

# PowerPlay5

Play Power Chords by Aiming the iPhone All Around You in Different Directions!

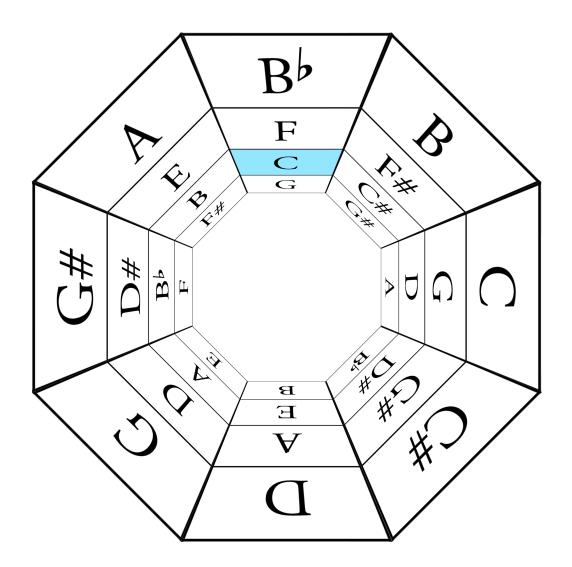
# **Quick Setup**

1 - Open a synthesizer app. Select a sound. (Tap a couple notes to test the sound.)

2 - In the synthesizer app settings, turn on "Background Audio."

3 - Open PowerPlay5. Hold the iPhone flat and touch "Set Zero." Then tap the yellow and orange play area. The C chord will play. (If no sound plays, see "Setting It Up" on page 2.)

4 - The diagram below shows what chord will play when aiming the top edge of the iPhone in different directions. (More about this picture on the next page.)



5 - The diagram represents an octagonal room. This view is from above, but when you are playing PowerPlay5 it's as though you are standing in this room. When you hold the iPhone flat with the screen facing up, touch the "Set Zero" button, and tap the playing area, you will hear the C chord (the location with the blue background). This is the "Home Chord."

6 - When you aim the iPhone lower, down toward the floor, you will hear the G chord shown below the C chord. When you aim the iPhone higher up the wall you will hear F.

7 - The 32 chord locations are arranged like the 4 strings of a bass guitar (EADG), or like strings 6, 5, 4, and 3 of an electric or acoustic guitar.

Spread out from left to right, it would look like this:

G	G#	А	Bb	В	С	C#	D
D	D#	Е	F	F#	G	G#	Α
А	Bb	В	С	C#	D	D#	Е
						Bb	

7 - Have fun while playing chords and progressions, but remember to hold on to the phone. You will be moving the phone around in midair—hold it securely in your hand.

# A More Complete Explanation

# An Important Concept to Understand

PowerPlay5 is a "midi controller" app for iPhone. It's important to understand that a midi controller <u>doesn't make any sound on its own</u>. Instead, it tells a synthesizer app which notes to play. The synth app then creates the sound.

There are many choices for synthesizer apps. I like ThumbJam. Also, King of FM is cool, and it's free. There are many others. (On page 6, I've listed a few of them and how to set them up.)

# Setting It Up

The usual setup process is:

1 - Open the synth app first. Choose a sound (responding on midi channel 1). Make sure "Background Audio" is turned on. (This is usually found somewhere in the synth app's settings.)

2 - Next open PowerPlay5. This establishes the midi connection. (If the synth is opened after PowerPlay5 is already running, touch "Off" on the PowerPlay5 screen to open new midi connections.)

Note: some apps (GarageBand is one example) will not make the necessary MIDI connection. However, they can still be used if you have a "MIDI bridge app" open and running in the background. I use the free app FreEWI for this purpose. I open GarageBand, then FreEWI, then PowerPlay5.

#### The Set Zero Button

The "Set Zero" button determines what direction you will aim the phone to play the I chord (the C chord if you are playing in the key of C).

Touch the Set Zero button while holding the iPhone flat, parallel to the floor, with the screen facing straight up, and the top edge of the phone toward the audience, or camera, or wherever you are facing.

Important: If you switch apps (for example, to change the synth app settings), when you return to PowerPlay5 you will have to touch the Set Zero button to reset and restart.

# Playing Instructions

1 - Hold the iPhone firmly in your hand, with your thumb just above the screen. Chords are played by touching the screen with your thumb. Touching higher on the screen is louder—lower is softer.

