

Buzard Organ, Opus 29

Mechanical Specifications

The Main Organ of 46 straight speaking stops is installed in the front of the church. The Great is housed in a case mounted on the south Chancel wall, and the Swell, Choir, Tuba, and Pedal are in a chamber and case-front on the north side. The Main Organ's cases are cantilevered into the Chancel four and a half feet, and display pipes of hand polished 75% tin from the Pedal 16' First Open Diapason and 8' Principal, and the Great 16' Double Open Diapason and 8' First Open Diapason.

The Antiphonal Solo Organ of 13 stops is housed in twin freestanding cases at the rear of the Church on either side of the great window, amidst the roofing trusses above the Tiffany windows in the side aisles. The low twelve notes of the Solo 8' Open Diapason are displayed in the case on the left; the remainder of the façade pipes stand mute.

The four organ cases in the Church are made of 1½" thick solid white oak with Honduras Mahogany accents, finished in hand-rubbed Danish Oil top-coated with lacquer, and include 24 carat gold leaf and the rich coloration found elsewhere in the Church as enameled accents.

The Chapel Organ of four stops is installed in a case made of lightly stained red oak, to compliment the furnishings in this more contemporary portion of the Church, and is mounted on a steel platform cantilevered from the rear wall of the Chapel, which adjoins the organ chamber. Since the Chapel is used as overflow seating for regular services, a 52" wide-screen plasma television has been mounted in the case's base for viewing the in-house, closed circuit telecasts of the services in the Nave.

The organ's console is made of 1½" thick solid white oak finished to match the organ. The interior woodworking (key slips, cheeks, and draw knob wings) is made of dark red Honduras Mahogany. The height of the console has been kept as low as one of our standard two manual consoles to facilitate good sight-lines with a conductor and for conducting from the console.

The arrangement and design of the manuals and pedal keyboards are in strict accordance to the American Guild of Organists standard dimensions. The manual keyboards are plated in bone and ebony, the pedal keys are made of hard rock maple. Manual compasses are 61 notes, pedal 32 notes. Our ebony draw stop knobs control the speaking stops and intra-divisional couplers; the inter-divisional couplers appear as tilting tablets. The Tuba's expression can be easily switched to operate from any of the three expression shoes, or to remain open.

The solid-state computer combination action features 200 levels of memory. Ten general thumb pistons and toe-studs, and eight divisional pistons and/or toe studs per division of the organ are located in traditional places.

Reversible pistons, some of which are duplicated by toe studs, include: Swell to Great, Choir to Great, Solo to Great, Swell to Choir, Solo to Choir, Solo to Swell, Great to Pedal, Swell to Pedal, Choir to Pedal, Solo to Pedal, 32' Trombone, 32' Subbass, 32' Gedeckt, All Swells to Swell, Reeds Off, and Full Organ.

The console also features a record/play system to allow the organist to record and play the instrument from computer diskettes.

The Organ employs Electric-Slider action, the chests constructed of thoroughly dried and seasoned maple, poplar and fine veneers. Unit stops are played on electro-mechanical wind chests with expansion chambers provided for every pipe; the low 12 notes of the largest 32' and 16' stops, and the high pressure Tuba, are played by electro-pneumatic actions.

The wind to play the pipes is provided by four new blowers. A 6 hp slow-speed turbine is installed in the basement blower room, which winds the enchambered portion of the Main Organ and the Chapel organ. A 1 hp high-speed silent blower is installed in the ceiling above the flower sacristy to wind the Great. A 1½" hp high-speed high-pressure turbine is installed in the Main Organ above the Choir expression box for the Tuba. A 1 hp high-speed turbine is installed in the tower to wind the Solo Organ. Single-fold reservoirs, schwimmer regulators, and wind stabilizers regulate the wind pressures throughout the organ. The Great, Swell, Choir, Solo, and much of the Pedal play upon four inches of wind. The Solo Festival Trumpet plays on 5½ inches of wind, the Great and Pedal Trombas and Trombones play on 6 inches of wind, and the Major Tuba plays on 20 inches. Wind conductors in the organ are made of ¾" thick Baltic Birch.

The pipes have been built from a variety of metals and woods chosen to produce the desired tonal quality for each stop. These materials include various alloys of tin and lead, copper, and select hardwoods. Principals and string stops are made of 70% tin, flutes of higher lead content, reeds of 50% tin. The pipe metal we use is also very thick, which assists in producing a pervasive, noble tone. The largest metal flue pipes up into the four foot octave are braced by felted Baltic Birch racks with pins which mate with stout hooks soldered onto each pipe body. Reeds are supported by multiple-level felted European traces.

The expression boxes are constructed of thick, dense fiberboard, ribbed in strategic locations to prevent the walls and ceilings from vibrating with the pitches produced therein. The expression shutters are made of Basswood to minimize inertia for swift operation, but are 2" thick, to provide an incredible dynamic range of expression. The shutters are moved by solid-state controlled electric servomotors and open a full 90 degrees.

