

THE KIMBALL PIPE ORGAN OF THE SAINT LOUIS SCOTTISH RITE CATHEDRAL

W.W. Kimball Company, Chicago, KPO 6763, October 1924

4 Manuals / 144 stops / 52 ranks / 3,859 pipes

3 pipe chambers (Main, Antiphonal, Echo)

10 inches of wind unless noted

9 Divisions: Pedal, Great, Swell, Choir, Solo, Echo,

Antiphonal Great, Antiphonal Swell, Antiphonal Pedal

Organ Historical Society Citation (No. 291) for historic merit issued 2003

This organ was constructed in 1924 and installed in early October of that year by the W.W. Kimball Company of Chicago, as Opus 6763. Charles M. Courboin served as tonal design consultant with voicing supervised by organ department manager Robert Pier Elliott. The instrument took 8 months to build.

There are 51 complete ranks and 1 incomplete (Contra Bourdon) rank in the instrument, totaling 52 ranks and 3,859 pipes situated in 3 separate chambers. Every pipe in this organ was made flexible and expressive by enclosing the entire instrument behind a total of 128 swell shutters. The console placement is in an elevated second floor balcony Stage Right (Audience Left). Above the console and behind a tone grill in the second floor (choir) balcony wall will be found the pipes of the Great/Choir, Solo, Swell, and Pedal divisions. The pipes of the Antiphonal divisions are in a chamber on the opposite side of the auditorium Stage Left (Audience Right) behind an identical tone grill in the second level (orchestra) balcony wall. The pipes of the Echo division are positioned in a small chamber located in the ceiling midway and speak directly over the center of the auditorium. There are no pipes visible.

This is an "8-foot [8'] organ," meaning that (save for a 3-rank Dulce Mixture in the Swell) there are no independent ranks of upperwork. Save for this single exception, ALL of the instrument's tonal forces are derived by unification, octave extensions, or duplexing of its 8' ranks. A few theatre-style ranks are included with the scheme (notably 2 Tibias, 2 Vox Humanas, and a Horn Diapason, Viole D'Orchestre, Kinura, Oboe Horn, and Tuba Sonora) along with certain special effects and most of the tuned percussions and traps typically found in theatre organs. A full size upright Kimball piano is also playable from the console, having been installed during the 2011-2012 renovation work (preparation for same was made part of the original contract). The Echo is an ancillary (floating) division playable singly from any manual, with or without the main organ, or from any 2 manuals at a time. The organ today remains fully enclosed, fully expressive, and playable from top to bottom. Every pipe speaks with its original voicing, and all pipes and chests remain as originally constructed.

This document is an attempt to correct any inaccuracies which may have crept into previous reportings about the disposition of this organ, the number of ranks and pipes, and the labeling of its drawknobs. For example, the ivory faces of the 4 drawknobs controlling the 4 Pedal Bombarde stops of 32'-16'-8'-4' pitches, as they appear on the console, indicate that they are all borrowed from the Great Harmonic Trumpet. They are not. All of these 4 stops in fact derive from one separate "Bombarde" rank of separate reed pipes sitting on an extended

wind chest strictly belonging to the Pedal division. This can be verified by sitting at the console and noticing that different pipes other than the Great Harmonic Trumpet are producing the tones.

The original contract [See top menu bar, Photos 3] for this organ is telling. It called for a Pedal 32' Contra Bombarde rank with NO upward extensions; for fullest reed tone in the Pedal, the Solo Tuba Sonora was to be wired to play there at 16'-8'-4'; the Swell Tibia Clausa was to be wired to play separately in the Swell at 16' pitch; there was to be NO 16' Open [Horn] Diapason or 16' Contre Viole in the Swell. In carrying the design into execution however, these aspects of the contract were not followed to the letter, presumably for good and sufficient reasons. Two significant changes were made, viz., 1) the Pedal Bombarde rank was wired to provide the 8'-4' chorus reed tone in the Pedal and was also made available there at 16' pitch; and 2) the Horn Diapason and Viole ranks in the Swell were made available there at 16' pitch in lieu of a 16' Tibia Clausa. What this means is, the 16'-8'-4' stops of Bombarde tone which we find included today as separate Pedal stops DO NOT reflect Courboin's tonal conception. This is important because, to get closer to what Courboin had in mind tonally, the 32-foot Contra Bombarde stop would be drawn in the Pedal and the other 3 left out of the full organ. The Swell 16' Open [Horn] Diapason and 16' Contre Viole stops might also, with justification, be left out of the fullest Swell combinations when pursuing Courboin's tonal conception.

