

viscount  
*Classical*  
organs



**Envoy 33-DFD**



Envoy 33-DFD



### Principal Features

- 2 x 61-note tracker touch keyboards with touch sensitivity for orchestral voices
- 32 note radiating and concave pedalboard
- 33 speaking stops with hundreds of alternatives from internal memory bank
- Illuminated draw stops
- 4 preset organ styles – English, Baroque, Romantic and Symphonic
- 4 adjustable user styles
- 18 alternative temperaments
- Tremulants fully adjustable for speed and depth

### Playing Aids

- Swell expression pedal
- Crescendo pedal programmable over 16 steps
- 6 General pistons
- 16 capture memories
- 6 thumb pistons to Swell and Great
- Gt/Ped, Sw/Ped, Sw/Gt reversible thumb pistons
- Gt/Ped, Sw/Ped, Sw/Gt reversible toe pistons
- Gt and Ped combinations coupled
- 2 sequencer previous and next pistons
- Transposer with -6/+5 semitone range

### Display and Software Features

- Backlit display with 8 control buttons to access all organ Styles and set-up features
- Fully upgradable software platform via USB socket
- Record and Playback using USB or Internal Memory

### Dimensions and Finishes

- Dark oak simulated wood veneer console with vinyl roll top cover
- Illuminated music desk
- 150 cm (W) x 126 cm (H) x 75 cm (D), 121 cm with pedalboard
- Weight – 210 kg

### Audio System and Sound Management

- 5 internal speakers split across 4 channels
- 2 x 60 watt and 1 x 100 watt amplifiers
- Stop-by-stop selection of simulated wind chest layout
- Stop-by-stop and divisional volume controls
- Stop-by-stop tonal adjustment using 6 voicing parameters
- Internal 5-band graphic equaliser
- Fully adjustable reverberation with live acoustic selection
- Stereo headphone output socket
- External outputs for up to 12 independent audio channels

## How Does Physis Work?

Viscount Physis instruments have been made possible by the vastly increased power of current microprocessor technology. Unlike sampled-sound solutions commonly used in digital organs and still available in our Cadet Series instruments, the Physis model is interactive and constantly makes small and subtle changes to the sound depending on the number of stops drawn and the number of notes being played. These small changes also occur in a real pipe organ although it is a characteristic that most pipe organ builders try to reduce to a minimum. These small variations make the pipe organ unique, and the Physis model has been able to accurately reproduce this magic ingredient that is missing from sampled-sound instruments.




The end result is that a Physis organ sounds dramatically more exciting and life-like. This is especially noticeable when the instrument is played in a small environment and on its internal speakers.

Because Physis technology is software based, instruments can benefit from improvements as they are developed. These include the availability of new voice models and the addition of even more detail into existing voice models to allow greater flexibility of individual stop voicing.

## Management of the Instrument

A comprehensive range of instrument management is available to the player without the need for a computer link up. The features are controlled through a display that can be readily seen at the console.

A digital display screen showing organ settings. The screen is divided into two columns: TUNING and SET-UP. The TUNING column shows VOICES, STYLES, EQUAL, ENSEMBLE 1, AIRPRESS --, and A: 440.00 HZ. The SET-UP column shows UTIL. & MIDI, FILE MANAG., ENGLISH, P.COMB GT+P, KINV NO, and TRANSP --.

<b>TUNING</b>	<b>SET-UP</b>
<b>VOICES</b>	<b>UTIL. &amp; MIDI</b>
<b>STYLES</b>	<b>FILE MANAG.</b>
<b>EQUAL</b>	<b>ENGLISH</b>
<b>ENSEMBLE 1</b>	<b>P.COMB GT+P</b>
<b>AIRPRESS --</b>	<b>KINV NO</b>
<b>A: 440.00 HZ</b>	<b>TRANSP --</b>

*Initial instrument display*

From the above picture you can see that the instrument is set to Equal temperament with A at 440 Hz and with the English voice setting. The Pedal and Great piston functions have been combined and the instrument has not been set to transpose. Other sections of the display allow you to enter and reset these parameters as well as other features on the instrument.



The organ has 4 factory-fixed organ styles that cannot be changed. These are English, Baroque, Symphonic and Romantic, which has a strong French flavour. Each of these four styles is copied into a fully accessible part of the memory where all the voices and features can then be changed by the musician, as required, to create a completely personal organ configuration. The 4 fixed styles ensure that it is always possible to return quickly to a perfectly balanced instrument as set up by the factory if any personal editing generates an unwelcome result.

