

CarolPlayMidi

Play Christmas Carols or Classic Hymns by Sending Midi to Your Favorite Synth Apps (App for iPhone or iPad)

How to Set Up CarolPlayMidi

CarolPlayMidi began as an app allowing you to play Christmas carols. Since then it has expanded to include classic hymns as well. These instructions will help you get started.

One Important Concept to Understand

CarolPlayMidi is a special kind of app called a "midi controller." It's important to understand that a midi controller <u>doesn't make any sound on its own</u>. The job of the midi controller is to tell a synthesizer app which notes to play.

Picture it like this. Suppose your friend was seated at a piano, and you were standing in the next room. Whenever you called out a note, your friend would play it. If you said, "Play middle C," your friend would put his finger down on middle C. If you said, "Now stop playing middle C," your friend would lift his finger off the piano.

That might not work very well with two people, but with electronic devices and apps it works very fast and very well.

So How Does that Relate to CarolPlayMidi?

CarolPlayMidi is "you standing in the next room." The synthesizer app is the "friend seated at the piano." This means you will be using a synthesizer app to create the sounds for you as you play.

There are many choices for synthesizer apps. One I've experimented with is called ThumbJam. Another one is SampleTank. There's a free synth app called Synth One. The list goes on and on. When you have chosen a synthesizer app to work with, it listens for instructions coming from the midi controller.

If you already have synthesizer apps on your iPhone or iPad, and you know how to use them, these are the steps to follow:

- **1** Open the synthesizer app first and select a sound.
- 2 Play a few notes to make sure you hear it playing.
- **3** Find the setting for "Background Audio" and make sure it's on. (With some synth apps, you may also have to turn on Virtual Midi.)
- 4 The midi channel should be set to 1, not "Omni."
- **5** Finally, open CarolPlayMidi. With most synth apps, opening CarolPlayMidi last will establish the midi connection.
- **6** Touch "Setup" at the top right. Choose either "Christmas Carols" or "Classic Hymns." Then touch "Done."

Three Other Observations for Midi Musicians

First, if you open CarolPlayMidi first, and the synth app later, touch "All Off" to open the midi connection to recently opened synth apps.

Second, midi channels 2 and 3 can be used to layer sounds. For example, you could have a string sound on channel 1 and a brass sound on channel 2.

Third, pipe organ apps usually have "combinations," collections of stops, which can be called up at the touch of a button. The 12 buttons going across the CarolPlayMidi screen can be assigned to combinations if you are using a pipe organ app.

What if I Don't Have a Synthesizer App Yet?

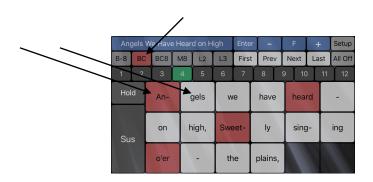
Another choice you could try, if you would like to, is a free app called JeuxdorgMini. This is a synthesizer app that recreates the sound of a pipe organ. You are not required to use JeuxdorgMini, but it is an option if you would like to try it.

If you decide to try using JeuxdorgMini, and you have already installed it, there is a slightly different set of steps to follow. Here they are.

- A Open CarolPlayMidi.
- B Touch the "Setup" button in the top right corner.
- C Select either "Christmas Carols" or "Classic Hymns."
- D Then scroll down the screen until you see "Optional Setup Path." Touch the button labeled "Optional Setup."
- D The Setup screen will return after a few seconds. When it returns, scroll back up and touch "Done" at the top left.

All Set to Begin Playing

- **7** The first song CarolPlayMidi loads is the carol "Angels We Have Heard on High" (or, if you have chosen to play classic hymns, "Holy, Holy, Holy").
- **8** With your right hand index finger, touch the buttons labeled "An-""gels" (or "Ho-""ly"). You should hear the synthesizer app playing. (If you don't hear any sound, check to make sure the iPhone volume is on.)
- 9 We recommend setting the iPhone volume at a reasonable level: somewhere between 1/2 and 3/4.
- **10 Important**: notice that the button BC is on. BC stands for "Bass and Chord." **BC must be on** for the synthesizer app to sound.



How to Play Smoothly

- **11** Tap a few of the words in the song. You'll notice that the chords stop playing as soon as you lift your finger from the screen. Most of the time you will want to play more smoothly than this. Here's how.
- **12** Hold the iPhone with your left hand, and place your left thumb on the "Sus" button. Sus stands for "Sustain." When you are touching the Sustain button, the current chord will keep playing until the next chord is played.
- **13** The Sustain button also controls volume. When you slide your thumb up, the sound opens up. When you slide your Thumb down, the sound closes down.
- **14** There may be some situations where you will want sustain to be on automatically, without your left thumb holding the Sustain button. In these cases, tap "Hold." When the Hold button is green, the current chord will keep sounding until the next chord is played.

