

**Writing for the Organ**  
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**Things you need to know**

The organ is played with hands and feet. There are usually at least two keyboards (manuals) for the hands, often three and sometimes more. There is one keyboard for the feet (pedal board).

The range of organ keyboards (its compass) are shorter than a piano keyboard. For the hands, 61 notes is common (C two octaves below middle C, to C three octaves above middle C), but older organs often have shorter keyboards, of 56 notes C-G, and occasionally 58 notes, C-A.

Modern pedalboards extend from the same low C two octaves below middle C, to G above middle C, 32 notes. Older organs and organs in Europe often have a range of C-F, 30 notes.

There is no sustaining pedal in the organ, so the fingers and feet need to hold down notes that are to be sustained. This means that chords cannot be built up with tones held in the sustaining pedal, as they can be in the piano.

Volume in the organ is not dependent on power of attack so the organ is always played with a very light keyboard touch, even when playing at high volume. Gradation and variation of tone is achieved by means of the application, addition and subtractions of ranks of pipes (called stops). But this is venturing into areas that you don't "need" to know about. You can just write dynamics as you would for any other instruments. Do remember though that only one dynamic is available at any one time on a particular keyboard - so you can't write forte for the right hand and piano for the left, expecting it to be achievable on a single keyboard. Two keyboards will be necessary for this.

The pedals are played by both feet, using a combination of heels and toes. Chords, comprising intervals not larger than a 3rd, are possible but mostly produce quite an ill-defined sound. The pedals usually supply the bass line but, with the application of stops sounding at a higher octave, can also produce lines in the tenor, alto or even soprano register.

**Things you don't "need" to know**

The keyboards all have different names. On a three manual organ these are usually (from the lowest): Choir, Great and Swell. Each keyboard controls its own division of pipes, usually several hundred, often more than a thousand pipes for each keyboard. Some divisions of pipes are enclosed in large boxes with shutters on the front. The shutters can be opened and closed to

produce crescendo/diminuendo effects. This effect, together with the addition and subtraction of stops, gives the organ the capability of a very wide dynamic spectrum.

There are two basic types of pipe: flues and reeds. Flue pipes are the kind that you'd typically see on the front of the organ. These are built like typical whistles. There are various sub-species: Open Diapason, Stopped Diapason, various types of flute, "strings", Principals, etc. Reed pipes are built with a resonating metal "reed", and are given the names of whatever instrument they are meant to imitate: Trumpet, Oboe, Trombone, Clarinet, Tuba, Cor Anglais, etc.

Reed stops are the loudest of all the stops on an organ, and are often used for solo lines, or at the loudest points of a piece. Principals/Diapasons are medium loud, with string and flute stops being the quietest. All these stops can be used in different combinations to achieve different moods and timbres.

Stops labelled as "8' (feet)" give the same pitch (hopefully) as the equivalent piano key. Middle C will be the same Middle C as on the piano. The 8 feet means that the lowest pipe in the rank (i.e. bottom C) will have a speaking length (often the real length) of 8 feet. A 16' stop will give a sound one octave lower, a 32' an octave lower than that. Similarly a 4' stop will sound an octave higher, etc.

Mixture stops, compound stops made up of several pipes, are designed to strengthen the upper harmonics of the overall sound but can be used for special effects, too, where the fundamental sound is understated and the harmonics only are exposed. Mutation stops (always flutes), such as quints (sounds at the 5th above the played note), tierces (sounds at the major 3rd), and (very rarely) more remote harmonics can be used in the same way.