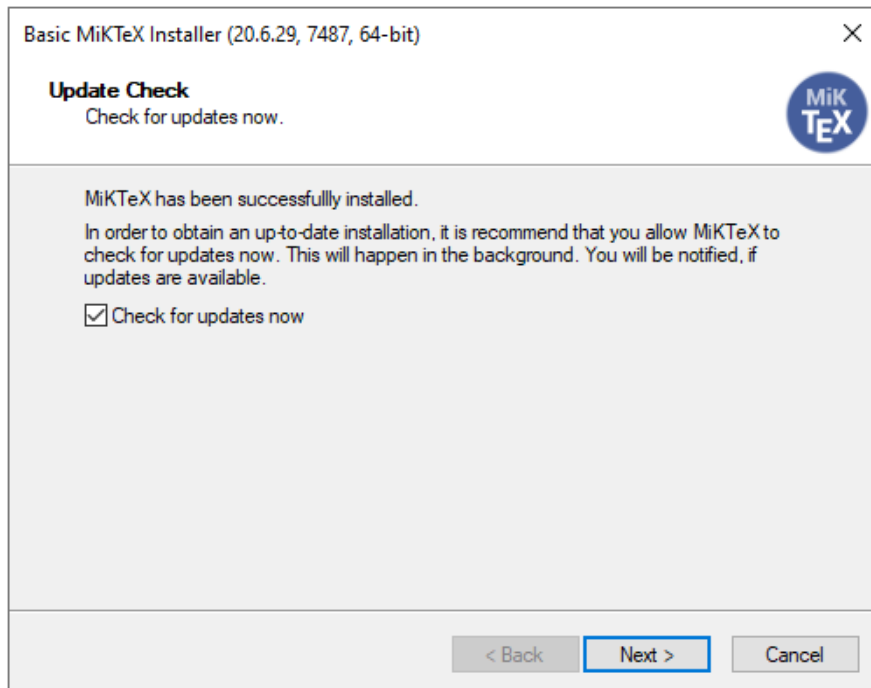
**Figure 7 MiKTeX Installation – Selecting Installation Folder**

APD Test Software generates PDF reports on letter paper, so set the preferred paper size to Letter. The option to install missing packages on-the-fly can be left unchanged as “Ask me first”.



**Figure 8 MiKTeX Installation – Paper Size and Package Installation Settings**

Click on *Next* to proceed to the next steps and complete installation of MiKTeX.



**Figure 9 MiKTeX Installation – Completing MiKTeX Installation**

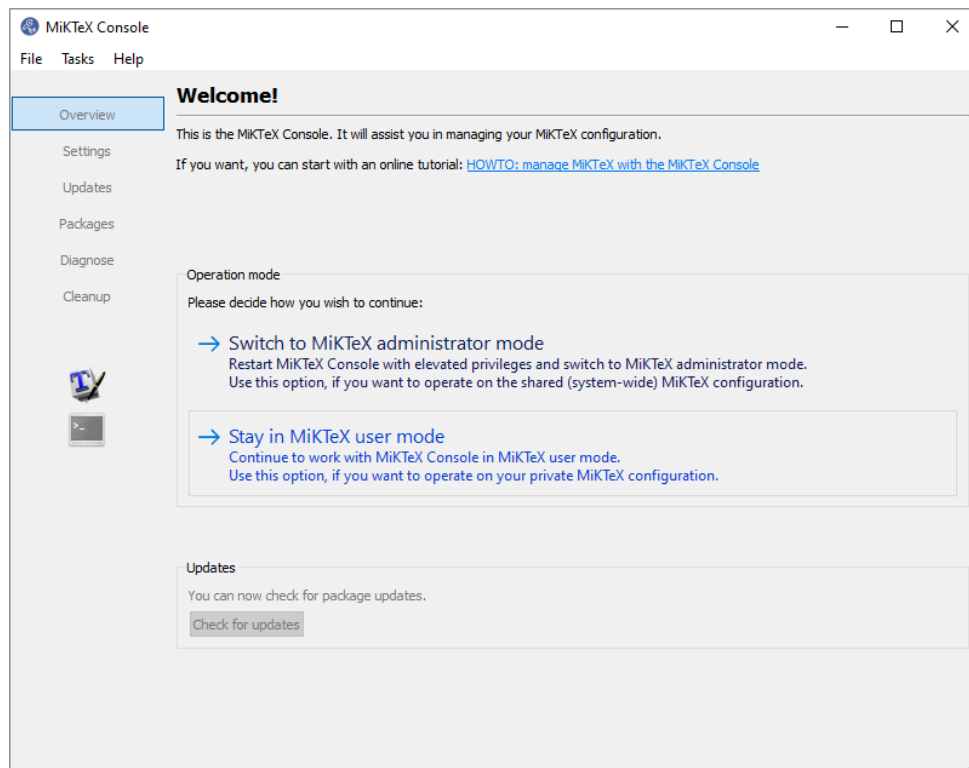


## Installation of Required MiKTeX Packages

In addition to installing MiKTeX, additional packages must be installed to allow APD Test Software to generate PDF reports. A total of six additional packages are required:

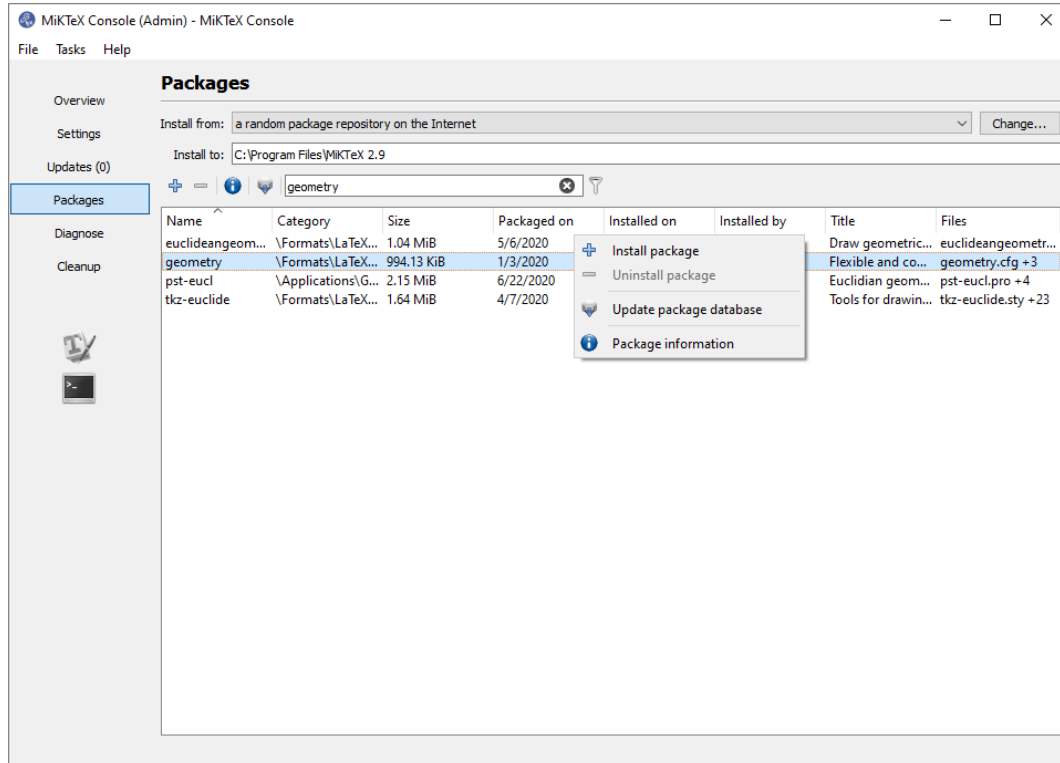
- geometry
- setspace
- multirow
- fancyhdr
- ulem
- tipa

