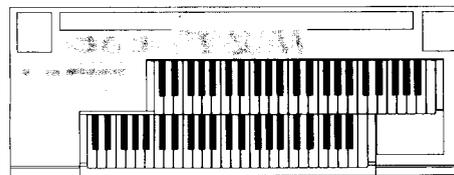The Electone is equipped with two general kinds of functions that can be used to change the sound of the voices: Voice Controls and Effects.

These are used to change various aspects of the voices, such as the volume and octave (footage), or enhance the sound of the voices, such as with Reverb, Tremolo, or Vibrato.

Each voice has been given certain factory-preset effect settings to best enhance its sound. However, with the exception of the Touch Tone function, you can also change the effect to suit your preferences by using the controls described in this section.

Voice Controls/Effects Chart

This chart shows all of the Voice Controls and Effects for the various voice sections of the EL-60 and EL-40. A circle (○) indicates that the setting is available. The bottom of the chart shows the relevant LCD titles for each setting.

Voice Controls & Effects

		Touch Tone (Initial/After)	Reverb	Sustain	Volume Fine	Feet (Octave)	Tremolo/Chorus	Symphonic/Celeste	Tone	Delay	Flanger	Vibrato Delay, Depth Speed	Vibrato Depth	Vibrato Touch	Glide
EL-60	Upper/Lower	*1 ○		○	○	○	○	○	○	○	○	–	○	–	○
	Lead		○	–	○	○	○	○	○	○	○	○		○	○
	Pedal	–		○	○	○	○	○	○	–	–	–		–	–
EL-40	Upper/Lower	*1 ○		○	○	○	○	*3 ○	○			–	○	–	○
	Lead		○	–	○	○	○	*3 ○	○	–	–	○		○	○
	Pedal	–		○	○	○	○	*3 ○	○			–		–	–
Related LCD Display	Condition LCD				○	○	*2 ○	①	–	*4 ①	*4 ①	○	○		
	Effect LCD			–				(EL-60 ②)	○	*4 ②	*4 ②				–
	Sustain LCD	–	–	○	–	–	–	–	–	–	–	–	–		
	Foot Switch LCD			–											○

*1 Preset on each voice.   *2 After setting this, press Tremolo button on the panel.   *3 Celeste only.   *4 After setting 1, adjust the parameter in 2.
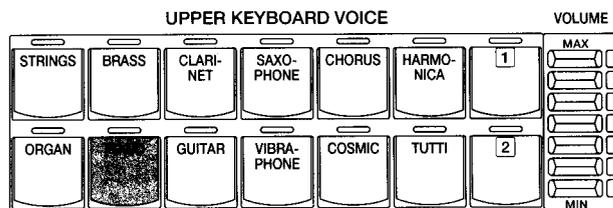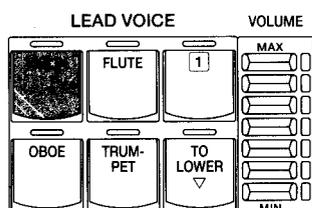
Voice Controls

Voice Condition Pages

To select the Voice Condition pages for changing the settings:
Choose a voice on the panel, then press that voice's panel button twice. Use the Page Select buttons to change the pages.
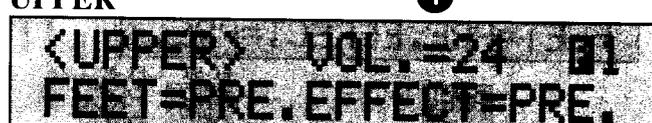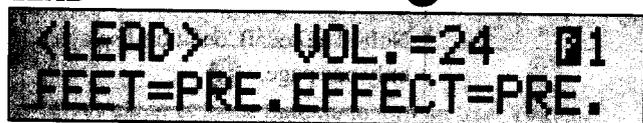
> **Note:** There are some differences between the functions in the Lead and Upper/Lower voices. Where appropriate, the different displays are shown.

For the Lead Voice example shown below, press the VIOLIN button in the Lead Voice section twice. To call up the corresponding Upper Voice example, press the PIANO button in the Upper Keyboard Voice section twice.
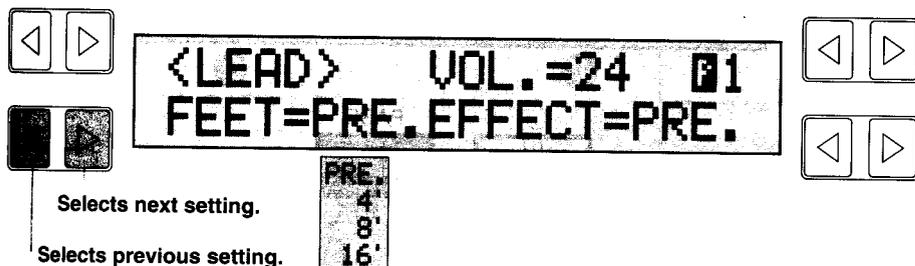
LEAD VOICE   VOLUME

FLUTE 1   MAX

OBOE   TRUM-PET   TO LOWER ▽   MIN

UPPER KEYBOARD VOICE   VOLUME

STRINGS BRASS CLARI-NET SAXO-PHONE CHORUS HARMO-NICA 1   MAX

ORGAN   GUITAR VIBRA-PHONE COSMIC TUTTI 2   MIN

LEAD ❶

```
<LEAD>    VOL.=24  ▣1
FEET=PRE.EFFECT=PRE.
```

❷ ❸

UPPER ❶

```
<UPPER>   VOL.=24  ▣1
FEET=PRE.EFFECT=PRE.
```

❷ ❸

❶ Volume

Fine adjustment of the voice volume. (Coarse volume settings are made with the front panel VOLUME controls.) Range: 0 — 24

Decreases the volume.

