

HS Series
YAMAHA ELECTONE®

A Legend Reborn



YAMAHA

Once upon a time, Yamaha created a concept that became a musical legend...

The concept was an organ that would be much more than just an organ.

The concept was an instrument that would provide the power of an entire orchestra.

The name of that concept was the Yamaha *Electone*.

The Yamaha Electone soon became the bestselling electronic organ on earth; it became a musical legend.

Now that legend has been reborn—in the HS Series Electones.

HS Series Electones open a brand new chapter in the grand tradition of the Electone—a chapter defined by a bold new design that reflects a high-tech revolution inside.

That revolution brings you—in all five HS Series models—one of the most powerful entertainment centers the world has ever seen.

It brings you incredible sound with advanced AWM and FM tone generation, and highly-efficient tuned bass reflection-type speakers.

It brings you exciting new possibilities in musical expression too, with 49-key touch-sensitive keyboards, clean and clear digital effects, and an enormous range of AWM keyboard percussion.

It also brings you creative freedom, with rhythm and chord programming, FM voice editing capabilities, and song multi-tracking features.

And it brings you almost infinite system expansion with the awesome power of MIDI.

The HS Series Electones have unlocked the door to a whole new dimension in electronic sound.

They've started the legend all over again.





Incredible Sound

The power of the HS Electone begins with its sound—the incredibly true-to-life sound of Yamaha's advanced AWM and FM tone generating processes (*see box*).

The vast selection of musical instrument voices—those on the panel plus the 59 in the Multi-Menu—range from traditional strings and brass to contemporary electric piano and synthesizer sounds.

All FM tone groups have a memory space for transferring voices in from the Multi-Menu.

You can assign these sounds to any keyboard—even the pedals. You can mix them too, and spice them up with a variety of clean, clear digital effects* like tremolo, chorus, symphonic, flanger, and delay—which use the same advanced digital signal processing as Yamaha's professional effects devices.

The HS-8 even has stereo digital reverb, which adds the true ambiance of a real concert hall to your sound.

* Some models incorporate different effects configurations than others. For complete information, see Model Comparison Chart.

Playing Expression

The HS Electone offers a host of features that combine to give you enormous flexibility in playing expression.

To begin, all HS Series upper and lower (and the HS-8's pedal) keyboards feature Touch Tone, or initial- and after-touch response. (Initial- and after-touch response lets you control both volume and tone color as you play, depending on how hard you press the keys.)

They offer Touch Vibrato too, which lets you control the vibrato effect as you play—the harder you press the keys, the more intense the vibrato.

The Glide feature (accessed with the footswitch) lets you bend notes of the Upper and Lower Orchestral and Lead instruments in half-steps.



Advanced Tone Generation

All HS Electones feature Yamaha's unique tone generating processes: FM



HS-8

for musical instrument voices and AWM™ for percussion instrument sounds (plus special preset instrument voices for the HS-8).

FM

FREQUENCY MODULATION

FM (Frequency Modulation) tone generation is Yamaha's advanced digital

process that precisely matches the shapes of an instrument's sound waves and controls the complex harmonics as they change through their decay period. Since FM voices have the same physical sound characteristics as the instruments they represent, they sound amazingly real. Not only that, they let you create your own instrument sounds.

AWM™ (Advanced Wave Memory) tone generation is Yamaha's breakthrough process that uses actual

digital recordings, or high-resolution "samples," of real musical instruments to create

AWM
ADVANCED WAVE MEMORY

sound. AWM™ instruments sound real because they are real.

Sound Editing

The Voice Edit menu (see *Multi-Menu* section) brings out the creative

Lead Slide lets you add portamento to the monophonic Lead instruments. This lets you reproduce the slurring effects of trombones, trumpets, saxophones, etc.

Multi-function pitch bend and modulation wheels (HS-8 only) give you even further expressive freedom. The pitch wheel bends Lead or Upper Orchestral notes, and also controls rhythm tempo. The modulation wheel controls the vibrato or the brilliance of the Lead or Upper Orchestral instruments. An optional second expression pedal (HS-8

only) lets you control the wheel functions by foot.

