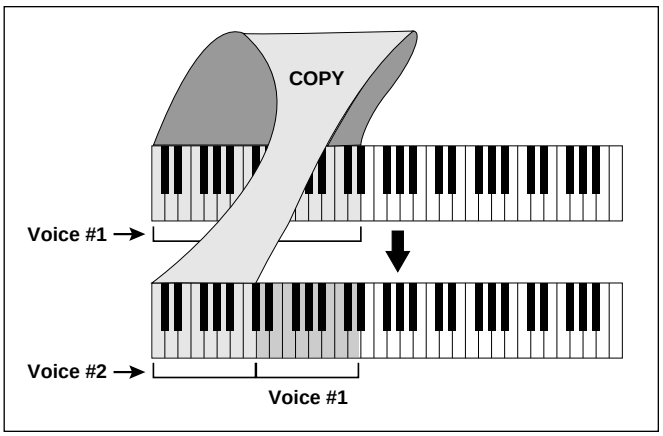
PRESET DEFINITION

PRESET DEFINITION

PRESET DEFINITION 1 COPY VOICE(S)

This function copies voice(s) from one preset to another.

Application: Copying a voice back to a subset of its former range gives you another voice that uses the same sample. Using this technique, you can dynamically process each voice separately.



Copying a voice back to a subset of its former range gives you another voice, using the same sample, which may be separately processed.

■ *Use the Copy Voice function to create multiple voices from one sample. This can be be used to create alternate tunings, or different pan settings for each key.*

1. Activate **PRESET DEFINITION 1**.

2. The display says:

```
GetVoiceFrom PXX
Select A Preset
```

... where XX defaults to the current preset.

Select the preset that contains the voice(s) to be copied, then press **ENTER**.

3. The display now shows:

```
Copy Pri,Sec,or
Both Voices:XXX
```

... where XXX is either Pri, Sec or Both.

PRESET DEFINITION

Use the data slider to select whether you will copy primary, secondary or both voices, then press **ENTER**.

Caution: If you select both, even though the source preset contains no secondary voices, you can overwrite double voices during the copying process (step 7).

4. The display says:

```
Copy: XX
Select Lo Key
```

...where XX defaults to the lowest note of the lowest voice (whether Pri or Sec).

Press the lowest key of the range you want to copy, or to quickly select the lowest note of the available voices, use the data slider. While selecting the low key, the lower display line will show the voice number and its original pitch. When the display shows the desired low key, press **ENTER**.

The display now asks you to choose the Hi Key:

```
Copy: XX to YY
Select Hi Key
```

...where YY defaults to the highest note of the previously selected voice.

Press the highest key of the range you want to copy or to quickly select the highest note of the available voices, use the data slider. After selecting the range to copy, press **ENTER**.

5. The display asks:

```
CopyVoiceTo PXX
Select A Preset
```

... where PXX defaults to the current preset.

6. Select the destination preset to which you want to copy the voice(s), then press **ENTER**.

PRESET DEFINITION

If you select an empty preset, upon pressing **ENTER** you will be given a chance to rename the preset that the Emax II just created for you. Rename as described in **PRESET MANAGEMENT 6**.

After renaming is complete, press **ENTER**.

7. The display now shows:

```
Copy Voice To
Pri or Sec: XXX
```

...where XXX defaults to your previous selection in step 2 (note: if in step 2 you selected both, then the Emax II will automatically go to step 9). This step allows you to copy primary voice(s) to secondary locations and visa versa.

8. Use the data slider to select whether you will copy the voice(s) to a primary or secondary location, then press **ENTER**.

9. The display now says:

```
Lo:XX
Select New LoKey
```

...where XX defaults to the previously-selected low key.

Press the low key of the desired range in the destination preset. The lower display line will show the voice number and original pitch in the destination preset. Attempting to place the low note in such a way that the range cannot be assigned produces an "Illegal Asgnment" display.

10. After specifying the range's low note, press **ENTER**. The display will warn you if this assignment either modifies the existing assignment or erases (overwrites) any existing voice(s). If this is okay, press **YES** to copy and return to the module identifier. Otherwise, press **NO** to interrupt the copying process and return to the module identifier.

PRESET DEFINITION 2 EDIT ASSIGNMENT

Use this function to change the assignment of a voice within a preset.

