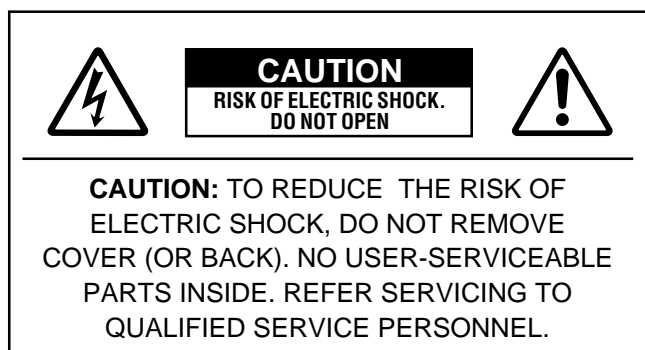


Electone  
**EL-900m**  
Upgrade Kit  
OWNER'S MANUAL

# SPECIAL MESSAGE SECTION

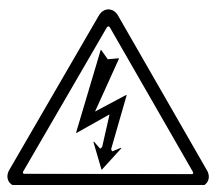
**PRODUCT SAFETY MARKINGS:** Yamaha electronic products may have either labels similar to the graphics shown below or molded / stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated in the safety instruction section.



See the name plate for graphic symbol markings.



The exclamation point within the equilateral triangle is intended to alert the user to the present of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

**IMPORTANT NOTICE:** All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. DO NOT modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

**SPECIFICATIONS SUBJECT TO CHANGE:** The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

**ENVIRONMENTAL ISSUES:** Yamaha strives to produce products that are both user safe and environmentally friendly.

We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

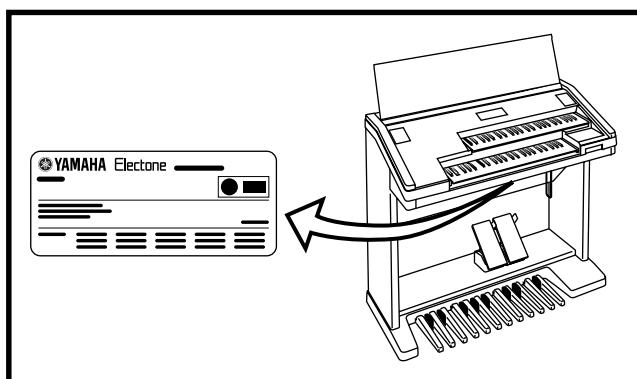
**BATTERY NOTICE:** This product MAY contain a small nonrechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

**WARNING:** Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

**DISPOSAL NOTICE:** Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

**NOTICE:** Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacture's warranty, and are therefore the owner's responsibility. Please study this manual carefully and consult your dealer before requesting service.

**NAME PLATE LOCATION:** The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model \_\_\_\_\_

Serial No. \_\_\_\_\_

Purchase Date \_\_\_\_\_

# PRECAUTIONS

## PLEASE READ CAREFULLY BEFORE PROCEEDING

\* Please keep these precautions in a safe place for future reference.



### WARNING

**Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:**

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.



### CAUTION

**Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:**

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.
- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum. Also, be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables.
- When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Take care that the key cover does not pinch your fingers, and do not insert a finger or hand in the key cover gap.
- Never insert or drop paper or metallic or other objects between the slits of the key cover and the keyboard. If this happens, immediately turn off the power and remove the electric plug from the outlet and have the instrument inspected by qualified Yamaha service personnel.
- Do not place the instrument against a wall (allow at least 3 cm/one-inch from the wall), since this can cause inadequate air circulation, and possibly result in the instrument overheating.
- Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

#### ■ USING THE BENCH

- Do not play carelessly with or stand on the bench. Using it as a tool or step-ladder or for any other purpose might result in accident or injury.
- Only one person should sit on the bench at a time, in order to prevent the possibility of accident or injury.
- If the bench screws become loose due to extensive long-term use, tighten them periodically using the included tool.

#### ■ SAVING USER DATA

- Always save data to a floppy disk frequently, in order to help prevent the loss of important data due to a malfunction or user operating error.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

# Congratulations!

This manual provides the information related to the newly upgraded features and functions, difference between EL-900 and EL-900m. You can enjoy specially tailored sophisticated voices, convenient and versatile voice display functions, voice editing even with VA voices and more.

## Included Items

Registration Menu Disk

3.5" Floppy Disk

Owner's Manual

To Authorized Service Personnel



Turning the Electone off erases all panel settings you have made. When the Electone is turned on, Basic Registration 1 is automatically selected. If you have made panel settings you wish to keep, save them to Registration Memory before turning the Electone off.



GM (General MIDI System Level 1) is an addition to the MIDI standard which ensures that any GM-compatible music data can be accurately played by any GM-compatible tone generator, regardless of maker. The GM mark is affixed to all software and hardware products that support the General MIDI standard.



XG is a new MIDI format created by Yamaha which significantly improves and expands upon the General MIDI standard by providing a greater variety of high-quality voices plus considerably enhanced effect operation—while being fully compatible with GM.



Products bearing the SONDIUS-XG logo are licensed under patents of Stanford University and Yamaha as listed on the internet web site, <<http://www.sondius-xg.com>>.

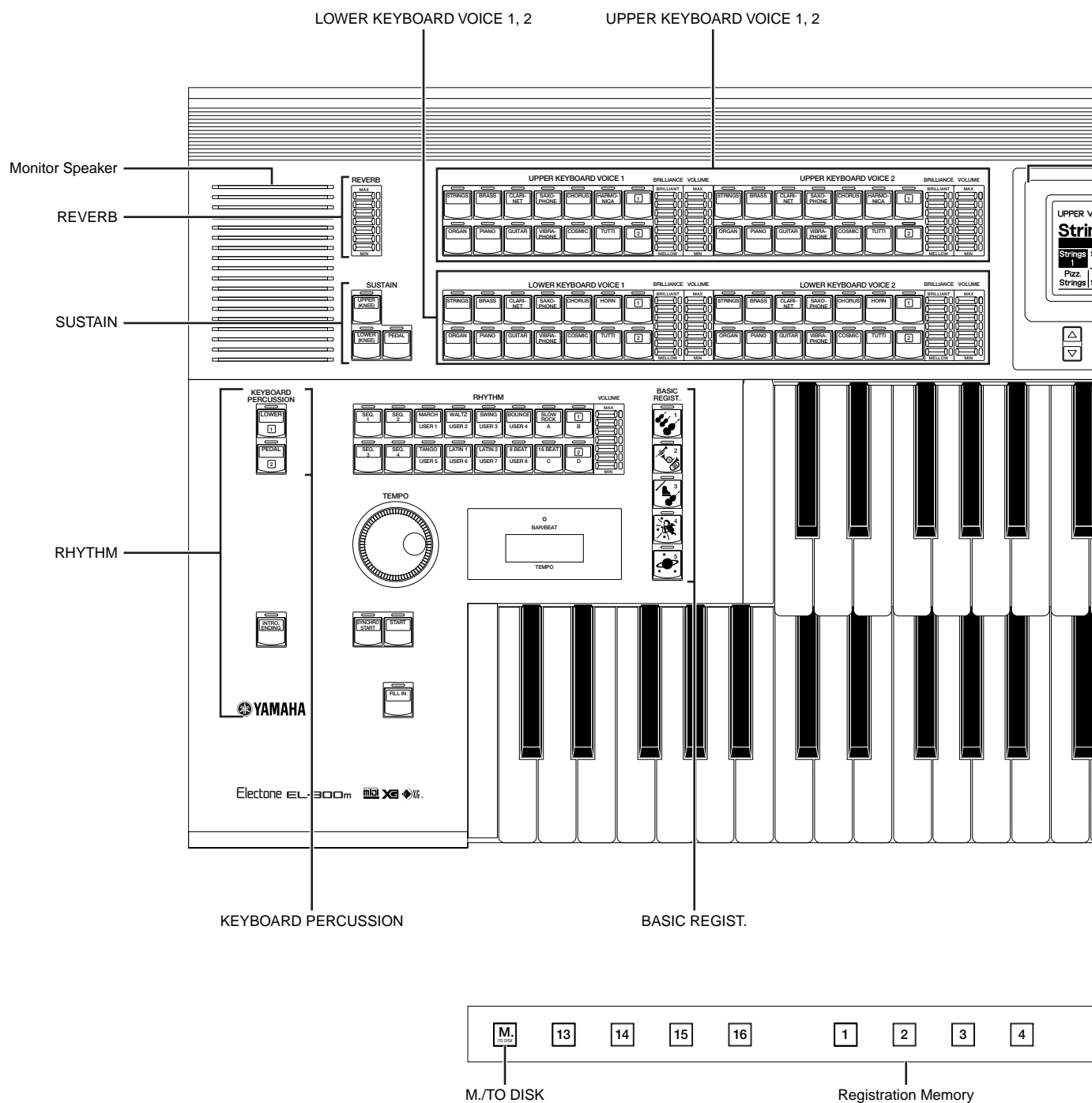
- The screen displays and illustrations as shown in this owner's manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- Copying of the commercially available music sequence data is strictly prohibited except for your personal use.
- The company names and product names in this Owner's manual are the trademarks or registered trademarks of their respective companies.

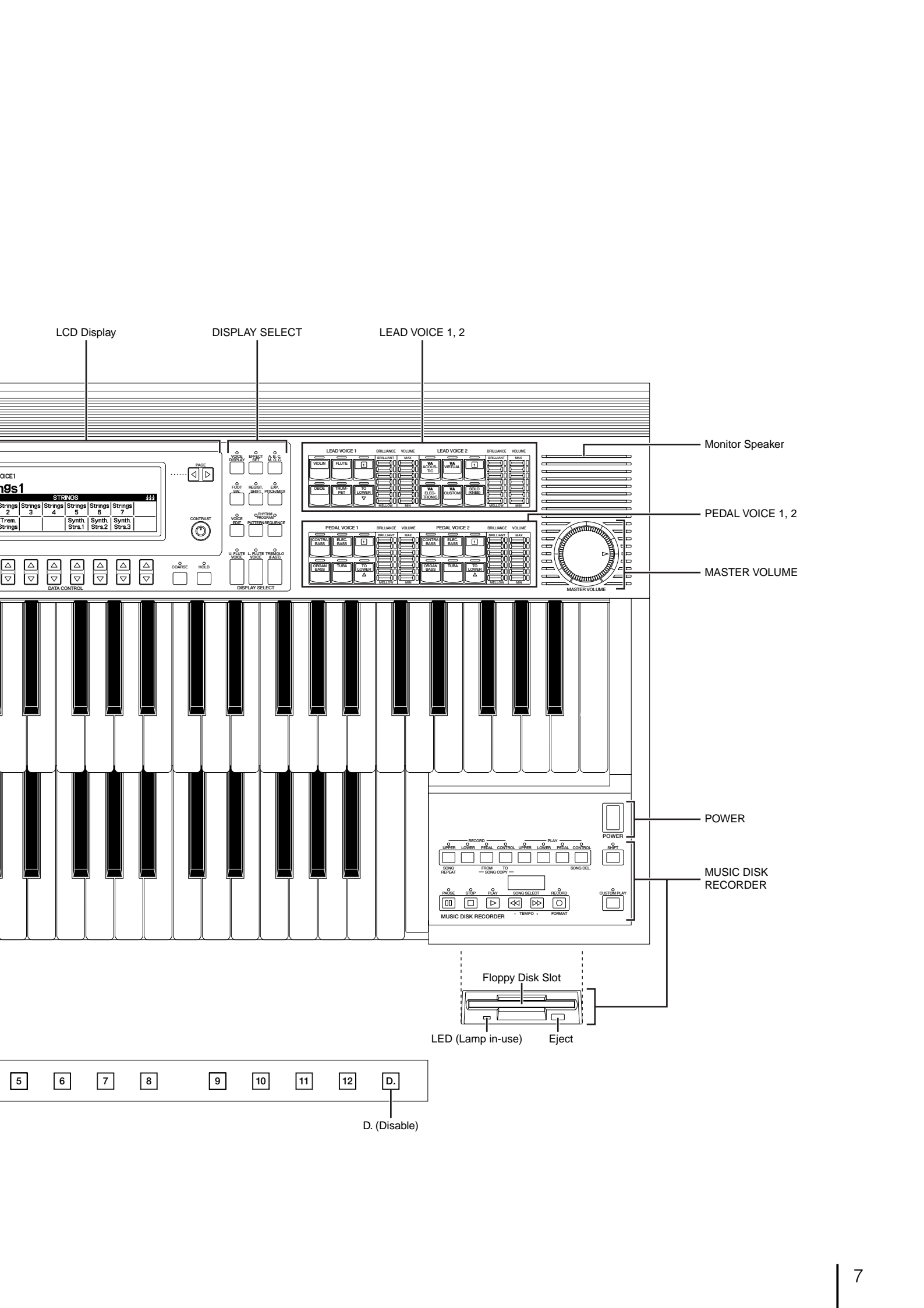
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# Panel Layout

## EL-900m Panel Layout





LCD Display

DISPLAY SELECT

LEAD VOICE 1, 2

Monitor Speaker

PEDAL VOICE 1, 2

MASTER VOLUME

POWER

MUSIC DISK RECORDER

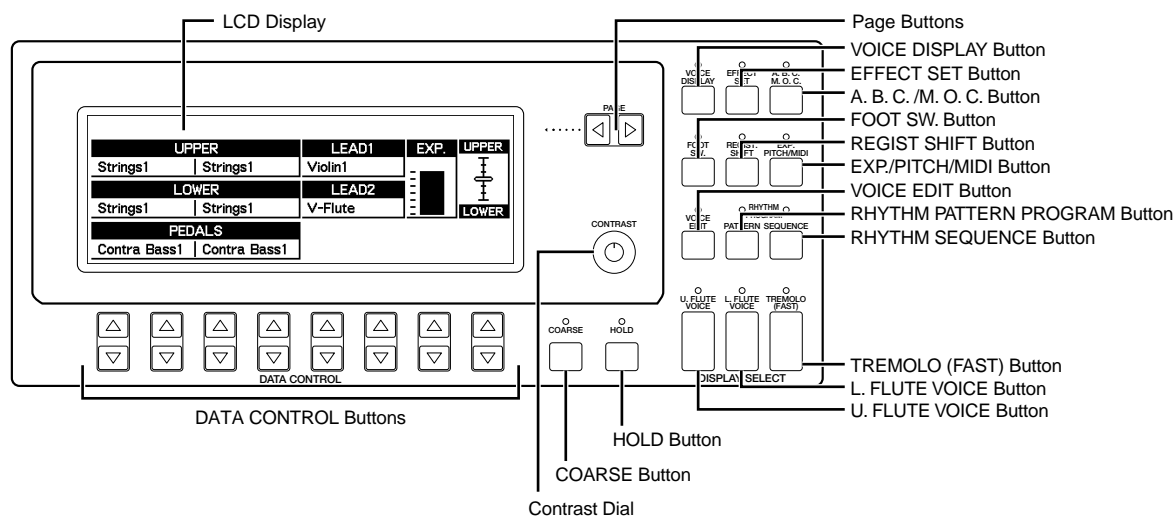
Floppy Disk Slot

LED (Lamp in-use)

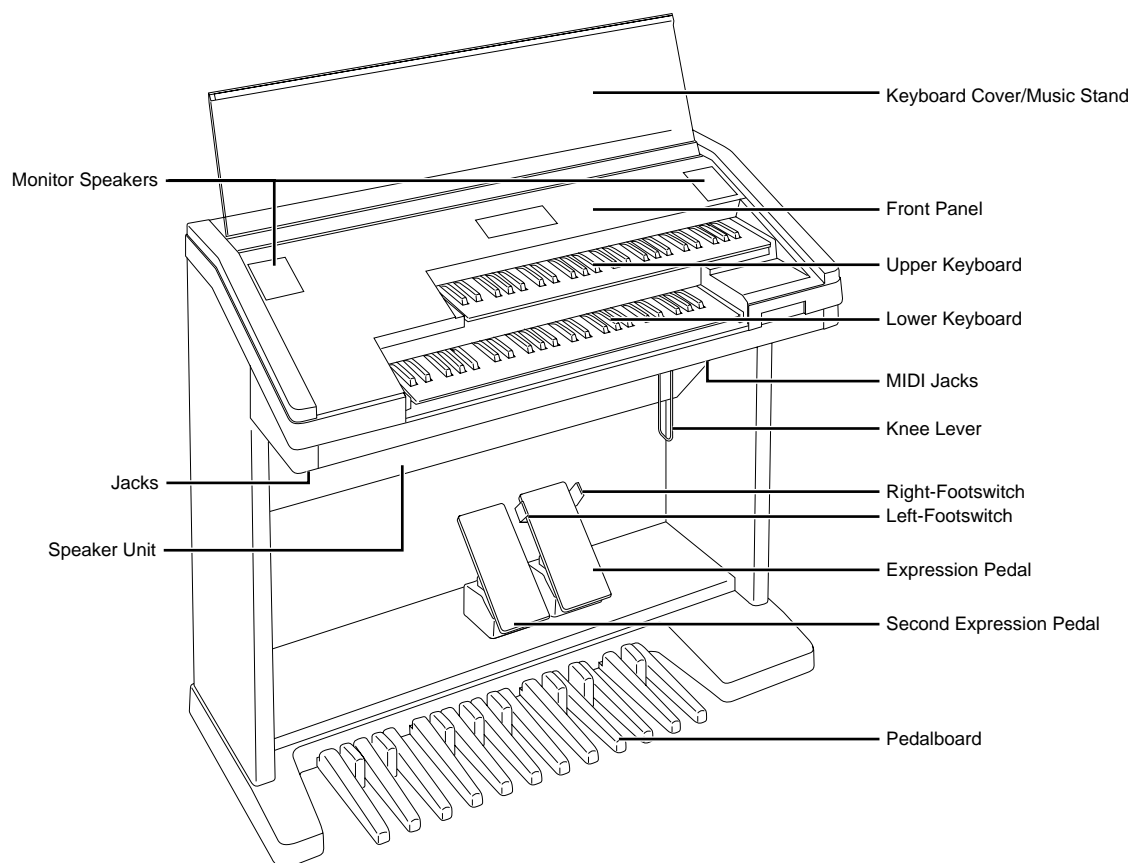
Eject

D. (Disable)

# LCD Display/Display Select



## Others





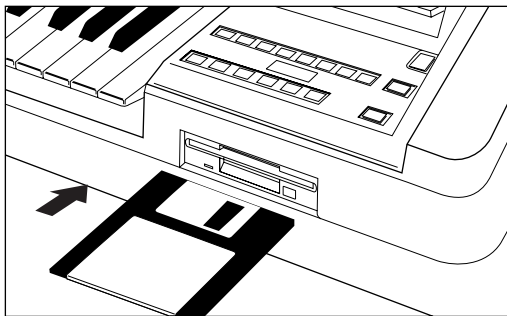
# Registration Menu Disk

The contents of the registrations have been perfected with the new voice combinations, compared to the ones of EI-900.

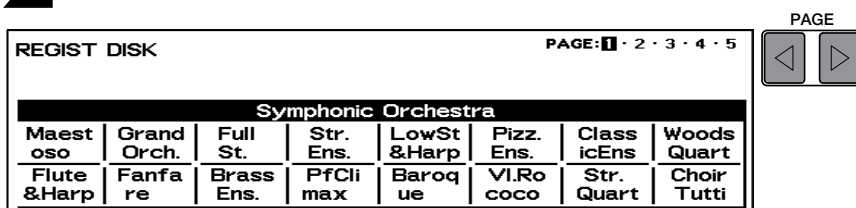
80 registration patterns in five basic categories are available for you to play.