Real-time Drumming

The Keyboard Percussion feature turns the HS Electone's lower and pedal keyboards into drums.

Since all drum sounds are generated by Yamaha's unique AWM process, you can make them louder or softer depending on how hard you hit the keys.

There are 34 different drum and percussion sounds—everything from conventional bass drum, snare, toms and cymbals to latin timbales and congas, and even modern electronic snare and toms.



You can store data for your voices, registrations, rhythms, and songs with convenient RP-3 and RP-5 RAM packs. (You can also save them digitally on cassette tape.)

genius in you by letting you change the preset FM voices.

Just like a synthesizer, the voice editor lets you access each FM operator and adjust its output level and envelope generator parameters in order to "personalize" the instrument tone colors, or create entirely new sounds.

You store your new voices in User Voice memory banks.

Rhythm Creation

With the HS Electone you're not limited to the preset rhythm patterns; you can create your own.

You can create your own chord patterns, too.

The Multi-Menu's Rhythm Pattern and Rhythmic Chord

Programmers (R.P.P., R.C.P.) let you modify the existing preset rhythm and chord patterns or create your own from scratch.

You can add accents too, and even designate stereo panning. A time quantizing feature helps you keep your rhythms right on the beat.

Song Programming

The HS Series Electone offers easy-to-use song programming features that help



The Registration Memory is a series of memory banks where you can preprogram entire panel settings for instant recall during performance.

Automatic Accompaniment

The HS Electone has wide-ranging automatic accompaniment

features that give you the power of an ensemble, or even an entire orchestra.

It comes with more than a dozen basic preset rhythm patterns, plus variations that add up to 50 rhythms.

These patterns cover a

broad range of rhythmic styles—everything from traditional waltz and swing to contemporary 8-beat, 16-beat and more.

The Auto Bass Chord (A.B.C.) system adds matching bass and chord patterns to your rhythm foundation, giving you a back-up band accompaniment that you can control with one finger (or more).

The Arpeggio Chord feature adds melodic chords to the back-up.

The Melody On Chord (M.O.C.) system automatically transforms

you learn, practice, compose and even perform.

The Chord Sequence Programmer (C.S.P.) lets you program sequences of chords for an entire composition in step-time—one measure at a time—complete with registration changes.

In the same way, the Rhythm Sequence Programmer (R.S.P.) lets you program the corresponding sequences of rhythm patterns.

The Full Music Programmer (F.M.P.), a five-track digital recorder, lets you record a song's Upper,

Lower, Pedal and Lead parts, plus registration changes. You can go back and change any part without affecting the others.

Expand

With its MIDI jacks, the HS Electone can synchronize with and control or be controlled by other MIDI-equipped Electones or Yamaha Electone expanders like the MDR-2P music disk recorder, external AWM and FM tone generators, and more.

The HS can also synchronize with other MIDI-equipped instruments like synthesizers, portable keyboards and digital pianos, as well as devices like music sequencers, digital effectors, and even computers.

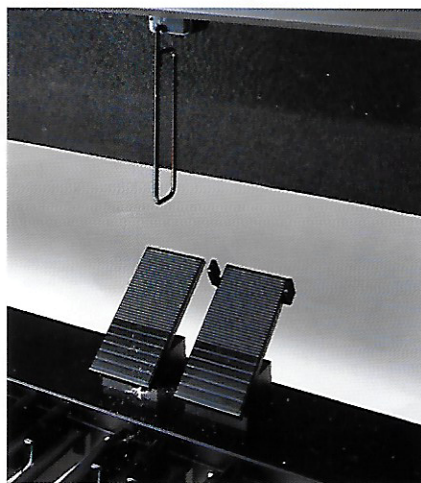


All HS Electones come with MIDI In and Out jacks for synchronization with other MIDI-compatible instruments.

upper keyboard single-note melodies into full harmonies—contoured by the chords you play on the lower keyboard.

