

# ChordMaps2

MIDI Controller App for iPad

## Understanding the ChordMaps2 Screen

As a songwriter and keyboard player, I enjoy exploring melody lines, bass lines, and chord progressions. I can switch keys, play in major and minor, and change accompaniment styles. So many interesting options are only “a thought away.”

When I designed ChordMaps2, I wanted the same experience. I wanted to switch keys, play melody lines, bass lines, and chord progressions. I wanted to move freely from one thought to the next. Whenever possible, I wanted the next idea to be only “one touch away.”

As a result, the ChordMaps2 screen is complex and “alive with options,” but each button and screen area has a purpose—to allow you to explore and play, flowing from one idea to the next.

These pages will help you understand the ChordMaps2 screen.

You may want to print page 2 for reference. (Most of the rest of the document is in large print and can be easily read on a computer or tablet.)

The information for “Editable Chords and Progressions” begins on page 10.

“The Info View - Understanding the Settings” begins on page 20.

# Understanding the ChordMaps2 Screen

## PORTRAIT MODE

The - and + buttons change the current key down or up a half step.

The top row allows you to select the current key.

Info (i) opens the view with the MIDI Channels and Destinations; also selects touch display option, and Min and Max note velocities.

Melody Sounds M1 and M2, on-off

Octave - or + changes the octave of the Additional Sounds.

Name - displays the chord name

Octave - or + changes the octave of the Chord Sounds.

Bass Sound and Bass Down an Octave, on-off

Additional Sounds A1 and A2, on-off

All Notes Off - sends all notes off commands to MIDI channels 1 – 16.

Chord Sounds C1 and C2, on-off

The Display Keyboard shows notes being played.

GL turns on "Glissando" which allows sliding from note to note.

The Display Keyboard has 24 playable zones which are assigned to play notes that are part of the current chord.

MM "Mirrors the Melody," meaning the Display Keyboard becomes an extension of the Melody Keyboard, but playing only notes that are part of the current chord.

Interval Area plays two-note intervals in 3rds, 4ths, 5ths, or 6ths, using chord sounds.

Repeat Area plays chord notes (or the bass note) currently stored in memory.

Enable the Arpeggio Option

Enable the Strum Option

Display the Help View

The Melody Keyboard plays one note at a time. H-M1 adds harmony notes using sound M1 if M1 is on. H-M2 adds harmony notes using sound M2 if M2 is on. Octave shifts the melody up or down in octaves. M-12 plays the melody as an octave. A1 adds Additional Sound A1 if A1 is enabled above. A2 adds Additional Sound A2 if A2 is enabled above. H-A1 adds harmony notes using sound A1 if A1 is on. H-A2 adds harmony notes using sound A2 if A2 is on.

0 - 9 selects current ChordMap - (info for Maps 10 - 13 on page 10)

ABC A - Add sounds A1 or A2 to the chord being played if A1 or A2 is enabled above. B - Play bass note that belongs to the chord. C - Play chord notes. Z - Zoom in on the ChordMap Region Hold BC - Sustain the bass and chord notes. Hold MD - Sustain the melody and display notes.

The Bass Keyboard plays one note at a time. Tr X turns off "Transpose" for the Melody and Bass Keyboards. OCT + and - shifts the bass note up or down by octaves. 5 adds chord sounds playing fifths along with the bass note. C adds chord sounds along with the bass note. M adds melody sounds along with the bass note.

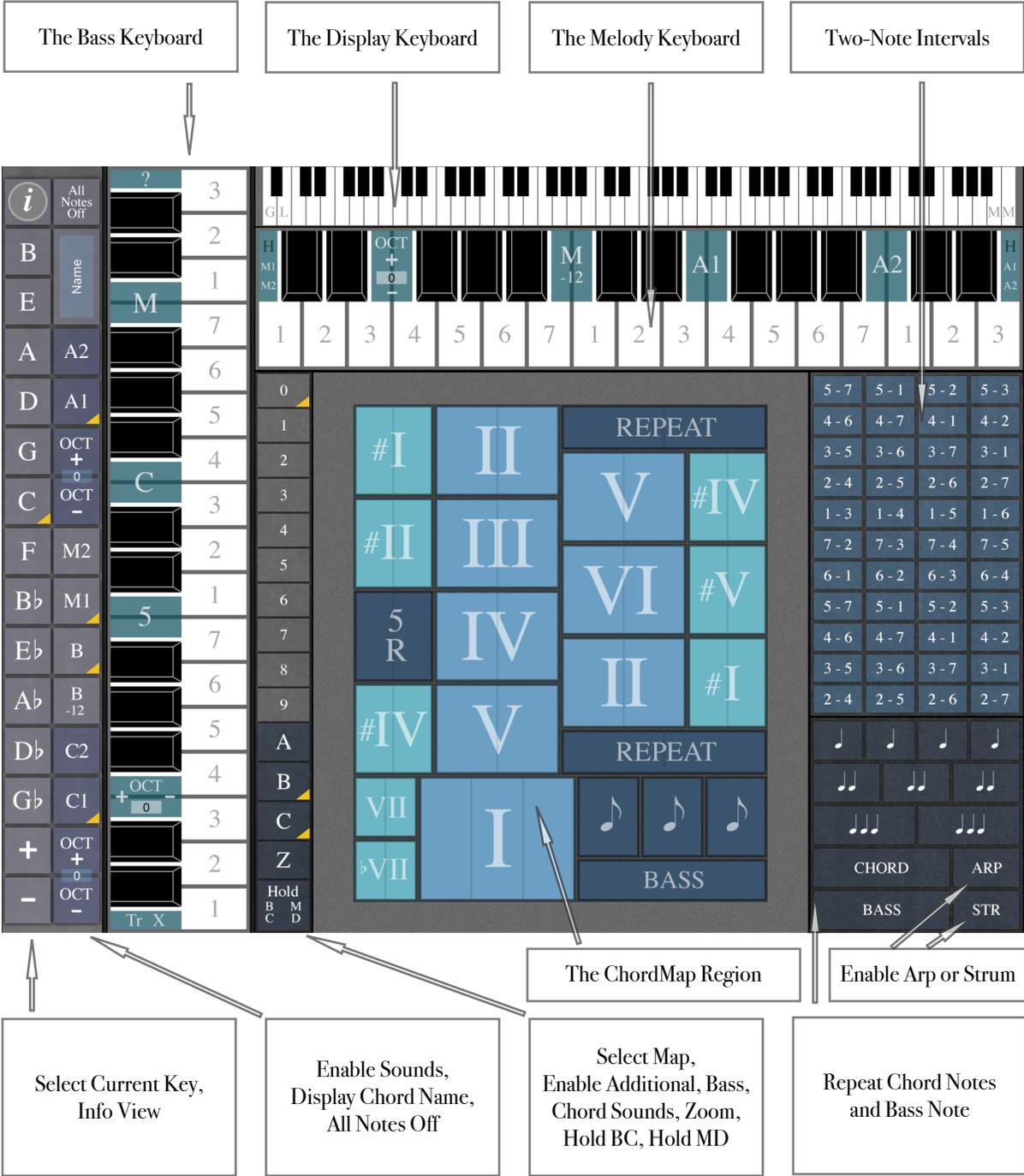
For more information, visit [ChordMaps2.com](http://ChordMaps2.com)