These packages can be installed through the MiKTeX console, which is available in the list of Windows programs after MiKTeX has been installed. The main screen of MiKTeX user console is shown in the picture below. Packages can be installed either in administrator mode (recommended) or user mode (if administrator privileges to the computer are not available). Packages installed in user mode will only be available to that user and other users will not be able to access the report printing features of APD Test Software. This guide shows the installation process in administrator mode. The package installation process is identical for user mode but with a different installation folder (User's local data folder) instead of the MiKTeX folder in Program Files (MiKTeX installation folder).



**Figure 10 MiKTeX Console Main Screen**

Click on the *Packages* tab on the left-hand side panel on the console screen.



**Figure 11 MiKTeX Console – Packages Tab and Installing Packages**

This guide demonstrates the process for installing the package “geometry”. Repeat the process for other package names that have been mentioned earlier in the guide.

- Click in the search field and type the word “geometry”.
- The search yields a total of four packages, one of them having the exact name as the search word.
- Right-click on the “geometry” package and click on *Install package*.
- Wait till the console finishes installing the package and click *Close*.

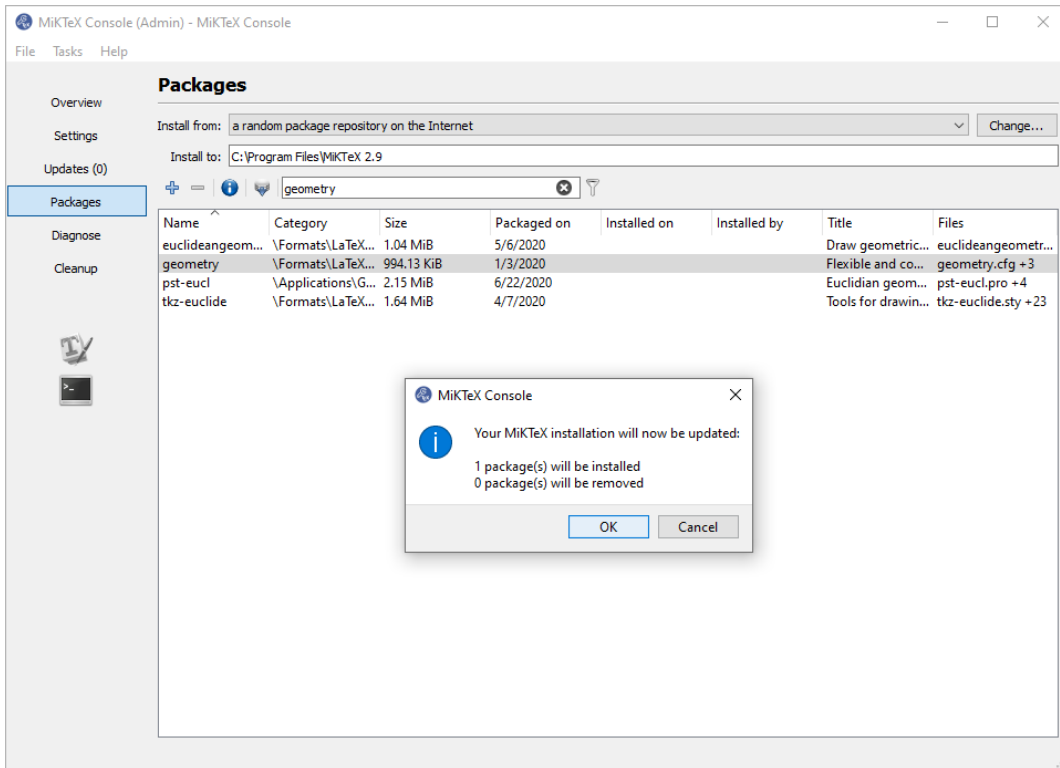


Figure 12 MiKTeX Console – Package Installation Process

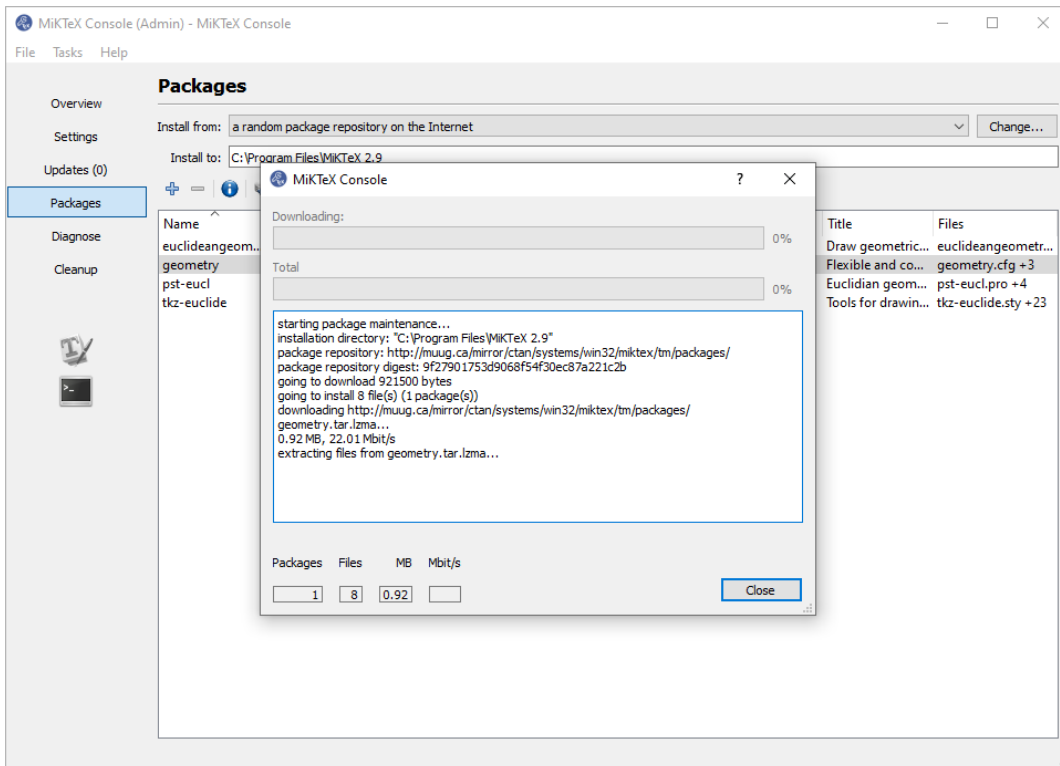
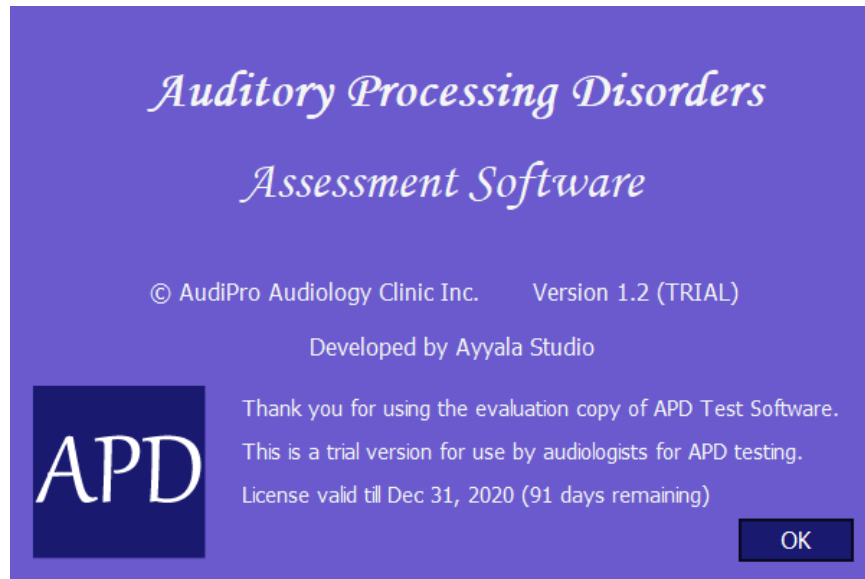


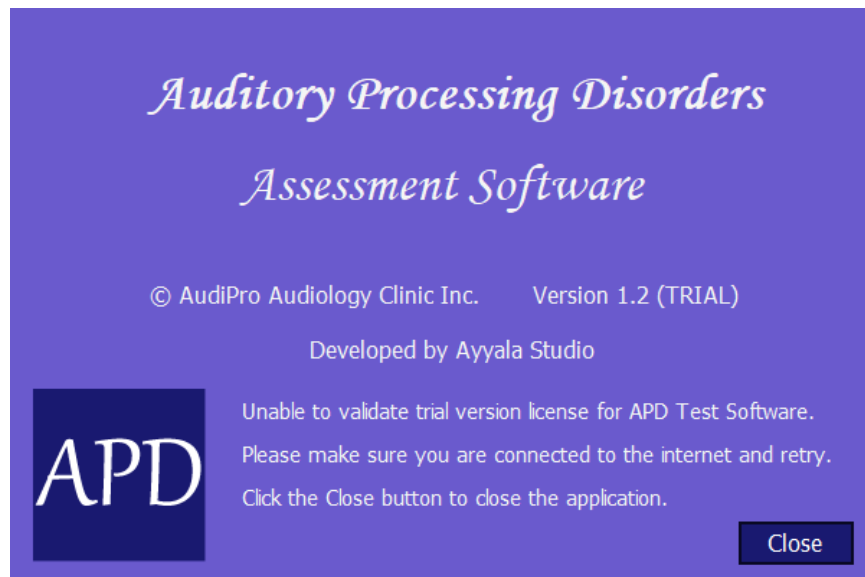
Figure 13 MiKTeX Console – Package Installation Success

## APD Test Software – Starting the Program

APD Test Software requires the user to be connected to the internet for validating the trial program license. The trial version is free to use till Dec 31, 2020. The program validates the trial license over the internet when started or displays an invalidation message and shuts down as shown below. Click **OK** to proceed to use the software or click **Close** to close the program. The internet activation is intended for use only with the trial version. The full version of the software will include a license key model to validate the application's license status and can be used offline as well.



**Figure 14 APD Test Software License Validation - Success**



**Figure 15 APD Test Software License Validation Failed (No Internet Connection)**

## APD Test Software Main Screen

After the trial version license is activated over the internet, the program loads the main screen. The main screen stays active throughout the use of the program and closing the main screen will shut down the program. The program allows users to either create a new patient data file for a new test or open an existing file to view or modify the contents. The various features on the main screen are explained below.