Giving "Space" and "Definition"

- **15** It's good to play smoothly, but sometimes you may want a little space between phrases, to give the music a chance to breathe, or there may be times when you would like to accent individual chords by playing them and letting go briefly before hitting the next chord.
- **16** To give the music a chance to breathe, let go of the Sustain button at the same time you let go of the current chord. In other words, your left thumb and your right index finger will both come off the screen at the same time. Then they can both go back down again for the next chord.
- **17** If Hold is on, you can create space by tapping the Sustain button once. This turns off the chord until the next chord is played.

Selecting a Carol or Hymn

- 18 There are four things to know about the Title Bar.
 - A Tapping the Title Bar at the right edge moves forward through the list.
 - B Tapping the Title Bar at the left edge moves backward through the list.
- C Sliding your finger across the middle of the Title Bar scrolls through the song titles. (After you begin scrolling, you can pull your finger down just below the Title Bar. That way, while you are sliding back and forth, you can see the titles as they are displayed.)
- D When the carol or hymn you are looking for is shown in the Title Bar, touch "Enter." Enter loads the selected title into the playing area of the screen.

Christmas Carols in the List:

Angels, from the Realms of Glory
Angels We Have Heard on High
As with Gladness, Men of Old
Away in a Manger
Away in a Manger (2)
Come, Thou Long-Expected Jesus
Come, Thou Long-Expected Jesus (2)
Ding Dong Merrily on High
Go, Tell It on the Mountain
God Rest Ye Merry, Gentlemen
Good Christian Men, Rejoice
Good King Wenceslas

Hark! the Herald Angels Sing

How Great Our Joy!

I Heard the Bells on Christmas Day

I Saw Three Ships

In the Bleak Midwinter

Infant Holy, Infant Lowly

It Came Upon the Midnight Clear

Joy to the World

Lo! How a Rose E'er Blooming

O Come, All Ye Faithful

O Come, O Come, Emmanuel

O Little Town of Bethlehem

Once in Royal David's City

Silent Night! Holy Night!

The Birthday of a King

The Coventry Carol

The First Noel

The Holly and the lvy

Thou Didst Leave Thy Throne

We Three Kings

What Child Is This?

While Shepherds Watched Their Flocks

Who Is He in Yonder Stall?

Two classical pieces are included with the carols:

Jesu, Joy of Man's Desiring

Prelude and Fugue in C Major BWV553

Hymns in the Classic Hymns List:

A Mighty Fortress is Our God

A Shelter in the Time of Storm

All Glory, Laud, and Honor

All Hail the Power

All People That on Earth Do Dwell

All the Way My Savior Leads Me

Amazing Grace

And Can It Be That I Should Gain?

Arise, My Soul, Arise!

Blessed Assurance

Blessed Be the Name

Christ Arose

Christ the Lord Is Risen Today

Come, Thou Almighty King

Come, Thou Fount

Come, Ye Thankful People, Come

Count Your Blessings

Crown Him with Many Crowns

Day by Day

Draw Me Nearer

Eternal Father, Strong to Save

Fairest Lord Jesus

Faith is the Victory!

Fill Me Now

Footprints of Jesus

For the Beauty of the Earth

Glorious Things of Thee Are Spoken

Glory to His Name

God Be with You

God of Our Fathers

Grace Greater Than Our Sin

Guide Me, O Thou Great Jehovah

Hallelujah! What a Savior!

He Hideth My Soul

He Leadeth Me

Higher Ground

Holy God, We Praise Thy Name

Holy, Holy, Holy

How Firm a Foundation

I Know Whom I Have Believed

I Must Tell Jesus

I Need Thee Every Hour

I Sing the Mighty Power of God

Immortal, Invisible, God Only Wise

It Is Well with My Soul

Jesus, I My Cross Have Taken

Jesus Loves Even Me

Jesus Loves Me

Jesus Saves!

Jesus Shall Reign

Jesus! What a Friend for Sinners!

Joyful, Joyful, We Adore Thee

Just As I Am, Without One Plea

Leaning on the Everlasting Arms

Like a River Glorious

Lord, Speak to Me

Love Divine, All Loves Excelling

Love Lifted Me

More Love to Thee

My Faith Has Found a Resting Place

My Jesus, I Love Thee

Near the Cross

Now Thank We All Our God

O for a Thousand Tongues to Sing

O God, Our Help in Ages Past

O Happy Day

O Sacred Head, Now Wounded

O That Will Be Glory

O Worship the King

O Zion, Haste

Oh, How I Love Jesus

Only Trust Him

Praise God from Whom All Blessings Flow

Praise Him! Praise Him!

Praise, My Soul, the King of Heaven

Praise the Savior, Ye Who Know Him!

Praise Ye the Lord, the Almighty

Praise Ye the Triune God!