Increases the volume.

```
<LEAD>    VOL.=24  ▣1
FEET=PRE.EFFECT=PRE.
```
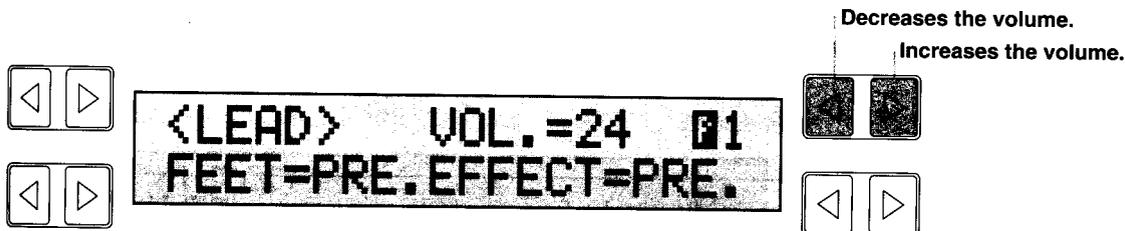
❷ Feet

Determines the octave setting of the voice. PRE. (Preset) is the original (factory) setting; 4' is the highest and 16' is the lowest. Settings: PRE., 4', 8', 16'
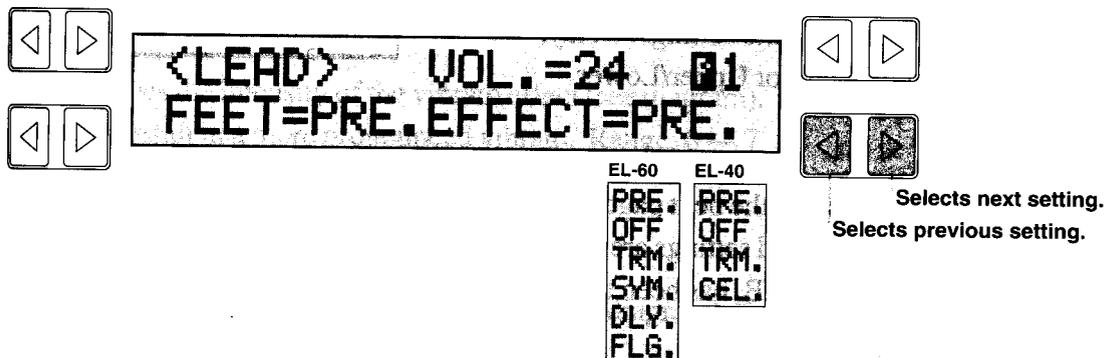
By using different Feet settings in the Lower and Upper keyboards and Pedal board, you can duplicate the wide octave range of many instruments. For example, with both the Lower and Upper keyboards set to the Piano voice and Feet set to appropriate values, you can play the voice nearly over the full range of a grand piano.

```
<LEAD>    VOL.=24  ▣1
FEET=PRE.EFFECT=PRE.
```

Selects next setting.

Selects previous setting.

```
PRE.
4'
8'
16'
```

❸ Effect

Determines the effect type applied to the voice. PRE. (Preset) selects the original (factory) effect, while OFF cancels the effect. This is essentially an on/off switch for the effects. Settings: PRE., OFF, TRM. (Tremolo), SYM. (Symphonic), DLY. (Delay), FLG. (Flanger) for EL-60; PRE., OFF, TRM., CEL. (Celeste) for EL-40.

Note: These effects are applied in different degrees depending on the voice selected.

```
<LEAD>    VOL.=24  ▣1
FEET=PRE.EFFECT=PRE.
```

EL-60	EL-40
PRE.	PRE.
OFF	OFF
TRM.	TRM.
SYM.	CEL.
DLY.	
FLG.	

Selects next setting.

Selects previous setting.

<Pedal> EL-60/40

```
<PEDAL>   VOL.=24
FEET=PRE.EFFECT=PRE.
```

|	EL-60	EL-40
PRE.	PRE.	PRE.
4'	OFF	OFF
8'	TRM.	TRM.
16'	SYM.	CEL.

Though different effects can be applied to different voice sections, only one effect can be selected at a time for each voice section. (In order to actually apply the Tremolo, Delay and Flanger effects, one more step is necessary. Refer to the sections on those individual effects below.)

Effects — Vibrato

Vibrato is an effect that periodically, or regularly, varies the pitch of a voice for a quavering sound. Used properly, it can make a voice sound richer and more natural.

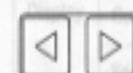The following diagram graphically shows the vibrato effect and its related controls.

