

The Three Row Diatonic Melodeon A Comprehensive Guide

Part 4 – How Does It Work?

Think of it like a stereo system with the bass (left hand) coming out of one speaker (left hand side of the instrument) and the treble (right hand) coming out of the other (right hand side of the instrument). The bellows in between acts as your volume control knob! *Of course, this is just an analogy – you don't really have speakers or a volume control!!*

The bellows

Think of the bellows as your lungs when you are singing. Pulling or pushing the bellows by means of applying pressure with your left hand, which is secured to the instrument with a strap, draws air in (pull) or out (push) of the bellows. This cannot (or should not) happen unless either a left or right hand button or the air button (see below) is pressed. The amount of pressure applied to the bellows dictates the volume of the instrument – not how hard you press the note/chord buttons! Once the bellows are fully opened or closed no sound will come from the instrument so forward planning is essential when playing any piece of music. Running out of air is a common fault with most beginners. Of course this is much easier with a unisonoric instrument like the chromatic button accordion or piano accordion as you simply change bellows direction when you run out of air.

The Air Button

Pressing the air button, located on the left hand side, allows air in and out of the bellows to facilitate faster closing or opening. The use of the air button plays a major part in the actual playing and expression i.e. volume of the instrument when combined with the pressing of the buttons and the pressure applied to the bellows with the left hand. You will notice a drop in volume if you operate the air button while

playing the instrument as this significantly reduces compression.

The Buttons

The buttons are attached to levers which, in turn, are attached to small pieces of wood covered in felt called pallets. These pallets cover holes in the soundboard. The reeds (little metal tongues), which are the things that give you the sound, are mounted on blocks behind the internal soundboard. When a button is pressed at the same time as the bellows are pulled or pushed (opened or closed), the pallet lifts thus exposing the hole and air is allowed to flow through the hole and to cause the reed or reeds to vibrate. Think in terms of twanging a ruler on the edge of a desk and you'll have the general idea of how a reed works.

The mass of each reed is different and in this way you have different notes. Longer reeds give deeper notes. Plastic or leather valves allow different reeds to sound on the push and the pull and in this way you get two notes per button.

The left hand buttons work in the same way except obviously in the case of chords, three reeds vibrate at the same time to give you the three different notes that you need. Some more sophisticated instruments allow you to remove the thirds from the chords by way of a switch to give you a "5" chord which is neither major nor minor and thus useful for right hand major and minor runs. The Compadre does not have this feature. Some people tape over the thirds but you need to know your way round the inside of the box to do this.

Right-Hand Voices

The Hohner Compadre is said to be "two-voice" so two "Middle" (M) reeds sound per right-hand button (in each direction). These reeds are tuned slightly apart to give you a fat or "wet"

sound. This can be changed by an experienced melodeon fettler. Don't attempt this yourself! You can get three and four voice instruments where extra "Low" (L) or "High" (H) reeds cause octaves of the same note to sound with each button press, selectable in many combinations by switches.

Don't forget all these extra voices and mechanisms add more weight. The Compadre has no switches so if you don't like the sound I'm afraid you're stuck with it apart from having it tuned "wetter" or "drier" (more or less gap between the pitch of the two reeds). Fortunately for me, I love it.

So, with your hands moving the bellows which in turn sound the reeds, the melodeon, like all the squeezebox family, is a completely acoustic instrument.

Now go to Part 5:-

The Three Row Diatonic Melodeon – The Right Hand