

YAMAHA

MUSIC SYNTHESIZER

SY85



Superior Sound, Extensive Real-time Control, and Total Production Power

The SY85 Music Synthesizer has been designed with the serious musician in mind ... it's also easy to use so the uninitiated can step right into professional-quality electronic music without getting lost in a labyrinth of technical complexity.

In addition to superlative sound quality, the SY85 features "Quick Edit" modes that provide fast, easy access to the most important voice and performance editing jobs so you can customize the sound without having to deal with the details. Of course, you still have full programming power when you want to do some serious voicing.

For unmatched on-stage expression the SY85 features a sophisticated real-time control system that lets you modify up to 8 different parameters as you play — in addition to the traditional pitch and modulation wheels.

There's even a full-featured sequencer that allows the SY85 to function as a complete music workstation.

In terms of sound, real-time control, and total production power, the SY85 offers unprecedented levels of quality and performance.



- 2nd-generation Advanced Wave Memory (AWM2) technology delivers dazzling, true-to-life sound with 30-note polyphony.
- Large 6-megabyte waveform ROM provides plenty of capacity for top-quality samples.
- Internal waveform RAM, expandable to 3.5 megabytes, can be used to load extra waveforms from disk or MIDI sources.
- 256 individual voices can be played individually, or up to four voices can be combined and "layered" to form as many as 128 performance combinations.
- Programmable digital filter with controllable resonance allows the SY85 sound to be tailored as required.
- Top-quality effects rivalling some of the finest separate signal processing systems.
- 8 continuous sliders can be used to control a range of parameters while performing for unmatched expressive power.
- Easy interface including a special function select matrix for efficient, intuitive editing.
- Quick and in-depth editing modes.
- Sophisticated 9-track 10-song sequencer with in-depth editing features.
- 3.5 floppy disk drive and external memory card slots for versatile data management and storage.
- 2 assignable stereo outputs.
- Standard MIDI file compatibility.

AWM2 Tone Generator with Expanded Wave ROM

Yamaha's AWM2 (second-generation Advanced Wave Memory) synthesis system takes the musical reproduction of digitally sampled sound to new levels of performance. The AWM2 sound rivals and often surpasses the quality of the finest compact disc players, giving you unprecedented clarity and realism in the reproduction of acoustic instruments and other natural timbres. For an even more stunning improvement in sound quality the SY85 packs a very impressive 6 megabytes of sampled waveform ROM. This allows longer samples, and therefore more realistic sound. External wave cards and expandable sample RAM with MIDI Sample Dump receive capability provide virtually unlimited potential for loading and using external samples. The SY85 in no way limits you to the "raw" sampled sound.

256 Voices and 128 Performance Combinations

The SY85's internal voice memory holds up to 256 individual voices. A complete set of 256 outstanding pre-programmed voices is provided with the SY85, both in memory and on disk so they can be reloaded if the contents of the internal memory are altered. Start with the pre-programmed voices,

```
PERFORMANCE PLAY  F1:CO Dream
Parallel EF1:EQ -> Rev1 EF2:Cho & Rev

LAYER Voice Number <SP Hyper>ABCD
A=1A4 B=1A2 C=1A4 D=1G2

LAYER Volume <CH Doh >ABCD
127 29 62 21
```

then create your own as you learn how to use the SY85's powerful voice editing features.

Although the SY85 voices can be selected and played individually, a versatile "performance" mode allows up to 4 different voices to be combined in a number of ways for extra depth and variety. Layers can be played simultaneously across the entire keyboard, limited to specific ranges to create split keyboard setups, or overlapped in any way that meets your musical requirements. Up to 128 performance combinations can be stored in internal memory and recalled in the same way as the individual voices. A complete set of pre-programmed performance combinations is supplied with the instrument.

