GLOSSARY

ARP INSTRUMENTS, INC.
320 Needham St., Newton,
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og1172

BASIC BUILDING BLOCKS OF SOUND

Oscillator (VCO): generates tone.

Filter (VCF): changes tone color.

Amplifier (VCA): controls volume.

Envelope Generator (ADSR and AR): controls attack and decay.

ELECTRONIC TERMS

Frequency: pitch.

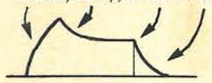
Timbre: tone color.

Amplitude: volume

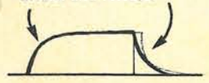
Envelope: attack and decay shape.

ODYSSEY TERMS

ADSR and AR:
attack, decay, sustain release.



attack and release.



Attenuator: on the Odyssey, a slider that lets signal through when it's up and cuts it off when it's down.

Audio range: the range of pitches that your ear can hear.

Harmonics: overtones. The more harmonics are present, the more brilliance the sound will have.

Hertz (Hz): an electronic term meaning "cycles per second." The human ear can hear pitches from 20 to 20,000 cycles per second, or 20Hertz to 20 kiloHertz. (20Hz - 20KHz).

Highpass filter (HPF): changes timbre by cutting off low harmonics and passing high ones.

Internal clock: adjustable low frequency oscillator.

Lowpass filter (VCF): changes timbre by cutting off high harmonics and passing low ones.

Mixer: combines signals.

Noise: a random signal that sounds like a "hiss."

Odyssey: the ultimate musical trip.

Phase: the relationship of one waveform to another.

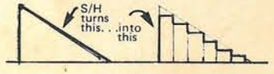
Phase-synchronization: using one oscillator to control the phase of another oscillator of different pitch.

Pitch bend: control of the frequency of a note while it's being played.

Portamento: a glissando, or sliding between notes.

Resonance: "wow" control. In electronic terms, a control that amplifies a narrow band of overtones.

Sample & hold: produces a series of steps, which can control pitch, volume, or brilliance. Triggers itself automatically.



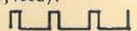
Sub-audio range (Low frequency): pitches that are below what your ear can hear as a tone.

Trigger: an electronic impulse put out by a keyboard or low frequency oscillator that starts the envelope generator.

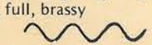
Voltage control: on a synthesizer, it means substituting an electrical signal for manual control of pitch, brilliance, volume, and attack & decay.

Waveform: tone. Different shapes of waveforms have different timbre:

Square: 
sounds hollow, reedy.

Pulse: 
sounds thin, nasal.

Sawtooth: 
sounds rich, full, brassy

Sine: 
sounds smooth, round, pure.

Ring modulator: produces a single complex output signal which contains all the sums and differences of the two inputs.

Learn to take yourself on the ultimate musical trip!

ARP

Odyssey

Electronic Music Synthesizer

Guide

FOR INSTANT INSTRUCTION, TURN TO PAGES 18 & 19.

Warranty

Your ARP synthesizer is warranted for the original purchaser only against defects in materials or workmanship for one full year from date of purchase.

In case of defect, repairs will be made without charge when the synthesizer is shipped, transportation prepaid, properly packed, to the nearest ARP authorized service center.

These warranties do not cover defects resulting from accident, alteration, improper use, unauthorized repairs, tampering, or failure of the purchaser to follow normal operating procedures outlined in the user's manual, nor, for example, does it cover damage resulting from acts of God, such as, flood, tornadoes, or lightning. Parts replaced under these warranties are warranted only through the remaining portion of the original warranty.

This warranty becomes effective only when the ARP Warranty Registration card is properly filled out with all the required information and received at ARP INSTRUMENTS, INC. within 14 days from the date of purchase.

The foregoing warranties are in lieu of all other warranties express, implied, or statutory, including but not limited to any implied warranty or merchantability or fitness, and all other obligations or liabilities of ARP INSTRUMENTS, INC. In no event shall ARP INSTRUMENTS, INC. be liable for special or consequential damages, or for any delay in the performance of this warranty due to causes beyond its control.

If your Odyssey fails during the first year after purchase, contact the dealer from whom it was purchased or the factory to obtain the name and address of the nearest ARP authorized service center. Do not return your Odyssey to the factory without getting prior approval. You are responsible for getting your Odyssey safely to the service center and back. If you ship your Odyssey, be certain to insure it for its full value and enclose a note describing the problem. And pack it well.

IMPORTANT! The enclosed Warranty card must be returned to the factory within 14 days of purchase.

ARP

ODYSSEY GUIDE

Table of contents

320 Needham Street
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SET UP YOUR ODYSSEY

1. Remove the instrument from its shipping carton. Do not throw the carton and packing materials away. They can be used to protect the Odyssey in transportation.

2. The Odyssey should be placed on a firm support about 30" off the floor so that its keyboard is at a comfortable playing height. An optional performance stand is available from your dealer.

3. Connect the power cord to a grounded 110-117 VAC electrical outlet. The power switch in the upper right corner of the control panel will light up when the Odyssey is turned on.

4. Like all electronic musical instruments, the Odyssey must be connected to an amplifier and loudspeaker system in order to produce sounds. The phone jack labeled "low level" on the back of the instrument is for use with standard musical instrument amplifiers. The smaller phono (RCA) jack next to it is labeled "high level" and should be used in connecting your Odyssey to a tape recorder, stereo amplifier, or electronic organ.

5. A foot switch and pedal control have been supplied with your Odyssey. Connect these to the rear panel jacks labeled "pedal" and "switch." The pedal is *not* a simple volume control such as you are familiar with if you have played electronic organs; *it is an integral part of the Odyssey and is essential for realising the full potential of the instrument.*

6. You are now ready to make music with your Odyssey. You can begin immediately, if you wish, by turning to the end of this manual and setting up any one of the "patches" given there. There are thousands of patches you can discover on your own, and in the next few pages of this manual we will show you, in simplified form, how you can discover some of them.

7. Until you are quite familiar with the range of sounds your Odyssey can produce, it will be a good idea to keep the tone controls of your amplifier set to their "flat" or normal position. Later on, of course, you can use them freely, together with reverberation if your amplifier provides it.

HOW YOUR ODYSSEY WORKS

1. Most purely electronic musical instruments work by generating certain kinds of "raw" sounds from circuits called **oscillators.** These raw sounds (not usually very pleasant or musical sounding by themselves) are then modified by other circuits such as **filters** to make them musically useful. In a very general way, this is how your Odyssey works, *but there are important differences.*

2. One difference is that the synthesizer gives you **complete control** over every step of the process that turns a raw sound into an interesting musical event or series of events. All of the slide controls on the upper half of your Odyssey control panel, for example, represent forms of sound modification that either do not exist on other electronic musical instruments or are buried deep inside where only a serviceman could reach them.

3. The biggest difference, however, is that with your ARP Odyssey the process of whittling a raw sound into something musically interesting can be controlled not only manually but also, in several important respects, automatically. This is the principle of **voltage control,** which means controlling the operation of your synthesizer by means of changing voltages as well as changing slider positions. Some of the circuits in your Odyssey exist only in order to produce such control signals. (Some of these are the sample/hold circuit, the two envelope generators, the LFO, and the keyboard.)

4. In a modern manufacturing plant many operations such as drilling, milling, and lathe work will be controlled by computer. Most of us have seen at one time or another a film of this sort of thing—a piece of raw material being locked into place and machined to a certain size, with holes of a certain depth, width, and placement—and so on. You can think of your Odyssey as being such an "assembly line" for the construction of sounds.

