



PROPRIETARY

INFORMATION

Orbit Teacher (Windows) User Guide

**15th October 2019
Version 1.0**

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1 Introduction

The Orbit Teacher™ platform enables teachers in mainstream classrooms to seamlessly interact with blind students through an app on a smartphone, computer or tablet. The app connects over Bluetooth to the student's Orbit Reader 20 braille display and provides a real-time text translation of the braille being read or written by the student on the device.

The Orbit Teacher app also has an offline mode which allows you to read files from the local storage of your phone, tablet or computer. It simulates the Orbit Reader's reading experience. This manual is for the Windows version of the app and covers the basic features. The advanced version of the app, which offers additional features, is covered by a separate user guide.

This manual will first guide you through the installation of the Orbit Teacher application on your Windows machine, and then guide you through the basic usage of online and offline modes.

Notes:

1. This document also includes pictures of the Windows application user interface. These are for illustrative purposes only. The actual user interface may vary.
2. This application works on Windows 7 or higher.

2 How the Orbit Teacher is used

2.1 Online Mode

Connect your Orbit Reader 20 (OR-20) and Orbit Teacher over Bluetooth. Once it is connected, the OR-20 braille display is mirrored on the Orbit Teacher application. Anything that you see on your Orbit Reader's display in braille, is shown on your Orbit Teacher as well, in both text and braille.

For example, if you open the Menu from your OR-20, the Orbit Teacher also shows the content of Menu in both Braille and Text. Similarly, if you read through any file on your OR 20, the Orbit Teacher shows the content of the file in both braille and text. Find more details about the online mode in the later sections of this document.

2.2 Offline Mode

In this mode, you do not need to connect your Orbit Reader 20 with the Orbit Teacher. Offline mode allows you to browse files from the local storage of your computer and read the file with navigation options similar to the OR-20. It is intended for reading files created by the student on their OR-20 and provided to the teacher, e.g. a file containing answers to homework problems.

You can navigate by 20 characters (pan), character, word, line/paragraph, percentage and page in the offline mode.

3 Run the Orbit Teacher application

There is no need to install the Orbit Teacher application on Windows. You can directly run it on your Windows computer.

- Save **Orbit Teacher vX.X.X** package from the mail to your computer.
- Unzip the folder.
- Run the application by double clicking on "**Orbit Teacher.exe**" from the folder named "**Orbit Teacher - Windows Application vX.X.X**" within the **Orbit Teacher vX.X.X** package.
- When you run the Windows application, the start-up screen looks as shown in the screenshot below.



Figure 1

- There are three tab-pages in the Windows application. By default, online mode tab will be selected. You can switch modes by clicking on the tab page or by pressing the short-cut keys "Ctrl + Tab".

- On top left corner, there is a “View” menu. This menu has the “Font Setting” option to adjust the fonts of the display.

4 Online Mode

When you run the Orbit Teacher, it starts with “Online mode”. The start-up screen looks like the screenshot shown in Figure 2.



Figure 2

On top of the page, the connection statuses, such as “Connecting”, “Not Connected” or “Failed” is displayed.

Below the connection status, there is a field showing the serial number of the connected OR-20 device. When no device is connected, this field shows “-NA-”.

Below the serial number field, there is a display window that shows the braille and normal text fonts. When no device is connected, it just displays the name of the application. Below it, there are two buttons for connecting and disconnecting the device.

4.1 The License

The Orbit Teacher app will not connect to Orbit Reader 20 without a valid license. It will show a message, “The license is not activated”.

4.2 License Activation Steps

The license activation process is divided into the following steps:

1. Obtain your license file
2. Activate the license by inserting the license key and pressing “Add LIC” button on the “Online” tab.

4.2.1 Obtaining the license file

Please contact us with the serial number for the Orbit Reader unit(s) which you plan to use with Orbit Teacher at techsupport@orbitresearch.com along with following information:

1. Your Name
2. Address
3. Email Address
4. Phone number
5. Organization (If you represent an organization)

We will send you the license number over email within 3 business days.

4.2.2 Checking the license information

Open the Licence tab and it will show you the activated OR-20 device list.

4.3 Connect with the Orbit Reader 20

For connecting with Orbit Reader 20 device, click on the “Connect” button. The application opens a new page showing already paired devices available for the connection.

