



- Transposing *made easy*
- Scales - *major, minor, blues, pentatonic*
- Modes - *use all seven*
- Chords - *in any key*

## HOW TO USE YOUR MASTERKEY

### TRANSPOSING with MasterKey

Can you transpose from C to F, or D to A $\flat$ , or E $\flat$  to A ? Instantly, with no mistakes ?  
If you're an expert, you probably can. If not, help is in your hands!

Your **MasterKey** is a quick, easy and accurate way to transpose notes or chords between any two keys.

Use the small slide ('OLD KEY') and the fixed scale ('NEW KEY').

Example: to transpose from the key of D to F :

Align 'D' on the ' OLD KEY ' sliding scale with 'F' on the ' NEW KEY ' fixed scale. Your notes in the key of D, for example D, A, G, E, D (on the ' OLD KEY ' slide) appear opposite F, C, B $\flat$ , G, F on the ' NEW KEY ' scale.

*The transposition is done! That's all there is to it!*

Another example: A $\flat$  to E $\flat$  :

Align A $\flat$  on the 'OLD KEY' slide with E $\flat$  on the 'NEW KEY' scale.  
Notes in A $\flat$  appear opposite their equivalents in E $\flat$ .

If you play guitar or keyboard using named chords,  
e.g. C, D minor, F7, G7 , B diminished, etc.,  
**MasterKey** transposes these too!

Just treat the chord names as though they were plain notes, ignoring the '7', 'diminished', 'minor' etc.

Do your transposition with **MasterKey**, then replace the '7' etc on the new notes.

Example: you have a chord sequence E, B7, A, G sharp minor - in the key of E, which you need to transpose into C:  
Align 'E' on the ' OLD KEY ' slide with 'C' on the 'NEW KEY' scale.  
You now play C, G7, F, E minor .

*No matter how awkward your key-change appears to be,  
**MasterKey**<sup>®</sup> shows you how to do it!*

### SCALES and MODES with MasterKey

- Do you know the exact notes of the scales of E major, F# minor, B $\flat$  major ? Or A $\flat$  harmonic minor ? Or D# melodic minor, *ascending and descending* ?
- Do Blues and Pentatonic scales mystify you?
- Do you want to explore the magic of Modes?

**MasterKey** shows you exactly how major, minor, pentatonic and blues scales are made up in any key you need. All seven Modes are demonstrated, too.

## SCALES

For Major and Minor scales, use **MasterKey**'s side ① ...

Use the large slide and the fixed 'NEW KEY' scale.

Note that **MasterKey** spans two full octaves, so there are three 'Tonic' marks. Depending on the function, we will be using either the **left-hand Tonic mark** or the **mid-way Tonic mark** as a starting point.

Example: to find the A major scale :

Moving the large slide *to the left*, align the **mid-way Tonic mark** with 'A' on the 'NEW KEY' scale.

The **◆ diamond symbols** on the **MAJOR** row now show the **major scale** :

A, B, C#, D, E, F#, G#, A. *Couldn't be easier!*

With **MasterKey** still in this setting, use the symbols on the **Harmonic Minor** row to find the scale of A **harmonic minor** :

A, B, C, D, E, F, G#, A.

Use the > and < **symbols** for the **Melodic Minor** scale. Notice that the melodic minor scale is on two rows: it changes depending on whether it is ascending or descending. The arrows show which notes you use. So, the A melodic minor scale going *up* is A, B, C, D, E, F#, G#, A, and going *down* A,G,F,E,D,C,B.A.

Note that some positions on **MasterKey** show two notes - a sharp (#) and a flat (b). These pairs of notes - known as 'enharmonic equivalents' - are played at the same position on the guitar, piano, etc., and can be thought of as the same note. Whether you use the sharp or the flat depends on the key involved. E.g. the key of A major has sharps, not flats. (Please refer to the handy Key Signatures chart at the end of these instructions.)

Another example: the key of F :

Align the **mid-way Tonic mark** with 'F' on the 'NEW KEY' scale. The top row of symbols shows the scale of F major: F, G, A, Bb, C, D, E, F, and the other rows of symbols show the minor scales, as in the last example .

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### Relative Minors:

For every Major Scale there is a 'Relative' Minor Scale. This is the Natural Minor Scale which uses the same notes as its Relative Major Scale. For example, C Major and A (natural) Minor both use the same notes.

C Major: C,D,E,F,G,A,B,C.