The screenshot shows the main interface of the APD Test Software. It features a 'Patient Information' section with input fields for personal details, a 'Select Test' dropdown menu, and several action buttons like 'CREATE NEW RECORD', 'LOAD EXISTING RECORD', and 'START TEST'. The interface is clean and professional, with a light blue background and clear labels.

Figure 16 APD Test Software Main Screen

### Creating a new file

Enter the patient information in the respective fields. Patient's first name and last name are required as a minimum to create a new patient data file. Click on the **Create New Record** button to initiate a new data file. The button only *initiates* a data file with the name displayed to the user. The file must still be saved by clicking on the **Save** button at the top of the screen.

To create a new file, the following information needs to be entered by the user.

- Salutation – Mr. / Mrs. / Ms. / Dr.
- First name (required)
- Middle name (optional)
- Last name (required)
- Name suffix (optional)
- Test date (usually the date on which file is created, can be changed by user)
- Date of birth (recommended)
- Patient age – The software automatically calculates the patient's age in years, months, and days as the difference between the test date and the patient's date of birth.

### *Patient Data Filename and Data Format*

Users are not allowed to select filenames for their data files – the software will automatically assign filenames using various parameters. The standard filename format used by APD Test Software is F\_M\_L\_D\_T, which translates to (F) First name, (M) Middle name, (L) Last name, (D) Test date and (T) Time at which the record is created. If a middle name is provided for a patient, it is replaced by an 'x' in the filename. Data files are saved in Java Script Object Notation (JSON) format. Filenames are designed to not contain any blank spaces, so all spaces entered by the user in a patient's name will be removed while generating a filename. The patient's name, however, will remain unchanged in the data file as well as the report.

Example 1: The data file for a patient Dr. Alice Brittany Chase whose record is created on March 18, 2020 at 4:25 p.m. will be saved with filename Alice\_Brittany\_Chase\_20200318\_1625.json.

Example 2: The data file for a patient Mr. Michael Lee whose record is created on August 3, 2022 at 8:15 a.m. will be saved with filename Michael\_x\_Lee\_20220803\_0815.json.

### *Loading an existing file*

The software also allows users to load existing patient data files using the **Load Existing Record** button. Users can select JSON files previously created by APD Test Software or generated in the exact format as required by the software.

