

**SONORIX**

**Bluetooth Audio Player**  
**OBH-0100**





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## Quick Installation & Usage Guides

### A) Preparing for Installation

- 1) Connect charger with AC/DC adapter and charge battery for 2 hours.

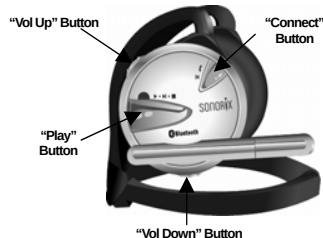


- 2) Check your PC system and make sure your PC is using Win 2000(SP3 or SP4) or Win XP(SP1 or 2) and has Windows Media Player version 6.4 or higher installed.

### B) Installing Browser, Bluetooth Driver & USB Dongle

- 1) Auto-run CD → 'Install SONORIX Browser' → Next → OK.
- 2) Auto-run CD → 'Install Bluetooth Driver' → Next → Yes → Next → Finish. BlueSoleil installation may take several minutes to complete. Make sure to reboot the computer.
- 3) Insert Bluetooth USB Dongle into USB port of PC.
  - a) For Win 2000, driver will be installed automatically.
  - b) For Win XP SP1, when 'Found New Hardware Wizard' screen shows up, click Next → Continue Anyway → Finish.
  - c) For Win XP SP2, if 'Security Warning' message shows up, make sure to click 'Do Not Block'. Wait until all the drivers for Generic Bluetooth Radio (provided by SP2) are installed. Then BlueSoleil driver will take over the SP2 driver and you will see only 1 Bluetooth icon in system tray. Reboot computer if prompted.

### C) Audio Player Control Buttons



FAMILIARIZE  
YOURSELF  
WITH POSITION  
OF BUTTONS

### D) Music Playback Control Buttons

Mount battery onto Audio Player → LED lights and flashes for 1 second → Boot Tone → LED OFF.



|              |                                                                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Play         | Click & hold <b>Play</b> button for 3 seconds.                                                                                                             |
| Skip/Next    | Click <b>Play</b> button once during play.                                                                                                                 |
| Previous     | Click <b>Connect</b> button once during play.                                                                                                              |
| Stop         | Click & hold <b>Play</b> for 3 seconds during play.                                                                                                        |
| Pause        | Click & hold <b>Vol Up &amp; Vol Down</b> for 2 seconds during play.<br>To resume, click <b>Play</b> or <b>Connect</b> button once.                        |
| Fast Forward | Click & hold <b>Vol Up</b> button in a long manner.                                                                                                        |
| Fast Rewind  | Click & hold <b>Vol Down</b> button in a long manner.                                                                                                      |
| Hold         | Click & hold <b>Vol Up &amp; Vol Down</b> buttons for 3 seconds in idle state. To cancel, click & hold <b>Vol Up &amp; Vol Down</b> buttons for 2 seconds. |
| Volume Up    | Click <b>Vol Up</b> button.                                                                                                                                |
| Volume Down  | Click <b>Vol Down</b> button.                                                                                                                              |

#### E) Bluetooth & Handsfree Control Buttons

|                  |                                                                                                                                             |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Pairing Mode     | Click & hold <b>Connect &amp; Vol Up</b> buttons for 3 seconds. LED flashes once every second.                                              |
| Delete Pairing   | Click & hold <b>Play &amp; Vol Down</b> buttons for 3 seconds. LED flashes once every second.                                               |
| Upgrading Mode   | Click & hold <b>Vol Up &amp; Vol Down</b> buttons, mount battery and when LED starts to flash, wait for 3 seconds and then release buttons. |
| Voice Connection | Click <b>Connect</b> button in a long manner to make connection. (only after pairing is complete)                                           |
| Answer Call      | Click <b>Connect</b> button once.                                                                                                           |
| End Call         | Click <b>Connect</b> button once.                                                                                                           |
| Redial           | Click & hold <b>Connect</b> button in a long manner. (Some phones can initiate Voice Dialing)                                               |

#### F) Using Audio Player with PC

By connecting Audio Player with PC, you can listen to stereo audio sources in high quality mode and use as wireless headset for voice chatting applications.



- 1) To use the above services, Audio Player must first be paired and connected to PC. Check if the Bluetooth icon in system tray is marked in blue. Mount battery onto Audio Player to power on.
- 2) Put Audio Player in pairing mode (refer to previous page – Pairing Mode) and click the 'Orange' ball once to start search for devices. You can also press F5 key to search for devices. Note : Pressing F5 will refresh the BlueSoleil Window.
- 3) When SONORIX\_PLAYER icon is displayed, double click the icon to activate services. Enter pinkey '1111' when prompted. The 3 Service icons will then be displayed in 'Yellow' boxes.

**F-1) Bluetooth AV Service (for stereo audio streaming)**

- 1) Right click 'Bluetooth AV Service' icon → click Configurations → Select SBC or MP3 codec → OK.  
\*\* SBC for video and games / MP3 for music \*\*
- 2) Click 'Bluetooth AV Service' icon once to connect to AV service.
- 3) Play music from Internet, Windows Media Player, Winamp, etc.
- 4) To end, right click 'Bluetooth AV Service' icon and click Disconnect.

**F-2) Bluetooth Headset Service (for voice chatting)**

- 1) Click 'Bluetooth Headset Service' icon → Bell rings from Audio Player → Click **Connect** button on Audio Player once to connect.
- 2) Run chatting programs like MSN messenger, Skype etc. Make sure the audio settings for speaker and microphone are set to "Bluetooth AV/HS Audio"
- 3) To end, right click 'Bluetooth Headset Service' icon and click Disconnect.