Foot-switching

The multi-function footswitch (located on the expression pedal) lets you control rhythm



The HS-8's main expression pedal incorporates two multi-function footswitches. An optional second expression pedal (HS-8 only) controls wheel functions and rhythm tempo.

stopping, ending and fill-ins, as well as Lead, Upper Orchestral and Lower Orchestral Glide by foot.

You designate the footswitch's function with the Multi-Menu.

The HS-8 features a second footswitch that lets you call up registration memories in sequential order.

Flexibility: The Amazing Multi-Menu

All HS Electones feature a highly intelligent *master cylinder*—the Multi-Menu.

Located just above the upper keyboard and accessed via a convenient thumbwheel, the Multi-Menu incorporates 12 'pages' of ten menus with extremely broad-based features.

While at first glance the Multi-Menu appears complicated, in actual operation it's very simple. Used in conjunction with the panel features, it expands your music making potential enormously.

Following is a brief outline of its menus:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

1. The REGISTRATION MENU is a selection of 38 preset panel setups—suitable for a wide range of popular musical styles—ready for *instant* recall.

COMBI	COMBI	COMBI	PIPE	PIPE	PIPE	STRINGS	STRINGS	STRINGS	BRASS	BRASS	WOOD	ACCORD	SYNTH	SYNTH	CEMIC	CEMIC	CEMIC	VOCAL	VOCAL
2	3	4	CREAM1	CREAM2	CREAM3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PIANO	ELEC.	ELEC.	HARPIC	HARP	ACQUST	ELEC.	JAZZ	STEEL	DISSOR	VIBRA	VARIMBA	CELESTA	BAND	KOTO	STER	TURBAN	CLAW	CHIME	WAVE
PIANO1	PIANO2	PIANO3	CHORD	CHORD	GUITAR	GUITAR	GUITAR	GUITAR	GUITAR	PHONE	PHONE	PHONE	PHONE	PHONE	PHONE	PHONE	PHONE	PHONE	PHONE

2. The VOICE MENU is a bank of 59 additional preset instrument sounds that are all transferrable to any FM tone group on the panel.

VOICE	OPERATOR	OUTPUT	ENVELOPE	ENVIRONMENT	FROM	DATA	USER	COPY
EDIT	1	2	3	4	5	6	7	8
	LEVEL	ATT	DR	DIL	DR	PR	COARSE	1

3. The VOICE EDIT MENU is a means of altering, or *personalizing*, the tone color of the preset FM instrument sounds.

MATCH	POLKA	COUNTRY	TANGO	WALTZ	SWING	BALLAD	BOSSA	SAMBA	LATIN	SALSA	SLOW	8 BEAT	8 BEAT	REGGAE	BOUNCE	DISCO	16 BEAT	16 BEAT	ORIGINAL
							NOVA				ROCK	1	2				1	2	TRUCK

4. The RHYTHM MENU is a bank of two or more variations for the preset rhythms located on the



The Multi-Menu pages shown above are for the HS-8 Electone. Features are the same for all models except for page 2 (the HS-4 has five Cosmic voices), page 11 (only the HS-8 has pitch bend and modulation wheels), and page 12 (the HS-4 comes without Flanger/Delay).

Connect

All HS Electones incorporate a variety of RCA-type inputs and outputs, like stereo auxiliary out jacks and an Exp. In jack (for controlling an external device's volume with the main expression pedal).

The HS-8, HS-7, and HS-6 feature a stereo headphone jack, as well as stereo auxiliary in jacks

(for mixing an external instrument or device with the HS).

The HS-5 and HS-4 feature mono headphone and auxiliary in jacks.

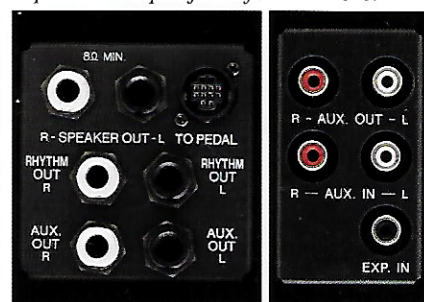
The HS-8 also features phone-type stereo auxiliary and rhythm out jacks.