A (natural) Minor: A,B,C,D,E,F,G,A.

Your **MasterKey** quickly and easily shows you your Relative Minors. Find the small triangle marked 'RM' at the extreme right-hand end of the 'OLD KEY' slide, and align it with the other triangle at the note 'C' at the end of the 'NEW KEY' scale.

All the Relative Minors can now be found on the 'NEW KEY' scale beside their Relative Majors on the 'OLD KEY' slide. (You will see C [Major] aligned with its Relative Minor, A.)

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For Pentatonic and Blues scales, use side ② of your **MasterKey** ...

Example: to find the C Major Pentatonic scale :

Align the **left-hand Tonic mark** with 'C' on the 'NEW KEY' scale. (These will automatically be aligned when your **MasterKey** is in its 'closed' position.)

On the **Major Pentatonic** row, you will see from the diamond symbols that the Major Pentatonic scale of C is C,D,E,G,A,[C].

Looking along to the right, and starting from the **mid-way Tonic mark**, the next symbols show the **Minor Pentatonic** scale: C,Eb,F,G,Bb,[C].

Our final scale is the Blues scale. Starting from the **mid-way Tonic mark**, and with 'C' still aligned, the symbols on the Blues scale row show that C,Eb,F,Gb,G,Bb,C make up the Blues scale in C.

Try another one: align the **mid-way Tonic mark** with 'F'. The Blues scale in F is F,Ab,Bb,B,C,Eb,F.

*Using **MasterKey** to find scales, you will soon notice that each type of scale follows a fixed pattern, regardless of which key is involved.*

*You will begin to see the 'shape' of each scale in your mind's eye, and **MasterKey** will be doing its job.*

## MODES

MODES are closely related to scales.

An easy way to see this, and to experiment with the sounds of the seven modes, is to use the notes of C major, C,D,E,F,G,A,B,C,etc. - the white notes on a keyboard - and play octaves from different starting points.

Each Mode has its distinct 'pattern'. The spacing of notes in the **Ionian** Mode, for example, is the same as the pattern of the Major Scale. In this case, play from C to C, and the octave will sound very familiar.

Play an octave from D to D, and the result is '**D Dorian**' - the Dorian mode starting on D.

*Remember that for now we are only using the notes from the C major scale - no sharps or flats.*

Just as the **Dorian** Mode uses the second note of a major scale as its starting point, so the **Phrygian** Mode uses the third note, the **Lydian** Mode the fourth, the **Mixolydian** Mode the fifth, the **Aeolian** Mode the sixth, and the **Locrian** Mode the seventh.

If we continue to use the C major scale for our notes, we can see from the diagram below that the Ionian Mode starts at C - and is called 'C Ionian', the Dorian Mode starts at D - and is the 'D Dorian', and so on, up to 'B Locrian', which starts at B (the seventh note of the C major scale).



'C Ionian'	<b>C D E F G A B C</b> D E F G A B C
'D Dorian'	C <b>D E F G A B C</b> D E F G A B C
'E Phrygian'	C D <b>E F G A B C</b> D E F G A B C
'F Lydian'	C D E <b>F G A B C</b> D E F G A B C
'G Mixolydian'	C D E F <b>G A B C</b> D E F G A B C
'A Aeolian'	C D E F G <b>A B C</b> D E F G A B C
'B Locrian'	C D E F G A <b>B C</b> D E F G A B C
	1 2 3 4 5 6 7 1 2 3 4 5 6 7 1


Try playing each series, and you will hear that each mode has its own distinctive character.


Note that the above examples are all based on the C major scale.

The seven modes always follow the same 'pattern', but they can be based on any major scale.

For example, '**C Dorian**' uses the notes of the major scale in which **C** is the second note.

Use your **MasterKey**'s  side to check your Major scales: slide the large slide to the left until 'C' on the New Key fixed scale is aligned with the  in the 'ii' column. You will see that the Tonic is B $\flat$ . So, 'C Dorian' uses the notes of the scale of B $\flat$  major: B $\flat$ ,C,D,E $\flat$ ,F,G,A,B $\flat$ ,C etc., starting with the 'C'.

The Modes section on **MasterKey**'s side  shows you the 'patterns' of all seven Modes, and gives you a quick way of finding the exact notes of any Mode.