## To use the Registration Menu:

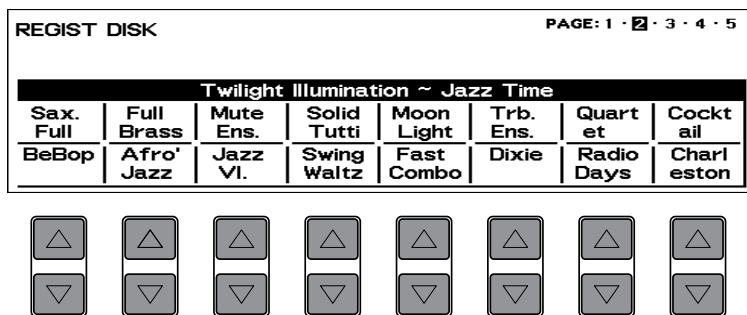
- 1 Insert the included Registration Menu disk in to the slot.



- 2 Select the desired page, or the category you want to use, by pressing the Page buttons.



- 3 Select the registration by pressing the appropriate Data Control buttons.



\* Each registration is preset with various functions, rhythm, effects, panning, etc., all suited to the voices.

The voices are elaborately combined to bring out the characteristics of each voice. You can use them as your good reference when you create your own registrations.

Take a brief look at each menu.

(page 1)

REGIST DISK							
PAGE: 1 · 2 · 3 · 4 · 5							
Symphonic Orchestra							
Maestoso	Grand Orch.	Full St.	Str. Ens.	LowSt & Harp	Pizz. Ens.	Class icEns	Woods Quart
Flute & Harp	Fanfare	Brass Ens.	PfCli max	Baroque	Vi.Ro coco	Str. Quart	Choir Tutti

(page 2)

REGIST DISK							
PAGE: 1 · 2 · 3 · 4 · 5							
Twilight Illumination ~ Jazz Time							
Sax. Full	Full Brass	Mute Ens.	Solid Tutti	Moon Light	Trb. Ens.	Quartet	Cocktail
BeBop	Afro' Jazz	Jazz VI.	Swing Waltz	Fast Combo	Dixie	Radio Days	Charleston

(page 3)

REGIST DISK							
PAGE: 1 · 2 · 3 · 4 · 5							
Latin							
Samba Brass	Samba Light	Bossa Combo	Bossa Str.	Mambo Slow	Mambo Fast	Rhumba	Beguine
Cha - Cha	Salsa	Tango Argen	Tango Conti	Mexican	Viva! Bamba	Jamaican16	Jamaican12

(page 4)

REGIST DISK							
PAGE: 1 · 2 · 3 · 4 · 5							
Dance & Fusion							
Disco	Dance Pop	Euro Beat	World Cup	Funk	Dance Class	R&R	Twist
Bounce	Brite Piano	Sax.& Synth	JazzFusion	Ocean Gtr.	16Bt. Pf	16Bt. Balad	16Bt. Latin

(page 5)

REGIST DISK							
PAGE: 1 · 2 · 3 · 4 · 5							
Black & White ~ Organ Sounds							
Straight	Cluster	Dry Combi	Fat & Rich	Moody	Full Balad	Light Combi	Organ Cla.
White Shade	Pale Great	Metal Combi	Blues	Cathedral	Chapel	Carousel	Stadium

Each registration is briefly described in the following tables.

# Registration Menu List

## Page 1: Symphonic Orchestra

	LCD (Name)	Content
1	<b>Maestoso</b>	Symphonic Orchestra 1
2	<b>GrandOrch.</b>	Symphonic Orchestra 2
3	<b>Full St.</b>	String Ensemble 1
4	<b>Str. Ens.</b>	String Ensemble 2
5	<b>LowSt&amp;Harp</b>	Strings & Harp
6	<b>Pizz.Ens.</b>	Pizz. Strings
7	<b>ClassicEns</b>	Classical Orchestra
8	<b>WoodsQuart</b>	Wood Ensemble
9	<b>Flute&amp;Harp</b>	Flute & Harp
10	<b>Fanfare</b>	Brass Ensemble 1
11	<b>BrassEns.</b>	Brass Ensemble 2
12	<b>PfClimax</b>	Piano Concerto
13	<b>Baroque</b>	Baroque 1
14	<b>VI.Rococo</b>	Baroque 2
15	<b>Str. Quart</b>	String Quartet
16	<b>ChoirTutti</b>	Orchestra w/choir

## Page 2: Twilight Illumination ~ Jazz Time

	LCD (Name)	Content
1	<b>Sax. Full</b>	Big Band Orchestra 1
2	<b>Full Brass</b>	Big Band Orchestra 2
3	<b>Mute Ens.</b>	Big Band Orchestra 3
4	<b>SolidTutti</b>	Big Band Orchestra 4
5	<b>Moon Light</b>	Big Band Orchestra 5
6	<b>Trb. Ens.</b>	Big Band Orchestra 6
7	<b>Quartet</b>	Quartet
8	<b>Cocktail</b>	Quintet
9	<b>BeBop</b>	Be Bop
10	<b>Afro'Jazz</b>	Afro Cuban
11	<b>Jazz VI.</b>	Jazz Violin
12	<b>SwingWaltz</b>	Jazz Waltz
13	<b>Fast Combo</b>	Combo Jazz
14	<b>Dixie</b>	Dixieland Jazz
15	<b>RadioDays</b>	Ragtime
16	<b>Charleston</b>	Charleston

### Page 3: Latin

	LCD (Name)	Content
1	<b>SambaBrass</b>	Samba 1
2	<b>SambaLight</b>	Samba 2
3	<b>BossaCombo</b>	Bossanova 1
4	<b>BossaStr.</b>	Bossanova 2
5	<b>MamboSlow</b>	Mambo 1
6	<b>MamboFast</b>	Mambo 2
7	<b>Rhumba</b>	Rhumba
8	<b>Beguine</b>	Beguine
9	<b>Cha - Cha</b>	Cha - Cha
10	<b>Salsa</b>	Salsa
11	<b>TangoArgen</b>	Tango 1
12	<b>TangoConti</b>	Tango 2
13	<b>Mexican</b>	Mexican 1
14	<b>Viva!Bamba</b>	Mexican 2
15	<b>Jamaican16</b>	Caribbean 1
16	<b>Jamaican12</b>	Caribbean 2

### Page 4: Dance & Fusion

	LCD (Name)	Content
1	<b>Disco</b>	70's Disco
2	<b>DancePop</b>	80's Dance
3	<b>Euro Beat</b>	Euro Beat
4	<b>WorldCup</b>	Latin Beat
5	<b>Funk</b>	Funk
6	<b>DanceClass</b>	Dance Classic
7	<b>R&amp;R</b>	Oldies 1
8	<b>Twist</b>	Oldies 2
9	<b>Bounce</b>	16 Beat Shuffle
10	<b>BritePiano</b>	16 Beat 1
11	<b>Sax.&amp;Synth</b>	16 Beat 2
12	<b>JazzFusion</b>	Jazz Fusion
13	<b>OceanGtr.</b>	West coast 1
14	<b>16Bt.Pf</b>	West coast 2
15	<b>16Bt.Balad</b>	16 Beat Ballad
16	<b>16Bt.Latin</b>	16 Beat Latin

### Page 5: Black & White ~ Organ Sounds

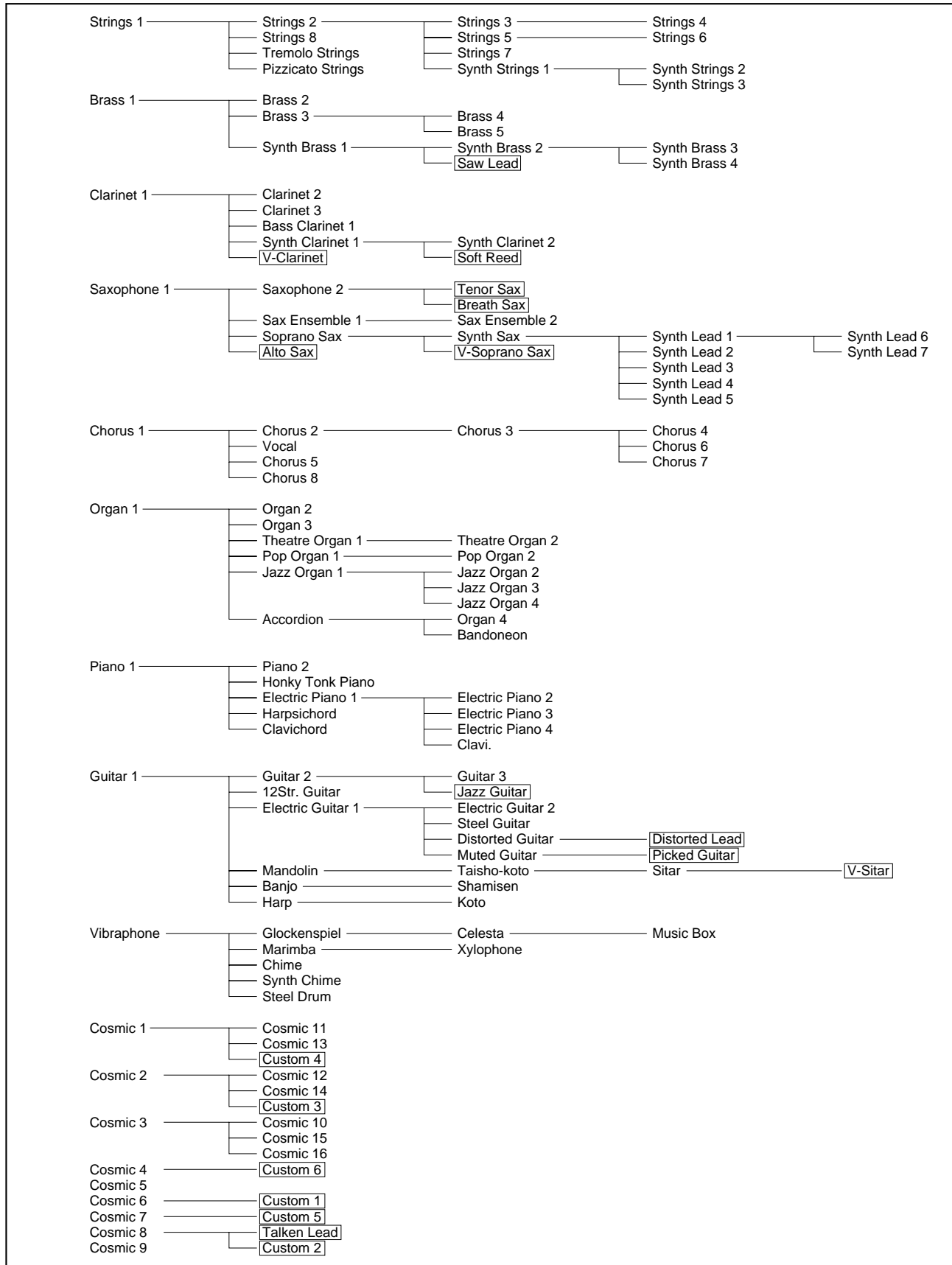
	LCD (Name)	Content
1	<b>Straight</b>	Flute Combi. 1
2	<b>Cluster</b>	Flute Combi. 2
3	<b>Dry Combi</b>	Flute Combi. 3
4	<b>Fat &amp;Rich</b>	Flute Combi. 4
5	<b>Moody</b>	Jazz Ballad 1
6	<b>Full Balad</b>	Jazz Ballad 2
7	<b>LightCombi</b>	Organ Bossa 1
8	<b>OrganCla.</b>	Organ Bossa 2
9	<b>WhiteShade</b>	8 Beat Ballad 1
10	<b>Pale Great</b>	8 Beat Ballad 2
11	<b>MetalCombi</b>	Rock Organ 1
12	<b>Blues</b>	Rock Organ 2
13	<b>Cathedral</b>	Cathedral
14	<b>Chapel</b>	Chapel
15	<b>Carousel</b>	Carousel
16	<b>Stadium</b>	Stadium

# Voice Category List

A variety of voices can be divided into the following categories.

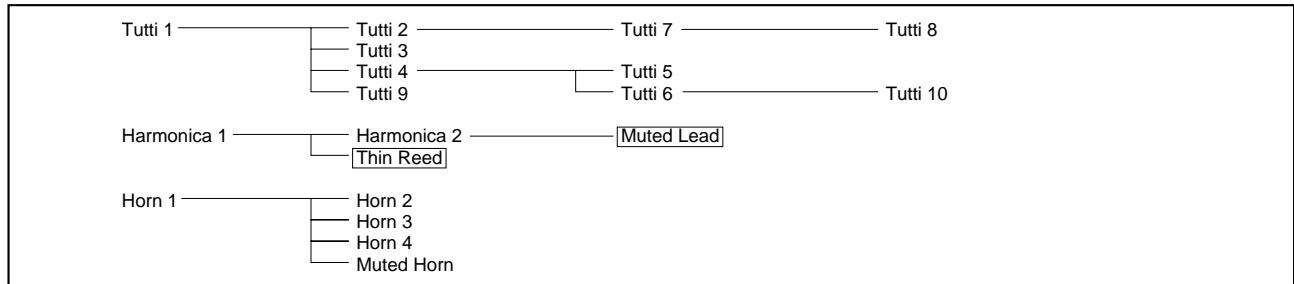
## ORCHESTRAL

The voice names in a square indicate they are created by VA (Virtual Acoustic) synthesis.

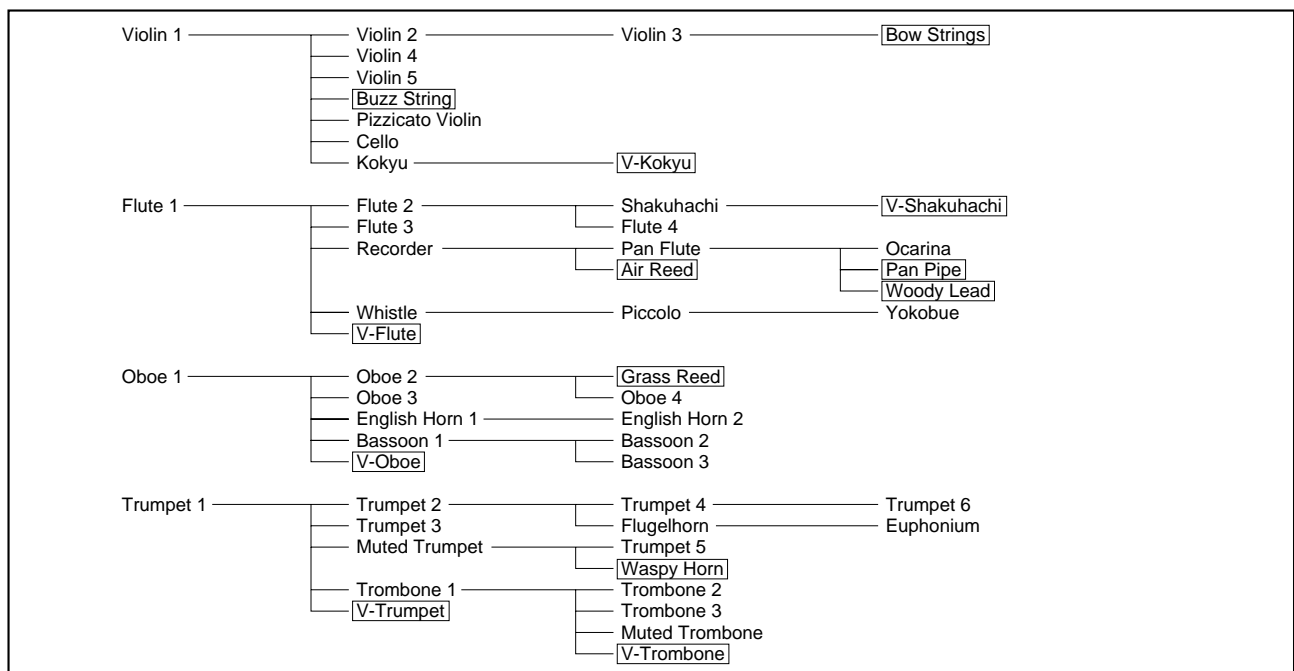


## ORCHESTRAL

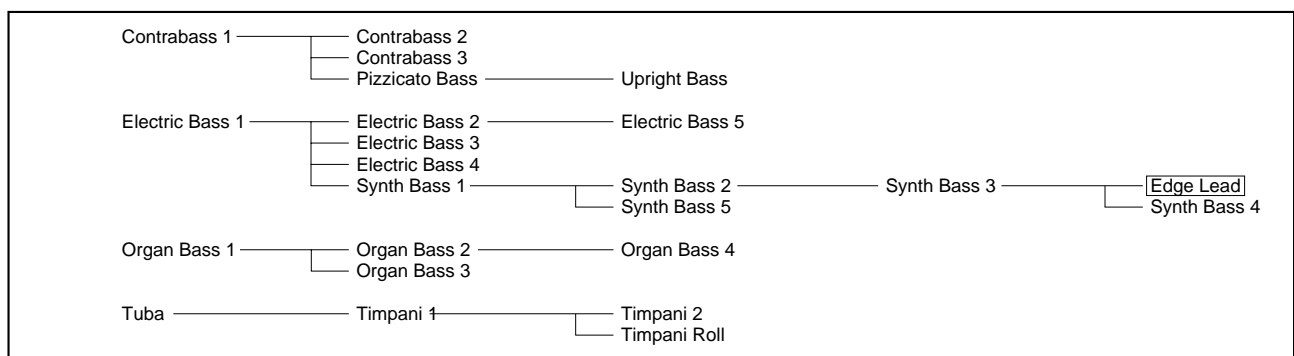
The voice names in a square indicate they are created by VA (Virtual Acoustic) synthesis.



## LEAD



## BASS



### The Preset Voices for Upper/Lower Flute Voices

Jazz Organ 1	Jazz Organ 2	Jazz Organ 3	Jazz Organ 4
Pop Organ 1	Pop Organ 2	Pop Organ 3	Pop Organ 4

# 2 New Voices

23 new AWM+FM voices are added: from 173 voices to 196 voices with EL-900m.

23 new additional voices allow you to play a variety of music categories, from classical to contemporary music. The total number of voices has become 230; 196 AWM+FM voices and 34 VA voices.

Let's take a brief look at the newly added voices.

## Strings Page

STRINGS							
Strings 1	Strings 2	Strings 3	Strings 4	Strings 5	Strings 6	Strings 7	Strings 8
Pizz. Strings	Trem. Strings			Synth. Strs.1	Synth. Strs.2	Synth. Strs.3	

### ● Strings 8 (8')

Con sordino (with mute) strings. Reproduces softly played string sounds. Subtle nuance can be produced by playing touch.



**NOTE:**

Refer to Voice Category List.

A. Dvorak: From the New world, 2nd Movement

**Largo**

Str.

English Horn

ppp

p

If you play it on EL-900, String 1 is produced.

## Brass Page

BRASS							
Brass 1	Brass 2	Brass 3	Brass 4	Brass 5			
Synth. Brass1	Synth. Brass2	Synth. Brass3	Synth. Brass4				

### ● Synth.Brass4(8')

Full-bodied synth. Brass sound with unique pitch characteristics.

If you play it on EL-900, Shynth Brass2 is produced.