Additionally, we find the Choir Unda Maris wired as a dual stop which automatically draws its "mate," the Dulciana, at the same time; the Unda Maris is the only mistuned rank, or celeste stop, in the entire organ which works like this -- all the other celeste stops are single and require a separate "mate" stop from the same division tuned true to pitch to be drawn with it to produce its characteristic undulating voice. When the Unda Maris or any other celeste stop is dual like this, a Roman numeral "II" is typically engraved on the drawknob face to indicate that it draws the "mate" rank at the same time. Instead, in this organ, the Unda Maris drawknob face was engraved as a single rank. This is important to know because, by drawing its "mate" rank (the Dulciana) with it, there is no change at all in the sound. Granted, it's a minor point, but it demonstrates how a label on a drawknob face doesn't always reflect how the instrument is wired, not 100 per cent of the time. By offering this specification it is hoped that any known previous inaccuracies like this might be clarified and/or corrected.

In 2002 this author nominated this instrument for recognition with the Organ Historical Society (OHS), and the following year (2003) the instrument was granted citation status (No. 291), the highest level of merit which the OHS can bestow upon a precious, historic instrument. The organ had its ups and downs through the closing years of the 20th century, and the Saint Louis Theatre Organ Society in 2011 made a proposal to the Scottish Rite Preservation Association to upgrade the organ and totally clean and refurbish the instrument with all volunteer help. All pipework in this renovation work was removed, cleaned, repaired, restored, tuned, and regulated to original, wind chests were releathered to original Kimball design, and original wind pressures and voicings were preserved. The relay and Peterson combination action were replaced with a Uniflex Relay. All of this restorative work was done by Alan Haker and his volunteer crew from the Saint Louis Theatre Organ Society and was largely completed by the end of 2012. Thanks to their meticulous care and yeomen work, the instrument today is fully playable.

PEDAL: 33 stops, 2 ranks, 121 pipes

64' Gravissima (Resultant, Swell) 32 notes Contra Bourdon 32' &

32'	Contra Bourdon (Swell)	12 pipes	Tibia Clausa 21-1/3' (extensions)
32'	Acoustic Bass (Resultant)	32 notes	Tibia Clausa above tenor C
			Great Principal Diapason (16') & Great Bourdon (10-2/3')
16'	Open Diapason (Wood, Great)	12 pipes	Principal Diapason
16'	Open Diapason (Metal, Great)	32 notes	English Diapason
16'	Waldhorn (Great)	32 notes	
16'	Contra Tibia Clausa (Swell)	17 pipes	GGGG-BBB for 64' Resultant
16'	Violone (Solo)	12 pipes	Cello
16'	Contra Virole (Swell)	32 notes	Virole D'Orchestre
16'	Bourdon (Great)	32 notes	Concert Flute
16'	Lieblich Gedeckt (Swell)	32 notes	Gedeckt
8'	Octave (Great)	32 notes	English Diapason
8'	Flute (Great)	32 notes	Concert Flute
8'	Still Gedeckt (Swell)	32 notes	Gedeckt
8'	Violoncello (Solo)	32 notes	Cello
8'	Cellos III (Swell)	32 notes	Virole D'Orchestre & Virole Celestes II
4'	Super Octave (Great)	32 notes	English Diapason
4'	Flute (Swell)	32 notes	Gedeckt
4'	Violins III (Swell)	32 notes	See 8' Cellos III
32'	Contra Bombarde	12 pipes	Bombarde 25"
16'	Bombarde	32 pipes	25"
16'	Trombone (Great)	32 notes	Harmonic Trumpet
16'	Bassoon (Swell)	32 notes	Oboe Horn
16'	Tuba Profunda (Solo)	32 notes	Tuba Sonora
8'	Tromba	12 pipes	Bombarde 25"
4'	Clarion	12 pipes	Bombarde 25"
16'	Piano		
	Triangle		
	Chimes (Solo)	12 notes	
	Cymbal		
	Bass Drum Stroke		
	Bass Drum Roll		
	Snare Drum Roll		