5. The ARP Odyssey contains about a dozen separate pieces of equipment (plus a few extra controls such as the portamento and pitch bend controls on the far left of the panel.) These can be connected to each other in many different ways by the switches and sliders to produce thousands of different "assembly programs" or patches. Each patch requires:

   a. at least one piece of equipment to generate the raw material from which the sound is to be made; i.e., **a signal source.**

   b. at least one piece of equipment to modify the raw material and make it usable; i.e., **a signal modifier.**

   c. one or more pieces of equipment for controlling the signal sources and signal modifiers; i.e., control signal sources, sometimes simply called **controllers.**

6. The front panel of your Odyssey shows the general assembly-line setup (Figure A). Thus, to reach your amplifier and loudspeaker system, a signal must pass through this "assembly line." *This is the heart of your Odyssey.* By using the sliders and switches of the audio mixer, you can select the raw material for processing by the voltage controlled filter (VCF), the high pass filter (HPF), and the voltage controlled amplifier (VCA). In the next few pages, we will show you exactly what each part of the assembly line does by itself; the sample patches at the end of the manual show some of the ways they all work together.

Audio signals from the two **voltage controlled oscillators** (VCO 1 and VCO 2), the **noise generator,** and **ring modulator** are mixed and passed through the **voltage controlled filter,** the **high pass filter,** and the **voltage controlled amplifier** before leaving the synthesizer. The output of the **voltage controlled amplifier** is connected to the output jacks on the back of your Odyssey.

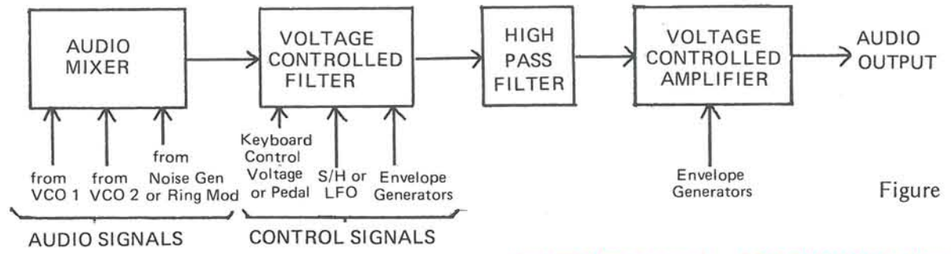


Figure A

INDIVIDUAL FUNCTIONS IN THE ODYSSEY

1. Set all the controls on your Odyssey as in Figure B. There should be no sound coming from your speakers when the controls are set like this, even if you press a key. But the assembly line is "wide open" and will pass any signal from the audio mixer in unchanged form.

2. Opening the first slider under the audio mixer will give you a steam-like hissing noise from the **noise generator.** The noise generator is a signal source, and has one control, located in the upper left corner of the panel (Figure C). Moving this switch down will give you the lower-pitched sound, like a distant waterfall, of pink noise. These raw sounds, suitably modified, are useful in the production of wind, thunder, surf, and motor or machine effects. See Patch 10 for some of these.

Close the first slider.

3. Open the second slider and you will hear a rich buzzy tone from **voltage controlled oscillator 1 (VCO 1).** The pitch of this tone can be changed manually by the **coarse** and **fine tuning** sliders (Figure D), and by voltage control from the **keyboard** (try playing the keyboard using all three positions of the transpose switch at the left of the control panel). Other control signals can affect the frequency of VCO 1 through the two sliding attenuators shown in Figure E. Experiment with the indicated controls. An **attenuator** acts like a valve, or faucet, to set the amount of a control signal that passes through it to affect a voltage controlled device. *An attenuator is closed when it is all the way down, and open when it is all the way up.*

VCO 1 produces two kinds of output signals; you have been listening to the **sawtooth** signal (so called because it is a pattern of voltage changes which look, on a graph, like the teeth of a saw). *It is the frequency with which this pattern is repeated every second that determines what pitch you hear.* You can hear the **pulse** signal by moving the middle switch under the audio mixer down (Figure F).

Figure C

Figure D

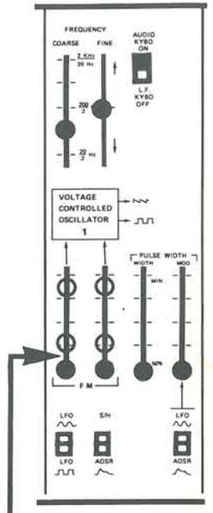


Figure E

Figure F

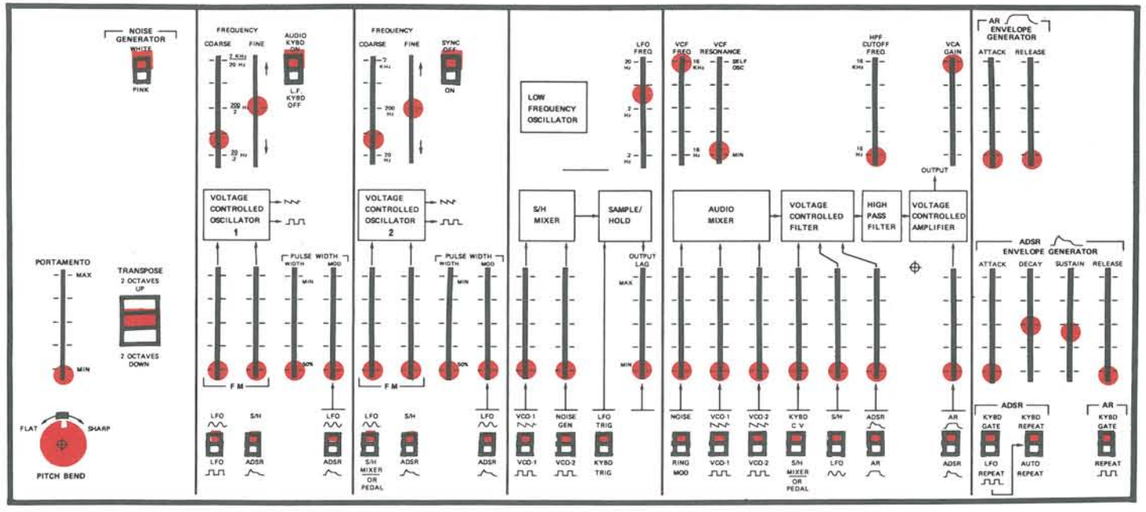
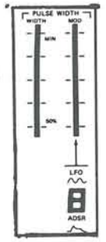


Figure B

Figure G



Experiment with the **pulse width control** on VCO 1 and then with the **pulse width modulation** signal attenuator (Figure G).

Moving the switch shown in Figure H down lowers the frequency of VCO 1 by a factor of about a hundred. *This is far below the range of human hearing;* consequently you will not hear any continuous tone but only a more or less rapid series of clicks (depending on the coarse and fine frequency settings). In this **low frequency range** VCO 1 is not controlled by the keyboard (if it were, the click-frequency would double with every keyboard octave), and can be used as a source of control signals.

4. Return the controls on the Odyssey to the positions shown in Figure B. Now open the third slider under the audio mixer to hear the raw sawtooth signal from **voltage controlled oscillator 2 (VCO 2).** VCO 2 is exactly like VCO 1 except for two things:

a. VCO 2 does not have a low-frequency operating range.

b. VCO 2 can be **synchronized** to VCO 1.

Phase synchronization of the two oscillators is accomplished by the switch at the top right in Figure I, labeled "sync off/on." When this switch is on, the audio signal from VCO 2 is forced to conform to the frequency of VCO 1. You can hear this effect in its raw form by setting VCO 1 to some relatively low audio frequency (near the "100 Hz" mark) and slowly moving the coarse tuning control of VCO 2 through its entire range from bottom to top. Experiment also with changing the frequency of VCO 1 while leaving VCO 2 in about the middle of its range. Patches 2, 3, and others make use of this spectacular sound.