## Trumpet Page

TRUMPET							
Trumpet 1	Trumpet 2	Trumpet 3	Trumpet 4	Trumpet 5	Trumpet 6	Muted Trp.	
Trombone 1	Trombone 2	Trombone 3	Muted Trb.	Flugel Horn		Euphonium	

### ● Trombone3(UK16'/LK8')

Trombone with the characteristics having strong and resonant tone.

R. Wagner: Die Meistersinger von Nurnberg, Vorspiel 1 Aufzug



If you play it on EL-900, Trombone 1 is produced.

## Tuba Page

TUBA							
Tuba				Timpani 1	Timpani 2	Timpani Roll	



**NOTE:**

Although some of the voice names and the locations of those on EL-900 may be altered because of accommodating new voices, they will not affect data compatibility between EL-900m and other models.

### ● Timpani 2(8')

Expressive Timpani sounds played with softer mallets. Responsive to your touch so that it can express strength from Piano to Forte. Good for classical.

A. Dvorak: From the New world, 4th Movement

cla. (A.T.)

*fz* (A.T.)

*più cresc.*

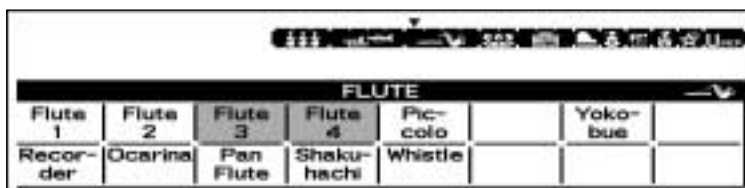
Tim. *pp*

(A.T.)

(A.T.)

If you play it on EL-900, Timpani 1 is produced.

## Flute Page



### ● Flute3(8')

Jazz flute with unique attack. Suitable for both faster phrases and extended ones. Vibrato is preset and fixed to the voice.

Medium Fast



If you play it on EL-900, Flute 1 is produced.

### ● Flute4(8')

Classical flute with deep vibrato. Vibrato is preset and fixed to the voice.

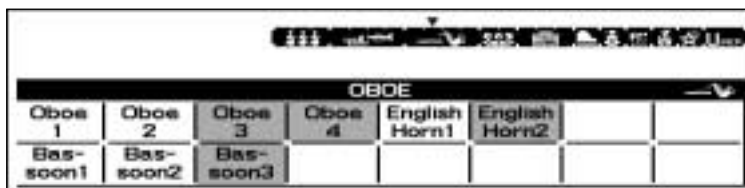
C. A. Debussy: Prelude a l'apres-midi d'un faune

Très modéré



If you play it on EL-900, Flute 2 is produced.

## Oboe Page



### ● Oboe 3(8')

Oboe suited to faster phrases. Vibrato is preset and fixed to the voice.

W. A. Mozart: From Konzert fur Oboe und Orchester

Allegro

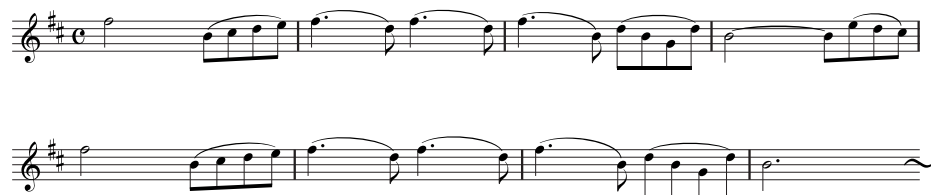


If you play it on EL-900, Oboe 1 is produced.

## ● Oboe 4(8')

Expressive oboe for classicals.

**P. I. Tchaikovsky: The Swan Lake**



If you play it on EL-900, Oboe 2 is produced.

## ● English Horn2(8')

English horn with distinctive reed.

**A. Dvorak: From the New world, 2nd Movement**



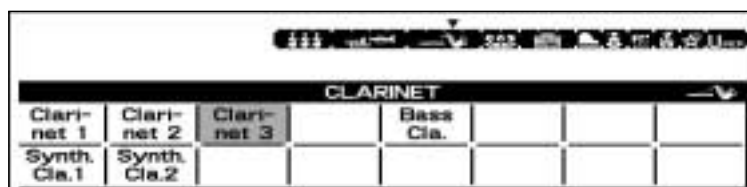
If you play it on EL-900, English Horn1 is produced.

## ● Bassoon3(UK16'/LK8')

Bassoon with rich resonance even in the lower register.

If you play it on EL-900, Bassoon 1 is produced.

# Clarinet Page



## ● Clarinet 3(8')

Sweet and expressive clarinet.

**Clarinet Polka**



If you play it on EL-900, Clarinet 1 is produced.

## Saxophone Page



SAXOPHONE							
Saxophone1	Saxophone2	Sopra. Sax.	Sax. Ens.1	Sax. Ens.2	Synth. Sax.		
Synth. Lead1	Synth. Lead2	Synth. Lead3	Synth. Lead4	Synth. Lead5	Synth. Lead6	Synth. Lead7	

### ● Synth. Lead6(8')

Comical synth. Lead with unique pitch characteristics.

If you play it on EL-900, Synth. Lead 1 is produced.

### ● Synth. Lead7(8')

Synth. Lead having Synth bass image.

If you play it on EL-900, Synth Lead 1 is produced.

## Tutti Page



TUTTI							
Tutti 1	Tutti 2	Tutti 3	Tutti 4	Tutti 5	Tutti 6	Tutti 7	Tutti 8
Tutti 9	Tutti 10						



**NOTE:**

Tutti, as you know, contains various types of voices. Especially, you should be conscious with the voice range when you play in the lowest/highest registers.

### ● Tutti 8(8')

Gorgeous brass ensemble.

R. Wagner: From Lohengrin

Molto vivace



If you play it on EL-900, Tutti 7 is produced.

### ● Tutti 9(8')

Magnificent string ensemble. Rich expressiveness with touch.

P. I. Tchaikovsky: Romeo and Juliet



If you play it on EL-900, Tutti 1 is produced.

### ● Tutti 10(8')

Wood winds ensemble. Thicker than Tutti 6. Also, it is attractive when mixed with other voices.

If you play it on EL-900, Tutti 6 is produced.

# Chorus Page

CHORUS							
Chorus 1	Chorus 2	Chorus 3	Chorus 4	Chorus 5	Chorus 6	Chorus 7	Chorus 8
Vocal							



## NOTE:

Let's play the following score using the registration, "Choir Tutti" in the category of Symphonic Orchestra (page 1, Registration Menu Disk).  
See page 9 for more information on Registration Menu Disk.

### ● Chorus 6(8')

Mixed chorus for the sacred music. Having a slow and clean impression, especially suited to chorale.

If you play it on EL-900, Chorus 3 is produced.

### ● Chorus 7(8')

Impressive chorus.

**L. V. Beethoven: From Symphonie No. 9 "Choral"**

*Allegro assai vivace* (♩ = 84)

If you play it on EL-900, Chorus 3 is produced.

### ● Chorus 8(8')

Chorus for Gospel music.

If you play it on EL-900, Chorus 1 is produced.

## Piano Page

PIANO							
Piano 1	Piano 2	Honky Tonk		Elec. Piano1	Elec. Piano2	Elec. Piano3	Elec. Piano4
Harpsi-chord		Clavi.	Clavi-chord				

### ● Elec. Piano4(8')

Bright and brilliant electric piano.

If you play it on EL-900, Elec. Piano 1 is produced.

## Electric Bass Page

ELECTRIC BASS							
Elec. Bass 1	Elec. Bass 2	Elec. Bass 3	Elec. Bass 4	Elec. Bass 5			
Synth. Bass 1	Synth. Bass 2	Synth. Bass 3	Synth. Bass 4	Synth. Bass 5			

### ● Elec. Bass 5(16')

Expressive Electric bass.

If you play it on EL-900, Elec. Bass 2 is produced.

### ● Syn. Bass 4(16')

Resonant synth. bass.

If you play it on EL-900, Synth. Bass 3 is produced.

### ● Synth. Bass 5(16')

Synth. Bass suitable for playing gradually changing sounds.

If you play it on EL-900, Synth. Bass 1 is produced.

The following list summarizes the newly added voices. Refer to the Details on Each Voice at the end of this manual for the information on the other voices.

## New Voices

Page	Voice Name	Feet	Effect	Comment
STRINGS	Strings 8	8'	-	Con sordino (with mute) strings.Reproduces softly played string sounds.
BRASS	Synth. Brass 4	8'	-	Full-bodied synth. Brass sound with unique pitch characteristics.
TRUMPET	Trombone 3	U16'/L8'	-	Trombone with the characteristics having strong and resonant tone.
TUBA	Timpani 2	8'	-	Expressive Timpani sounds played with softer mallets.
FLUTE	Flute 3	8'	-	Jazz flute with unique attack.
	Flute 4	8'	-	Classical flute with deep vibrato.
OBOE	Oboe 3	8'	-	Oboe suited to faster phrases.
	Oboe 4	8'	-	Expressive oboe for classicals.
	English Horn 2	8'	-	English horn with distinctive reed.
	Bassoon 3	U16'/L8'	-	Bassoon with rich resonance even in the lower register.
CLARINET	Clarinet 3	8'	-	Sweet and expressive clarinet.
SAXOPHONE	Synth. Lead 6	8'	-	Comical synth. Lead with unique pitch characteristics.
	Synth. Lead 7	8'	-	Synth. Lead having Synth bass image.
TUTTI	Tutti 8	8'	-	Gorgeous brass ensemble.
	Tutti 9	8'	-	Magnificent string ensemble.Rich expressiveness with touch.
	Tutti 10	8'	-	Wood winds ensemble.Thicker than Tutti 6.
CHORUS	Chorus 6	8'	-	Mixed chorus for the sacred music.
	Chorus 7	8'	-	Impressive chorus.
	Chorus 8	8'	-	Chorus for Gospel music.
PIANO	Elec. Piano 4	8'	-	Bright and brilliant electric piano.
ELECTRIC BASS	Elec. Bass 5	16'	-	Expressive Electric bass.
	Synth. Bass 4	16'	-	Resonant synth. bass.
	Synth. Bass 5	16'	-	Synth. Bass suitable for playing gradually changing sounds.

# Voice Menu

The following chart lists the voices available and their button/page assignment.

## STRINGS Upper/Lower

STRINGS							
Strings 1	Strings 2	Strings 3	Strings 4	Strings 5	Strings 6	Strings 7	Strings 8
Pizz. Strings	Trem. Strings			Synth. Strs.1	Synth. Strs.2	Synth. Strs.3	

## VIOLIN Lead

VIOLIN							
Violin 1	Violin 2	Violin 3	Violin 4	Violin 5	Pizz. Violin		
Cello	Kokyu						

## CONTRABASS Pedal

CONTRABASS							
Contra Bass 1	Contra Bass 2	Contra Bass 3		Pizz. Bass	Upright Bass		

## BRASS Upper/Lower

BRASS							
Brass 1	Brass 2	Brass 3	Brass 4	Brass 5			
Synth. Brass 1	Synth. Brass 2	Synth. Brass 3	Synth. Brass 4				

## HORN Lower

HORN							
Horn 1	Horn 2	Horn 3	Horn 4	Muted Horn			

## TRUMPET Lead

TRUMPET							
Trumpet 1	Trumpet 2	Trumpet 3	Trumpet 4	Trumpet 5	Trumpet 6	Muted Trp.	
Trombone1	Trombone2	Trombone3	Muted Trb.	Flugel Horn		Euphonium	

## TUBA Pedal

TUBA							
Tuba				Timpani 1	Timpani 2	Timpani Roll	

## FLUTE Lead

FLUTE							
Flute 1	Flute 2	Flute 3	Flute 4	Piccolo		Yokobue	
Recorder	Ocarina	Pan Flute	Shakuhachi	Whistle			

## OBOE Lead

OBOE							
Oboe 1	Oboe 2	Oboe 3	Oboe 4	English Horn1	English Horn2		
Basoon1	Basoon2	Basoon3					

## CLARINET Upper/Lower

CLARINET							
Clarinet 1	Clarinet 2	Clarinet 3		Bass Cla.			
Synth. Cla.1	Synth. Cla.2						

## SAXOPHONE Upper/Lower

SAXOPHONE							
Saxophone1	Saxophone2	Sopra. Sax.	Sax. Ens.1	Sax. Ens.2	Synth. Sax		
Synth. Lead1	Synth. Lead2	Synth. Lead3	Synth. Lead4	Synth. Lead5	Synth. Lead6	Synth. Lead7	

## TUTTI Upper/Lower

TUTTI							
Tutti 1	Tutti 2	Tutti 3	Tutti 4	Tutti 5	Tutti 6	Tutti 7	Tutti 8
Tutti 9	Tutti 10						

## CHORUS Upper/Lower

CHORUS							
Chorus 1	Chorus 2	Chorus 3	Chorus 4	Chorus 5	Chorus 6	Chorus 7	Chorus 8
Vocal							

## HARMONICA Upper

HARMONICA							
Harmonica1	Harmonica2						

## ORGAN Upper/Lower

ORGAN							
Organ 1	Organ 2	Organ 3	Organ 4	Jazz Organ 1	Jazz Organ 2	Jazz Organ 3	Jazz Organ 4
Pop Organ 1	Pop Organ 2	Theat. Organ 1	Theat. Organ 2	Accordion	Bandonneon		

## ORGAN BASS Pedal

ORGAN BASS							
Organ Bass 1	Organ Bass 2	Organ Bass 3	Organ Bass 4				

## PIANO Upper/Lower

PIANO							
Piano 1	Piano 2	Honky Tonk		Elec. Piano 1	Elec. Piano 2	Elec. Piano 3	Elec. Piano 4
Harpsichord		Clavi.	Clavichord				

## GUITAR Upper/Lower

GUITAR							
Guitar 1	Guitar 2	Guitar 3	12Str. Guitar	Banjo	Mandolin	Sitar	Shamisen
Elec. Guitar1	Elec. Guitar2	Muted Guitar	Dist. Guitar	Harp	Steel Guitar	koto	Taisho koto



**VIBRAPHONE Upper/Lower**

VIBRAPHONE							
Vibra- phone	Gloc- ken.	Celesta	Music Box	Marim- ba	Xylo- phone		
Chime	Synth. Chime			Steel Drum			

**ELECTRIC BASS Pedal**

ELECTRIC BASS							
Elec. Bass1	Elec. Bass 2	Elec. Bass 3	Elec. Bass 4	Elec. Bass 5			
Synth. Bass1	Synth. Bass 2	Synth. Bass 3	Synth. Bass 4	Synth. Bass 5			

**COSMIC Upper/Lower**

COSMIC							
Cosmic 1	Cosmic 2	Cosmic 3	Cosmic 4	Cosmic 5	Cosmic 6	Cosmic 7	Cosmic 8
Cosmic 9	Cosmic 10	Cosmic 11	Cosmic 12	Cosmic 13	Cosmic 14	Cosmic 15	Cosmic 16

**USER VOICE**

USER VOICE							
USER 1	USER 2	USER 3	USER 4	USER 5	USER 6	USER 7	USER 8
USER 9	USER 10	USER 11	USER 12	USER 13	USER 14	USER 15	USER 16

**NOTE:**

The VA voices of the Lead Voice 2 section are not comprised in the 22 Voice Menu pages.

**LEAD VOICE 2(VA)****VA ACOUSTIC**

VA ACOUSTIC							
Flute	Oboe	Clari- net		Sopra. Sax.	Alto Sax	Tenor Sax.	Breath Sax.
Trum- pet	Trom- bone			Shaku- hachi	Kokyu	Sitar	

**VA VIRTUAL**

VA VIRTUAL							
Pan Pipe				Air Reed	Thin Reed	Grass Reed	Soft Reed
Buzz String	Bow String			Waspy Horn			

**VA ELECTRONIC**

VA ELECTRONIC							
Jazz Guitar	Picked Guitar						
Saw Lead	Edge Lead	Dist. Lead	Woody Lead	Muted Lead	Talken Lead		

**VA CUSTOM**

VA CUSTOM							
Custom 1	Custom 2	Custom 3	Custom 4	Custom 5	Custom 6		

\* The details for each voices such as octave (feet) setting and effect on/off status are shown in the list on page 46.

# 3 Additional Changes on Voice Display Pages

Two pages are added to the Voice Display page, a page with useful indications for realtime performance, the other for master control functions over various parameters; the Voice Display has become configured with total three pages.

## Voice Display, Page 1

PAGE: 1 · 2 · 3			
UPPER		LEAD1	EXP.
002 Str.2	001 Str.3	009 Trp.6	UPPER
LOWER		LEAD2	LOWER
003 Br.2	006 Br.4	001 V-Fi.	
PEDALS			
Timpani1	015 Tutti2		

This first page is the same as the one in EL-900 excepting that: "U" in negative letter will be added to the top of the voice name indicating the current voice is a User voice, if you have selected one of the User voices. If the name of the User voice has been altered, its latest name will also be displayed.



### NOTE:

"U" in negative letter is the prefix for the AWM+FM User voices, while "C" in negative letter is the one for the VA Custom voices.

## Voice Display, Page 2

The indications assisting your realtime performance are prepared in this page. It's convenient for you to display this page when you play the Electone since you can visually confirm the functions related to realtime performance.

PAGE: 1 · 2 · 3	
TEMPO	BAR/BEAT
128	1.1
REGISTRATION	
REG. TOP	15 16 13 12
↑	·
⏮	⏪ ⏩ ⏭
	■

### Tempo

Shows the current tempo, which is the same as the one on the Tempo LED in the Rhythm section. You don't need to look aside and confirm the tempo every time you want to check the current tempo in the middle of the performance.

TEMPO
128

## Bar/Beat

As the name implies, this works as the bar and beat indicators. The difference from the existing Bar/Beat Indicator (LED in the Rhythm section) is that this indication is independent from the Tempo display and you will not miss every beat even when the tempo change occurs.

Also, you don't need to twist your head to see the current bar/beat.

### ● Bar/Beat indication when rhythm starts:



### ● Bar/Beat indication when rhythm is off:



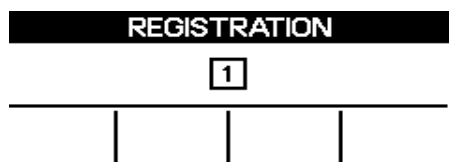
When you currently stop the rhythm, "STOP" is displayed.

### ● Bar/Beat indication when rhythm is in stand-by mode (Synchro. Start):



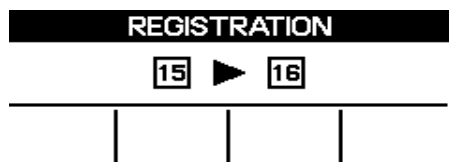
## Registration Shift

### ● Registration Shift, off:



The current position/registration is displayed.

### ● Registration Shift, in "Shift" mode:



The current registration number (left) and the next number (right) will be displayed.

### ● Registration Shift, in "Jump" mode:



The current registration number (left) and the destination number (right) will be displayed. You can change the destination number even in the middle of the performance by pressing the appropriate Data Control buttons.

## ● Registration Shift, in “User” mode:



Indicates the current position of the Registration Shift. You can change the registration by moving the cursor to right and left. It's handy when you have wrongly advanced the shift setting in the middle of your performance. You cannot edit the user registration settings here.

## M.D.R. Operation

Start, Stop and Song Select operations on the M.D.R. can be executed here. The currently selected song number and its name will be displayed.

When you set the Next Song function, you can visually confirm if the next song has been read, or not.

