

A few years ago Hugh Wallington, a Yamaha Club member and dedicated AR enthusiast, formed a 'club within a club' when he set up an Internet based resource especially for AR owners. Now, with a wealth of material to draw on, Hugh opens the door to his AR-Group and invites us inside to browse amongst the treasures on offer...

Starting from Scratch with the Yamaha AR Organ - by Peter Anderson (edited by Glyn Madden)

10: Melody On Chord (M.O.C.)

The Melody-on-Chord (M.O.C.) feature automatically adds a harmony part to melodies played on the upper keyboard. This harmony is derived from the chords that are played on the lower keyboard or from the chords indicated when using Auto Bass Chord.

History

When a group of player/enthusiasts get together in 'anorak world' to recall the 'good old days' it's quite likely that at some point in the conversation reference will be made to one or two of the early technological advances that literally changed the world (in keyboard terms at least) and continue to shape its future.

One of these is, of course, the 'Leslie' speaker - and debates continue to this day about how the latest electronic simulation compares with the original *real deal*. Another is A.O.C. (The Automatic Organ Computer) which has evolved into Melody-On-Chord / Harmony / TechniChord (and a whole raft of other names depending on the manufacturer).

The keyboard/organ industry has many things to thank Yamaha for but the company can't lay claim to this one because way back in 1962 the Lowrey Organ Company introduced the Automatic Organ Computer on an early electronic organ - and a new sound was born.

A.O.C. was described as "the greatest single advancement in electronic organs". It was certainly of great benefit to the sales people of the day because the home player market was expanding rapidly and ease of playing was the key. The Lowrey organ was seen as the 'easiest' of all because, with A.O.C., a novice player could produce big right-hand chords - just like a

pro! For many years the Automatic Organ Computer remained a Lowrey exclusive and it was the envy of every other manufacturer. In the early 1980s though the patent was released - and real development began to take place as each manufacturer copied, and refined, the system for its own product. You only have to look at the list of 'Harmony' options (fig.1) available on the latest Yamaha keyboards to realise just how far we've come.

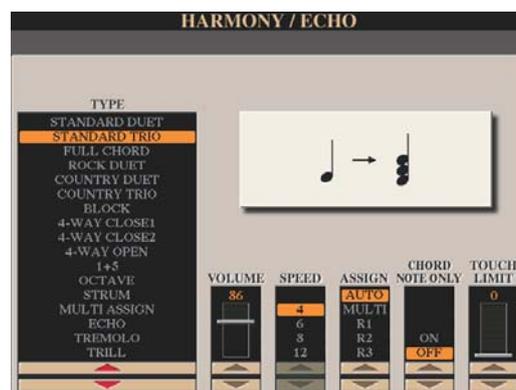
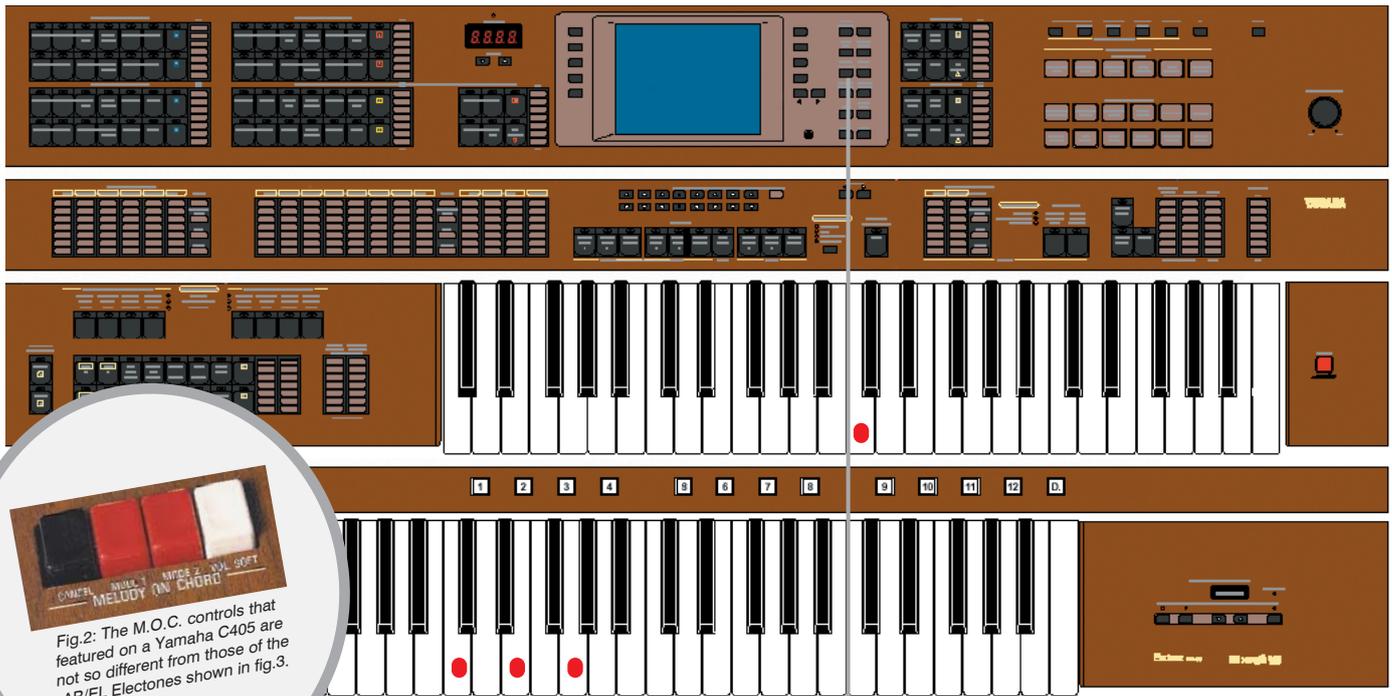