Double-check the 'C Dorian' you have just experimented with: align the **left-hand Tonic mark**\* with 'C' on the 'NEW KEY' scale, and read off the notes of 'C Dorian' as shown by the  symbols: C,D,E $\flat$ ,F,G,A,B $\flat$ ,C.

*\* Note: Modes use particular sections of related Scales, but they are not scales themselves, and do not have a 'Tonic' as such. However, we use the Tonic column on **MasterKey** as a convenient starting point for the series of notes that each Mode contains.*

Try our original '**D Dorian**'. Move the slide so that the **left-hand Tonic mark** is aligned with 'D', and you will see our easy 'white notes': D,E,F,G,A,B,C,D.

*You will notice that the first four Modes - Ionian, Dorian, Phrygian and Lydian - are grouped together at the left end of the slide. To work with these Modes, use the **left-hand Tonic mark** and move the slide to the **right**. The other three Modes - Mixolydian, Aeolian and Locrian - are at the right end of the slide. For these Modes, use the **mid-way Tonic mark**, and move the slide to the **left**.*

*Using your **MasterKey**, you will be able to work in any mode you choose.*

## CHORDS with MasterKey

CHORDS: **MasterKey** shows you how to form seven of the most-used chords: Major and Minor, Major 7th, Minor 7th, Dominant 7th (usually simply called '7th'), Diminished and Augmented.

Note that **MasterKey** spans two full octaves, so there are three Tonic marks. The five chords all start at the **left-hand Tonic mark**, on side ① of your **MasterKey**.

Making your chord: Move the bottom slide to align the left-hand Tonic mark with the chord's name-note on the 'NEW KEY' scale. The notes of each chord-type will appear above the symbols on the appropriate row.

Note that on the '**MAJOR**' row, there are three ● symbols and one ⑦ symbol. The three ● symbols show the notes of the straight Major chord, and the ⑦ symbol gives the extra note that makes the Major chord a Major 7<sup>th</sup>.

In the same way, the ⑦ symbols on the '**Minor**' and '**dim(o)**' rows show notes that should be played to form a Minor 7<sup>th</sup>, or a Diminished 7<sup>th</sup>. Playing just the ● symbols will produce a straight Minor chord, or a normal Diminished chord.

Examples:

'C' chord: align the **left-hand Tonic mark** with C on the 'NEW KEY' scale. The notes above the ● symbols on the '**MAJOR**' row - C,E,G - are the basic notes of the C (major) chord.

'Cmaj7' chord: use the same alignment as above, and read the symbols from the same row, but this time add the ⑦ - C,E,G,B.

'C Minor' chord: use the symbols on the '**Minor**' row: C,E<sub>b</sub>,G. For 'Cmin7', add the note above the ⑦: C,E<sub>b</sub>,G,B<sub>b</sub>.

For a 'G7' chord, align the (left-hand) Tonic column with 'G' on the 'NEW KEY' scale. The ● symbols on the '**(dom)7th**' row now appear beneath G, B, D and F. Those notes form the chord of G7.

'G min7': follow up from the ● and ⑦ symbols on the 'minor /7' row to see that a G minor 7<sup>th</sup> chord consists of G, B<sub>b</sub>, D and F.

'E<sub>b</sub> diminished': align the Tonic with E<sub>b</sub>, and look along the '**dim(o)**' row. The notes of the chord are shown above the ● symbols: E<sub>b</sub>, G<sub>b</sub>, A. Add the C above the ⑦ to make this an 'E<sub>b</sub> dim7' chord. 'Diminished seventh' chords have a double-flatted seventh. The seventh of E<sub>b</sub> is D, which, double-flatted, is D<sub>bb</sub>.

( N.B. Strictly speaking, an 'E<sub>b</sub> dim7' chord does not contain the note C: it contains a D<sub>bb</sub> ("D double-flat"). However, in order to keep MasterKey less cluttered and more readable, the symbols for double-flat and double-sharp have been omitted. Therefore, although in a 'dim7' chord, for example, a double-flat may be the correct terminology, MasterKey shows the *enharmonic equivalent* - in this case, C is shown instead of D<sub>bb</sub>. )

The '**aug(+)**' row: the notes of an 'F augmented' chord are shown above the ● symbols: F, A, C#.

**The effective use of chords is what gives music its colour, its mood and its character.**

**The rewards are great - let MasterKey get you started!**

**MasterKey**® is not just a handy calculator -it is a valuable learning aid that gives you the answers and shows you how it's done.

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