

## Appendix D

# Orchestral ROM

The Orchestral ROM Soundblock option adds 8 Megabytes of samples, including a full array of winds, brass, and strings. The Orchestral ROM Upgrade adds objects in the 900s bank. There you will find programs, keymaps, samples, effects, performance setups, and QA banks. All Orchestral ROM sounds can be combined with your existing 8 Megs of base sound ROM, 4 Megs of Stereo Piano ROM, and 8 Megs of (optional) Contemporary ROM.

### Orchestral ROM Effects

900	Rich Delay
901	Glass Delay
902	Real Plate
903	Real Niceverb
904	ClassicalChamber
905	Empty Stage
906	Long & Narrow
907	Far Bloom
908	New Hall w/Delay
909	With A Mic

## Orchestral ROM Programs

### Orchestras

900	TotalCntrl Orch1
901	TotalCntrl Orch2
902	BaroqueOrchestra
903	Oboe&Flute w/Str
904	Horn&Flute w/Str
905	Trp&Horns w/Str

### Winds

906	Piccolo
907	Orchestra Flute
908	Solo Flute
909	Orchestral Oboe
910	Solo Oboe
911	2nd Oboe
912	Orch EnglishHorn
913	Solo EnglishHorn
914	Orch Clarinet
915	Solo Clarinet
916	Orch Bassoon
917	Solo Bassoon
918	Woodwinds 1
919	Woodwinds 2

### Brass

920	Dynamic Trumpet
921	Copland Sft Trp
922	Orch Trumpet
923	Soft Trumpet
924	Strght Mute Trp
925	French Horn MW
926	Slow Horn
927	F Horn Con Sord
928	F Horn a2 MW
929	French Horn Sec1
930	French Horn Sec2
931	Solo Trombone
932	Tuba
933	Dyn Hi Brass
934	Dyn Lo Brass
935	Dyn Brass & Horn
936	Soaring Brass

### Solo Strings

937	MarcatoViolin MW
938	Solo Violin
939	2nd Violin
940	Orch Viola
941	Solo Viola
942	Slow Viola
943	Marcato Cello MW
944	Solo Cello
945	Slow Cello
946	Arco Dbl Bass
947	Slow Arco Bass
948	Brt Dbl Bass

### Section Strings

949	Touch Strings
950	Fast Strings MW
951	Chamber Section
952	Sfz Strings MW
953	Sweet Strings
954	Baroque Strg Ens
955	Big String Ens
956	Bass String Sec
957	Pizzicato String
958	Wet Pizz
959	Arco & Pizz

### Plucked Strings

960	Classical Guitar
961	Virtuoso Guitar
962	Acoustic Bass
963	Snappy Jazz Bass
964	Dynamic Harp
965	Harp w/8ve CTL
966	Harp Arps

### Keyboards

967	Celesta
968	Pipes
969	Pedal Pipes
970	Church Bells

### Percussion

971	Glockenspiel
972	Xylophone
973	Chimes
974	Timpani/Chimes
975	Timpani
976	Timpani & Perc
977	Big Drum Corp
978	Orch Percussion1
979	Orch Percussion2
980	Jam Corp
981	Conga & Perc
982	Woody Jam Rack
983	Metal Garden
984	Hot Tamali Kit
985	Funk Kit

### Synths

986	Magic Guitar
987	Glass Bow
988	Synth Orch
989	Nooage InstaHarp
990	AC Dream
991	Synth Dulcimer
992	Glistener
993	Afro Multi CTL
994	Tranquil Sleigh
995	Batman Strings
996	Ethnoo Lead
997	Orch Pad CTL
998	Choral Sleigh
999	Pad Nine

## Orchestral ROM Keymaps

### Reeds

900	<b>Oboe</b>
901	<b>English Horn</b>
902	<b>Bassoon</b>
903	<b>Clarinet</b>
904	Bassoon/Oboe
905	Bsn/EHrn/Oboe
906	Flute 2
907	Eng Horn/Oboe

### Brass

910	<b>Soft Trumpet</b>
911	<b>French Horn</b>
912	<b>French Hrn Sec</b>
913	<b>Tuba</b>
914	Tuba/Horn
915	Tuba/Hrn Sec
916	Tuba/Sft Trmpt
917	Trombet
918	Trumpbone
919	Trombone/SftTrmpt