▼ *When editing stereo voices, make sure that the keyboard assignments of the primary and secondary voices match to prevent undesirable results.*

1. Activate **PRESET DEFINITION 2**. The display says:

```
Edit Pri or Sec
Voice:      XXX
```

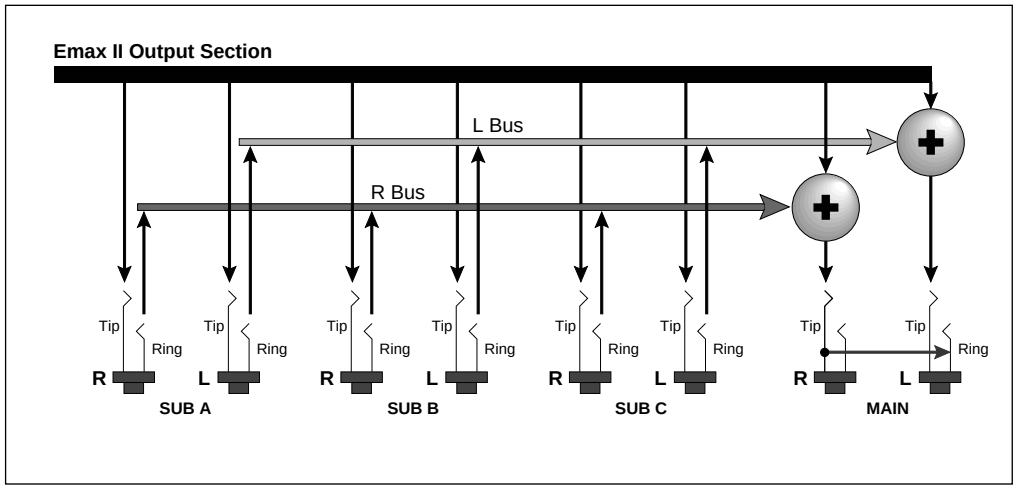
...where XXX is either Pri or Sec. Use the data slider to select whether you will edit the primary or secondary voice, then press **ENTER**. If there are only primary or secondary voices, Emax II will automatically go to step 2.

2. The display now says:

```
Edit: XX
 Select A Voice
```

...where XX defaults to the lowest note of the lowest voice (whether Pri or Sec).

Press a key in the range of the voice that you want to edit, or to quickly select the voice, use the data slider. While selecting the voice, the lower display line will show the voice number and its original pitch. After selecting the voice to edit, press **ENTER**.



The Sub A, B, and C jacks can be used as effect returns to the Main Outputs.

PRESET DEFINITION

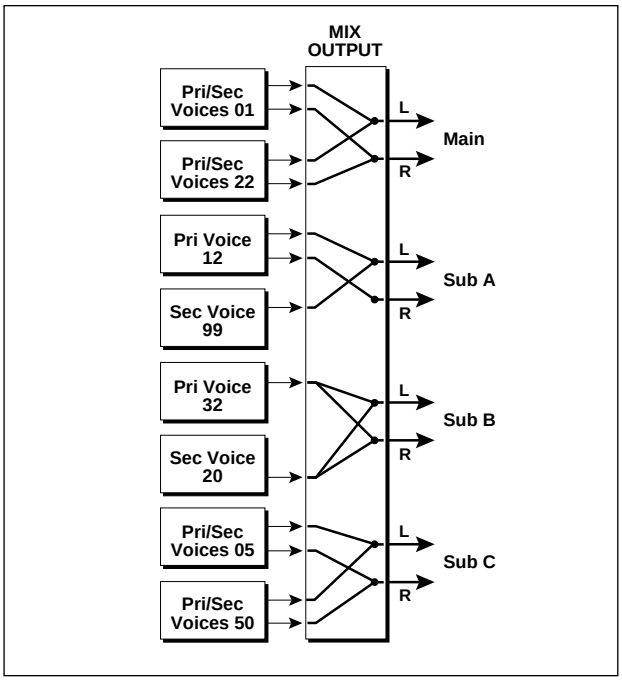
3. The display now shows the complete assignment:

```
Orig Lo Hi Out
XX   XX XX Y
```

...where XX are notes and Y is one of the 4 stereo output channels.

Place the new original note. If the display says "Illegal Asgnment," you are doing something like placing the lower note above the original. Play a key to select notes, and the cursor buttons to select the desired parameter to be changed. Note: You can also use the data slider to show the available keys.