Expandable Sample RAM

The SY85 comes with 512 kilobytes of internal RAM memory that can be used to store AWM2 samples loaded from external sources via either the MIDI Sample Dump protocol or floppy disks. The loaded sample data can be assigned to voices and used in the

same way as the internal AWM2 samples. This means that the SY85 has virtually "open-ended" sample handling capability, giving you access to an unlimited world of sound. Expansion slots allows up to 3 megabytes of additional sample memory to be installed.

```
MIDI SAMPLE DUMP Receive To
Sample=01 Volatile Mem.
```

Advanced Digital Filters for Dynamic Timbre Control

In addition to sophisticated amplitude and pitch envelope generators, LFO control, and assignable controller capabilities, the SY85 features an advanced digital filter system that affords extensive voice programming power. Low-pass, high-pass, band-pass, and band-elimination response can be selected as required, and a complex 6-segment filter envelope generator makes it possible to produce a virtually unlimited range of dynamic filtering patterns. For those of you who miss the distinct musical personality of analog synthesizer type filters, the SY85 filter even has a resonance parameter that allows you to boost the cutoff-frequency peak ... all the way into oscillation if you like. The filter cutoff frequency can be controlled in real time via the modulation wheel, a foot controller, or keyboard aftertouch for real-time timbre control.

```
FEQ L0 L1 L2 L3 L4 RL1 RL2
[LU] +0 +10 -14 -34 -50 +0 +0
```

90 Superb Effects Add Essential Ambience

The SY85 offers 90 outstanding digital effects — including Aural Exciter® * — with two high-performance internal digital signal processors. The internal effect processors are equivalent in quality and performance to some of the most advanced rack-mount units available today. The two effect processors can be interconnected in several ways, providing a wide range of sophisticated parallel and series processing configurations. A range of programmable parameters for each effect make it easy to give your sound the extra warmth and "spaciousness" that it deserves.

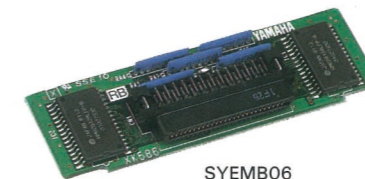
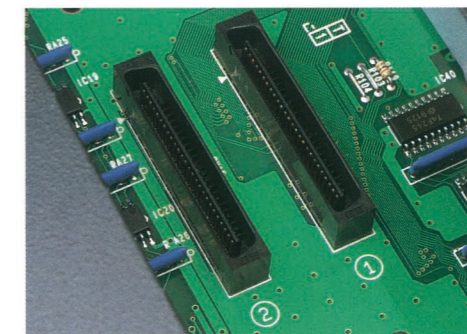
* Aural Exciter® is a registered trademark and is manufactured under license from Apex System, Ltd.

```
EF Mode EF1 Type EF2 Type
2:Face 21:Pit Chng2 48:Pan -> Dly
```