At this point, too, with the sync switch off, you should practice tuning VCO 1 and VCO 2 to various musical intervals by opening both the second and third sliders under the audio mixer.

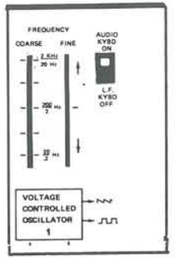
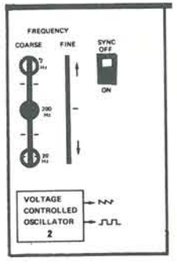


Figure H

Figure I



*Be sure you have returned the sync switch to "off" when you first try the ring modulator.

5. Beginning from the position of Figure B,* open the first slider under the audio mixer again and listen to the **ring modulator.** The ring modulator is a signal modifier, and when you are listening to it you should think of your assembly line as it is shown in Figure J. The ring modulator has no controls of its own. It produces, from the pulse outputs of VCO 1 and VCO 2, a single complex output signal which contains all the sums and differences of the two oscillator frequencies. This means that:

a. the raw sound produced from the ring modulator depends entirely on the tuning of VCO 1 and VCO 2; and to a lesser extent on the pulse width settings for each one. Experiment with these. *Note in particular that sounds from the ring modulator do not necessarily have any standard musical pitch in relation to the pitch of either oscillator.* (Unless they are synchronized by the "sync" switch on VCO 2; try that.)

b. the overtones of the ring modulator signal will not necessarily conform to the standard harmonic series. They may be extremely complex, like those of a bell, chimes, gongs, and other metallic or percussive sounds. All of these, in fact, can be simulated by further modifications of a suitable ring modulator signal; see Patch 12.

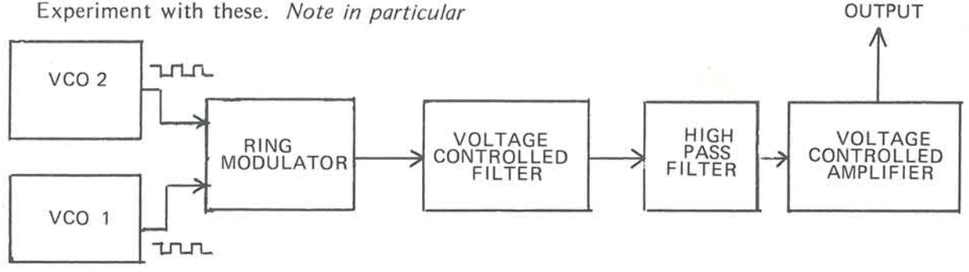


Figure J

6. The **voltage controlled filter (VCF)** is a signal modifier. It alters the sound of signals passing through it by selectively removing or weakening their higher frequencies. Listening to pink noise, with the settings as in Figure K, move the **VCF freq** slider slowly down as far as it will go. You will hear first the highest frequency components of the noise weaken and disappear, then middle frequencies, and finally even the lowest bass disappear until no signal is audible at all. Try the same procedure with signals from one or both of the VCO's instead of pink noise.

Raise the **resonance** slider about halfway up, as in Figure L, and repeat the experiment, first with pink noise and then with an oscillator signal. With this resonance setting, the VCF "peaks" sharply around a narrow range of frequencies; this is useful in creating various "wa-wa" effects.

The highest position of the resonance slider is labeled "self osc" (Figure M). In this position the VCF is an oscillator just like one of the VCO's and will produce an output even with all the input sliders on the audio mixer closed. *In other words, it becomes a signal source rather than a signal modifier.*

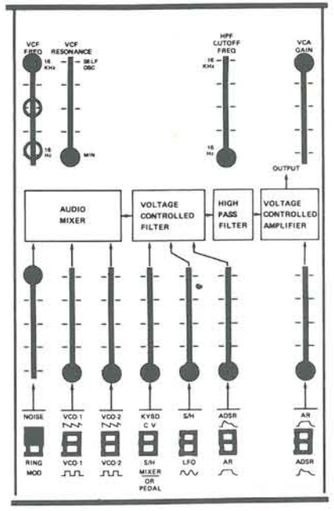


Figure K

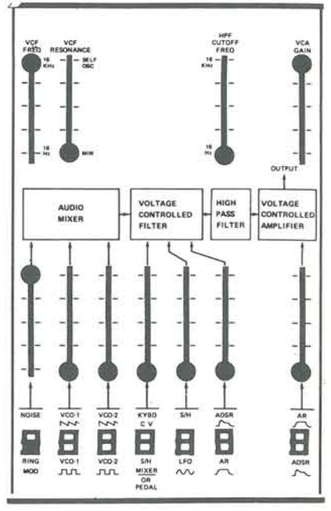


Figure M

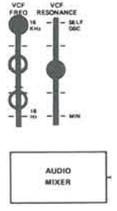
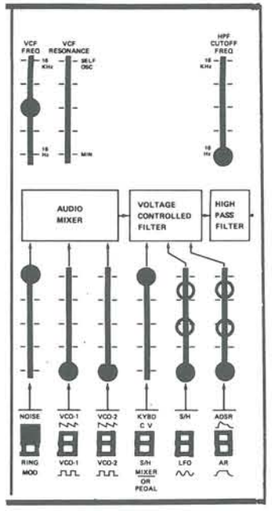


Figure L

The **VCF resonance** can only be set manually. The **VCF frequency** can be set and changed with control voltages as well as by hand; using noise as your input signal, open the first control input attenuator all the way (Figure N) and set the manual **VCF freq** slider about halfway up. Now run long glissandos on the keyboard and listen to the noise grow alternately brighter and duller. Close this attenuator and open the next one to introduce control by the **LFO sine** output. (By this time, you should develop the habit of experimenting with all the relevant controls for any functions in use; in this case, for example, you will want to hear different settings of the LFO frequency and the VCF resonance and manual VCF frequency settings.)

Often you will want to control the **VCF frequency** by the **ADSR** or **AR envelope generators** in order to create separate events with their own **attack** and **decay** characteristics. For an example of this, feed one of the VCO signals into the audio mixer and move the **VCF freq** slider all the way down. Open the third control attenuator under the VCF all the way (all the other controls on your Odyssey should



control input attanuators

Figure N

be set as in Figure B), and play the keyboard. Continue with various settings of the VCF freq, the third attenuator, and the four controls of the ADSR envelope generator. In general, the higher the setting of the third attenuator, the lower you will want to set the VCF freq, and vice versa.

7. The **high pass filter (HPF)** is another signal modifier. It attenuates frequencies below the setting of its HPF cutoff frequency slider and thus is exactly opposite in its effects to the VCF which is a low pass filter.* It is useful in eliminating "boominess" from low bass notes, and in simulating certain instrumental sounds (see Patch 6). *The HPF is not voltage controlled.*

8. The **voltage controlled amplifier (VCA)** is the final signal modifier stage of your Odyssey "assembly line." *It governs the volume of the synthesizer's output.* The most common way of using the VCA is to set its **VCA gain** slider all the way down and the control attenuator all the way open. (See Figure O on page 12.) Thus the VCA will allow signals to pass through only when it is "instructed" to do so by one of the envelope generators.

*Thus the HPF is "wide open" when the HPF Cutoff Freq control is all the way down.