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# Understanding the ChordMaps2 Screen

## LANDSCAPE MODE

In Landscape mode, the buttons and functions that were at the top of the screen in Portrait mode have been moved to the left edge. The Bass Keyboard has also been moved to the left side and is positioned vertically. (All of the function descriptions remain the same as in Portrait mode above.)



See Portrait Mode on the previous page for a summary of each location.  
See the pages below for a more detailed list of functions.

# Understanding the ChordMaps2 Screen

## Description of Functions

### The Top Row (in Portrait mode) or the left edge (in Landscape mode)

This row allows you to choose the current key. You can change keys at any time while you are playing, even in the middle of a phrase.



- Lowers the current key a half step
- + Raises the current key a half step
- G $\flat$  Selects G $\flat$  as the current key
- D $\flat$  Selects D $\flat$  as the current key
- A $\flat$  Selects A $\flat$  as the current key
- E $\flat$  Selects E $\flat$  as the current key
- B $\flat$  Selects B $\flat$  as the current key
- F Selects F as the current key
- C Selects C as the current key
- G Selects G as the current key
- D Selects D as the current key
- A Selects A as the current key
- E Selects E as the current key
- B Selects B as the current key
- i* Opens the info view for assigning MIDI Channels and Destinations

Note: when a minor map is selected, the key names change to F $\sharp$ m, C $\sharp$ m, G $\sharp$ m, Ebm, Bbm, Fm, Cm, Gm, Dm, Am, Em, Bm

### The Second Row (in Portrait mode) or the second column (in Landscape mode)



- OCT - Lowers by octaves the Chord sounds (C1 and C2)
- OCT + Raises by octaves the Chord sounds (C1 and C2)
- C1 Enables Chord Sound 1 (C1) to play the current chord notes
- C2 Enables Chord Sound 2 (C2) to play the current chord notes
- B-12 Adds a bass note one octave lower than the current bass note

- B Enables the Bass Sound to play the current bass note
- M1 Enables Melody Sound 1 (M1) to play the current melody note
- M2 Enables Melody Sound 2 (M2) to play the current melody note
- OCT - Lowers by octaves the Additional sounds (A1 and A2)
- OCT + Raises by octaves the Additional sounds (A1 and A2)
- A1 Enables Additional Sound 1 (A1) to play if assigned to melody or chords:  
     A1 can be assigned to the melody in the Melody Keyboard area.  
     A1 can be assigned to play when chord notes play by switching on A at the left of the ChordMap region.
- A2 Enables Additional Sound 2 (A2) to play if assigned to melody or chords:  
     A2 can be assigned to the melody in the Melody Keyboard area.  
     A2 can be assigned to play when chord notes play by switching on A at the left of the ChordMap region.
- Name The name of the current chord is displayed here.
- All Notes Off This sends note off signals to MIDI Channels 1–16.

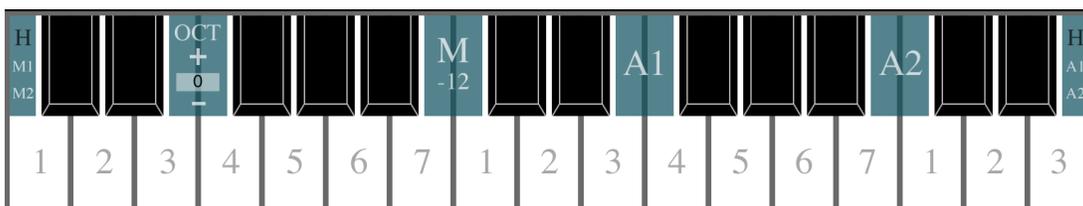
**The Display Keyboard (the third row in Portrait mode or the top right edge in Landscape mode)**



- GL Enables Glissando – allows the user to slide from one location to the next across the Display Keyboard, Melody Keyboard, Bass Keyboard, Two-Note Interval Area, and Chord and Bass Repeat Area
- MM Mirrors the Melody – makes the Display Keyboard an extension of the Melody Keyboard so that it functions in the same way (but playing only notes in the current chord)

Note: the Display Keyboard is also a playable area. It has 24 playing zones. Each zone is assigned to play notes that are part of the current chord.

**The Melody Keyboard (located just below the Display Keyboard)**

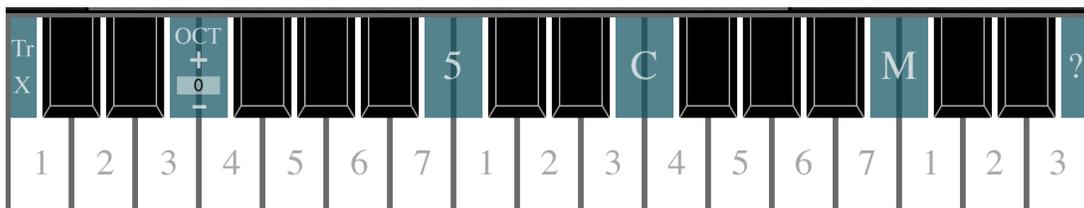


Note: the Melody Keyboard, in its default configuration, plays one note at a time using sound M1. In order to hear the melody note, at least one of the following must be true:

- M1 is enabled in row 2 in Portrait mode (or column 2 in Landscape mode).
- M2 is enabled in row 2 in Portrait mode (or column 2 in Landscape mode).
- A1 is enabled in row 2 in Portrait mode (or column 2 in Landscape mode) and also in the Melody Keyboard A1 location.
- A2 is enabled in row 2 in Portrait mode (or column 2 in Landscape mode) and also in the Melody Keyboard A2 location.

