

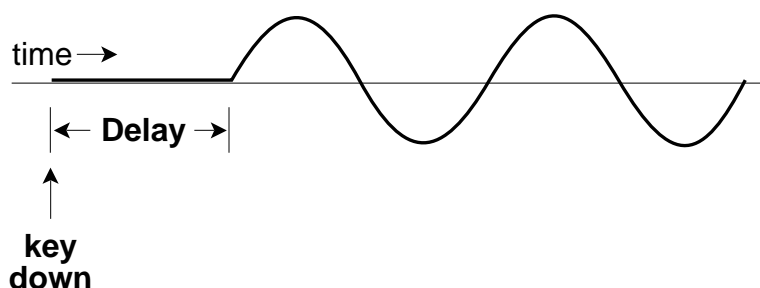
## PRESET EDIT MENU

### LFO 1 - RATE, DELAY and VARIATION

This screen controls the rate, delay and variation of LFO 1.

■ **LFO Rate:** varies the LFO speed from 0.052 Hz to 25 Hz (000-127).

■ **LFO Delay:** sets the amount of time between hitting a key and the onset of modulation. This can be used to simulate an effect often used by acoustic instrument players, where the vibrato is brought in only after the initial note pitch has been established. The delay range is variable from 0 to 13 seconds (000-127).



*The LFO wave begins after the specified delay time has elapsed.*

■ **LFO Variation:** sets the amount of random variation of an LFO each time a key is pressed. This function is useful for ensemble effects, where each note played has a slightly different modulation rate. The higher the number, the greater the note to note variation in LFO rate. LFO variation is variable from 000-127.

LF01	RT	DLY	VAR
000	000	000	000

### LFO 2 - SHAPE and AMOUNT

LFO 2 is functionally identical to LFO 1.

### LFO 2 - RATE, DELAY and VARIATION

LFO 2 is functionally identical to LFO 1.

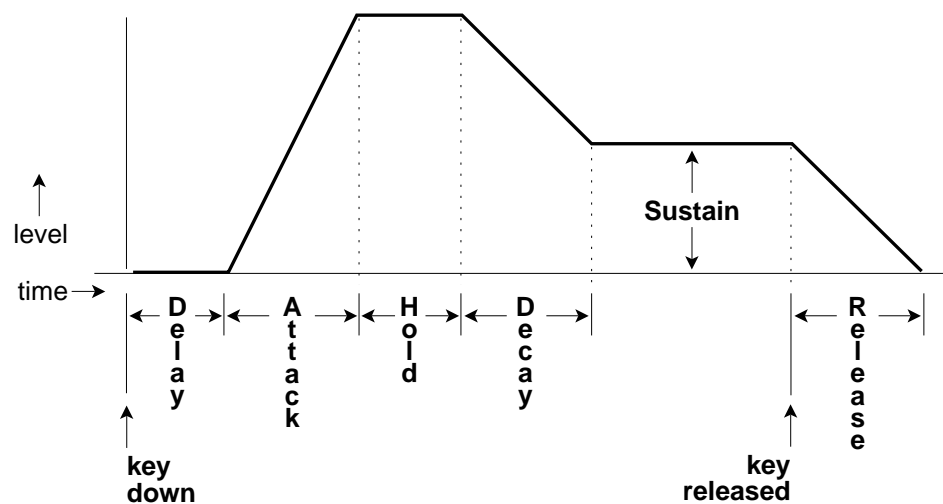
## PRESET EDIT MENU

### AUXILIARY ENVELOPE

This is a supplementary, utility envelope that can be routed to any realtime control destination. The auxiliary envelope parameters are: Envelope Amount, Delay, Attack Time, Hold Time, Decay Time, Sustain Level, and Release Time. The delay time is variable from 0 to 13 seconds (000-127). The envelope amount is variable from -128 to +127. Negative values will produce inverted envelopes.