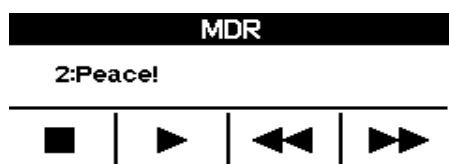
## ● M.D.R.: not displayed



Nothing is displayed when no disk is inserted or while one of the following function is engaged: Recording, Song Delete, Song Copy and Disk Copy.

No Data Control button is operable, in this case.

## ● M.D.R.: displaying the song name when stopped



The number and name of the currently selected song are displayed.

Also, those of the XG songs are displayed.

## ● M.D.R.: displaying the song name during playback



Displayed during playback including song repeat function.

Only STOP button is available in this case.

When Next Song function is executed, the song number/name will be changed.

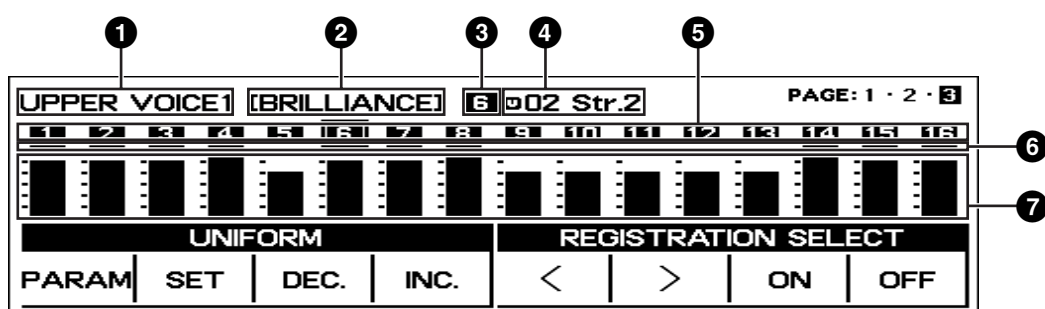
# Voice Display, Page 3

You can adjust to "uniform" a specific parameter used in various voice group at one time.

Take Reverb here, for example, you may sometimes want to change Reverb depth of the entire system equally when you rehearse in a concert since each concert hall has its own environmental characteristics, or resonance. Although you know you can change the Reverb settings of the entire system at one time even on the EL-900, the EL-900m lets you do the same operation with various parameters.

Furthermore, you can select from the several changing methods: changing the specific parameter values in a certain registration to the value in another registration at one time or offsetting a certain amount of value from a certain parameter in a registration on the basis of the one in another registration.

## ● Let's check each section in the Voice Display.



### ① Voice Group

Shows the currently selected voice group.

### ② Parameter

Shows the current parameter.

### ③ Registration Memory Number

Shows the currently selected Registration Memory number.

### ④ Voice Name

Shows the voice name currently assigned to the displayed Voice Group.

### ⑤ Registration Memory (1 - 16)

The cursor (box) is positioned at the currently selected Registration Memory number.

You can move the cursor to select another registration by pressing the Data Control buttons corresponding to the left/right arrows in REGISTRATION SELECT section.

Notice that you cannot move the cursor by directly pressing one of the Registration Memory buttons between the Upper and Lower keyboards.

### ⑥ Same Voice

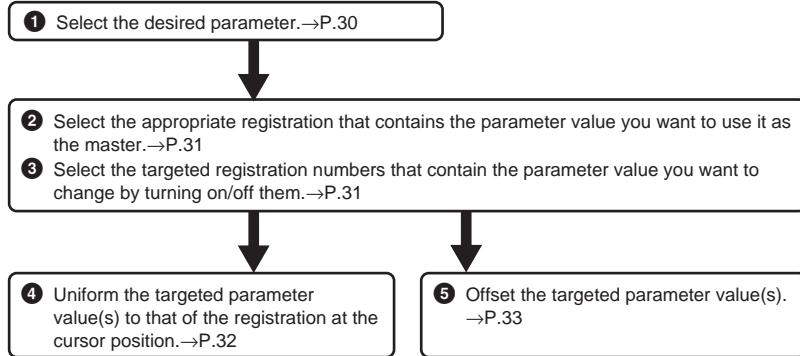
A line under each registration number indicates that the currently assigned voice to the registration is the same as the one shown at the top ④.

### ⑦ Parameter Value

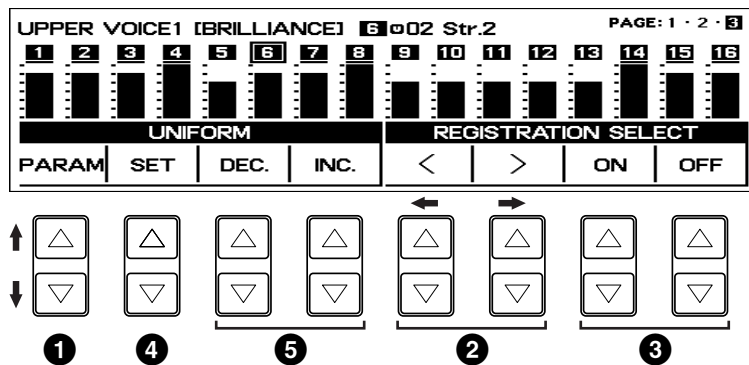
Shows the values of the currently selected parameter ② to each registration.

Each value corresponds to the ones currently assigned to each voice group.

# Basic Operation



## UNIFORM and REGISTRATION SELECT



### 1 PARAM(Parameter)

Selects the parameter you want to change its amount.

Available parameters are as follows:

Each press of the down arrow Data Control button selects the parameters in order. Reverb Length is always selected when the Electone is turned on.

#### Parameters

##### Related to Reverb settings:

Reverb Length  
Reverb Depth  
UK1 Reverb  
UK2 Reverb  
LK1 Reverb  
LK2 Reverb  
Lead1 Reverb  
Lead2 Reverb  
PK1 Reverb  
PK2 Reverb  
U.Flute Reverb  
L.Flute Reverb  
Percussion Reverb  
Accompaniment Reverb

##### Related to Sustain settings:

UK Sustain  
LK Sustain  
PK Sustain

##### Related to Pan settings:

UK1 PAN  
UK2 PAN  
LK1 PAN  
LK2 PAN  
Lead1 PAN  
Lead2 PAN  
PK1 PAN  
PK2 PAN

##### Related to Volume settings:

UK1 Volume  
UK2 Volume  
LK1 Volume  
LK2 Volume  
Lead1 Volume  
Lead2 Volume  
PK1 Volume  
PK2 Volume  
U.Flute Volume  
L.Flute Volume  
Percussion Volume  
Accompaniment Volume

##### Related to Brilliance settings:

UK1 Brilliance  
UK2 Brilliance  
LK1 Brilliance  
LK2 Brilliance  
Lead1 Brilliance  
Lead2 Brilliance  
PK1 Brilliance  
PK2 Brilliance

## ● Selecting the desired parameter

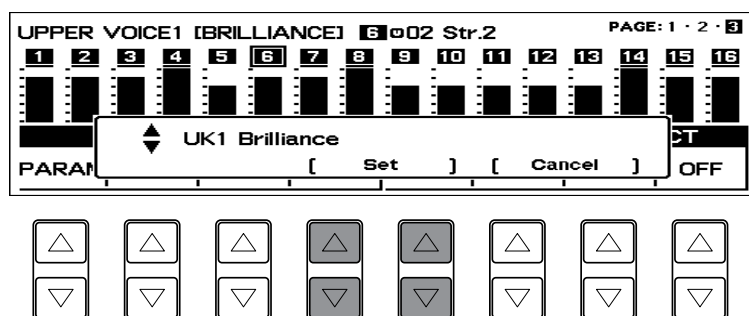
### ① By pressing PARAM and the appropriate panel button simultaneously:

You can directly select the parameter by pressing the panel button of the desired parameter while holding down the appropriate Data Control buttons corresponding to PARAM.

### ② By pressing PARAM button:

Press the appropriate Data Control buttons corresponding to PARAM and then release it. Parameter selection dialog box appears. Select the desired parameter using the appropriate Data Control buttons (left most) and select [Set] to execute the operation.

#### Parameter Selection Dialog Box



#### NOTE:

The parameters you can select using this method are:

- Volume
- Brilliance
- Reverb Depth
- Sustain

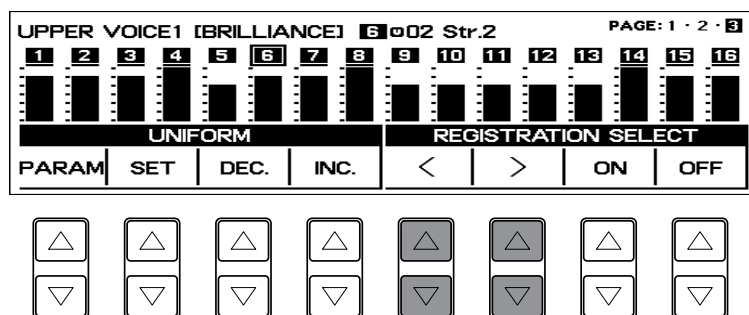


#### NOTE:

Pressing the appropriate Data Control buttons (left most) while holding down COARSE button selects the parameters in the same voice group.

### ② Cursor (<>)

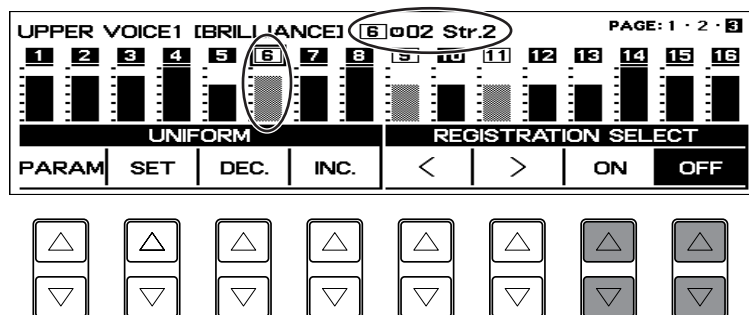
Selects the registration memory number you want to turn on/off or the number you want to set it as the master.



The registration memory number 6 is currently selected in this case.

### ③ ON/OFF

Pressing "Off" after selecting the appropriate registration turns off (grayed out) its parameter. Pressing "On" turns on the parameter (solid bar). All parameters are selected after Power-On Reset operation.



#### NOTE:

The registration number encircled by the cursor (positive box) indicates that it acts as the master. Turning the Registration Select "switch" on and off to select the targeted registrations.

There are several unique methods to select the registration memory numbers:

■ **By pressing ON button while holding down COARSE button:**

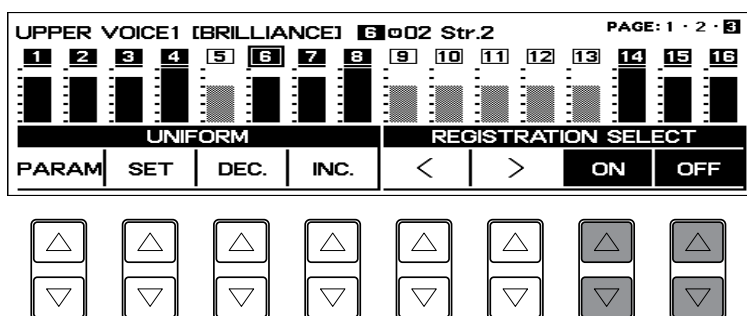
All the registration memory numbers can be selected by pressing the Data Control buttons corresponding to "ON" with the COARSE button held.

■ **By pressing OFF button while holding down COARSE button:**

All the registration memory numbers can be cancelled by pressing the Data Control buttons corresponding to "OFF" with the COARSE button held.

■ **By holding ON and OFF simultaneously:**

Holding down "ON" and "OFF" simultaneously turns on the registration memory numbers that contains the same voice as the one which is currently set in the registration at the cursor position.

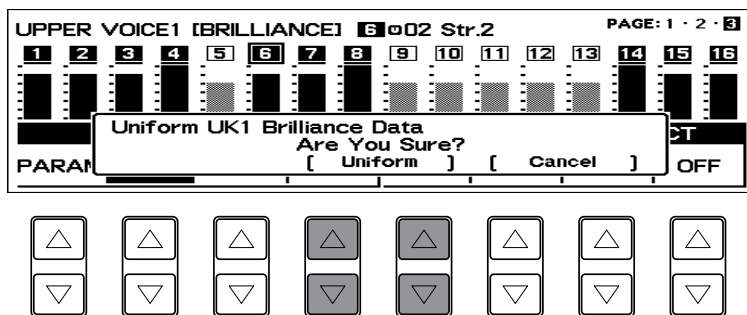


In this case, the registrations 1, 2, 3, 4, 6, 7, 8, 14, 15 and 16 are shown in a solid bar indicating that those contain the User Voice 2, Str.2.

**4 SET**

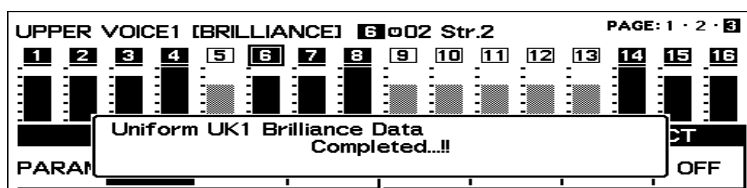
Uniforms the currently turned-on parameters' values to the one in the currently selected registration (at the cursor position).

Pressing [Set] opens the dialog box urging you to confirm the operation.



In this case, the operation uniforms the brilliance values of the Upper keyboard Voice in the registrations 1, 2, 3, 4, 6, 7, 8, 14, 15 and 16 to the one in the registration 6 (at the cursor position).

If you proceed the operation, select [Uniform].



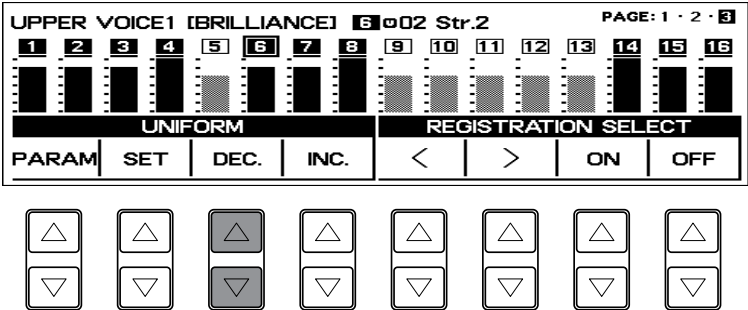
The completed message will momentarily be shown on the LCD.



**5 DEC.(Decrement)/INC.(Increment)**

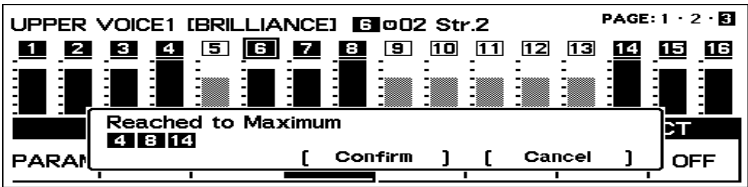
Offsets the currently turned-on parameters' values.

In the following case, you cannot increase the values the registrations 4, 8 and 14 relative to the one in the registration 6 since they are already set to maximum.



The following message appears, in this case. Also, you cannot exceed the minimum value when using decrement operation.

**Alert Dialog Box**



In this case, pressing [Confirm] continues the operation ignoring those with maximum value. Pressing [Cancel] aborts the operation.



**NOTE:**

You can decrement value by pressing any of the Data Control buttons just below DEC.



**NOTE:**

You can increment value by pressing any of the Data Control buttons just below INC.



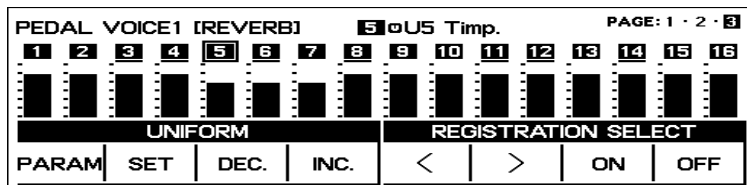
**NOTE:**

Be aware that you cannot retrieve the original data once the [Confirm] is engaged.

# Setting Examples

The display shows differently depending on the selected parameter.

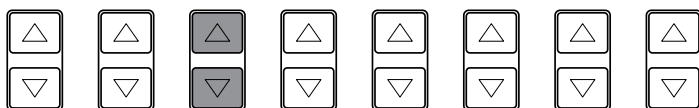
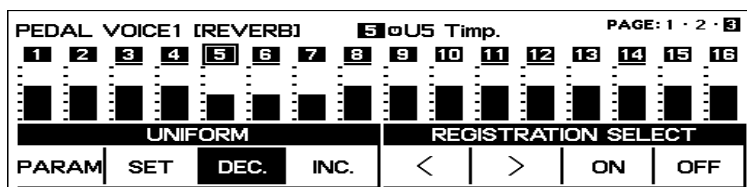
## Reverb Parameter



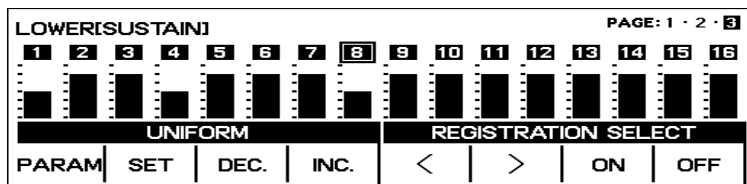
Shows the Pedal Voice 1 Reverb parameters.

Imagine, you want to decrease the value equally from the all parameters.

Select all the parameters by pressing "On" while holding down COARSE. Press "DEC." button to gradually decrease the value.



## Sustain Parameter



Shows the Lower Keyboard Voice Sustain parameters.

Try changes similar to the operation mentioned above.

# Panning Parameter

UPPER VOICE2 [PAN]															
3 001 Str.3															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R1	L1	L2	C	R1	R1	R1	C	R2	R2	R2	R2	R2	C	R2	C
UNIFORM								REGISTRATION SELECT							
PARAM	SET	LEFT	RIGHT	<		>		ON		OFF					

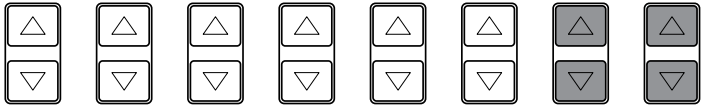
Shows the current panning of the Upper Keyboard Voice 2.

The cursor is currently set at the registration 3, User voice 1 is assigned and panning is set to L2.

You will find the same User voice 1 is assigned to the registrations 1, 2, 4, 6, 7, 8 and 15 but panning is different among those registrations.

To uniform the panning among those registrations, you need first to turn off the other registrations. Holding "On" and "Off" buttons simultaneously lets you select the voices containing the same voice. You are ready to uniform the pan setting.

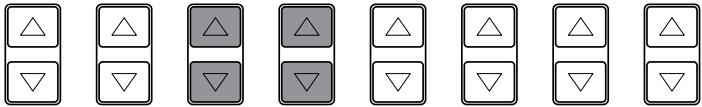
UPPER VOICE2 [PAN]															
3 001 Str.3															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
R1	L1	L2	C	R1	R1	R1	C	R2	R2	R2	R2	R2	C	R2	C
UNIFORM								REGISTRATION SELECT							
PARAM	SET	LEFT	RIGHT	<		>		ON		OFF					



Lastly, press [Set] button to uniform the panning.

You will find the same pan setting, L2, is adopted to the registrations 1, 2, 4, 6, 7, 8 and 15.