Vibrato Controls
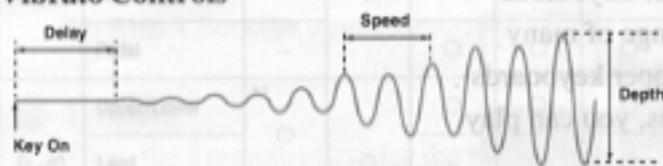
Call up the Vibrato and Touch Vibrato settings on Voice Condition Page 2 by using the Page Select buttons.

Voice Condition — Page 2

LEAD

```
<LEAD>          P2
□USER VIB.  □T.VIB.
```
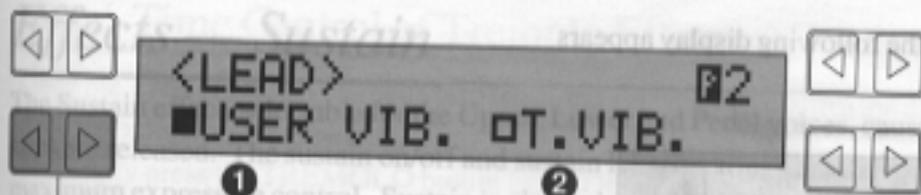①   ②

UPPER

```
<UPPER>         P2
□USER VIB.
```
①

① **User Vibrato (USER VIB.)**
When this is turned on, you can adjust the vibrato settings: Delay, Depth and Speed for Lead voices, and Depth for Upper/Lower voices.
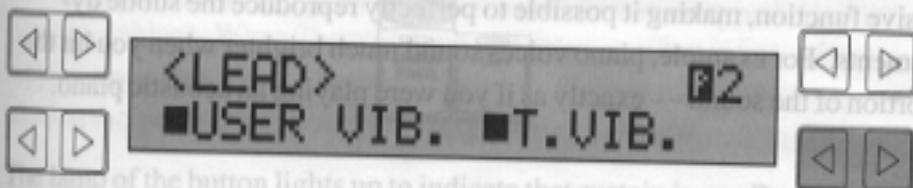
The Delay, Depth and Speed settings are set in the next page, Voice Condition Page 3. The Delay, Depth and Speed settings are not displayed and cannot be adjusted unless USER VIB. has been turned on in this setting.

```
┌──┐┌──┐    ┌─────────────────────────────────┐   ┌──┐┌──┐
│◁ ││▷ │    │ <LEAD>                      P2  │   │◁ ││▷ │
└──┘└──┘    │ ■USER VIB.  □T.VIB.            │   └──┘└──┘
┌──┐┌──┐    └─────────────────────────────────┘   ┌──┐┌──┐
│◁ ││▷ │         ❶            ❷                     │◁ ││▷ │
└──┘└──┘   Press either of these buttons to turn on User Vibrato.
```

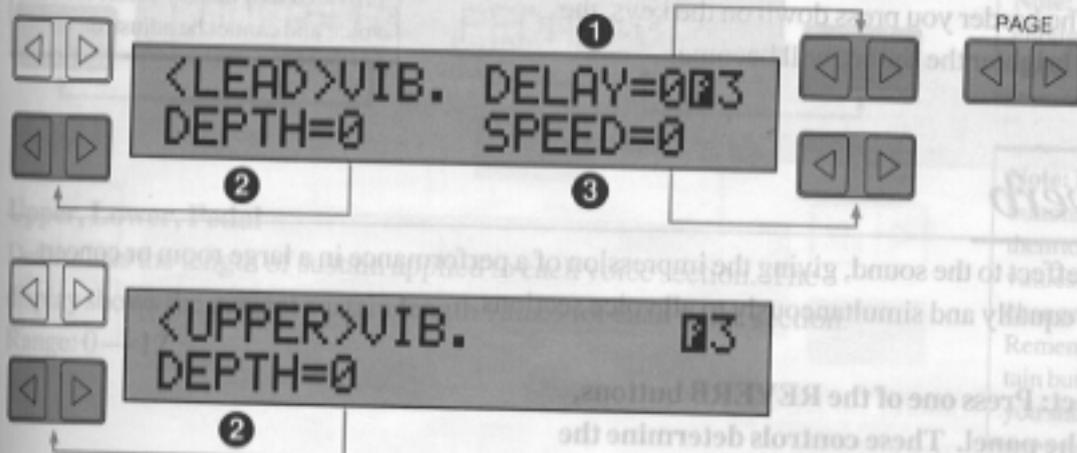**❷ Touch Vibrato (T.VIB) (Lead Voice only)**

On/Off switch for the Touch Vibrato function. Touch Vibrato lets
you apply vibrato to individual notes as you play them. While
playing a key, press down harder on it to give the note vibrato. The
harder you press the key down, the greater the vibrato will be.

```
┌──┐┌──┐    ┌─────────────────────────────────┐   ┌──┐┌──┐
│◁ ││▷ │    │ <LEAD>                      P2  │   │◁ ││▷ │
└──┘└──┘    │ ■USER VIB.  ■T.VIB.            │   └──┘└──┘
┌──┐┌──┐    └─────────────────────────────────┘   ┌──┐┌──┐
│◁ ││▷ │                                           │◁ ││▷ │
└──┘└──┘                                           └──┘└──┘
```
Press either of these buttons to turn
on Touch Vibrato.

Call up the User Vibrato settings on Voice Condition Page 3 by using the
Page Select buttons.