To select the output channels (Out) over which the voice will appear, move the cursor under Out and select the desired output - **M**ain, or one of the **A**, **B**, **C** submix outs. Press **ENTER**, and the Emax II will return to the module identifier.



A voice may be assigned to any stereo output pair.

PRESET DEFINITION

PRESET DEFINITION 3 ERASE VOICE(S)

Use this function to erase a voice(s).

1. Activate **PRESET DEFINITION 3**. The display shows:

```
Erase Pri, Sec
or Both:  XXX
```

... where XXX is either Pri, Sec or Both.

Use the data slider to select whether you will erase the primary, secondary, both voice(s), then press **ENTER**. If there are only primary or secondary voices, Emax II will automatically go to step 2.

2. The display says:

```
Lo:XX
Select Lo Key
```

...where XX defaults to the lowest note of the lowest voice (whether Pri or Sec).

3. Press the lowest key of the range you want to erase, or to quickly select the lowest note of the available voices, use the data slider. While selecting the low key, the lower display line will show the voice number and its original pitch. When the display shows the desired low key, press **ENTER**. The display now asks you to choose the Hi Key:

```
Lo:XX Hi:YY
Select Hi Key
```

...where YY defaults to the highest note of the previously selected voice.

4. Press the highest key of the range you want to erase or to quickly select the highest note of the available voices, use the data slider. After selecting the range to erase, press **ENTER**.

5. The display will warn you if this assignment either modifies the existing assignment or erases (overwrites) any existing voice(s). If this is okay, press **YES** to erase and return to the module identifier. Otherwise, press **NO** to interrupt the erasing process and return to the module identifier.

PRESET DEFINITION 4 STEREO VOICE

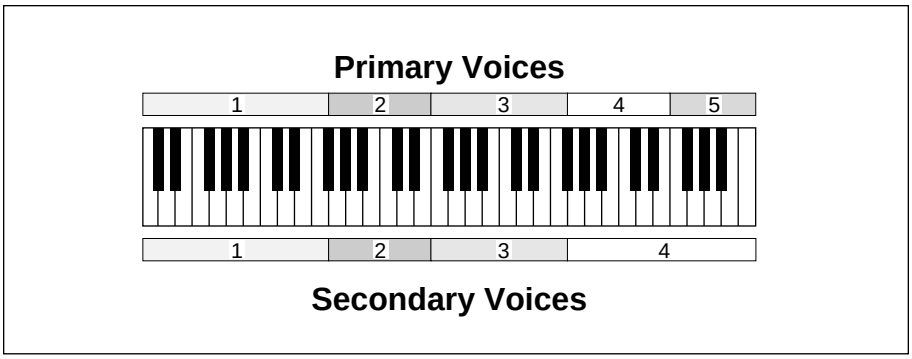
The Emax II plays back stereo samples, with no loss of polyphony. Stereo is implemented using the primary and secondary voices and selecting Stereo Voice mode.

Stereo Voice mode uses all ***primary*** voice parameters for ***both*** primary and secondary layers. With Stereo Voice off, the primary and secondary voice parameters are totally independent and no sharing of functions occurs.

In order for a key to *become* stereo, it must meet all of the following criteria:

- The primary and secondary voices must be assigned to the same keyboard range.
- Both primary and secondary voices must have the same original key.
- Both primary and secondary voices must have the same sample rate.

The above rules must not be violated after a stereo voice has been created or unpredictable (and undesirable) side effects may result (wrong pitches, etc.).



In this diagram, voices 1, 2 and 3 are eligible to become stereo, if the primary and secondary voices have the same original keys and the same sample rates.

■ *Stereo Voice mode may be used to "stack" voices without loss of polyphony, since the primary and secondary voices need not be the same instrument.*

1. Activate **PRESET DEFINITION 4**. The display shows:

```
Lo:XX Stereo:Off
Select Lo Voice
```

...where XX defaults to the lowest note of the lowest voice.

Press the lowest key of the low voice that you want to put into or out of stereo vioce mode, or to quickly select the low voice, use the data slider. While selecting the low voice, the display will show the voice number, its original pitch and whether the voice has stereo on or off. After selecting the low voice, press **ENTER**.