Rejoice, the Lord Is King

Rejoice, Ye Pure in Heart

Rescue the Perishing

Revive Us Again

Savior, Like a Shepherd Lead Us Send the Light Shall We Gather at the River? Sing Praise to God Who Reigns Above Softly and Tenderly Jesus Is Calling Standing on the Promises Sweet Hour of Prayer Take My Life and Let It Be The Church's One Foundation The Lord's My Shepherd The Solid Rock There Is a Balm in Gilead There Is a Fountain There Shall Be Showers of Blessing This Is My Father's World 'Tis So Sweet to Trust in Jesus To God Be the Glory Trust and Obey We Gather Together We're Marching to Zion We've a Story to Tell to the Nations What a Friend We Have in Jesus When He Cometh When I Survey the Wondrous Cross When Morning Gilds the Skies When the Roll Is Called Up Yonder Wonderful Words of Life Work, for the Night Is Coming

The Buttons with a Dash on Them

19 - There are places in the music where a word or syllable might be held for two or more chords. When this happens, the word or syllable is written on the first chord in the sequence, and later chords are indicated with a dash. The dashed buttons are the trickiest part of learning to play these songs. It takes a little practice to learn how each song goes, but it's part of the fun. After you understand how a song goes, and have practiced it a few times, it will be easier to play it through correctly.

Transposing to a Different Key

20 - The buttons labeled "-" and "+" allow you to move the key down or up by half steps. The current key is displayed between them.

Moving to a Different Screen

- **21** When a song is loaded, the first screen in the song is displayed. When you reach the last playable button on this screen, the next screen is automatically loaded. This continues until all of the screens have been played.
- 22 When you reach the end of the song, the first screen is loaded again. This allows you to play the carol through as many times as may be needed. (For example, if you are accompanying people who are singing, and the song leader asks for the first, third, and fourth verses, you would play

through the carol three times. The words on the iPhone or iPad screen are the words for the first verse, but the singers will continue on to the other verses as you play.)

- 23 The "First", "Prev", "Next", and "Last" buttons jump to specific screens in the song. This may be helpful in the following situations:
- A The "Last" button can be used if you need to play an introduction for singers. Playing the last phrase of a carol is one way to establish the song, the key, and the tempo.
- B If you are learning the song, you can move back a screen and review a section that may have already passed by.

Using the Couplers

24 - The "B-8", "BC8", and "M8" buttons help to make the sound bigger.

The "B-8" button adds the bass note down an octave.

The "BC8" button adds the bass and chord notes up an octave.

The "M8" button adds the melody (soprano) note up an octave. (Note: You can use either BC8 or M8 to add higher notes, but not both at the same time.)

(The "L2/M2" and "L3/M3" buttons are for layered sounds. See line 27 below.)

Important Recommendation - The BC8 and M8 buttons add high-frequency content to the sound. These options can be used when needed, but always remember to maintain reasonable volume levels, especially if you are using headphones.

All Off

- 25 In the event that a note gets stuck and keeps playing when it shouldn't, you can turn all notes off by touching the "All Off" button. (Note: if you are using the optional JeuxdorgMini app, then touching "All Off" also turns off the stop combinations. You would then need to touch one of the combination buttons to hear the sound again.)
- **26** (In the worst case, if All Off doesn't turn off the stuck notes, you may have to double-click the home button and close any sound-generating apps you are using. Then reopen them and start again.)

More Information for iOS Midi Musicians

27 - CarolPlayMidi has the following midi setup:

Button BC - Soprano, Alto, Tenor, and Bass notes are sent on midi channel 1 when BC is on.

Button L2 - Soprano, Alto, Tenor, and Bass notes are sent on midi channel 2 when L2 is on. (Only the Soprano note is sent when the button displays M2.)

Button L3 - Soprano, Alto, Tenor, and Bass notes are sent on midi channel 3 when L3 is on. (Only the Soprano note is sent when the button displays M3.)

28 - The couplers work this way (if BC or L2 or L3 is on):

B-8 - Adds the bass note down an octave

BC8 - Adds the bass and chord notes up an octave

M8 - Adds the soprano note up an octave

(Note: The couplers do not add anything to M2 or M3 if they are on.)

29 - The volume information from the Sustain button:

A - On midi channels 1, 2, and 3, the volume information is sent on controller 7.

(Note: if "Optional Setup" is being used, the volume information is also sent on midi channel 11, controller 0, and midi channel 11 (notes 1 to 12) is being used to turn on and off stops that create the combinations. If the optional setup is not being used, channel 16, notes 1 to 12 are used by the combination buttons.)

Important: If you are using a synth app which is in Omni mode, it may try to play midi notes on channel 11 (or channel 16) when the combination buttons are touched. It's better if the synth apps are set up to respond to midi only on: channel 1 for BC, channel 2 for L2, and channel 3 for L3.