- H-M1 Harmony M1 – adds harmony notes that fit the current chord using sound M1 (if M1 is on in row 2 of Portrait mode, or column 2 in Landscape)
- H-M2 Harmony M2 – adds harmony notes that fit the current chord using sound M2 (if M2 is on in row 2 of Portrait mode, or column 2 in Landscape)
- OCT Shifts the Melody note up or down in octaves
- M-12 Plays the melody in octaves (two notes one octave apart)
- A1 Adds Additional Sound A1 if A1 is enabled in row 2 of Portrait mode or in column 2 in Landscape mode
- A2 Adds Additional Sound A2 if A2 is enabled in row 2 of Portrait mode or in column 2 in Landscape mode
- H-A1 Harmony A1 – adds harmony notes that fit the current chord using sound A1 (if A1 is on in row 2 of Portrait mode, or column 2 in Landscape, and if A1 is on in the Melody Keyboard A1 location)
- H-A1 Harmony A2 – adds harmony notes that fit the current chord using sound A2 (if A2 is on in row 2 of Portrait mode, or column 2 in Landscape, and if A2 is on in the Melody Keyboard A2 location)

**The Bass Keyboard (at the lowest edge in Portrait mode, and displayed vertically toward the left in Landscape mode)**



Note: the Bass Keyboard, in its default configuration, plays one note at a time. In order to hear the bass note, either B or B-12 must be enabled in row 2 in Portrait mode (or column

2 in Landscape mode). If B and B-12 are both enabled then the single bass note will be played as an octave.

Tr X Transpose Off – the Melody Keyboard and Bass Keyboard are by default transposing keyboards, allowing you to play melodies and bass lines on the white keys as if you were playing in the key of C. If Tr X is on, then the keyboards will not transpose automatically.

OCT Shifts the Bass note up or down in octaves

5 Adds chord notes, playing a root and a fifth, along with the bass note being played

C Adds chord notes playing the same note as the bass, but higher on the keyboard

M Adds melody notes playing the same note as the bass, but higher on the keyboard

? Displays the Help View

### The Map Selection Area (0 – 9 at the left edge of the ChordMap Region)

ChordMaps2 has 13 maps. The first 10 are numbered 0 – 9. Each map is designed for a different purpose. You can switch from map to map at any time while you are playing.

0	Map 0 - plays power chords (root, fifth, octave)
1	Map 1 - explores I, ii, IV, and V chords
2	Map 2 - explores I, IV, V, and vi chords
3	Map 3 - explores I, ii, iii, IV, V, and vi chords
4	Map 4 - explores Blues progressions
5	Map 5 - plays three-note (root, third, fifth) progressions in major and minor keys, and includes secondary chords
6	Map 6 - plays iim7, V7, IM9, I6 around the circle of fifths
7	Map 7 - explores ii, V, I variations (with IV, iii, and VI) around the major and minor circle of fifths
8	Map 8 - plays tenth chords or basic triads in major and minor keys, and includes secondary chords
9	Map 9 - a melody playing map (It gives some notes a little more room than on the Melody Keyboard.)

Information about Maps 10 – 13 begins on page 10.

## The A-B-C-Zoom-Hold Area (at the lower left edge of the ChordMap Region)

<b>A</b>	A - adds the Additional Sounds to the Chord Sound if A1 or A2 is enabled in row 2 in Portrait mode (or column 2 in Landscape mode) and C is on
<b>B</b>	B - play the Bass note when a location is touched in the ChordMap Region
<b>C</b>	C - play the Chord notes when a location is touched in the ChordMap Region (add the Additional Sounds if A is on)
<b>Z</b>	Z - Zoom in on the ChordMap Region
<b>Hold</b> B M C D	Hold BC - sustain the Bass and Chord notes until replaced Hold MD - sustain the Melody and Display Keyboard notes until replaced

## The Two-Note Interval Area (at the upper right edge of the ChordMap Region)

5-7	5-1	5-2	5-3
4-6	4-7	4-1	4-2
3-5	3-6	3-7	3-1
2-4	2-5	2-6	2-7
1-3	1-4	1-5	1-6
7-2	7-3	7-4	7-5
6-1	6-2	6-3	6-4
5-7	5-1	5-2	5-3
4-6	4-7	4-1	4-2
3-5	3-6	3-7	3-1
2-4	2-5	2-6	2-7

The Two-Note Interval Area plays two notes at a time in thirds, fourths, fifths, or sixths. ChordMaps2 sends this information out on the MIDI Channel used for playing Chord notes, so these two notes will sound instead of whatever chord notes may have been playing.

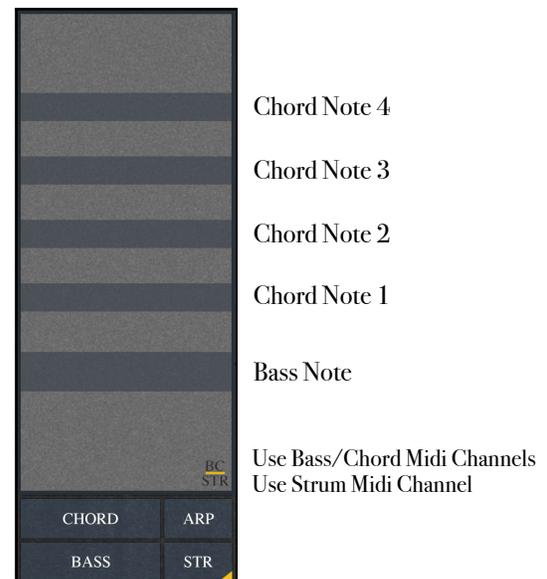
## The Chord and Bass Repeat Area (at the lower right edge of the ChordMap Region)



The Chord and Bass Repeat Area plays notes from the most recently selected chord.