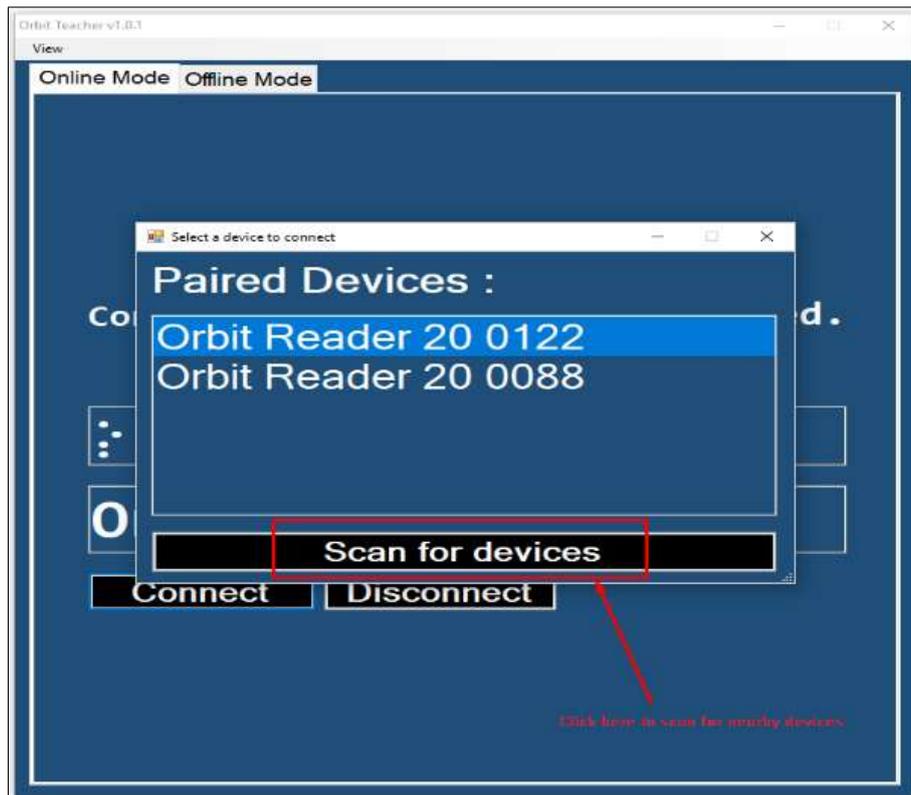


Figure 3

If your device is not paired, it will not be shown in the list. Click on “scan for devices” for first-time pairing. It will show all the unpaired devices within the available range.

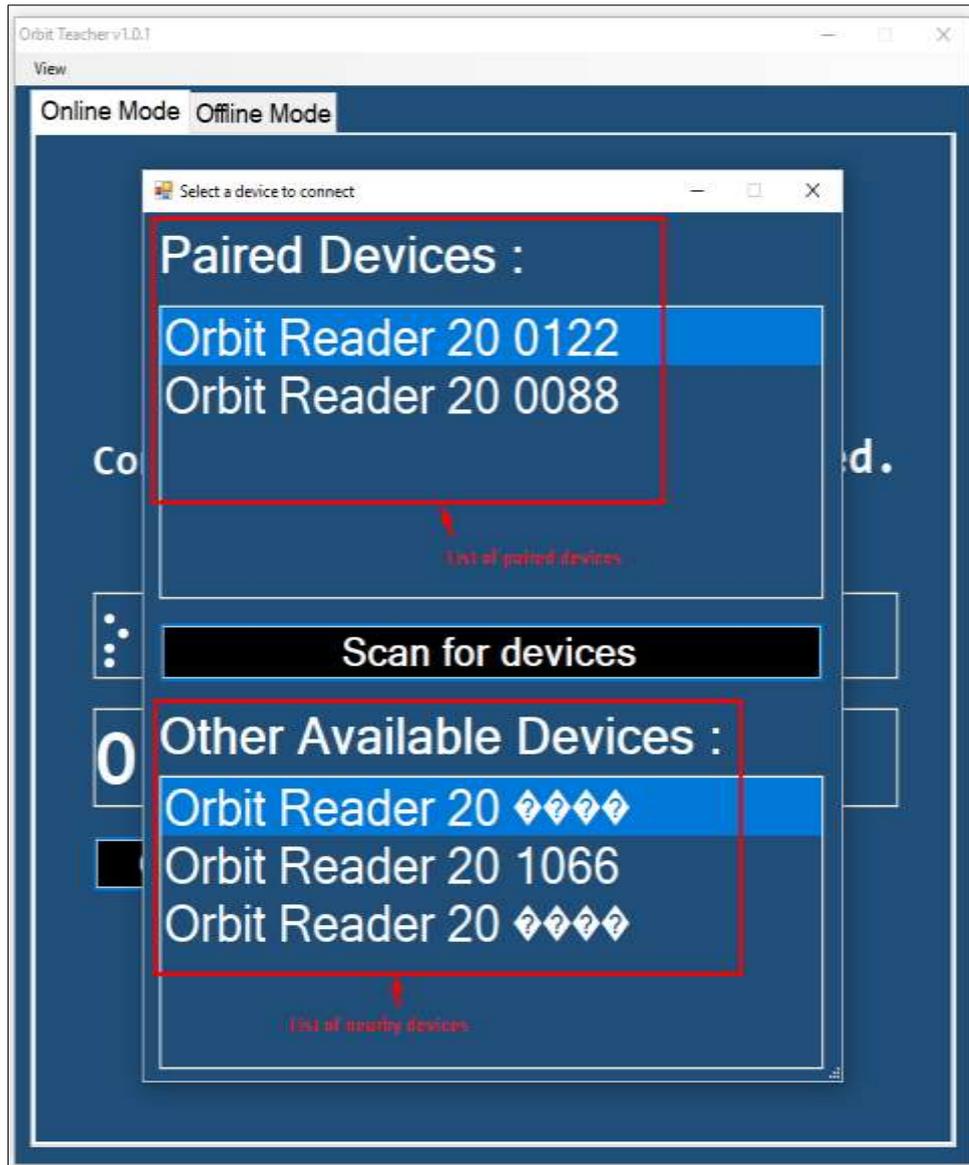


Figure 4

Click on the device name for the application to connect to the device. If the device is not paired, then the application will give a pop up to pair that device. Allow pairing to establish the connection.

