

# Accessible Music Player for Android™

## User Manual for v1.00

**Published by:**

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**Making Mobile Phones Accessible to the Blind and Visually Impaired.  
Moving Accessibility Forward!**

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## 1 Introduction

Welcome to the exciting world of Mobile Accessibility and Accessible apps for Android phones. Thank you for choosing Code Factory products to provide you with the most comprehensive access to mainstream mobile technologies!

Mobile Accessibility is a **suite of accessible applications** especially designed for people who are blind as well as a **screen reader** for the Android standard user interface. Code Factory believes in developing simple but powerful solutions that help users to enjoy the mobile experience and be productive in their personal as well as professional lives. For more information on Mobile Accessibility, check the Mobile Accessibility user manual at [http://codefactory.es/en/manuals.asp?id=89#family\\_ma](http://codefactory.es/en/manuals.asp?id=89#family_ma)

This document aims to be your guide in your journey of exploring Accessible Music Player, an stand alone application from Code Factory and it should be considered as an overview of the available functions and features of the software, not of the devices on which it runs. For more information about your mobile phone, please consult the user manual or contact your mobile operator's customer service department.

For additional information on Accessible Music Player and all Code Factory products, you can contact us through our **Help Desk** at <http://www.codefactory.cat/helpdesk/>

You may also wish to subscribe to the **Mobile Accessibility mailing list**. The Code Factory mailing lists serve as a rich source of information, as other users of our products are there to help answer questions, share tips and tricks they have learned from personal experience or other resources, and suggest ways to troubleshoot issues you may be encountering. These mailing lists are also monitored by Code Factory managers and developers for feature requests, reported bugs, suggestions and comments on how to improve the product, and other forms of constructive feedback. For more information and to subscribe, please visit <http://www.codefactory.es/en/list.asp?id=88>

## 2 Minimum Requirements

Accessible Music player will work on Android devices running Android version 2.1 and above.

Also note that Accessible Music Player, like most of the applications running on the Android platform, requires you to have a data connection permanently active. This is used for many purposes, such as checking for updates and checking the Accessible Music Player licensing status.

## 3 Installation and activation

### 3.1 Preparing your phone to be used with Accessible Music Player

To prepare your device for Accessible Music Player, it is strongly recommended to get sighted assistance as the initial steps are not accessible and need to be performed on the phone itself. Alternatively, if you have Mobile Accessibility installed and MA Screen reader service is activated or if you have a screen reader such as Talkback or Spiel Installed on the device, you may try to follow the instructions on your own. Before starting the installation of Accessible Music Player, you must ensure the following:

1. The phone battery is charged: Make sure the charge is more than 50% to avoid the device shutting down in the middle of installation. Check the battery status under Phone Settings > About > Status > Battery Status and ensure it is more than 50% or is full.
2. Make sure you have enough free space: Accessible Music Player only requires approximately 2 MB on the device's internal memory. Check the memory status under Phone Settings > SD card and Phone Storage Settings > Internal Phone Storage, and ensure the available space is enough.
3. Make sure your phone service is active (registered on a cellular network) and the SIM card is properly inserted. The best way to check this would be to call the number being used on the Android device you plan to use and make sure the phone rings. Alternatively, you can check the cellular service / connection status from Phone Settings > About > Status > Network, and make sure it is showing the name of the network you are using.
4. Be sure to have your credit card or bank details ready to make a payment online. More information on Google checkout can be found at <https://www.google.com/accounts/ServiceLogin?service=sierra&continue=https://checkout.google.com/main?upgrade%3Dtrue&hl=en&nui=1&tmpl=default>
5. Be sure to have an Internet connection either by activating the data connection over a cellular network or by connecting the phone to a Wi-Fi access point. For data connection settings, contact your service provider and for Wi-Fi access point configuration, please check the phone user guide. Upon successful configuration of the Internet access on the phone, open a web page from the mobile web browser and make sure the internet is working correctly.