GREAT (enclosed with Choir): 25 stops, 9 ranks, 705 pipes

16'	Major Diapason	12 pipes	English Diapason
16'	Bourdon	12 pipes	Concert Flute
8'	Principal Diapason (Wood)	73 pipes	
8'	English Diapason (Metal)	61 pipes	
8'	Clarabella	73 pipes	
8'	Waldhorn	73 pipes	
8'	Concert Flute	61 pipes	
8'	Gamba	73 pipes	
8'	Gemshorn	73 pipes	
4'	Octave	12 pipes	English Diapason
4'	Traverse Flute	12 pipes	Concert Flute
2 2/3'	Twelfth		Concert Flute
2'	Fifteenth	12 pipes	Concert Flute
16'	Double Trumpet	12 pipes	Harmonic Trumpet
8'	Harmonic Trumpet	61 pipes	15"
8'	Tromba	73 pipes	
4'	Clarion	12 pipes	Harmonic Trumpet
8'	Marimba	49 notes	wood bars (Deagan)

8'	Harp	49 notes	from Marimba
8'	Chimes	20 tubes	in Echo (A to e2) Deagan Class A
8'	Piano		
4'	Piano		
4'	Xylophone	37 notes	wood bars (Deagan)
	Snare Drum Roll		
	Snare Drum Tap		
	Tremolo		

SWELL: 28 stops, 16 ranks, 1,196 pipes

16'	Open Diapason	12 pipes	Horn Diapason
16'	Lieblich Gedeckt	12 pipes	Gedeckt
16'	Contre Virole	12 pipes	Virole d'Orchestre
8'	Diapason Phonon	73 pipes	
8'	Horn Diapason	73 pipes	
8'	Tibia Clausa	73 pipes	
8'	Gedeckt	61 pipes	
8'	Flute Celeste	73 pipes	single rank, mistuned flat
8'	Virole d'Orchestre	61 pipes	
8'	Virole Celestes II	122 pipes	mistuned sharp/flat
8'	Salicional	73 pipes	
8'	Voix Celeste	73 pipes	single rank, mistuned sharp
4'	Octave	12 pipes	Horn Diapason
4'	Flute	12 pipes	Gedeckt
4'	Tibia	12 pipes	Tibia Clausa
4'	Violin I	12 pipes	Virole d'Orchestre
4'	Violins II	12 pipes	Virole Celeste II
2 2/3'	Flute Twelfth		Gedeckt
2'	Flautino	12 pipes	Gedeckt
1 3/5'	Tierce	4 pipes	Gedeckt
III	Soft Mixture	183 pipes	Dulce pipes (15-17-19)
16'	Contra Fagotto	12 pipes	Oboe Horn
8'	Posaune	73 pipes	
8'	Oboe Horn	61 pipes	
8'	Vox Humana	61 pipes	7- $\frac{1}{2}$ "
4'	Oboe Clarion	12 pipes	Oboe Horn
8'	Celesta	49 notes	metal bars (Deagan)
4'	Celesta		
	Tibia Clausa Tremolo		
	String Tremolo Fast		
	String Tremolo Slow		
	Vox Humana Vibrato		
	Tremolo		

CHOIR: (enclosed with Great): 25 stops, 6 ranks, 438 pipes

16'	Waldhorn	12 notes	duplexed from Great
8'	English Diapason	61 notes	duplexed from Great
8'	Tibia Minor	73 pipes	
8'	Concert Flute	61 notes	duplexed from Great
8'	Waldhorn	61 notes	duplexed from Great
8'	Viola	73 pipes	
8'	Dulciana	73 pipes	

8'	Unda Maris	73 pipes	two ranks, one is mistuned flat, paired with Dulciana
4'	Waldhorn	12 notes	duplexed from Great
4'	Traverse Flute	12 notes	duplexed from Great
2'	Piccolo	12 pipes	duplexed from Great
8'	Orchestral Oboe	73 pipes	
8'	Clarinet	73 pipes	
8'	Piano		
8'	Harp		
4'	Harp		
4'	Xylophone		
2'	Glockenspiel		from Solo
2'	Orchestral Bells		from Solo
	Wood Block		
	Tom Tom		
	Castanet		
	Tambourine		
	Snare Drum Roll		
	Snare Drum Tap		
	<i>Tremolo</i>		