2 - PowerPlay5 plays power chords (root, fifth, octave). Where you aim the top edge of the iPhone determines which chord is played.

3 - As mentioned before, hold the phone parallel to the floor with the screen facing up and the top edge toward the audience. Touch "Set Zero." Then tap the "play area" with your thumb. This plays the I chord (the C chord when you are playing in the key of C).

4 - Still holding the iPhone flat, tap the play area while turning to the right or left. The chord goes up by half steps as you turn to the right, or down by half steps as you turn to the left. It's similar to playing power chords on a guitar. The eight power chords (while holding the iPhone flat) are:

A Bb B C C# D D# E

Turning to the right...

- C when you are facing the audience
- C# when you have turned 45 degrees to the right
- D when you have turned 90 degrees to the right
- D# when you have turned 135 degrees to the right
- E when you have turned 180 degrees, facing away from the audience

Turning to the left...

- when you are facing the audience
- B when you have turned 45 degrees to the left
- Bb when you have turned 90 degrees to the left
- A when you have turned 135 degrees to the left

5 - Until now, we've held the iPhone parallel to the floor. If you aim it a little bit upward, everything goes up a fourth. Aim higher and everything goes up another fourth. If you hold it flat again, and then aim the iPhone down toward the floor in front of you, the chords you played at first will play down a fourth. (This is similar to playing the four lowest strings on a guitar, or the strings on a bass guitar.)

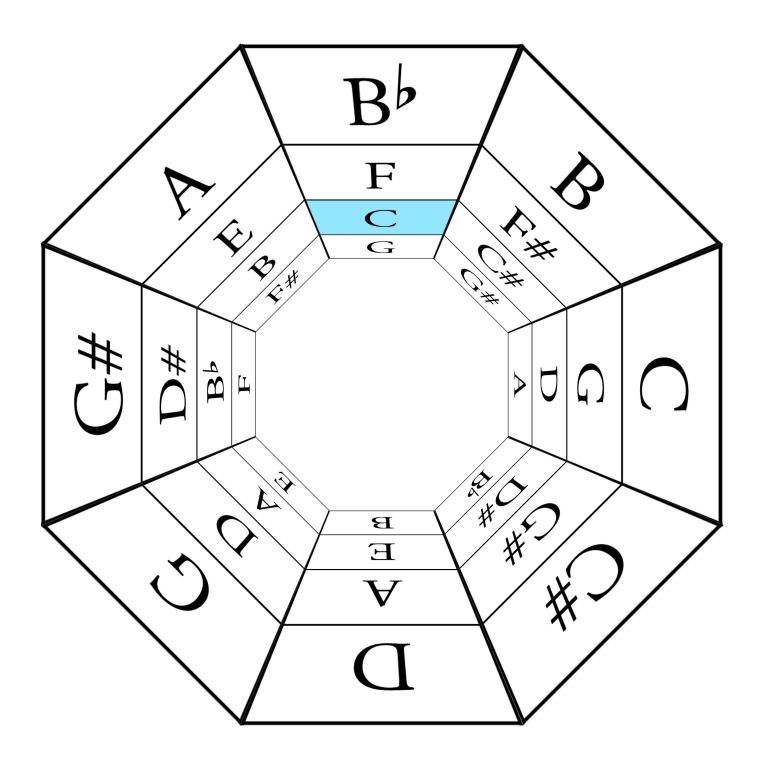
G	G#	А	Bb	В	С	C#	D
D	D#	Е	F	F#	G	G#	А
Α	Bb	В	С	C#	D	D#	Е
Е	F	F#	G	G#	А	Bb	В

If you wrap this chart around you, as though you were standing inside an octagonal room with 32 "windows," it would look like the diagram we saw before. Here it is again. (next page)

Notice the blue "window" labeled C. This is the chord that plays when you are facing the audience while holding the iPhone flat.

Notice also that if you continue facing the audience, and then aim the iPhone a little lower, you will play the G chord. Or, if you aim the iPhone a little higher, you will play the F chord.

It takes a little experimenting to learn where the chords are, but, after you get used to it, it's fun to play.



# The Buttons on the Screen

#### Hold - Off - Info

Hold - Sustains the chord until the next chord is played. Off - Sends midi All Off command. (Also opens midi connection to recently opened synth apps.) Info - Set midi channels, view Instructions.