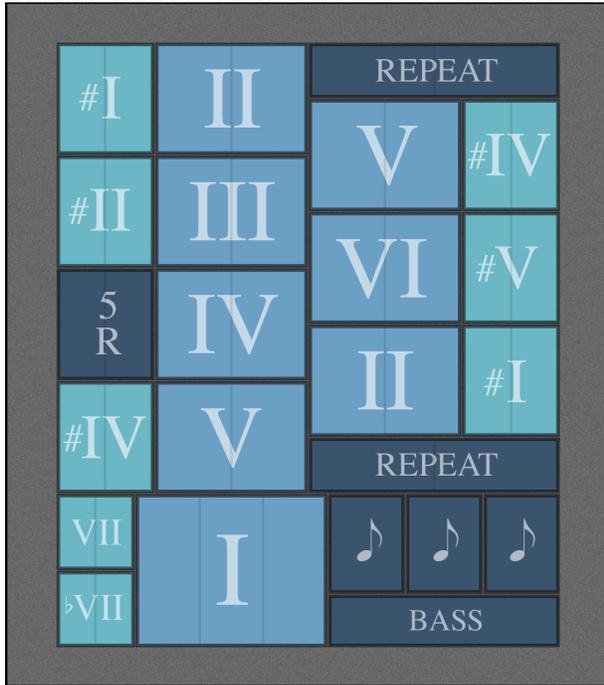
### The Strum Option (STR)

The Strum Option opens a strumming overlay which allows strumming or fingerpicking the notes in the most recently selected chord. (Note: Enabling only "B"



in the “A-B-C-Hold ” area allows you to select a chord location in the ChordMap region with your left hand, playing only its bass note. You can then strum the chord or play in a fingerpicking style with your right hand, by sliding or tapping on the strum area.)

**The ChordMap Region (the larger area in the middle)**



This is where the selected map (0 – 13) is displayed. Most of the locations in this region represent Chords. A few of them represent Bass notes or repeat locations. On certain maps there are places where the key can be changed, or where the map can switch to a minor key.

**The Arpeggio Area (visible when ARP is enabled on the main screen)**

-10	TAP		+10
-1			+1
4/4	3/4	B&C	ARP
B	C	BC1	BC2
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
PLAY ARP		STOP ARP	

TAP - Tap to set tempo (or use +10, -10, +1, -1 to adjust)  
 4/4 or 3/4 - select the time signature for the arpeggio  
 B&C - plays arpeggio notes on the Bass and Chord MIDI channels  
 ARP - plays arpeggio notes on the Arpeggio MIDI channel  
 B - plays a pattern using Bass notes  
 C - plays a pattern using Chord notes  
 BC1 or BC2 - plays a pattern using both Bass and Chord notes  
 1 to 24 - select a pattern to play  
 PLAY ARP - turn on to enable playing an arpeggio with the next touch of the ChordMap Region.  
 STOP ARP - stops the arpeggio from playing

Note: When playing arpeggios on the “B&C“(Bass and Chord) MIDI channels, the usual bass note and chord notes associated with a touch do not play – only the arpeggio plays. But when the “ARP“MIDI channel is selected, the usual bass and chord notes will sound while the arpeggio notes are added on the Arpeggio Sound MIDI channel.

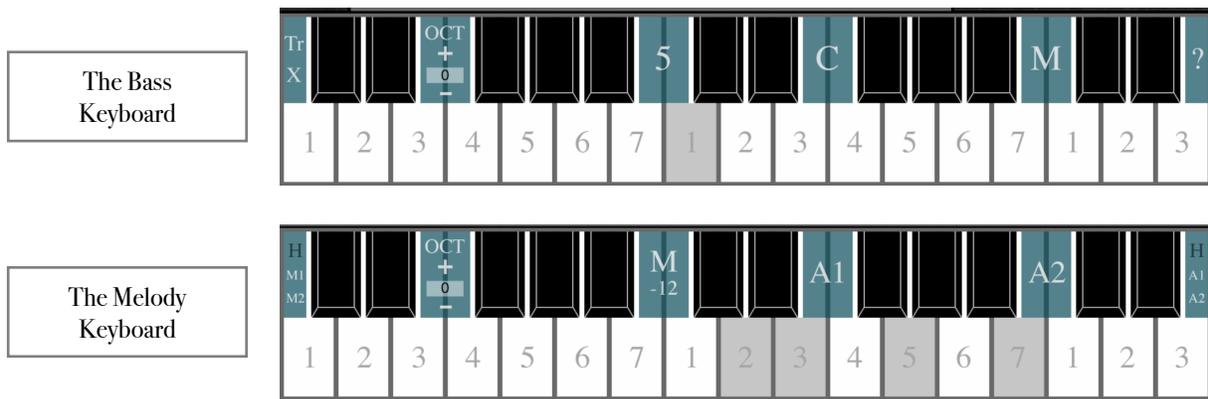
## Editable Chords and Progressions – A Quick Overview

Until now, though many useful chords are in the maps, there was no guarantee a specific chord you are looking for would be there.

Maps 10 – 13 allow you to create your own chord collections.

Here’s a quick overview:

- Find Map 0, then tap 0 again.
- Select one of the “Pages.”
- Select EDIT mode.
- Choose one of the 45 chord locations.
- Tap a bass note on the Bass Keyboard.
- Tap up to four chord notes on the Melody Keyboard. (To delete a note, tap it again.)



- Decide if you would like TEXT on the location, or a different background color.



Using these tools, you can create and design pages that have exactly the chords you would like to play. You can also give each page a title. When you are finished designing the page, you can save it to the ChordMaps2 folder in the Files app.

That’s the quick overview.

Now that you have the idea, here’s a more complete explanation.

## Editable Chords and Progressions – A More In-Depth Explanation

Maps 10, 11, 12, and 13 are editable.

You can view Map 10 by going to Map 0 and then tapping the 0 a second time. (Map 10 and Map 0 toggle back and forth. In the same way, Maps 11, 12, and 13 are viewed by tapping again on 1, 2, or 3.)