Voice Condition — Page 3

```
┌──┐┌──┐    ┌─────────────────────────────────┐   ┌──┐┌──┐        PAGE
│◁ ││▷ │    │ <LEAD>VIB.  DELAY=0 P3         │   │◁ ││▷ │    ┌──┐┌──┐
└──┘└──┘    │ DEPTH=0      SPEED=0            │   └──┘└──┘    │◁ ││▷ │
┌──┐┌──┐    └─────────────────────────────────┘   ┌──┐┌──┐    └──┘└──┘
│◁ ││▷ │         ❷            ❸                     │◁ ││▷ │
└──┘└──┘                                           └──┘└──┘
```

```
┌──┐┌──┐    ┌─────────────────────────────────┐
│◁ ││▷ │    │ <UPPER>VIB.                P3  │
└──┘└──┘    │ DEPTH=0                        │
┌──┐┌──┐    └─────────────────────────────────┘
│◁ ││▷ │              ❷
└──┘└──┘
```

❶ Delay (Lead Voice only)

Determines the amount of time that elapses between the playing of a
key and the start of the vibrato effect (see diagram). Higher settings
increase the delay of the vibrato onset. Range: 0 — 7

❷ Depth

Determines the intensity of the vibrato effect (see diagram). Higher
settings result in a more pronounced vibrato. Range: 0 — 7

❸ Speed (Lead Voice only)

(Lead Voice only)

Determines the speed of the vibrato effect (see diagram). Range: 0 — 7

30

If User Vibrato has not been turned on, the following display appears when Page 3 is selected.
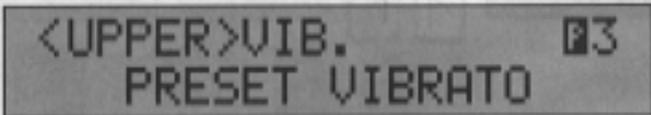
```
<UPPER>VIB.          P3
       PRESET VIBRATO
```

Effects — Touch Tone

The Touch Tone function gives you expressive control over the volume and timbre of a voice. Two types of keyboard touch affect this function: Initial Touch and After Touch.

All voices are provided with this expressive function, making it possible to perfectly reproduce the subtle dynamic and tonal changes of actual instruments. For example, piano voices sound much brighter when you hit the keys strongly, especially in the attack portion of the sound — exactly as if you were playing an acoustic piano.

Initial Touch

Controls volume and timbre according to the velocity at which you strike the keys. The harder you strike the keys, the greater the volume and the brighter the timbre will become.

After Touch

Controls volume and timbre according to the pressure you apply to the keys after playing them. The harder you press down on the keys, the greater the volume and the brighter the timbre will become.

> **Note:** The Touch Tone function is provided as a factory preset for each voice and cannot be adjusted.

Effects — Reverb

Reverb adds an echo-like effect to the sound, giving the impression of a performance in a large room or concert hall. The effect is applied equally and simultaneously to all voice sections.

To adjust the reverb effect: Press one of the REVERB buttons, located at the far left of the panel. These controls determine the depth of the reverb effect. There are seven settings, from a minimum of 0, or no reverb, to the maximum.

Effects — Sustain

The Sustain effect, selectable for the Upper, Lower and Pedal voices, causes voices to gradually fade out when the keys are released. The sustain on/off and sustain length settings are independent for each keyboard, providing maximum expressive control. Sustain is also independent from the other effects (such as Tremolo or Symphonic; selectable from Voice Condition Page 1).

To add sustain to the voices and call up the Sustain Length page:
Press the UPPER button in the SUSTAIN section.

> **Note:** Sustain cannot be applied to the Lead voices.

The lamp of the button lights up to indicate that sustain is on. Press the button again to turn sustain off.

> **Note:** If knee lever control of the Upper or Lower sustain has been turned on, pressing the Upper or Lower buttons here will not add sustain unless the knee lever is pushed. (See page 63, USING THE KNEE LEVER TO CONTROL SUSTAIN.)

Sustain Length Page

```
<SUSTAIN>  UPPER=12
LOWER=10   PEDAL=0
```
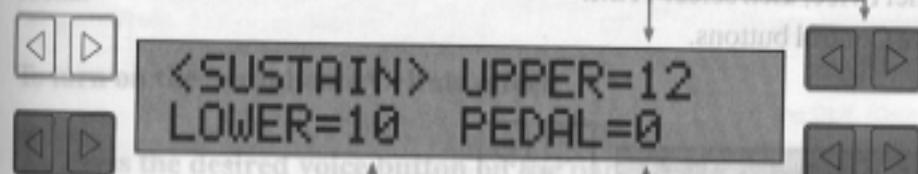
> **Note:** The values here must be set high enough for the sustain effect to be noticeable.

Upper, Lower, Pedal

Determines the length of sustain applied to each voice section. The display shows the current sustain length values for each voice section.
Range: 0 — 12.

> **Note:** Remember that the SUSTAIN buttons are on/off switches. If you use them to simply check the sustain length values, you may unintentionally change the on/off status of the effect. Remember to check whether the sustain button lamps are on or off before you start to play.

Effects — Tremolo/Chorus

Tremolo recreates the rich, swirling sound of the popular rotating speaker effect. Just as with a conventional rotating speaker, you can switch the effect on and off as you play. And like a motor-driven speaker, the characteristic tremolo effect gradually changes speed after it is switched. The Tremolo effect can be switched in real time as you play with the TREMOLO (FAST) button on the panel.