PRESET DEFINITION

2. Now the display shows:

```
Hi:XX Stereo:Off
Select Hi Voice
```

...where XX defaults to the highest note of the previously selected voice. Press the highest key of the highest voice that you want to put into or out of stereo voice mode, or to quickly select the voice, use the data slider. After selecting the high voice, press **ENTER**.

3. Now you see...

■ *Using Chorus mode with stereo voices produces a beautiful stereo chorus effect.*

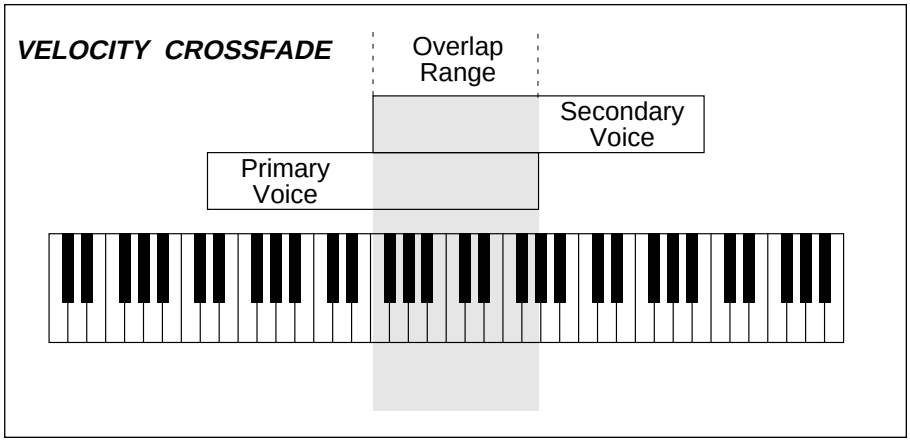
```
Stereo Voice:XX
Select on/off
```

...where XX is either on or off. Use the **ON** and **OFF** buttons to select whether stereo voice is on or off, then press **ENTER**. The Emax II will inform you that secondary parameters will be altered if you select stereo voice on. If that's okay, press **YES**; otherwise, press **NO** to abort and the Emax II will return to the module identifier.

Note: Stereo Voice mode automatically pans the primary and secondary voices to opposite sides. If the stereo pan position **(DYNAMIC PROCESSING 19)** is altered, the primary and secondary voice pan positions will move in opposing directions. In the center position, the signal will be monophonic.

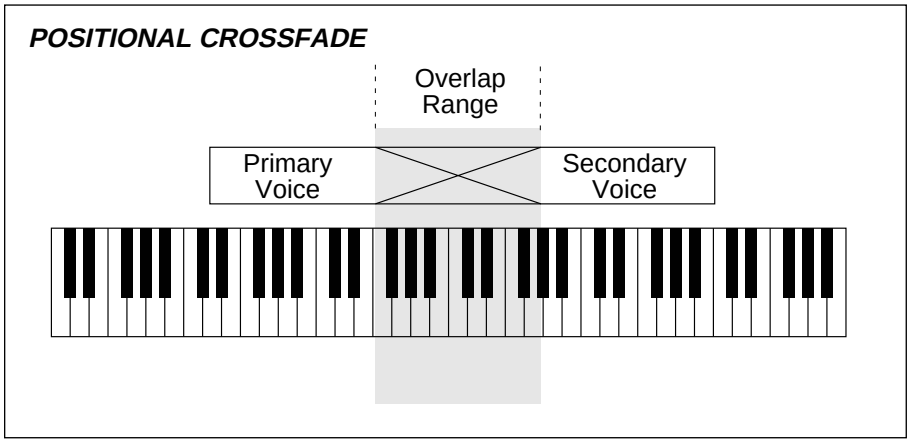
PRESET DEFINITION 5 VELOCITY XFADE/SWITCH, POSITIONAL XFADE

Velocity Crossfade crossfades between the primary and secondary voices according to how hard you play the keyboard. One voice will become louder as you play harder and softer as you play softer, while the other voice will become louder as you play softer and softer as you play *harder*. Velocity switch is similar, however, there is a threshold above which one voice plays and below which the other voice plays.



When playing in the shaded range, if the secondary voice equals "Hard", then the primary voice becomes progressively softer and the secondary voice becomes progressively louder as you strike a key with increasing force.

Where two voice's keyboard assignments overlap, Positional Crossfade alters the level balance (mix) between the two voices depending on where you play within the overlap range.