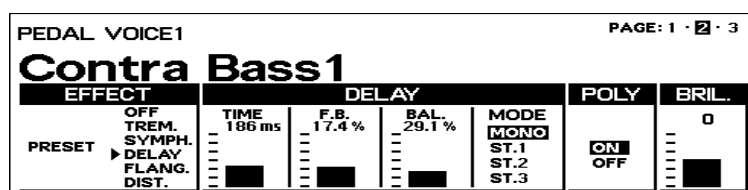
UPPER VOICE2 [PAN]															
3 001 Str.3															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L2	L2	L2	L2	R1	L2	L2	L2	R2	R2	R2	R2	R2	C	L2	C
UNIFORM								REGISTRATION SELECT							
PARAM	SET	LEFT	RIGHT	<		>		ON		OFF					



You can offset the panning position using LEFT/RIGHT buttons (DEC./INC. are changed to LEFT/RIGHT in the case of panning).

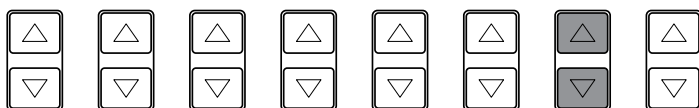
# 4 Pedal Polyphonic Mode

You can change the monophonic pedal voices to be polyphonic.



## NOTE:

Be aware that you cannot exceed the total maximum polyphony, 14 notes for both Upper, Lower and Pedal.



This makes it possible for you to enjoy various playing styles.

## Legato and polyphonic play on the Pedalboard

You can make the different settings between Pedal Voice 1 and 2.

## Pedal voices to the Lower keyboard

You can use one of the Pedal voices on the Lower keyboard using To Lower function.

## Polyphonic Pedal voice and A.B.C. function



## NOTE:

A.B.C. function is not available with the Pedal Voice group which Polyphonic mode is set to on.

Set one of the Pedal Voice groups to Polyphonic mode and turn on the A.B.C. function. You can play the pedal voice independently and A.B.C. function produces sounds using the other Pedal Voice group.

Editing VA voices becomes possible with EL-900m.

The available parameters are the same as the ones on AWM.

- **OL (Output Level)**

Determines the level of the VA sound.

Range: 0 - 127

- **AR (Attack Rate)**

Determines how quickly the Operator will reach its maximum level after the key is played.

Lower values produce a slower attack.

Range: -64 - +63

- **DR (Decay Rate)**

Determines how much time it takes for the Operator to reach its second level.

Range: -64 - +63

- **RR (Release Rate)**

Determines how much time it takes for the level to reach 0 after the key is released.

Range: -64 - +63

- **LOW**

Determines to boost or decrease the output of the lower range of the keyboard.

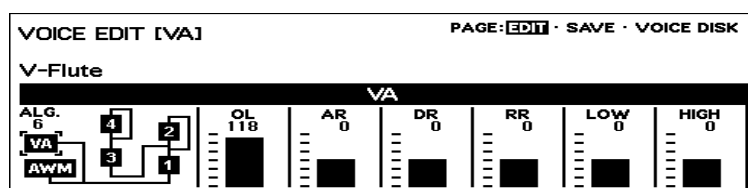
Range: -64 - +63

- **HIGH**

Determines to boost or decrease the output of the higher range of the keyboard.

Range: -64 - +63

The basic concept and necessary operations are the same as the ones for AWM voice editing.



As you can see the algorithm, a VA voice is configured with three factors: VA, AWM and FM.

However, the output levels of AWM and FM tone generators are set to off, and VA voices sound using VA tone generator only. (This is true for all VA voices.)

You can edit the VA voices adding AWM and/or FM voice elements. Now listen to the "hidden" voices by raising the AWM and/or FM output levels.



**NOTE:**

You need to understand the functions of each parameter to edit the VA voices.



**NOTE:**

Some voices may not have distinctive effect.

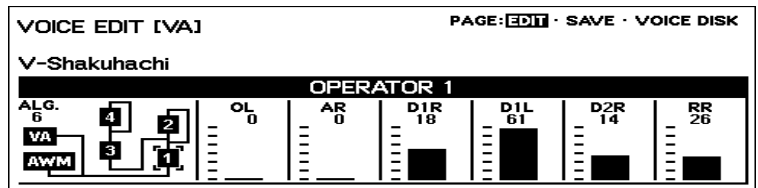


**NOTE:**

The VA voices built in EL-900 are also configured with VA, AWM and FM.

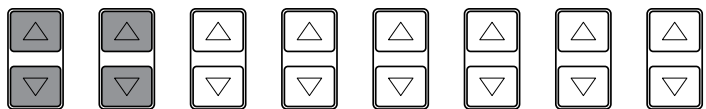
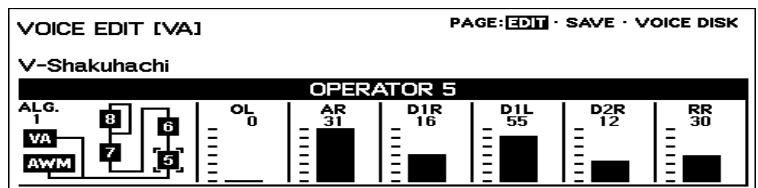
# Let's check VA Shakuhachi voice.

1 Engage editing the voice.

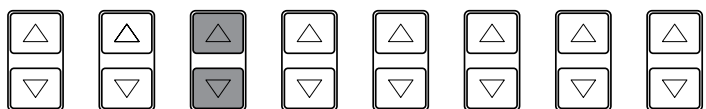
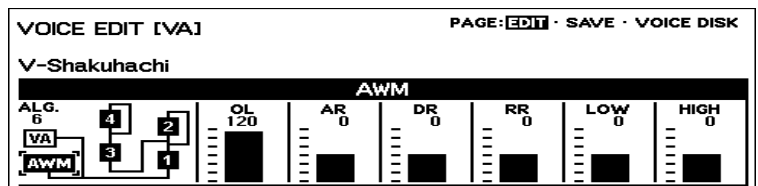


The OL of FM OP1, carrier, is set to 0.

Moves the cursor to OP5. The OL of FM OP5, carrier, is also set to 0.



2 Move the cursor to AWM, and its OL is also set to 0. Gradually raise the OL of the AWM. In this case, turn off the VA tone generator (positive letters).

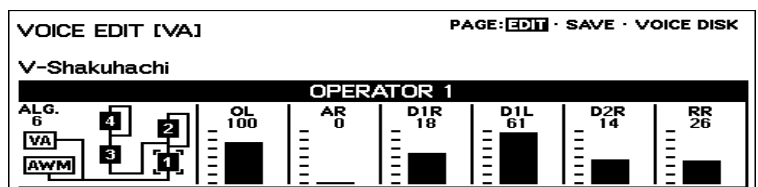


The voice, Shamisen, will gradually be heard.

You understand that Shamisen is preset as AWM voice.

Also, check the FM "hidden" voice by raising OL of FM carrier.

Turn off AWM and VA and listen to the FM voice. (VA and AWM should be displayed in positive letters.)



You will find an attack sound similar to Shamisen voice in the OP1 and OP5, carriers of FM synthesis.

Turn these FM carriers to off and turn the VA and AWM back to on. (Be sure to lower the OL of FM OP1 and OP5 to the minimum.)

You can produce an effective voice using two voice factors, VA and AWM here for example, in a single voice.



## NOTE:

Turning each operator on/off: Move the cursor to select the appropriate operator using the second Data Control buttons from the left and temporarily turn off the operator using the left most Data Control buttons.

# 3

Save the voice to the Custom voice area.

VOICE EDIT [VA] PAGE: EDIT · **SAVE** · VOICE DISK

V-Shakuhachi

SAVE TO VA CUSTOM					
Custom	Custom	Custom	Custom	Custom	Custom
1	2	3	4	5	6

Select SAVE page and save to the VA Custom Voice locations, different from the normal voices (User Voice).

You can name the voice you created as well as you do for the normal voices.

The operation and the number of letters for naming are the same as the one for normal voices.

VOICE EDIT [VA] PAGE: EDIT · **SAVE** · VOICE DISK

V-Shakuhachi

Edit Voice Name

0 2 \_ \_ \_ S h a k u & K o t o \_ \_ \_ \_

◀

⬆

⬇

▶

[ Set ]

[ Cancel ]

◀

⬆

⬇

▶

[ Set ]

[ Cancel ]

Name the voice "02 Shaku&Koto" here.

## VOICE NAME

Up to 16 letters can be used to name your newly created voice.

Yamaha recommends you to add the Custom (user) voice number to the voice you created. When displayed on the LCD or when reediting the voice, you may become unsure which user voice you are editing.

If you name a voice "Trumpet," the Voice Display simply shows it "(c) Trumpet." It will be difficult for you to know to which user number the voice is saved.

If you add the appropriate user number to the created voice, you can easily understand the voice's derivation.

Up to 6 user voice locations, Custom voices, are available for the VA voices.

All the Custom voice locations are tentatively preset with voices as factory preset. Those voices will be overwritten and cleared, when you save your own voices to the locations. If you want to keep a certain preset voice intact, select another location to save your voice.



### NOTE:

#### Resetting the Custom (VA user) voices to the factory presets:

Power-On reset operation restores original voices. If you don't want to restore and you want to keep some of them with your voices, you can save the original voices to a disk in advance and reload the voice(s) one by one from it to Electone.

## Reproducing the edited VA voices on EL-900

The edited VA voices can be reproduced on EL-900.

Although saving the registration again on EL-900 resets the voice parameters to 0, the voice itself is intact.

The voice name will also be reset. Be aware those facts when saving the registration again.

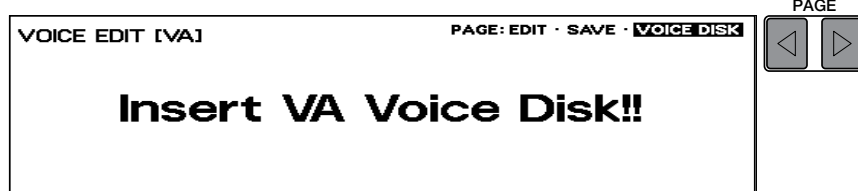
## VOICE DISK

VA voice disk is optionally available.

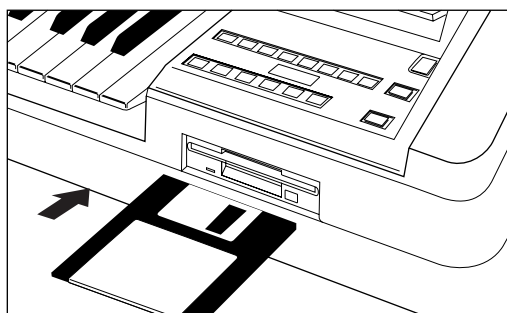
The operation procedure is the same as the one for normal voices.

1 Select a VA voice and enter voice editing.

2 Select VOICE DISK using Page buttons.



3 Insert a VA voice disk.



4 Select the desired voice by pressing Data Control buttons.

5 Designate one of the VA Custom voices and save the voice.



Different from EL-900, the user voices can also be read in the Next Song operation with EL-900m (Next Song +).

You can use the user voices more than 16.

## Registration Shift: Mode Page

REGIST SHIFT (FOOT SWITCH-RIGHT)				PAGE: <b>MODE</b> · EDIT											
<table border="1"> <tr> <th colspan="4">MODE</th> </tr> <tr> <td>OFF</td> <td>SHIFT</td> <td>JUMP</td> <td>USER</td> </tr> </table>						MODE				OFF	SHIFT	JUMP	USER		
MODE															
OFF	SHIFT	JUMP	USER												
<table border="1"> <tr> <th colspan="2">SHIFT END</th> </tr> <tr> <td colspan="2">STOP</td> </tr> <tr> <td colspan="2">TOP</td> </tr> <tr> <td colspan="2">NEXT SONG</td> </tr> <tr> <td colspan="2">NEXT SONG+</td> </tr> </table>						SHIFT END		STOP		TOP		NEXT SONG		NEXT SONG+	
SHIFT END															
STOP															
TOP															
NEXT SONG															
NEXT SONG+															

## Registration Shift: User Edit

A suffix, +, is added.

REGIST SHIFT (FOOT SWITCH-RIGHT)										PAGE: <b>MODE</b> · <b>EDIT</b>									
No.	1		5		10		(NEXT SONG+)												
REG. TOP	2	3	4	2	5	.	.	.	.	.	.								
↑																			
POSITION						DATA													
<table border="1"> <tr> <td>⏪</td> <td>&lt;</td> <td>&gt;</td> <td>⏩</td> </tr> </table>						⏪	<	>	⏩	<table border="1"> <tr> <td>SET</td> <td>INS.</td> <td>DEL.</td> <td>CLEAR</td> </tr> </table>						SET	INS.	DEL.	CLEAR
⏪	<	>	⏩																
SET	INS.	DEL.	CLEAR																

### IMPORTANT

- Use the same user voice number and name for the same voices between songs.
- If a voice with a specific user number is used in the previous song and another voice with the same user number is used in the next, always change one of the two voice names.



#### NOTE:

If you set the same user voices the user voices will not sound again in the consecutive song.

The sound will be played again in the transition to the next song, if the voice has two different names even when the same voice is used.

If you play the songs with EL-900, the new user voices will not be read.

You need to be aware what type of Electones you are using to make registration sequences.



#### NOTE:

The VA voices can also be read as well as the normal voices, but they may not sound since they take much time to be read in the Electone.

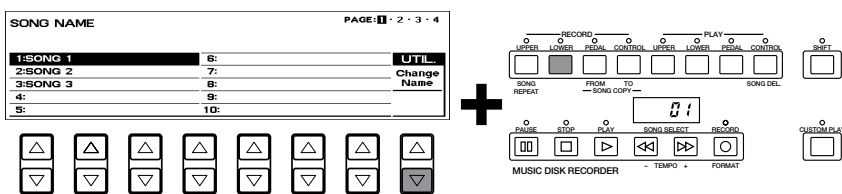
## Disk Copy 2

The functions are almost the same as the ones on the EL-900. Additional operation method is added to the Disk Copy function.

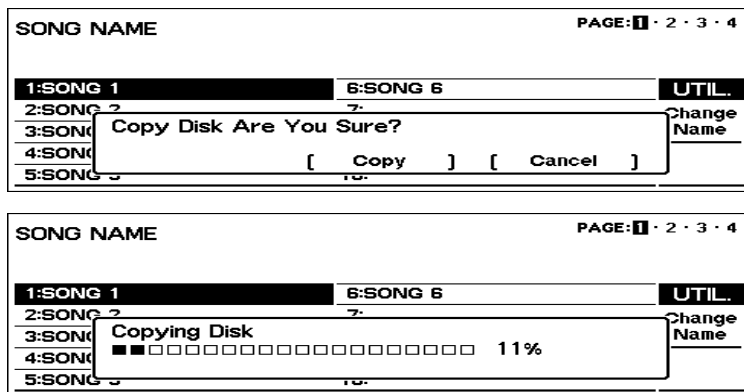
- Song Copy in the same disk (the same)
- Song Copy between different disks (the same)
- Disk Copy (new operation method is added)

You can use the following operation procedure in Disk Copy function.

- 1 Insert the source disk into the disk slot. Simultaneously hold down the bottom right Data Control button and LOWER in the Record section in M.D.R.

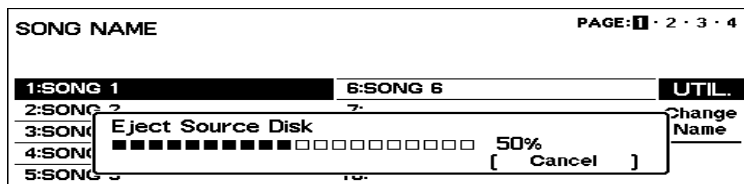


- 2 Press the Data Control buttons corresponding to [Copy] to initiate copy operation.



In the middle, 50%, the copying operation is finished.

- 3 Eject the source disk from the disk slot.





## ● Different disks in the disk copy operation.

(Ex: 2HD disk is inserted as the copy destination while 2DD disk data has been read as the source.)

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Insert 2DD Disk	
4: SONG 4	[ Cancel ]	Change Name
5: SONG 5	10:	

(Ex: 2DD disk is inserted as the copy destination while 2HD disk data has been read as the source.)

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Insert 2HD Disk	
4: SONG 4	[ Cancel ]	Change Name
5: SONG 5	10:	

**Answer:** You have to prepare the same disk type as that of source disk.

## ● Reading error.

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Copy Disk Error...!!	
4: SONG 4	[ Confirm ]	Change Name
5: SONG 5	10:	

## ● The destination disk has not been formatted.

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Insert Destination Disk	
4: SONG 4	Copy Disk Error...!!	
5: SONG 5	[ Format ]	Change Name

**Answer:** Press the Data Control buttons under [Format] to execute formatting operation, first.

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Formatting	
4: SONG 4	■■■■■■■■■■□□□□□□ 56%	
5: SONG 5	10:	Change Name

You can also change disk and insert a formatted disk.

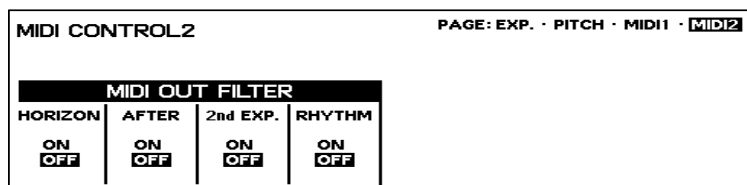
## ● Others

SONG NAME		PAGE: 1 · 2 · 3 · 4
1: SONG 1	6: SONG 6	UTIL.
2: SONG 2	7:	
3: SONG 3	Insert Destination Disk	
4: SONG 4	Copy Disk Error...!!	
5: SONG 5	[ Cancel ]	Change Name

Unnecessary MIDI data can be filtered out when you play the Electone using an external sequencing software (PC).

The MIDI Out filter function is equipped with the Electone not to response to unnecessary MIDI data. An additional MIDI Control page is used for this function.

An external MIDI device that receives the MIDI data should have the filtering function when the horizontal touch and aftertouch are unnecessary. If the device doesn't have this function, use the MIDI Out Filter on the Electone.



## ● The Messages to be filtered:

- **Horizontal Touch Message**

Even when you don't intend to, Electone's FSV keyboards always send out the horizontal touch messages. You need to cut the data if you use the tone generators like MU series, since they receive the messages and produce the sounds that are applied with pitch bend function.

- **After Touch Message**

Also, even when you don't intend to, Electone's FSV keyboards always send out the aftertouch messages. In addition to the normal aftertouch, VA aftertouch (Control no. 16) is sent out. If you don't need them you can cut them.

- **2nd Expression Pedal Message**

This message is transmitted as the Control no. 4. If you don't need the control no. 4 you can cut it.

- **Rhythm Start/Stop Messages**

Electone can transmit the realtime messages FA (start) and FC (stop). When working with an external sequencer, the sequencer may respond to those messages. You can avoid it with this message set to off.



### NOTE:

#### MU series:

XG tone generators from Yamaha. EL-900 has built in MU50 type tone generator exclusive for XG playback.



### NOTE:

#### VA Aftertouch:

Exclusive to VA tone generation system and can be applied only to Upper keyboard.



### NOTE:

The message of the 2nd expression pedal is different from the normal MIDI pitch bend messages.



### NOTE:

This MIDI Out Filter function is effective for the external connected devices and not effective for the M.D.R. recording.