Cover

All HS Series models come with an acrylic

cover that protects the Electone from dust, and lifts to double as a convenient music stand.

Input and output jacks for the HS-8.



panel; it expands the HS's selection of presets to a total of 50 rhythms.

5. The RHYTHM PATTERN PROGRAMMER, RHYTHMIC CHORD PROGRAMMER MENU is a dual-function menu. The R.P.P. lets you modify any existing rhythm, or create your own from scratch. The R.C.P. lets you preprogram block and arpeggio chords that automatically synchronize with the rhythm during playback.

6. The CHORD SEQUENCE PROGRAMMER, RHYTHM SEQUENCE PROGRAMMER MENU is also dual-functional. The C.S.P. lets you preprogram—step by step, one measure at a time—a series (or sequence) of chords for automatic playback. In the same way, the R.S.P. lets you preprogram sequences of rhythm patterns for automatic playback. You can store both C.S.P. and R.S.P. data in RP-3 or RP-5 RAM packs, or digitally on cassette tape.

7. The FULL MUSIC PROGRAMMER MENU is a digital multi-track recorder. It lets you record and edit the different parts for your composition. You

can store your F.M.P. data in RP-5 RAM packs, or digitally on cassette tape.

8. The VIBRATO, SUSTAIN, TREMOLO, TOUCH MENU is a multi-function menu. It lets you select parameters for the vibrato, sustain and tremolo effects, activate Touch Vibrato and Touch Tone, and select MIDI modes.

9. The FOOTSWITCH, (PITCH WHEEL, MODULATION WHEEL,) TRANSPOSITION, PITCH CONTROL MENU is also a multi-function menu. It lets you designate the functions of the footswitch (and pitch and modulation wheels for the HS-8), as well as transpose the key and fine tune the pitch.

10. The AUTO BASS CHORD, MELODY ON CHORD, FLANGER/DELAY, VOLUME FINE MENU is also multi-functional. It lets you select the different A.B.C. and M.O.C. modes, program parameters for the flanger and delay effects (all models except the HS-4), and control each volume level in fine increments.

Model Comparison Chart



			HS-8	HS-7
KEYBOARDS			(Upper, Lower & Pedal: Initial/After touch)	
VOICE SECTION	Upper Keyboard	Orchestral Voices Combination Voices	Strings, Brass, Wood, Vocal, Volume 1, 2, 3, 4, Volume	
	Lower Keyboard	Orchestral Voices Combination Voices	Strings, Brass 1, 2, Vocal, Volume 1, 2, 3, 4, Volume	
	Upper/Lower Keyboard	AWM Preset Lead Voices Percussive Voices	Piano, Strings, Pipe Organ, Brass, Volume	Flute, Oboe, Trumpet
	Pedal Keyboard	AWM Bass Voices Bass Voices	Wood Bass, String Bass, Volume	
ENSEMBLE SECTION	Upper Keyboard		Orches., Combi., AWM Preset, Lead	Percussive, Lead
	Lower Keyboard		Orches., Combi., AWM Preset, Lead	Percussive, Lead, Combi., Orches.
ARPEGGIO CHORD SECTION			Lower Keyboard	
EFFECTS		Tremolo & Symphonic	Chorus, Tremolo, Upper Combi., Lower Combi., Celeste, Symphonic, Upper Orchestral	
		Sustain		
		User Vibrato		
		Flanger/Delay	Upper Orches., Lower Orches., Lead, Arpeggio Chord, AWM Preset, AWM Bass	Upper Orches., Lower Orchestral
		Others	Manual Balance, Reverb, Modulation Selector & Wheel, Pitch Selector & Pitch Bend Wheel	
AUTO RHYTHM SECTION		Rhythms	March, Waltz, Ballad, Swing	
		Variations		
		Others	Start, Synchro Start, Tempo	
KEYBOARD PERCUSSION SECTION	Lower/Pedal		Lower Keyboard Percussion Selector, Pedal Keyboard Percussion Selector, Surdo Open; Timbales: Low, High; Conga: Low, High; Bongo: Low, High	
REGISTRATION MEMORY SECTION			Memory/To Pack, 1-16	
C.S.P./R.S.P. (Chord Seq. Progr./Rhythm Seq. Progr.)				
F.M.P. (Full Music Programmer)				
A.B.C. (Auto Bass Chord)				
M.O.C. (Melody On Chord)				
REGISTRATION PACK SECTION				
AWM VOICE PACK SECTION			Pipe Organ 1, Brass 1, String Bass 1, 3 Voice Pack Sockets	
MULTI-MENU SECTION				
OTHER CONTROLS			Master Volume, Expression Pedal, Foot Switch Selector (Left: Rhythm Fill In, Stop, Ending; Glide/Right: Registration Shift), Guide Display, Power Switch, Knee Lever (for Sustain)	
OTHER FITTINGS			MIDI In/Out, Headphones Jack, Mic., Mic. Vol., Rhythm Out (L & R), Aux. Out (L & R), RCA Aux. In/Out (L & R), RCA Exp. In, From/To Cassette, Music Stand, Bench, 2nd Expression Pedal (Option)	MIDI In/Out, Headphones In/Out (L & R), RCA Exp.
SOUND SYSTEM	Power Amplifier		30W x 2	
	Speakers		20cm (7.9") x 2; 5cm (2") x 2	
DIMENSIONS Width x Depth x Height				
WEIGHT			79.5kg (174.9 lbs.)	74.5
FINISH				