AUX ENV AMT DLY
+127 000

A: A H D S R
00 00 00 99 20

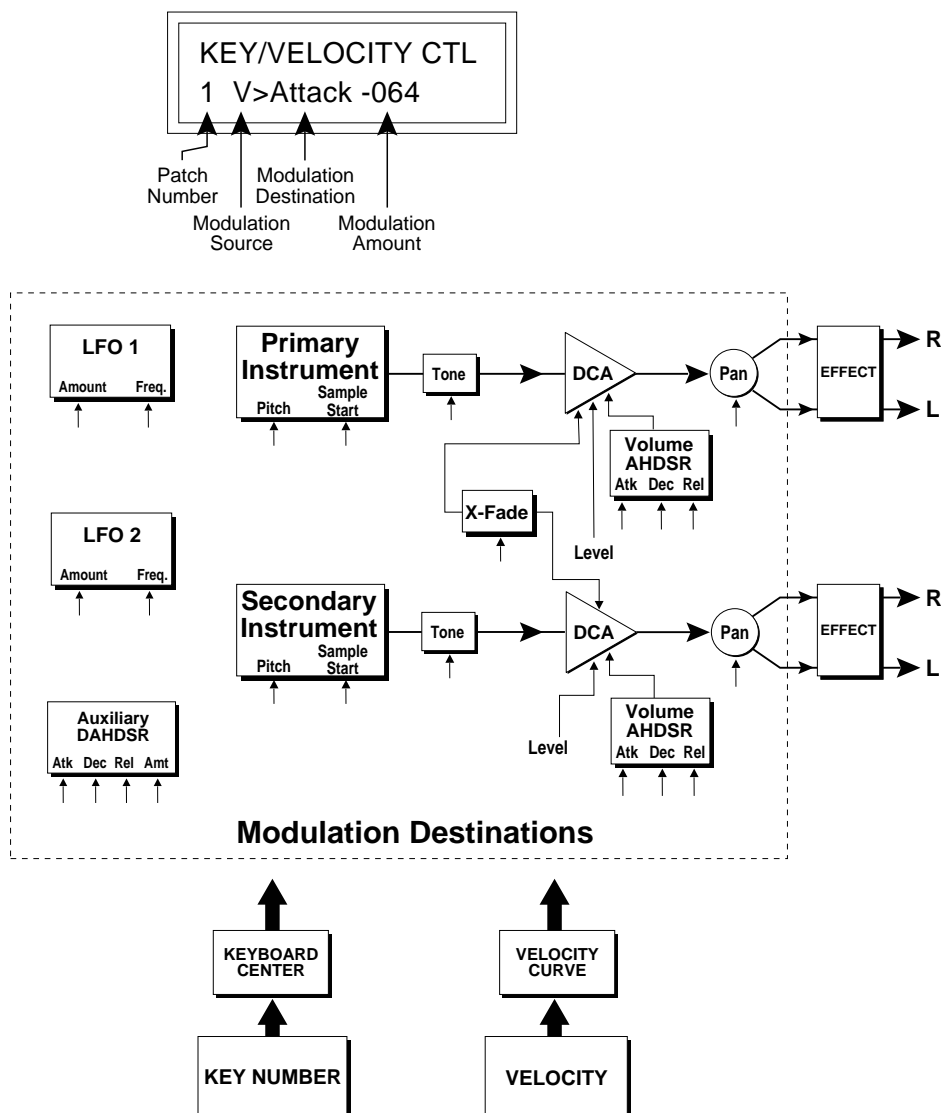


*This diagram shows the six stages of the Auxiliary Envelope Generator.*

## PRESET EDIT MENU

### KEYBOARD and VELOCITY MODULATION CONTROL

These functions allow you to route keyboard and velocity information to any of the modulation destinations on the Proteus. Up to 6 simultaneous paths or patches may be programmed. For each modulation patch, there is a source (keyboard or velocity), and a corresponding amount parameter which is variable from -128 to +127. **Place the cursor under the appropriate parameter and change the patch number, modulation source, modulation destination, or the amount using the data entry control.** If a parameter is not labeled either primary or secondary, it affects both.



Keyboard and Velocity Modulation Sources

**Modulation Sources:**  
Key Number and Key Velocity

**Destinations:** Off, Pitch, Primary Pitch, Secondary Pitch, Volume, Primary Volume, Secondary Volume, Attack, Primary Attack, Secondary Attack, Decay, Primary Decay, Secondary Decay, Release, Primary Release, Secondary Release, Crossfade, LFO 1 Amount, LFO 1 Rate, LFO 2 Amount, LFO 2 Rate, Auxiliary Envelope Amount, Auxiliary Envelope Attack, Auxiliary Envelope Decay, Auxiliary Envelope Release, Sample Start, Primary Sample Start, Secondary Sample Start, Pan, Primary Pan, Secondary Pan, Tone, Primary Tone, Secondary Tone

**When Modulating Envelope Attack, Decay, or Release Times:**

Positive amounts of modulation **increase** the time.

Negative amounts of modulation **decrease** the time.