## Details on Each Voice

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
1. Upper/Lower <b>STRINGS</b>	Strings 1	8'	-	Large strings ensemble.
	Strings 2	8'	-	Relatively small strings ensemble for contemporary music.
	Strings 3	8'	-	Small strings ensemble.
	Strings 4	8'	-	Having specific harmonics for layering other voices.
	Strings 5	8'	-	For legato playing.
	Strings 6	8'	-	Strings with clarity. Appropriate for the fast passages.
	Strings 7	8'	-	Expressive full bodied strings with a slow attack.
	Strings 8	8'	-	Con sordino (with mute) strings. Reproduces softly played string sounds.
	Pizz. Strings	8'	-	Pizzicato strings.
	Trem. Strings	8'	-	Tremolo strings.
	Synth. Strs. 1	8'	Cele.	Synth. strings with softer attack.
	Synth. Strs. 2	8'	Sym.	Bright synth. strings.
	Synth. Strs. 3	8'	Cde	Softer Synth. strings.
2. Lead <b>VIOLIN</b>	Violin 1	8'	-	For multi purposes.
	Violin 2	8'	-	For solo with sharp attack.
	Violin 3	8'	-	Bright fiddle for country music.
	Violin 4	8'	-	Darker synth. violin with wider dynamic range.
	Violin 5	8'	-	Violin with deep preset vibrato, also suited for chord playing.
	Pizz. Violin	8'	-	Pizzicato violin.
	Cello	8'	-	Cello with realistic rubbed string-instrument feel.
	Kokyū	8'	-	Ancient Chinese fiddle.
3. Pedal <b>CONTRABASS</b>	Contra Bass 1	8'	-	Standard type.
	Contra Bass 2	8'	-	True-to-life tight contrabass sounding in an octave unison.
	Contra Bass 3	8'	-	Realistic contrabass solo.
	Pizz. Bass	8'	-	Pizzicato contrabass for classical.
	Upright Bass	8'	-	For jazz.
4. Upper/Lower <b>BRASS</b>	Brass 1	8'	-	Trumpet and trombone ensemble for classical.
	Brass 2	8'	-	For big band with brighter attack.
	Brass 3	8'	-	With strong impact. Can be used as orchestra hit.
	Brass 4	U16'/L8'	-	Trombone ensemble.
	Brass 5	8'	-	Tight octave brass for contemporary music.
	Synth. Brass 1	8'	-	Synth. brass with sharp attack. Used for Basic Regist. 5.
	Synth. Brass 2	8'	-	Analog type. Can be used as melody line.
	Synth. Brass 3	8'	-	Fat synth. brass.
	Synth. Brass 4	8'	-	Full-bodied synth. Brass sound with unique pitch characteristics.
5. Lower <b>HORN</b>	Horn 1	8'	-	Standard horn for classical.
	Horn 2	8'	-	Horn unison solo. Alpenhorn.
	Horn 3	8'	-	For solo playing.
	Horn 4	8'	-	Impressive horn ensemble.
	Muted Horn	8'	-	Muted horn.
6. Lead <b>TRUMPET</b>	Trumpet 1	8'	-	Standard trumpet for classical.
	Trumpet 2	8'	-	Jazz trumpet 1 with full-bodied sounds.
	Trumpet 3	8'	-	Sweet voice.
	Trumpet 4	8'	-	Jazz trumpet 2 with a peculiar attack.
	Trumpet 5	8'	-	Comical synth. trumpet.
	Trumpet 6	8'	-	Resonant trumpet solo.
	Muted Trp.	8'	-	Harmon mute.
	Trombone 1	U16'/L8'	-	For legato playing.
	Trombone 2	U16'/L8'	-	Bright trombone solo. For fast phrases.
	Trombone 3	U16'/L8'	-	Trombone with the characteristics having strong and resonant tone.
	Muted Trb.	U16'/L8'	-	Cup mute.
	Flugel Horn	8'	-	Flugelhorn.
	Euphonium	U16'/L8	-	Euphonium with softer sounds.
7. Pedal <b>TUBA</b>	Tuba	16'	-	Accentuated by touch
	Timpani 1	8'	-	Standard timpani.
	Timpani 2	8'	-	Expressive Timpani sounds played with softer mallets.
	Timpani Roll	8'	-	Typical timpani roll.
8. Lead <b>FLUTE</b>	Flute 1	8'	-	Standard flute solo.
	Flute 2	8'	-	For legato playing.
	Flute 3	8'	-	Jazz flute with unique attack.
	Flute 4	8'	-	Classical flute with deep vibrato.
	Piccolo	4'	-	Standard piccolo.
	Yokobue	4'	-	Japanese pipe with clear sounds.

\* U16'/L8' indicates that the feet settings of each voice are preset to 16' on the upper keyboard and 8' on the lower keyboard.

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
8. Lead <b>FLUTE</b>	Recorder	4'	-	Block floete.
	Ocarina	4'	-	Ocarina with simple but warm sounds.
	Pan Flute	8'	-	Pan Flute.
	Shakuhachi	8'	-	Japanese Shakuhachi with realistic breath noises.
	Whistle	4'	-	Whistle.
9. Lead <b>OBOE</b>	Oboe 1	8'	-	Softer oboe.
	Oboe 2	8'	-	Rounder tone with characteristic tonguing. For fast phrases.
	Oboe 3	8'	-	Oboe suited to faster phrases.
	Oboe 4	8'	-	Expressive oboe for classicals.
	English Horn 1	8'	-	Cor Anglais.
	English Horn 2	8'	-	English horn with distinctive reed.
	Bassoon 1	U16'/L8'	-	For legato playing.
	Bassoon 2	U16'/L8'	-	For staccato playing.
10. Upper/Lower <b>CLARINET</b>	Bassoon 3	U16'/L8'	-	Bassoon with rich resonance even in the lower register.
	Clarinet 1	8'	-	Standard clarinet.
	Clarinet 2	8'	-	Clarinet solo for jazz and contemporary.
	Clarinet 3	8'	-	Sweet and expressive clarinet.
	Bass Cla.	8'	-	Bass clarinet with fat and resonant sounds.
11. Upper/Lower <b>SAXOPHONE</b>	Synth. Cla. 1	8'	-	Resonant synth. clarinet.
	Synth. Cla. 2	8'	-	Synth. reed with a unique attack sound.
	Saxophone 1	U16'/L8'	-	Alto sax.
	Saxophone 2	U16'/L8'	-	Characteristic tenor sax with strong tonguing.
	Sopra. Sax.	8'	-	Standard soprano sax.
	Sax. Ens. 1	U16'/L8'	-	Softer sounds for classicals.
	Sax. Ens. 2	U16'/L8'	-	Saxophone section for bigband.
	Synth. Sax.	8'	-	Wind synthesizer with thick sounds in the middle and lower range.
	Synth. Lead 1	8'	-	Softer analog synth. reed.
	Synth. Lead 2	8'	-	Clear synth. reed with a sharp attack.
	Synth. Lead 3	4'	-	Hoarse noise reed.
	Synth. Lead 4	8'	-	Digital synth. reed.
	Synth. Lead 5	8'	-	Synth. reed with thick fourth notes.
12. Upper/Lower <b>TUTTI</b>	Synth. Lead 6	8'	-	Comical synth. Lead with unique pitch characteristics.
	Synth. Lead 7	8'	-	Synth. Lead having Synth bass image.
	Tutti 1	8'	-	Strings unison and wood winds ensemble.
	Tutti 2	8'	-	Strings unison and the brasses.
	Tutti 3	8'	-	The brasses for classicals and bands.
	Tutti 4	8'	-	Big band. Softer playing = sax only. Harder playing = 1 octave higher brasses added.
	Tutti 5	8'	-	Wood winds ensemble. Instruments vary depending on the register played.
	Tutti 6	8'	-	Wood winds quintet.
	Tutti 7	8'	-	Brass ensemble.
	Tutti 8	8'	-	Gorgeous brass ensemble.
13. Upper/Lower <b>CHORUS</b>	Tutti 9	8'	-	Magnificent string ensemble. Rich expressiveness with touch.
	Tutti 10	8'	-	Wood winds ensemble. Thicker than Tutti 6.
	Chorus 1	8'	-	Female "Ah".
	Chorus 2	8'	-	Male "Wh".
	Chorus 3	8'	-	Mixed chorus.
	Chorus 4	8'	-	Mixed chorus with beautiful resonance. Wh.
	Chorus 5	8'	-	Scat type vocal ensemble.
	Chorus 6	8'	-	Mixed chorus for the sacred music.
	Chorus 7	8'	-	Impressive chorus.
14. Upper <b>HARMONICA</b>	Chorus 8	8'	-	Chorus for Gospel music.
	Vocal	8'	-	Accentuated solo vocal, "Ah".
15. Upper/Lower <b>ORGAN</b>	Harmonica 1	8'	-	Standard type with pitch modulated vibrato.
	Harmonica 2	8'	-	Solo harmonica with filter and amplitude modulated vibrato.
15. Upper/Lower <b>ORGAN</b>	Organ 1	8'	-	Small pipe organ. 8'.
	Organ 2	8'	-	Big pipe organ with full coupler.
	Organ 3	8'	-	Nasard stops. 8'+2 2/3'.
	Organ 4	8'	-	Harmonium.
	Jazz Organ 1	16'	Chor.	For solo playing. 16'+8'+5 1/3'.
	Jazz Organ 2	16'	Trem.	16'+8'+2'.
	Jazz Organ 3	16'	Trem.	For cluster playing. 16'+1 3/5'+1 1/3'+1'.
	Jazz Organ 4	16'	Trem.	Fat and noisy jazz organ.
	Pop Organ 1	8'	Chor.	Bright sounds for jazz. 8'+4'+2 2/3'.
	Pop Organ 2	8'	Chor.	For multi purposes.
	Theat. Organ 1	8'	Sym.	8'+4' with slower attack.
	Theat. Organ 2	8'	-	16'+8' with slower attack.
	Accordion	8'	-	Slower attack.
	Bandoneon	8'	-	Attack can be controlled by initial touch.

Page/Section	Voice Name	Preset		Comments
		Feet	Effect	
16. Pedal <b>ORGAN BASS</b>	Organ Bass 1	8'	-	Combination organ bass.
	Organ Bass 2	16'	-	Pipe organ bass 1. Standard type.
	Organ Bass 3	16'	-	For jazz. 16'.
	Organ Bass 4	16'	-	Pipe organ bass 2. Full coupler.
17. Upper/Lower <b>PIANO</b>	Piano 1	8'	-	For multi purposes.
	Piano 2	8'	-	Brighter sounds. CP80 type.
	Honkytonk	8'	-	Honky tonk piano.
	Elec. Piano 1	8'	Cele.	DX7 type.
	Elec. Piano 2	8'	Cele.	Old fashioned, full bodied electric piano.
	Elec. Piano 3	8'	-	Electric piano with clearly brilliant but deep sounds.
	Elec. Piano 4	8'	-	Bright and brilliant electric piano.
	Harpsichord	8'	-	Standard cembalo.
	Clavi.	16'	-	Funky clavi.
18. Upper/Lower <b>GUITAR</b>	Clavichord	8'	-	Clavichord with stable and grave sounds.
	Guitar 1	U16'/L8'	-	Folk guitar. Steel string.
	Guitar 2	U16'/L8'	-	Acoustic jazz guitar. Tone varies depending on the touch.
	Guitar 3	U16'/L8'	-	Classic guitar. Suitable to backing for bossanova.
	12Str. Guitar	U16'/L8'	-	12-string classic guitar with gorgeous sounds.
	Banjo	8'	-	For country and dixieland.
	Mandolin	8'	Cele.	Standard mandolin.
	Sitar	8'	-	Indian sitar with the different resonances between lower and mid./high ranges.
	Shamisen	8'	-	Japanese classical shamisen.
	Elec. Guitar 1	U16'/L8'	-	For backing.
	Elec. Guitar 2	U16'/L8'	-	For solo playing.
	Muted Guitar	U16'/L8'	-	Muted guitar.
	Dist. Guitar	U16'/L8'	-	Distorted guitar.
	Harp	8'	-	Grand harp.
	Steel Guitar	8'	-	Hawaiian guitar. Effective when used with the glide function.
	Koto	8'	-	Japanese Koto.
	Taisho Koto	4'	Cele.	Japanese Taisho Koto.
19. Upper/Lower <b>VIBRAPHONE</b>	Vibraphone	8'	-	Standard vibraphone.
	Glocken	4'	-	Glockenspiel.
	Celesta	4'	-	Celesta.
	Music Box	4'	-	Antique music box.
	Marimba	8'	-	Concert marimba.
	Xylophone	4'	-	Tone varies depending on the initial touch.
	Chime	4'	-	Chime.
	Synth. Chime	8'	Cele.	Starry chime.
20. Pedal <b>ELECTRIC BASS</b>	Steel Drum	8'	-	Steel Drum.
	Elec. Bass 1	8'	-	For multi purposes.
	Elec. Bass 2	16'	-	Slap bass.
	Elec. Bass 3	16'	-	Plucked bass with hard attack.
	Elec. Bass 4	16'	Cele.	Fretless bass, also suited for solo playing.
	Elec. Bass 5	16'	-	Expressive Electric bass.
	Synth. Bass 1	16'	-	Sustained sounds.
	Synth. Bass 2	16'	-	With remarkable attack.
	Synth. Bass 3	16'	-	Tone varies depending on the touch.
	Synth. Bass 4	16'	-	Resonant synth. bass.
	Synth. Bass 5	16'	-	Synth. Bass suitable for playing gradually changing sounds.
21. Upper/Lower <b>COSMIC</b>	Cosmic 1	4'	-	Decay type. For multi purposes. UK in Basic Regist. 4.
	Cosmic 2	8'	-	The lower register of celesta. LK and PK in Basic Regist. 4.
	Cosmic 3	8'	-	Brass type.LK in Basic Regist. 5.
	Cosmic 4	8'	-	Decay type. With fantastic image.
	Cosmic 5	8'	-	Spacious sounds with feedback.
	Cosmic 6	8'	-	Synth. brass type.
	Cosmic 7	8'	-	Vocal type with feedback.
	Cosmic 8	8'	-	Distortion type with feedback.
	Cosmic 9	8'	-	Decay type with unique feedback.
	Cosmic 10	8'	-	Clear synth. pad.
	Cosmic 11	8'	-	Digital synth. pad.
	Cosmic 12	8'	-	Chorus type synth. pad.
	Cosmic 13	8'	-	Special sound effect with a slower attack. The sounds drastically changes.
	Cosmic 14	8'	-	Fantastic digital music box.
	Cosmic 15	8'	-	Ethnic synth. percussion.
	Cosmic 16	16'	-	Special sound effect with a complicated mixture of various sounds.



page	Voice Name	Preset		Horizontal	Recommended Range *1	Remarks
		Feet	Effect			
VA Acoustic	V-Flute	8		Pitch	G2~A6	Flute, containing noise factors, which may squeak in the high register. Setting the Touch Tone (After) higher and applying keyboard pressure can result in flutter tonguing.
	V-Oboe	8		Pitch	C3~F5	Wider dynamic range with the Touch Tone effect.
	V-Clarinet	8		Pitch	D2~F5	Breath noise in pianissimo and brighter sound with the pitch a little bit lowered in fortissimo.
	V-Sopra. Sax.	8		Pitch	A 2~D5	Rounder and softer soprano saxophone.
	Alto Sax.	8		Pitch	D 2~G4	A bright alto saxophone for contemporary music.
	Tenor Sax.	16		Pitch	A 2~C4	Multipurpose tenor saxophone. Softer in pianissimo and brighter in fortissimo.
	Breath Sax.	16		Pitch	A 2~C4	Softer tenor saxophone with much breath noise suited for music in slow tempo.
	V-Trumpet	8		Embouchure *2	A 2~A 4	Softer trumpet. Lip-slide can be obtained with the Horizontal touch.
	V-Trombone	16		Embouchure	E1~G3	Lip-slide can be obtained with the Horizontal touch. Also, cracking image with the After touch.
	V-Shakuhachi	8		Embouchure		Higher Touch Tone (After) setting increases breath noises and then squeaks the sounds.
	V-Kokyu	8		Pitch		Palying with softer touch produces hoarse sounds.
	V-Sitar	8		Pitch		Palying with harder touch squeaks the sounds.
VA Virtual	Pan Pipe	8		Pitch	E2~G5	Setting the Touch Tone (After) higher and applying keyboard pressure can result in flutter tonguing.
	Air Reed	8		Pitch	A2~C5	An image of adopting an oboe reed to a saxophone.
	Thin Reed	8		Pitch	E2~G5	An image of adopting a clarinet mouthpiece to a flute.
	Grass Reed	4		Pitch	E2~G5	An image of adopting a bassoon reed to a brass wind instrument. After touch changes the pitch.
	Soft Reed	8		Embouchure	A2~G5	An image of adopting a clarinet mouthpiece to a brass wind instrument.
	Buzz String	8		Pitch	A2~F5	An image of bowed-wind instrument.
	Bow Strings	8		Pitch	E1~E6	Artificially synthesized strings.
	Waspy Horn	8		Embouchure	C1~G4	An image of adopting a brass wind instrument mouthpiece to a wind instrument. After touch affects the muted condition. Lip-slide can be obtained with the Horizontal touch.
VA Electronic	Jazz Guitar	16		Pitch	E1~E5	Softer and warm Jazzy sounds.
	Picked Guitar	16		Pitch	E1~E5	Plucked guitar sounds with a pick.
	Saw Lead	8		Pitch	C1~C5	Multipurpose lead sounds. After touch affects to change the filter.
	Edge Lead	16		Pitch	C1~C4	Sound suited for synthe. bass with a sharp attack portion. After touch affects to change the filter.
	Dist. Lead	16	Dist.	Pitch	G1~C5	Distorted lead sounds. Setting the Touch Tone (After) higher and applying keyboard pressure can raise the pitch one octave.
	Woody Lead	8		Pitch	C2~G5	Lead sound with woody quality.
	Muted Lead	8		Pitch	C2~C5	Lead sound with wah-wah effect. After touch affects the wah-wah effect.
	Talken Lead	16		Pitch	C1~C5	Talkative lead sound. Setting the Touch Tone (After) higher and applying keyboard pressure can result in hum noises.
VA Custom	Custom1	16		Pitch	—	Sounds tapping an opening of a pipe with your palm.
	Custom2	8		Embouchure	—	Sounds scraping a metallic plate. After touch affect the degree of scraping.
	Custom3	8		Pitch	—	Sounds hitting a metallic plate with a wood block. Initial touch affects to change the hardness of the wood block.
	Custom4	8		Pitch	—	Softer playing results in sounds of wind. Applying the keyboard pressure (After touch) produces a distorted guitar sounds.
	Custom5	8		Pitch	—	Jet noise sounds. Applying the keyboard pressure produces lead sounds.
	Custom6	8		Pitch	—	Sounds colliding a metallic plate with another.

\*1 Each acoustic instrument has its own suited range. Be aware that exceeding the range may create an unexpected and unrealistic (non-musical) sounds.

\*2 Embouchure indicates the tightness of the lips against the reed or against each other in the wind instruments, and the force of the bow against the string.

