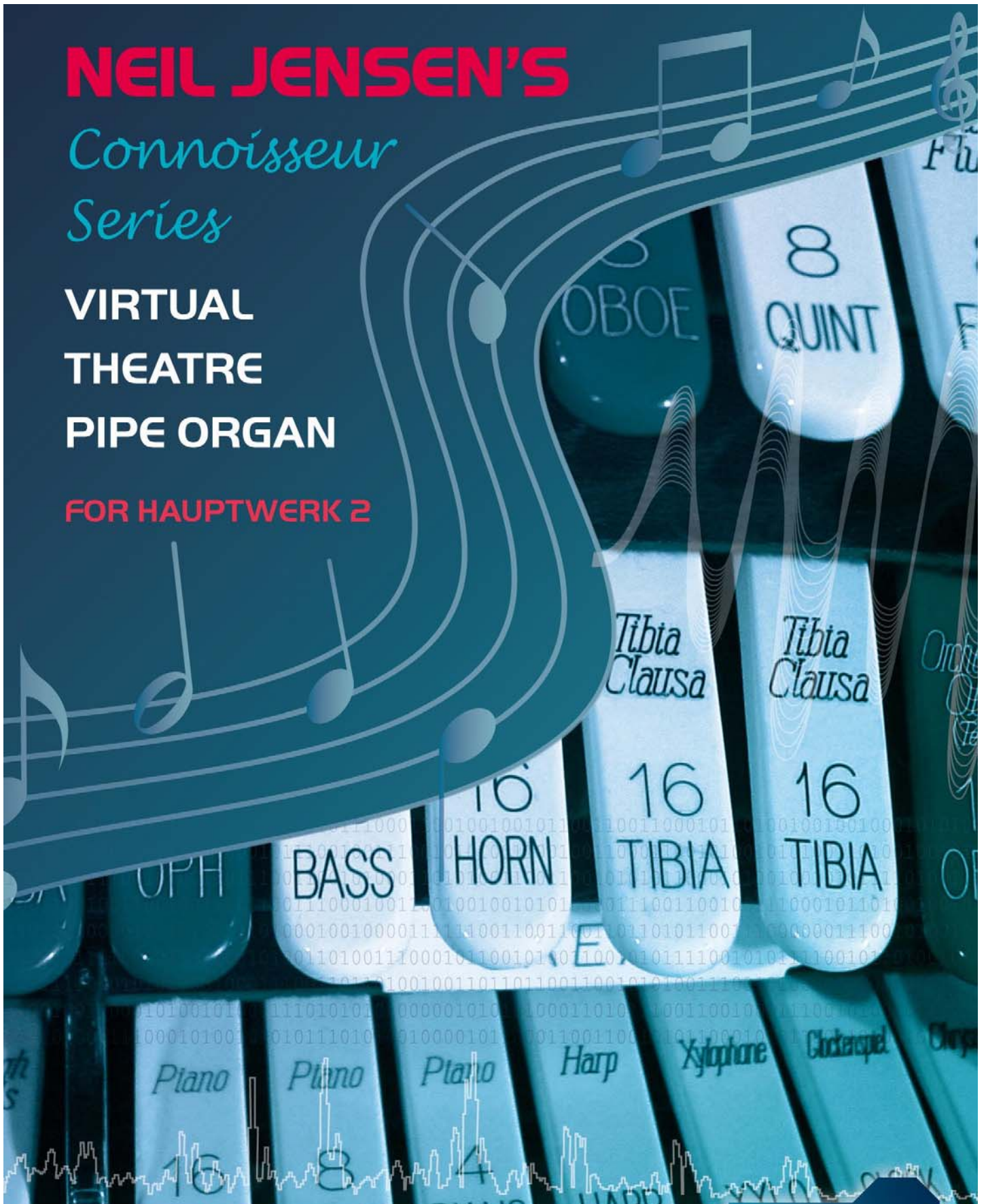


NEIL JENSEN'S

Connoisseur Series

VIRTUAL THEATRE PIPE ORGAN

FOR HAUPTWERK 2



3/35- Expansion Pack



What is the Connoisseur Virtual Theatre Pipe Organ Series?

The Connoisseur Virtual Theatre Pipe Organ Series is an expandable series of high resolution sample sets engineered and developed expressly for the exciting Hauptwerk 2 software for the PC & MAC platforms.

Created by Crumhorn Labs U.K., Hauptwerk 2 is an organ specific sampler software application with programming parameters that synergistically combine to create and deliver in a virtual domain, the musical illusion, performance and idiosyncrasies that form part of the real theatre pipe organ experience.

Hauptwerk creates an open and complete solution combining the platform for organ design (such as **Connoisseur Virtual Theatre Pipe Organ Series**) and sound engine in one elegant cost effective software solution.

Each package in the series represents a Virtual Theatre Pipe Organ complete within and of itself. However, it does not stop there.....each instrument is expandable by subsequent expansion packages.