### Orchestral Percussion

920	<b>Timpani</b>
921	<b>Snare Roll</b>
922	<b>Snare Hit</b>
923	<b>Orch Bass Drum</b>
924	<b>Orch Crash</b>
925	<b>Tam Tam</b>
926	<b>Triangle</b>
927	<b>Tambourine Roll</b>
928	<b>Tamb Hit</b>
929	<b>Sleigh Bells</b>
930	<b>Woodblock</b>
931	<b>Low Clave</b>
932	<b>Castanet Hit</b>
933	<b>Castanet Up</b>
934	Dry Snares
935	Amb Snare
936	Bass Drums
937	Orch Perc Units
938	Orch Perc Full
939	Misc Percussion
940	2Hand Amb Kit
941	2Hand Dry Kit
942	2H Kit Unit1
943	2H Kit Unit2
944	<b>Xylophone</b>
945	<b>Glockenspiel</b>
946	<b>Chimes</b>
947	2Hand DrumCorp

948	Lite Metal
949	Woody Perc
950	Celeste

### Pluck

951	<b>Plucked Harp</b>
952	Harp Gliss
953	<b>Nylon String Gtr</b>
954	Nylon Str noA2
955	Nylon for dulc
957	<b>Acoustic Bass</b>
960	<b>Pizz Strings</b>
961	Full Kbd DblBass

### Strings

962	<b>Solo Violin</b>
963	<b>Solo Viola</b>
964	<b>Solo Cello</b>
965	Fast Solo Cello
966	Solo Double Bass
967	Bass/Cello
968	Bass/Cello/Vio
969	Cello/Vla/Cello
970	Cello/Vla/Vln
971	Ens Strings 2
972	Solo Section 1
973	Solo Section 2
979	BassDrum/Timp

### Waveforms

980	<b>Organ Wave 8</b>
981	<b>Buzz Wave 2</b>
982	<b>Ahh Buzz Wave</b>
983	<b>OB Wave 1</b>
984	<b>OB Wave 2</b>
985	<b>OB Wave 3</b>

### Variations

986	Tenor tune alt
987	Dual Ride 1
988	Black Fills C
989	Orc Perc Preview
990	<GM>Standard Kit
991	<GM> Orch Kit
992	Castanets x 3
993	Tambourine x 3
994	Black Fills B
995	Black Fills A
996	2HandDrumCrp NB
997	Sleigh Loop
998	Bs Drm Rumble
999	Church Bell

Note: Items in **bold** represent the primary keymap for each instrument.

## Orchestral ROM Samples

900	Oboe	951	Harp
901	English Horn	953	Nylon String Gt
902	Bassoon	957	Acoustic Bass
903	Clarinet	960	Pizz Strings
904	DbI Reeds	962	Solo Violin
910	SoftTrump	963	Solo Viola
911	French Horn	964	Solo Cello
912	FrenchHrnSect	965	Fast Solo Cello
913	Tuba	966	Solo Double Bass
914	Synth Accord	967	Conga Tone ingrl
915	Tuba % Horn	968	Amb Kick 3 va
920	Timp	980	Organ Wave 8
921	Snare Roll	981	Buzz Wave 2
922	Snare Hit	982	Ahh Buzz Wave
923	Orch Bass	983	OB Wave 1
924	Orch Crash	984	OB Wave 2
925	Tam Tam	985	OB Wave 3
926	Triangle	988	Jackhammer
927	Tamb Roll	989	Scratch
928	Tamb Hit	990	Zap 1
929	Sleigh Bells	991	Alarm Bell
930	Woodblock	992	Deep House Clave
931	Low Clave	993	China Crash
932	Castanet Hit	994	Dry Sidestick
933	Castanet Up	995	Med Open Hi Hat
934	Bi TamTam<v2.0>	996	Syn Vibra Stick
935	Orch Crash ignf	997	Sleigh Loop
937	Dark Triangle	998	BD Rumble <v2.0>
938	MuteTriangle	999	Church Bell
939	Triangle (rel)		
944	Xylophone		
945	Glockenspiel		
946	Chimes		
950	Celeste		

## Orchestral ROM Programs with Controller Assignments

The preset programs in the K2500 Orchestral ROM are organized by category. You can either use them as they are or as a good starting point for your own work. There are many ways to put expressivity and variety in a single program by assigning MIDI controllers to the various DSP functions in its layers. This list describes how each of the preset programs can be modulated or altered by the various MIDI controls. Only those controls which may not be immediately evident are listed. Controls such as attack velocity and keynumber are understood to be assigned to most programs.