**F-3) Bluetooth Serial Port Service (COM Port for browser)**

- 1) Click 'Bluetooth Serial Port Service' icon → COM Port number will be displayed on top of system tray.
- 2) From desktop, double click SONORIX Browser icon → click Red Button → Select COM port you saw in 1) → OK.



- 3) For details of SONORIX Browser features, please refer to 'Help' under 'Tools'
- 4) To disconnect, click Red Button and then from BlueSoleil window, right click 'Bluetooth Headset Service' icon and click Disconnect..

For other details, please refer to the chapters in the manual

For any inquiries, visit our website, [www.sonorix.com](http://www.sonorix.com) or email us at [obt@openbrain.co.kr](mailto:obt@openbrain.co.kr)

## Introduction

Thank you for purchasing our SONORIX Bluetooth Audio Player.

The SONORIX Bluetooth Audio Player OBH-0100 is the first product of its kind in the world to integrate Mobile, Wireless and Audio technologies into a multi-purpose entertainment device, providing the user with the Ultimate Solution for handsfree and audio demands.

It functions as '**Wireless Headphone**' for PC enabling 2 way voice communication (voice chatting) and direct streaming of high quality audio, '**Wireless Headset**' for handsfree operation with mobile phones, '**Standalone Music Player**' for listening to music anytime, anywhere and '**Portable Storage Device**' for storing any files other than music files.



## Product Functions

**Wireless Stereo Headphone** for listening to CD, DVD, HDD Music, Online Music etc.



**Portable Music Player** for listening to MP3, WMA music stored in memory and



**Handsfree Headset** for handsfree operation with Bluetooth phones



**Wireless Headset** for 2-way voice communication via PC



## Safety Instructions

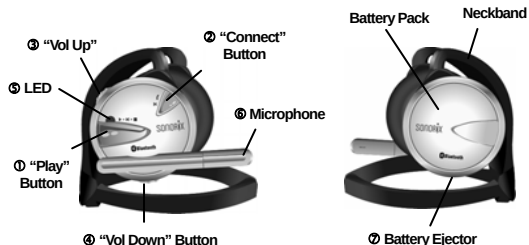
\* Please read the following safety instructions before using the product

- Never use the Bluetooth Audio Player while driving.
- Check the laws and regulations on the use of mobile phones and handsfree equipments in areas you intend to use.
- Continuous listening of music at high volume may cause hearing defects.
- Use of non-SONORIX batteries may result in damage, performance degradation, injury, electric shock and even fire.
- Never touch the electric cord or plug with wet hands and never use force to pull the cord or plug.
- Please read the precautions on the use of battery.
- When cleaning, do not use any type of abrasive pad, scouring powder or solvents as these may render the finish dull permanently.
- Charge battery for at least 2 hours before using.
- Read the instructions on 'Pairing' to connect the Audio Player with mobile phone or PC.
- Do not use in places like hospitals, airplanes etc. where use of electronic devices is prohibited.
- Do not expose components to the extremes of sunlight, temperature, moisture or vibrations.

## What's included in the Package



## Description of Parts



## Wearing Audio Player / Using Travel Case



Place the Audio Player such that the neckband goes behind the head and the microphone is positioned off the right ear.



When not in use, fold the Audio Player and place it inside the case.

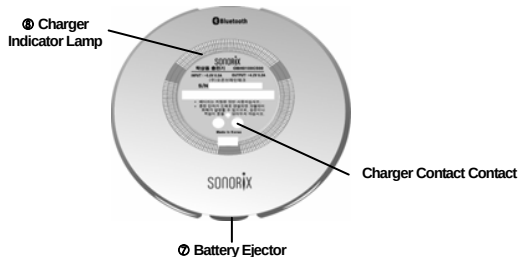
## Mounting / Removing battery

\* Audio Player has no Power "On/Off" buttons and switches on automatically when battery is mounted.



To mount battery, place hook of battery into groove of Audio Player and when terminals of battery and Audio Player are in contact, press battery downwards until it locks completely.

To remove, press the "Battery Ejector" button.



## Charging the battery

\* Battery at the time of purchase must be charged for at least 2 hours before use.



To charge battery, place hook of battery into groove of charger and when the terminals of battery and charger are in contact, press the battery downwards until it locks. Check if charger LED switches red.



Press the "Battery Ejector" button under charger cradle.

## Charger Indicator Lamp

The charger status is indicated by the following colors.

- Red : Being charged
- Blue : Charging complete



- \* If charger indicator does not light up when battery is mounted, remove battery and mount again. If it still does not light up, clean the charger terminals. If problem persists, contact the service center.
- \* Charging and storage should be at room temperature.
- \* Do not use other adapters with the charger as it may cause damage or fire.
- \* Do not place metals (coin, necklace etc.) over the charger terminal as it may lead to short circuit.