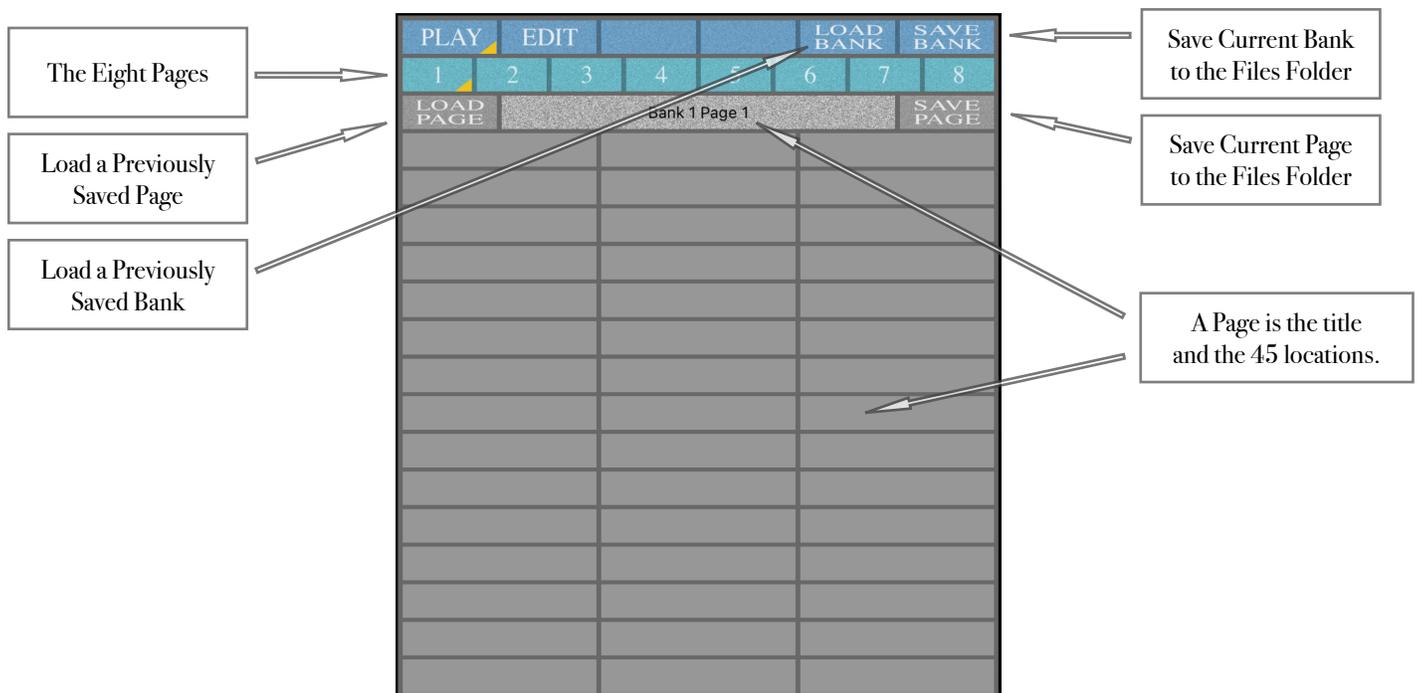
Maps 10, 11, 12, and 13 each contain 8 editable “Pages.” The collection of 8 pages is called a “Bank.”

Each page has 45 editable locations. (Each location can hold one bass note, up to four chord notes, a text label, a background color, and another four “extra notes” if needed.)



### PLAY Mode

When PLAY is selected, you can play one of the eight pages labeled 1 – 8. You can load a page you saved before, or save a page you are currently working on. (You can also load a bank of eight pages, or save a bank of eight pages.)



**IMPORTANT** - Before loading a page, first select the page number (1– 8) you would like as the destination. (For example, if you select page 2 and then load a page, the data you are loading will overwrite whatever is on page 2.)

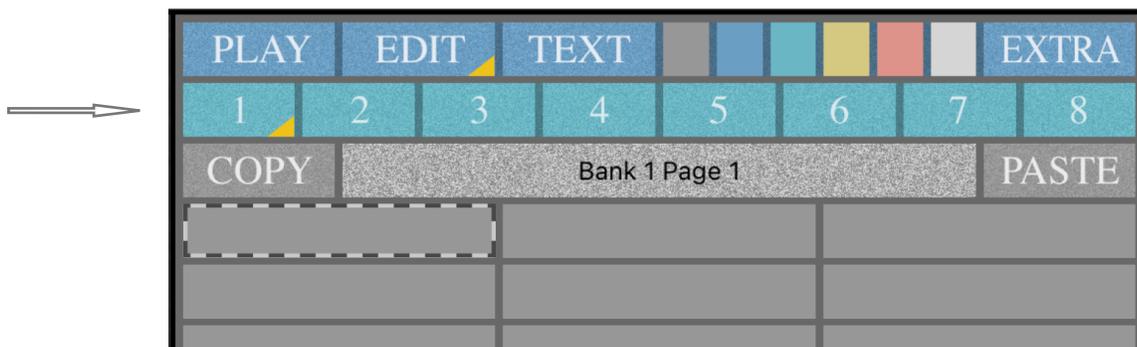
The same applies to loading banks. (If you are on Map 10, and you load a bank, all eight pages on Map 10 will be replaced.)

Maps 10, 11, 12, and 13 are one big work area. You can save a page (or bank), while working in Map 10, and then load the saved page (or bank) into Maps 11, 12, or 13.

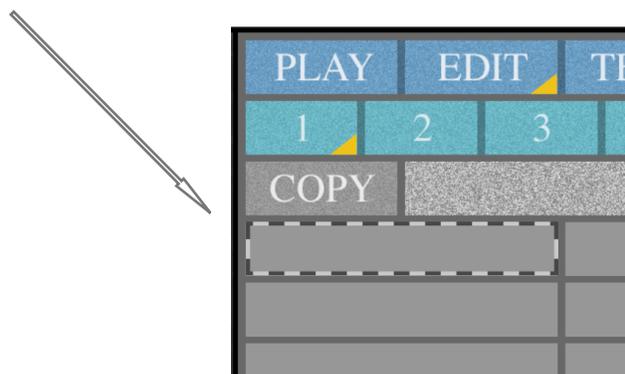
Saved pages and banks are stored in the Files app in the folder labeled ChordMaps2.

### **EDIT Mode**

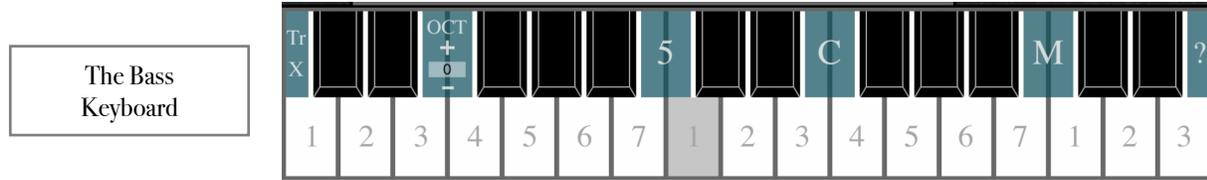
When EDIT is selected, choose one of the eight pages to work on.