Model Comparison Chart



			HS-8	HS-7
KEYBOARDS			(Upper, Lower & Pedal: Initial/After touch)	
VOICE SECTION	Upper Keyboard	Orchestral Voices	Strings, Brass, Wood, Vocal, Volume	
		Combination Voices	1, 2, 3, 4, Volume	
	Lower Keyboard	Orchestral Voices	Strings, Brass 1, 2, Vocal, Volume	
		Combination Voices	1, 2, 3, 4, Volume	
	Upper/Lower Keyboard	AWM Preset	Piano, Strings, Pipe Organ, Brass, Volume	
		Lead Voices		Flute, Oboe, Trumpet
		Percussive Voices	—	
	Pedal Keyboard	AWM Bass Voices	Wood Bass, String Bass, Volume	
Bass Voices				
ENSEMBLE SECTION	Upper Keyboard	Orches., Combi., AWM Preset, Lead	Percussive, Lead	
	Lower Keyboard	Orches., Combi., AWM Preset, Lead	Percussive, Lead, Combi., Orches.	
ARPEGGIO CHORD SECTION		Lower Keyboard		
EFFECTS	Tremolo & Symphonic		Chorus, Tremolo, Upper Combi., Lower Combi., Celeste, Symphonic, Upper Orchestral	
	Sustain			
	User Vibrato			
	Flanger/Delay	Upper Orches., Lower Orches., Lead, Arpeggio Chord, AWM Preset, AWM Bass	Upper Orches., Lower Orchestral	
	Others	Manual Balance, Reverb, Modulation Selector & Wheel, Pitch Selector & Pitch Bend Wheel		
AUTO RHYTHM SECTION	Rhythms		March, Waltz, Ballad, Swing	
	Variations			
	Others		Start, Synchro Start, Tempo	
KEYBOARD PERCUSSION SECTION	Lower/Pedal		Lower Keyboard Percussion Selector, Pedal Keyboard Percussion Selector, Surdo Open; Timbales: Low, High; Conga: Low, High; Bongo: Low, High	
REGISTRATION MEMORY SECTION			Memory/To Pack, 1-16	
C.S.P./R.S.P. (Chord Seq. Progr./Rhythm Seq. Progr.)				
F.M.P. (Full Music Programmer)				
A.B.C. (Auto Bass Chord)				
M.O.C. (Melody On Chord)				
REGISTRATION PACK SECTION				
AWM VOICE PACK SECTION			Pipe Organ 1, Brass 1, String Bass 1, 3 Voice Pack Sockets	
MULTI-MENU SECTION				
OTHER CONTROLS			Master Volume, Expression Pedal, Foot Switch Selector (Left: Rhythm Fill In, Stop, Ending; Glide/Right: Registration Shift), Guide Display, Power Switch, Knee Lever (for Sustain)	
OTHER FITTINGS			MIDI In/Out, Headphones Jack, Mic., Mic. Vol., Rhythm Out (L & R), Aux. Out (L & R), RCA Aux. In/Out (L & R), RCA Exp. In, From/To Cassette, Music Stand, Bench, 2nd Expression Pedal (Option)	MIDI In/Out, Headphones In/Out (L & R), RCA Exp.
SOUND SYSTEM	Power Amplifier		30W × 2	
	Speakers		20cm (7.9") × 2; 5cm (2") × 2	
DIMENSIONS Width × Depth × Height				
WEIGHT			79.5kg (174.9 lbs.)	74.5
FINISH				