# MIDI Data Format

## 1. Channel Messages

### 1.1 EL Mode

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
8n,nn,00-7F	Note Off	X	1ch	UK
		X	2ch	LK
		X	3ch	PK
		X	(4ch)*	LEAD 1
		X	5-14ch	XG
		X	15ch	Keyboard Percussion
9n,nn,00	Note Off	(1ch)*	1ch	UK
9n,nn,01-7F	Note On	(2ch)*	2ch	LK
		(3ch)*	3ch	PK
		X	(4ch)*	LEAD 1
		X	5-14ch	XG
		X	15ch	Keyboard Percussion
Bn,00,00-7F Bn,20,00-7F	Bank select	X	5-14ch	XG
Bn,01,00-7F	Modulation	X	5-14ch	XG
Bn,04,00-7F	2nd Expression	16ch	16ch	Control
		(4ch)**	(4ch)*	LEAD 1
Bn,05,00-7F	Portamento Time	X	5-14ch	XG
Bn,06,00-7F Bn,26,00-7F	Data Entry	X	5-14ch	XG
Bn,07,00-7F	Volume	X	5-14ch	XG
Bn,0A,00-7F	Pan	X	5-14ch	XG
Bn,0B,00-7F	Expression	16ch	16ch	Control
			5-14ch	XG
Bn,10,00-7F	After Touch for VA Voices	(1ch)*	1ch	UK
Bn,40,00-7F	Hold	X	5-14ch	XG
Bn,41,00-7F	Portamento	X	5-14ch	XG
Bn,42,00-7F	Sostenuto	X	5-14ch	XG
Bn,43,00-7F	Soft Pedal	X	5-14ch	XG
Bn,47,00-7F	Resonance	X	5-14ch	XG
Bn,48,00-7F	Release Time	X	5-14ch	XG
Bn,49,00-7F	Attack Time	X	5-14ch	XG
Bn,4A,00-7F	Brightness	X	5-14ch	XG
Bn,54,00-7F	Portamento Control	X	5-14ch	XG
Bn,5B,00-7F	Reverb Send Level	X	5-14ch	XG
Bn,5D,00-7F	Chorus Send Level	X	5-14ch	XG
Bn,5E,00-7F	Variation Send Level	X	5-14ch	XG
Bn,60,00-7F	Data Increment	X	5-14ch	XG
Bn,61,00-7F	Data Decrement			
Bn,62,00-7F	NRPN LSB	X	5-14ch	XG
Bn,63,00-7F	NRPN MSB			
Bn,64,00-7F	RPN LSB	X	5-14ch	XG
Bn,65,00-7F	RPN MSB			
Bn,78,00	All Sounds Off	X	5-14ch	XG
Bn,79,00	Reset All Controllers			
Bn,7B,00	All Note Off			
Bn,7C,00	Omni Off			
Bn,7D,00	Omni On			
Bn,7E,00	Mono			
Bn,7F,00	Poly			

\* Can be changed in the MIDI settings.

\*\* Can be output when assigned to the channel 4.

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
Cn,nn	Program Change	×	1ch	UK
		×	2ch	LK
		×	3ch	PK
		×	5-14ch	XG
		16ch	16ch	Control
Dn,00-7F	After Touch	(1ch)*	1ch	UK
		(2ch)*	2ch	LK
		(3ch)*	3ch	PK
			(4ch)*	LEAD 1
		1	5-14ch	XG
En,00-7F,00-7F	Pitch Bend	(1ch)*	1ch	UK
		(2ch)*	2ch	LK
		×	(4ch)*	LEAD 1
			5-14ch	XG

\* Can be changed in the MIDI settings.

\*\* Can be output when assigned to the channel 4.

## 1.2 XG Mode

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
8n,nn,00-7F	Note Off	×	1-16ch	
9n,nn,00	Note Off	(1ch)	1-16ch	UK
9n,nn,01-7F	Note On	(2ch)*		LK
		(3ch)*		PK
Bn,00,00-7F	Bank select	×	1-16ch	
Bn,20,00-7F				
Bn,01,00-7F	Modulation	×	1-16ch	
Bn,04,00-7F	2nd Expression	16ch (4ch)**	×	Control LEAD 1
Bn,05,00-7F	Portamento Time	×	1-16ch	
Bn,06,00-7F	Data Entry	×	1-16ch	
Bn,26,00-7F				
Bn,07,00-7F	Volume	×	1-16ch	
Bn,0A,00-7F	Pan	×	1-16ch	
Bn,0B,00-7F	Expression	16ch	1-16ch	Control
Bn,10,00-7F	After Touch for VA Voices	(1ch)*	×	UK
Bn,40,00-7F	Hold	×	1-16ch	
Bn,41,00-7F	Portamento	×	1-16ch	
Bn,42,00-7F	Sostenuto	×	1-16ch	
Bn,43,00-7F	Soft Pedal	×	1-16ch	
Bn,47,00-7F	Resonance	×	1-16ch	
Bn,48,00-7F	Release Time	×	1-16ch	
Bn,49,00-7F	Attack Time	×	1-16ch	
Bn,4A,00-7F	Brightness	×	1-16ch	
Bn,54,00-7F	Portamento Control	×	1-16ch	
Bn,5B,00-7F	Reverb Send Level	×	1-16ch	
Bn,5D,00-7F	Chorus Send Level	×	1-16ch	
Bn,5E,00-7F	Variation Send Level	×	1-16ch	
Bn,60,00-7F	Data Increment	×	1-16ch	
Bn,61,00-7F	Data Decrement			
Bn,62,00-7F	NRPN LSB	×	1-16ch	
Bn,63,00-7F	NRPN MSB			
Bn,64,00-7F	RPN LSB	×	1-16ch	
Bn,65,00-7F	RPN MSB			

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
Bn,78,00	All Sounds Off	×	1-16ch	
Bn,79,00	Reset All Controllers			
Bn,7B,00	All Note Off			
Bn,7C,00	Omni Off			
Bn,7D,00	Omni On			
Bn,7E,00	Mono			
Bn,7F,00	Poly			
Cn,00-7F	Program Change	16ch	1-16ch	Control
Dn,00-7F	After Touch	(1ch)* (2ch)* (3ch)*	1-16ch	UK LK PK
En,00-7F,00-7F	Pitch Bend	(1ch)* (2ch)* ×	1-16ch	UK LK

\* Can be changed in the MIDI settings.

\*\* Can be output when assigned to the channel 4.

## 2. Realtime Messages

Code (Hexadecimal)	Function	Transmit	Receive	Remarks
F8	Clock	○	○*	
FA	Start	○	○	
FC	Stop	○	○	
FE	Active Sensing	○	○	
FF	Reset	×	×	

\* Received only when in the Ext. mode

## 3. System Exclusive Messages

### 3.1 Format

Universal Realtime Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,7F,7F,04,01,SS,TT,F7 XN	XG Master Volume	×	○

Universal Non-Realtime Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,7E,7F,09,01,F7 XN	GM ON	×	○

XG Native

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,1N,4C,AH,AM,AL,..data..,F7	XG Parameter Change	×	○
F0,43,0N,4C,BH,BL,AH,AM,AL,..data..,cc,F7	XG Bulk Dump	×	○
F0,43,1N,27,30,00,00,MM,LL,cc,F7	XG Master Tuning	×	○
F0,43,1N,4C,00,00,7E,00,F7	XG System On	×	○

Electone/Single Keyboard Common Messages

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,73,01,02,F7 03	Request for Internal Synch. Mode	×	○
	Request for External Synch. Mode	×	○

## Electone Exclusive

Code (Hexadecimal)	Message	Transmit	Receive
F0,43,70,70,00,...(Data)...F7 78	Bulk Dump Data	×	○
F0,43,70,ID,00,F7	Model ID Data	○	×
F0,43,70,70,nn(*1),F7 78	Request-to-Send Data	×	○
F0,43,70,70,nn(*2),F7 78	Request-to-Receive Data	×	○
F0,43,70,70,01,ID1,ID2,SPI,SPh,DCI,DCh,F7 78	Request-to-Send Voice parameter data	×	○
F0,43,70,70,02,ID1,ID2,SPI,SPh,DCI,DCh,F7 78	Request-to-Receive Voice parameter data	×	○
F0,43,70,70,30,F7	Request-to-Send Model ID data	×	○
F0,43,70,70,38,7F,F7 00	Bulk Dump Acknowledge	×	×
	Bulk Dump Unacknowledge	○	×
F0,43,70,70,40,nn(*3),7F,F7 00	Switch On	○	○
	Switch Off	○	○
F0,43,70,70,40,50,TL,TH,F7(*4)	Tempo	○	○
F0,43,70,78,41,cd,dd,F7(*5)	Panel Switch Events	○	○
F0,43,70,78,42,...(Data)...F7	Current Registration Data	○	○
F0,43,70,78,44,...(Data)...(*5),F7	EL MIDI Parameters	○	○
F0,43,70,70,70,nn(*6),F7	External MDR	*	*
F0,43,70,70,73,F7	EL ON	×	○
F0,43,70,70,78,SC,NC,F7	Bar Signal	○	○

X : don't care    N : Device Number("0" on EL-900m)    ID=49

## \*1 Data Codes to Send

nn	Data
10	All RAM
11	Registrations
12	Rhythm Sequences
14,15	User Patterns
16	User Voices
17	Keyboard Percussion Assignments

## \*2 Data Codes to Receive

nn	Data
20	All RAM
21	Registrations
22	Rhythm Sequences
24,25	User Patterns
26	User Voices
27	Keyboard Percussion Assignments

## \*3 Switches

nn	Switch	Transmit	Receive
45	Left Footswitch	○	○
47	Knee Lever	○	○
48	Fill In 1	○	○
4B	Intro./Ending	○	○
4D	Solo Bar	○	○

#### \*4 Switch Codes

##### Selectors

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
02	UK Voice 1	○	[00-0D]	○	[00-0D]	Switch Number
03	LK Voice 1	○	[00-0D]	○	[00-0D]	Switch Number
04	UK Voice 2	○	[00-0D]	○	[00-0D]	Switch Number
05	LK Voice 2	○	[00-0D]	○	[00-0D]	Switch Number
06	LEAD Voice 1	○	[00-04]	○	[00-04]	Switch Number
07	Pedal Voice 1	○	[00-04]	○	[00-04]	Switch Number
08	Pedal Voice 2	○	[00-04]	○	[00-04]	Switch Number
09	LEAD Voice 2	○	[00,05-08]	○	[00-08]	Switch Number
0B	Rhythm	○	[00-0B]	○	[00-04]	Switch Number
0F	Registration Memory	×		○	[00-0F]	

##### Volume

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
12	UK Voice 1	○	[00-7F]	○	[00-7F]	Volume Data 00:MAX,7F:MIN
13	LK Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
14	UK Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
15	LK Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
16	LEAD Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
17	Pedal Voice 1	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
18	Pedal Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
19	LEAD Voice 2	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
1A	Rhythm	○	[00-7F]	○	[00-7F]	Volume Data; 00:MAX,7F:MIN
1B	Reverb	○	[00-7F]	○	[00-7F]	Depth Data; 00:MAX,7F:MIN

##### Flute Voice

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
30	Upper Flute Voice	○	[00-01]	○	[00-01]	00:OFF,01:ON
31	Lower Flute Voice	○	[00-01]	○	[00-01]	00:OFF,01:ON

##### To Lower

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
36	LEAD Voice 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
37	Pedal Voice 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
38	Pedal Voice 2	○	[00-01]	○	[00-01]	00:OFF,01:ON

##### Solo Mode

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
39	LEAD Voice 2 Solo (Bar)	○	[00-01]	○	[00-01]	00:OFF,01:ON

##### Brilliance

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
42	UK Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
43	LK Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
44	UK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
45	LK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
46	LEAD Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
47	Pedal Voice 1	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
48	UK Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow
49	LEAD Voice 2	○	[00-06]	○	[00-06]	00: Brilliant; 06: Mellow

### Sustain

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
50	Upper Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
51	Lower Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
52	Pedalboard	○	[00-01]	○	[00-01]	00:OFF,01:ON

### Solo Bar

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
59	Solo Bar	×	[00-01]	○	[00-01]	00:OFF,01:ON

### Keyboard Percussion

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
5B	Lower Keyboard	○	[00-01]	○	[00-01]	00:OFF,01:ON
5C	Pedal Board	○	[00-01]	○	[00-01]	00:OFF,01:ON

### Disable

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
5F	Disable	○	[00-01]	○	[00-01]	00:OFF,01:ON

### Tremolo

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
60	Tremolo	○	[00-01]	○	[00-01]	00:SLOW,01:FAST

### Rhythm Sequence

Code	Switch	Transmit	Tx Range	Receive	Rx Range	Remarks
61	Sequence 1	○	[00-01]	○	[00-01]	00:OFF,01:ON
62	Sequence 2	○	[00-01]	○	[00-01]	00:OFF,01:ON
63	Sequence 3	○	[00-01]	○	[00-01]	00:OFF,01:ON
64	Sequence 4	○	[00-01]	○	[00-01]	00:OFF,01:ON

\*5 EL MIDI Parameters

**Voice Section Parameters**

**Panel Voice Parameters**

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
00	00-07	00-0D	2	00-7F	Voice Assign Number H		○	[00-7F]	○	[00-7F]	
				00-7F	Voice Assign Number L		○	[00-0F]	○	[00-7F]	
00	00-07	10	1	00-0D	Voice Selector Number		×	[00-0D]	○	[00-0D]	
00	00-07	11	1	00-7F	Volume	00:MIN 7F:MAX	×	[00-7F]	○	[00-7F]	
00	00-07	12	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
00	00-07	13	1	00-7F	Brilliance	00:Brilliant  40:Center  7F:Mellow	×	[00] [15] [2B] [40] [55] [6B] [7F]	○	[00-0A] [0B-17] [18-35] [36-4A] [4B-5F] [60-75] [76-7F]	
00	00-07	14	1	00-04	Feet	00:Preset 01:16Feet 02:8Fee 03:4Feet 04:2Feet	○	[00] [01] [02] [03] [04]	○	[00][05-7F] [01] [02] [03] [04]	
00	00-07	15	1	00-7F	Pan	00:Right  40:Center  7F:Left	○	[0B] [1D] [2B] [40] [55] [63] [75]	○	[00-11] [12-25] [26-31] [32-4E] [4F-5A] [5B-6E] [6F-7F]	
00	00-07	16	1	00-7F	Initial Touch Sensitivity	00: Min. 7F: Max.	○	[00-7F]	○	[00-7F]	
00	00-07	17	1	00-7F	After Touch Sensitivity	00: Min. 7F: Max.	○	[00-7F]	○	[00-7F]	
00	00-07	19	1	00-01	User Vibrato	00:PRESET 01:USER	○	[00] [01]	○	[00] [01-7F]	
00	00-07	1A	1	02-1A	Vibrato Delay	00:Short 7F:Long	○	[02-1A]	○	[00-7F]	
00	00-07	1B	1	00-54	Vibrato Depth	00: Min. 7F: Max.	○	[00-54]	○	[00-7F]	
00	00-07	1C	1	3C-6C	Vibrato Speed	00:Slow 7F:Fast	○	[3C-6C]	○	[00-7F]	
00	00-05	1D	1	00-7F	Pitch (Horizontal)	00: Narrow 7F: Wide	○	[00-7F]	○	[00-7F]	
00	00-07	1E	1	00-7F	Touch Vibrato On/Off	00:OFF 01:ON	○	[00] [7F]	○	[00] [01-7F]	
00	00-07	1F	1	00-01	To Lower/SOLO(BAR)	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	LEAD2:SOLO(BAR)
00	04-07	20	1	00-02	Slide	00:OFF 01:ON 02:KneeControl	○	[00] [01] [02]	○	[00] [01] [02]	
00	04-05	21	1	02-7F	Slide Speed	02:Fast 7F:Slow	○	[02-7F]	○	[00-7F]	
00	04-05	22	1	00-2B	Detune	00:Normal 2B:TuneUP	○	[00-2B]	○	[00-7F]	
00	00-01 04-07	23	1	00-01	2nd Expression Pedal	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
00	00-05	24	1	00-01	Glide	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
00	06-07	28	1	00-01	Mono/Poly	00:Mono 01:Poly	○	[00] [01]	○	[00] [01-7F]	



## Flute Voice Parameters

	Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
01	00-01	00	1	00-7F	FLUTE 16Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	01	1	00-7F	FLUTE 8Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	02	1	00-7F	FLUTE 5-1/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	03	1	00-7F	FLUTE 4Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	04	1	00-7F	FLUTE 2-2/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	05	1	00-7F	FLUTE 2Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	06	1	00-7F	FLUTE 1-3/5Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	08	1	00-7F	FLUTE 1Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	09	1	43-7F	FLUTE Response	43:Slow 7F:Fast	○	[43-7F]	○	[00-7F]		
01	00-01	0A	1	00-7F	ATTACK 4Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	0B	1	00-7F	ATTACK 2-2/3Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	0C	1	00-7F	ATTACK 2Feet	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	0D	1	30-48	ATTACK Length	30:Short 48:Long	○	[30-48]	○	[00-7F]		
01	00-01	0E	1	00-7F	Click	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	11	1	00-7F	Flute Coupler On/Off	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]		
01	00-01	12	1	00-7F	Volume	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	13	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]		
01	00-01	20	1	00-07 40-47	Parameter Load	00-07:PresetParameter 40-47:UserParameter	○	[00-07] [40-47]	○	[00-07] [40-47]		
01	00-01	21	1	40-47	Parameter Save	40-47:UserParameter	○	[40-47]	○	[40-47]		

## Effect Parameters (Voice Sections)

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
00-01	00-07	3F	1	00-06	Effect Select	00:Preset	○	[00]	○	[00][07-7F]	
						01:OFF		[01]	[01]		
						02:Tremolo		[02]	[02]		
						03:Symphonic		[03]	[03]		
						04:Delay		[04]	[04]		
						05:Flanger		[05]	[05]		
						06:Distortion		[06]	[06]		
00-01	00-07	40-42	1	00-7F	Reverb		×	[00-7F]	○	[00-7F]	
00-01	00-07	48-4A	1	00-7F	Tremolo		×	[00-7F]	○	[00-7F]	
00-01	00-07	50	1	00-7F	Symphonic		○	[00-7F]	○	[00-7F]	
00-01	00-07	58-5B	1,2	00-7F	Delay		○	[00-7F]	○	[00-7F]	
00-01	00-07	60-62	1	00-7F	Flanger		○	[00-7F]	○	[00-7F]	
00-01	00-07	68-69	1	00-7F	Distortion		○	[00-7F]	○	[00-7F]	

## Keyboard Parameters

### Sustain Parameters

	Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	00-02	00	1	00-01	Sustain On/Off	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	
02	00-02	01	1	15-3D	Length	19:Short(PK), 15:Short(UK, LK) 30:Long(PK), 37:Long(UK, LK)	○	[15-3D]	○	[00-7F]	

### Keyboard Percussion Parameters

	Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	01-02	10	1	00-01	Keyboard Percussion	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	
02	01-02	11	1	00-08	Modes	00:Preset 01-08:UserAssign1-8	○	[00] [01-08]	○	[00] [01-08]	

### Effect Parameters (Keyboard)

	Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
02	00-02	40-42	1		Reverb		×	[00-7F]	○	[00-7F]	
02	00-02	48-4A	1		Tremolo		×	[00-7F]	○	[00-7F]	
02	00-02	50	1		Symphonic		×	[00-7F]	○	[00-7F]	
02	00-02	58-5B	1,2		Delay		×	[00-7F]	○	[00-7F]	
02	00-02	60-62	1		Flanger		×	[00-7F]	○	[00-7F]	
02	00-02	68-69	1		Distortion		×	[00-7F]	○	[00-7F]	