To disconnect the device, click on the “Disconnect” button. This will disconnect the device and set the connection status to “Not Connected”.

4.4 Reading Files in Online Mode

The ‘Online Mode’ in the Orbit Teacher application helps the user to understand the braille dots of the Orbit Reader 20 by translating braille fonts into its actual text.



Figure 5

Orbit Teacher application duplicates the braille display of the connected Orbit Reader 20 in the braille font display window and shows its corresponding actual text in a localized language (which is selected in the connected device) in the actual text window.

Application will change the braille fonts and its actual text whenever the changes are made in the connected Orbit Reader 20 display. For instance, while typing, reading, navigating through preference menu etc. in the connected Orbit Reader 20.

4.5 Adjusting font size

The application will set font size of the braille fonts and actual text based on the selected font size from the font setting options.

There are 5 different font size options available in the application such as, smallest, smaller, normal, larger and largest.

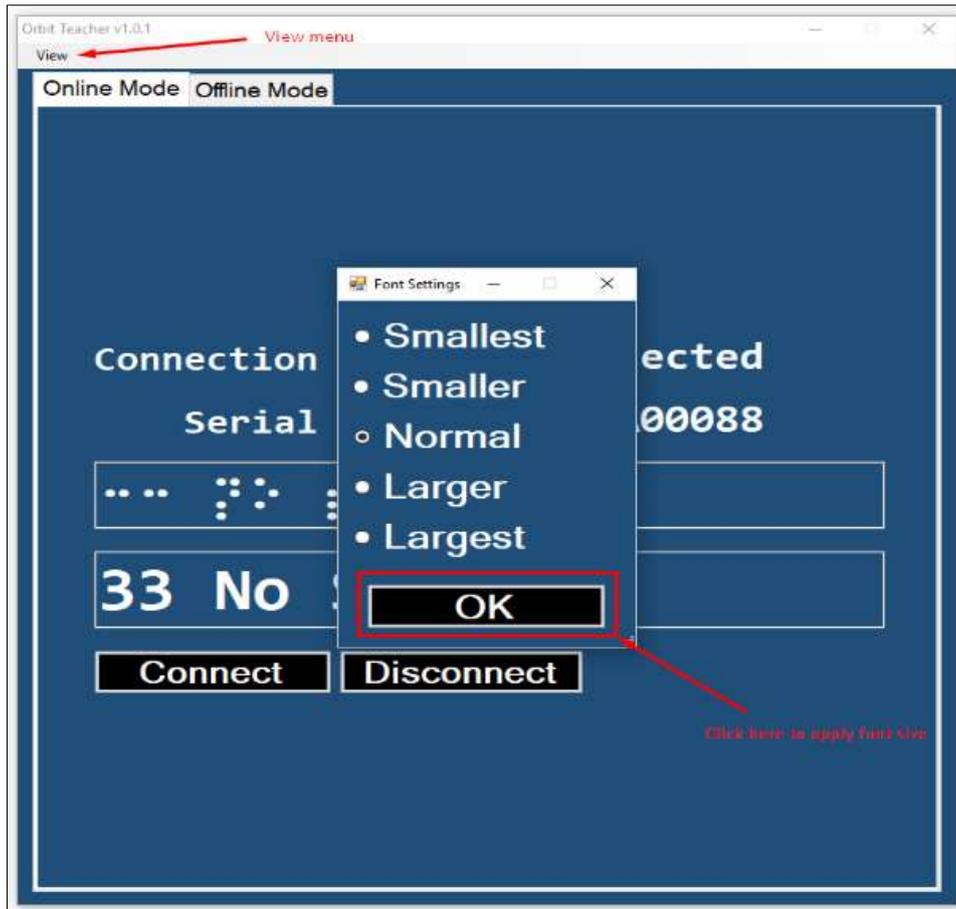


Figure 6

To change the font size, click on “Font Settings” option from the “View” menu or use the short-cut keys “Alt + v + f”. This will open a new page. By default, Normal font size will be selected.

4.6 Using the File Transfer Feature

You can also send or receive a file from PC to a connected Orbit Reader 20 using the Orbit Teacher. It supports the transfer of TXT, BRF, BRA and BRL file types.

4.6.1 Transfer a file from the Orbit Teacher to the Orbit Reader 20

To send a file from Orbit Teacher to the connected Orbit Reader 20, go to the View menu → Send a file.

After selecting a file, the Orbit Teacher opens a dialog box for the confirmation. Click on “Yes” to send a file to the connected Orbit Reader 20 unit. The Orbit Reader 20 unit should display a confirmation message. Press dot 8 on Orbit Reader 20 for receiving the file from the Orbit Teacher Application or press dot 7 on Orbit Reader 20 unit to reject the request.

