



*PROPRIETARY*

*INFORMATION*

# Orbit Reader 20™ FAQ

**3<sup>rd</sup> Sept 2019**

**Version 0.71**

# Frequently asked questions

This page contains answers to most commonly asked questions about Orbit Reader 20.

## General Specifications

### **Q. What are the dimensions and weight of the Orbit Reader 20?**

A. The dimensions (W x H x D) are 6.6 x 1.4 x 4.4 inch (168 x 35 x 112 mm). It weighs 0.99 lbs (450 grams)

### **Q. What are the accessories of Orbit Reader 20 available for sale?**

A. You can purchase the following accessories

1. SD card – 8 GB
2. Padded Carrying case
3. Power Adapter
4. USB-A to Micro USB-B Cable
5. Spare Battery

### **Q. What and how many kinds of Braille input keys does the Orbit Reader 20 have?**

A. It has the eight high-quality, Perkins-style keys and a space bar.

### **Q. Which additional buttons or keys does the Orbit Reader 20 have?**

A. It has a Power on/off button, a cursor pad with four directional buttons and one select button for navigation, and two rocker type panning keys.

### **Q. Does the Orbit Reader 20 have any external ports?**

A. It has one Micro-B USB port (USB 2.0) with support for Serial, HID and Mass storage device classes and one SD card slot.

### **Q. What is the typical battery life of the Orbit Reader 20?**

A. The battery typically lasts 3 days with normal use.

### **Q. Does the Orbit Reader 20 have internal memory?**

A. The Orbit Reader 20 uses the SD Card for storing files for reading and editing.

## SD Card and File System

### **Q. Which file system on SD card is supported by Orbit Reader 20?**

A. Orbit Reader 20 supports only FAT32 file system. SD cards should be formatted with the FAT32 file system only.

**Q. What size of an SD card is supported by Orbit Reader 20?**

A. The Orbit Reader 20 supports SD cards with memory capacity ranging from 4 GB to 32 GB.

**Q. What is the maximum length allowed for the file name and path?**

A. The maximum length allowed for a file name and path is 255 characters.

**Q. Does the Orbit Reader 20 offer date and time stamping when a file is created or edited?**

A. When a file is created or edited, the Orbit Reader 20 applies a fixed date and time, i.e. 1-Jan-2019 00:00:00.

**Q. What is the maximum number of files that can be stored in a single directory?**

A. There is no limitation to the number of files that can be stored in a single directory of Orbit Reader 20. However, the file sorting function is limited to the first 250 files found on an SD card.

**Q. What are the file formats supported in Stand-alone Mode?**

A. The txt, .brf, brl, and .bra file formats are supported in Stand-alone mode.

**Q. What is the maximum number of files that can be marked for cut, copy or delete operations?**

A. A maximum of 100 files within the same directory can be marked for cut, copy or delete operations.

**Q. Is it possible to perform cut, copy or delete operations on folders?**

A. Cut, copy and delete operations can be performed only on empty folders. If you try to perform these operations on a non-empty folder, the system shows an error message.

**Q. Which encoding formats are supported in the Orbit Reader 20?**

A. Text files can be encoded in ANSI, UNICODE-LE16, UNICODE-BE16 or UTF8 formats. Other encoding formats are not supported.

**Q. What is the maximum number of files are shown when “Show Recent Files” command is selected from the Menu?**

A. The maximum number of files shown in the recent file list is 20.

**Q. What is the error message "SD Error XX" shown on the display?**

A. This error message indicates an internal error with the SD card, such as corrupt memory regions or a damaged card adapter or wrong file system.

**Q. How to check the available memory on the SD card of your Orbit Reader 20?**

A. There is no way to check the remaining space on the SD card through Orbit Reader 20. However, you can check it by connecting your Orbit Reader 20 to your PC and go to mass storage mode by pressing command Space + Dots 5 7

**Q. Is it possible to rename a file with a name having a mixed set of Unicode and ASCII characters?**

A. It is not possible to rename a file with mixed characters from Unicode and ASCII.

**Q. How do I transfer the files to and from the Orbit Reader 20?**

A. Connect your Orbit Reader 20 to your PC using USB cable and invoke mass storage mode for the file transfers. Hotkey for the mass storage mode is Space + Dots 5 7.