Our series commence at 3 manuals and 11 ranks and is expanded in three successive packages of 19, 27 and 36 ranks plus ancillary traps, percussions, effects and features. The customer's hardware, audio, personal computer, and budgetary factors can influence the size of the Virtual Theatre Organ's size and specification. Hence we felt it prudent to design an expandable range of Virtual Theatre Organ products that can be seamlessly and easily expanded in conjunction with the updating and 'upsizing' of these factors. Please refer to our PC and Mac system requirement tables in the relevant product links.

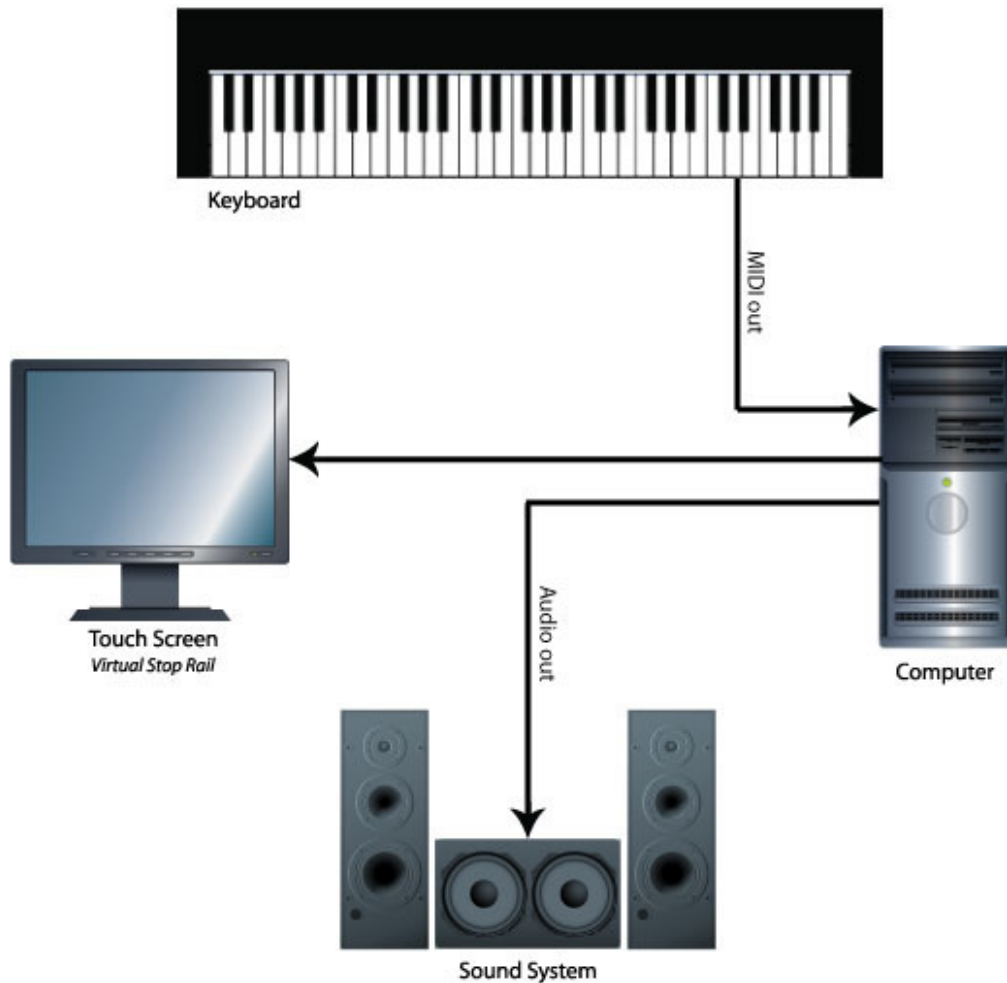
Accompanying each Virtual Organ in the series, in addition to the library of digital samples, is a specifically designed and engineered Virtual Organ Definition File and a General User Interface of 'The console.' This Virtual Console includes a unique and state-of-the-art specification of stops (which caters for both traditional and modern playing paradigms), manuals, piston combination action; and swell pedals – all visibly displayed on the customer's personal computer monitor. Touch screens are supported and provide an ideal cost effective alternative to hardware stop boxes and stop rails, thereby bringing a Virtual Theatre Pipe Organ into homes with even the most modest of instruments with MIDI capability.

Programmed into the Organ's Definition Files are the parameters which comprise Winding systems, tremulant model, swell enclosure architecture, swell (expression) curves, the relay (connecting circuitry) and many more. These parameters are appropriately programmed and represented in a virtual form, directly influencing the randomness and finer nuances of the organ performance.

What applications does the Connoisseur Virtual Theatre Pipe Organ Series have?