The progress of the file transfer is shown through a progress bar and completion is indicated by a message saying “File transfer complete”.

4.6.2 Transfer a file from the Orbit Reader 20 to the Orbit Teacher

On the Orbit Reader 20 browse to a file in the file manager and press the “Space + Dots 1-3-6-7” key combination to send a file from Orbit Reader 20 to the connected PC. The Orbit Teacher app will open a dialog box for confirmation. Press the “Yes” button for receiving the file from the OR-20 unit or press the “No” button to reject the request.

The completion of the file transfer is indicated by a message saying “Complete”.

5 Offline Mode

If you click on “Offline mode” tab page, it takes you to the offline mode page.

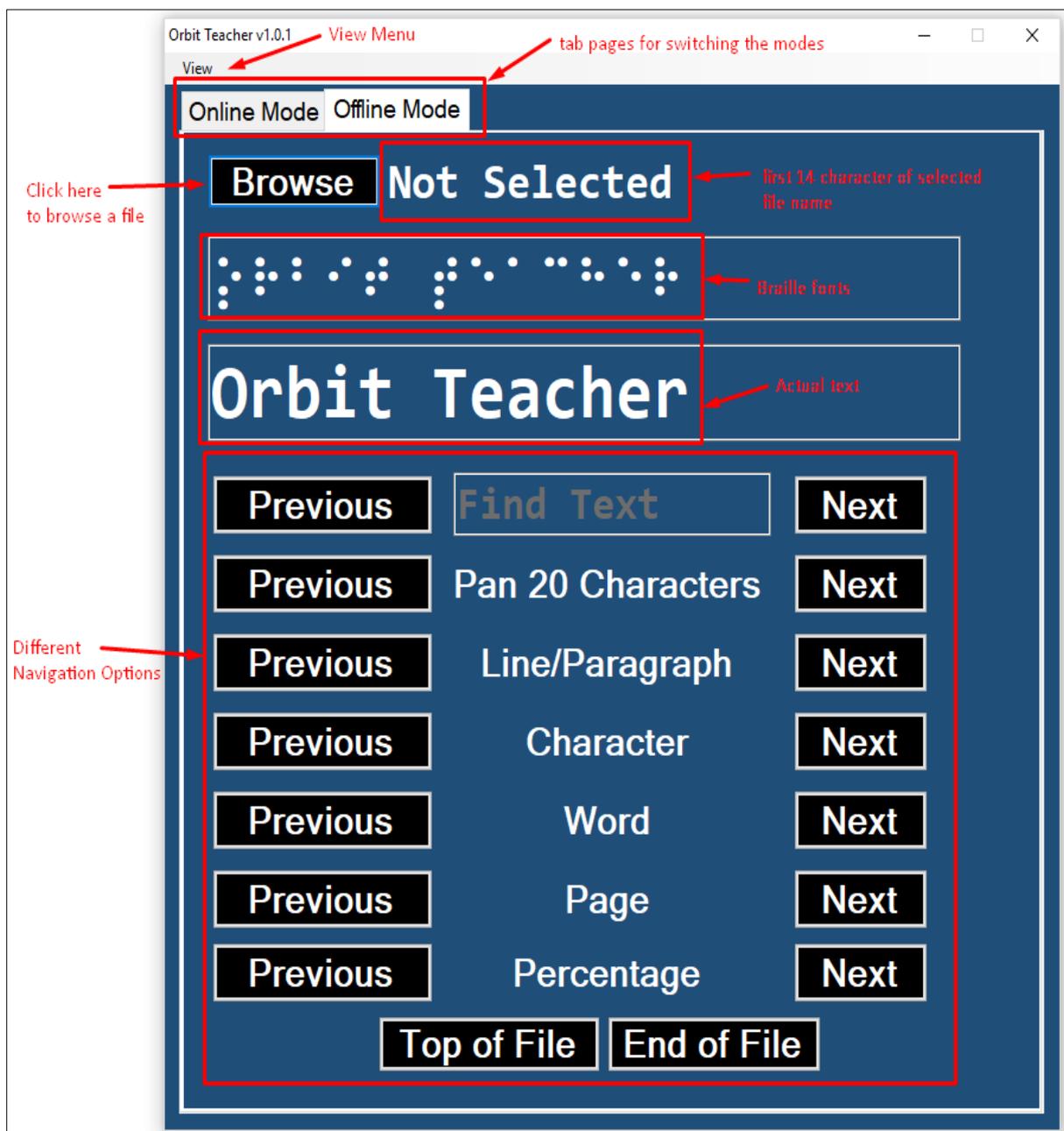


Figure 7

On top left corner, there is a “View” menu. The View menu has the following sub-options