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HS-6	HS-5	HS-4
Upper: 49 Keys (C ₂ -C ₆), Lower: 49 Keys (C ₁ -C ₅), Pedal: 20 Keys (C ₀ -G ₁) (Upper & Lower: Initial/After touch)		
	Strings, Brass 1, 2, Wood, Vocal, Combi., Volume	Strings, Brass 1, 2, Wood, Combi. 1, 2, Volume
Strings, Brass 1, 2, Vocal, Combi. 1, 2, Volume		Strings, Brass 1, 2, Piano, Combi. 1, 2, Volume
Trombone, Volume		
Piano, Vibraphone, Jazz Guitar, Guitar, Volume		Flute, Oboe, Trumpet, Trombone, Upper, Lower, Volume
Contra Bass 1, 2, Electric Bass, Tuba, Volume		
Combi., Orches.	Percussive, Lead, Orches.	
Percussive, Lead, Orches.		
1, 2, 3, 4, User 1, 2, Volume		
Lower Orches.	Chorus, Tremolo, Celeste, Symphonic, Upper Orches., Lower Orches.	
Upper, Upper Orches., Lower, Lower Orches., Pedal, Lead		
Upper Orches., Lower Orches., Lead		
Lead, Arpeggio Chord	Lead, Arpeggio Chord	
Manual Balance, Reverb		
Bossanova, Tango, Samba, Latin, Bounce, Latin Rock, 8 Beat, Slow Rock, Disco, 16 Beat, User 1, 2		
Fill In 1, 2, User Fill In, Intro, Ending		
Balance, Volume, Tempo Display		Start, Synchro Start, Tempo, Volume, Tempo Display
Instruments: Bass Drum Heavy × 2; Snare Drum: Heavy × 2, Light, Gate Echo, Rim Shot; Hi-hat: Closed, Open; Cymbal: Crash, Ride; Cuica: Low, High; Synth Drum: 1, 2, 3; Brush: Roll, Shot; Tom: 1, 2, 3; Cow Bell; Wood Block: Low, High; Agogo: Low, High; Hand Claps		
M./To Pack, 1-8		
Song 1, 2, 3, 4, C.S.P. Play, R.S.P. Play		
Start		
On, Memory		
On		
Confirm, To Pack, From Pack, Ready, Error, RAM Pack Socket		
(See photo in this brochure)		
Master Volume, Expression Pedal, Foot Switch Selector (Rhythm Fill In, Stop, Ending; Glide), Power Switch, Knee Lever (for Sustain)		
Jack, Mic., Mic Vol., RCA Aux. From/To Cassette, Music Stand, Bench	MIDI In/Out, Headphones Jack, Mic., Mic Vol., RCA Aux. Out (L & R), RCA Aux. In, RCA Exp. In, From/To Cassette, Music Stand, Bench	
	30W × 1	
	20cm (7.9"); 5cm (2")	
109cm (42.9") × 52cm (20.5") × 99cm (39") (163.9 lbs.)	72.5kg (159.5 lbs.)	
Black (Side Panels: Simulated Black Rosewood Grain)		

Descriptions and photographs in this brochure are for information purposes only, and specifications are subject to change without notice. Since options may not be the same in every locale, please check with your Yamaha dealer.

YAMAHA

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