### *Set Data Folder for Patient Data Files*

The **Data Folder** is the working directory or folder where APD Test Software saves the patient data records and uses as the starting folder to search for existing data files. The data folder only needs to be changed when switching folders and need not be updated when the software starts. It is important to set this folder right after installation so that user knows where the data files are being saved. Data folder can be changed by clicking on the **Browse Folder** button.



Designate a folder to save APD test data files right after installing the software.

---

### *MyAPD – Program and Document Settings for PDF Report Printing*

The MyAPD button allows users to define settings for each clinic separately, allowing for personalization of the PDF reports. Users can enter up to four lines of specific information.

- Line 1 – Clinic name
- Line 2 – Clinic address
- Line 3 – Contact information
- Line 4 – Additional contact information

Clinic name must be entered by the user and will be printed as the first line on the PDF report. Lines 2 through 4 are optional and can be left blank in any order. Users can also select a JPG image having same dimensions (square) for use as clinic logo. The minimum permissible image size is 128 × 128 pixels, while the largest permissible image dimensions are 2160 × 2160 pixels.

The default setting uses a control square image that indicates to the user to upload a custom logo. It is recommended that the user sets clinic-specific information when using the software for the first time. If no logo should be used, the user can upload a blank (white) image of any size, preferably 128 × 128 pixels to keep the PDF report file size smaller.



**Use clinic logo with an image size 256 × 256 pixels or 512 × 512 pixels to reduce the file size of the PDF output report.**

**Figure 17 Clinic Information and PDF Report Settings**

Users can also select which test results to be included in the PDF report. These selections are specific to the current patient file and are reset to include all tests when user creates a new file or loads an existing file. The patient information page (first page with clinic information as entered on the main screen), along with the test results summary is included by default in the PDF report and cannot be excluded by the user. After making the desired changes to the PDF report details, click **OK** to accept and save the changes or **Exit** to discard the changes and close the form to return to the main screen.

## APD Test Battery Data and Questionnaires

The APD test software program allows users to record patient data for the Buffalo Model APD central battery tests. The software also includes screening questionnaires and a detailed analysis of phonemic errors on all three Buffalo model tests. The software facilitates recording information for the following tests and questionnaires:

- Questionnaires & Forms – Buffalo model screening questionnaire for children and adults
- Questionnaires & Forms – Hearing inventory screening (HHIA) questionnaires for children and adults
- Speech in Quiet/Noise test
- Staggered Spondaic Words (SSW) test
- Phonemic Synthesis (PS) test
- Phonemic Synthesis Picture (PS Picture) test
- Phonemic Error Analysis (PEA)

### *Opening an APD Test Data or Questionnaire Form*

Test or questionnaire forms can be opened after either creating a new file (click on **Create File** button) or loading an existing file. To open a test form, click on any test in the **Select Test** list and click on the **Start Test** button. If there is no file open in the software, the software will not open the requested form and will display the message – “There is no file currently open. Please create a new file or load an existing file”.

### *Save and Menu Buttons*

All test forms and questionnaires have two buttons in common – the **Save** button and the **Menu** button. The **Save** button writes all information that is entered during a session to the JSON data file. It is important to save data intermittently during a test session to avoid loss of data due to unexpected reasons. The **Menu** button closes the current test form and displays the main screen. It is recommended that users use the **Menu** button to return to the main screen instead of simply closing the form they are working on, as the **Menu** button also saves data to the JSON file before it closes the form.

## Questionnaires & Forms

The Questionnaires & Forms screen allows users to enter patient responses to the Buffalo model screening questionnaire and HHIA screening questionnaire.

The default response to all questions is **No** and the default questions category is set to **Child** when a new patient data file is created. Users can switch between child and adult questions using the buttons at the top of the questionnaire table.

---

**OKAY!**



Switching between Child and Adult questions does not reset the responses. It only changes the way questions are framed for the selected category.

---



Questionnaires and Forms

## Questionnaires and Forms for APD Testing

Select category for questionnaires  Child  Adult

Buffalo Model Questionnaire **HHIA Questionnaire**

Statement	Yes	No	Additional Information
<b>Please indicate if your child is currently receiving or has received any of the following services</b>			
Auditory training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Speech therapy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Phonological awareness training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Special phonics training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Special help with reading	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Sensory-integration training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>DECODING (Please mark YES if the statement applies to you or NO if not a problem)</b>			
My child has a problem saying speech sounds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem understanding language	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem understanding spoken instructions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem reading aloud	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem with phonics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem with spelling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child responds slowly/delayed to spoken language	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child has a problem learning a foreign language	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
My child speaks slowly	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Figure 18 Questionnaires and Forms Screen

### Speech in Quiet & Noise Test

Speech-in-Quiet/Noise test is part of the Buffalo Model central test battery for evaluation of auditory processing disorders. It consists of two distinct sets of words that the patient hears in different ears, one set with a quiet background and the other with a noisy background. The results for words in quiet and noise are scored separately at the end of the test as a percentage of correct responses for each set of words.

The Speech-in-Quiet/Noise test screen displays the following information:

- Buttons for selecting word sets for quiet or noise
- Table showing a list of 25 words for the word set. There are four lists of words that are displayed in the table – (a) Speech-in-quiet, words in right ear (first 25 words), (b) Speech-in-quiet, words in left ear (last 25 words), (c) Speech-in-noise, words in right ear (first 25 words), (d) Speech-in-noise, words in left ear (last 25 words).
- Speech level (dB) for each of the four sets as described above. The speech level can only be entered when the first word is selected for the list, i.e. word no. 1 or word no. 26 only.
- Word number and word display
- Buttons to navigate to *Previous* and *Next* words
- Buttons to mark the word as *Correct* or *Wrong*. Each word is marked as *Correct* by default.
- Delay markers – The panel consists of four buttons corresponding to four different delay levels. The buttons correspond to ~ (no delay) which is the default selection, **X** indicating a short delay, **XX** indicating a long delay and **I-X** indicating an integration delay. Each button is highlighted using a different color to help with quick identification.

- Drop-down menu to navigate to any word within the Quiet or Noise word lists.
- Buttons to switch between Right and Left ear word lists
- Statistics showing the number of incorrect (wrong) responses and the score as percentage of correct responses for each of the four sets.