9. The two **envelope generators** are controllers. They are most often used to program the attack and decay of events by controlling the gain of the VCA or the frequency of the VCF. The upper envelope generator in Figure O has two control sliders, one for **attack time,** and one for **release time.** It is referred to as the **AR generator.** The lower generator has controls for **attack time, decay time, sustain level,** and **release time,** and is thus abbreviated as the **ADSR generator.**

With your Odyssey controls set as in Figure B, feed pink noise into the audio mixer and close the VCA gain slider all the way down. Open the control attenuator under the VCA all the way as in Figure P, and depress any key on the keyboard. Raise the attack slider on the AR generator a little way and depress a key again. Continue to do this, each time raising the attack control a little more until it is all the way up. Then move it down again and repeat the whole procedure using the release slider.

Now experiment with VCA control by the ADSR generator; move the selector switch under the VCA control attenuator down as in Figure P and try various settings of the four ADSR controls.

By closing the VCF freq slider and opening the third attenuator under the VCF all the way as in Figure Q, you can give yourself a similar introduction to ADSR and AR control of the VCF. Experiment too with various combinations of the VCF freq and control attenuator settings, and with various mixes (by means of the input attenuators to the audio mixer) of signals from VCO 1 and VCO 2.

Up to now you have been triggering the envelope generators only from the keyboard. By means of the three switches at the bottom right of Figure R, you can also trigger the envelope generators with the LFO. Move all three switches down and set the other controls of your Odyssey for AR or ADSR control of the VCF or VCA as in Figure R; now try different settings of the LFO freq slider from low to high. With the first switch down and the second switch up, a series of events will be produced (triggered) by the LFO, but only when a key is depressed. This is useful in simulating banjo-picking and strumming as in Patch 11.

Return switches under ADSR and AR to upper position.

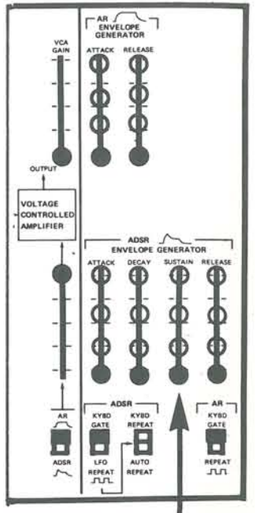


Figure P

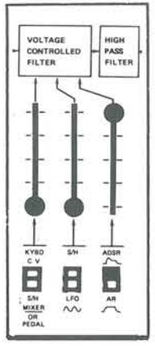


Figure Q

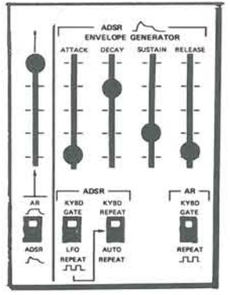


Figure R

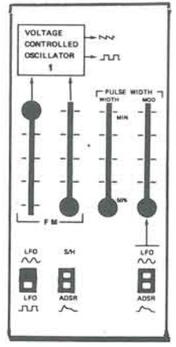


Figure S

10. The **low frequency oscillator (LFO)** is a controller; *its output signal is never used as raw material but only to control other functions within the Odyssey.* You have already heard it control VCO 1 in Figure E; now, by following the settings of Figure S, listen alternately to **LFO square wave** control of VCO 1 and **LFO sine wave** control. In one case you hear a vibrato, in the other a trill. Experiment with various settings of the LFO freq slider and of the control attenuator under VCO 1.

The LFO can also be used to govern the operation of the sample/hold circuit and the envelope generators which you will read about later.

11. The **sample and hold mixer (S/H mixer)** selects and combines signals to be fed to the sample and hold circuit. These signals can also be routed to control VCO 2 and the VCF. Under each of these two functions is a switch labeled"S/H mixer or pedal." When the foot pedal is plugged into the Odyssey, the lower position of these switches selects control by the pedal; if the foot pedal is disconnected

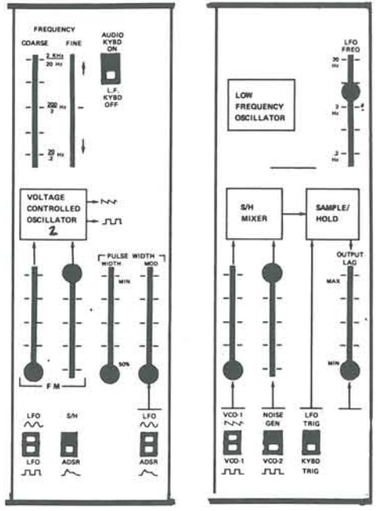
from the back of the Odyssey, the same switch position selects control by the output of the S/H mixer.

12. The **sample and hold circuit** is a controller; it is used only to control VCO 1, VCO 2, and/or the VCF. In order to hear what it does listen first to VCO 2 as you have done before and then experiment with the controls indicated in Figure T.

By "sampling" at a given instant the signal voltage from the S/H mixer, the sample and hold circuit produces a series of **voltage levels.** If these in turn are used to control a VCO, the result is a series of **pitches.** The switch under the sample and hold circuit selects either the LFO or the keyboard as a triggering source. If the keyboard is selected (Figure U), then a new sample will be taken every time you press a key; if the LFO is selected, then new samples will be taken at regular intervals corresponding to the frequency setting of the LFO.

When the signal sampled is primarily noise, the output voltage levels will be random and so of course will be the pitches produced from VCO 2; but if the signals being sampled are

Figure T



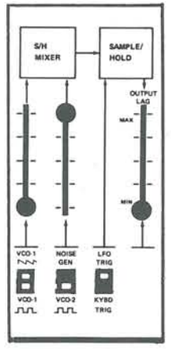


Figure U

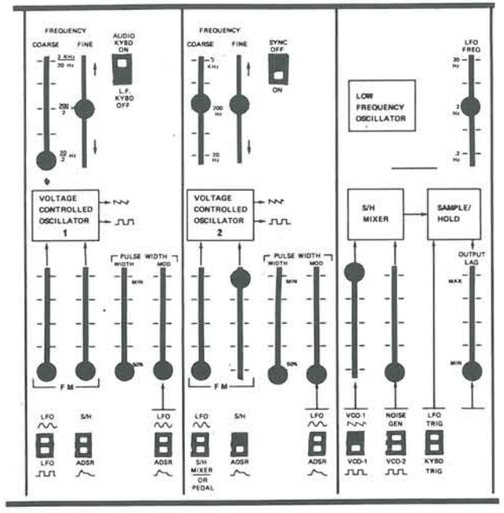


Figure V

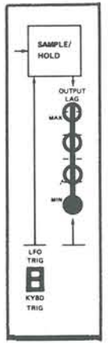


Figure W

See Patch 10 for a thorough sample and hold patch.

regular and periodic (any combination of the VCO 1 and VCO 2 signals), then the output from the sample and hold circuit will tend to be a repeating pattern also. It may be an extremely complex one, or it may be extremely simple. For an example of a simple one, switch VCO 1 to its low freq range and feed the VCO 1 sawtooth into the S/H mixer. Use the **sample and hold output** to control VCO 2 and listen to VCO 2 through the audio mixer. Set the LFO freq to about halfway up, and the VCO 1 freq at about 2 Hz. *You should hear a descending "staircase" of pitches, like a scale passage or an arpeggio (Figure V).* Speed up VCO 1 freq and hear the repeating patterns.

The **output lag** slider (Figure W) "smoothes out" sudden changes of voltage from the sample and hold circuit. With the same patch you have been listening to, move the slider slowly from "min" to "max" and back again.

13. The **keyboard** is a controller. By controlling the pitch of the VCO's and providing triggering signals to the envelope generators, it allows you to play your Odyssey as though it were a standard keyboard instrument. The

transpose, portamento, and pitchbend controls (Figure X) give extra flexibility to your pitch control of the oscillators.