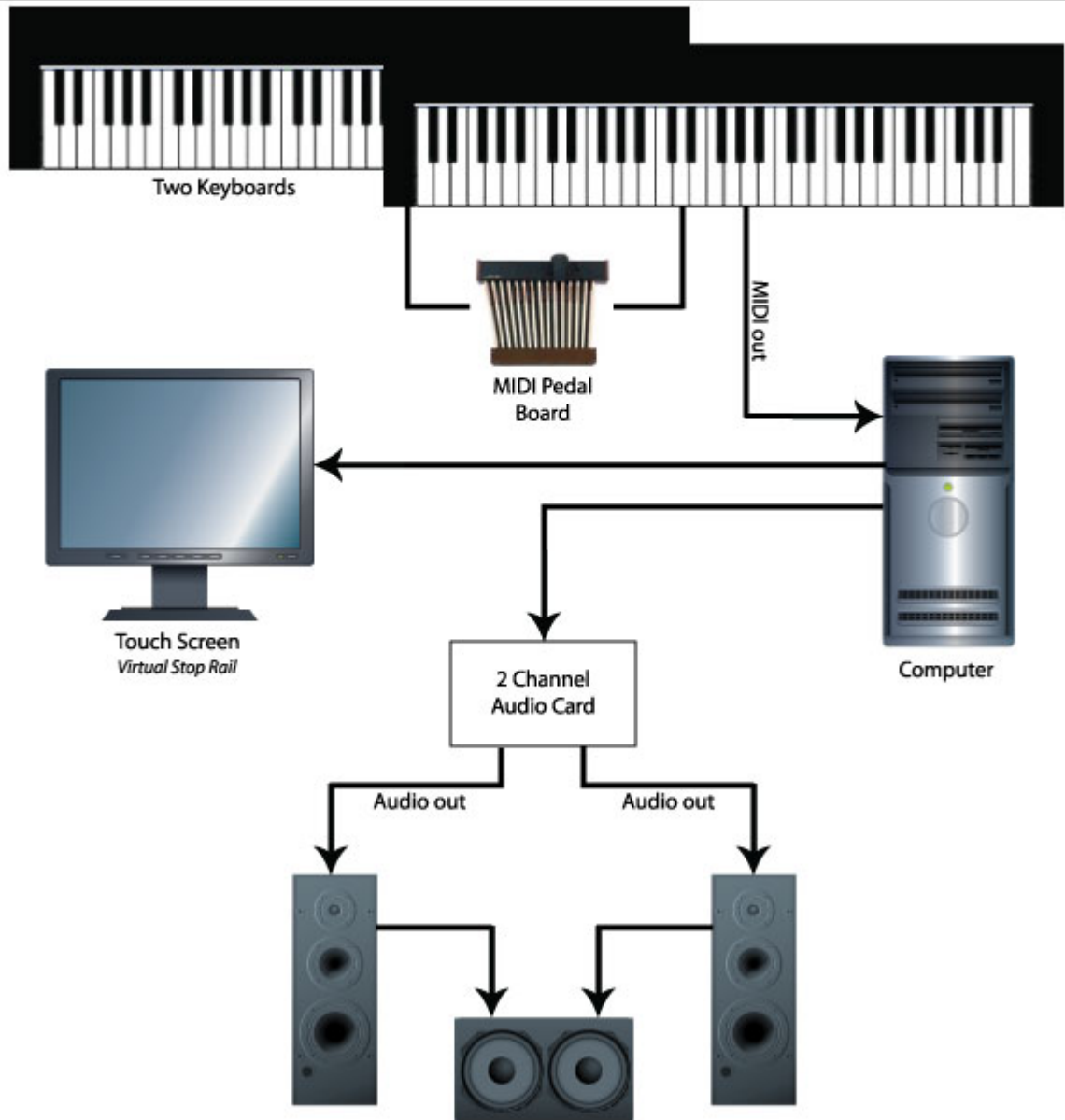
Virtual Theatre Pipe Organs offer many versatile solutions from retro-fit of theatre organ scale consoles through to digital augmentation of existing theatre pipe organ instruments, electronic organs and D.I.Y Digital Theatre Organ Construction projects.....whatever your imagination may conjure up!