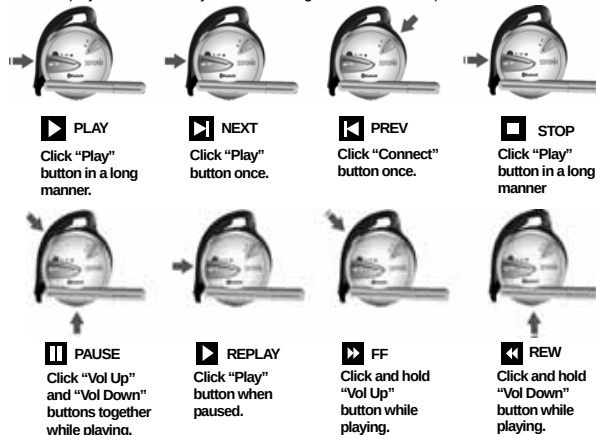
## Battery Information

- **Battery Level Indicator** : Battery level can be checked by connecting Audio Player to PC via 'SONORIX BROWSER' (at the bottom right corner). Also, brightness of LED varies with battery level. Low brightness indicates low battery level.
- **Battery charging time** : 2 hours  
\* Charging time varies with battery level
- **Battery Life**  
Standby : 150 hours  
When connected to PC or mobile phone : 4 hours  
Continuous music play : 6-8 hours

- \* Because of its consumable nature, battery life cycle gradually degrades over time. Purchase new battery if battery life has degraded significantly.
- \* Do not drop battery, subject it to force or disassemble it as it may result in damage or overheating.
- \* Do not place battery near burner or microwave oven as it may explode.
- \* Keep away from the reach of children. Can be harmful when damaged battery is used or if placed in the mouth.
- \* When exposed to battery liquid, clean the exposed area under running water for 1-2 minutes.
- \* Do not use battery with other devices as it may cause damage.

## Playback of MP3/WMA Files in Memory

- Audio Player is equipped with 128MB built-in memory for storage of music files downloaded from PC.
- To play music, click "Play" button in a long manner until a beep tone is heard.



## Volume Control / Hold Function

### Adjusting Volume

To increase volume, press "Vol Up" button and to decrease volume, press "Vol Down" button. Volume can be adjusted while listening to music or during handsfree mode. To adjust volume while listening to music, buttons must be pressed in a short manner. Pressing buttons in a long manner will activate FF (fast forward) or REW (fast rewind) functions.

### HOLD Function

If Audio Player is placed in a bag or pocket, accidental pressing of the "Play" button may activate Audio Player to play thereby resulting in unnecessary battery power consumption. To prevent such unnecessary battery power consumption, put Audio Player in 'Hold' mode by pressing "Vol Up" and "Vol Down" buttons together for 4 seconds. To cancel hold, press "Vol Up" and "Vol Down" buttons shortly.

## PC System Requirements for Driver and Program Installations

- Before installing Sonorix Browser and Bluetooth Driver from CD, check if your computer system supports the following minimum requirements :
  - ✓ Pentium III – 800MHz or higher
  - ✓ Windows 2000, XP (ME, Win 98 not supported)
- **Ensure that your Windows 2000 / XP is fully updated before installing :**  
**Windows 2000 (Service Pack 3 or 4) / Windows XP (Service Pack 1 or 2)**
  - ✓ Memory 128MB or higher
  - ✓ Available hard disk space of at least 10MB
  - ✓ CD-Rom drive and USB port

## Installing SONORIX Browser

Insert CD and wait for auto-program to run. The following screen will be displayed. Select 'English' tab. Click the first menu, 'Install SONORIX Browser' to install.



Wait for SONORIX Setup to prepare the InstallShield Wizard. If your Windows Media Player version is 6.4 or lower, the following message will appear. Click 'Yes' to continue.



If 'No' is selected, the message below will be displayed and the Browser has to be installed again. Click 'Yes' to accept the agreement. Extracting files for installation. Click 'Yes' to complete installation of Window Media Format.

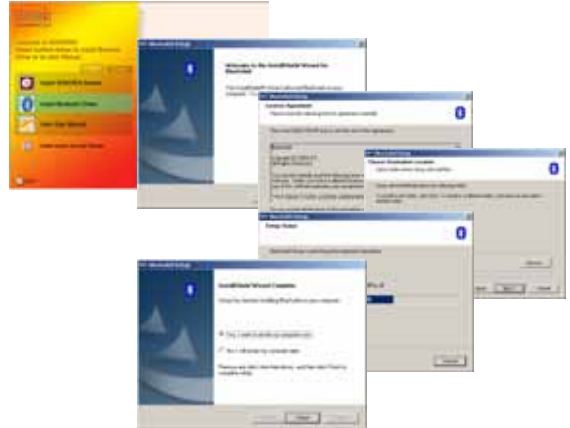


Run 'Install SONORIX Browser' to install again. Click 'Next' to install or Browse to select another folder. After installation is complete, SONORIX Browser icon will appear on desktop.



## Installing Bluetooth Driver (BlueSoleil)

Click the second menu, 'Install Bluetooth Driver' to install. The InstallShield Wizard will guide you through the rest of the setup process. Read the agreement and Click 'Yes' to continue. Click 'Next' to install or 'Browse' to select another folder. Copying files to designated folder/directory. For Windows XP, if 'Windows Logo Certification Notice' shows up, click 'Continue Anyway' for all drivers until all drivers have been installed. Click Finish to complete the installation. For proper installation, the computer must be rebooted.



When properly installed and computer rebooted, BlueSoleil Main Window will be displayed as shown below. Also, BlueSoleil icon will be created on desktop with Bluetooth logo (marked in grey) in taskbar.