1. Font Setting – To adjust the fonts of the display
2. Text Formatting – To adjust the text formatting settings

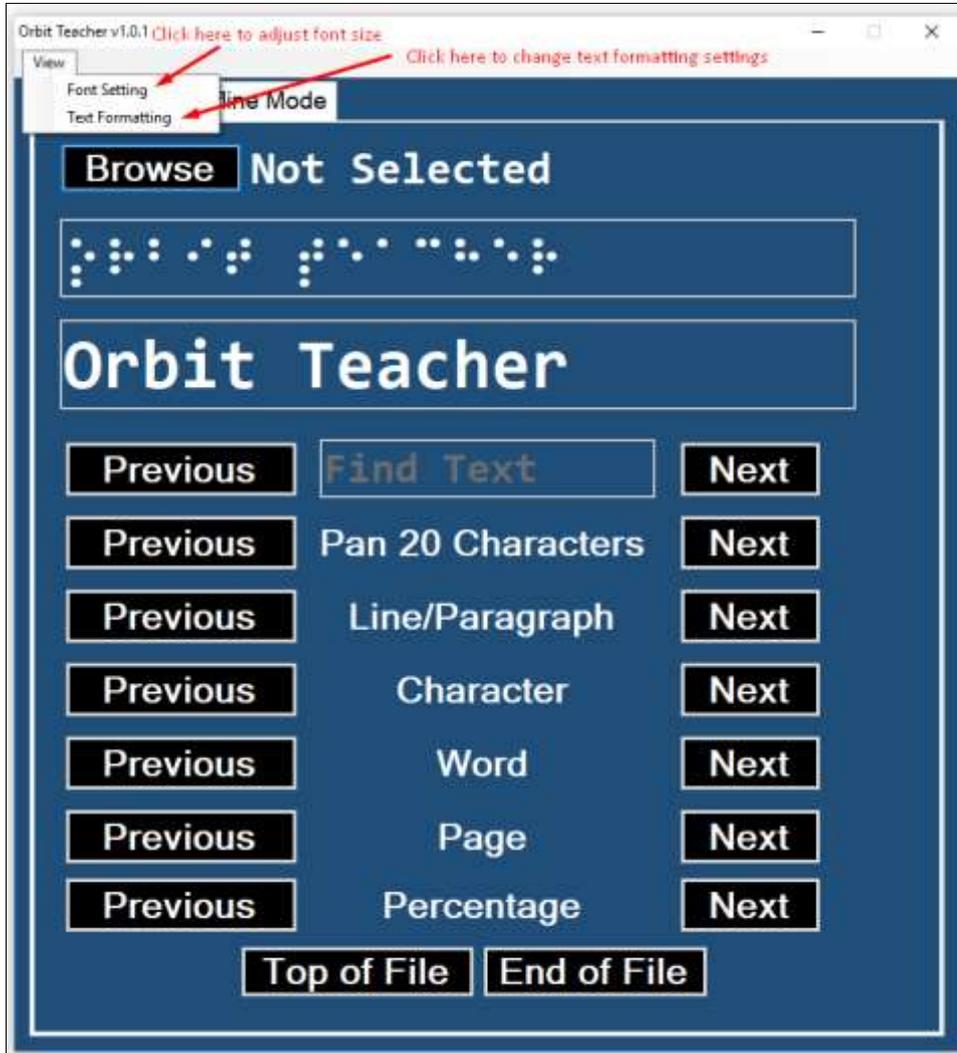


Figure 8

On top of the page, there is a button for browsing the file. The application supports text and BRF files.

On the right side of the “Browse” button, there is a field that shows the name of the browsed file. If no file is selected/browsed, then it shows “No File Selected”.

Below the file name, there is a display window that shows the braille and normal text fonts. When no device is connected, it just displays the name of the application.

Below the display window there are different navigation options available such as:

- Pan 20 characters
- Character
- Word
- Line/paragraph
- Percentage
- Page
- Top of file
- End of file

The above navigation options work exactly like the reader mode of the orbit reader 20. Refer [section 6.2.3](#) to know the functions of these navigation options.

5.1.1 Browse a file

To browse a text/BRF file, click on the “Browse” button. The application will open a new dialog box to browse the files. See Figure 9.