# Degrees - Minus - C - Plus

Degrees - Displays the phone direction relative to the Set Zero point. Minus - Key down a half step. C - Displays the current key. Plus - Key up a half step.

# B - C1 - C2 - M

B - Enables sending the Bass note on the Bass midi channel.

C1 - Enables sending chord notes on the C1 Chords midi channel.

C2 - Enables sending chord notes on the C2 Chords midi channel.

M - Enables sending the Melody note on the Melody midi channel.

## 0 - 0 - 0 - 0

Scrolls through the octave options for B - C1 - C2 - M. The options are multiples of 12. (For example, 24 means up two octaves.)

#### **Chord Names Displayed**

Chord names are displayed at the upper and lower corners of the play area. The upper corners show the chord just played. The lower corners show the chord which will play if the screen is touched while aimed in the current direction.

# The Buttons on the Info Screen

#### Midi Channels

Choose midi channels for the Bass note, Chord1, Chord2, and Melody note. (Range is from 1 to 16.)

#### **SpinWheels**

Enables the spinning wheels effect on the screen.

#### LR - Volume

Enables sending midi volume commands when the touch is moved from left to right across the screen.

#### Tilt - ModWheel

Enables sending mod wheel information when the iPhone is tilted either to the left or right.

#### Website

This document is found at the website: MugglinWorks.com/PowerPlay5

# **Two More Things**

- 1 Important: When playing, hold the iPhone securely.
- 2 When finished playing, turn off both PowerPlay5 and the synth app (and FreEWI if it's open).

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# **Setup Instructions for Specific Synthesizer Apps**

#### ThumbJam

1 - Open ThumbJam. Select a Sound. (I like using Trombone.)

2 - In ThumbJam, touch "Prefs," then "Options." Make sure "Background Audio" is on. Touch "Done."

3 - Open PowerPlay5. Hold the iPhone flat, parallel to the ground, and touch "Set Zero." This establishes the direction for the I chord—the blue box in the octagonal room diagram.

## GarageBand

1 - Open FreEWI and leave it running in the background. (FreEWI is a free MIDI bridge app by Audeonic Apps.)

2 - Open GarageBand. Select a Sound (for example, Alchemy Synth > Pads > Epic Cloud Formation).
3 - In GarageBand, touch Settings (the gear icon at the top right). Scroll down and touch "Advanced." Make sure "Run in Background" is on. Touch the gear icon again to return to the main screen.
4 - Open PowerPlay5. Hold the iPhone flat, parallel to the ground, and touch "Set Zero." This establishes the direction for the I chord—the blue box in the octagonal room diagram.

# Pure Piano

1 - Open FreEWI and leave it running in the background. (FreEWI is a free MIDI bridge app by Audeonic Apps.)

2 - Open Pure Piano. (You can use the default Piano sound.)

3 - In Pure Piano, touch Settings (the gear icon). Make sure "Run App in Background" is on.

4 - While in Settings also touch "MIDI Inputs." The FreEWI option should already be on.

5 - Return to Settings and then touch the "X" at the top right to return to the main screen.

6 - Open PowerPlay5. Hold the iPhone flat, parallel to the ground, and touch "Set Zero." This

establishes the direction for the I chord-the blue box in the octagonal room diagram.

# King of FM

King of FM is a free synthesizer app.

1 - Open FreEWI and leave it running in the background. (FreEWI is a free MIDI bridge app by Audeonic Apps.)

2 - Open King of FM. Select a sound. (You can use the default sound called DX E Piano 1.)

3 - In King of FM, touch "Settings." Make sure "Background Audio" is on. Then touch "Done."4 - Open PowerPlay5. Hold the iPhone flat, parallel to the ground, and touch "Set Zero." This

establishes the direction for the I chord-the blue box in the octagonal room diagram.

#### There are other synth apps.

Many synth apps are available. The basic setup pattern is the same.

1 - Usually you will open the synth app first, select a sound, and check the settings to make sure the app will run in the background.

2 - Some synth apps will require a MIDI bridge. I use FreEWI to make the connection. I open FreEWI and leave it on in the background.

3 - Open PowerPlay5 (or, if PowerPlay5 is already open, touch "Off" – this establishes the MIDI connection.)

# Have Fun Playing PowerPlay5!