## Alternative Stop Voices

The most versatile and perhaps commonly used function in our Regent organs is the ability to change stop voices for others inside the huge internal library. The picture below shows the display that controls the voice selection, and you can see a short part of the list of alternative voices that in this case are available to replace the Open Diapason 16. The voice to be changed is shown at the top of the image and the alternatives are listed below.



The list extends beyond the screen to upwards of 20 alternative voices for each stop. These can be viewed by scrolling through the list. The new voice is selected at the push of a single button. This feature, which is unique to Viscount Physis instruments, allows the musician to set up a totally custom-voiced instrument based on the library of over 1000 individual stops stored in the memory.



## Individual Stop Voicing

Having selected your preferred stop voice you are additionally able then to voice each rank for a number of parameters, just as would be possible in a real pipe organ. These include:

- Character (pipe width)
- Air Noise
- Harmonic Noise
- Attack
- Release Detune
- Relative Tuning of Strings
- Bass Attenuation Curve
- Treble Attenuation Curve
- Individual Rank Volume

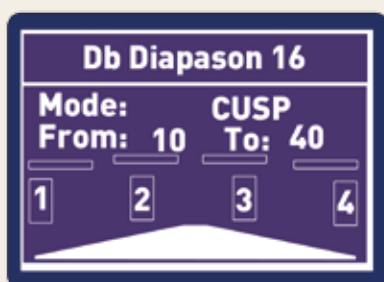
A screenshot of a digital organ console display showing voicing parameters for "Opdiap 8IA". The display is a rectangular screen with a dark blue background and white text. It lists five parameters with their corresponding values:

Opdiap 8IA	
Character	-1
Air Noise	+1
Harm Noise	-3
Attack	2
Release DET.	1

All of these features can be locked with a security code to prevent accidental adjustment. On occasions when more detailed adjustments are required, including on a note by note basis, these can be made by connecting a computer via the USB port located under the keyboard shelf.

## Wind Chest Layout

In a real pipe organ the individual pipes sit on a box known as the wind chest. Each pipe creates a note and these notes sound from a different position in the instrument governed by the position of the pipe on the box. Pipes are nearly always set in fixed patterns. You will see arrays with tall pipes in the centre and small pipes to the sides and vice versa. This spacing of the pipes creates an extra dimension to the organ sound which all Regent and Envoy organs can reproduce.

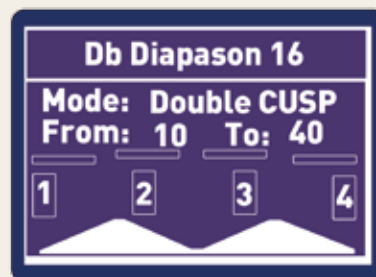


*Single cusp sound distribution*

The above picture shows the wind chest layout for a particular stop. In this case the sound for the Double Diapason 16 is being spread across 4 speakers with the lowest notes in the centre of the array and the highest notes towards the outside. This particular arrangement is known as a cusp and this is shown on the display.



The technology allows many alternative wind chest layouts to be created and the picture below shows a double cusp where the stop is distributed across 4 speakers.



*Double cusp sound distribution*

The above features are available for both internal and external speaker systems. When used exclusively on internal speakers we also employ an additional feature called Smart Sound distribution that ensures that combinations of notes that would normally 'fight' against each other, can never be routed to the same speaker. These unique features together with the remarkable sophistication of the Physis physical model, combine to create an instrument which faithfully reproduces the truly living sound of a traditional organ, that the ear never tires of listening to.

## Keyboard Options

Our keyboards are available in a range of shapes, sizes and weights. Since the feel of each keyboard and its action are important to the control of the instrument, we select only the finest components to ensure the touch is consistent, comfortable and rewarding to play.

The Viscount standard keyboards are all constructed with a simulated tracker touch and we always recommend a solid filled key that has its own weight and inertia. We also offer wood filled keyboards that would be found on a traditional pipe organ.

Viscount has also developed a tracker type response to key speed in their physical models. When this is enabled, the starting transient is influenced by the speed that the key is activated, just as you would hear on a pipe organ.