Bluetooth connection cannot be established if the Bluetooth logo is displayed in grey. Refer to the next chapter, 'Installing Bluetooth USB Dongle' to install Bluetooth USB Dongle and driver before making the Bluetooth connection. properly installed and computer rebooted, BlueSoleil Main Window will be displayed as shown below. Also, BlueSoleil icon will be created on desktop with Bluetooth logo (marked in grey) in taskbar.

## Installing Bluetooth USB Dongle

The SONORIX Bluetooth USB Dongle is a device that provides Bluetooth interface when connected to USB port of desktop or laptop PCs without Bluetooth functionalities.



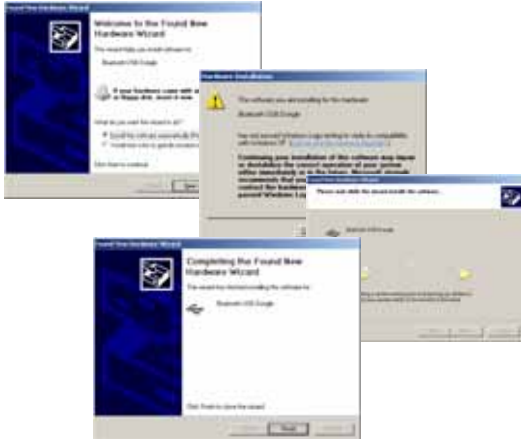
After BlueSoleil software has been installed and computer rebooted, insert Bluetooth USB dongle into USB port of PC. A message 'New Hardware Found' will be displayed and driver will be installed automatically. (Only for Windows 2000)

For Windows XP, driver installation procedures may differ according to version of service pack used. For Windows XP Service Pack 1, when USB dongle is inserted a message 'New Hardware Found' shows up followed by driver installation.

**\* For Windows XP Service Pack 2, refer to the instructions on page 40**

## Windows XP Service Pack 1

When the message, 'New Hardware Found' shows up, select 'Install the software automatically (Recommended)' and click 'Next'. During the installation process, when notice on 'Windows Logo Testing' shows up, click 'Continue Anyway'. If 'Stop Installation' is selected, the installation will not continue. Wait for the driver to be installed. Click 'Finish' to complete installation.



## Windows XP Service Pack 2

Windows XP Service Pack 2 provides built-in Bluetooth functionalities but doesn't provide AV and Headset profiles needed for stereo and voice applications. Therefore, BlueSoleil driver has to be installed for such applications. After installing driver and rebooting the computer, the following 'Security warning' screen may be displayed. In this case, select 'Do Not Block'. Insert Bluetooth USB Dongle into USB port of PC. 'Found New Hardware' message shows up and 2 Bluetooth icons will be displayed in taskbar.



The activated Bluetooth icon (marked in blue) in taskbar corresponds to the Bluetooth driver provided by Service Pack 2 and therefore cannot be used for BlueSoleil.

The newly installed Bluetooth driver (BlueSoleil) is the one that is shown as inactivated (grey icon).



After new hardware installation, notice on 'Windows Logo Testing' may show up. In this case, click 'Continue Anyway' to complete the installation. When installed, there will be only one Bluetooth icon (BlueSoleil) in taskbar marked in blue and activated.

- At this point, the Bluetooth driver provided by Service Pack 2 is disabled and cannot be used.



Due to security features of Service Pack 2, even after installation, security warning messages may show up during use. In this case, select 'Do Not Block' option. If installation of Bluetooth USB Dongle has been done properly, the Bluetooth icon in taskbar will change from grey to blue. If USB Dongle is removed, the Bluetooth icon will turn grey and when inserted will turn blue. When properly installed, the following screen will show up. Enter 'Device Name' and 'Device Type' and then click 'OK'.



## Pairing Audio Player with PC

Check if Bluetooth Logo icon in system tray is in blue. Put Audio Player in pairing mode by pressing "Vol Up" and "Connect" buttons together for more than 3 seconds. A beep tone will be heard followed by flashing of LED.

Double click 'BlueSoleil' icon on desktop. BlueSoleil Main Window will be displayed as shown. From BlueSoleil Main Window, click 'Bluetooth Device Discovery' under 'My Bluetooth' or click the Orange Ball in the center of the Window once to search for devices.



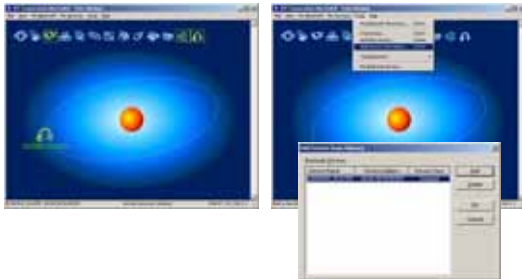
BlueSoleil



From the list of searched Bluetooth devices, look for 'SONORIX\_PLAYER' and double click the device icon. When prompted to enter Passkey, enter Passkey '1111' and then click 'OK'.



The Services available from SONORIX\_PLAYER will be shown in yellow. (3 Services) When computer is rebooted, 'SONORIX\_PLAYER' icon will not be displayed in BlueSoleil Window. To add Audio Player to screen, click 'Tools' and select 'Add Device from History'. From list of Bluetooth Devices, double click 'SONORIX\_PLAYER' or click 'Add' button. 'SONORIX\_PLAYER' will then be displayed in Main Window. Right click 'SONORIX\_PLAYER' and select 'Refresh Services' or double click 'SONORIX\_PLAYER' icon in BlueSoleil Window. The available services will then be activated and displayed in yellow boxes.