Note: Using the data connection may incur additional charges by your cellular service provider, please contact your service provider for more information.

## 3.2 Installing Accessible Music Player

The installation process of Accessible Music Player is similar to other applications available for Android over the Android Market.

In order to install Accessible Music Player, follow the below steps. We strongly recommend sighted assistance for this process in case you don't have any screen reader installed on the phone.

1. **Start Market application:** The Market application is preinstalled on all Android devices and is the application store for the Android platform and used to search, download and update applications for your Android phone. The Application can be launched from the device's all application menu.
2. **Configuring Market application:** When opening the Market application for the first time you may be prompted to enter a Google / Gmail e-mail address. This address is required to pass the validation process done by the device operating system. If you do not have a Gmail address, please visit <http://www.gmail.com> to obtain one for free. Enter your Google / Gmail e-mail address.
3. **Searching for Accessible Music Player:** In the Market application, there is a search edit box to let you find applications available in the Android store. Please type "Accessible Music Player" in the edit box and activate the search button to let the application search for the program. You can also type "Code Factory" in the search box to let it list all the Code Factory products and have the search results confined to Code Factory products.
4. **Choosing the correct application:** Upon completion of the search, the Market application will present the list of applications available in the store. In the list, you should find Accessible Music player.
5. **Reading the application description:** upon selecting the application, you will be presented with the description of the application. The description of the application highlights the functionality of the application. Select the OK button or Buy button to continue the download and installation process.
6. **Authorizing system access permissions:** Upon selecting the OK / Buy button, a screen with the list of access rights of the application appears. Select the OK button to continue with the installation.
7. **Purchasing the application (not required for trial demo version):** Upon selecting OK button in the authorization screen, a notification window containing the price of the application and an option to select form of payment appears. Select the form of payment you wish to use. Continue to follow the on-screen prompts to complete the payment process.
8. **Downloading and Installing:** Upon Successful completion of payment or upon authorization for system access rights, the market application takes the control of downloading the application and installing it automatically.
9. **Checking the installation status:** Open the notification window by sliding your finger from the top of the screen to the bottom of the screen. In the notification window, check for the Accessible Music Player installation status. If the status Messages says successful, then you are done with the installation. If you have problems, contact Code Factory support with the exact error message you get in the notification window.
10. **Running the application:** You can select the application from the notification window and in the resulting screen, select open button to launch the application. Alternatively, you can start the application from phone all application list by selecting its icon.

### 3.2.1 Installation using Computer over internet

You can install Accessible Music Player from the android market available at <https://market.android.com> by following the below steps.

1. **Start Market application:** The Market application is preinstalled on all Android devices and is the application store for the Android platform and used to search, download and update applications for your Android phone. The Application can be launched from the device's all application menu.
2. **Configuring Market application:** When opening the Market application for the first time you may be prompted to enter a Google / Gmail e-mail address. This address is required to pass the validation process done by the device operating system. If you do not have a Gmail address, please visit <http://www.gmail.com> to obtain one for free. Enter your Google / Gmail e-mail address. After configuring the market application exit the application and continue to follow the below instructions.
3. **Open the web page** <https://market.android.com> on your computer.
4. **Sign in to the market website** using the email address configured with the Market application on the phone.
5. **After sign in, navigate to Search edit box** and type "Accessible Music player", hit enter to start search. Alternatively, you can search for "Code Factory" to get the list of all code Factory products.

6. In result page, you would find "Accessible Music Player", select the install/Buy button against it.
7. A page consisting application access permission appears, select Buy button to continue to make payments. Follow the on page instructions to complete payment.
8. The market application on the phone should automatically start downloading the Accessible Music Player and it will be installed automatically.
9. Checking the installation status: Open the notification window by sliding your finger from the top of the screen to the bottom of the screen. In the notification window, check for the Accessible Music Player installation status. If the status Messages says successful, then you are done with the installation. If you have problems, contact Code Factory support with the exact error message you get in the notification window.
10. Running the application: You can select the application from the notification window and in the resulting screen, select open button to launch the application. Alternatively, you can start the application from phone all application list by selecting its icon.