SOLO: 16 stops, 9 ranks, 657 pipes

8'	Diapason Stentor	73 pipes	Scale 36
8'	Melophone	73 pipes	
8'	Cello	73 pipes	
8'	Cello Celeste	73 pipes	single rank, mistuned sharp
16'	Tuba Profunda	12 pipes	Tuba Sonora 20"
8'	Tuba Mirabilis	61 pipes	20"
8'	Tuba Sonora	61 pipes	20" all harmonic
8'	French Horn	73 pipes	
8'	English Horn	73 pipes	
8'	Kinura	73 pipes	
4'	Tuba Clarion	12 pipes	Tuba Sonora
8'	Chimes	25 tubes	in Solo (G to g2) Deagan Class A
8'	Marimba		from Great
4'	Marimba		from Great
2'	Glockenspiel	37 notes	metal bars (Deagan)
2'	Orchestral Bells	37 notes	Glockenspiel reiterate
	Tuba Tremolo		
	<i>Tremolo</i>		

ANTIPHONAL GREAT (enclosed with Ant. Swell and Pedal):

4 stops, 2 ranks, 146 pipes

8'	Open Diapason	73 pipes	
8'	Claribel Flute	61 notes	from Ant. Swell
8'	Gemshorn	73 pipes	
4'	Forest Flute	12 notes	from Ant. Swell

ANTIPHONAL SWELL (enclosed with Ant. Great and Pedal):

6 stops, 3 ranks, 243 pipes

16'	Bourdon	12 pipes	Claribel Flute
8'	Claribel Flute	61 pipes	
8'	Viola	73 pipes	
4'	Forest Flute	12 pipes	Claribel Flute
2'	Piccolo	12 pipes	Claribel Flute
8'	Horn	73 pipes	Tuba Horn pipes
	<i>Tremolo</i>		

ANTIPHONAL PEDAL (enclosed with Ant. Great and Swell): 2 stops

16'	Bourdon	12 notes	Claribel Flute
8'	Flute	12 notes	Claribel Flute
	Main Great, Swell, and Pedal Off		

ECHO (in ceiling): 5 stops, 5 ranks, 353 pipes all on 7 1/2"

8'	Viola Aetheria	73 pipes	
8'	Vox Angelica	73 pipes	single rank, mistuned sharp
8'	Fern Floete	73 pipes	
8'	Corno D'Amore	73 pipes	
8'	Vox Humana	61 pipes	
8'	Chimes	20 tubes	A to E (Deagan Class A)
	Vox Humana Vibrato		
	<i>Tremolo</i>		

COUPLERS

8'	Great to Pedal	16'	Antiphonal Swell
8'	Swell to Pedal	4'	Antiphonal Swell
4'	Swell to Pedal		
8'	Choir to Pedal	16'	Solo to Great
4'	Choir to Pedal	8'	Solo to Great
8'	Solo to Pedal	4'	Solo to Great
		16'	Swell
16'	Great	4'	Swell
4'	Great	16'	Choir to Swell
16'	Swell to Great	8'	Choir to Swell
8'	Swell to Great	4'	Choir to Swell
4'	Swell to Great	8'	Great to Swell
16'	Choir to Great	8'	Solo to Swell
8'	Choir to Great		
4'	Choir to Great	16'	Choir
		4'	Choir
16'	Solo	8'	Swell to Choir
4'	Solo	4'	Swell to Choir
8'	Great to Solo		
		16'	Echo
8'	Antiphonal Great to Pedal		Echo Unison Off
8'	Antiphonal Swell to Pedal	4'	Echo
16'	Antiphonal Great	8'	Antiphonal Swell to Great

4' Antiphonal Great

4' Antiphonal Swell to Great

Master Swell Lock (rewired from original Pedal Separation tablet)