Tremolo Operation

1) For Panel Voices (Voice Menu)

Turn on Tremolo effect in each Voice Condition display

2) For Upper/Lower Flute Voice

Turn on Tremolo effect in Edit page of Flute Voice

**3) Turn on Tremolo as you play with the panel Tremolo button.**

Turning On The Tremolo Effect

Before you can switch Tremolo on and off in real time, you must first turn the effect on in the various voice sections. This doesn't actually start the effect, but merely puts Tremolo in a "standby" condition. Tremolo can be applied selectively to the voice sections; in other words, the Upper Keyboard voices can have the Tremolo effect while the Lead voices have another effect or no effect at all.

To turn on the Tremolo effect (set to standby):

For Lead, Upper, Lower and Pedal Voices

Press the desired voice button on the panel twice, then select TRM.
(Tremolo) by using the bottom right Data Control buttons.

```
◁ ▷              ◁ ▷
       <LEAD>    VOL.=24   ⌷1
◁ ▷    FEET=PRE.EFFECT=TRM.   ◁ ▷
```
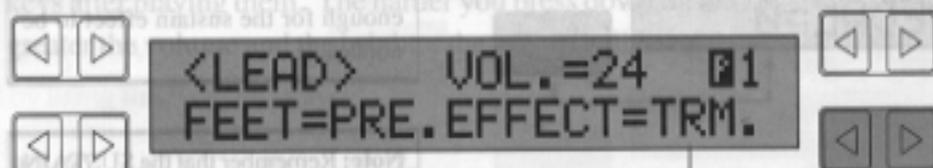
Selecting TRM. turns on Tremolo
for the selected voice section.

For Flute Voices

Press the U.FLUTE VOICE button and/or L.FLUTE VOICE button in
the DISPLAY SELECT section, then select Page 1.

```
◁ ▷              ◁ ▷
       <U.FLUTE>  VOL.=24   ⌷1
◁ ▷    ■■■■____  ■_■_■  ON    ◁ ▷
```
16' 8' 5⅓' 4' 2⅔' 2' 1⅗' 1'Rsp.   4'2⅔'2'Lng. CLICK TREMOLO
FLUTE   ATTACK

Selecting "ON" in the LCD turns on
Tremolo for the current Flute Voice.

Move the cursor to the Tremolo setting in the LCD with the bottom left Data
Control buttons, and use the bottom right Data Control buttons to turn the
Tremolo on. This applies the Chorus effect to the voices. (Actual application
of the Tremolo effect is described in the section immediately following.)
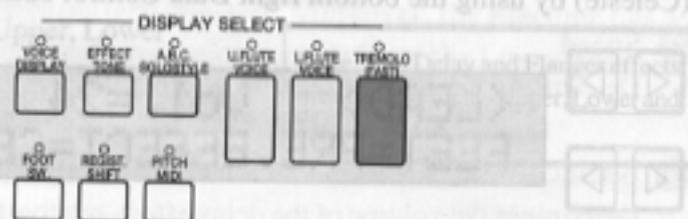
Real-Time Control of Tremolo Effect

Once the Tremolo effect has been turned on and set, you can control the effect in real time from the TREMOLO (FAST) button on the panel.

Simply press the TREMOLO button in the DISPLAY SELECT section to turn the Tremolo effect on and off while you're playing.
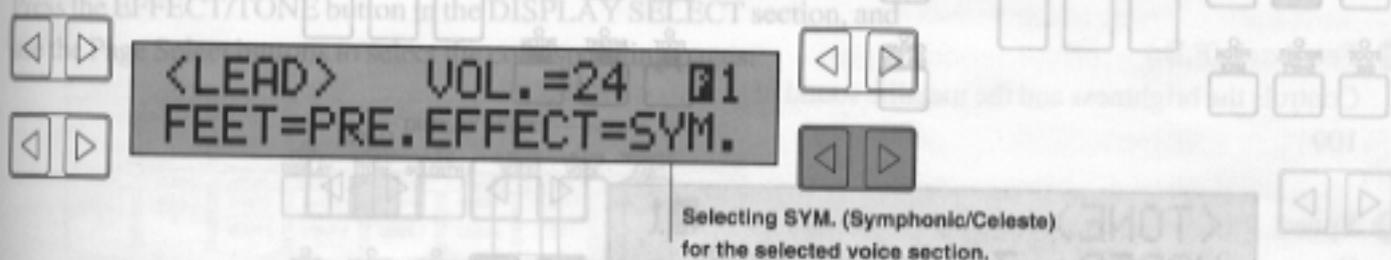
EL-40
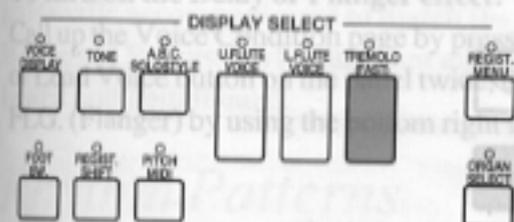
EL-60

This button functions just like the fast/slow switch on an actual rotating speaker cabinet. When Tremolo is on, the rotation effect is fast; when off (Chorus), it is slow. The speed change is gradual, effectively reproducing the slowing down and speeding up of a rotating speaker.