Note regarding GarageBand: If you would like to connect to GarageBand, an extra step is required —opening an app called a "midi bridge." One choice is the free app FreEWI. If FreEWI is open and running in the background, GarageBand will respond to the midi signals coming from CarolPlayMidi.

Interesting Setups for iOS Midi Users

30 - While developing CarolPlayMidi, I found it interesting to start with a favorite synth app on midi channel 1, and then layer strings on channel 2, which could be turned on and off using the L2 button. I also experimented with brass sounds on channel 3, which could be turned on and off with the L3 button. I used the String Ensemble and Trombone sounds in ThumbJam, setting them to respond on channels 2 and 3. (Note: I found it helpful to increase the buffer size in ThumbJam > Preferences > Options to 512. This gave a little bit more time for calculating the audio.)

About

CarolPlayMidi is a free gift to the iOS music community, enabling users to play Christmas carols and classic hymns on synthesizer apps.

Acknowledgements

Thank you to Markus Sigg for his help. His work can be seen at www.polaron.de.

We Hope You Enjoy Playing These Carols and Hymns

All the best from MugglinWorks. Steve Mugglin Mac Mugglin email: info@mugglinworks.com

Postscript

If you are interested in, or already have, one of Markus Slgg's larger Napo pipe organ apps (for example: Burea), here's how to set it up with CarolPlayMidi.

- 1 Important: Close CarolPlayMidi and reopen. (You don't need to touch setup.)
- 2 Open Burea (or another Napo pipe organ)
- 3 Tap the settings icon (looks like a wrench), and then MIDI (lower left).
- 4 At the top of the page, under "Channel Mappings", edit all manuals and pedals to respond only on midi channel 1.

- 5 Below Channel Mappings is "Controller for Global Volume." Tap on "Learn."
- 6 An alert pops up, but don't touch the alert. Instead double-click the home button.
- 7 Find CarolPlayMidi and slide your finger on the Sus button.
- 8 Double-Click the home button and go back to Burea. You should see that the learn function now has a setting for global volume. (It should say ch: 1, id: 07.)
- 9 The same process helps with creating combination assignments.
- 10 Scroll down to the bottom of the page and find "Buttons for Combinations." (not "Buttons for Combination Banks"—further down)
- 11 In the row marked "Select 1", tap on "Learn."
- 12 An alert pops up, but don't touch the alert. Instead double-click the home button.
- 13 Find CarolPlayMidi and touch the "1" button.
- 14 Double-Click the home button and go back to Burea. You might have to scroll back down the page. You should see that the Select 1 row now has an assignment. (It should say ch: 16, n: 0.)
- 15 Follow the same procedure (steps 10 14) to setup Select 2 Select 12. Each time touch the CarolPlayMidi number that corresponds. (When you finish, the 12 assignments will all say ch: 16, n: X, where the X is a number from 0 to 11.)
- 16 Tap the Settings icon (the wrench), and then choose General (far left).
- 17 Near the top of the page, set "Combination Mode" to "Bank/Comb".
- 18 Touch the second icon on the lower left. (It looks like a bookmark or ribbon.) This lists the Combination Banks. Touch "Edit" and then, using the plus sign at the top right, create a new combination. Call it CarolPlayMidi, (or whatever you like). Then touch "Create."
- 19 Now Touch the plus sign over to the left of the word CarolPlayMidi.
- 20 Type in a name for the New Combination. (I used the number 1.) Touch "Create."
- 21 Touch the plus sign at the left again and create "2." Then "3", then "4"... all the way up to 12.
- 22 You should have the name CarolPlayMidi at the top, and rows labeled 1 through 12 beneath.
- 23 Tap on row "1". A picture of all the organ stops will be presented. At the bottom you can step through (or scroll through) all 12 pictures. Each picture is a snapshot of what the stops will look like for that particular combination. It takes some experimenting to choose which sounds you would like to assign to each combination, but in general I choose softer sounds to be used for the lower numbered combinations, and louder sounds for the higher numbered combinations. (I only use the named pipes—not the couplers—because we are sending everything on channel 1, so it's just like they are all on one organ manual, and the B-8 and BC8 buttons on CarolPlayMidi will act as couplers.)
- 24 When you are ready to play, touch the keyboard icon at the far left of the Burea screen. Look for the button at the top right labeled "Bank." Touch "Bank" and select CarolPlayMidi. A checkmark will appear.
- 25 Finally, go back to CarolPlayMidi and touch "All Off" once to make sure the midi connection has been established.

At this point, Burea is set up to play organ sounds and combinations on midi channel 1, using the sounds you have assigned to the 12 buttons in CarolPlayMidi. (Note: if you turn off Burea, and reopen it, touch "Bank" to select the CarolPlayMidi bank you created.)

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