### 3.3 Uninstallation

In order to uninstall Accessible Music Player, go to your phone's Settings > Applications > Manage Applications. From the list, select Accessible Music Player and activate it. A new screen will show up with an "Uninstall" button. Alternatively, if you have Mobile Accessibility installed, you can get to your phone's settings from the Apps menu of Mobile Accessibility.

### 3.4 Music Player

Accessible Music Player is designed with the objective of simplicity and the user interface of the application is very basic. The player automatically list all the music files on the SD card of the phone and can sort them by Artists / Albums.

#### 3.4.1 Opening Music Player and sorting the play list.

From Phone All application menu, arrow down to Accessible Music Player and double tap or enter to open the application. When you open the application, the first screen has a list having 3 options as Artists, Albums and All Songs. In the list an additional option "Now Playing" is shown when a track is being played in the background, this option will open the currently playing track with the music player controls Screen.

Opening Artists, presents a list of Artists whose songs are available on the SD Card of the phone. Opening any artist folder will show the list of Albums by the Artist. The first option in the list of song is "All Songs". Opening the all songs folder will present list of all songs by the selected Artist. Opening any album will present the list of songs of the selected artist and album.

Opening the Albums will present list of albums present on the SD Card of the phone. Further opening an album will present the list of songs of the selected album.

Opening All Songs, will list all the songs available in the SD card of the phone. Remember, by songs, we refer to all the audio media files.

#### 3.4.2 Using Music Player

Using the desired filter, by artist or by Album, navigate to the songs list. In the list, one can use slide / arrow up and down to move to previous and next item and can use slide / arrow left and right to jump back and forth in the list. One can use Slide up with 2 fingers to move to the top of the list and similarly slide down with 2 fingers will move to the end of the list. To navigate a level back, use the device back key or slide left with 2 fingers. Double tap or enter on any song to start playing it.

#### 3.4.3 Player window

When you open a song, Music Player starts playing the song and opens the player window having the buttons to control the music. Before moving to the controls, it is important to understand the layout of player window, below is a list of controls with their position on the screen.

- Previous Song - Top Left
- Play / Pause Button - top center.
- Next Song – Top Right
- Rewind – Bottom Left
- Stop – Bottom Center

- Fast Forward – Bottom Right

The Idea behind this type of layout is that you can tap the relevant corners of the screen and with little practice can master the position of the controls and can use them without having to scroll through all other buttons than the one you wish to use. In addition you can use touch slides and arrow keys to navigate between the controls and can double tap on the screen or press enter key to activate them. One can also tap the screen and start moving the finger on the screen to let the control be announce and when you find the one you wish to use, you may double tap to activate it.

*Tip: using slide / arrow left and right will only move between either previous song, play / pause and next song button or between rewind, stop and fast forward button, so you must use slide / arrow up / down to jump between top and bottom controls.*

Another important thing to note is the track information such as Track name, album , current time and Total Time are shown at the middle of the player screen. To read this information, tap and hold the screen and start moving your finger slowly towards the vertical center position, information will be read as you navigate.

#### 3.4.4 Using Play / pause and Next / Previous song options

- Activating the Previous song button will start playing the previous song from the sorted list, that is if you have selected a song from an Album, this option will play the previous song from that Album. Similarly, activating the next song will play the next song from the sorted list.
- Activating the pause button, the button caption changes to resume indicative of a song is in paused state. Similarly, activating the resume button, the button caption changes to Pause and indicate a song is being played.

#### 3.4.5 Using Stop and Fast Forward / Rewind options

- Activating the Rewind button, the current track time elapses by 5 seconds backward. The option works only when a song is either being played or is in paused state. Similarly activating the fast forward button, the song time elapse by 5 second forward and the option works only when a song is either being played or in paused state.
- Activating the stop button, the current song is stopped and the time is reset to the beginning. This also changes the caption of Pause button to Play.