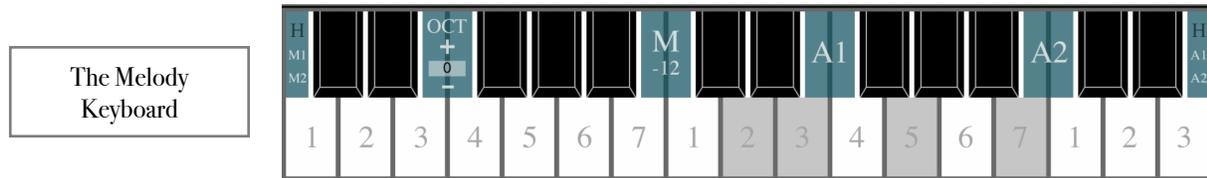
To EDIT a chord, select one of the 45 chord locations. A dotted line will identify the location.



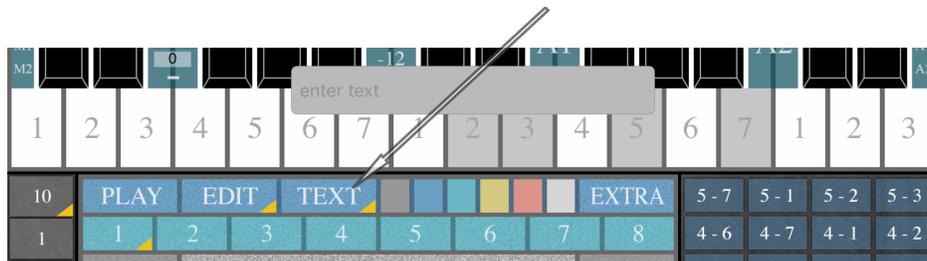
Add a bass note if you wish by tapping one of the notes on the Bass Keyboard. The bass note you have chosen will be shown with a gray color. (You can change your choice by tapping a new bass note, or you can tap the same note again to delete it.)



Add up to four chord notes by tapping on the Melody Keyboard. (If you have already selected four notes, new selections will not respond until you delete one of the four. Tapping a note already selected will delete it from the chord.)



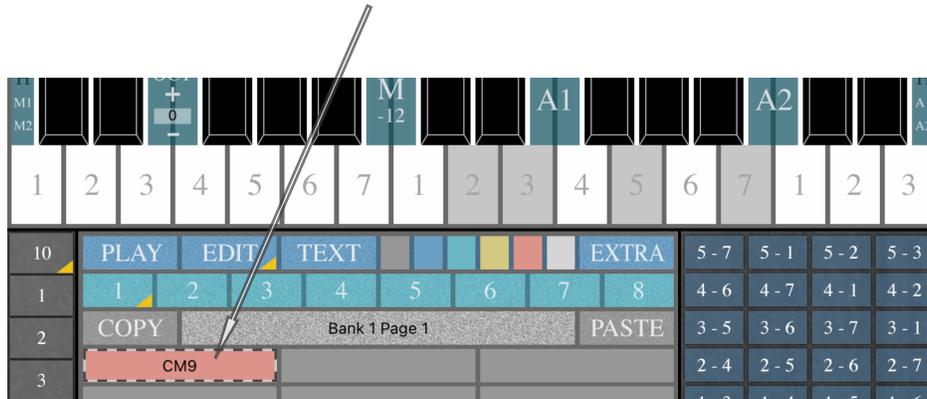
If you would like to put a text label on the location, touch TEXT. Tap the text field after it opens, enter your text, and hit “Done.” (You can leave the text field open while editing, or close it by touching TEXT again.)



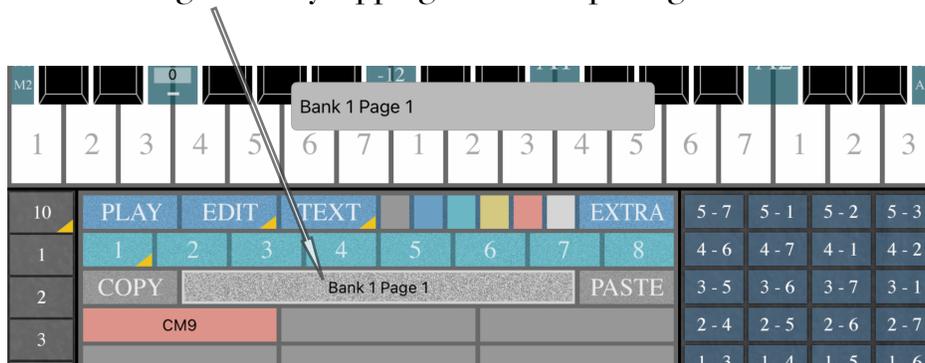
If you would like a different background color for the chord location, choose one of the colored boxes next to the word TEXT.



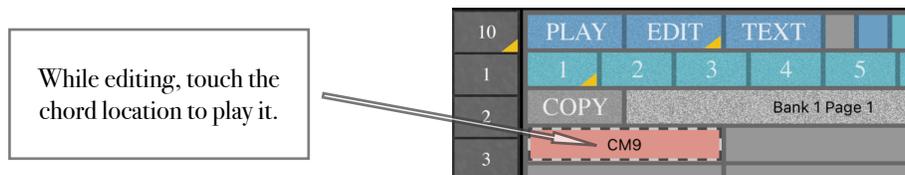
The chord we have been entering in this example is a C Major 9 chord, abbreviated CM9. It isn't necessary to name every chord, but in this case if we enter the text and choose a background color it might look like this.



You can also edit the Page Title by tapping on it and opening the text field.



While in EDIT mode, you can touch the chord location at any time to hear how it sounds. (The sound plays louder as you move toward the right side of the box.)



(About text in the chord locations: this text doesn't change when a different key is selected. If we wanted to use Roman numerals, which apply from key to key, like we did in Maps 0 – 9, we would have called this IM9. Either way is fine, but understand if you label it CM9 it will read the same when you switch to another key.)