The Simplest Hauptwerk Setup



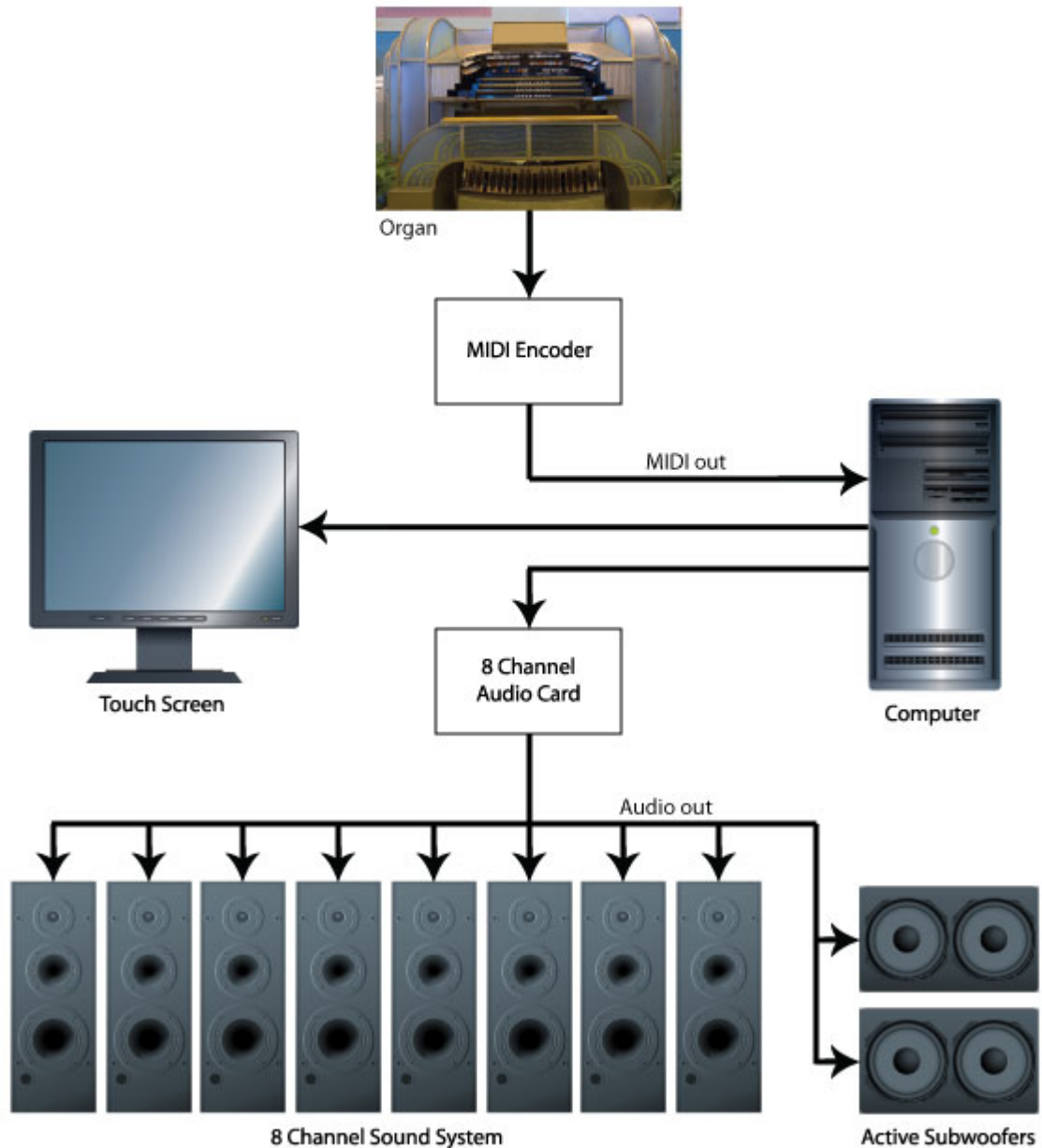
- *Simple Single MIDI Keyboard Solution using Touch Screen as Virtual Stop Rails.*

Basic Two Manual Organ



- *Two Keyboard & Pedal MIDI Solution using Touch Screen as Virtual Stop Rails.*

Multi-Channel Theatre Organ Console MIDI Fit Out



- *Retro Fit Out of WurliTzer Console with MIDI Encoder using Touch Screen as monitor and virtual ancillary stop rail to hardware stop rail and mapped to a multi channel audio system.*

While Hauptwerk and our Sample Sets offer outstanding instruments from a virtual representation and reproduction standpoint, a host or controller and audio system are required. Keymedia can advise the customer on the optimum choice of these elements. By special arrangement, we can even sample your favorite ranks and incorporate them in any one of the sample sets on offer.

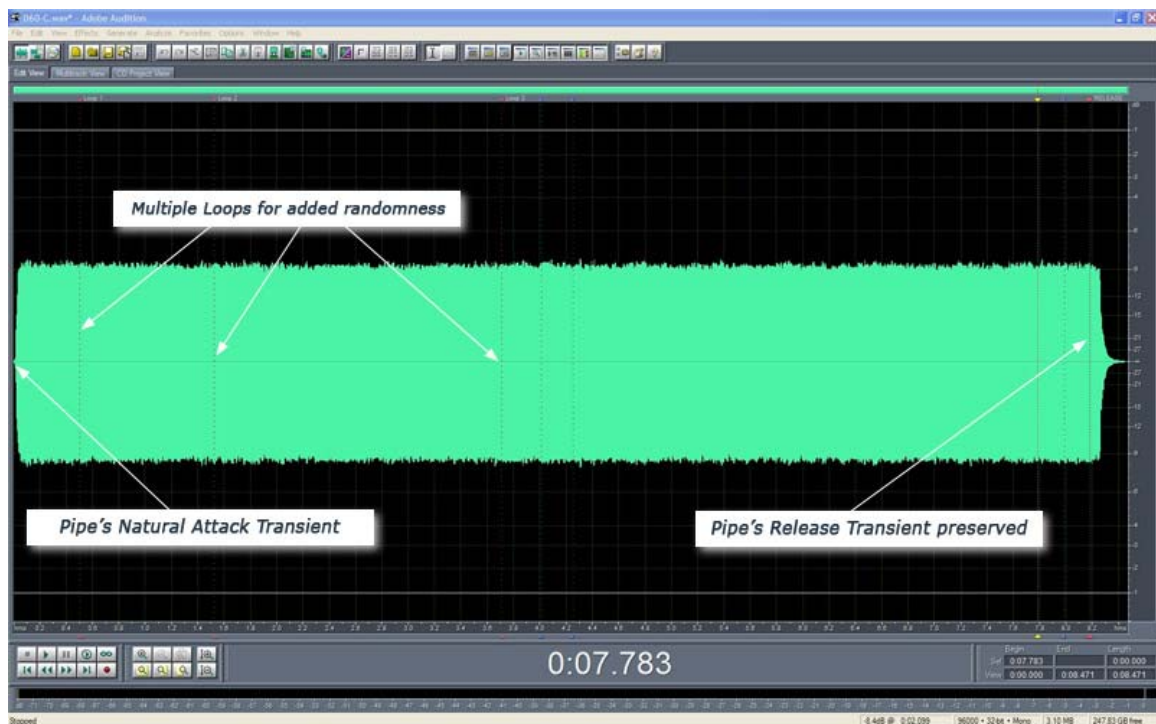
The Sampling, Engineering and Design of our Virtual Theatre Pipe Organs.