#### 3.4.6 Quick Menu and Music Player Settings

You can activate quick menu using triple tap on the screen or by pressing the menu key. Find below the description of the menu items, Also note, we use the term ATNS, for the controls, where the name of the control is self explanatory of it's functionality. Should you need clarification, please check Mobile Accessibility User guide or submit help desk ticket on Code Factory Web site. Also note, the options marked with \* are only applicable if you have Mobile Accessibility installed on the phone.

1. Stop and Exit: the option stops the playing of current song and exit the player window.
2. Date and Time: activating the option, date and time will be announced.
3. Phone Status: activating the option, phone status including battery and network signal, number of unread SMS etc will be announced.
4. \*Show system Notifications, this option is only available if you have Mobile Accessibility installed and MA is set to work as Screen Reader. The option will open the phone notification window.
5. Settings: activating the option will open list of settings for Music player as follows.
  1. Shuffle: The option is not checked by default. Checking the option will let the player to reorder (shuffle) the list automatically.
  2. Keep Playing in Background: This option is not checked by default. Checking the option allow you to exit Music Player window and the song is continue playing in the background. If the option is not checked, exiting the music player window will stop playing the song
  3. Speech Settings
    1. Rate: ATNS.
    2. Pitch: ATNS.
    3. Use System Voice, checking the option will enable system default TTS / voice. To configure System TTS

check phone settings > Voice Input and Output > Text to Speech Settings.

4. Punctuation Verbosity: ATNS.
  5. Indicate Capitalization: ATNS. Uses a higher pitch.
  6. Spell Phonetically: ATNS. Takes effect both when typing and reviewing text.
  7. Turn off list numbering: ATNS.
  8. Eliminate Character Repeats: ATNS. For example 5 consecutive dots are announced as as “dot dot dot” (three times).
  9. Number Processing: ATNS.
4. Text Input Settings
    1. Keyboard Echo: ATNS.
    2. Speak Deleted Character: ATNS.
    3. Speak Line Number: this option enables announcement of line numbers available in an edit field and also as the cursor moves.
    4. Secret Mode: list verbosity choices for password fields.
    5. Virtual Keyboard: Refer to virtual keyboard section in this document.
  5. Audio and Vibration Settings
    1. Sound Feedback for Navigation: enable sounds to indicate navigation to the next control or list item.
    2. Vibration Feedback for Navigation: ATNS.
    3. Stop speech when tapping the proximity sensor: ATNS. To locate the sensor on the phone, consult the phone manual.
  6. Screen Reader Settings
    1. \*Notify when leaving Mobile Accessibility: ATNS. When using MA, this option opens a notification when moving to an application or window outside the MA Suite. For example, when opening an application using the apps menu.
    2. \*Speak System Notifications: ATNS. Reads only the notifications that are updated on the system notification window.

## 4 Tips and Tricks

### 4.1 Review cursor

Within anywhere in Accessible Music Player, you can tap the screen, wait for the vibratory feedback and start moving your finger to explore items on the screen. Use Double tap to activate the option that was last announced.

For Quick Navigation if you know the position of a control or Icon on the screen, you can tap the control. The control will be announce the option and the focus will be moved to the control. Then double tap the screen to activate the option.

### 4.2 Multi touch Commands

Double finger gestures will only work for devices having multi touch capabilities.

## 5 Command list

### Enter

If using the touchscreen, double tap to simulate Enter, if not press track pad or hardware Enter key.

### Navigational keys

If using the touchscreen, swipe up/down/left/right, if not press physical navigational keys or swipe up/down/left/right on the trackpad.

Swipe up or down with two fingers to go to the top or bottom of a list. Swipe left with two fingers to go back to the previous screen.