PRESET WAVE LIST											
Wave No.	Group	Wave Name	Wave No.	Group	Wave Name	Wave No.	Group	Wave Name	Wave No.	Group	Wave Name
1	Piano	Piano	62		GtrNyn	123		SynBs9Lp	184		VcDrmBD
2	Key	HardEp	63		GtrNynLp	124		SynBs10	185		VcDrmSD
3		HardEpLp	64		12String	125		SynBs10Lp	186	Perc	AgogoHi
4		SoftEp	65		12StrngLp	126		Pad 1	187		Bongo
5		SoftEpLp	66	E. Guitar	EgSngl1	127		Pad 1Lp	188		Cabasa
6		SynthEp	67		EgSngl1Lp	128		Pad 2	189		CongaLo
7		SynthEpLp	68		EgSngl2	129		Pad 3	190		CongaMt
8		Clavi 1	69		EgSngl2Lp	130		Pad 4	191		CongaSlp
9		Clavi 1Lp	70		EgMute1	131		Pad 5	192		AnaConga
10		Clavi 2	71		EgMute2	132		SynLead1	193		Clap
11		Clavi 2Lp	72		EgComp	133		SynLead2	194		Clave
12		Harp1	73		EgCompLp	134		SynStWv	195		AnaCwbl
13		Harp1Lp	74		EgHarm1	135		DistWv	196		Cowbell
14		Acrdion	75		EgHarm1Lp	136		DistWvLp	197		Maracas
15		AcrdionLp	76		EgHarm2	137	Choir	ChoirAa	198		Timbrine
16		Prgan 1	77		EgHarm2Lp	138		ChoirAaLp	199		Timpani
17		Prgan 1Lp	78	Bass	WoodBass	139		ChoirOo	200		TempBlk
18		PrcOrg1	79		FingBs	140		ChoirOoLp	201		Timbale
19		PrcOrg1Lp	80		FingBsLp	141		Itopia	202		Timbale2
20		PrcOrg2	81		PickBs1	142	TPerc	Glocken	203		Triangle
21		PrcOrg2Lp	82		PickBs1Lp	143		HandBell	204		Whistle
22		RockOrg	83		PickBs2	144		HandBellLp	205	SE	Bottle
23		Pipe Wv	84		PickBs2Lp	145		Marimba	206		E.P. Np
24		Pipe WvLp	85		FretLess	146		SteelDrm	207		Bamboo
25	Brass	Trumpet	86		FretLs Lp	147		Tubular	208		Temp Ra
26		TrumpetLp	87		ThumpBs	148		TubularLp	209		Typist
27		MuteTp	88		ThumpBsLp	149		Vibes	210		VoiceAtk
28		MuteTpLp	89		SlapBs	150		Xylophon	211		ChouCho
29		Trombone	90		SlapBsLp	151	Drum	BD1	212		Vox Bell
30		TromboneLp	91	Folk	Dulcimer	152		BD2	213		Mellow
31		Horn	92		DulcimerD	153		BD3	214		Bell Mix
32		Tuba	93		DlcmSplit	154		BD4	215		Seq1
33		TpEns	94		Kalimba	155		BD5	216		Seq2
34		TpEnsLp	95		Sitar	156		BD6	217		OrchHit1
35		BrsEns	96		Harp	157		BD7	218		OrchHit2
36		BrsEnsLp	97	Synth	SynBrs1	158		BD8	219		Noise
37	Wind	Baritone	98		SynBrs1Lp	159		SD1	220	OSC	AnlgSaw1
38		BaritoneLp	99		SynBrs2	160		SD2	221		AnlgSaw2
39		Tenor	100		SynBrs2Lp	161		SD3	222		Pulse 10
40		TenorLp	101		SynBrs3	162		SD4	223		Pulse 25
41		AltoSax	102		SynBrs3Lp	163		SD5	224		Pulse 50
42		AltoSaxLp	103		SynBrs4	164		SD6	225		Digital1
43		Soprano	104		SynBrs4Lp	165		SD7	226		Digital2
44		SopranoLp	105		SynBrsWv	166		SD8	227		Digital3
45		Clarinet	106		SynBs1	167		SD9	228		Digital4
46		Bassoon	107		SynBs1Lp	168		SD side	229		Digital5
47		Oboe	108		SynBs2	169		Tom1	230		Digital6
48		EngHorn	109		SynBs2Lp	170		Tom2	231		Digital7
49		Piccolo	110		SynBs3	171		HH Open	232		Digital8
50		Recorder	111		SynBs3Lp	172		HH Pedal	233		Digital9
51		Flute	112		SynBs4	173		HH light	234		Digital10
52		Panflute	113		SynBs4Lp	174		HH mid	235		Digital11
53		PnFluteLp	114		SynBs5	175		HH heavy	236		Digital12
54	Strings	Strings1	115		SynBs5Lp	176		Crash	237		DigiVox1
55		Strngs 1Lp	116		SynBs6	177		Ride	238		DigiVox2
56		Strings2	117		SynBs6Lp	178		RideBell	239		DigiVox3
57		Violin	118		SynBs7	179		AnlgTom	240		DigiVox4
58		Viola	119		SynBs7Lp	180		HHopAnlg	241		DigiVox5
59		Pizz	120		SynBs8	181		HHclAnlg	242		DigiWild
60	A. Guitar	rGtrSteel	121		SynBs8Lp	182		Scratch	243		Tri
61		GtrSteelLp	122		SynBs9	183		RezClick	244		Sin