Prg #	Program Name	Mod Wheel	Data	MPress	Comments
<b>Pianos</b>					
788	<b>Piano Trio</b>		Ride cymbal fade	Vibrato - Bass	
789	<b>Pno &amp; Syn String</b>	String fade	String swell		
790	<b>Fluid Grand</b>		Wet/Dry mix		
791	<b>Haunted Piano</b>	Harp balance	Wet/Dry mix		
792	<b>Xylopiano</b>	Release ctl	Wet/Dry mix		
793	<b>Grand,Harp&amp;Lead</b>	Lead tremolo	Lead fade	Lead tremolo	Sustain pedal does not affect the lead sound
<b>Orchestras</b>					
900	<b>TotalCntrl Orch1</b>	Layer bal	Adds brass & flute, boosts strings	Swell (trp out - ww solo)	
901	<b>TotalCntrl Orch2</b>	Layer bal, adds harp	Layer balance, adds horns/cuts woodwinds	Swell	
902	<b>BaroqueOrchestra</b>	None	None	Swell	Sost ped disables brass
903	<b>Oboe&amp;Flute w/Str</b>	Strings fadeout	Disables strings	None	
904	<b>Horn&amp;Flute w/Str</b>	Strings fadeout	Disables strings	None	
905	<b>Trp&amp;Horns w/Str</b>	Strings fadeout	Disables strings	None	
<b>Winds</b>					
906	<b>Piccolo</b>	None	Wet/Dry mix	None	
907	<b>Orchestral Flute</b>	Envelope control (slower)	Wet/Dry mix	None	
908	<b>Solo Flute</b>	Timbre (brighter)	Wet/Dry mix	None	
909	<b>Orchestral Oboe</b>	Swell	Wet/Dry mix, rate & depth	Vibrato	
910	<b>Solo Oboe</b>	Vibrato off	Wet/Dry mix	Swell	
911	<b>2nd Oboe</b>	Vibrato off	Wet/Dry mix	Swell	
912	<b>Orch EnglishHorn</b>	Swell	Wet/Dry mix, rate & depth	Vibrato	

**Orchestral ROM**

Orchestral ROM Programs with Controller Assignments

<b>Prg #</b>	<b>Program Name</b>	<b>Mod Wheel</b>	<b>Data</b>	<b>MPress</b>	<b>Comments</b>
913	<b>Solo EnglishHorn</b>	Vibrato off	Wet/Dry mix	Swell	
914	<b>Orch Clarinet</b>	Swell	Wet/Dry mix	Vibrato depth	
915	<b>Solo Clarinet</b>	Swell	Wet/Dry mix	Swell	
916	<b>Orch Bassoon</b>	Swell	Wet/Dry mix	Vibrato depth	
917	<b>Solo Bassoon</b>	Vibrato off	Wet/Dry mix	Swell	
918	<b>Woodwinds 1</b>	None	Wet/Dry mix	None	
919	<b>Woodwinds 2</b>	None	Wet/Dry mix, rate & depth	Swell, vibrato	
<b>Brass</b>					
920	<b>Dynamic Trumpet</b>	Swell	Wet/Dry mix	Vibrato depth	
921	<b>Copland Sft Trp</b>	Vibrato off	Wet/Dry mix	Swell	
922	<b>Orch Trumpet</b>	Timbre (darker)	Envelope Control	Swell, vibrato rate & depth	
923	<b>Soft Trumpet</b>	None	Wet/Dry mix	Vibrato depth	
924	<b>Strght Mute Trp</b>	Vibrato off	Wet/Dry mix	Swell	
925	<b>French Horn MW</b>	Timbre (brighter)	Wet/Dry mix	Vibrato rate & depth	
926	<b>Slow Horn</b>	Vibrato	Wet/Dry mix	None	
927	<b>F Horn Con Sord</b>	Timbre (brighter)	Wet/Dry mix	Vibrato depth	
928	<b>F Horn a2 MW</b>	Timbre (brighter)	Wet/Dry mix	None	
929	<b>French Horn Sec1</b>	None	Wet/Dry mix	Slight swell	
930	<b>French Horn Sec2</b>	None	Wet/Dry mix	Swell	
931	<b>Solo Trombone</b>	Selects legato layer	Wet/Dry mix	Slight swell when MW is off	
932	<b>Tuba</b>	Vibrato rate & depth	Wet/Dry mix	Vibrato rate & depth	
933	<b>Dyn Hi Brass</b>	Swell, legato	Wet/Dry mix	Swell	
934	<b>Dyn Lo Brass</b>	Swell, legato	Wet/Dry mix	Swell	
935	<b>Dyn Brass &amp; Horn</b>	Timbre (darker)	Wet/Dry mix	None	
936	<b>Soaring Brass</b>	None	Wet/Dry mix	None	
<b>Solo Strings</b>					
937	<b>MarcatoViolin MW</b>	Spiccato articula- tion	Wet/Dry mix	Vibrato rate & depth	
938	<b>Solo Violin</b>	Delays auto- vibrato	Wet/Dry mix	Vibrato rate & depth	
939	<b>2nd Violin</b>	Envelope control	Wet/Dry mix	Vibrato rate	
940	<b>Orch Viola</b>	Release time (shorter)	Wet/Dry mix	Vibrato depth	

