

WALT DISNEY CONCERT HALL PIPE ORGAN

FACT SHEET

Materials used

- Douglas fir (pipes)
- Norwegian pine (pipes)
- Porcelain (stops)
- Simulated ivory (keyboard)
- Ebony (Keyboard)
- Lead and tin alloys (pipes)

Key Features

- 6,134 pipes ranging in size from a pencil to a telephone pole
- The organ is a gift to the County of Los Angeles from the Toyota Motor Corporation.
- The visual design of the organ is the collaboration between architect Frank O. Gehry and organ builder Manuel J. Rosales.
- The mechanical design, construction, tuning and voicing is the result of collaboration by two internationally known pipe organ builders: Glatter-Gotz Orgelbau in Germany and Rosales Organ Builders in Los Angeles.
- The project consultant is J. Michael Barone of Minnesota Public Radio's "Pipedreams."
- Planning, design, construction and installation have taken a combined 35,000 worker-hours.
- The organ was shipped from Germany by sea in six containers; total weight is over 40 metric tons.
- Installation by the Glatter-Gotz staff in the WDCH began in April 2003 and was completed in June 2003.
- The voicing and tuning by Rosales Organ Builders will take over 2,000 worker-hours to be completed in May 2004.
- Total number of ranks is 109.
- The length of the longest pipes is over 32 feet and the largest pipe weighs over 800 lbs.
- The smallest pipe is the size of a small pencil with a speaking length less than 1/4" long.
- Lowest note is CCCC whose frequency is 16 cycles per second which is C below the lowest note on the piano.
- The highest note has a frequency of 10,548 cycles per second which is an octave plus a third higher than the top note of a piano.

- The specially curved wood facade pipes were made by Glatter-Gotz Orgelbau of solid, vertical grain Douglas fir.
- The wood facade pipes are actual playing pipes consisting of the Violone and Bassoon basses.
- Behind the facade are metal pipes which are made of alloys of tin and lead.
- Wood pipes were made in the workshops of Glatter-Gotz Orgelbau of Douglas fir and Norwegian pine.
- Metal pipes were made in various specialty workshops in Portugal, Germany and England.
- The main console is permanently installed at the base of the organ's facade in the 'forest' of pipes.
- The stage console is moveable and can be plugged in at four locations.
- 61-note manual keyboards are covered with (simulated) ivory and solid ebony.
- 32-note pedal boards are made of maple and ebony.
- 128 draw stop controls are hand-lettered on porcelain with solid ebony stems.
- 80 manual thumb piston controls and 28 pedal toe-pistons are available for preset combinations.
- 300 memory levels are available for the organists' preset combinations.
- Organist's bench is raised and lowered with an electric motor.
- Closed circuit television gives the organist at the main console a view of the conductor.
- Wind for the organ is supplied by three blowers whose motors total 13.3 horsepower.
- Wind pressures range from 4" (102mm) for the Positive to 15" (380mm) for the Llamada "Tuba."
- The keys on the main console are connected to the pipe valves via a mechanical linkage known as "tracker action."
- Both consoles are equipped with electric action which may be digitally recorded for playback and archival purposes.
- The organ is equipped with MIDI interface for connection to digital systems.
- The sound of this organ is designed specifically to support the orchestra and not to imitate it.
- The organ is voiced with a wide dynamic range from super pianissimo to a breathtaking fortissimo.