## PRESET EDIT MENU

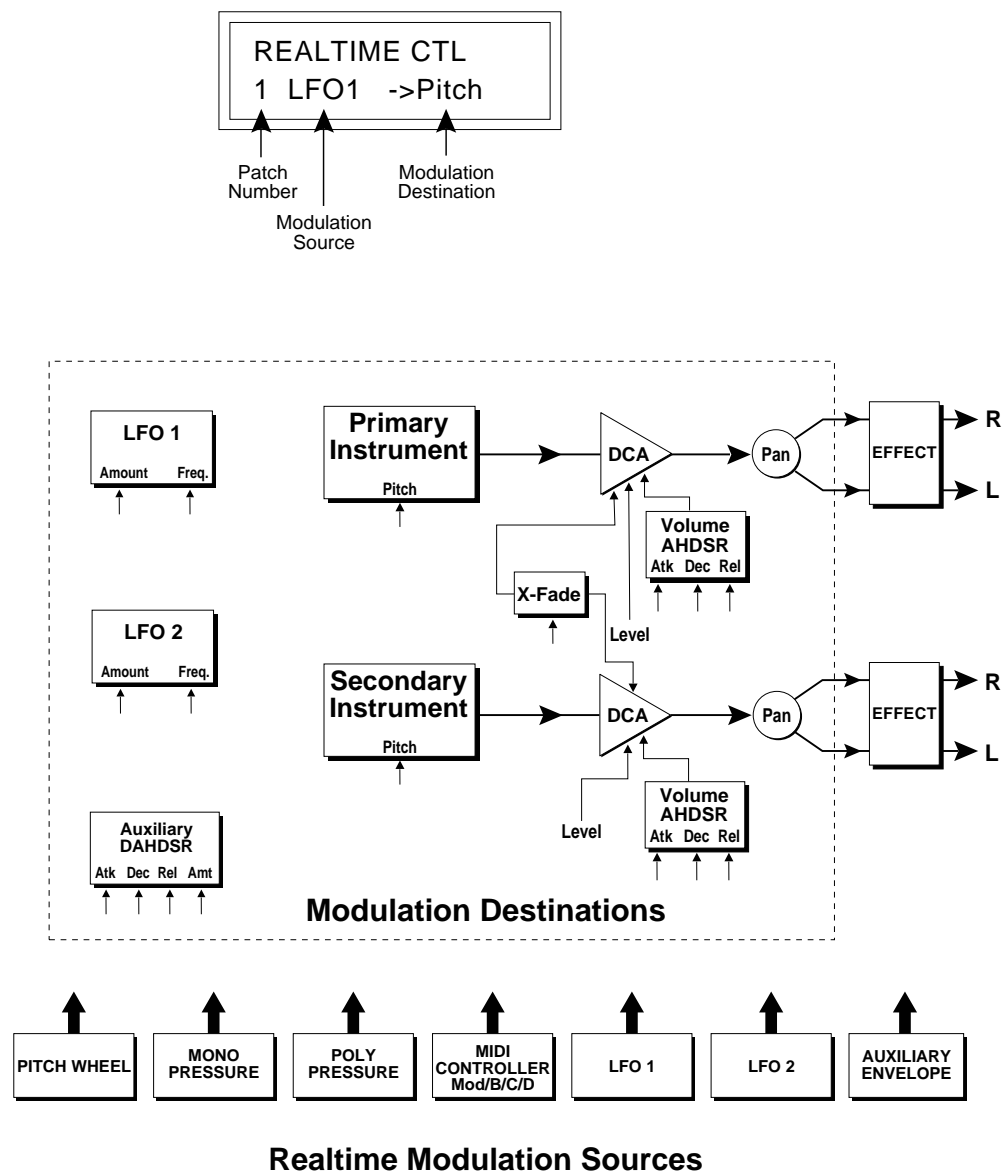
### Modulation Sources:

Pitch Wheel, MIDI  
Control A, MIDI  
Control B, MIDI  
Control C, MIDI  
Control D, Mono  
Pressure, Polyphonic  
Pressure, LFO 1, LFO  
2, Auxiliary Envelope

**Destinations:** Off,  
Pitch, Primary Pitch,  
Secondary Pitch,  
Volume, Primary  
Volume, Secondary  
Volume, Attack,  
Primary Attack,  
Secondary Attack,  
Decay, Primary  
Decay, Secondary  
Decay, Release,  
Primary Release,  
Secondary Release,  
Crossfade, LFO 1  
Amount, LFO 1 Rate,  
LFO 2 Amount, LFO 2  
Rate, Auxiliary  
Envelope Amount,  
Auxiliary Envelope  
Attack, Auxiliary  
Envelope Decay,  
Auxiliary Envelope  
Release

