

GT160

Harmony Guitars

Got too many guitarists in your band? Trying to re-create the sound of Queen, Iron Maiden, Steve Vai and many others? This month Dario Cortese will take you for a journey through the world of harmonized guitars!

“Have you been fighting with the other guitarist in your band to decide who’s gonna take the solo? Have you just composed a new song and you’re looking for a way to make your melody more ‘spicy’? Well, here’s the solution for you: harmonizing!” I know that the above sentence seem to be one of those slogans that people shout through a TV screen trying to sell some new product that will change the way we live but in this case this happens to be the truth.

Who hasn’t been, at least one, intrigued by the sound of ‘Hotel California’ by Eagles? Or by most of Iron Maiden’s songs? And what about Steve Vai or Cacophony or Queen? Well, they all used extensively harmonized guitars!

Okay, but what exactly means harmonized guitars? Firstly harmonized guitars use very similar rules and concepts as backing vocals, choirs, horn sections and orchestras. Generally speaking harmonizing means that a melody which usually is constructed by single notes or double stops, is doubled by one or more melody lines that are higher or lower in pitch in order to create a harmony. Each melody line is called ‘voice’. This concept didn’t come out from modern music or jazz but from classical music. To explain how this works let’s work in the key of C and see how we can harmonize a given melody.

Diatonic Harmony

This is the first and most used harmonization system. Diatonic harmony uses only scale tones, resulting in maj, min, perfect, aug or dim intervals in accordance with the scale’s step formula. To understand this further let’s have a look at it on paper. Fig 1 shows the C major scale which we’ll treat as main melody that we want to harmonized.



Figures 2-5 show our melody harmonized in 3rds (higher or lower), 4ths and 5ths. Of course this can be carried on to 6ths, 7ths, 8ths, 12ths, etc.



Parallel Harmony

Parallel harmony builds the same interval from each scale degree, regardless of the note's absence or presence in the scale. Fig 6 shows parallel min 6ths (each interval is 8 semitones apart).



Chordal Harmony

When the melody line is built from an arpeggio, the harmonized melody is often obtained from a different inversion of the same arpeggio as shown in Fig 7.



At this stage you may have noticed that the two voices always go in the same direction. This is of course not the only possible way. There are four different harmonic motions that can be used to harmonize two or more guitar parts (Fig 8-11):

Similar Motion: the voices move in the same direction using diatonic harmony



Parallel Motion: the voices move in the same direction using parallel harmony

Fig 9: Similar Motion - Parallel 6ths



Oblique Motion: one voice moves whereas the other stands still

Fig 10: Oblique Motion



Contrary Motion: the voices move in opposite directions

Fig 11: Contrary Motion



This should give you enough information to create your own harmonized guitar parts. My suggestion is to start just by studying famous harmonized guitar parts/solos. Once you've learnt a few, try to harmonize a melody starting with something very simple at first and moving onto something harder only when a good degree of confidence is gained. Experiment and don't be scared to try unusual solutions, you might miss some awesome stuff. Enjoy!

Ex 1 - Steve Vai/Shred Style: This example is in the style of Steve Vai's *Passion & Warfare* and it features 3 harmonized guitars, with gtr 2 a diatonic 3rd lower, and gtr 3 a diatonic 5th lower than the lead. The main technique used is the picking hand tapping with one finger only and although the speed may be an issue to some the main problem seems to be the rhythm of the phrase.

In fact bars 2 and 3 feature a 4 note pattern within a sextuplet which results in a polyrhythm that is more complicated than it looks. Practice this example slowly for a few days and speed it up slowly over a period of time keeping an eye on the clarity of the rhythm figures.

♩ = 100 E5

Gtr 1

T
A
B

Gtr 2

T
A
B

Gtr 3

T
A
B

2

Gtr 1

T
A
B

Gtr 2

T
A
B

Gtr 3

T
A
B

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Gtr 1

Gtr 2

Gtr 3

Gtr 4

Gtr 5

Gtr 6

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Ex 2 - Hellecasters/Country Style: This example is in the style of country all-star band The Hellecasters and although they use mainly three guitar parts I decided to stick to two only because this concept can be easily applied in most bands. It's a two guitar part with gtr 2 a diatonic 3rd higher than the lead.

The main technique here is hybrid picking, in fact to get that staccato sound of the recording I used strictly pick-finger-pick-finger digging in hard with the fingers instead of the more common alternate picking. In bar 5 both guitars play an artificial harmonic.

After you play the 9th fret with the fretting hand you just slightly touch the string 12 frets above (21st fret) with the picking hand. This should result in a harmonic. The example is built around a short blues chord progression in A.

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♩ = 120

A

Gtr 1

lx only

Gtr 2

lx only

3

D

A

Gtr 1

Gtr 2

5

B7

E7

A

E

A

Gtr 1

Gtr 2

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Ex 3 - Stevie Wonder/Funk Style: This example features 8 guitars in total, 2 rhythm and 6 leads. The two rhythms are played using the slap technique and are harmonized a 5th apart from each other. They also have a touch of phaser. S=Slap, P=Pop, m=mute (just hit the strings with the picking hand producing a dead sound) - see GT144 for more details.

The lead guitars are arranged a little bit like a 3 parts horn section with three different lines that interact with each other. When the main groove comes in each guitar is harmonized with an additional guitar a diatonic 4th lower than the reference lead. The boxed numbers represent the order the guitars appear on the GT track.

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♩ = 104 Em⁷

Gtr 1

TAB

0 7 x 5 x x 7 5 x x 5 7 0 7 x 5 x x 7 4 5

s p m p m s p p m s p s p m p m s p p p

Gtr 2

TAB

9 7 x x x 9 7 x x 7 9 9 7 x x x 9 4 5

s p m p m s p p m s p s p m p m s p p p

Gtr 3

TAB

12 11 11 12

Gtr 4

TAB

7 6 5 7

Gtr 5

TAB

9 7 7 9 8

Gtr 6

TAB

4 2 2 4 3

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3

Gtr 1

TAB

Gtr 2

TAB

Gtr 3

TAB

4

Gtr 1

TAB

Gtr 2

TAB

Gtr 3

TAB

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TECHNIQUE FOCUS

If you don't have recording facilities or another guitarist to split the parts with, why don't you check out a few toys that will help you achieving the desired result?

With the Digitech Whammy Pedal, Boss Super Shifter PS-5 or the amazing Eventide you can add at least one voice and get a two-part harmony. You can also try any loop station that can be used to record as many harmonized guitars as you want!

TONE SETTINGS

When recording harmonized guitars remember not to use too much processing effects as chorus, flanger, phaser, delay and reverb. If you do so the result will be muddy and unclear. It's better to go for a quite dry signal at first, either clean or overdriven, and eventually add effects later.

Also, experiment with the pan (position in the stereo image) of each guitar. You can get completely different results just by changing the virtual position of a guitar!

Just for the record: I've used the Ernie Ball Music Man Luke through the POD XT on all of the examples.

RECOMMENDED LISTENING

There are many artists and bands you might want to check out.

In rock you need to listen to Queen (Killer Queen), Iron Maiden (Twilight Zone), Thin Lizzy (The Boys Are Back In Town).

Shred guitar is full of this, especially Steve Vai (Erotic Nightmares), Racer X (Viking Kong) and Cacophony (The tech-freak's wet dream).

In country listen to The Eagles (Hotel California), The Hellecasters (Inspector Gadget) and even Doc Watson (Blue Mountain Rag)!