### Pairing Audio Player with Bluetooth Phone

- List down Bluetooth Device Address on the left headset body where battery is mounted. (ex : BD00054934BA)
- Pairing can be done in any 2 ways : 1) saving pairing information each time Audio Player is paired with another device or 2) deleting any pairing information that remain in Audio Player.
- To put Audio Player in pairing mode as for case 1), click "Vol Up" and "Connect" buttons together for more than 3 seconds. A beep tone will be heard from Audio Player and LED will flash periodically. This pairing mode will last 3 minutes and if no pairing is made within this period the Audio Player will return to standby mode.
- To put Audio Player in pairing mode as for case 2), click "Vol Down" and "Play" buttons together for more than 3 seconds. The rest of the procedures are the same.



To put Audio Player in pairing mode as for case 1), click "Vol Up" & "Connect" buttons together for 3 seconds



To put Audio Player in pairing mode as for case 2), click "Vol Up" & "Connect" buttons together for 3 seconds.

- With Audio Player in pairing mode, manipulate the buttons or menus of the mobile phone to do the pairing procedures. (Refer to phone manual as the instructions on pairing may differ from device to device) Check if device name 'SONORIX\_PLAYER' or corresponding 'Bluetooth Device Address' is displayed in the list of searched devices. If device is not found, repeat pairing procedure.
- When 'SONORIX\_PLAYER' or corresponding 'Bluetooth Device Address' is selected, the user may be prompted to enter PinKey. Enter '1111' which is the fixed PinKey for SONORIX Bluetooth Audio Player.
- If pairing is successful, LED will flash 4 times and a message 'Pairing Successful' will appear on the other device.
- Audio Player can be paired with up to 10 different devices. Pairing is done just once and not every time a different device is used. However, it is necessary to disconnect the Bluetooth connection with one device before connecting to another device.
- Pairing can only take place if Audio Player is not in connection mode with other device. For instance, if the Audio Player is in connection mode with mobile phone it cannot be paired with PC. In this case, first disconnect the Audio Player from the mobile phone and then pair anew with PC.

## Using the Audio Player to Make a Call

- To make a call, follow the normal procedures of a mobile phone. Make sure Audio Player and mobile phone are in connection mode.
- User can use either mobile phone or Audio Player to communicate. To talk over Audio Player, click "Connect" button.
- To talk over Audio Player while talking in phone mode, click "Connect" button of Audio Player.
- Likewise, to talk over mobile phone while talking in Audio Player mode, call transfer function can be used. (Refer to phone manual as the procedures may differ from phone to phone)
- To disconnect a call while talking in Audio Player mode, click "Connect" button.
- For Bluetooth phones that support Handsfree Profile, clicking "Connect" button in a long manner will activate phone to redial to the last number received or called.

Notes : For redialling, the procedures for connection may differ from one device to another. For some phones, clicking the "Connect" button will activate the phone to display the list of the last numbers received or called. For other phones, clicking the "Connect" button will redial to the last number received or called directly.

### Using the Audio Player to Answer a Call

- To be able to receive a call, Audio Player and mobile phone must be in connection mode.
- On an incoming call, a ringing tone will be heard from Audio Player and mobile phone.
- Call can be answered directly from mobile phone or from Audio Player by clicking "Connect" button once.
- To disconnect, click "Connect" button once.
- If the other party ends the call first, Audio Player will automatically enter into standby mode without the user having to click "Connect" button to end the call.
- To talk over mobile phone while talking in Audio Player mode, the call transfer function can be used.(Refer to phone manual as the procedures may differ from phone to phone)

Incoming call can also be answered while listening to music from Audio Player. In this case, song will pause followed by bell tone. Click "Connect" button once to answer the call. Once disconnected, music will play again from the point it was paused.

### Using the SONORIX Browser

'SONORIX Browser' is a program used for connecting Audio Player with PC for various applications listed below.

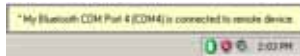
- Transfer of music files from PC to Audio Player and vice versa.
- File and folder management (file delete, create folder, delete folder, memory format etc)
- Remote controlling of Audio Player (playing music stored in Audio Player memory) from PC
- Adjust audio quality (Treble, Bass) of Audio Player
- Firmware upgrade (upgrading the firmware of Audio Player wirelessly) and Memory Format

**For details on how to use the SONORIX Browser, please refer to 'Help' under Tools menu.**



## Connecting to Audio Player

To connect to SONORIX Browser, the COM Port for 'SONORIX\_PLAYER' must first be set up. Right click 'SONORIX\_PLAYER' icon and select 'Bluetooth Serial Port Service' under 'Connect'. Click 'Yes' to establish Automatic Connection. Remember the Serial Port setting (ex : COM4) as it will be used to connect the Audio Player with SONORIX Browser. The Com Port connection message will then be displayed in taskbar. Double click SONORIX Browser icon from desktop.



- Double click SONORIX Browser icon from desktop. To connect Audio Player with SONORIX Browser, click 'Connect' button. When 'Select Com Port for Connection' appears, select the Com Port number that corresponds to the Audio Player as indicated in the previous page and click 'OK'. When successfully connected, the list of songs stored in Audio Player memory will be displayed and all buttons will be seen as activated.



## Disconnecting from Audio Player

To end connection between Audio Player and SONORIX Browser, click 'Disconnect' button.



## Downloading Music Files

To download music files from PC to Audio Player, go to the PC folder or directory containing music files, select the files and either drag and drop the files to Audio Player file list or click 'Download' button.