### REALTIME MODULATION CONTROL

These functions allow you to route realtime controllers to any of the modulation destinations on Proteus except Tone, Sample Start and Pan. Up to 8 simultaneous patches may be programmed. For each modulation patch, there is a source and a destination parameter. **Place the cursor under the appropriate parameter and change the patch number, modulation source or modulation destination using the data entry control.** If a parameter is not labeled either primary or secondary, it affects both.



## PRESET EDIT MENU

### FOOTSWITCH CONTROL

This function allows you route the 3 footswitch controllers (Local, 2 or 3) to any of the footswitch destinations. Local refers to the footswitch jack on the rear panel. Footswitches 2 and 3 are MIDI footswitches. (See *MIDI Footswitch Assign* in the Master Edit menu.) The footswitches can be routed to switch: Sustain (pri/sec/both), alternate volume envelope (pri/sec/both), alternate volume release (pri/sec/both), or cross-switch between the primary and secondary instruments.

FOOTSWITCH CTL  
Local-> Sustain

### MIDI CONTROLLER AMOUNT

This function allows you to specify an amount parameter (variable from -128 to +127) for each of the modulation controllers. MOD refers to the Proteus modulation wheel. Controllers B, C and D are MIDI controllers as assigned in the Master Edit menu. The Control Pedal jack on the rear panel can be assigned to Controller B. (See *MIDI Controller Assign* in the Master menu.)

CONTROLLER AMT  
MOD:+32    B:-090

CONTROLLER AMT  
C:-64    D:-090

### PRESSURE AMOUNT

This function allows you to specify an amount parameter for mono or poly keyboard pressure data. The pressure amount is variable from -128 to +127.

PRESSURE AMOUNT  
+127

## PRESET EDIT MENU

### PITCH BEND RANGE

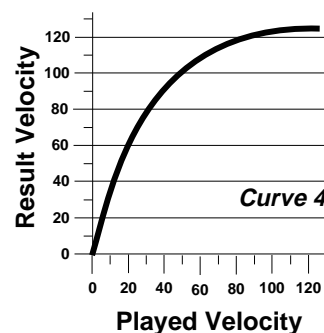
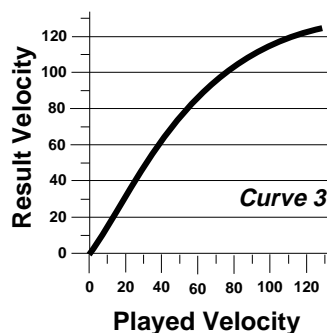
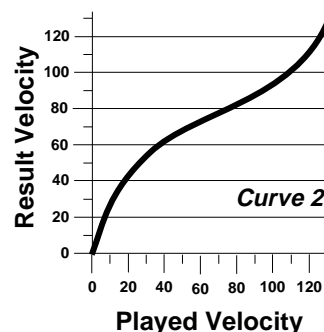
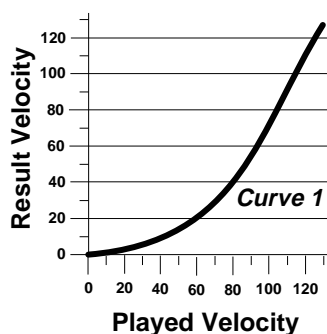
This function allows you to specify the pitch wheel range for the current preset or it can be set to be controlled globally (set in the Master menu). Pitch bend range is only applied when the pitch wheel is used to control pitch.

PITCH BEND RANGE  
+/- 12 semitones

### VELOCITY CURVE

Keyboard velocity data can be modified by a velocity curve in order to provide different types of dynamics in response to your playing or better adapt to the MIDI controller. This function allows you to select one of the four velocity curves or leave the velocity data unaltered (off). In addition, the velocity curve can be set to "Global", which means that the global velocity curve (programmed in the Master menu) is used.