Effects — Symphonic/Celeste (EL-60)

Symphonic simulates the effect of a large ensemble, while Celeste creates the effect of a gradually expanding sound.

To turn on the Symphonic/Celeste effect:

1. Press the desired voice button on the panel twice, then select SYM. (Symphonic) by using the bottom right Data Control buttons.


```
<LEAD>     VOL.=24   ⊡1
FEET=PRE.EFFECT=SYM.
```

Selecting SYM. (Symphonic/Celeste)
for the selected voice section.

2. Press the EFFECT/TONE button in the DISPLAY SELECT section, and call up the Symphonic page 5 by using the Page Select button. Select Symphonic (or Celeste) by pressing any of the bottom Data Control buttons.
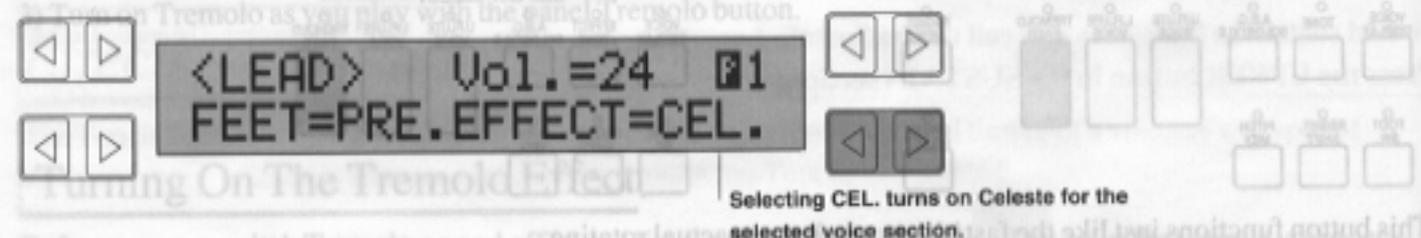

PAGE

```
<SYMPHONIC>          ⊡5
■Symphonic □Celeste
```

Use any of these Data Control buttons to select the Symphonic/Celeste settings.
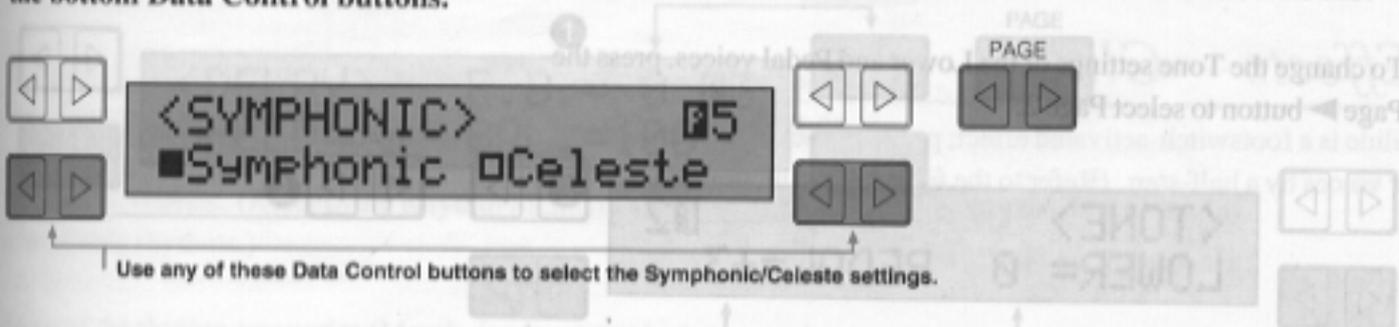
Effects — Celeste (EL-40)

Celeste creates the effect of a gradually expanding sound.

To turn on the Celeste effect:

Press the desired voice button on the panel twice, then select CEL. (Celeste) by using the bottom right Data Control buttons.
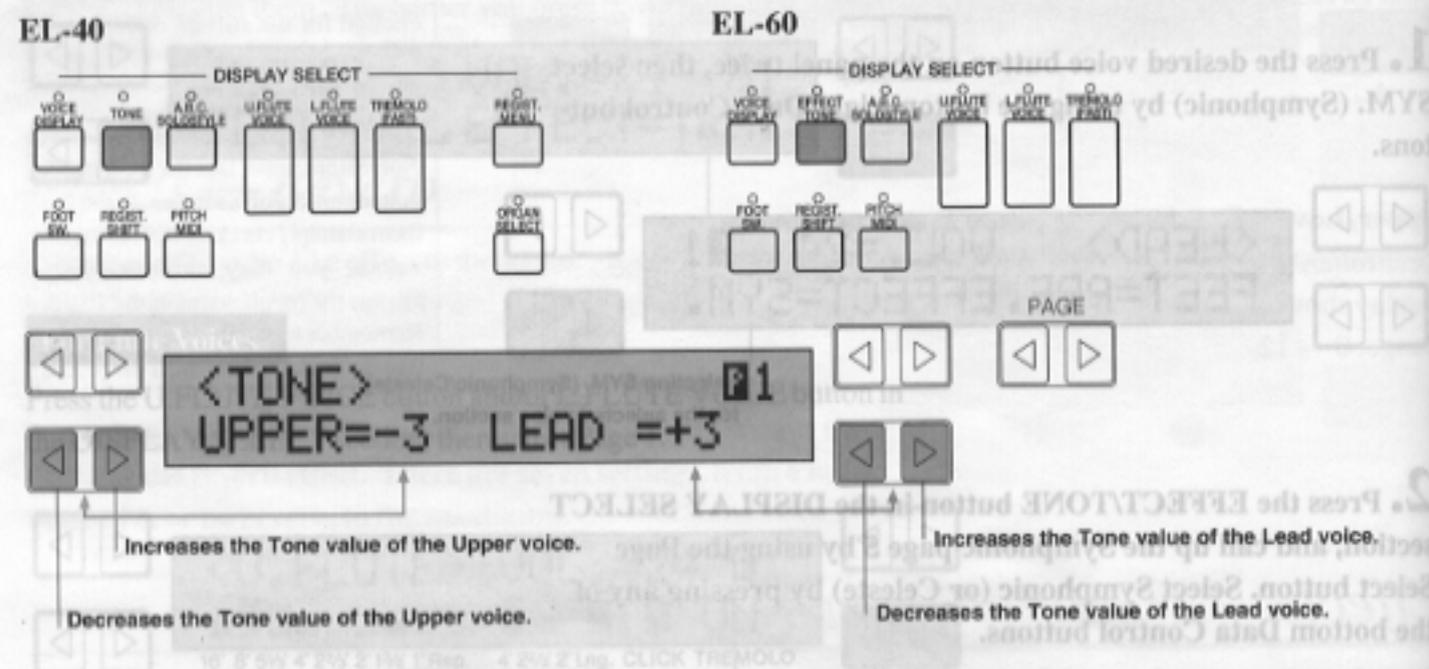
```
<LEAD>    Vol.=24   P1
FEET=PRE.EFFECT=CEL.
```

Selecting CEL. turns on Celeste for the selected voice section.

Effects — Tone

Tone is a special effect that lets you adjust the timbre, or sound quality, of a voice. Positive settings make the sound brighter while negative settings make it softer or more mellow.

To set the Tone effect:

Press the EFFECT/TONE button (TONE button on the EL-40). Use the Page Select buttons to switch between the Tone pages, and use the bottom pair of Data Control buttons on either side of the display to change the values. The range is from -3 to +3.

Note: Occasionally the Tone effect may be difficult to hear, depending either on the voice selected or on the direction in which the setting is changed.

EL-40

```
<TONE>           P1
UPPER=-3  LEAD =+3
```

Increases the Tone value of the Upper voice.

Decreases the Tone value of the Upper voice.

EL-60

Increases the Tone value of the Lead voice.

Decreases the Tone value of the Lead voice.

To change the Tone settings of the Lower and Pedal voices, press the Page ► button to select Page 2.

```
<TONE>           P2
LOWER= 0  PEDAL=+3
```
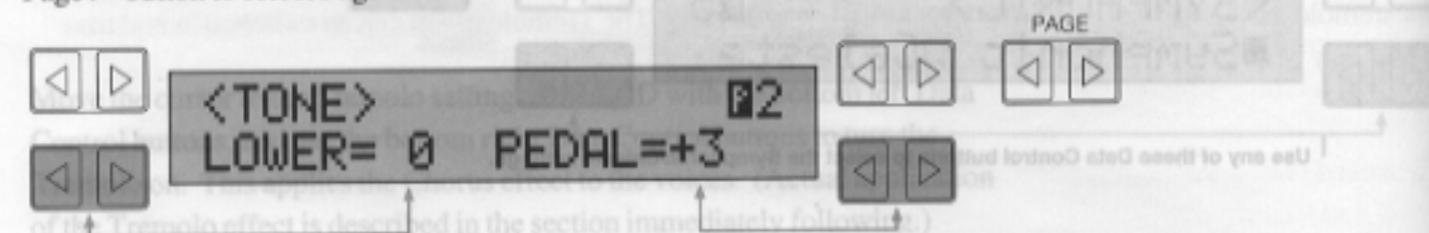
Effects — Delay and Flanger (EL-60)

Delay and Flanger are two unusual effects used often in contemporary music. Like Tremolo above, the Delay and Flanger effects are set in two steps, from two different groups of display pages: the Voice Condition pages and the Effect/Tone pages.
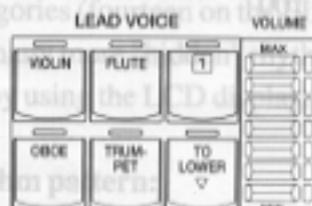
To turn on the Delay or Flanger effect:

Call up the Voice Condition page by pressing the desired Upper, Lower or Lead Voice button on the panel twice, then select DLY. (Delay) or FLG. (Flanger) by using the bottom right Data Control buttons.