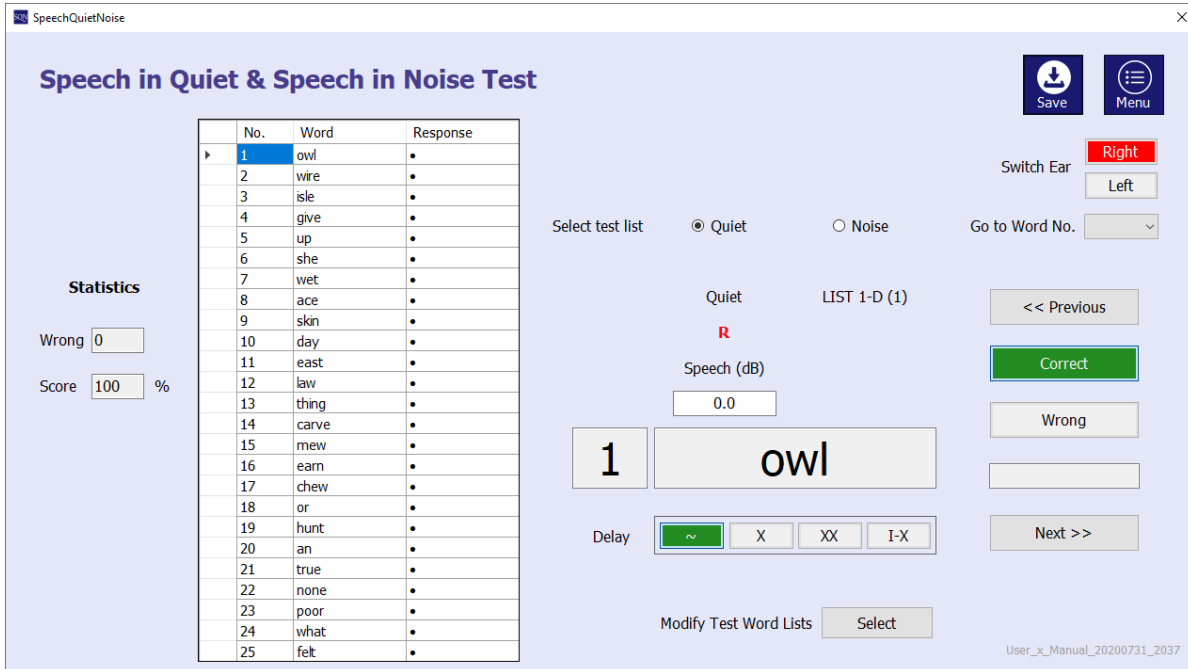


Figure 19 Speech-in-Quiet Test Screen

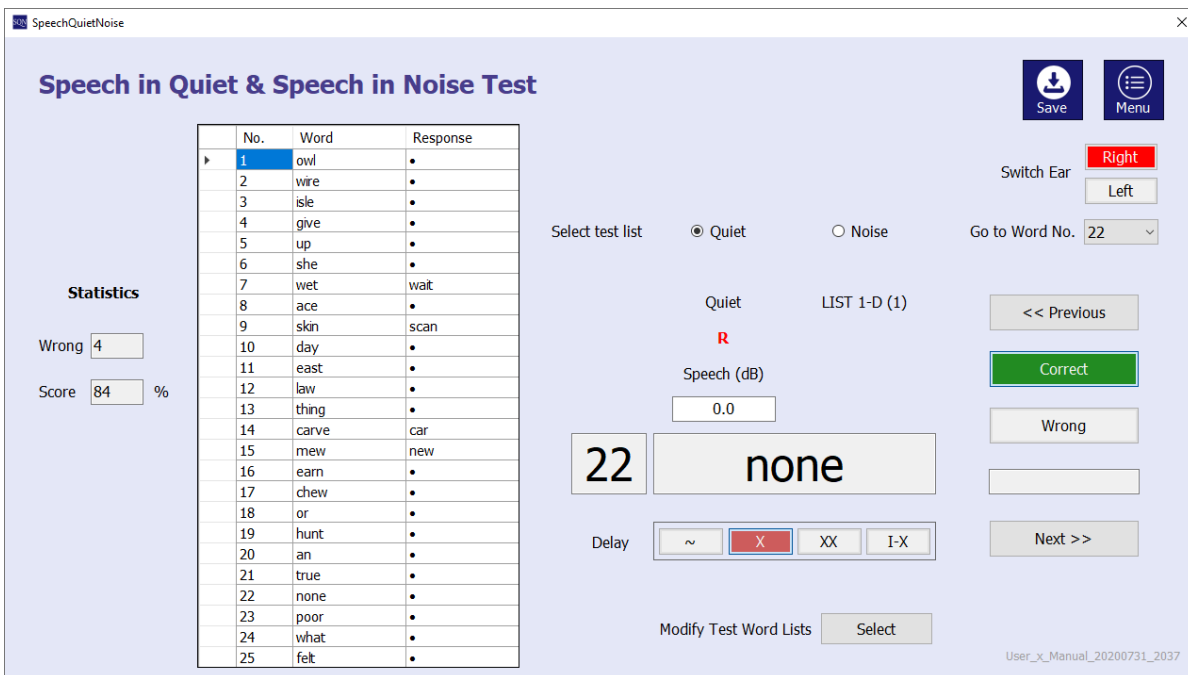


Figure 20 Speech-in-Quiet Test Score and Delay Marking

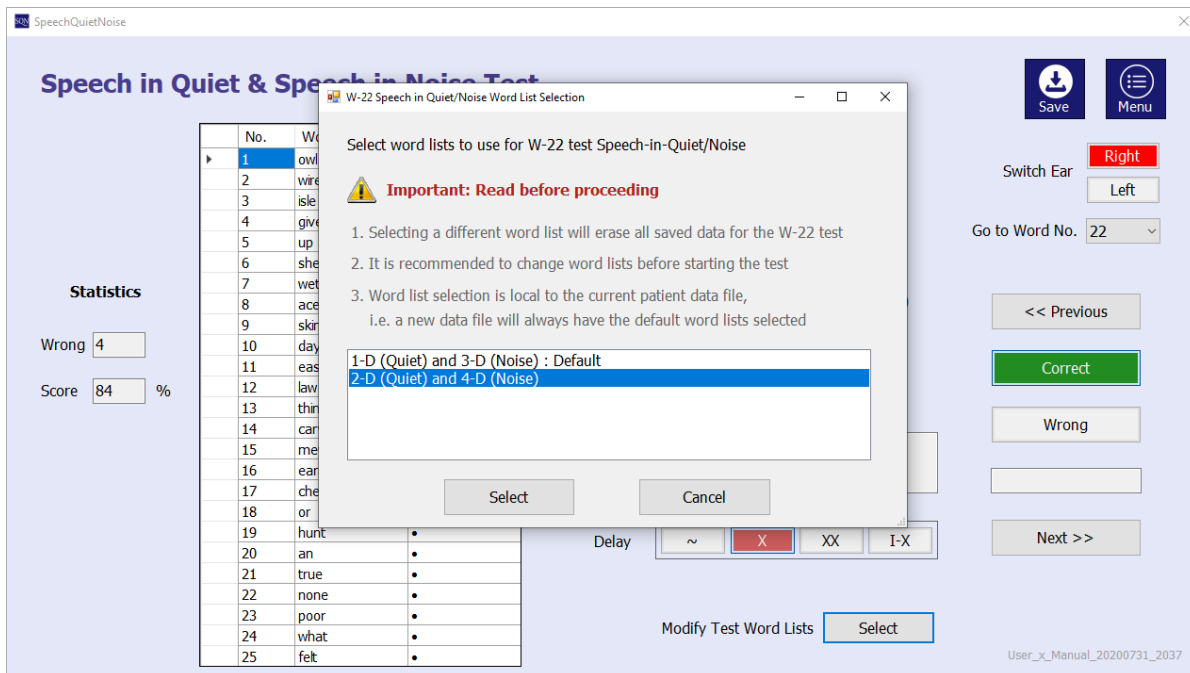
Scoring the speech-in-quiet/noise test is done by clicking on the **Correct** or **Wrong** buttons for each word. When a patient responds to the test word incorrectly, the user can click the **Wrong** button and directly start typing in the patient's response. This will automatically focus the cursor on the textbox for entering the recorded word (box below the wrong button). After entering the recorded word and marking the appropriate delay marker (if applicable), click on the Next button to go to the next word in the list. The statistics are updated when navigating to a different word or when the **Save** button is clicked.