## Reader and Editor

**Q. How much file content can be copied using Cut/Copy block operations in Orbit Reader 20?**

A maximum of 5KB (approximately 5000 characters) of the file content can be copied at a time.

**Q. What is the maximum number of bookmarks you can set in single file on your Orbit Reader 20?**

A. The maximum number of bookmarks that can be set, in a single file, is 100.

**Q. Is text formatting applied in Editor based on different settings from the Menu (for example word wrap)?**

A. The text formatting options from the Menu are applicable in the Reader only.

**Q. Is it possible to perform Cut/Copy block operations in Reader mode in Orbit Reader 20?**

A. The Cut/Copy block operations can be performed only in Editor. To perform these operations in Reader mode, you should first open the file in Editor mode and perform the desired operation.

**Q. Can I remove the SD card while editing a file?**

A. When you remove the SD card, Editor application is terminated and edited data will be lost. It is highly recommended not to remove the SD card while editing any file.

**Q. Is the file automatically saved while editing in Orbit Reader 20?**

A. A file is automatically saved when you exit the Editor. A file is also automatically saved while editing or navigating approximately 1000 characters within the file.

**Q. How does the page navigation work in Orbit Reader 20?**

A. 'Navigation by page' will move the cursor to the next form feed character or 1000 characters, whichever comes first in the file. If the file has no form feed characters, the cursor will move approximately 1000 characters.

**Q. Why does 'Dot 7' appear on the display, even after Filter dot 7 is turned on in Orbit Reader 20?**

A. The 'Filter dot 7' function works only for BRF and BRL files. It has no impact if you are reading a text file.

**Q. What are the steps to create a BRF file on the Orbit Reader 20?**

A. Steps to create a BRF file

1. Choose encoding option "ANSI" from the Menu
2. Create a new file using the command (by pressing space + N keys)
3. Type the content
4. Save the file (By pressing Select, Select)
5. Rename the file by adding the extension '. BRF'

**Q. What are the steps to create a TEXT file on the Orbit Reader 20?**

A. Steps to create a TXT file

1. Choose appropriate encoding option from the Menu
2. Create a new file using the command (by pressing space + N keys)
3. Type the content
4. Save the file (By pressing Select, Select)
5. Rename the file by adding the extension '.TXT'

**Q. Does Orbit Reader 20 perform on-board translation?**

A. Yes, Orbit Reader 20 can support on-board translation using the localization feature. You can prepare the localization files (.lan and .loc) and apply the localization on your Orbit Reader 20. Once your Orbit Reader 20 is localized, it uses the translation table supplied in the .lan file. For more information about the localization please refer Orbit Reader 20 localization user guide available on our website at <https://www.orbitresearch.com/support/orbit-reader-20-support/orbit-reader-localization-download/> By default, Orbit Reader 20 uses the 8-dot computer braille chart for translation. You can refer to this chart in Appendix A of the product user guide.

## Bluetooth

**Q. What happens when a Bluetooth Host sends a pairing request to the Orbit Reader 20 when in sleep mode?**

A. Pairing requests are accepted automatically when the pairing mode is set to "Just Works". If it is set to "Confirm Code", Orbit Reader 20 will not respond.

**Q. How many Bluetooth devices can be connected to the Orbit Reader 20?**

A. Four Bluetooth devices can be connected to the Orbit Reader 20. However, only one Bluetooth device will be active at a time. In order to switch between connected devices, first put the currently connected host on standby (screen lock the phone) and then wake up the other host from standby (unlock the phone). The host will then connect to the Orbit Reader 20 automatically, provided it was paired already.

**Q. Why does my device switch back to Bluetooth connection even when I am working in Stand-alone mode?**

A. The default setting for Bluetooth is Auto in the Menu. That means If there is any screen reader activity running on the paired device, the Orbit Reader 20 automatically switches to Bluetooth Remote mode. If you do not want automatic Bluetooth connection switching, change the Bluetooth menu option to manual. To disable Bluetooth completely, select OFF.