Set the controls, to start with, as in the illustration, and feed VCO 1 (either the sawtooth or pulse signal) into the audio mixer with the VCF, HPF, and VCA wide open. Depress a key and rotate the **pitch bend** knob to the right, then to the left, then return it to center. Release the key and rotate the knob again. Note that it operates only when a key is depressed. Return the knob to center.

Raise the **portamento** slider about halfway and play a short melody; note the "glide" between pitches. The position of the portamento slider determines the speed of the glide; experiment with different settings.

The **transpose** switch shifts the entire keyboard control up or down by two octaves. Play a scale up the keyboard with this switch centered, and then with the switch up, then with the switch down. In this way the keyboard can have an effective range of seven octaves, almost as wide as a piano.

The **foot switch** supplied with your Odyssey is used to turn on the portamento. Thus you can set the portamento slider for a certain glide speed and then turn it on and off with the foot switch.

When the **foot pedal** is plugged into the back of your Odyssey, VCO 2 and the VCF can be controlled by it. (The signal from the S/H mixer is automatically disconnected by inserting the foot pedal jack.) See Patch 1 and 2 for examples of its use.

Your Odyssey **keyboard** has two-voice capability. Feed both oscillator signals into the audio mixer and tune them to unison while holding down the lowest key. Now VCO 1 will follow, or "track," the lowest key of any two notes you play, and VCO 2 will track the highest key. Thus you can play two independent pitches at the same time. For examples of this turn to page 20 and begin with the first patch. (When you are setting up a two-voiced patch, make sure the "sync" switch is in the "off" position.)

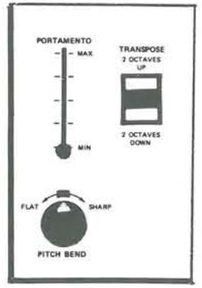


Figure X

HINTS FOR GETTING THE MOST OUT OF YOUR ODYSSEY

1. You may tend at first to think of the control sliders on the Odyssey as something like stop tabs on an electronic organ. That is, you may be tempted to set them in a certain way and then "play" the Odyssey only from the keyboard. Try to overcome this temptation. *Use the sliders in performance.* Learn to change the sounds you are producing while you are producing them.

2. The patches given in this manual are very basic. Do not hesitate to search for improvements and variations on your own. In many cases a slight change in the position of a single control slider or attenuator can make a large difference in the sounds you are producing.

3. *Resist the temptation to merely open as many sliders as possible, as far as possible.*

If you just have to start here:

INSTANT ODYSSEY

Set up the sound shown on page 19 (opposite).
Play a two-part piece on the keyboard.
If you hear two voices with pedal control, turn the page and try more sounds.
If what you hear is nothing like two voices with pedal control, **or if you don't hear anything,** check the following things:

1). *Is the "sync off/on" switch turned off? (top of Oscillator 2).*
If it's on, you'll hear only one voice even though you press down two keys.

2). *Is the "audio kbd on/LF kbd off" switch turned on? (top of Oscillator 1).*
If it's off, your first tone source (VCO 1) will be way below what your ear can hear.

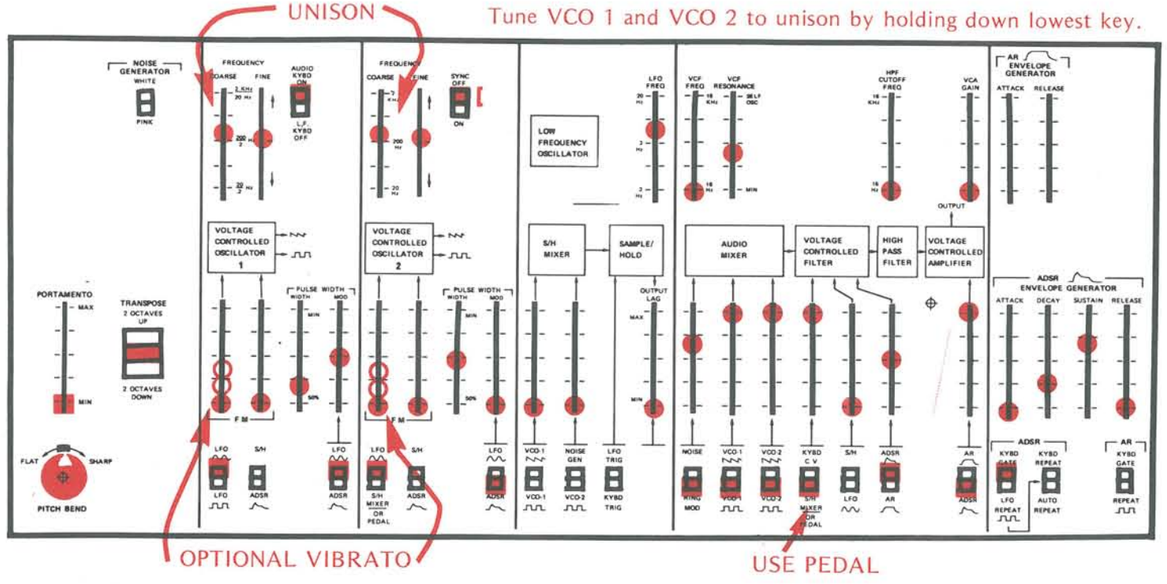
3). *Is the "HPF cutoff" slider all the way down? (top of High Pass Filter).*
If it's up, you are cutting off your sound by eliminating all but the very highest overtones.

4). *Is the "VCA gain" slider down? (top of Voltage Controlled Amplifier).*
If it's up, you'll hear sound all the time, even when you take your hand off the keyboard.

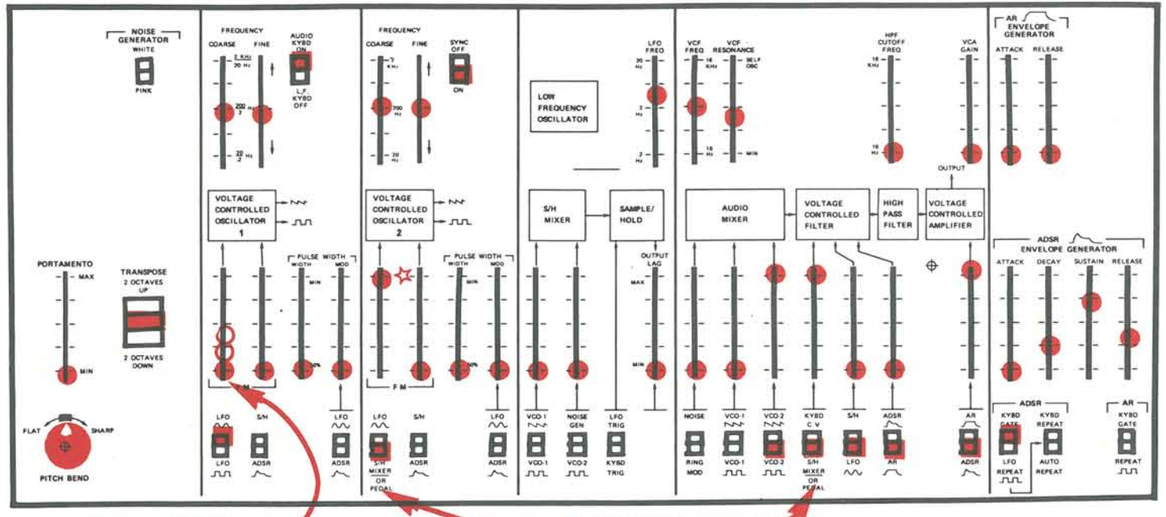
5). *Are the "attack, decay, sustain, release" sliders raised partway? (under ADSR Envelope Generator).*
If they're all down, the attack & decay of your note will make only a tiny blip.