**TIP** You can also use the arrow keys (← and →) to navigate to the previous and next words instead of clicking on the **Previous** and **Next** buttons. This method applies to any test form that has the two navigation buttons.

Click on the **Menu** button after completing in the Words in Speech/Noise test to close the form and return to the main screen.

**OKAY!** It is okay to navigate to the next word without saving after each word. The software saves all user activity to memory and the data file should be saved intermittently so that data is written to the JSON file (permanent save).

Users can now select one of two word sets for the W-22 speech in quiet/noise test. The default word lists are 1-D and 3-D for quiet and noise tests. Use the Select button next to Modify Test Word Lists to select 2-D and 4-D lists. It is recommended to select the word lists before beginning the test, as changing the word list will clear and reset all responses, including recorded words and delay markers.



**Figure 21 Speech-in-Quiet Test Word List Selection**

## Staggered Spondaic Words (SSW) Test


The SSW test is part of the Buffalo Model central test battery for evaluation of auditory processing disorders. The test consists of four practice sets of words followed by 40 sets of four words each. The controls on the SSW test form are similar to the Speech in Quiet/Noise test, with additional controls to enter information for skipped words, word order (reversals), cardinal responses and re-instruction messages.

### Word Correctness and Delays

The test screen displays all four words for a set along with the set number. All words are marked **Correct** by default and user can mark them as either **Skip** or **Wrong**. Delays are similar to speech in quiet/noise test. For a given word set, correctness and delays should be marked for all four words.

### Reversal and Word Order

The Reversal checkbox should be ticked if words are spoken by the patient in the wrong order. Ticking the Reversal checkbox will enable the user to enter the word order in the textbox right below the checkbox. Word order is entered as numbers corresponding to the order in which the patient responds to the word set. The software will automatically calculate the numbers and print them in the correct order on the SSW form portion of PDF report.

**TIP**  SSW test can be extremely demanding in terms of data entry when the test is in progress. It is easier to enter as much data as possible during the test, save the data file and revisit it from the **Load File** option to complete data entry.

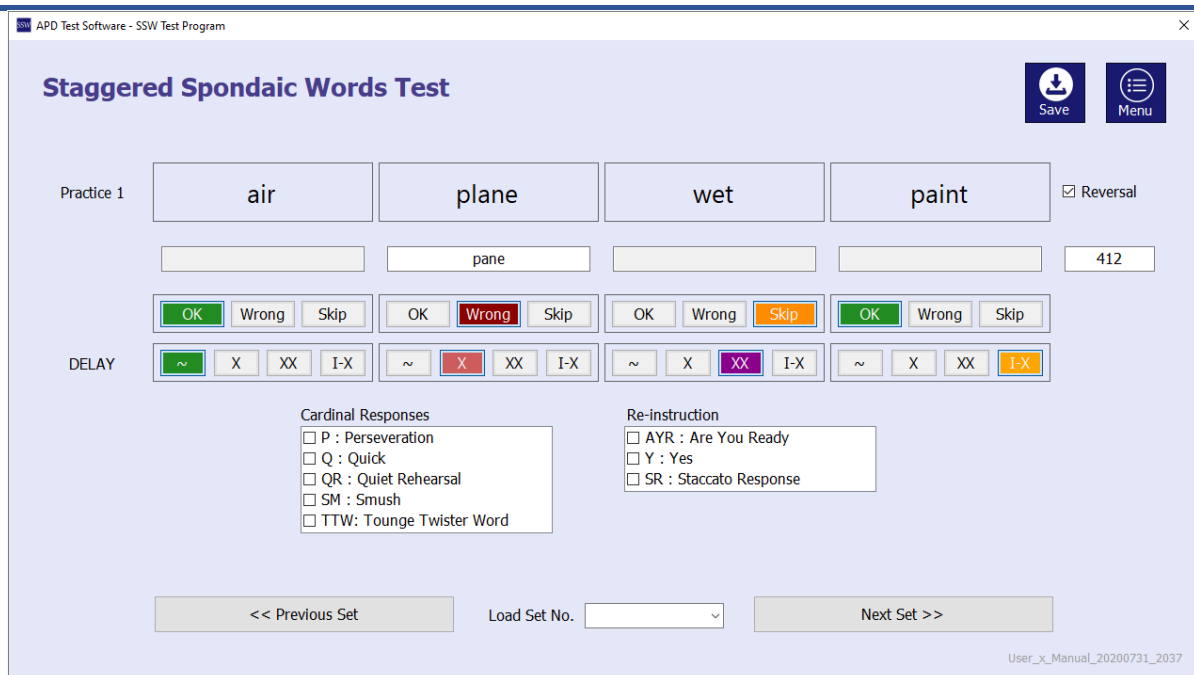


Figure 22 SSW Test Screen

Example: If the word set consists of the four words (1) air (2) plane (3) wet (4) paint, and the patient response is wet-paint-air-plane, the user should enter **3412** into the box. When the test is in progress, entering the word order in this manner is quicker than arranging the words in order as required by the SSW test report form. Interestingly, for this example, the user entry for word order and the order printed on the report are identical, i.e. **3412**.

Example: If the patient response is paint-air-plane, the user should mark the word “wet” as Skip, check the Reversal checkbox and enter **412** as the word order. The software will calculate the print order as **2 3 - 1**.

Users should be careful to match the skipped words with the word order entered into the textbox. The software will not allow users to enter a word order if it includes the word number corresponding to a skipped word.

### *Cardinal Responses and Re-Instruction*

Cardinal responses and reinstruction options should be checked for each word set. It is possible to select more than one option from each list. All responses will be marked on the PDF report. Perseveration is automatically marked by the software for incorrect responses.

---

**RULE**  Users should not mark Perseveration responses, as they are marked automatically by the software. This applies to the SSW test and Phonemic Synthesis test, where perseveration errors occur.