When playing from left to right across the shaded range, the primary voice fades out as the secondary voice fades in.

PRESET DEFINITION

Velocity XFade Application: Fade between cellos and violins, depending on how hard you play a key. Have a fuzz guitar sound assigned so that playing softly plays the fundamental, and playing harder brings in a feedback note an octave above the fundamental.

Positional XFade Application: Transposing a sampled sound lower usually produces a more muffled sound than the original sample, and transposing upwards usually produces a thinner, brighter sound. Overlapping voices and using Positional Crossfade can balance out the voice timbres; as one voice becomes progressively brighter, it can be fading out as the overly muffled part of the next voice fades in. Combining the overly thin and overly muffled voices in the correct proportion can produce an overall timbre that ends up sounding just right.

1. Activate **PRESET DEFINITION 5**. The display says:

...where XX defaults to the lowest note of the lowest voice. Press a key in the range of the low voice that is to be crossfaded, or to quickly select the voice, use the data slider. While selecting the voice, the lower display line will show the voice's crossfade status. After selecting the low voice, press **ENTER**.

2. Now the display shows:

...where XX defaults to the highest note of the previously selected voice. Press a key in the range of the highest voice that is to be crossfaded, or to quickly select the voice, use the data slider. After selecting the high voice, press **ENTER**.

3. The display now says:

PRESET DEFINITION

You now may select from the following choices:

■ **XFade Off** = There is no crossfading between the primary and secondary voices.

■ **Velocity XFade** = One voice will become louder as you play more forcefully; the other voice will become softer.

■ **Velocity XSwitch** = If you strike a key with more force than the mid-point of the velocity range, one voice will play; if you strike a key with less force than the mid-point of the velocity range, the other voice will play.

■ **Positional XFade =** As you play from low to high over the current voice, one voice will fade out as the other voice fades in. This is a useful technique for maintaining an even tone quality over the keyboard when using multi-samples.

■ **Realtime XFade** = Crossfading occurs not according to keyboard velocity, but according to the real time controller that has been assigned. (See Preset Definition 9)

■ **Realtime XSwitch** = Crossfading occurs not according to keyboard velocity, but according to the real time footswitch.

4. If you choose any option except for Positional XFade, the display says:

```
Pri or Sec Voice
Equals Hard: Sec
```

Use the data slider to select whether the primary or secondary voice will:

- Fade in when the keyboard is played forcefully (Velocity XFade);
- Switch in when the keyboard is played forcefully (Velocity XSwitch);
- Fade in according to the real time control wheel (Realtime XFade); or
- Switch in according to the real time footswitch (Realtime XSwitch).

If you choose Positional Crossfade, the display will say:

```
Pri or Sec Voice
On Top: Sec
```

The selected voice will become more prominent as you play higher on the keyboard, and the other voice will become less prominent.

5. After making your selection, press **ENTER**.

PRESET DEFINITION

PRESET DEFINITION 6 ARPEGGIATOR SETUP

You're going to love this arpeggiator: It does a lot and it's easy to set up. Best of all, arpeggiation settings are stored with the preset so that different presets can have totally different arpeggiation characteristics. Also, arpeggiation can be assigned to any range of the keyboard or the entire keyboard, and some arpeggiation parameters can be altered in real time for expressive arpeggiation.

1. Select the current preset; this preset will contain the arpeggiation information.

2. Activate **PRESET DEFINITION 6**. The display says:

```
Arpeg Setup Menu
Use Cursor Keys
```

Use the cursor keys to select the various Arpeggiator options or press **ENTER** to jump back to the module identifier.

The first arpeggiation option display says:

```
Arpeggiator: off
Select on/off
```

Select the desired arpeggiator status with the **ON** or **OFF** buttons. To jump back to the module identifier press **ENTER**, otherwise press the right arrow cursor key to continue the setup.

3. The next display says:

```
Tempo: ♩=120.00
[040-240]Inc/Dec
```

Use the data slider or the numeric keypad to adjust the tempo through the range from 40-240 Beats Per Minute. Press the right cursor key to to do fine adjustment to the tempo. Use the data slider or the numeric keypad to adjust the tempo through the range from .00-.99 Beats Per Minute.

If you have selected a clock other than the internal clock, (see next menu item), the arpeggiator will follow and display this clock rather than the internal clock.