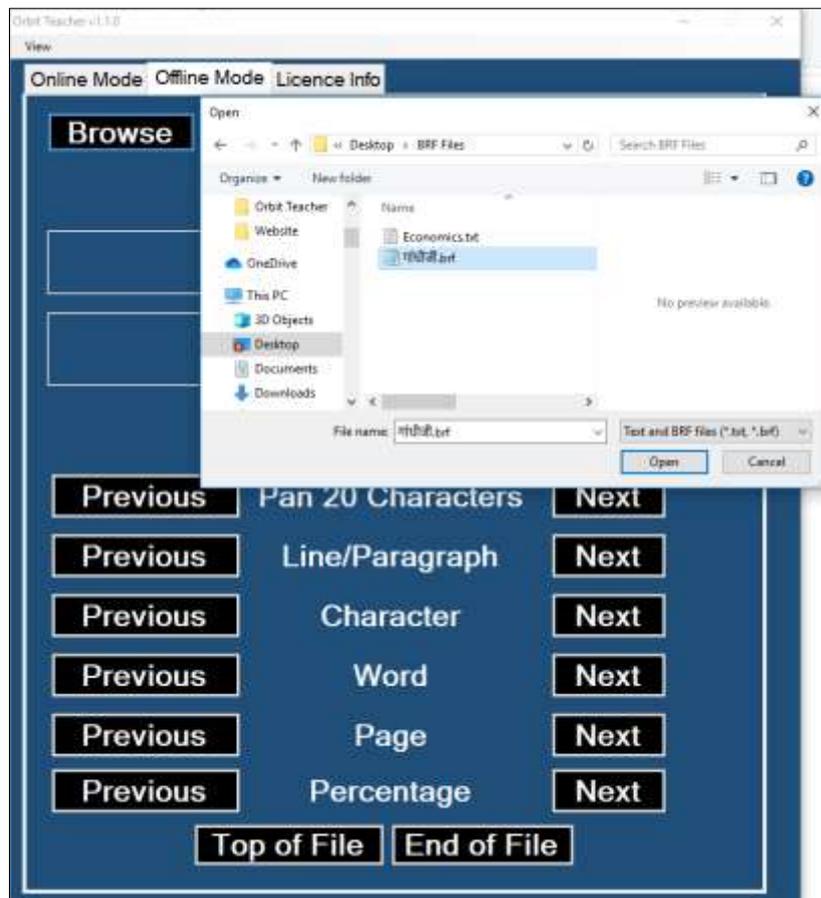


Figure 9

5.1.2 Adjust Text Formatting settings

The application will show the braille fonts and actual text based on the selected text formatting options such as, Filter dot 7, Wrapping, Split Word and Compress Space.

Option	Choices	Default Value	Description
Split words	On	Off	Shows 20 characters while panning
	Off		Breaks the display on the word boundary
Filter Dot 7	On	On	Removes the capitalization from BRF files that are saved in all caps
	Off		Does not remove the capitalization from BRF files that are saved in all caps
Wrapping	On	On	Removes CR/LF from the file except for those lines that begin with one or more spaces
	Off		Does not remove CR/LF from file except for those lines that begin with one or more spaces
Compress Spaces	On	On	Compresses two or more space characters to one
	Off		Does not compress two or more space characters to one

To change the text formatting settings, click on text formatting option from the “View” menu or press the short-cut keys “Alt + v + t”. This will open a new page as shown in Figure 10.

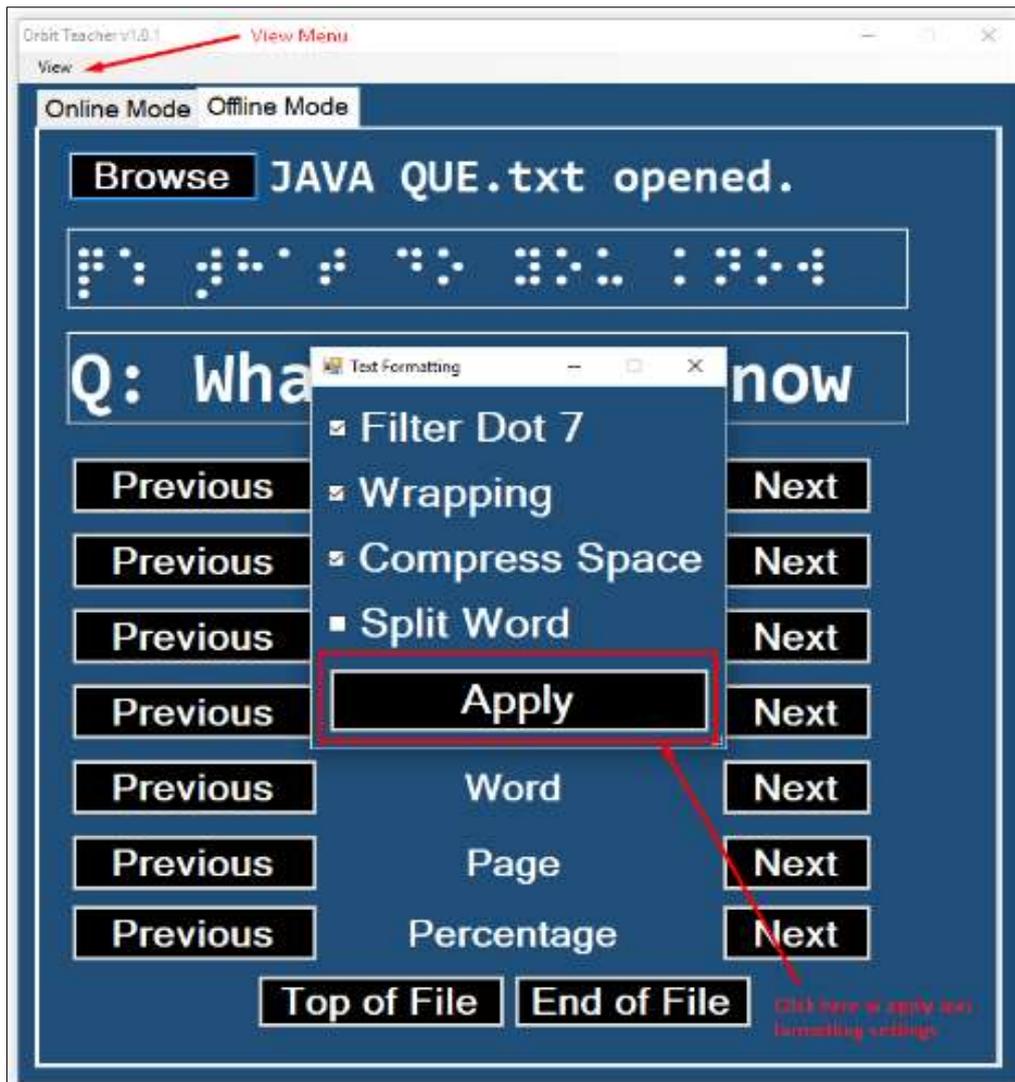


Figure 10

5.1.3 Navigation Options

Following are the different navigation options available in the application.