Prg #	Program Name	Mod Wheel	Data	MPress	Comments
941	<b>Solo Viola</b>	Delays auto-vibrato	Wet/Dry mix	Vibrato rate & depth	
942	<b>Slow Viola</b>	Timbre (darker)	Wet/Dry mix	Swell, vibrato rate & depth	
943	<b>MarcatoCello MW</b>	Spiccato articulation	Wet/Dry mix	Vibrato rate & depth	
944	<b>Solo Cello</b>	Delays auto-vibrato	Wet/Dry mix	Vibrato rate & depth	
945	<b>Slow Cello</b>	Timbre (brighter)	Wet/Dry mix	Vibrato rate, swell	
946	<b>Arco Dbl Bass</b>	Bass boost	Wet/Dry mix	Vibrato depth	
947	<b>Slow Arco Bass</b>	Delays auto-vibrato	Wet/Dry mix	Swell, vibrato rate & depth	
948	<b>Brt Dbl Bass</b>	Decrescendo	Wet/Dry mix	Vibrato rate	
<b>Section Strings</b>					
949	<b>Touch Strings</b>	Timbre (brighter)	Envelope Control	Swell	
950	<b>Fast Strings MW</b>	Selects faster strings	Timbre (darker), Wet/Dry mix	Swell	
951	<b>Chamber Section</b>	None	Wet/Dry mix	Vibrato depth	
952	<b>Sfz Strings MW</b>	Tremolo	None	Swell	
953	<b>Sweet Strings</b>	Fade out	Wet/Dry mix	Vibrato depth	
954	<b>Baroque Strg Ens</b>	Bass boost, layer delay	Wet/Dry mix	Swell	
955	<b>Big String Ens</b>	None	Wet/Dry mix	Swell	
956	<b>Bass String Sec</b>	Bass boost on solo layer	Wet/Dry mix	None	
957	<b>Pizzicato String</b>	Timbre (darker)	Wet/Dry mix	None	
958	<b>Wet Pizz</b>	Treble boost	Wet/Dry mix	None	
959	<b>Arco &amp; Pizz</b>	Timbre (brighter), layer balance	Enables 2nd string layer, stereo panning	Swell	
<b>Plucked Strings</b>					
960	<b>Classical Guitar</b>	Fade/disables key-up layer	Wet/Dry mix	None	
961	<b>Virtuoso Guitar</b>	Vibrato rate & depth	Wet/Dry mix	None	Sost ped enables staccato envelope
962	<b>Acoustic Bass</b>	Vibrato rate & depth	Wet/Dry mix	None	
963	<b>Snappy Jazz Bass</b>	Vibrato rate & depth	Pitch of snap, disables ride	Vibrato rate & depth	Sost ped disables ride cymbal