6). *Is the Odyssey connected to the right amplification system? (back of instrument).*
The "low level" output on the back is for a standard musical instrument amp;
the "high level" output is for a tape recorder, stereo amplifier, or electronic organ.

7). *Is the Odyssey plugged in? Turned on?*

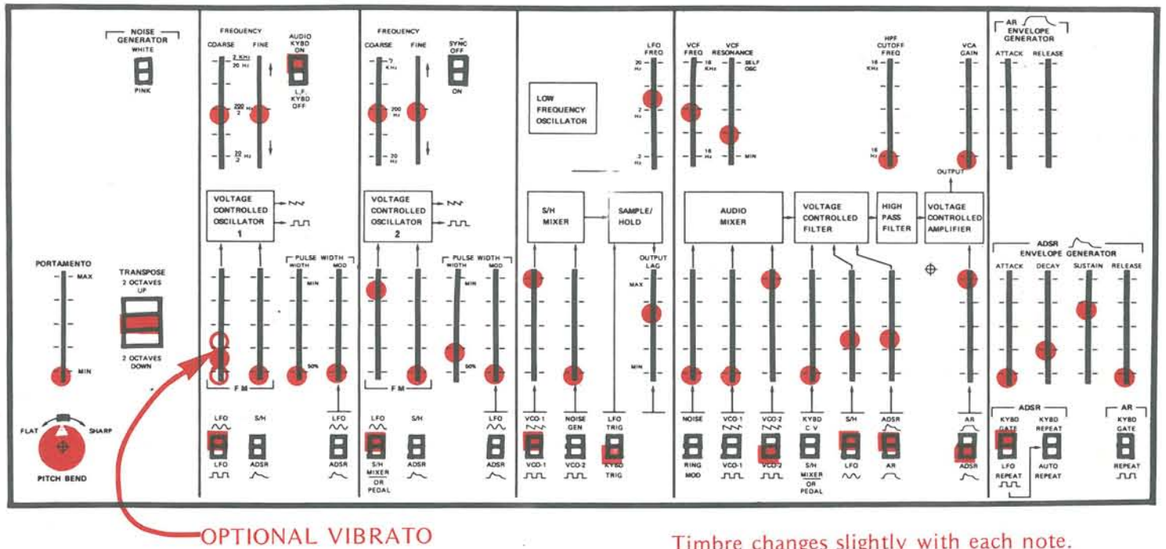


2-Voice with Pedal Filter Control



Phase-Synchronized Oscillator

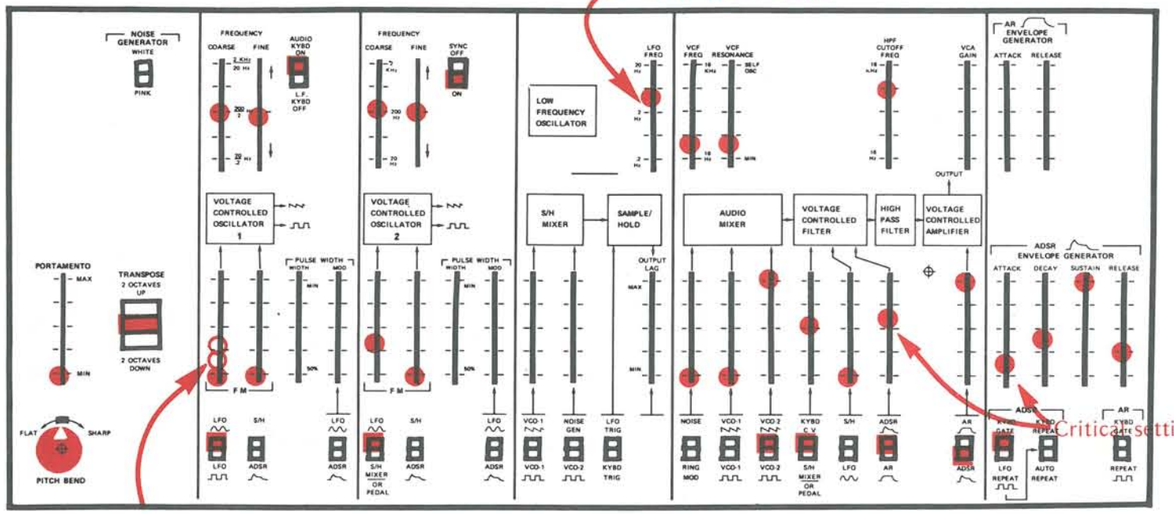
Single voice with pedal control.



Timbre changes slightly with each note.

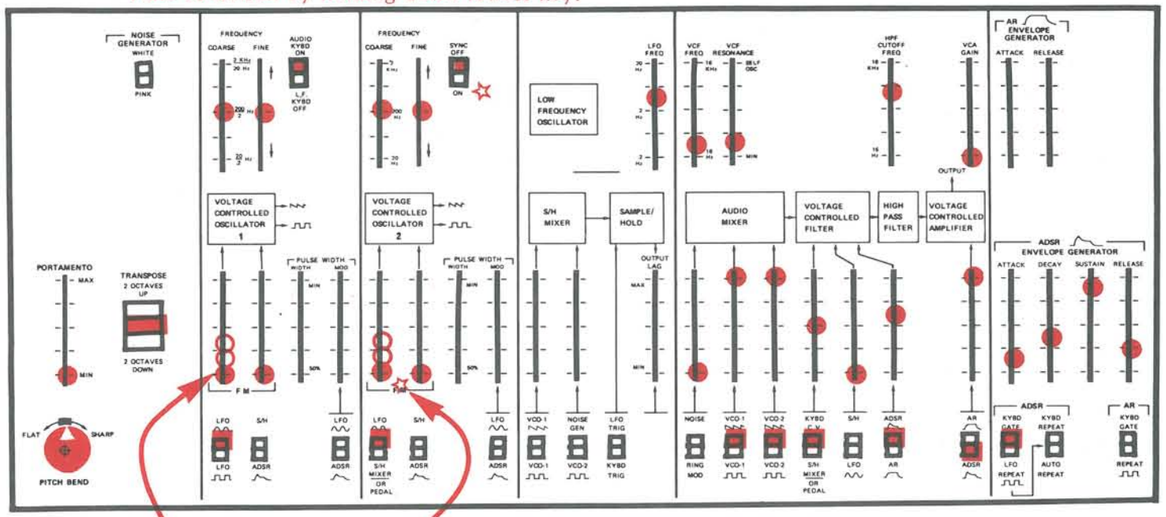
Single voice

Processed Guitar

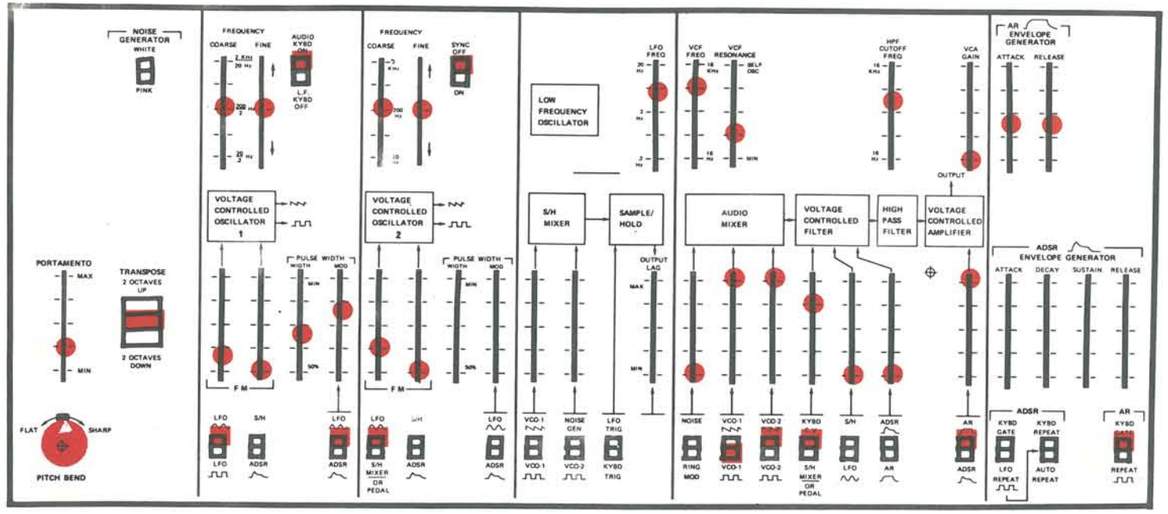


Trumpet Single voice

Tune to unison by holding down lowest key.