1. **Pan 20 Characters:** This option is for panning 20 characters forward or backward.
2. **Line/paragraph:** This option is used for going to the previous or next line/paragraph.
3. **Character:** This option is used for going to the previous or next character.
4. **Word:** This option is used for going to the previous or next word.
5. **Page:** This option is used for going to the previous or next page.
6. **Top of File:** This option is used for going to the top of the file (where text starts).
7. **End of File:** This option is used for going to the end of the file (where text ends).

- 8. **Percentage:** This option is used for jumping to the previous or next percentage location in the file.

User can use these options with the help of 'Previous' and 'Next' buttons, present on both the sides of all the options.

5.1.4 Find Text

The user can search the text or phrase using the "Find Text" option.

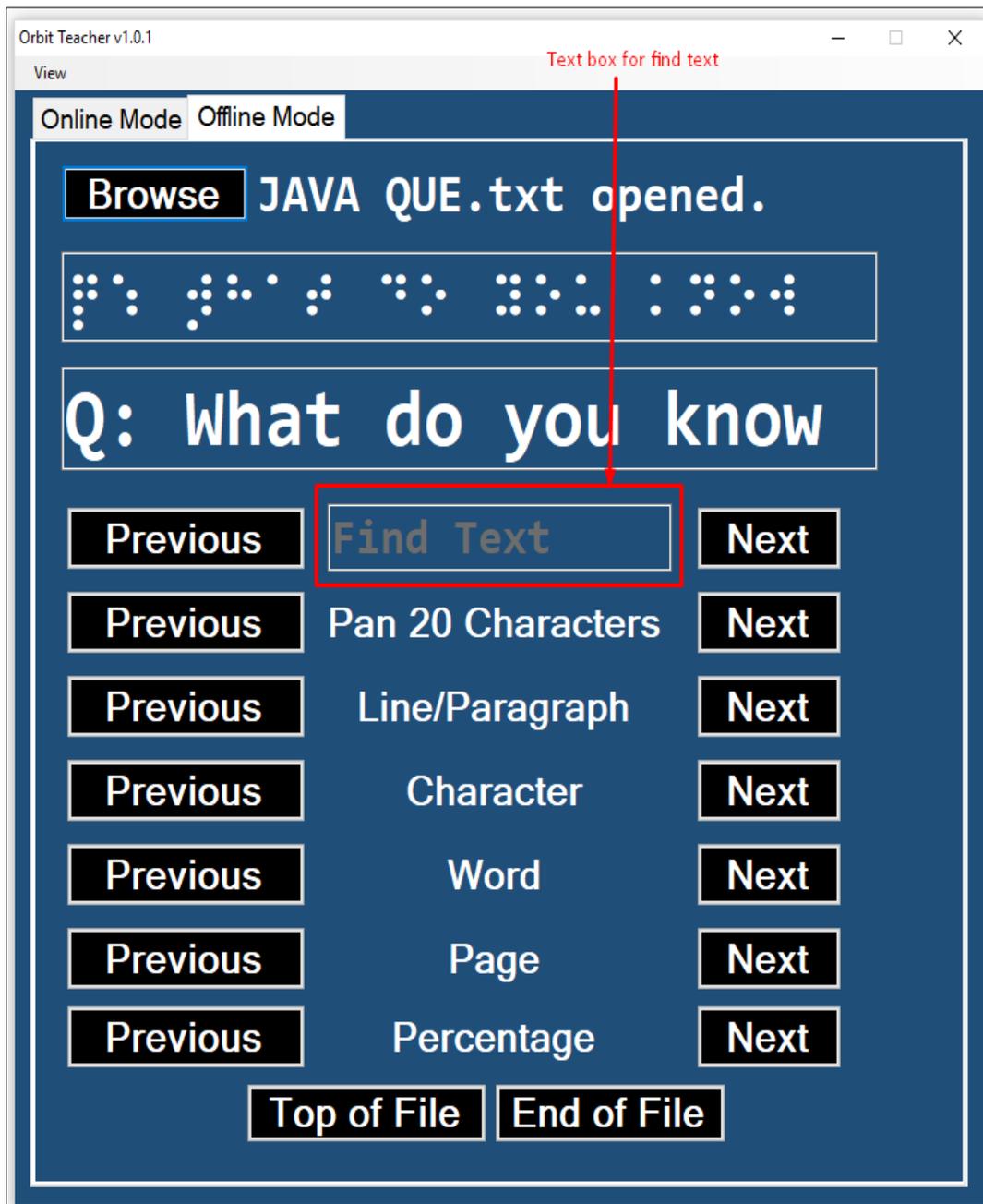


Figure 11

Write the text you want to search in the “Find Text” box and click on the next or previous button to find the text from the browsed file.