**Orchestral ROM**

Orchestral ROM Programs with Controller Assignments

<b>Prg #</b>	<b>Program Name</b>	<b>Mod Wheel</b>	<b>Data</b>	<b>MPress</b>	<b>Comments</b>
964	<b>Dynamic Harp</b>	Release time (longer)	Wet/Dry mix	None	
965	<b>Harp w/8ve CTL</b>	Brightness	Enables octave	None	
966	<b>Harp Arps</b>	None	Selects diminished	None	
<b>Keyboards</b>					
967	<b>Celesta</b>	None	Wet/Dry mix	None	
968	<b>Pipes</b>	Timbre (hollow)	Wet/Dry mix	None	
969	<b>Pedal Pipes</b>	None	None	None	
970	<b>Church Bells</b>	Distance	Timbre (brighter)	None	
<b>Percussion</b>					
971	<b>Glockenspiel</b>	None	Wet/Dry mix	None	Sus ped enables key-up layer (for rolls)
972	<b>Xylophone</b>	Timbre (fuller)	Wet/Dry mix	None	Sus ped enables key-up layer (for rolls)
973	<b>Chimes</b>	None	Wet/Dry mix	None	
974	<b>Timpani/Chimes</b>	Alt attack (timp)	Wet/Dry mix	None	
975	<b>Timpani</b>	Alt attack	Wet/Dry mix	None	Sus ped enables key-up layer (for rolls)
976	<b>Timpani &amp; Perc</b>	Alt attack (timp)	None	None	Sost ped enables bass drum. Sus ped dampens.
977	<b>Big Drum Corp</b>	None	Enables both fill layers (black keys: f#3-a#4)	None	Sost ped switches layers. Sus ped dampens.
978	<b>Orch Percussion1</b>	None	Switches fill layers	None	Sus ped dampens
979	<b>Orch Percussion2</b>	None	Wet/Dry mix	None	Sus ped dampens
980	<b>Jam Corp</b>	Alt attack	Pitch control (black keys: f#3-a#4)	None	
981	<b>Conga &amp; Perc</b>	Pitch control	Wet/Dry mix	None	
982	<b>Woody Jam Rack</b>	Pitch control up to 1200ct	Enables random drum layer	None	
983	<b>Metal Garden</b>	Pitch control up to 1200ct	Pitch control down to -1200ct	None	
984	<b>Hot Tamali Kit</b>	Tunes drums, alt atk on snares	Switches to old drum map	None	
985	<b>Funk Kit</b>	Tunes drums	Switches to old drum map	None	



Prg #	Program Name	Mod Wheel	Data	MPress	Comments
	<b>Synths</b>				
986	<b>Magic Guitar</b>	Vibrato depth	Layer balance	Vibrato depth	
987	<b>Glass Bow</b>	Vibrato depth	None	Vibrato depth	
988	<b>Synth Orch</b>	Filter modulation	None	Vibrato depth	
989	<b>Nooage InstaHarp</b>	Vibrato depth	Echo rate	Vibrato depth	
990	<b>AC Dream</b>	Vibrato depth	Enables bell layer	Vibrato depth	
991	<b>Synth Dulcimer</b>	Filter modulation	Wet/Dry mix	None	Sus ped dampens
992	<b>Glistener</b>	Vibrato depth	None	Vibrato depth	
993	<b>Afro Multi CTL</b>	None	Pitch control	None	
994	<b>Tranquil Sleigh</b>	Panner rate	Bandpass width	None	
995	<b>Batman Strings</b>	Vibrato depth	None	Vibrato depth	
996	<b>Ethnoo Lead</b>	Vibrato depth	Pitch control	Vibrato depth	
997	<b>Orch Pad CTL</b>	Vibrato depth	Filter cutoff	None	
998	<b>Choral Sleigh</b>	Sleigh play	None	None	
999	<b>Pad Nine</b>	Vibrato depth	Filter cutoff	None	

## Version 2 Orchestral ROM Setups with Controller Assignments

A setup is a combination of eight zones, each having its own MIDI channel and controller assignments. Designed initially for models with built-in keyboards, setups can be played on K2500R via the Local Keyboard Channel feature: Find this parameter in MIDI mode on the RECV page, change it from None to a channel of your choice, and set your controller to send on only that channel. Now, any notes or MIDI controller data that come in on that channel will be re-mapped according to the display channel (in program mode) and according to the setup (in Setup mode).