Two voice Trumpet Chorus

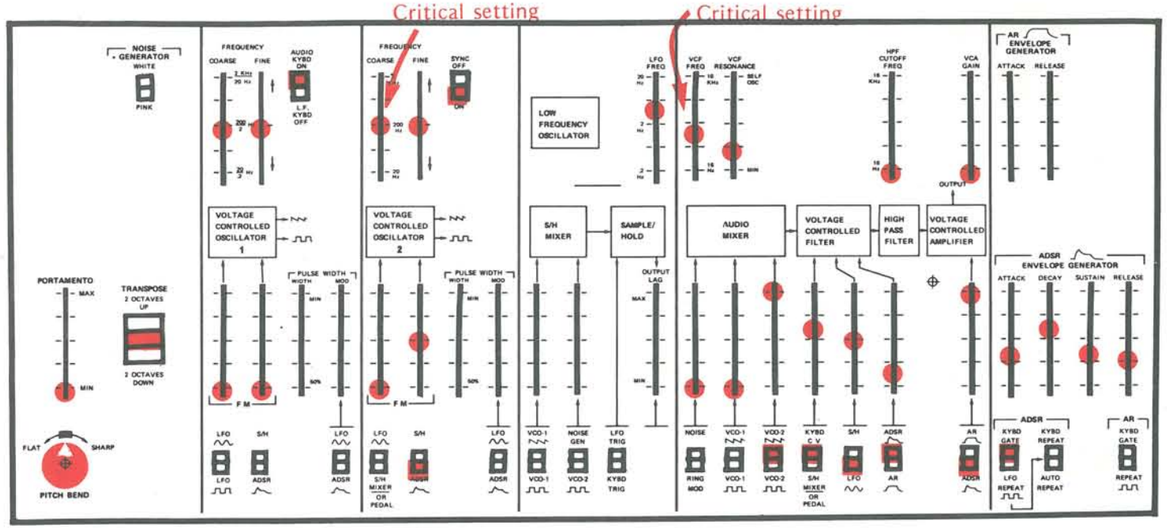


Play separate detached notes.

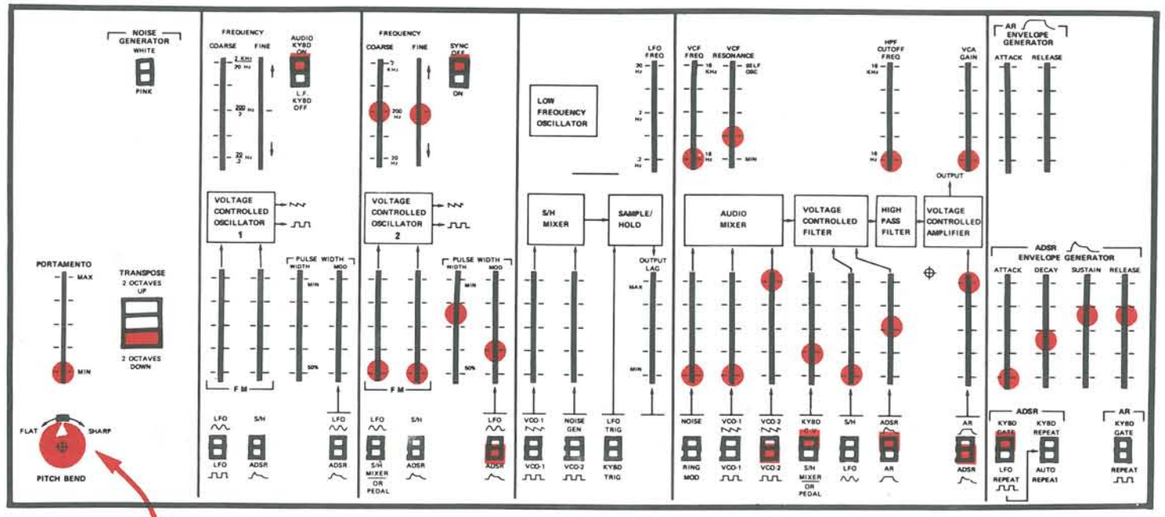
String Chorus Two voice

Critical setting

Critical setting



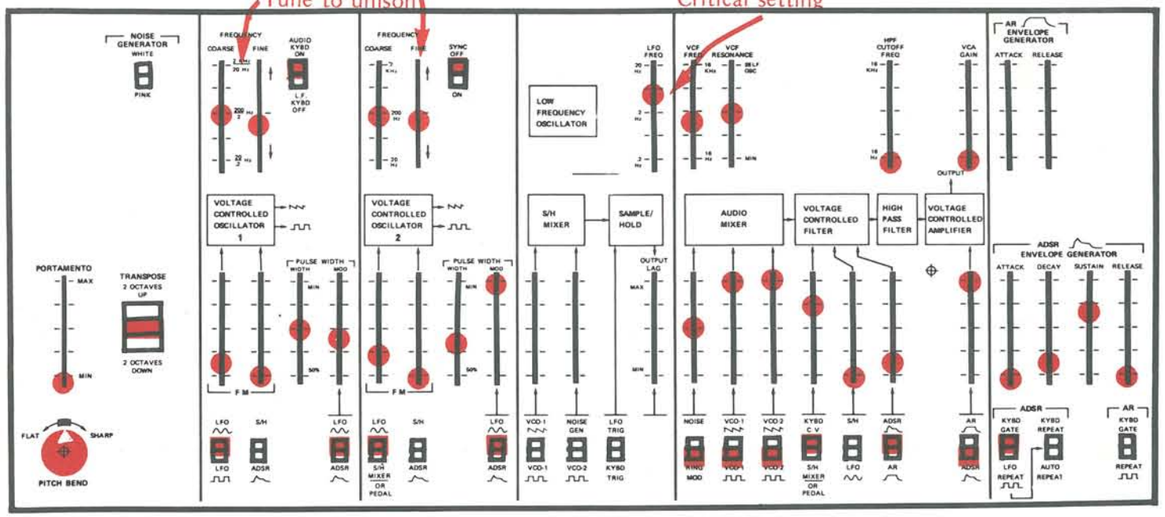
Single voice. **Flute**



Turn pitch bend up when you sustain a bass note.