**Q. Can I wake up my mobile from the standby mode using the Orbit Reader 20 keys?**

A. The Orbit Reader 20 keys cannot be used to wake up a mobile from the standby mode, but can be used to enter a password to unlock the screen for iPhones.

Android phones with Google's BrailleBack does not support this functionality.

**Q. Will Orbit Reader 20 show my phone's notifications when the phone is in standby mode?**

A. This depends on the screen reader application running on your mobile phone.

Our observations are as follows:

For iPhones,

No notifications are shown for incoming calls. For phone messages, only notifications are received, and not the content of the messages. The display usually shows the contents of the screen.

For Android phones,

On receiving a call, the device displays contents of the screen. The content may vary depending on the mobile phone. The device may or may not display the number for an incoming call. The device does not display anything for incoming message notifications.

**Q. Why am I unable to see my device listed in the IOS Bluetooth menu option "Nearby Devices"?**

A. Note that iOS is paired through,

Settings →General →Accessibility→VoiceOver→Braille→Choose A Braille Display and not through Settings→Bluetooth→Devices.

## Remote Mode

### **Q. Can the Orbit Reader 20 work as the 18-cell braille display?**

A. The Orbit Reader 20 works as an 18-cell device when it is emulated as Refreshbraille 18. The last two cells remain blank.

### **Q. Can I turn off the emulation mode anytime?**

A. The Emulation mode can be changed only when there is no active screen reader connection. If the user attempts to change emulation during an active screen reader connection, the system will give an error message.

### **Q. What happens when a Bluetooth connection is lost with the host device?**

A. The Orbit Reader 20 resumes connection when you unlock the previously connected device from standby.

If the connection was lost when the Bluetooth device is active, then the connection needs to be re-established manually.

There are some simple ways to do this. They are as follows:

1. Lock the screen of the phone and unlock.
2. For Android, go to Settings->Accessibility->Brailleback->Setting and click on the status or turn off the Brailleback and turn it on again.
3. For ios, go to Settings->General->Accessibility->Voiceover-> Braille and double click on the name of the braille device, or turn off the voice-over and turn it on again.
4. If nothing works, unpair the braille device and pair it back.

### **Q. What happens when the Emulation mode is changed while the device is already paired with the host?**

A. When the Emulation mode is changed, the “connected device list” will not show that change unless Orbit Reader 20 unpair and pair with the host. However, there is no disturbance in the current work.

### **Q. What happens when you change the Emulation mode during active screen reader connection?**

A. If the Android device is in standby, then there is a chance that it may connect to the Orbit Reader 20 in the wrong emulation mode when wake-up the phone. Here, you can disconnect (forget) the Orbit Reader 20 and pair it again.

The current active connection (USB or Bluetooth) will be reset and re-initialized.

## Q. How can I know whether the screen reader application I am using is supported by Orbit Reader 20 or not?

A. Refer to the table below for details

	Connection mode	Supported Channels	Screen Reader Latest Version verified
<b>NVDA</b>			
1	Orbit Reader 20	USB HID/Bluetooth	2017.2
2	Refreshabraille18 Emulation	Bluetooth	2017.2 or earlier
<b>JAWS</b>			
1	Orbit Reader 20	USB HID/ Bluetooth	JAWS 2018.1803.24
2	Refreshabraille18 Emulation	USB HID/ Bluetooth	18.0.2945
<b>Window-Eyes</b>			
1	Orbit Reader 20	USB HID/USB Serial/Bluetooth	Not released yet
2	Refreshabraille18 Emulation	USB Serial/Bluetooth	9.5.1.0 and earlier
<b>System Access</b>			
1	Orbit Reader 20	USB HID	3.7.88
2	Refreshabraille18 Emulation	USB HID/	3.6.136
<b>Voiceover (Mac)</b>			
1	Orbit Reader 20	USB HID/Bluetooth	Mac OS-10.12.1 sierra
2	Refresh braille Emulation	Bluetooth	Mac OS 9 and earlier
<b>Voiceover (iOS)</b>			
1	Orbit Reader 20	Bluetooth	iOS10.3.2
2	Refreshabraille18 Emulation	Bluetooth	iOS9 and earlier
<b>BrailleBack</b>			
1	Refreshabraille18 Emulation	Bluetooth	0.95.1-Prod or earlier
<b>Windows Narrator</b>			
1	Refreshabraille18 Emulation	USB Serial/Bluetooth	Windows10