The complexity, integrity and sophistication of the Hauptwerk platform has unlike any other digitally replicated Theatre Pipe Organ or Soft Sampler application allowed for virtual modeling, sample reproduction and performance to an unparalleled degree of detail, precision and realism .

Sample libraries of considerable size on the Hauptwerk platform can now be accommodated due to current modern and advancement in personal computer design and RAM capability. All samples within our instruments are prepared and cached to RAM.

What makes a fine organ is the quality of the ranks and instruments which it comprises. We have sought the finest ranks from various manufacturers and our sampling techniques using high end equipment at 24bit, 96 KHz, ensure our customers have the flexibility to possess a Virtual Theatre Pipe Organ in any acoustical settings from studio to theatre. Naturally occurring nuances of the start, sustain and release transients of each sampled pipe, percussion and novelty effects have been faithfully captured.

In our commitment to an utmost realistic outcome, a sample and tremulant waveform set is provided for every note for every rank. Sample stretching has been avoided. The length of each sample is 3 – 8 seconds in length thus capturing the natural dithering behavior of each and every pipe.

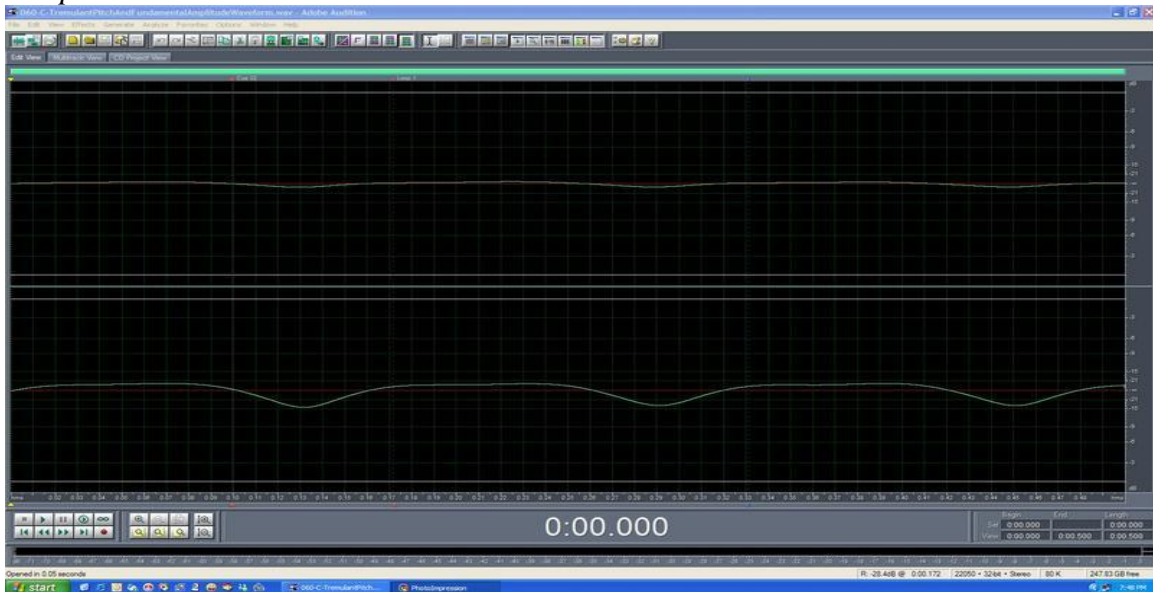


- *A typical multi second sample depicting programmed multiple loops and the pipe's release transient.*