## Things to Be Aware of When Editing

The simplest way to edit is the following:

- choose the key of C
- set all Octave up down options to 0
- in the info view, set the MIDI channels to 1211345167
- edit the chords as though you were playing in the key of C

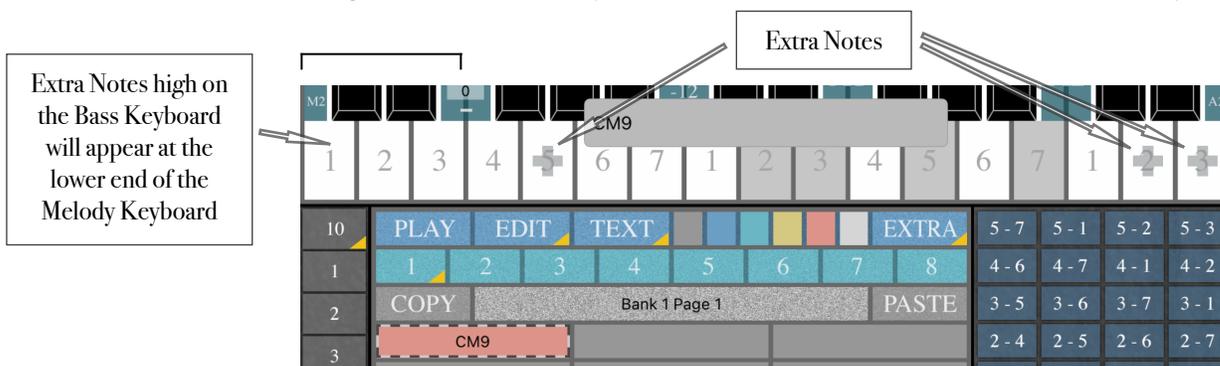
This allows the transpose options to work correctly. When you return to PLAY mode, switch to whichever key you like.

To be complete, it is possible to edit with a different key selected, but you still have to enter the notes on the Melody and Bass Keyboards as though you were thinking in the key of C.

You can also use other MIDI channel assignments, but 1211345167 allows the edited notes being entered on the Melody and Bass Keyboards to play the same instrument sound as the chord locations.

## EDIT Mode with EXTRA Notes

Some music styles use complex chords with more than four chord notes. You can add up to four EXTRA notes if needed. They show as plus signs, and can be on either keyboard. (Extra notes high on the Bass Keyboard show at the lower end of the Melody Keyboard.)



(NOTE - In most situations, it's best not to use EXTRA notes until after the main chord notes have been assigned. The main chord notes are used in other places – the Repeat, Strum, Arpeggio, and Display Keyboard areas, and for harmonies on the Melody Keyboard. In other words, when you play a chord on one of the maps, you are also assigning the notes for other areas. The EXTRA notes only play here. If a chord uses only EXTRA notes, the other locations won't adjust to match the new chord played.)

## **COPY and PASTE**



COPY is similar to having three different clipboards.

If you select a chord location and touch COPY, the chord information will be remembered on the first clipboard.

If you select the page title and touch COPY, the title will be remembered on a second clipboard.

If you touch the page title a second time, the bounding box will enclose the entire page. Touch COPY and the page will be assigned to the third clipboard.

All three clipboards are available all the time.

If you select a chord location and then touch PASTE, the chord location will receive the chord data from the first clipboard.

If you select a page title and touch PASTE, the page title will change to match what is on the second clipboard.

If you touch the page title a second time to select the entire page, then PASTE will fill the whole page with the data on the third clipboard.

This allows you to work efficiently, copying locations, titles, or pages at any time, and pasting them to new locations.

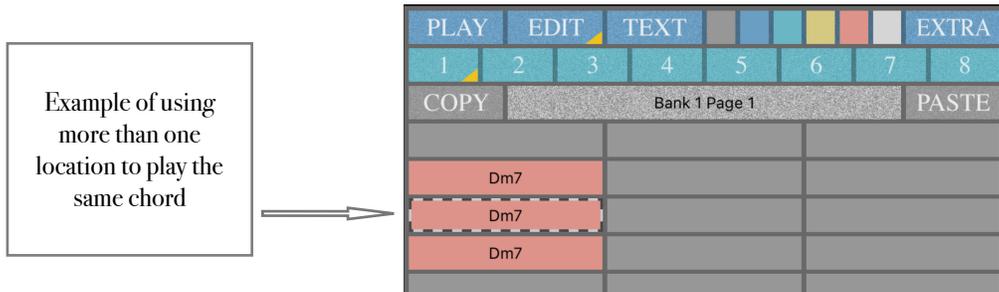
### **Saving Pages**

Remember to save a page after you have created it. Go to PLAY mode and touch SAVE PAGE. When the text field opens, tap it, enter a name, and touch “Done.”

## Suggestions for Using Maps 10, 11, 12, and 13

#1 - As mentioned previously, there are some advantages to editing while in the key of C. It isn't absolutely necessary to have C selected when editing, but it works well.

#2 - There are 45 chord locations on a page. However, the music you are creating may not need that many chords. You can make it easier to play a chord if you copy and paste to the location directly above, or below, or both. This effectively doubles or triples the area of the chord location.



#3 - A location can be used as a text label only. For example, you can have locations for Intro, Verse, Chorus, etc., and then build chords in the locations below these labels.

PLAY	EDIT			LOAD BANK	SAVE BANK		
1	2	3	4	5	6	7	8
LOAD PAGE	Song Title				SAVE PAGE		
Intro		Chorus		Ending			
C		Dm7		C			
Am7		Em7		Am7			
G7sus4		Am7		G7sus4			
G7		G		G7			
				C			
Verse		Bridge					
C		Bbadd2					
F		G7sus4					
Dm7		G7					
F / G							

#4 - You don't have to name all the chords you are creating. Sometimes a background color is enough to remind you there is a chord in that location.

#5 - There are musical situations where it's helpful to hold a bass note while the chord above it changes, or hold a chord while the bass note changes. You can accomplish this by creating some chord locations with only a bass note, and some with only chord notes. When you are playing, touch with one finger the location with the bass note. While holding that finger down, use your other hand to touch a sequence of locations with only chord notes. The bass note will continue to sound while the chord changes.

A second example: play a location that has several chord notes and a bass note. While holding this location with one finger, use a second finger to tap on locations that have only a bass note, or only chord notes.

#6 - Here's another idea: Percussion Maps. One of the challenges playing drum patterns on a device is that a single button for kick drum, another for hi-hat, and a third one for snare is not always easy to play (especially 16th note patterns).

Some patterns are easier if specific buttons have multiple sounds: like a button that plays both the kick and the hi-hat, and another that plays both the snare and the hi-hat.

Here's an example with six buttons. Notice that some areas have two sounds assigned.

PLAY	EDIT			LOAD BANK	SAVE BANK		
1	2	3	4	5	6	7	8
LOAD PAGE	Percussion Map					SAVE PAGE	
Kick Hi-Hat	Hi-Hat		Snare Hi-Hat				
Hi-Hat	Hi-Hat Open		Crash				

I tested this Percussion Map idea with one of the acoustic drum kits in GarageBand. Here's how you can set it up.