<b>BRLTTY</b>			
1	Orbit Reader 20	Bluetooth	5.5
2	Refreshbraille18 Emulation	Bluetooth	5.5
<b>ChromeVox (Chromebook)</b>			
1	Orbit Reader 20	HID	61.0.3163.120
2	Refreshbraille18 Emulation	HID	61.0.3163.120
<b>Voiceview (Amazon Tablet)</b>			
1	Orbit Reader 20	Bluetooth	5.6.0.1
2	Refreshbraille18 Emulation	Bluetooth	5.6.0.1

**Q. I typed a character when connected to IOS on the home screen and now I see a box with all 8 dots up in the first and 20th cell. What does this mean?**

A. You might have enabled a status cell on the right-hand side. You can turn it off in Braille settings.

**Q. Are there any known issues/limitations while working with Android?**

A. The following issues have been noted while working with Android-

- Automatic switching does not happen. The Orbit Reader 20 has a feature wherein, if USB and Bluetooth both are active at the same time, Bluetooth takes over the connection and in the event of the phone being locked the USB mode automatically gets activated.
- When you type text messages on the Android device, it does not get displayed on the device.
- It is not possible to enter the 'screen unlock' password of the phone from the Braille keypad of the device.
- While using the Brailleback, you cannot type with Grade - 2.

# Firmware Upgrade

**Q. What needs to be done if the error messages like “[Mfc100.dll not installed](#)” or “[Msvcr100.dll is missing](#)” are displayed when an update utility is run?**

A. If you are using firmware upgrade utility version v00.00.12 or an earlier version, Install VC++ redistributable from [here](#) and run it again.

For Utility version v001.00.13 and onwards, these dll files are merged with the main application and no installations are required.

**Q. Is it possible to upgrade the Orbit Reader 20 from SD card?**

A. Yes.

# Localization

**Q. Can I change the Orbit Reader 20’s language?**

A. Yes. The language can be changed through the localization feature. Please see the Language Options (Localization) section of the user manual for details.

**Q. How should I switch back to the default English from the wrong language?**

A. You can change the language to default English by pressing Dot 8 + Space Key + Dot 1 together then press down arrow key once and click Select key to apply the English language.

**Q. What are the steps to load the localization files?**

A. There are two methods

Method 1:

1. Download the desired language files from our [website](#).
2. For example, you have downloaded the Spanish files ".OR20-es-ES.lan" and ".OR20-es-ES.loc". Copy both the files to the "locale" folder available in the root of your SD card. In case, the folder is not available you should create it.
3. Go to the Menu by pressing command Space + Up. It shows the first Menu item "charging xx%" or "battery xx%"
4. Press Down arrow keys till you get the option "Load language"
5. Press Right arrow key to get sub-menu item "Load locale"
6. Press Select key to get "Default English"
7. Press Down arrow key to get ".OR20.es-ES". This message will be different for your language

8. Press Select to apply the localization and It shows the message “Localización exitosa” (Localization OK in Spanish)

#### Method 2:

1. Download the desired language files from our [website](#).
2. For example, you have downloaded the Spanish files ".OR20-es-ES.lan" and ".OR20-es-ES.loc". Copy both the files to the “locale” folder available in the root of your SD card. In case, the folder is not available you should create it.
3. Press the shortcut key command Space + Dot 8 + Dot 1. It opens the load language menu and shows the message “Load Locale”
4. Now, press Down arrow key twice to get the local language name ".OR20-es-ES". This message will be different for your language
5. Press Select to apply the localization and It shows the message “Localización exitosa” (Localization OK in Spanish)

### **Q. Why am I getting localization error when I load the language to Orbit Reader 20?**

A. These are the possible reason for the error

1. Make sure you have latest localization file and latest firmware version installed on your Orbit Reader 20. In case version of localization file and firmware version of your SD card does not match, it shows the localization error.
2. Make sure that localization file name is not changed. Some of the operating systems remove the full stop (.) from the beginning of the file name when you download the file to your PC. The full stop (.) is required to detect the language in OR-20.