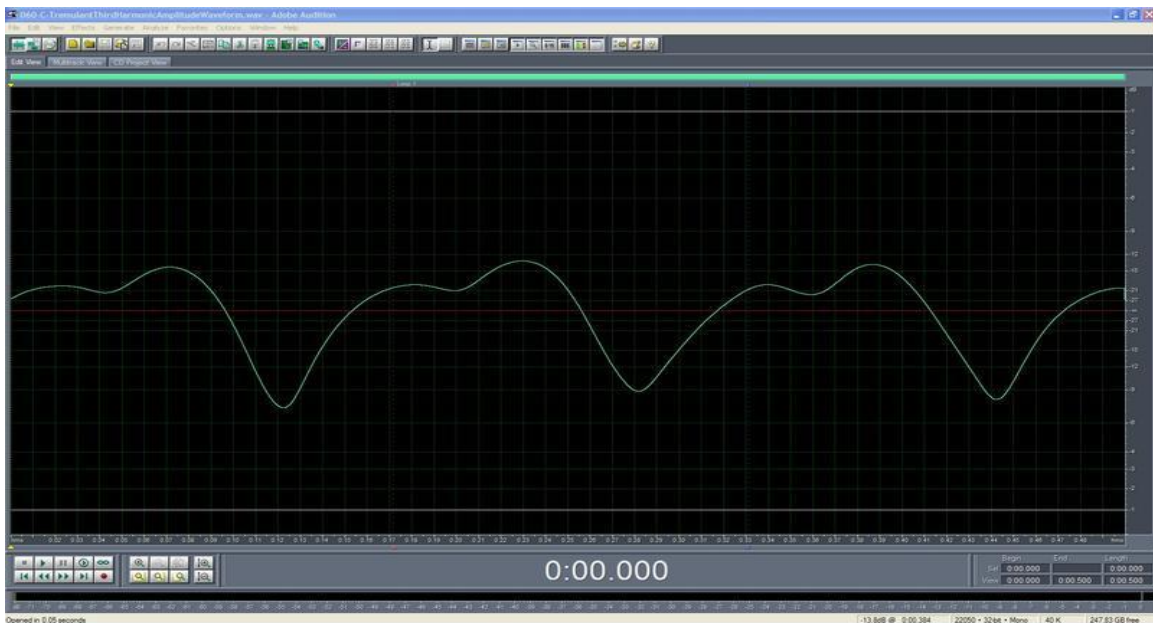
Superb Tremulant Modeling

Every pipe in our virtual instruments has been sampled off and on tremulant. As theatre Pipe Organ Tremulants are not linear nor is one waveform shape constant over the entire compass of a rank, a set of tremulant waveforms (3) for each note is software generated by comparing the amplitude and frequency (1st & 3rd and greater harmonic) differences between the tremmed and non-tremmed samples. This yields an exact and in phase replication of the original tremulant musical outcome and dynamic. Complementing the ‘total illusion’ optional tremulant mechanical noise can be selected by the customer.

Screenshots – Non Linearity of Theatre Pipe Organ Tremulant replicated in the Hauptwerk Tremulant Model



- *Tremulant Frequency Waveform & 1st Harmonic Amplitude Waveform.*



- *Tremulant 3rd Harmonic & Greater Amplitude Waveform.*

Comments relate to the Concert Edition of HW (multi-channel audio, voicing, wind supply model not available in the Studio Edition, and polyphony restricted to 1024 simultaneous pipes in SE).

CHAMBER ANALYSIS

MAIN CHAMBER	PERCUSSION CHAMBER	SOLO CHAMBER
<p>TRUMPET 'D' STYLE' (WurliTzer) <i>Tuba Horn (WurliTzer)</i></p> <p>DIAPHONIC DIAPASON (WurliTzer) <i>*Open Diapason (Christie)</i> <i>Tibia Clausa 10" Scale (WurliTzer)</i> <i>Clarinet (WurliTzer)</i> <i>Musette (WurliTzer)</i> <i>Viol d' Orchestre (WurliTzer)</i> <i>Viol Celeste (WurliTzer)</i> <i>Salicional (Christie)</i> <i>Celeste (Christie)</i> <i>Oboe Horn (WurliTzer)</i> <i>Quintadena (WurliTzer)</i></p> <p>QUINTADENA CELESTE (WurliTzer) <i>Concert Flute (WurliTzer)</i> <i>Concert Flute Celeste (WurliTzer)</i> <i>Vox Humana (WurliTzer)</i></p> <p><i>* Notes 24 - 41 Wood Diaphone</i> <i>Blue * denotes prerequisite packages</i></p>	<p><i>Wood Harp/Marimba (WurliTzer)</i> <i>Xylophone/Re-it Xylophone (WurliTzer)</i> <i>Glockenspiel/Orchestral Bells (WurliTzer)</i> <i>Chrysoglott (WurliTzer)</i> <i>Cathedral Chimes (Christie)</i> <i>Vibraphone (Musser)</i></p> <p>ORCHESTRAL HARP TUNED TIMPANI</p> <p><i>Bass Drum</i> <i>Bass Drum Roll</i> <i>Cymbal Crash</i> <i>Ride Cymbal</i> <i>Ride Cymbal Back Beat</i> <i>Jazz Cymbal</i> <i>Brush Cymbal</i> <i>Snare Drum</i> <i>Rim Shot</i> <i>Open Hi Hats</i> <i>Closed Hi Hats</i> <i>Pedal Hi Hats</i> <i>Choke Cymbal</i> <i>Tom Tom</i> <i>Tambourine</i> <i>Castanets</i> <i>Maraccas</i> <i>Wood Block</i> <i>Cow Bell</i> <i>Sand Block</i> <i>Temple Block</i> <i>Triangle</i> <i>Bell Tree</i> <i>Choke (Tight)</i> <i>Piatti</i> <i>Symphonic Cymbal Roll</i> <i>Drum Roll / Cymbal Crash</i> <i>Bird Whistle</i> <i>Train Whistle</i> <i>Novelty Whistle</i> <i>Chinese Gong</i></p>	<p>TUBA MIRABALIS (WurliTzer) <i>English Horn (Stephens)</i> <i>Brass Trumpet (WurliTzer)</i> <i>Horn Diapason (Palmer)</i> <i>Horn Diapason Celeste (Palmer)</i> <i>Tibia Clausa (WurliTzer)</i></p> <p>TIBIA MINOR (Morton) <i>Krumet (WurliTzer)</i> <i>Kinura (WurliTzer)</i> <i>Orchestral Oboe (WurliTzer)</i> <i>Brass Saxophone (WurliTzer)</i> <i>Solo String (WurliTzer)</i> <i>Solo String Celeste (WurliTzer)</i> <i>Lieblich Flute (Morton)</i> <i>Vox Humana (WurliTzer)</i></p> <p>DOLCE FLUTE (Unknown) DOLCE FLUTE CELESTE (Unknown) <i>Cymbal Roll Mezzo</i></p>
UNENCLOSED		
<p><i>Grand Piano (Kawai 7'4')</i> <i>String Bass</i></p> <p>PEDAL TIBIA PIZZICATO (WurliTzer)</p>		