1 - There's an extra step when working with GarageBand. First, open a free app called FreEWI (by Audeonic Apps). This acts as a MIDI bridge. (It allows GarageBand to hear the MIDI instructions being sent by ChordMaps2. Leave FreEWI open and running in the background.)

2 - Open GarageBand. Create a new project. Put an acoustic drum set on one of the tracks. (Tap a few drums to make sure you hear them playing.) Also turn on "Run in Background" under Settings / Advanced.

3 - Open ChordMaps2. Touch the info view. It's in one of the top corners, and looks like an *i* in a circle. Look for MIDI Destinations. Make sure FreEWI is selected. A checkmark will appear.

4 - On Map 10, touch EDIT and also EXTRA. (We wouldn't normally use EXTRA notes first, but here we are not creating chords, and EXTRA notes will work well because they can be assigned to the Bass Keyboard. MIDI drum kits are often played on the low end of a keyboard.)

5 - On the Bass Keyboard, find the kick, snare, hi-hat, and crash sounds: kick (C), snare (D), hi-hat (F#), hi-hat open (Bb), crash (C# next octave).

6 - With just a little editing, using EXTRA notes on the Bass Keyboard, and copying and pasting to the locations above and below, you can create the picture seen on the previous page. (You can also add areas for toms and other cymbals.)

7 - Switch to PLAY mode and try it. I've found using multiple drum sounds on specific locations makes some rhythm patterns much easier to play.

8 - The same experiment can be done with drums in Cubasis3, but you won't need FreEWI this time. Cubasis3 appears in the MIDI Destinations list of ChordMaps2, and you can select it there.

9 - When finished playing, remember to turn off the apps you opened.

## The Info View - Understanding the Settings

### MIDI Channels

ChordMaps2 allows you to send note information on separate MIDI channels. The default settings are:

Chord Sound 1	1
Chord Sound 2	2
Bass Sound	1
Melody Sound 1	1
Melody Sound 2	3
Additional Sound 1	4
Additional Sound 2	5
Display Keyboard Sound	1
Strum Sound	6
Arpeggio Sound	7

Notice that Chord Sound 1, Bass Sound, Melody Sound 1, and the Display Keyboard Sound are all sending note information on MIDI Channel 1. This is fine for playing a single sound like a piano or synthesizer, but if you would like to select a different instrument for the bass sound, or the melody keyboard or display keyboard, you can create a setup where the various instruments are each assigned to their own MIDI channels.

### MIDI Destinations

This list shows the synthesizer apps that “advertise” themselves as being on and available. For example, if you open ThumbJam, the name “ThumbJam” will show up in the list of possible MIDI Destinations. When you touch the name “ThumbJam” on the list, a blue checkmark will appear over at the right side of the row. This means ThumbJam is now listening to the MIDI information coming from ChordMaps2. (Notice that the synth app, in this case ThumbJam, must also have Background Audio enabled, and be listening on the MIDI channels we are sending on.)

There are some synthesizer apps that do not “advertise” as being available, even when they are on. One example is GarageBand. In situations like this, a MIDI bridge app can sometimes help. I use FreEWI (a free app from Audeonic Apps) as a bridge. When I open

FreEWI and just leave it running in the background, ChordMaps2 sees FreEWI in the list of MIDI Destinations. After touching the name “FreEWI”, a blue checkmark appears to the right. Then GarageBand will respond to notes played by ChordMaps2.

(Important Note: this also means if a synth app doesn't show in the MIDI Destinations list, I can open it on a track in GarageBand. Then, with FreEWI running in the background, notes played in ChordMaps2 will be relayed to GarageBand and the synth on the selected track will play.)

## **Other Settings**

Display Finger Touches places blue circles on the screen when your fingers touch down. This is useful when demonstrating how to play ChordMaps2.

The Minimum MIDI Note Velocity (default value of 30) can be adjusted. (For example, if the soft edge of the playing areas isn't loud enough, you might adjust this value up to something higher, say 50 or 60.) (Note: the Minimum Note Velocity can range from 1 up to the value of the Maximum Note Velocity.)

The Maximum MIDI Note Velocity (default value of 120) can also be adjusted. (For example, if the loud edge of the playing areas is too strong, you might adjust this value down to 90 or 100.) (Note: the Maximum Note Velocity can range from the value of the Minimum Note Velocity up to 120.)

## **Using ChordMaps2 with a Digital Audio Workstation (DAW)**

One of the advanced things you can do with ChordMaps2 is use it as a MIDI controller with your computer DAW.

Many musicians have a setup where a keyboard is used as a controller to send MIDI to the computer. The keyboards range in size, and sometimes include pads, sliders, or knobs.

You can use an iPad running ChordMaps2 as a controller. If you are using Logic Pro X or GarageBand on a Mac, here's how to set it up.

1 - Using the charging cable, connect the iPad to the Mac.

(I got a popup saying I needed to update, but I chose Not Now, and continued with the setup below.)

2 - In Applications, look for the Utilities folder, then open Audio MIDI Setup.

- 3 - When Audio MIDI Setup opens, under Window in the top menu look for Audio Devices (or Show Audio Devices.)
- 4 - When the Audio Devices window opens, find your iPad listed in the left column. If you see a button underneath the iPad name saying “Enable,” click on it. (You may see a popup asking if you want to use the iPad as an audio source. In the future, you may want to try that, but for now you can choose “Don’t Use.”)
- 5 - Next go back to Window. This time click on MIDI Studio (or Show MIDI Studio.) When it opens, you should see a highlighted symbol with the word iPad. If you see the highlighted symbol, you’re all set.
- 6 - Next open Logic Pro X or GarageBand. Create a track with an instrument. A piano or EPiano might be a good first choice.
- 7 - Open ChordMaps2. In the info view, find MIDI Destinations and click on IDAM MIDI Host. A blue checkmark should appear. Then touch “Done.”
- 8 - Choose a map in ChordMaps2 and play some of the locations. You should hear the sound coming from Logic Pro X or GarageBand.
- 9 - Now you can record tracks just like you would with any MIDI controller.

Note: It sounds complicated when written like this, but it’s fairly easy. Mainly you look for the Audio MIDI Setup app, and find the place where you Enable the iPad. When you do that, you’ll find you can play melody lines, bass lines, and chord progressions into Logic Pro X or GarageBand using the iPad as a controller.

## **Have Fun with ChordMaps2**