ON/OFFS IN MANUAL KEY CHEEKS

LEFT	RIGHT
Solo Unison Off	Echo to Solo Release Echo On, Solo Off
Swell Unison Off	Echo to Swell Release Echo On, Swell Off
Great Unison Off	Echo to Great Release Echo On, Great Off
Choir Unison Off	Echo to Choir Release Echo On, Choir Off

MOVING COMBINATION ACTION

Universal Thumb Pistons (Generals) C-1-2-3-4-5-6-7-8-9-10-11-12 beneath Swell and Great manuals
Universal "Typewriter Key" Pistons (Generals) C-1-2-3-4-5-6-7-8 above Solo manual, duplicated as Toe Pistons
Great Thumb Pistons C-1-2-3-4-5-6-7-8
Choir Thumb Pistons C-1-2-3-4-5-6-7-8
Swell Thumb Pistons C-1-2-3-4-5-6-7-8
Solo Thumb Pistons C-1-2-3-4-5-6-7-8
Antiphonal Great Thumb Pistons C-1-2-3-4
Antiphonal Swell Thumb Pistons C-1-2-3-4
Transposer Thumb Pistons [formerly wired as Echo Pistons 1-2-3-4 (1 transposes down by half steps, 2 releases, 3 transposes up by half steps, 4 is unwired)]
Pedal Toe Pistons 1-2-3-4-5

MISCELLANEOUS MECHANICALS

Chinese Gong (thumb piston)
Birds (thumb pistons) Echo, Main, Antiphonal
Bugle Call ("typewriter key" pistons above Solo manual) F, Bb, D, F
Thunder Loud (toe lever)
Thunder Soft (toe lever)
Sforzando (manual piston and toe lever) -- unwired
Mezzo (manual piston and toe lever) -- unwired
Expression shoes w/indicator panel
 left to right: Echo, Solo, Great/Choir, Swell, Antiphonal
 original slider panel unwired
Programmable Crescendo shoe - far right, wired for 183 positions
 Original slider panel and rocker tablets unwired

Strings to Crescendo
Flutes to Crescendo
Diapasons to Crescendo
Reeds to Crescendo
Pedal Separation (Divide) rocker tablet
rewired as Master Swell coupler (all shoes to Swell)

WIND PRESSURES

Great Harmonic Trumpet 15"
Both Solo Tubas (Mirabilis and Sonora) 20"
Pedal Bombarde 25"
Swell Vox Humana and Echo stops 7-1/2"
The rest of the instrument on 10"

PIPE RANKS

GREAT

- Principal Diapason
- English Diapason
- Clarabella
- Concert Flute (Bourdon)
- Waldhorn
- Gamba
- Gemshorn
- Harmonic Trumpet
- Tromba

CHOIR

- Dulciana
- Unda Maris (flat)
- Tibia Minor
- Viola
- Clarinet
- Orchestral Oboe

SWELL

- Diapason Phonon
- Horn Diapason
- Tibia Clausa
- Gedeckt
- Flute Celeste (flat)
- Salicional
- Voix Celeste (sharp)
- Viole D'Orchestre
- Viole D'Orchestre (flat)
- Viole D'Orchestre (sharp)
- Soft Mixture (III ranks)
- Posaune

- Oboe Horn
- Vox Humana

SOLO

- Diapason Stentor
- Mellophone
- Cello
- Cello Celeste (sharp)
- Tuba Mirabilis
- Tuba Sonora
- French Horn
- Kinura
- English Horn

ECHO

- Vox Angelica
- Fern Floete
- Viol Aetheria
- Corno D'Amour
- Vox Humana

ANTIPHONAL

- Open Diapason
- Claribel Flute
- Gemshorn
- Viola
- Horn (Oboe)

PEDAL

- Bombarde
- Contra Bourdon (bottom octave only, 12 notes) - incomplete rank
- [Contra Tibia Clausa (bottom 17 notes of Gravissima) - unified with Swell]

TUNED PERCUSSIONS

- Piano
- Marimba Harp
- Glockenspiel
- Xylophone
- Celesta
- Chimes - Great
- Chimes - Solo

TRAPS

- Bass Drum

- Snare Drum
- Gong
- Tambourine
- Wood Block
- Triangle
- Tom Tom
- Cymbal
- Castanet