Fig. 1: The list of sophisticated 'Harmony' options featured on today's Yamaha keyboards and Clavinovas.

Yamaha's original version was the M.O.C. (Melody-on-Chord) which essentially took the Lowrey idea and improved it slightly with a couple of extra variations. And this was how it stayed for several years. Several generations of Yamaha organs followed the same format - and these included both the EL and AR series Electones.

If you compare the M.O.C. section of the AR100/80 organs with that of an early '80s C405 Electone model you won't fail to spot the similarities between the controls. (Fig.2 / Fig.3)



1: Play the notes marked red on the upper and lower keyboards.

2: Melody-on-Chord

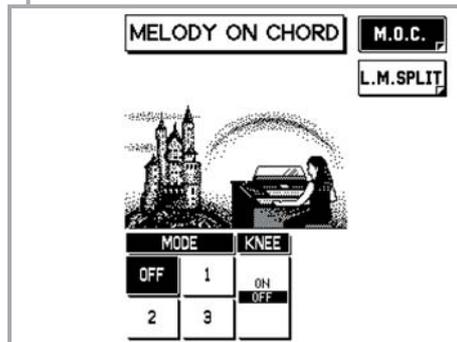
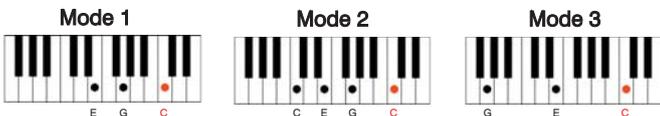


Fig.3

Fig.4: This is how the added notes are arranged on the upper keyboard for each mode - based on the C major chord / C melody note illustrated above



How does M.O.C. work?

To activate the Melody-on-Chord feature press the button to the right of the screen (2) marked [M.O.C./SPLIT].

When you play a chord on the lower keyboard the notes of that chord are added to any single note you play on the upper keyboard - giving the impression that you're playing a full chord with your right hand as well as your left.

Three different 'modes' (fig.2) cause the chord notes from the lower keyboard to be added to the melody note in different harmony formations - 'standard trio', 'block', 'open'.

Using a C major chord as an example, play the C note indicated above on the upper keyboard - whilst you hold the three notes of the C major chord (i.e. C, E, and G) on the lower. (1)

Mode 1: As you play the 'C' on the upper keyboard you will hear the notes of the C major chord arranged as in the 'Mode' illustration above (fig.4). The melody note (i.e. the note you are actually playing) always sits at the top of the group.

Mode 2: Mode 2 differs from mode 1 in that three notes are added to the melody to give a full block chord.

Mode 3: In mode 3 you can see that the same three notes are spread more widely across the keyboard. This produces the 'open harmony' effect beloved of theatre organ stylists. Beware of playing your melody too far down the keyboard though as the depth of the lower note in the harmony can make the overall sound very stodgy if you're not careful.

Note: M.O.C. does not work on voices from the LEAD section because these voices are 'monophonic' (i.e. they only play one note at a time).

You may occasionally feel that using Melody-on-Chord throughout a piece becomes a bit monotonous - in which case the knee lever can be used to control whether the feature is active or not.

Note: Even if the [KNEE] option is switched on in the screen (fig.2) the Melody-on-Chord will remain active if the actual lever is folded up under the keyboard. It's surprising how many EL and AR users overlook this feature but it can be used to give refined control over several different features.