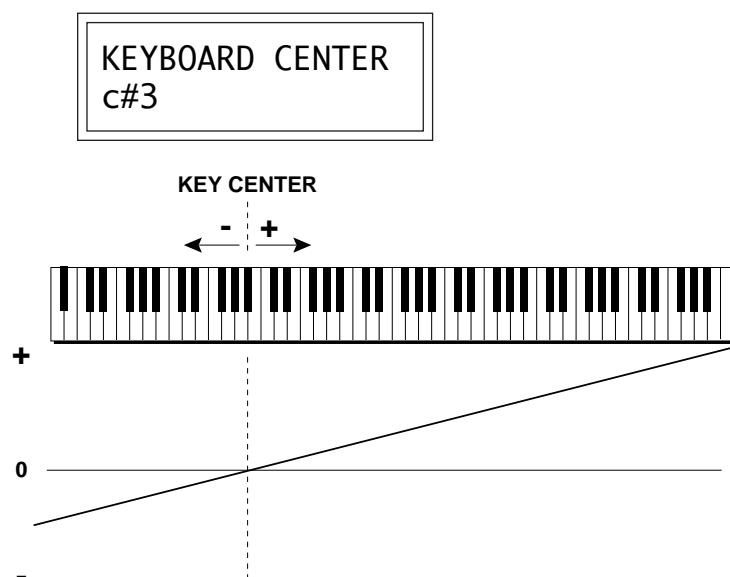
VELOCITY CURVE  
Global



## PRESET EDIT MENU

### KEYBOARD CENTER

The Keyboard Center parameter establishes a reference point for keyboard modulation. Keys above this point will have a positive value and keys below it will be negative. The keyboard center can be set to any key within the range C-2 to G8.



### KEYBOARD TUNING

In addition to the standard equally divided octave tuning, Proteus contains three other types of scale tuning and one user-definable tuning. This function selects which tuning will be used in the current preset. The choices of keyboard tunings are:

**Equal tuning** (12 tone equal temperament)

Standard Western tuning

**Just C tuning** (just intonation)

Based on small interval ratios; sweet and pure; non-beating intervals

**Vallotti tuning** (Vallotti and Young non-equal temperament)

Similar to 12 tone equal temperament; for a given scale, each key has a different character

**19 Tone tuning** (19 tone equal temperament)

19 notes per octave; difficult to play but works well with a sequencer

**Gamelan (Javanese) tuning** (5 tone Slendro and 7 tone Pelog)

Pelag-white keys; Slendro-black keys; exotic tunings of Gamelan flavor

**User tuning (1-4)** which is defined in the Master menu.

## PRESET EDIT MENU

### PRESET LINKS

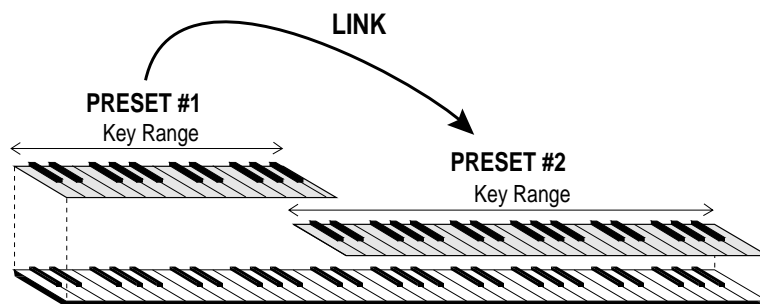
Presets may be linked to other presets in order to create layering or keyboard splits as part of the preset instead of a performance map. The current preset can be linked with up to three other presets. Each linked preset can be assigned to a specific range in order to easily create keyboard splits. The modulation parameters specified in each preset remain in effect for each preset in the link. Beginning with the lowest numbered links, presets will retain their programmed effect assignments until the two effect processors have been used up. All other linked presets will retain their effect *buss* routings only. See page 106 for more information.

LINK 1 c#1->f#4  
000 Preset Name

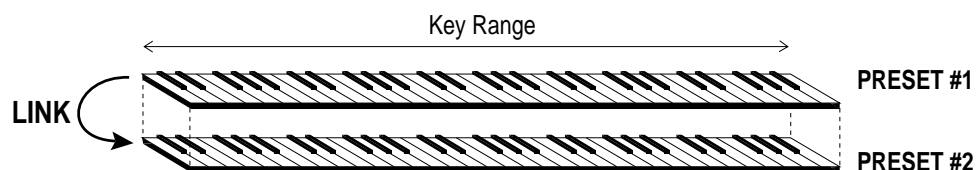
LINK 2 c#1->f#4  
191 Preset Name

LINK 3  
Off

■ Split or Layered keyboards can also be created in the Quick Key section of the Performance Edit menu.



CREATING A SPLIT KEYBOARD



LAYERING TWO PRESETS