PRESET DEFINITION

4. The next menu item chooses the note value; the display says:

```
Note Value: 1/16
Use Data Slider
```

Use the data slider to select between the following arpeggiation note values: 1/2 note, 1/4 note, 1/4 triplet, 1/8, 1/8 triplet, 1/16 (default setting), 1/16 triplet, 1/32, 1/32 triplet, and (believe it or not) 1/96 note. The note value can be manipulated in real time. To jump back to the module identifier press **ENTER**, otherwise press the right arrow cursor button to continue the setup.

5. The next display is:

```
Mode: fwd assign
Use Data Slider
```

Use the data slider to catalog the various modes.

- **UP** held notes arpeggiate continuously from lowest to highest pitch.
- **DOWN** held notes arpeggiate continuously from highest to lowest pitch.
- **UP/DOWN** held notes first arpeggiate from lowest to highest pitch, then from highest to lowest, then repeat this cycle.
- **FWD ASSIGN** held notes arpeggiate continuously in the order in which the keys were pressed.
- **BKWD ASSIGN** held notes arpeggiate continuously in the reverse order in which the keys were pressed.
- **RANDOM** held notes arpeggiate continuously in a random fashion.

To jump back to the module identifier press **ENTER**, otherwise press the right arrow cursor key to continue the setup.

6. The next display says:

```
Latch: off
Use Data Slider
```

PRESET DEFINITION

Use the data slider to catalog the various modes.

- **OFF** No latching of notes. When you release your fingers from the keys, arpeggiation stops.
- **AUTO** When you release your fingers from the keys, arpeggiation continues. When you press down new keys, the old notes stop arpeggiating and the new ones arpeggiate instead.
- **EXTEND** Same as auto, except that new notes are added in with old notes, thus all played notes arpeggiate.
- **MEMORY** Holds your arpeggio in memory until an un-latched, arpeggiator-on preset is selected. Arpeggios can be set up in advance, then started on command with the arpeggiator footswitch or by selecting the memory arpeggio preset.

To jump back to the module identifier press **ENTER**, otherwise press the right arrow cursor key to continue the setup.

7. To understand the next two menu items, let's define a couple of terms:

An arpeggio ***Interval*** specifies what additional intervals will be played if you play a key. For example, suppose you played C2 with an interval of 5 (a major fifth) and up mode arpeggiation. the Emax II would arpeggiate between C2 and G2.

An arpeggio ***Extension*** specifies how many times the interval will be extended. For example, with an interval of M3 (major third) and an extension of 04 (four times), if you played a C2 with the arpeggiator in up mode the arpeggiated sequence would consist of C2, E2 (a major third above C2), G#2 (a major third above E2), C3 (a major third above G#2) and the fourth extension, E3.

8. The next menu item after velocity specifies the number of extensions in the arpeggio. The display says:

```
Number of Ext:00
Use Data Slider
```

Use the data slider or the numeric keypad to step through the number of extensions, from 00 to 15. To jump back to the module identifier press **ENTER**, otherwise press the right arrow cursor button to continue the setup.

PRESET DEFINITION

9. The next menu item produces the following display:

```
Interval: Oct
Use Data Slider
```

Use the data slider to specify the arpeggiation interval, as listed below:

m2 = minor second
M2 = major second
m3 = minor third
M3 = major third
P4 = perfect fourth
m5 = minor fifth
P5 = perfect fifth
m6 = minor sixth
M6 = major sixth
m7 = minor seventh
m9 = minor ninth
M9 = major ninth
Oct = octave
m10 = minor tenth
M10 = major tenth

To jump back to the module identifier, press **ENTER,** otherwise press the right arrow cursor button to continue the setup. Note that you can change the interval in *real time* for some really nifty arpeggiation effects.

10. But wait, there's more!! The next great option is Harmony 1. This option plays a second note at the chromatic interval from the base note specified on the display. The interval is adjustable from a minor second, up to a major tenth. The display says:

```
Harmony 1: off
Use Data Slider
```

Use the **ON** and **OFF** buttons or the **DATA SLIDER** to adjust the interval or turn the function off.

11. The next arpeggiator option is Harmony 2, which plays another note, (making a total of three notes if Harmony 1 is also selected) at the chromatic interval from the base note specified on the display. The interval is adjustable from a minor second, up to a major tenth.