The James G. Kenan Memorial Organ

All Saints' Episcopal Church -Atlanta, Georgia

John-Paul Buzard Organ, Opus 29



63 Straight Speaking Stops, 87 Ranks of Pipes

GREAT ORGAN 4 Inch Wind Pressure Manual II - Unenclosed Pipework

Double Open Diapason	16'
First Open Diapason	8'
Second Open Diapason	8' ext. 16'
Viola da Gamba	8'
Harmonic Flute	8'
Bourdon	8'
Principal	4'
Spire Flute	4'
Twelfth	2 2/3'
Fifteenth	2'
Fourniture V	2'
Harmonic Mixture IV	1 3/5'
Double Trumpet	16'
Trombas	8' ext. Ped.
Clarion	4' ext. Ped.
Tremulant	
Chimes	
Major Tuba	8' 20" wind
Tuba Solo	8' melody coupler
Fanfare Trumpets	8' (Solo)

SWELL ORGAN 4 Inch Wind Pressure Manual III - Enclosed and Expressive

Open Diapason	8'
Stopped Diapason	8'
Salicional	8'
Voix Celeste	8'
Principal	4'
Harmonic Flute	4'
Nazard	2 2/3'
Flageolet	2'
Tierce	1 3/5'
Full Mixture V	2 2/3'
Bassoon	16'
Trompette	8'
Oboe	8'
Vox Humana	8'
Clarion	4' (ext. 16')
Tremulant	
Major Tuba	8' (Gt)
Fanfare Trumpets	8' (Solo)

CHOIR ORGAN 4 Inch Wind Pressure Manual I - Enclosed and Expressive

Lieblich Gedeckt	16' wood
English Open Diapason	8'
Flûte à Bibéron	8'
Gedeckt Flute	8' (ext. 16')
Dulciana	8'
Unda Maris	8'
Principal	4'
Koppel Flute	4'
Recorder	2'
Mixture III-IV	2' (Dulcianas)
Fourniture IV	1 1/3'
Sesquialtera II	2 2/3 & 1 3/5
English Horn	16'
Cornoepen	8'
Clarinet	8'
Tremulant	
Cymbalstern	14 bells
Major Tuba	8' (Gt)
Fanfare Trumpets	8' (Solo)
Harp	digital
Celesta	digital

ANTIPHONAL SOLO ORGAN

4 & 5 1/2 Inch Wind
Manual IV - In twin cases over the
Narthex (Expressive)

Open Diapason	8'
Viola da Gamba	8'
Gamba Celeste (CC)	8'
Melodia	8'
Flute Coelestis II	8' Ludwigtone
Principal	4'
Flûte d'Amour	4'
Doublette	2'
Mixture IV	1 1/3'
Flügel Horn	8'
Corno di Bassetto	8'
Tremulant	
Cymbalstern	8 bells
Chimes (Gt)	
Fanfare Trumpets	8'
Major Tuba	8' (Gt)
Harp	digital
Celesta	digital





PEDAL ORGAN Various Wind Pressures

Double Open Diapason	32' digital
Subbass	32' digital
Lieblich Gedeckt	32' (Ch) digital
First Open Diapason	16'
Second Open Diapason	16' (Gt)
Bourdon	16'
Lieblich Gedeckt	16' (Ch)
Principal	8'
Bass Flute	8' ext. 16' Bdn.
Gedeckt Flute	8' ext. 16' Liebl.
Choral Bass	4'
Open Flute	4' ext. 16' Bdn.
Mixture IV	2 2/3'
Contra Trombone	32' wood
Trombone	16' wood ext. 32'
Double Trumpet	16' (Gt)
Bassoon	16' (Sw)
Trumpet	8' ext. 16'
Clarion	4' (Sw)
Major Tuba	8' (Gt)
Fanfare Trumpets	8' (Solo)

CHAPEL ORGAN 4 Inch Wind, Floating

Open Diapason	8'
Aeoline	8'
Vox Angelica (tc)	8'
Principal	4'

- Chapel on Great
- Chapel on Swell
- Chapel on Choir
- Chapel on Solo
- Chapel on Pedal

INTRADIVISIONAL COUPLERS

Great to Great	16'
Great Unison Off	
Great to Great	4'
Swell to Swell	16'
Swell Unison Off	
Swell to Great	4'
Choir to Choir	16'
Choir Unison Off	
Choir to Choir	4'
Solo to Solo	16'
Solo Unison Off	
Solo to Solo	4'

INTERDIVISIONAL COUPLERS

Great to Pedal	8'
Great to Pedal	4'
Swell to Pedal	8'
Swell to Pedal	4'
Choir to Pedal	8'
Choir to Pedal	4'
Solo to Pedal	8'
Solo to Pedal	4'
Swell to Great	16'
Swell to Great	8'
Swell to Great	4'
Choir to Great	16'
Choir to Great	8'
Choir to Great	4'
Solo to Great	16'
Solo to Great	8'
Solo to Great	4'
Swell to Choir	16'
Swell to Choir	8'
Swell to Choir	4'
Solo to Choir	16'
Solo to Choir	8'
Solo to Choir	4'

Pedal Stops To Divisional Pistons



