

## **The Orchestrion in Kinloch Castle**

by Stephen E Frankland

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Just as every castle and mansion should have its ghost, so should it possess an organ, and Kinloch Castle on the Isle of Rum is no exception in respect of the latter - as the Orchestrion can style itself a first cousin of the 'King of instruments'. (I am unable to answer as to the ghost).

I was lured to the island in September of 1999 by my friend of almost 30 years, George Randall, who used the orchestrion as bait. I was not to be disappointed either, and being able to inspect the instrument was certainly the 'icing on the cake' as far as my visit was concerned (and the icing needed to be pretty thick after a journey starting in the northern Pennines on near-bald tyres, being woken in the middle of the night with less than half an hour to spare before the boat sailed, and finally being abandoned on a remote Scottish island before the crack of dawn and with no possible means of escape for at least 24 hours).

The Kinloch Castle orchestrion was constructed by Imhof and Mukle of Vohrenbach, Baden, Germany, in 1896, and carried their works plate number 3220. It was reputedly made for Queen Victoria, who died before it could be delivered, and was eventually purchased by Sir George Bullough in 1906 and following modification to fit the site, was installed in Kinloch Castle.

Operationally, the orchestrion is similar to a fairground organ, but whereas the fairground organ operates via a folding card system, the orchestrion utilises a paper roll which has precision punched holes similar to a pianola roll. This is divided into 108 'tracks', 88 for operating the notes, the remainder operating the drums, cymbal, triangle, crescendo devices, and controlling the various 'registers', similar to the function of the drawstops on a conventional pipe organ. The paper roll passes under a series of steel fingers, pivoted in the centre, one for each 'track' and as the roll advances, whenever one of these fingers encounters a hole in the paper it is allowed to fall. As it does so the other end of the lever rises and operates a small valve which admits air along a small diameter lead tube, causing a pneumatic 'purse' at the other end of the tube to inflate. This in turn operates a larger valve which admits air into a pneumatic 'motor', like a very small bellows, causing this to inflate and in doing so pulls down a wire connected to the 'pallet' valve situated under the pipe causing the pipe to sound. When the key is released, the system reverses and the mechanism returns to rest. Apart from the mechanism for reading the paper roll, this action is very similar to some of the various designs of tubular pneumatic actions encountered in many church organs built from the late nineteenth century onwards, until these gradually fell out of favour. Drum beats, triangle and cymbal are operated directly by the pneumatic movement. The drum roll I found rather fascinating. In this case, a pneumatic motor causes a gear on a rotating shaft to mesh with another gear connected to a series of cams which in turn operate four drumsticks, producing a drum roll as the cams rotate.

The materials used in the construction are of the finest quality, as is the workmanship, The metal flue pipes are of tin (or more correctly an alloy of tin and a small percentage of lead - pure tin being very difficult to work) seldom encountered other than in exceptionally high class work, the norm being equal parts tin and lead for high class work down to alloys approaching pure lead in inferior work. The resonators of the pipes of the trumpet class are of brass, the other reeds being of tin. The flute-toned pipes are of wood. The instrument is

remarkably well preserved, undoubtedly due to its position behind glass doors under a staircase.

Hearing the orchestrion is a remarkable experience, everything happens as if by clockwork (in reality everything is driven by electric motor via a system of belts, pulleys and gears) - indeed this is part of the appeal of the instrument - and when the music becomes busy the whole of the mechanism gets very excited, definitely an experience not to be missed! I will be returning later this year for another slice!