STOP SPECIFICATION

3 Manuals

35 Ranks

PEDAL	ACCOMPANIMENT	GREAT	SOLO	TREMULANTS
32 Diaphone	8 Tuba Mirabilis	16 Tuba Mirabilis (Ten C)	16 English Horn (Ten C)(NC)	Main
32 Contra Violone	8 English Horn	16 English Horn (Ten C)	8 Tuba Mirabilis	Solo
32 Contra Bourdon	8 Brass Trumpet	16 Brass Trumpet (Ten C)	8 English Horn	Strings
16 Ophicleide	8 Trumpet	16 Trumpet (Ten C)	8 Brass Trumpet	Clarinet
16 Diaphone (Wood)	8 Tuba Horn	16 Ophicleide	8 Trumpet	Tuba Mirabilis
16 Diaphonic Horn	8 Diaphonic Diapason	16 Open Diapason	8 Tuba Horn	Tibia Sax Vox
16 Tibia Clausa	8 Horn Diapason	16 Diaphonic Horn	8 Diaphonic Diapason	Brass Trumpet
16 Violone	8 Tibia Clausa (M)	16 Tibia Clausa (S)	8 Open Diapason	Tuba Horn & Trumpet
16 Oboe Horn	8 Clarinet	16 Tibia Clausa (Ten C)(M)	8 Tibia Clausa (S)	Vibraphone
16 Bourdon	8 Saxophone	16 Clarinet (Ten C)	8 Tibia Clausa (M)	
8 English Horn	8 Solo String (2 Rks)	16 Krumet (Ten C)	8 Clarinet	GENERAL
8 Tuba Horn	8 Viol d' Orchestre (2 Rks)	16 Orchestral Oboe (Ten C)	8 Krumet	Lieblich Flute OFF
8 Open Diapason	8 Salicional (2 Rks)	16 Musette (Ten C)	8 Kinura	Tibia Minor ON
8 Horn Diapason	8 Oboe Horn	16 Saxophone (Ten C)	8 Orchestral Oboe	Solo String > Flauto Dolce
8 Tibia Clausa	8 Quintadena	16 Solo String (2 Rks)	8 Musette	Horn Diapason Celeste ON
8 Tibia Pizzicato	8 Lieblich Flute	16 String Ensemble (4 Rks)	8 Saxophone	Quintadena Celeste ON
8 Clarinet	8 Concert Flute	16 Oboe Horn	8 Solo String (2 Rks)	Concert Flute Celeste ON
8 Cello (2 Rks)	8 Vox Humana (S)	16 Bourdon	8 String Ensemble (4 Rks)	String Celestes OFF
8 Oboe Horn	8 Vox Humana (M)	16 Vox Humana (Ten C)(S)	8 Oboe Horn	Dampers (Vibraphone & Tympani)
8 Concert Flute	4 Octave	16 Vox Humana (Ten C)(M)	8 Quintadena	Percussion Re-it
16 Piano	4 Octave Horn	8 Tuba Mirabilis	8 Lieblich Flute	Percussion Un-expressed
8 Piano	4 Piccolo (Main)	8 English Horn	8 Vox Humana (S)	Swell Master
8 String Bass	4 Solo String (2 Rks)	8 Brass Trumpet	8 Vox Humana (M)	
Tympani (Tuned)	4 Viol (2 Rks)	8 Trumpet	4 Piccolo (S)	SWELL TOGGLE
Tympani Rolls (Tuned)	4 Salicet (2 Rks)	8 Tuba Horn	4 Piccolo (M)	Solo Sustain
Bass Drum	4 Quintadena	8 Open Diapason	4 Solo String (2 Rks)	Solo Sostenuto
Bass Drum Roll	4 Lieblich Flute	8 Horn Diapason	4 String Ensemble (4 Rks)	Great Sustain
Crash Cymbal	4 Concert Flute	8 Tibia Clausa (S)	4 Vox Humana (S)	Great Sostenuto
Cymbal Roll	4 Vox Humana (S)	8 Tibia Clausa (M)	4 Vox Humana (M)	Vibraphone Rotor
Ride Cymbal	4 Vox Humana (M)	8 Clarinet	4 Lieblich Flute	Piano Sustain
Jazz Cymbal	2 2/3 Lieblich Twelfth	8 Krumet	2 2/3 Twelfth (Tibia)(S)	