---

### **Phonemic Synthesis Test**

Phonemic Synthesis test is the third test of the Buffalo Model central test battery for evaluation of auditory processing disorders. It consists of a set of 25 words, preceded by one set of two training words and another set of two practice words. The test screen for phonemic synthesis is similar to speech in quiet/noise. The table displays the test word and patient’s response, along with user markings for different qualifiers in real-time, i.e. qualifier cells are highlighted as soon as the user checks a qualifier. Perseveration errors are automatically marked by the software for phonemic synthesis test.

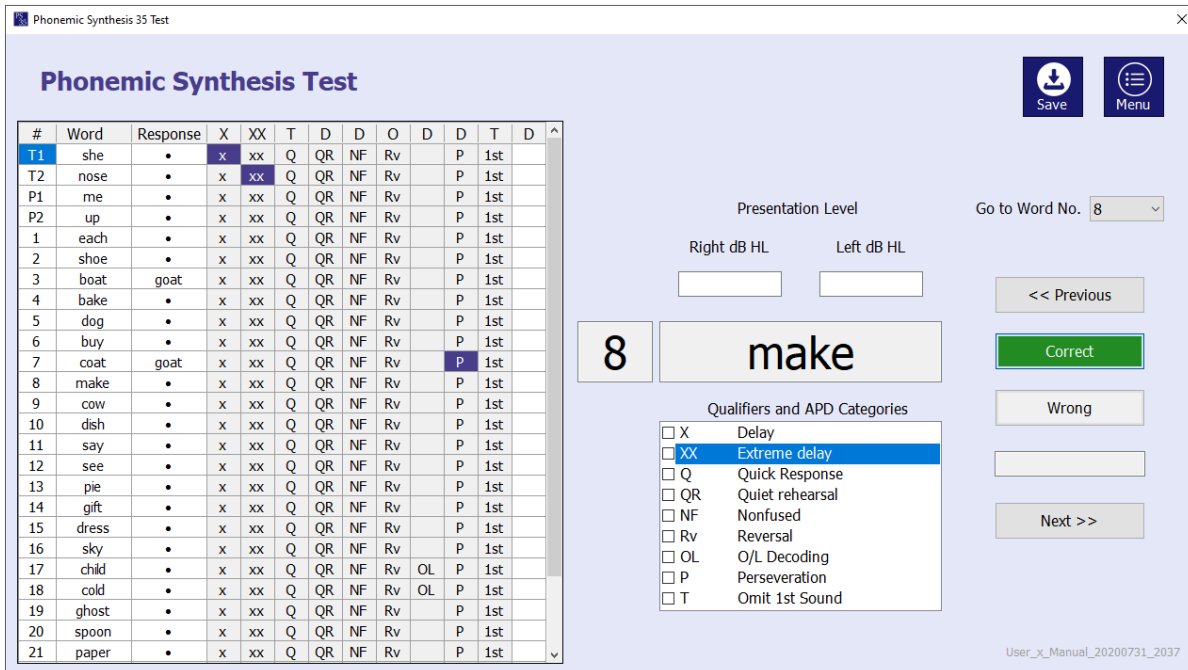


Figure 23 Phonemic Synthesis Test Screen

### Phonemic Error Analysis

Phonemic errors in patient responses to the central battery test words, i.e. speech in quiet/noise test, SSW test and phonemic synthesis tests can be analyzed using the phonemic error analysis (PEA) module. The PEA module generates an aggregate list of words that have been marked **Wrong** on the three tests (skipped words on the SSW test are not included). The PEA screen shows the following information:

- Total number of error words: Count of number of words that are marked as Wrong by the user on the three tests
- Test name and test word/set number of the wrong word
- The recorded (wrong) word and test (correct) word
- Error type and two phonemes X and Y

### Phonemic Error Types and Description

There are four types of errors that can be marked for a wrong word. No error (default option) means that there are no phonemic errors to be marked in the recorded word. The second option is a substitution error, where the patient substituted phoneme Y in the test word with phoneme X, i.e. an X for Y substitution. The third option is an addition error, where the patient added phoneme X to the recorded word which does not exist in the test word. Finally, the fourth option is an omission error, where the patient omitted a phoneme Y that is part of the test word.

**Phonemic Error Analysis**

Total number of error words:

Test: Speech-in-Quiet      Test Set/Word Number: 7      Go to Word No.

Error No.       Recorded Word       Test Word

**Error Type**      **Phoneme X**      **Phoneme Y**

Error 1:            

Error 2:            

Error 3:            

Error 4:            

Error 5:            

#	Error Phoneme	Number of Times
1	^ (^)	0
2	a:(a:)	0
3	æ (@)	0
4	ə (.)	0
5	e (e)	1
6	ɜ:(r)	0
7	ɪ (i)	0
8	ɪ:(i:)	0
9	ɒ (o)	0
10	ɔ:(o:)	0
11	ʊ (u)	0
12	u:(u:)	0
13	aɪ (ai)	0
14	aʊ (au)	0
15	oʊ /	0
16	eəʳ (e..r)	0
17	eɪ (ei)	1
18	ɪəʳ (i..r)	0
19	oɪ (oi)	0
20	ʊəʳ (u..r)	0
21	b (b)	0
22	d (d)	0
23	f (f)	0

**Figure 24 Phonemic Synthesis Test Screen**

To mark a phonemic error, users select the phoneme from one or both drop-down lists depending on the error type. For substitution error, one phoneme should be selected from both drop-down lists. For addition or omission errors, one phoneme should be selected from the appropriate list. The software ignores any selections made to the wrong list, or if no selection is made from the appropriate list after marking an error type. They may appear in the overall list of user markings but will not be counted as phonemic errors in the final summary.

**RULE**



Users should select an option from the Phoneme X list for Addition and from the Phoneme Y list for Omission.

The table on the right-hand side shows the number of times each phoneme has been used to mark a phonemic error.