To take advantage of Version 2's eight zone setup capability, there are 51 new setups in the Version 2 Orchestral ROM Objects. You will find unique internal program combinations, arpeggiator examples, and special ribbon and controller functions. With as many as 24 assignable controllers shared among 8 independent zones, K2500 MIDI setups can be quite powerful, and they require some experimentation to find all their features and nuances. In order to make this process easier, many setups are programmed according to the certain conventions. The sliders generally provide mixing capabilities either as group faders or individual zone faders. They also provide control over timbre, effects mix, and clock tempo. Other conventions include:

<u>Controller</u>	<u>Default</u>
Slider G:	Wet/Dry mix
Slider H:	Tempo
PSw 1:	Arp on/off
Psw 2:	Latch2
Footswitch 1:	Sustain
Footswitch 2:	Sostenuto
Footswitch 3:	Soft Pedal
Large Ribbon:	Pitch
Small Ribbon Press:	Mono Pressure
Small Ribbon Lin:	Pitch
Mod Wheel:	Mod Wheel
MPress:	MPress

These are the Setups provided in the Orchestral ROM:

900	<b>Deep Piano Rbn</b>	Sliders A-C: zone faders; Lg Rib : fx depth, arp vel & pan (celeste); ModWhl: sleigh mod; PSw2: zone mute (celeste)
901	<b>Choir &amp; Harp</b>	Sliders A-B: zone faders; FootSw1: arp latch; FootSw2: zone mute; Lg Rib: tempo; PSw2: harp octave
902	<b>Orchestrator</b>	Sliders A-D: zone faders, Slider F: key vel cym roll; FootSw3 solos vox pad; Lg Rib: cym roll; ModWhl: low string balance
903	<b>Piano Concerto</b>	Sliders A-D: group faders; FootSw1: mutes pizz; PSw1: piano solo
904	<b>Xmas Carols</b>	Sliders A-D: group faders
905	<b>Sideline Perc</b>	Sliders A-D: group faders, Slider F: key vel cym roll; FootSw1: glock roll; Lg Rib: cym roll; PSw1 & 2: mute groups

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906	<b>TonalGroov C5-&gt;</b>	Sliders A-D: zone faders; FootSw1: latch; ModWhl: enables shaker & detunes conga; PSw1: mute group
907	<b>Exotic Grooves</b>	Sliders A-D: zone faders; FootSw1: arp latch; ModWhl: percussion pitch; PSw1: mute group
908	<b>Lunar Harp</b>	Sliders A-D: zone faders; Lg Rib: detuned harps; ModWhl: sleigh mod
909	<b>Themes</b>	Sliders A-D: zone faders; FootSw2: arplatch; Lg Rib: string & choir Xfade; ModWhl: string balance
910	<b>Wet Piano</b>	Sliders A-C: zone faders; ModWhl: pad balance
911	<b>enter the Jester</b>	Sliders A-D: group faders; Slider E: string balance; Lg Rib: glockenspiel trigger; ModWhl: vibrato disable
912	<b>Tap the Jester</b>	Sliders A-E: zone faders; Lg Rib: glockenspiel trigger
913	<b>Hybrid Strings</b>	Sliders A-C: zone faders, Slider D: synstring balance
914	<b>Wonderous Spaces</b>	Sliders A-D: zone faders; Lg Rib: pad balance & sleigh pitch
915	<b>Metal Orch Pad</b>	Sliders A-C: zone faders, Slider F: key vel (bells); Lg Rib: bell trigger; ModWhl: bell balance
916	<b>Toon prs</b>	Sliders A-D: zone faders, Slider F: key vel (glock); Lg Rib: glockenspiel trigger, pitch (perc); PSw2: group mute; Press: tempo
917	<b>Tranquil Sea</b>	Sliders A-D: zone faders, Slider E: piano detune; ModWhl: sleigh mod
918	<b>Sick Clock Jam</b>	Sliders A-E: zone faders; ModWhl: pitch bend clock sounds, filter mod bass; PSw1: arp latch
919	<b>Orc Split</b>	Sliders A-B: zone faders; ModWhl: RH string balance
920	<b>Baroque Brass</b>	Sliders A-B: zone faders; Lg Rib: MPress
921	<b>Unison Orchestra</b>	Sliders A-D : group faders,; FootSw1: winds solo, FootSw2: pizz; PSw1: triggers cymbal cras; PSw2: pizz
922	<b>Unison w/Pizz</b>	Sliders A-F: zone faders; FootSw: 1 winds solo
923	<b>Switch Orchestra</b>	Sliders A-E: group faders; Lg Rib: timpani roll (to B3); PSw1 & PSw2: mute group; MPress: timpani roll (to B3)
924	<b>Pizz/Str/Winds</b>	Sliders A-E: zone faders; Lg Rib: timbre ctl
925	<b>Harp Arps Cmaj</b>	Slider A: zone fader, Slider B: keyvel, Slider C: harp octave enable; FootSw1: arp latch, FootSw2: latch2; Lg Rib: harp arps; ModWhl: harp filter; PSw2: ribbon arpeggio select
926	<b>Desert Bloom E1</b>	Sliders A-F: zone faders; PSw2: zone mute (aux. percussion)
927	<b>Exotic Charge</b>	Sliders A-C: zone faders; ModWhl: timbre ctl
928	<b>ET Comes Home</b>	Sliders A-B: group faders; FootSw: 1 arp latch; Lg Rib: Expression (harp arpeggios); ModWhl: string balance