Finger Cymbal	2 2/3 Twelfth	8 Kinura	2 2/3 Twelfth (Tibia)(M)	EFFECTS
Brush Cymbal	2 Lieblich Piccolo	8 Orchestral Oboe	2 2/3 Lieblich Twelfth	Bell Tree
Closed Hi Hats	2 Piccolo	8 Musette	2 Piccolo (Tibia)(S)	Choke
Pedal Hi Hats	8 Piano	8 Saxophone	2 Piccolo (Tibia)(M)	Piatti
Triangle	Harp Sub	8 Solo String (2 Rks)	1 3/5 Tierce (Tibia)(S)	Symphonic Cymbal Roll
Temple Block	Harp	8 Viol d' Orchestre (2 Rks)	1 1/3 Larigot (Tibia)(S)	Drum Roll / Cymbal Crash
MIDI on PEDAL	Chrysglott	8 Salicional (2 Rks)	1 Fife (Tibia) (S)	Bird Whistle
Accomp to Pedal	Orchestral Harp	8 Oboe Horn	8 Piano	Train Whistle
Great to Pedal	Snare Drum	8 Quintadena	Harp Sub	Novelty Whistle
	Rim Shot	8 Lieblich Flute	Xylophone	Chinese Gong
	Ride Cymbal	8 Concert Flute	Glockenspiel	Tremulant & Chamber Noise
	Ride Cymbal (Back Beat)	8 Vox Humana (S)	Chrysglott Sub	
	Jazz Cymbal	8 Vox Humana (M)	Chrysglott	COMBINATION ACTION
	Brush Cymbal	5 1/3 Fifth (Tibia) (M)	Vibraphone	15 General Pistons
	Open Hi Hats	4 Octave	Orchestral Harp	15 Solo Division Pistons
	Closed Hi Hats	4 Piccolo (S)	Cathedral Chimes	15 Great Division Pistons
	Pedal Hi Hats	4 Piccolo (M)	MIDI on SOLO	15 Accomp. Division Pistons
	Choke Cymbal	4 Solo String (2 Rks)	Sub Octave	5 Pedal Division Piston
	Tom Tom	4 Viol d' Orchestre (2 Rks)	Unison Off	SET
	Tambourine	4 Salicet (2 Rks)	Octave	CANCEL
	Castanets	4 Lieblich Flute	Great on Solo	
	Marracas	4 Concert Flute	Great Octave Solo	MISCELLANEOUS
	Wood Block	4 Vox Humana (S)	Solo Sub 5th	Percussion Re-iteration Rate
	Cow Bell	3 1/5 Tenth (Tibia)(M)	Solo 3rd	Solo on Great Delay Rate
	Sand Block	2 2/3 Twelfth (Tibia)(S)	Solo 5th	42 stage Configurable Crescendo
	MIDI on ACCOMP	2 2/3 Twelfth (Tibia)(M)	Solo 7th	
	Octave	2 2/3 Lieblich Twelfth	Solo Major 7th	DISPLAY
	Solo to Accomp	2 Piccolo (Tibia)(S)		Solo MIDI Keyboard Activity
		2 Piccolo (Tibia)(M)		Great MIDI Keyboard Activity
		2 Fifteenth		Accompaniment Keyboard Activity
		2 Lieblich Piccolo		Accomp 2nd T Keyboard Activity
		1 3/5 Lieblich Tierce		Pedal Board Activity
		1 Lieblich Fife		Solo Chamber Swell Indicator
		16 Piano		Main Chamber Swell Indicator
		8 Piano		Percussion Chamber Swell Indicator
		Harp Sub		Crescendo Stage Indicator
		Xylophone		Sustain Toggle Indicator
		Glockenspiel		
		Chrysglott		
		MIDI on GREAT		
		Sub Octave		
		Unison Off		
		Octave		
		Solo Sub Great		
		Solo to Great		
		Solo on Great Melody		
		Solo on Great Pizzicato		
		Solo on Great Delay		

(Ten C) denotes Tenor C

(NC) denotes non couple

(S) denotes Solo Chamber

(M) denotes Main Chamber

* Specification subject to change.