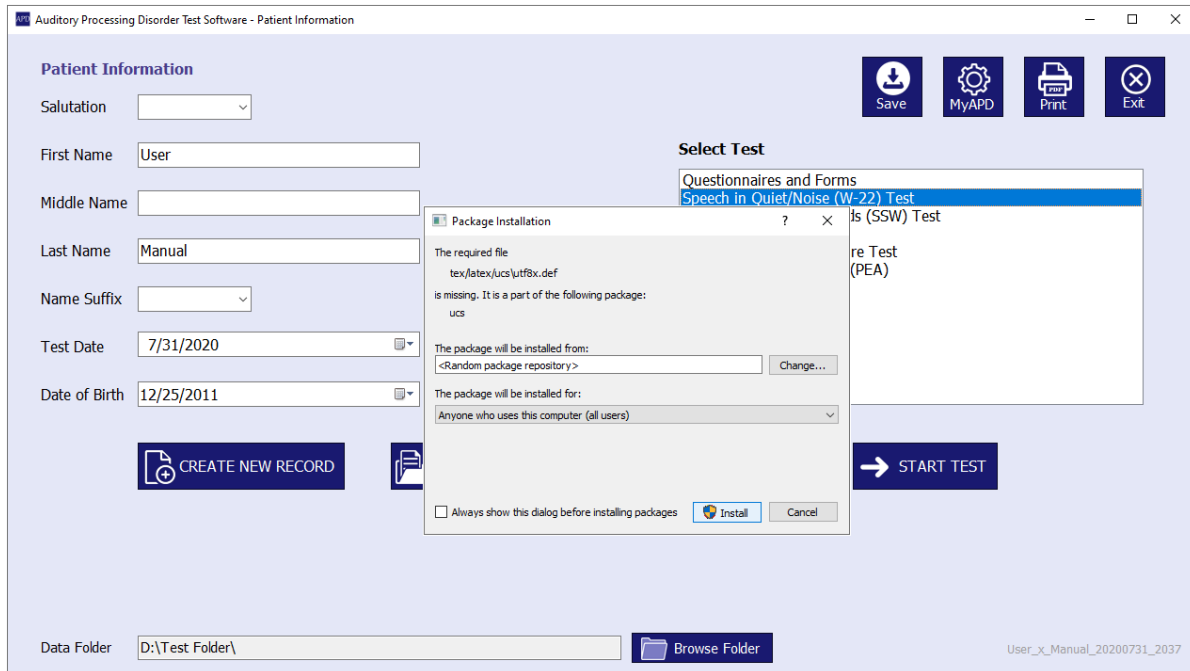
**Phonemic Error Counts and Summarization**

The software analyzes the phonemic errors entered by the user for all wrong words in the Buffalo model central battery tests and generates three tables in the PDF report.

- Table 1: User entries for each wrong word on the tests (software input data)
- Table 2: Tally of substitution, addition, and omission errors
- Table 3: Total count of errors for each phoneme

## PDF Report Generation


A detailed PDF report is generated by APD Test Software program by clicking on the **Print** button on the main screen. The reports will be saved to the same folder with the same filename as the APD test data file. When running the software for the first time, MiKTeX may ask for permission to install additional packages for compiling the PDF report. A permission request will be presented to the user through a dialog window as shown below.



**Figure 25 PDF Report Generation – First Time Setup and Permissions**

Since MiKTeX might need to install multiple packages during the initial use of APD Test Software, it is recommended that the user uncheck the box for **Always show this dialog before installing packages** so that MiKTeX does not show a dialog for every package. Uncheck the box and click **Install** to continue installing the required packages.

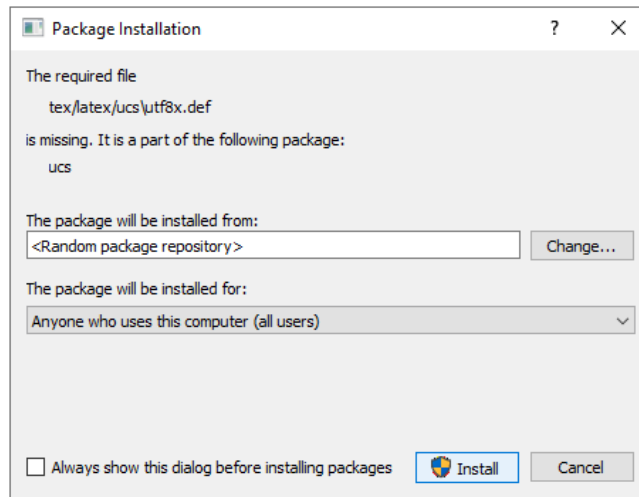
---

**TIP**  The package setup takes place when printing a PDF report only for the first time using APD Test Software and may take several minutes to generate the PDF file.

---

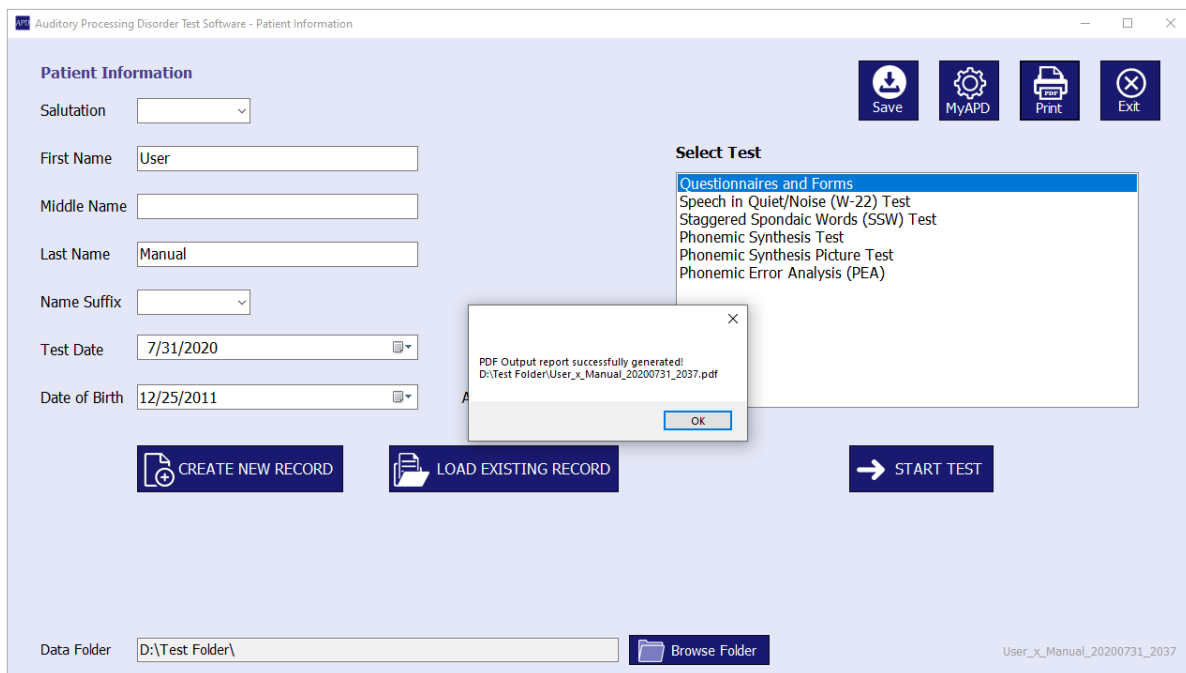
The package installation process will take a long time to complete. Please be patient and do not close the program or turn off your computer to skip the process. Subsequent print activity for all other files will be completed in just a few seconds.





**Figure 26 PDF Report Generation – Package Installation Permission Request**

The PDF report will be available in the data folder after all packages have been downloaded and MiKTeX generates the PDF document. A success message will be shown the user when the PDF file is generated, along with the full path (folder and file location) of the generated PDF file.



**Figure 27 PDF Report Generation – Success Message**