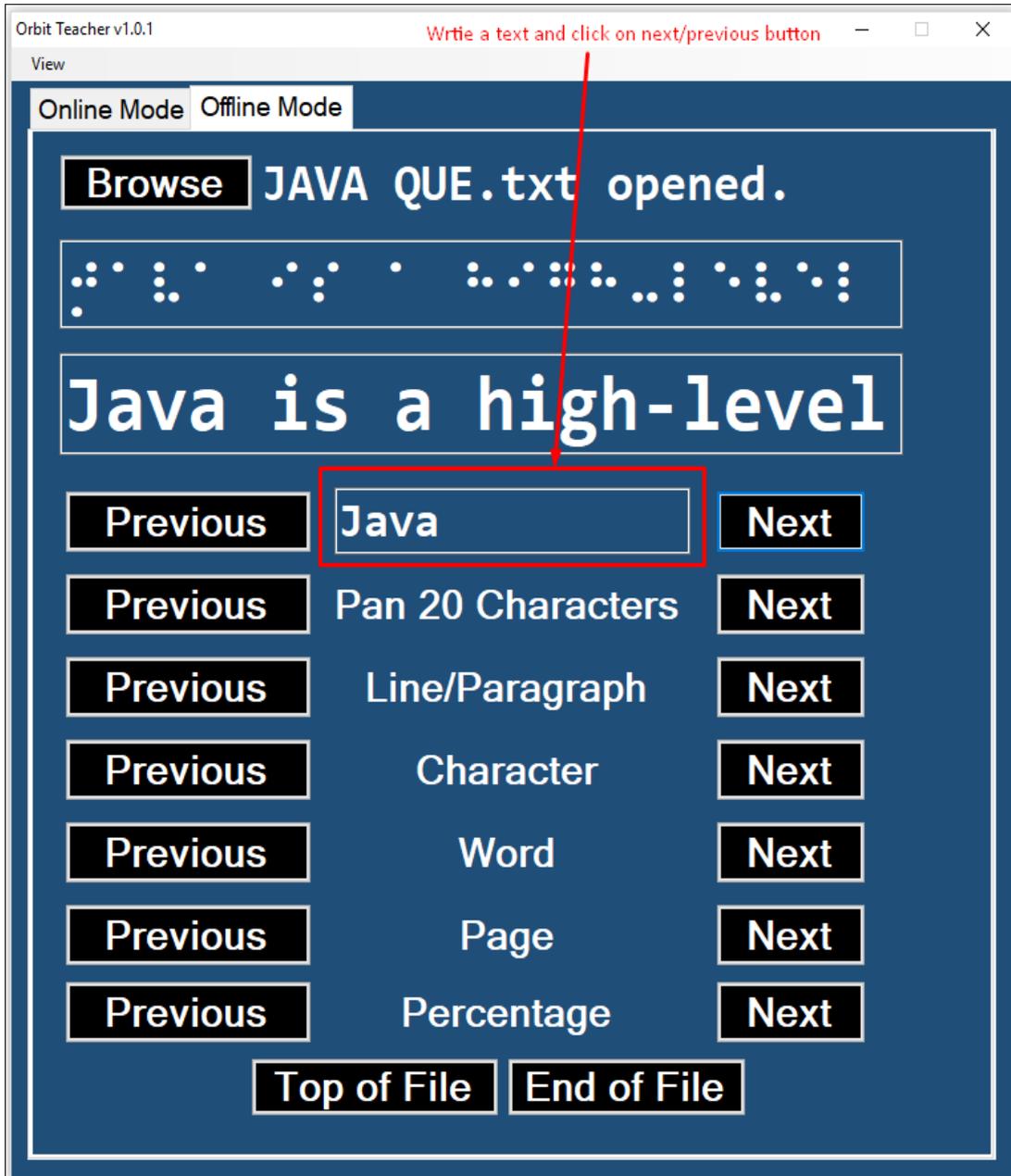


Figure 12

6 Limitations

1. The device connection will not resume automatically if the device is reset or turned off.
2. If the connected device is getting turned off, the application will disconnect the device after few seconds.
3. After power cycle of OR20, sometimes the application might take multiple attempts to connect the device.

4. Application will not connect the device if the device is already connected with Brailleback. To connect the device with the application, turn off Brailleback before connection.
5. Sometimes the windows application might show the blank braille dots and actual text in online mode, if there is no SD card.
6. Sometimes the windows application might not pair the device using “confirm code”.
7. Make sure that com ports are generated for the host device that you want to connect through Bluetooth. Check the com ports settings in, Bluetooth Devices Control Panel → More Bluetooth options → COM Ports tab."

7 Troubleshoot

7.1 Unable to pair the OR-20 unit with PC

Restart Orbit Teacher application, Reset the OR-20 unit and try again.

7.2 Not able to connect the OR-20 unit with PC

1. Check to make sure that the OR-20 unit is not in sleep mode and is not connected with any other device, screen-reader software or any other application through Bluetooth.
2. Reset the OR-20 unit and try again.