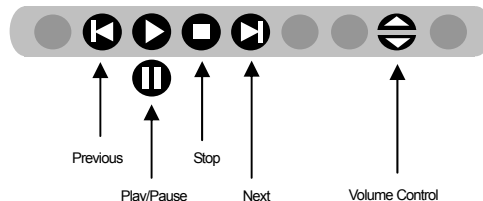


The download status will be indicated as shown below. To download more files, simply select the file(s) and drag them to 'Download' window or use 'ADD FILES' or 'ADD DIR' buttons. To delete files from 'Download' file list, select the file(s) and click 'REMOVE' button. To stop downloading, click 'CANCEL' button.



## Listening to Music

- 'SONORIX Browser' can be used to remotely manipulate the functions of Audio Player such as playing music, adjusting volume, audio quality etc.
- The buttons located in the middle of the Browser are used to remotely manipulate the Audio Player. The functions of the buttons are as follows :



## Adjusting Audio Quality

To adjust audio quality, click 'Tools' button located at the right most end, select 'Treble/Bass' and click Up & Down arrows to adjust accordingly.



## Uploading Music Files

Select the file(s) from Audio Player file list and either drag and drop the files to PC file list or click 'Upload' button.



## Deleting File(s)

Select To delete file(s) in Audio Player file list, click file name with right mouse button and select 'Delete'. To delete multiple files at once, check the boxes left to the file names and click 'Delete' button.



## Creating Folder / Deleting Folder

To create, delete or rename folder(s) of Audio Player, click 'SONORIX Player' with right mouse button and select the task to be performed.



## Formatting Memory

To format memory of Audio Player, click 'Tools' button located at the right most end and select 'Memory Format'. When formatted, all files in Audio Player memory will be deleted permanently.



## Upgrading Firmware

- 'SONORIX Upgrader' is used for upgrading firmware of Audio Player. This program is automatically installed when SONORIX Browser program is installed.

- End connection between Audio Player and BlueSoleil Bluetooth Service.

- Slightly remove battery from Audio Player such that the terminals are not touching. While holding down "Vol Up" and "Vol Down" buttons together, fit in battery completely to power on.

- When LED lights up and starts to flash, wait for 3 seconds and then release the 2 buttons. If LED does not flash continuously, repeat above procedure.

- With Audio Player in upgrade standby mode, right click 'SONORIX\_PLAYER' icon in BlueSoleil Window and select 'Refresh Services'.



- During this process, only 'Bluetooth Serial Port Service' will be displayed as activated.
- Right click 'SONORIX\_PLAYER' icon in BlueSoleil Window, select 'Connect' and then 'Bluetooth Serial Port Service'. Or just click 'Bluetooth Serial Port Service' from menu icons found at the top of BlueSoleil Window.



- The Com Port connection message will then be displayed in taskbar. Remember this Com Port number (ex : COM5) as it will be used to connect Upgrade program with BlueSoleil.
- To run 'SONORIX Upgrader' program, click 'START' → 'Programs' → 'SONORIX' → 'SONORIX Upgrader'.



- Select the Com Port number designated in the previous page. (ex:COM5)
- Click 'Find' button and search for the firmware binary file (\*.img) in PC folder / directory.
- Select firmware binary and click 'Open'.
- Click 'OK'. If firmware binary version is the same or lower than the existing firmware version, following message box appears. If the selected firmware binary file version is correct, click 'Yes' to start upgrading.
- The upgrade status bar will be displayed. Do not remove battery while upgrading is in progress.
- \* If upgrading is interrupted in between, the upgrading procedure must be repeated from start again.



- Once upgrading is complete, click Exit when message shows up. End 'Bluetooth Serial Port Service' and reboot Audio Player by removing and mounting the battery on.
- Right click 'SONORIX\_PLAYER' icon from BlueSoleil Window and select 'Refresh Services'. The services available from Audio Player (Bluetooth Serial Port Service, Bluetooth AV Service and Bluetooth Headset Service) will then be displayed as activated.
- Connect Audio Player to 'Bluetooth Serial Port Service' and then to 'SONORIX Browser'. Click 'Tools' button, click 'Version Info' and check if Audio Player has been properly upgraded.



## Using the Audio Player as Data Storage Unit

- Audio Player can be used as Data Storage Unit to save files other than music files (MP3, WMA). To save files in memory, simply download the file(s) to Audio Player file list as in the case of downloading music files explained in the previous chapters.

For convenience, a separate folder can be created to save only non- music files.

- The download status will be indicated as shown below. To download more files, simply select the file(s) and drag them to 'Download' window or use 'ADD FILES' or 'ADD DIR' buttons. To delete files from 'Download' file list, select the file(s) and click 'REMOVE' button. To stop downloading, click 'CANCEL' button.



## Stereo and Voice Connection / Disconnection

### Bluetooth Audio / Video Service

- BlueSoleil supports SBC(Sub Band Codec) and MP3 Codec and user can select either of them stereo audio streaming. Because SBC provides fast encoding / decoding rate, there is very little time delay but at the expense of audio quality. On the other hand, the encoding / decoding rate of MP3 Codec is slower than SBC with more time delay but provides higher audio quality. Therefore, please select the codec according to user application as follows :

- ✓ SBC Codec - Internet Access, PC Game and Movie
- ✓ MP3 Codec - High Quality MP3 or other Music formats

•

- To connect to Bluetooth AV Service, run BlueSoleil. When using the SONORIX Audio Player for the first time, first pair the device with PC. Right click 'Bluetooth AV Service' and select 'Configuration'.