### Quick Menu

Can be activated with:

- Menu key
- Triple tap anywhere on the screen
- Long press of track pad
- Long press of Enter key

### Navigation and Reading

- Move to next item: swipe down or down arrow.
- Move to previous item: swipe up or up arrow.
- Jump to next few items: swipe right or right arrow.
- Jump to previous few items: swipe left or left arrow.
- Activate or open the current item: double tap or enter.
- Go to top/bottom of a list: swipe up/down with 2 fingers.

### Reviewing List Item

- Press Long menu key to toggle review mode between words / character / Text review off.
- Use the slide left / right to review list item as per the review mode.

## 6 Virtual keyboard

Accessible Web includes an accessible on-screen virtual keyboard which allows you to enter text using the touch screen. When you activate this input method, a virtual keyboard is enabled on the screen. When you navigate on the virtual keyboard with your finger or stylus, you will receive audio and vibratory feedback to help you know the character which is currently focused. When you find the character that you want to enter, you can remove your finger or the stylus in order to enter the character.

### 6.1 Activating or deactivating the virtual keyboard

To toggle the virtual keyboard, long press the volume up key.

### 6.2 Using the virtual keyboard to enter text

#### Typing characters

There are 2 ways to enter the text using the virtual keyboard.

1. **Explore and type:** in this method, you would use the stylus or your finger to find a character, keeping contact with the screen as you move through the characters. When a character is selected, Accessible Web will speak that character. To insert the character that is currently selected, just lift your finger or the stylus from the screen. Note that as soon as you release the character held at the tip of the stylus or finger, it is inserted. The stylus or your finger should therefore remain pressed to the screen until you find the character that you wish to insert.

Also Note that if you stay on one character for more than 2 seconds, Accessible Web will activate alternative characters and continue to cycle between alternative characters and the actual character with a 2 second interval, so that you do not have to change the keyboard layout to find that character.

2. **Touch typing:** In this method, you would use your existing knowledge of the key location to just touch the screen and release your finger or the stylus. This method allows fast typing for advanced users.

#### Erasing characters

If you have selected a character and wish to erase it you can simply swipe (slide quickly) your finger in any direction. For example, if you start swiping on the virtual keyboard and reach a character but then you realize, the character you are looking for is in some other keyboard layout or for any reason would like to discard the current selection, you may quickly swipe in any direction and then remove your finger from the screen. This tells Virtual Keyboard to discard the current selection and the character will not be entered or typed.



5 <sup>th</sup> row	shift	,	space	.	/	Enter	
Alternate	Toggle Keyboard layouts	;	Toggle Navigation Mode	:	?		

*QWERTY UPPERCASE Layout with Number row*

1 <sup>st</sup> Row	1	2	3	4	5	6	7	8	9	0	Backspace
Alternate	!	@	#	\$	%	^	&	*	(	)	
2 <sup>nd</sup> row	Q	W	E	R	T	Y	U	I	O	P	
Alternate	q “	w	e =	r	t ~	y	u -	i	o	p +	
3 <sup>rd</sup> row	A	S	D	F	G	H	J	K	L		
Alternate	a ‘	s	d	f	g >	h	j	k	l <		
4 <sup>th</sup> row	Z	X	C	V	B	N	M				
Alternate	z	x	c ĉ	v	b   \ [ ]	n	m - .				
5 <sup>th</sup> row	shift	,	space	.	/	Enter					
Alternate	Toggle Keyboard layouts	;	Toggle Navigation Mode	:	?						

*QWERTY UPPERCASE Layout without Number row*

1 <sup>st</sup> row	Q	W	E	R	T	Y	U	I	O	P	Backspace
Alternate	q 1 ! “	w 2 @	e 3 # =	r 4 \$	t 5 % ~	y 6 ^	u 7 & -	i 8 *	o 9 (	p 0 ) +	
3 <sup>rd</sup> row	A	S	D	F	G	H	J	K	L		
Alternate	a ‘	s	d	f	g >	h	j	k	l <		
4 <sup>th</sup> row	Z	X	C	V	B	N	M				
Alternate	z	x	c ĉ	v	b   \ [ ]	n	m - .				
5 <sup>th</sup> row	shift	,	space	.	/	Enter					
Alternate	Toggle Keyboard layouts	;	Toggle Navigation Mode	:	?						