Viscount standard black and cream resin keyboards



Fatar standard wood-veneered, reverse-colour, baroque-style keyboards



Fatar style TP60LR white and black plastic keyboards



Fatar style TP60LW solid wood filled cream and ebony keyboards



## English Specification

### Pedal (9 stops)

Sub Bass	32
Open Wood	16
Open Metal	16
Bourdon	16
Principal	8
Bass Flute	8
Choral Bass	4
Mixture	IV
<b>Trombone</b>	<b>16</b>

### Great (12 stops)

Double Diapason	16
Open Diapason No.1	8
Open Diapason No.2	8
Claribel Flute	8
Stopped Diapason	8
Principal	4
Harmonic Flute	4
Twelfth	2-2/3
Fifteenth	2
Mixture	IV
<b>Trumpet</b>	<b>8</b>
<b>Clarinet</b>	<b>8</b>

### Swell (12 stops)

Geigen Diapason	8
Chimney Flute	8
Echo Gamba	8
Vox Celesta	8
Geigen Principal	4
Wald Flute	4
Flageolet	2
Sesquialtera	II
Mixture	IV
<b>Contra Fagotto</b>	<b>16</b>
<b>Cornopean</b>	<b>8</b>
<b>Oboe</b>	<b>8</b>

Swell to Pedal  
Great to Pedal

Tremulant  
Swell to Great

Tremulant





## Romantic Specification

### Pedal (9 stops)

Principal Basse	32
Gambe	16
Flute	16
Soubasse	16
Flute Principal	8
Flute	8
Flute	4
Mixtur	IV
<b>Bombarde</b>	<b>16</b>

### Great (12 stops)

Montre	16
Montre	8
Gambe	8
Flute Harmonique	8
Bourdon	8
Octave	4
Flute a Fuseau	4
Quint	2-2/3
Doublette	2
Grande Fourniture	III
<b>Trompette</b>	<b>8</b>
<b>Cromorne</b>	<b>8</b>

### Swell (12 stops)

Diapason	8
Flute Traversiere	8
Viole da Gamba	8
Voix Celeste	8
Prestant	4
Flute a Cheminee	4
Octavin	2
Tierce	1-3/5
Plein Jeu	IV
<b>Bombarde</b>	<b>16</b>
<b>Bombarde</b>	<b>8</b>
<b>Basson Hautbois</b>	<b>8</b>

Swell to Pedal  
Great to Pedal

Tremulant  
Swell to Great

Tremulant



## Baroque Specification

### Pedal (9 stops)

Untersatz	32
Subbass	16
Prinzipalbass	16
Gedackt	16
Oktavebass	8
Gedackt	8
Choralbass	4
Mixtur	IV
<b>Posaune</b>	<b>16</b>

### Great (12 stops)

Prinzipal	16
Prinzipal	8
Gemshorn	8
Gedackt	8
Hohlflöte	8
Oktave	4
Spitzflöte	4
Quinte	2-2/3
Superoktave	2
Mixtur	V
<b>Trompete</b>	<b>8</b>
<b>Krummhorn</b>	<b>8</b>

### Swell (12 stops)

Geigenprinzipal	8
Rohrgedackt	8
Viola da Gamba	8
Vox Coelestis	8
Oktave	4
Rohrflöte	4
Waldflöte	2
Terz	1-3/5
Scharf	III
<b>Fagott</b>	<b>16</b>
<b>Trompete</b>	<b>8</b>
<b>Oboe</b>	<b>8</b>

Swell to Pedal  
Great to Pedal

Tremulant  
Swell to Great

Tremulant



## Symphonic Specification

### Pedal (9 stops)

Contra Violone	32
Open Wood	16
Principal	16
Quintaton	16
Octave	8
Bass Flute	8
Choral Bass	4
Mixture	IV
<b>Bombarde</b>	<b>16</b>

### Great (12 stops)

Double Diapason	16
1st Diapason	8
2nd Diapason	8
Flauto Traverso	8
Stopped Diapason	8
Octave	4
Rohr Flute	4
Twelfth	2-2/3
Fifteenth	2
Fourniture	IV
<b>Trumpet</b>	<b>8</b>
<b>Clarinet</b>	<b>8</b>

### Swell (12 stops)

Horn Diapason	8
Chimney Flute	8
Gamba	8
Gamba Celeste	8
Prestant	4
Harmonic Flute	4
Block Flute	2
Tierce	1-3/5
Plein Jeu	IV
<b>Bombarde</b>	<b>16</b>
<b>Trompette</b>	<b>8</b>
<b>Oboe</b>	<b>8</b>

Swell to Pedal  
Great to Pedal

Tremulant  
Swell to Great

Tremulant

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Viscount Classical Organs Limited

Prestige House, 23 Telford Road, Bicester, Oxfordshire OX26 4LD

Tel: 01869 247 333 | Email: [enquiries@viscountorgans.net](mailto:enquiries@viscountorgans.net) | [www.viscountorgans.net](http://www.viscountorgans.net)