- The 'AV codec priority' screen is displayed. The default codec for BlueSoleil is set to SBC. To change to MP3 codec, highlight SBC and press 'Down' or highlight 'MP3' and press 'Up'. Click 'OK'. The Codec that appears on top of the priority list will be selected.



- From BlueSoleil Main Window, right click 'SONORIX\_ PLAYER', click 'Connect' and select 'Bluetooth AV Service'.



- Another way of connecting to AV service is by right clicking 'Bluetooth AV Service' and selecting 'Connect' or by clicking the 'Bluetooth AV Service' icon once.



- When connected, Bluetooth icon in taskbar will turn green. If SBC codec is selected, the message 'SBC Codec is selected' pops up above system tray.



- If MP3 codec is selected, then the message 'MP3 Codec is selected' pops up above system tray. From now on, all audio and sounds will be heard from the Audio Player. Open Windows Media Player or any other players to play CD Music, Movie, Music stored in HDD, internet music and even games.



- To disconnect, right click SONORIX\_PLAYER, click 'Disconnect' and then select 'Bluetooth AV Service'.



- Another way of disconnecting AV service is by right clicking 'Bluetooth AV Service' and selecting 'Disconnect'.



- When the message shows up, click 'Yes' to disconnect.



Notes : If Bluetooth AV connection is successful but audio does not play from the Audio Player, check 'Audio Settings' of the player used. For Windows Media Player, go to 'Tools', select 'Option', select 'Device Tab' and double click 'Speakers'. Check if 'DirectSound : Bluetooth AV/HS Audio' had been designated. Click OK and then try playing the music again.

## Bluetooth Headset Service

- By creating a Shortcut icon on desktop, the Bluetooth AV Service can be connected without having to run BlueSoleil. To create a Shortcut, right click SONORIX\_PLAYER icon while in AV connection mode, click 'Save Connection As Shortcut' and then select 'Bluetooth AV Service'.



- When the following screen is displayed, click 'Yes' and 'SONORIX\_PLAYER (AV Headphone)' icon will be created on desktop.



- To automatically connect to Bluetooth AV Service, simply double click 'SONORIX\_PLAYER (AV Headphone)' icon on desktop.

- To connect to Bluetooth Headset Service, right click 'SONORIX\_PLAYER', click 'Connect' and select 'Bluetooth Headset Service'.



- When bell tone is heard from Audio Player, press 'Connect' button of Audio Player to establish the connection. If 'Connect' button is not pressed within 25 seconds after bell tone is heard, connection will fail and in such case, try the connection again. When connection had been established, the Bluetooth icon in taskbar will turn green.



- From now on, the Audio Player is ready to use for voice chatting. Run voice chatting or internet phone (VoIP) program like NetMeeting. For speaker and microphone functionality tests, the 'Voice Recorder' found under 'Program → Accessories → Entertainment' can be used.

- Some voice chatting applications or messengers may require user input for 'Audio Settings'. For instructions on 'Audio Settings', refer to manual or instructions of the specific application or messenger to be used.
- To disconnect Bluetooth Headset Service, right click SONORIX\_PLAYER, click 'Disconnect' and then select 'Bluetooth Headset Service'.



- When the message shows up, click 'Yes' to disconnect.



## LED Indicator Status

| LED Indicator     | Status                                 | Remarks             |
|-------------------|----------------------------------------|---------------------|
| Continuous ON     | Audio Player Malfunction               | A/S required        |
| Continuous OFF    | Standby or Operating Mode              |                     |
| Periodic Flashing | Pairing Standby Mode                   | Lasts for 3 minutes |
| Quick Flashing    | File Downloading or Firmware Upgrading |                     |

| Audio Player Status | Lamp Indicator                          | Remarks                                                                                                      |
|---------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Power On            | LED ON for 2 seconds                    | Switches Off if already paired with device<br>Pairing standby mode if no pairing is made (periodic flashing) |
| Incoming Call       | Continuous Flashing                     |                                                                                                              |
| Discharged Battery  | LED flashes with discharge warning tone |                                                                                                              |
| Key Pressed         | LED ON                                  |                                                                                                              |

## Specifications

\* Common for both Audio Player and USB Dongle

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Standards                 | Bluetooth                                                                      |
| Frequency Band            | 2402 ~ 2480 MHz                                                                |
| Tx Power                  | 0.25 ~ 2.5mW (Bluetooth Power Class 2)                                         |
| Rx Sensitivity            | < -80dBm (PER 1 %)                                                             |
| Distance                  | < 10m (open space)                                                             |
| Audio Decoding Format     | MP3 Max. 320kbps 44.100, 48.000kHz                                             |
|                           | WMA Max. 192kbps 44.100, 48.000kHz                                             |
| Audio Streaming Format    | MP3 Max. 192kbps 44.100, 48.000kHz                                             |
|                           | SBC Max. 200kbps 44.100kHz                                                     |
| Audio Frequency Range     | 20Hz ~ 22kHz                                                                   |
| Audio S/N                 | > 90dB                                                                         |
| Audio THD                 | < 0.1%                                                                         |
| Audio Output Power        | > 20mWrms                                                                      |
| Memory                    | 128MB Flash Memory                                                             |
| Battery Life              | Standby > 150 hrs, Music Play > 6-8 hrs<br>Stereo and Voice Connection > 4 hrs |
| Charging Time             | 2 hrs                                                                          |
| Adapter AC Input          | AC 90 ~ 250V                                                                   |
| Weight                    | 76g (include Battery)                                                          |
| Operating Temp & Humidity | -10 ~ +50°C, Relative Humidity 0 ~ 95%                                         |