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## Orchestral ROM

### About the Control Setup

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929	<b>Fanfare Orch</b>	Sliders A-C: group faders; Lg Rib: snare & timp roll (G1-F#2); ModWhl: low brass balance; PSw1: disagle snare & timp roll, PSw2: triggers Tam Tam; MPress: snare roll (G1-F#2)
930	<b>Switch Orch 2</b>	Sliders A-D: zone faders; ModWhl: fades woodwinds; PSw1: mute group, PSw2: timbre select
931	<b>Orbiting Venus</b>	Sliders A-D: group faders; ModWhl: pad LFO rate; PSw1: zone mute
932	<b>Glass Dulcimer</b>	Sliders A-D group faders, Slider F: keyvel; Lg Rib: syn. dulcimer note trigger; ModWhl: syn. dulcimer envelope filter
933	<b>Hybrid Reeds</b>	Sliders A-B: zone faders
934	<b>Two Hand Pizz</b>	Sliders A-D: zone faders; ModWhl: pizz timbre
935	<b>Slo Str &amp; Horn</b>	Sliders A-B: group faders; ModWhl: string fade
936	<b>Pianist Band</b>	Sliders A-E: zone faders; Velocity triggers left hand kicks and RH snares
937	<b>Prepared Pianos</b>	Sliders A-C: zone faders
938	<b>FSW1 solo winds</b>	Sliders A-F: zone faders; FootSw1 holds strings & solos winds; ModWhl: string fade
939	<b>Strings&amp;Winds</b>	Sliders A-F: group faders
940	<b>Str Ens Solo MW</b>	Sliders A-E: zone faders; ModWhl: solo strings; PSw2: slow passages
941	<b>Pno&amp;Vox&amp;Pizz</b>	Sliders A-E: group faders; ModWhl: timbre ctl
942	<b>Down Wind SmRbn</b>	Sliders A-D: zone faders; Sm Rib Press: wind trigger; Lg Rib: wind speed; PSw1: wind sost ped, PSw2: guitar / piano select
943	<b>Guitar &amp; Piano</b>	Sliders A & B: group faders; ModWhl: disables classical guitar release noise
944	<b>Cirrus 9</b>	Sliders A-C: group faders; Slider D: harp octave enable; FootSw2: latch2; Lg Rib: pad filter ctl; PSw2: mute group
945	<b>Dry Plucks</b>	Sliders A-C: zone faders
946	<b>String Collage</b>	Sliders A-C: zone faders; ModWhl: string ensemble timbre
947	<b>Esoterica</b>	Sliders A-E: zone faders; MPress: sound f/x expression
948	<b>Poseidon</b>	Sliders A & B: group faders
949	<b>Stalkers</b>	Sliders A-C: group faders; FootSW: 1 arp latch; ModWhl: bell/percussion pitch bend
950	<b>Diabolic Trickle</b>	Sliders A-C: group faders; FootSw: 1 arp latch; Lg Rib sec: 1: bell pitch bend, sec 2: explosion mod, sec 3: explosion pitch; ModWhl: pad timbre; PSw2: explosion trigger

### About the Control Setup

The default Control Setup (97 Control Setup) has been updated. Sliders B-H are now assigned to MIDI controller numbers 22-28. CC pedal 1 is now assigned to MIDI controller 4. These default settings will make it easier to assign control sources from within the Program editor.