*Number Layout*

1st Row	1	2	3
Alternate	<	>	-

2nd Row	4	5	6
Alternate	?	@	=
3 <sup>rd</sup> Row	7	8	9
Alternate	/	(	)
4 <sup>th</sup> Row	*	0	#
Alternate	*	+	#
5 <sup>th</sup> Row	Shift	Enter	Backspace

#### *Symbol Layout*

1 <sup>st</sup> Row	1	2	3	4	5	6	7	8	9	0	Backspace
Alternate	!	@	#	\$	%	^	&	*	(	)	
2 <sup>nd</sup> Row	"	=	€	~	_	+					
3 <sup>rd</sup> Row	'	£	{	}	>	«	»	<			
4 <sup>th</sup> Row	[	]	¢	\		·	-				
Shift	,	Space	.	/	Enter						

## 6.4 Changing the navigation mode and navigating text

While composing text, it is important to be able to move through the edit field in order to make sure what you are typing is correct. In order to toggle the navigation mode, press the volume down key. This will toggle between characters, words and sentences. One can also change the navigation mode by holding the Space key on the virtual keyboard.

Using swipe left / right on the screen will move the cursor in the editor using the selected navigation mode.

## 6.5 Changing the keyboard layout

You can use the volume up key to toggle the current layout. When the virtual keyboard is activated, the layout is QWERTY lower case. Pressing the volume key in succession will change the layout to numeric mode, symbol mode, and QWERTY upper case. Alternatively, one can hold the Shift Key on the virtual keyboard to change layouts. Alternatively, one can use the long press of Shift Key on the virtual keyboard to toggle keyboard layouts.

## 6.6 Landscape vs. Portrait

By default, the virtual keyboard operates in landscape mode.

When the landscape setting of the virtual keyboard is off, the virtual keyboard always adapts to the current orientation of the device (regardless of the orientation of the current application). When holding the device in portrait mode, the virtual keyboard adapts itself and will work only in the lower half part of the screen. This makes typing with the device upright and only using a thumb feasible.

## 6.7 Dynamic Virtual keyboard

Similar to Mobile Speak for Windows Mobile, the dynamic virtual touch keyboard has been implemented with Mobile Accessibility and Stand alone apps for Android as well. This means that wherever you first put your finger becomes the letter H for lowercase and UPPERCASE or the number 5 for numeric keyboard layouts. You can move your finger in any direction to locate the desired character. This option is off by default, but can be turned on from Settings > Virtual Keyboard.

## 7 Contacting Code Factory

Thank you for choosing Accessible Music Player. We hope you will enjoy music on the phone, and being able to harness the full

potential of multifunction and mainstream smartphones.

If you would like more information regarding our products please visit our web site at <http://www.codefactory.es>

For support on any of our products, sales questions, and general inquiries please visit our Helpdesk at <http://www.codefactory.cat/helpdesk/>

To get help from more experienced users and share impressions on the product, subscribe to Mobile Accessibility mailing list at <http://codefactory.es/en/list.asp?id=88>

## **8 About Code Factory**

Founded in 1998 and headquartered in Terrassa (Barcelona), Spain, Code Factory is the global leader committed to the development of products designed to eliminate barriers to the accessibility of mobile technology for the blind and visually impaired. Today, Code Factory is the leading provider of accessible mobile applications such as screen readers, screen magnifiers, and Braille interfaces. Code Factory's products are compatible with the widest range of mainstream mobile devices running on Symbian, Windows Mobile, BlackBerry Smartphones, and Android. Among Code Factory's customers are well known organizations for the blind such as ONCE in Spain, and carriers such as AT&T, Bouygues Telecom, SFR, TIM and Vodafone.