### **Q. Can I edit the localization file at my end?**

A. No, you cannot edit the localization file available on our website. Please contact us our tech support team for more help.

### **Q. Are .loc and .lan files required to be loaded in a particular order in Orbit Reader 20?**

A. Yes. It is recommended to load lan files first, and then the loc files.

### **Q. What is the maximum length of any system message, the Orbit Reader 20 supports?**

A. The maximum length of a system message that the Orbit Reader 20 supports is 20 characters.

### **Q. How can I find, if someone has already created localization files for my language? Can I submit my localization files to share with others?**

A. We post localization files that we receive on our website [here](#).

We encourage you to share your localization files with others. You can send us your files via email at [techsupport@orbitresearch.com](mailto:techsupport@orbitresearch.com)

## Others

### **Q. Does Orbit Reader 20 support text to braille conversion?**

A. Yes. You can read text files in any language on Orbit Reader 20. English text files are supported out of the box. For non-English text files, Orbit Reader 20 device needs to be localized.

### **Q. How to clean the braille display?**

A. Follow the below-mentioned steps to keep your Orbit Reader 20 clean:

Due to exposure to natural elements such as dust and oils, the Orbit Reader 20 should be cleaned periodically.

The following are some tips to keep your Orbit Reader 20 clean:

- Cleaning should be performed with the unit switched off and with all pins in the down position.
- Use a vacuum cleaner with a soft tip attachment to remove dust from the pin area.
- Use a lint-free cloth to wipe the cells.
- The cloth may be moistened with water.
- Avoid using the following:
  1. Paper towels, cotton swabs or materials that can release fibres
  2. Alcohol or ammonia-based cleaners
  3. Canned or compressed air.

### **Q. What is a single line edit box in Orbit Research 20 and what are its limitations?**

A. Orbit Reader 20 presents a text dialog or input field called an Edit Box when you want to find text or rename a file. The Edit Box permits only one line of text. Press Space + F to begin a search or press Space + R to rename a file. The only limitation is, the Cut/Copy operations cannot be performed on a single line edit box.

### **Q. Can Orbit Reader 20 be put into sleep mode?**

A. You can put your Orbit Reader 20 into sleep mode by tapping the power key once when it is in Stand-alone mode.

### **Q. Does Orbit Reader 20 support Unified English Braille (UEB)?**

A. If you are working with screen reader applications in remote mode, it depends on the application you are using. Being a terminal display device, Orbit Reader 20 displays anything sent by the host application as it is. In local mode, the Orbit Reader 20 supports only 8-dot computer braille code.

**Q. How to report a software bug?**

A. You can email us the details at [techsupport@orbitresearch.com](mailto:techsupport@orbitresearch.com). You can also post your queries on our forums available on our website [here](#).

**Q. What is the Orbit Research warranty?**

A. Orbit Research warrants the Orbit Reader hardware product against defects in materials and workmanship under Normal use for a period of ONE (1) YEAR from the purchase date, by the original purchaser ("Warranty Period"). If a hardware defect arises and a valid claim is received by the Orbit Research, within the Warranty Period, at its option and to the extent permitted by law, the defective hardware will be repaired or replaced. Extended one-year warranty can be purchased for \$85.00 at the purchase time of the Orbit Reader 20 by the original purchaser.

**Q. How can I obtain Technical Support for Orbit Reader 20?**

A. For technical support, you may contact your local distributor of OR 20. You can email the details at [techsupport@orbitresearch.com](mailto:techsupport@orbitresearch.com)

Or post your queries on our website [here](#).