## Mirror Image Drum Map

The Mirror Image Drum Map is a drumkit layout that enables a natural two-hand style of playing. The Mirror Image Drum Map gets its name by its instruments being laid out in a mirror image of itself with D4 being the point of reflection.

### Getting Started

Play the key, D4. You'll notice that snare drum is assigned to it. From there, play 1 semitone down (C#4), and up 1 semitone (D#4). Notice that the two are the same snare drum. Play 2 semitones down (C4) and up 2 semitones (E4). Notice that the same bass drum is assigned to both keys. (Bass drum is also repeated on E3 and C4, which is particularly useful in fast double bass drum playing.) Notes 3 semitones down, and up 3 semitones, have the same hi-hat, etc.

There are, however, two instances – G4 and E6 – where the left and right sides do not match. They deviate from the mirror image scheme to accommodate the more familiar one hand playing of hi-hat and tambourine.

The layout of the drums and various percussion instruments are easy to remember. Just keep in mind that the basic drumkit consisting of Snare, Bass Drum, Toms, and Cymbals are in the range of C3-E5, or the "inner core" range. The two remaining ranges (C2-B2 and F5-C7) which extend out to the left and right edges of the keyboard make up the "outer edge" range, and will generally consist of auxiliary percussion instruments. This "inner" and "outer" range structure is also maintained in the drum corps programs (#977, #980) and orchestral percussion programs (#978, #979).

It is easy to memorize the placement of instruments if you think of the double and triple groupings of the black keys as one instrument or instrument type. Look at the center group of black keys, C#4 and D#4. Think of that grouping as the snare drum. Fanning out on both sides to the next group of black keys, F#3, G#3, A#3 on the left hand side, and F#4, G#4, A#4 on the right hand side, are the toms. Fanning out farther to the next set of double black keys are the cymbals. The next set of triple black keys are the timbales, and the next set of double black keys are the congas. The four white keys under the toms are the hi-hats.

In the "outer edge" range, white keys are generally hand-held percussion toys or various useful articulations of the congas laid out such that one can play typical conga patterns with one hand.

Try playing in a straight eighth note beat D#2, E2, F2, D#2, E2, F2, C2, C#2 and repeat. For easy right-hand tambourine playing, try playing in the same eighth note beat C7, A6, E6, C7, A6, E6, C7, A6 and repeat. Now combine the left-hand conga part and the right-hand tambourine. A combination of easily fingered patterns will often yield a useful rhythm section.

### Sostenuto Pedal

One more bonus was added to the drumkit programs—the sostenuto pedal. Just hold down the sostenuto pedal and again play in a steady eighth note beat E3, G3, A3, B3, G3, A3, B3, G3 and repeat. The sostenuto adds percussion to the white keys ranging from F3 to C4, and C#4.

## Sticking

The Mirror Image Drum Map lets you simulate the sticking that a real drummer would use. Try playing a tom tom fill from hi tom to low tom using a paradiddle sticking (RLRRLRL). This should be very easy to execute with minimal physical motion. The symmetrical inward-outward motion also feels comfortable and smooth. Doubling or layering of instruments while maintaining the beat is as easy as grabbing chords. A good example of this can be illustrated with program 977, "Big Drum Corps".

Play a steady repeating sixteenth note snare drum pattern with your left and right thumbs alternating on the keys, C#4 and D#4. Keep that same left, right, left, right hand motion going but simply add your index fingers to play the next black keys which would be A#3 in the left hand and F#4 in the right hand. Finally, add the ring finger for the low tom on F#3 and A#4. If you look at your hands now the right hand is making an E flat minor chord and its mirror image chord, F# Major, is in the left hand. After playing with the drum programs you'll notice how easy it is to play multiple drums in unison or to add or drop a tom or crash cymbal while maintaining a continuous flow of rhythm.

For those of you who prefer the old Kurzweil drum map for the drumkit programs, it is available on the Controller slider.

Drumkit Programs: 984, 985

Drum Corps Programs: 977, 980

Orchestral Percussion Programs: 978, 979