## Troubleshooting

| Problems                                                                                                      | Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power does not switch on when battery is mounted                                                              | <ul style="list-style-type: none"> <li>■ Charge battery as it might have been discharged.</li> <li>■ Clean battery terminals and mount again.</li> <li>■ Slowly mount battery and mount completely when LED lights up.</li> <li>■ Contact the service center if the above actions do not work.</li> </ul>                                                                                                                                                              |
| LED does not switch off after power is switched on                                                            | <ul style="list-style-type: none"> <li>■ Wait for 20 seconds after battery has been mounted. If LED still does not switch off, remove and place the battery again.</li> <li>■ Contact the nearest service center if the problem persists.</li> </ul>                                                                                                                                                                                                                   |
| Audio Player does not connect to mobile phone or PC                                                           | <ul style="list-style-type: none"> <li>■ Check if Audio Player is in connection mode with other device. If so, disconnect first before connecting to mobile phone or PC.</li> <li>■ If the connection cannot be made after repeated tries, contact the nearest service center.</li> </ul>                                                                                                                                                                              |
| LED does not flash when "Vol Down" and "Play" buttons are pressed together to delete all pairing information. | <ul style="list-style-type: none"> <li>■ If Audio Player is in connection mode with mobile phone or PC, pairing information cannot be deleted. After disconnecting the link, remove and mount battery and try again.</li> </ul>                                                                                                                                                                                                                                        |
| Bell does not ring when call is received                                                                      | <ul style="list-style-type: none"> <li>■ Bell will not ring if Audio Player is not in connection mode with mobile phone.</li> <li>■ If LED flashes without sound, check volume of Audio Player.</li> </ul>                                                                                                                                                                                                                                                             |
| Charger indicator lamp does not switch on when battery is placed                                              | <ul style="list-style-type: none"> <li>■ Remove and mount battery again.</li> <li>■ Clean battery terminals if covered with impurities.</li> <li>■ Contact the nearest service center if the lamp does not switch on.</li> </ul>                                                                                                                                                                                                                                       |
| Connection with PC or mobile phone is disrupted occasionally                                                  | <ul style="list-style-type: none"> <li>■ Check battery conditions of mobile phone and Audio Player.</li> <li>■ Because Audio Player uses the same frequencies as Wireless LAN or Microwave ovens, it is susceptible to such interferences when placed nearby such devices.</li> <li>■ Check if there are such devices in the neighborhood and if so, keep Audio Player at least 5m away from such devices. If problem persists, contact the service center.</li> </ul> |
| Noise interference during handsfree mode                                                                      | <ul style="list-style-type: none"> <li>■ Interference may occur if Audio Player is used near WLAN or micro-ovens.</li> <li>■ If noise interference still occurs at more than 10m away from WLAN or micro-oven, contact the service center.</li> </ul>                                                                                                                                                                                                                  |
| The other party cannot hear my voice during handsfree mode                                                    | <ul style="list-style-type: none"> <li>■ Pull out the microphone to the fullest.</li> <li>■ Check if the tiny opening on the microphone is blocked.</li> <li>■ If the problem is not solved, contact the service center.</li> </ul>                                                                                                                                                                                                                                    |
| Battery life differs from what is indicated on manual                                                         | <ul style="list-style-type: none"> <li>■ Battery life, due to its consumable nature, shortens gradually.</li> <li>■ Battery life shortens when discarded in cold or hot environment.</li> </ul>                                                                                                                                                                                                                                                                        |
| Can battery be left in charger cradle even after indicator lamp turned blue?                                  | <ul style="list-style-type: none"> <li>■ It is safe to leave the fully charged battery in charger cradle.</li> <li>■ The battery performance won't be affected.</li> </ul>                                                                                                                                                                                                                                                                                             |
| Bluetooth software cannot be installed on PC                                                                  | <ul style="list-style-type: none"> <li>■ The Bluetooth software can only be installed in Win 2000 or Win XP.</li> <li>■ Contact the service center if Bluetooth software cannot be installed in Win 2000 or Win XP.</li> </ul>                                                                                                                                                                                                                                         |
| Windows does not recognize USB Dongle when inserted into USB port.                                            | <ul style="list-style-type: none"> <li>■ Check if USB port is functioning properly. To do so, plug in other USB devices and see if it works.</li> </ul>                                                                                                                                                                                                                                                                                                                |

**Product Warranty**

- OPENBRAIN Technologies warrants this product against all defects in material and workmanship for a period of one year from the date of purchase by end user. The conditions for warranty are as follows :
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- The warranty does not cover any failure or damage of the product due to normal wear and tear, physical abuse, improper installation, misuse, modification or repairs by unauthorized third parties.
- OPENBRAIN Technologies does not assume responsibility for any loss or damage incurred during shipment and as a result of force majeure.
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- If OPENBRAIN Technologies repairs or replaces the product, the repaired or replaced product shall be warranted for the remaining time of the original warranty period. Repair or replacement may involve the use of functionally equivalent reconditioned units. Replaced part or product becomes the property of OPENBRAIN Technologies.
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THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. Operation is subject to the following two conditions; (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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