Electric Bass

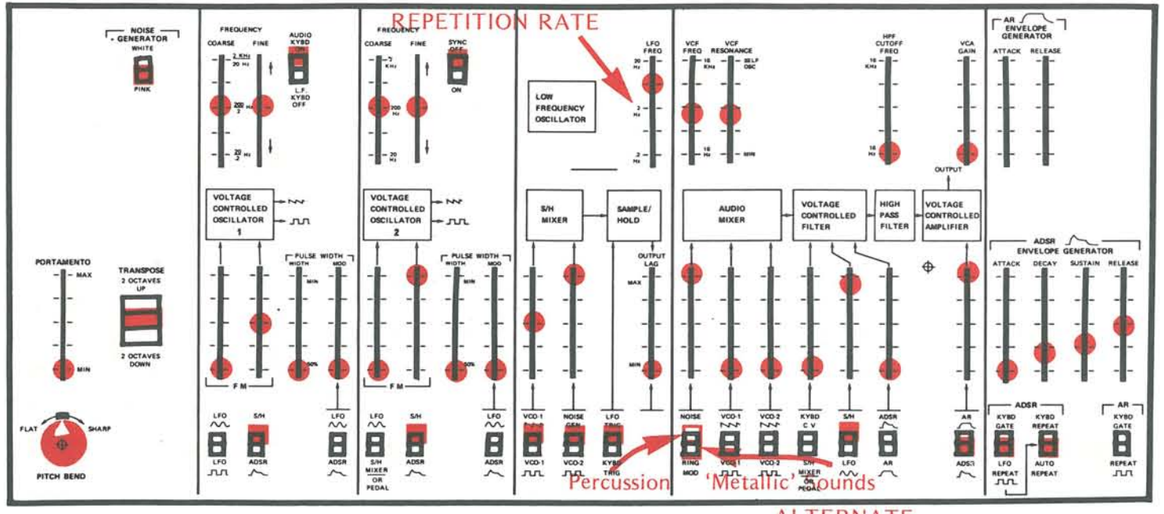
Single voice



Try tuning VCO 2 one octave lower than VCO 1.

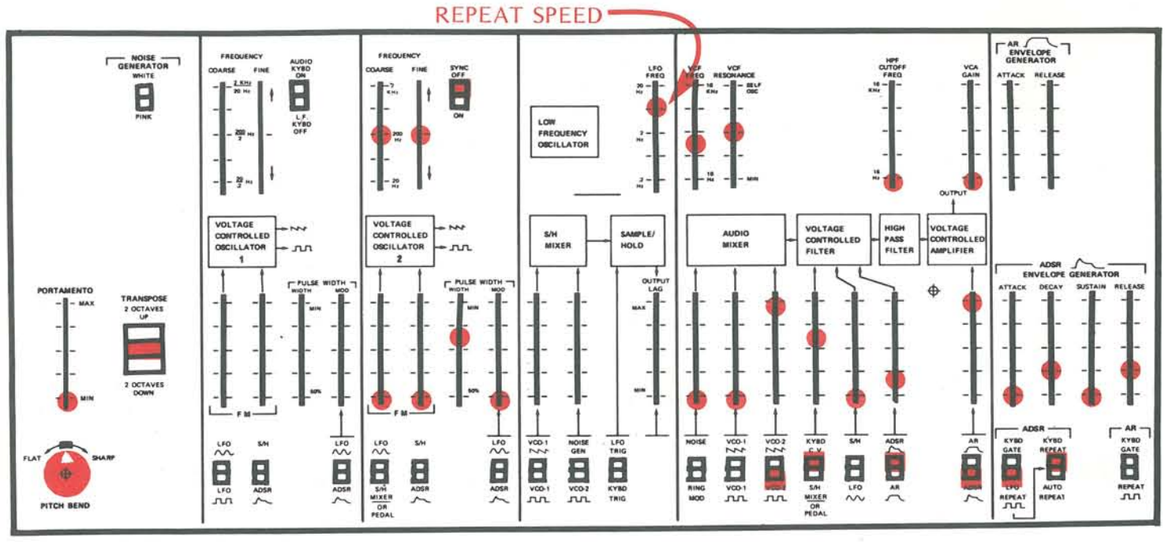
Two voice

"Jazz Organ"



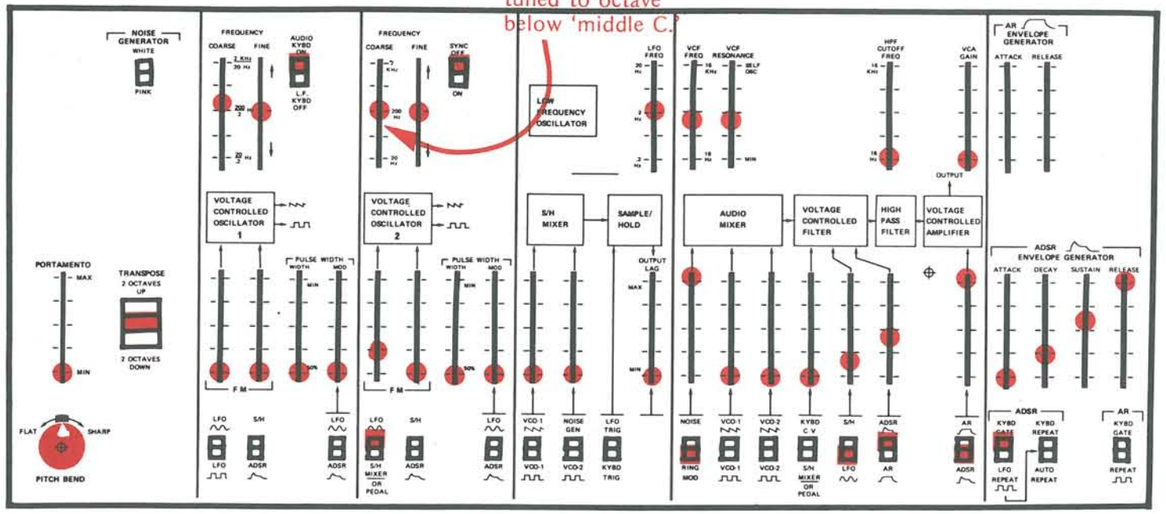
Note: Keyboard will 'tune' metallic sounds and add off-beat accents.

Sample & Hold Percussion



Note: Tune lowest key to one octave below 'middle C.' Play on keyboard to hear repeating effect.

Banjo with Repeat



Note: Tune VCO 1 for desired metallic timbre.

Gong/Chime

ARP Accessories

ARP Instruments offers a full range of accessories and instructional materials for your Odyssey, including carrying cases, performance stands, cassette instruction course, panel facsimile pads, Instant Odyssey Templates, etc. See your local ARP dealer for additional information and prices.

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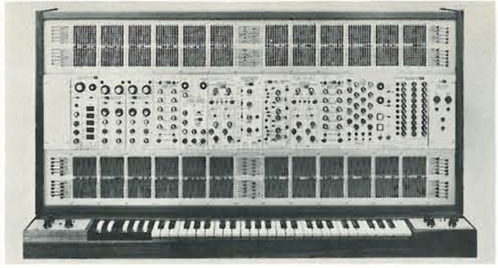
ARP 2600

Pete Townshend

Stevie Wonder

Gerald Shapiro of Brown University with ARP 2500

Alan Haven with ARP Odyssey



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THE ULTIMATE MUSICAL TRIP

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With its ease of operation and high reliability, the ARP Odyssey can produce an enormous variety of sounds in live performance. Everything from thunder and lightning to gong, fuzz guitar, and feedback distortion is at your fingertips with the Odyssey's slider controls and patch switches. The Odyssey's foot pedal and foot switch add to your expressive control. Its two-voice, 37-note keyboard has a seven-octave range. The Odyssey is compatible with all other ARP synthesizers. And, of course, the famous ARP filters and oscillators give you drift-free accuracy for professional-quality recordings.