> **Note:** The Delay and Flanger effects are available for the Upper, Lower and Lead Voice sections.


```
<LEAD>      VOL.=24   P1
FEET=PRE.EFFECT=DLY.
```

Selecting DLY. (Delay) or FLG. (Flanger) turns on the corresponding effect for the selected voice section.
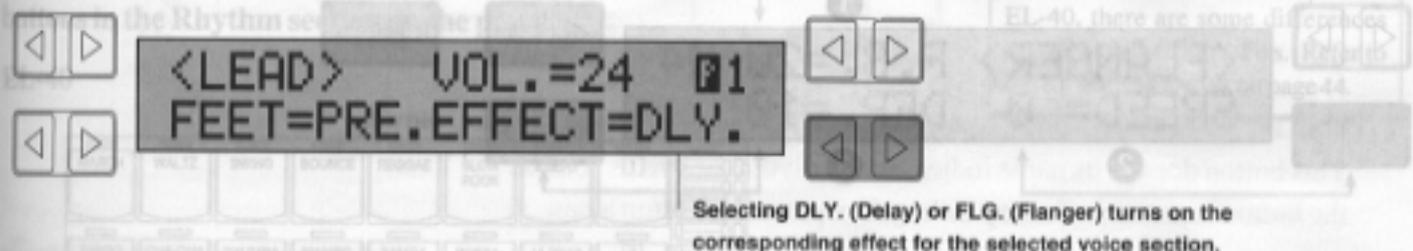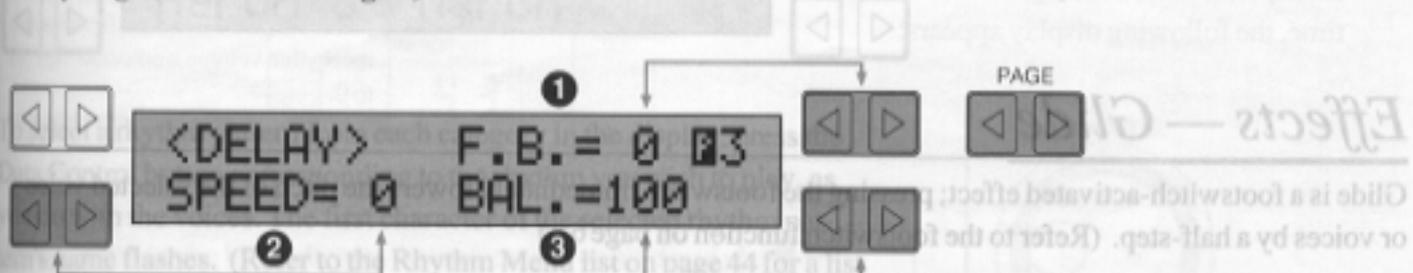
To set the Delay or Flanger effect:

Press the EFFECT/TONE button in the DISPLAY SELECT section, and use the Page Select buttons to select the corresponding pages.
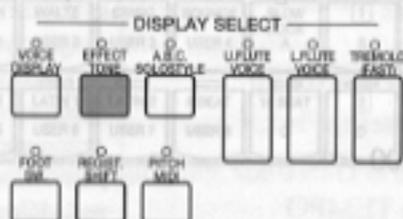
Delay Page (Effect/Tone Page 3)

```
<DELAY>     F.B. = 0  P3
SPEED= 0    BAL.=100
```

Delay

Delay is a pronounced echo effect, with distinct delayed repeats of the original sound.

1 Feedback (F.B.)

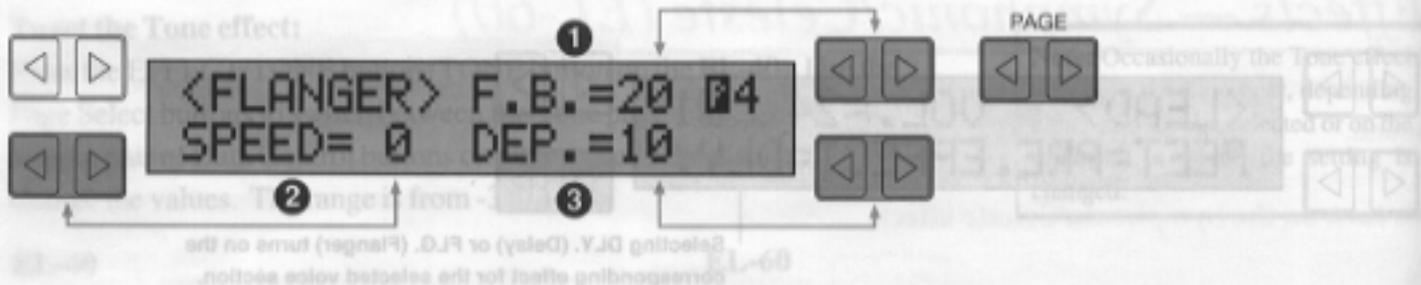Determines the number of delayed repeats. Range: 0 — 100

2 Speed

Determines the time between delayed repeats. Range: 0 — 100

3 Balance (BAL.)

Determines the volume of the delay effect, relative to the original sound. Higher settings produce a louder delay. Range: 0 — 100

Flanger Page (Effect/Tone Page 4)

Flanger

Flanger introduces a swirling, animated modulation effect to the sound.

1 Feedback (F.B.)

Controls the brightness and the metallic sound of the effect. Range: 0 — 100

2 Speed

Determines the speed of the modulation. Range: 0 — 100

3 Depth (DEP.)

Determines the intensity of the effect. Range: 0 — 100

Effects — Glide

Glide is a footswitch-activated effect; pressing the footswitch immediately lowers the pitch of the selected voice or voices by a half-step. (Refer to the footswitch function on page 61.)