## Rhythm

### Rhythm Parameters

	Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	00	00-0B	1	00-65 67-98	Pattern Assign Number	Pattern Numbers	○	[00-62]	○	[00-62]	
03	00	10	1	00-0B	Pattern Select Number	Selector Switch Numbers	×	[00-0B]	○	[00-0B]	
03	00	11	1	00-7F	Volume	00:MIN 7F:MAX	×	[00-7F]	○	[00-7F]	
03	00	12	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
03	00	14	1	00-01	Auto Variation	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
03	00	15	1	00-7F	Rhythm Balance	00:Cymbal 40:Center 7F:Drums	○	[00-7F]	○	[00-7F]	
03	00	16	1	00-01	2nd Expression Tempo Control	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
03	00	17	1	00-03	Footswitch Rhythm Mode	00:OFF 01:RhythmStop 02:Ending 03:FillIn	○	[00] [01] [02] [03]	○	[00][04-7F] [01] [02] [03]	

### Rhythm Sequence Parameters

	Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	01	00-03	1	00-01	Rhythm Sequence	00:OFF 01:ON	×	[00] [01]	○	[00] [01-7F]	

### Accompaniment Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	02	10	1	00-03	Pattern Selector Number	00:Type1 01:Type2 02:Type3 03:Type4	○	[00] [01] [02] [03]	○	[00] [01] [02] [03]	
03	02	11	1	00-01	Volume Mute	00:OFF 01:MUTE	○	[00] [01]	○	[00] [01-7F]	
03	02	12	1	00-7F	Volume	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	
03	02	13	1	00-7F	Reverb Send Level	00:MIN 7F:MAX	○	[00-7F]	○	[00-7F]	

### A.B.C. Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	03	00	1	00-03	A.B.C. Mode	00:OFF 01:SingleFinger 02:Fingerd 03:CustomABC	○	[00] [01] [02] [03]	○	[00][04-7F] [01] [02] [03]	
03	03	01	1	00-01	Lower Memory	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	
03	03	02	1	00-01	Pedal Memory	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	

### M.O.C. Parameters

Address			Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
03	04	00	1	00-03	M.O.C. Mode	00:OFF 01:Close2Note 02:Close3Note 03:PassBOpen	○	[00] [01] [02] [03]	○	[00][04-7F] [01] [02] [03]	
03	04	01	1	00-01	M.O.C. Knee Control	00:OFF 01:ON	○	[00] [01]	○	[00] [01-7F]	

## Overall System Parameters

Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
04	00	00	1	00-01	Disable	00:OFF 01:ON	×	[00] [01]	○ [01-7F]	
04	00	01	1	00-01	Flute Coupler Attack Mode	00:EachKey 01:FirstNewKey	○	[00] [01]	○ [01-7F]	
04	00	02	1	3A-46	Transpose	3A:KeyDown 40:Normal 46:KeyUp	○	[3A] [40] [46]	○ [3A] [40] [46]	
04	00	03	1	00-0B	2nd Expression Range	01:100 ¢ 0C:1200 ¢	○	[01-0C]	○ [01-0C]	
04	00	04	1	00-03	Footswitch Mode	00:OFF 01:Rhythm 02:Glide 03:Tremolo	○	[00] [01] [02] [03]	○ [00][04-7F] [01] [02] [03]	
04	00	05	1	3C-4F	Pitch	3C:PitchDown 40:Normal 4F:PitchUp	○	[3C-4F]	○ [3C-4F]	
04	00	06	1	04-1C	Glide Speed	04:Fast 1C:Slow	○	[04-1C]	○ [00-7F]	
04	00	07	1	34-4C	Manual Balance	34:Upper 40:Center 4C:Lower	○	[34-4C]	○ [00-7F]	
04	00	09	1	00-01	L.I.T.	00:Mode1 01:Mode2	○	[00] [01]	○ [00] [01]	
04	00	0A	1	00-01	Expression INT/EXT	00:Internal 01:External	×	[00] [01]	○ [00][02-7F] [01]	

## Effect Parameters (Overall)

Address		Size	Data	Parameter	Content	Transmit	Tx Range	Receive	Rx Range	Remarks
04	00	40-42	1		Reverb	○	[00-7F]	○	[00-7F]	
04	00	48-4A	1		Tremolo	○	[00-7F]	○	[00-7F]	
04	00	50	1		Symphonic	×	[00-7F]	○	[00-7F]	
04	00	58-5B	1,2		Delay	×	[00-7F]	○	[00-7F]	
04	00	60-62	1		Flanger	×	[00-7F]	○	[00-7F]	
04	00	68-69	1		Distortion	×	[00-7F]	○	[00-7F]	

## \*6 External MDR

nn	Command	Transmit	Receive
01	Play Start	×	○
02	Play Stop	×	○
03	Record Start	×	○
04	Record Stop	×	○

# MIDI Implementation Chart

YAMAHA [Electone-EL mode] / Model: EL-900m

Date: 01. Dec. 2000  
Version: 1.00

Function		Transmit	Receive	Remarks
Basic Channel	Default Changed	1, 2, 3, 16 *1 1-16	1-3, 5-16 *2 4	
Mode	Default Messages Altered	Mode 3 × *****	Mode 3 × ×	
Note Number	True Voice	36-96 *3 *****	0-127 *4	
Velocity	Note ON Note OFF	○ 9nH, v=1-127 ○ 9nH, v=0	○ 9nH, v=1-127 ○ 9nH, v=0, 8nH	
After Touch	Key's Ch's	× ○	× ○	
Pitch Bend		○ *5	○ *5	
Control Change	0, 32 1, 5, 7, 10 4 6, 38 11 16 96, 97 64-67 71-74 84, 91, 93, 94 98-99, 100-101 120, 121	× × ○ *7 × ○ *7 ○ *8 × × × × × × ×	○ *6 ○ *6 ○ *7 ○ *6 ○ *6, 7 ○ *8 ○ *6 ○ *6 ○ *6 ○ *6 ○ *6 ○ *6	Bank Select  2nd Expression Pedal Data Entry Expression Pedal VA After Touch Data Entry SW  Sound Controller  NRPN, RPN
Program Change	Range	○ *10 *****	○ *11	
System Exclusive		○	○	
System Common	Song Position Song Select Tune	× × ×	× × ×	
System Real Time	Clock Commands	○ ○	○ *9 ○	(FAH, FCH)
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	× × ○ ×	× ○ (123-127) *11 ○ ×	
Notes		*1 Ch 1: UK; Ch 2: LK; Ch 3: PK; Ch 16: Control *2 Ch 1: UK; Ch 2: LK; Ch 3: PK; Ch 4: LEAD 1; Chs 5 - 14: XG; Ch 15: Keyboard *3 UK: 48 - 96; LK: 36 - 84; PK: 36 - 55 *4 UK, LK, PK, LEAD 1: 36 - 96; XG: 0 - 127; Keyboard Percussion: 3 - 127 *5 UK: UK Horizontal Touch; LK: LK Horizontal Touch *6 XG only *7 Control only *8 UK only *9 External Mode only *10 Control: 0 - 15, 112 - 116 *11 UK, LK, PK, Control: 0 - 15, 112 - 116; XG: 0 - 127		

Mode 1 : OMNI ON, POLY  
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO  
Mode 4 : OMNI OFF, MONO

○ : YES  
× : NO

Mode 1 : OMNI ON, POLY                      Mode 2 : OMNI ON, MONO                      ○ : YES  
Mode 3 : OMNI OFF, POLY                      Mode 4 : OMNI OFF, MONO                      × : NO

# Specifications

<b>KEYBOARD</b>	<b>Keyboards</b>	Upper: 49 keys (C – C), Lower: 49 keys (C – C), Pedal: 20 keys (C – G)
<b>Touch Tone</b>	<b>Initial Touch</b>	Upper, Lead, Lower, Pedal
	<b>After Touch</b>	Upper, Lead, Lower, Pedal
<b>Pitch</b>	<b>Horizontal Touch</b>	Upper, Lead, Lower
<b>VOICE</b>	<b>Tone Generation</b>	AWM & FM, VA
	<b>Upper Keyboard Voice 1, 2 Lower Keyboard Voice 1, 2</b>	Strings 1, 2, 3, 4, 5, 6, 7, 8, Pizz. Strings, Tremolo Strings, Synth. Strings 1, 2, 3; Brass 1, 2, 3, 4, 5, Synth. Brass 1, 2, 3, 4; Clarinet 1, 2, 3, Bass Clarinet, Synth. Clarinet 1, 2; Saxophone 1, 2, Soprano Sax., Sax. Ensemble 1, 2, Synth. Sax, Synth. Lead 1, 2, 3, 4, 5, 6, 7; Chorus 1, 2, 3, 4, 5, 6, 7, 8, Vocal; Organ 1, 2, 3, 4, Jazz Organ 1, 2, 3, 4, Pop Organ 1, 2, Theatre Organ 1, 2, Accordion, Bandoneon; Piano 1, 2, Honky Tonk, Elec. Piano 1, 2, 3, 4, Harpsichord, Clavi., Clavichord; Guitar 1, 2, 3, 12 String Guitar, Banjo, Mandolin, Sitar, Shamisen, Elec. Guitar 1, 2, Muted Guitar, Distortion Guitar, Steel Guitar, Harp, Koto, Taisho Koto; Vibraphone, Glockenspiel, Celesta, Music Box, Marimba, Xylophone, Chime, Synth. Chime, Steel Drum; Cosmic 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16; Tutti 1, 2, 3, 4, 5, 6, 7, 8, 9, 10; [Upper] Harmonica 1, 2; [Lower] Horn 1, 2, 3, 4, Muted Horn; User 1-16; 2 Dotted Buttons; [Upper] 115 Voices; [Lower] 118 Voices; Volume Fine; Brilliance
	<b>Lead Voice 1</b>	Violin 1, 2, 3, 4, 5, Pizz. Violin, Cello, Kokyu; Flute 1, 2, 3, 4, Piccolo, Recorder, Yokobue, Ocarina, Pan Flute, Shakuhachi, Whistle; Oboe 1, 2, 3, 4, English Horn 1, 2, Bassoon 1, 2, 3; Trumpet 1, 2, 3, 4, 5, 6, Muted Trumpet, Trombone 1, 2, 3, Muted Trombone, Flugel Horn, Euphonium; User 1-16; To Lower; Dotted Button; 34 Voices; Volume Fine; Brilliance
	<b>Lead Voice 2 (VA)</b>	V-Flute, V-Oboe, V-Clarinet, V-Sopra. Sax., Alto Sax., Tenor Sax., Breath Sax., V-Trumpet, V-Trombone, V-Shakuhachi, V-Kokyu, V-Sitar; Pan Pipe, Air Reed, Thin Reed, Grass Reed, Soft Reed, Buzz String, Bow Strings, Waspy Horn; Jazz Guitar, Picked Guitar, Saw Lead, Edge Lead, Dist. Lead, Woody Lead, Muted Lead, Talken Lead; Custom 1, 2, 3, 4, 5, 6; User 1-16; SOLO (Knee) Button; Dotted Button; 34 Voices; Volume Fine; Brilliance
	<b>Pedalboard Voice 1, 2</b>	Contrabass 1, 2, 3, Pizz. Bass, Upright Bass; Elec. Bass 1, 2, 3, 4, 5, Synth. Bass 1, 2, 3, 4, 5; Organ Bass 1, 2, 3, 4; Tuba, Timpani 1, 2, Timpani Roll; User 1-16; To Lower; Dotted Button; 19 Voices; Volume Fine; Brilliance
	<b>Voice Display</b>	Upper 1,2; Lower 1,2; Lead 1,2; Pedal 1,2; Manual Balance
<b>Upper Flute Voice Lower Flute Voice</b>		Flute Voices (16', 8', 51/3', 4', 22/3', 2', 13/5', 1'); Attack (4', 22/3', 2'; Length; Mode: Each, First); Click; Response; Tremolo On/Off; Reverb; Volume; 8 Presets; 8 User Voices; On/Off Control: Upper, Lower
<b>VOICE EDIT</b>		On/Off; Operator 1, 2, 3, 4, 5, 6, 7, 8:(Output Level, Attack Rate, Decay 1 Rate, Decay 1 Level, Decay 2 Rate, Release Rate); AWM: (Output Level, Attack Rate, Decay Rate, Release Rate, Low, High); Operator Selectors; Operator On/Off Buttons; Save: User: 1 – 16; (From) Voice Disk; Voice Name
<b>EFFECT/ CONDITION</b>	<b>Digital Reverb</b>	3 Types: Room, Hall, Church; Length; Depth; Volume: Upper/Lower 1, 2, Flute Voice, Lead 1, 2, Pedal 1, 2, Accompaniment, Percussion; Set: Length, Depth
	<b>Sustain</b>	Upper (Knee), Lower (Knee), Pedal: Length
	<b>Brilliance</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2: Control: Brilliant/Mellow
	<b>Tremolo/Chorus</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2, Flute Voice; Tremolo (Fast): Speed; Chorus: Slow, Stop
	<b>Symphonic/Celeste</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Mode: Symphonic/Celeste
	<b>Vibrato</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2: Preset/User (Delay, Depth, Speed); Touch Vibrato
	<b>Delay</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Time, Feedback, Balance; Mode: Mono, Stereo 1, 2, 3
	<b>Flanger</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Speed, Feedback, Depth
	<b>Distortion</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Control: Level, Hi-pass
	<b>Glide</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2; Control: Time
	<b>Lead Slide</b>	On/Knee/Off; Control: Time
	<b>Lead Tune</b>	Tune Control
	<b>Panning</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; (7 positions)
	<b>Feet</b>	Upper 1, 2, Lower 1, 2, Lead 1, 2, Pedal1, 2; Preset 2' (Pedal Voices only)/4/8/16'

<b>RHYTHM</b>	<b>Rhythms</b>	March 1, 2, 3, Polka 1, 2, Country 1, 2, Broadway, Baroque; Waltz 1, 2, 3, 4, 5, Jazz Waltz 1, 2, 3, Bolero; Swing 1, 2, 3, 4, 5, 6, Jazz Ballad, Dixieland 1, 2; Bounce 1, 2, 3, Reggae 1, 2; Slow Rock 1, 2, 3; 8Beat 1, 2, 3, 4, 5, Dance Pop 1, 2, 3, 4; Tango 1, 2, 3; Mambo, Salsa, Chacha, Rhumba, Beguine; Samba 1, 2, 3, Bossanova 1, 2, 3; 16Beat 1, 2, 3, 4, 5, 16 Beat Funk 1, 2, 3; User 1-8 (A-D); 2 Dotted Buttons; 66 Rhythms; Volume Fine
	<b>Variations</b>	Fill-In; Intro. Ending; Lead In; Auto Variation: On/Off
	<b>Others</b>	Start; Synchro Start; Tempo; Bar/Beat LED; Condition: Reverb, Balance, Volume; Instrument: Tune, Pan, Reverb, Volume; Assign: Normal, Extend(ed), Copy Preset
<b>RHYTHM PROGRAM</b>	<b>Pattern Program</b>	On/Off; Step Write/Real Time Write; Beat (4/4, 3/4, 2/4); Quantize (♩, ♪, ♫, ♬, ♪♪, ♫♫, ♬♬, Off); Metronome (On/Off); Assign (Normal/Extend); Edit: Instruments 1-16 (Change, Clear; Cursor); Accent Level 0-8; 120 Instruments; Accompaniment Select; Lower Rhythmic (Clear, Change, 16 Accompaniment Voices); Save: User 1-8 (A-D, Fill-In); (From) Pattern Disk; Pattern Name; Remaining Memory Display
	<b>Rhythm Sequence</b>	On/Off; Sequence 1-4; 120 Positions (Bar); Cursor Controls; Data: Preset/User (Set, Insert, Delete, Clear)
<b>KEYBOARD PERCUSSION</b>		Lower, Pedal On/Off: Lower Preset, Pedal Preset, User 1- 8; Copy: LK Preset, PK Preset, User; Assign: 120 Instruments, Clear
<b>ACCOMPANIMENT</b>	<b>Auto Bass Chord</b>	Mode: Off; Single Finger; Fingered Chord; Custom ABC; Memory: Lower, Pedal
	<b>Accompaniments</b>	Type 1, 2, 3, 4, All Off
<b>MELODY ON CHORD</b>		Mode: Off, 1, 2, 3; Knee: On/Off
<b>BASIC REGISTRATION</b>		1 – 5
<b>REGISTRATION MEMORY</b>		M./To Disk, 1-16; Disable Button; Mode: Off; Shift; Shift +; Jump; User (80 Positions; Cursor Controls: Data: Set, Insert, Delete, Clear; Shift End: Stop, Top, Next Song)
<b>MUSIC DISK RECORDER</b>		Play/Record: Upper, Lower, Pedal, Lead, Keyboard Percussion, Control; Pause, Stop, Fast Forward/Reverse, Song Select, Shift, Custom Play, Tempo; Format, Read & Auto Increment, Song Repeat; Song Delete; Song Copy: From/To; Disk Copy, Punch in Recording, XG Song Playback, XG Easy Converter, Song Name, Voice Disk, Pattern Disk, Remaining Memory; LED Display; Eject
<b>FOOT SWITCH</b>	<b>Left</b>	Mode: Off; Rhythm (Stop, Ending, Fill-In); Glide (Upper/Lower/Lead 1, 2; Time); Tremolo (On/Off);
	<b>Right</b>	Regist. Shift Mode: Off, Shift, Jump, User (80 Positions; Cursor Controls: Data: Set, Insert, Delete, Clear; Shift End: Stop, Top, Next Song)
<b>KNEE LEVER</b>		On/Off: Sustain (Upper, Lower); MOC; Lead Slide; Solo/Upper Mode
<b>2ND EXP. PEDAL</b>		Pitch Bend (On/Off: Upper/LeadPedal 1, 2; Range 1 -12); Tempo (Range 1 -12)
<b>TRANPOSE/PITCH</b>		Transpose: -6 - +6; Pitch: 438.8Hz - 444.5Hz
<b>LCD DISPLAY</b>		480 x 160 Full Dot
<b>OTHER CONTROLS</b>		Power On/Off; Exp. Pedal (Right/Left Footswitches); 2nd ExpressionPedal; Pitch Control; Transpose; Master Volume; Display Select; Data Controls; Page; Coarse; Hold; LCD Contrast; MIDI (Output: Upper, Lower, Pedal; Int./Ext.: Lead, Sync., Exp.); Lead Initial Touch
<b>OTHER FITTINGS</b>		Registration Menu Disk; 3.5" Floppy Disk; To Authorized Service Personnel; Matching Bench; Keyboard Cover/Music Stand; Headphone Jack; Rhythm In (Phone; R/L); Aux Out (RCA; R/L, Phone; R/L); Aux In (RCA; R/L); Mic In; Mic. Volume; Mic. Reverb; MIDI IN/Out; To Host; Host Select
<b>OPTIONAL ACCESSORIES</b>		Voice Disk; Pattern Disk; HPE-170 Headphones; 3.5" Floppy Disks
<b>SOUND SYSTEM</b>	<b>Power Amplifiers</b>	216W (Stereo)
	<b>Speakers</b>	20cm x 2; 18cm x 2; 2.5cm x 2; Monitor 6.6cm x 2
<b>DIMENSIONS Width x Depth x Height</b>		114.9cm x 55.6cm x 98.0cm *With Keyboard Cover Closed
<b>WEIGHT</b>		103kg, Bench: 10kg

Specifications and description in this Owner's Manual are information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. As specifications, equipment or options may not be the same in every locale, please check with Yamaha dealer.





## **IMPORTANT NOTICE FOR THE UNITED KINGDOM**

### **Connecting the Plug and Cord**

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL

BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

(2 wires)

- This applies only to products distributed by Yamaha-Kemble Music (U.K.) Ltd.

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