EFFECT TYPES

No.	Type	No.	Type	No.	Type
1	Rev.Hall1	31	Dly->Rev	61	Hall&Plate
2	Rev.Hall2	32	Echo->Rev	62	Echo & Rev
3	Rev.Room1	33	Flg->Rev	63	Flg & Rev
4	Rev.Room2	34	Cho->Rev	64	Cho & Rev
5	Rev.Room3	35	Sym->Rev	65	Sym & Rev
6	Rev.Stage1	36	Pha->Rev	66	Pha & Rev
7	Rev.Stage2	37	Pit->Rev	67	Pit & Rev
8	Rev.Plate	38	Exc->Rev	68	Exc & Rev
9	Rev.WhRoom	39	Dist->Rev	69	Dist & Rev
10	Rev.Tunnel	40	Pan->Rev	70	Pan & Rev
11	Rev.Canyon	41	Flg->Dly	71	Dly & Rev
12	Rev.Basmt	42	Cho->Dly	72	Dly & Dly
13	Early Ref1	43	Sym->Dly	73	Flg & Dly
14	Early Rev2	44	Pha->Dly	74	Cho & Dly
15	Gate Rev.	45	Pit->Dly	75	Sym & Dly
16	Revs Gate	46	Exc->Dly	76	Pha & Dly
17	Dly L.R	47	Dist->Dly	77	Pit & Dly
18	Dly L.C.R	48	Pan->Dly	78	Exc & Dly
19	St.Echo	49	Dist->Echo	79	Dist & Dly
20	Pit Chng2	50	EQ->Rev1	80	Pan & Dly
21	Pit Chng2	51	EQ->Rev2	81	Flg & Flg
22	Pit Chng3	52	EQ->ER	82	Flg & Cho
23	Aural Exc.	53	EQ->Dly	83	Flg & Sym
24	EG Flanger	54	EQ->Echo	84	Flg & Pha
25	EG Chorus	55	EQ->Flg	85	Cho & Cho
26	EG Sympho.	56	EQ->Cho	86	Cho & Sym
27	EG Phaser	57	EQ->Sym	87	Cho & Pha
28	Rotary SP.	58	EQ->Pha	88	Sym & Sym
29	Ring Mod.	59	EQ->Pit	89	Sym & Pha
30	D.Flt(Wah)	60	EQ->Pan	90	Pha & Pha



SYEMBO6 Expansion Memory Board

8 Continuous Sliders Facilitate Real-time Expression Control & Intuitive Editing

The SY85 provides a number of controllers that make one of the most expressive and easy-to-use keyboards available. Its 8 continuous sliders, in particular, provide significant advantages for both real-time expression control and intuitive editing.



Other controllers include a pitch bend wheel, modulation wheel, foot controller, and keyboard aftertouch sensitivity. All of these except the pitch wheel can be set to control a wide range of parameters including amplitude and pitch modulation, filter modulation, and direct control of effect parameters.

Real-time Control

Each of the continuous sliders ("CS1" through "CS8") below the SY85 display panel has a specific real-time control function when playing in the voice and performance modes.

"CS1" and "CS2" can be assigned to control specific parameters of the effects produced by the SY85's two effect processors. They could control reverb or delay time, chorus depth or speed, or just about any parameter that produces a useful real-time sound variation with the selected effect.

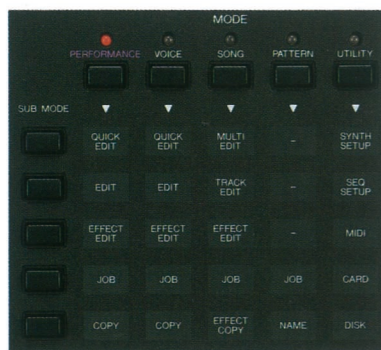
"CS3" and "CS4" are assignable to just about any voice parameters. You could, for example, use them to control pitch envelope generator parameters or LFO parameters in real time.

"CS5" controls the attack rate of the amplitude envelope generator, producing a faster or slower attack, as required. "CS6" controls the release rate of the amplitude envelope generator, producing a faster or slower release, as required.

In the voice mode, "CS7" varies the cutoff frequency of the digital filter, making it easy to produce real-time filter sweep effects. In the performance mode this controller can be used to adjust the balance between voice layers. Similarly, "CS8" increases or decreases the filter bandwidth or the amount of resonance at the filter cutoff frequency in the voice mode, but is used for layer balance control in the performance mode.

Intuitive Programming Interface

The same eight continuous sliders that offers a wide range of real-time control capabilities in the voice and performance play modes make editing easier than ever. The continuous sliders and associated function keys below the large 40-character x 2-line LCD display allow direct selection and control of the parameters appearing directly above them in the display for efficient, intuitive editing. A mode selection matrix further enhances operation by allowing fast, easy access



to any of the SY85 modes. A well-thought-out hierarchy of function pages leads you to the function you're looking for, and a unique "menu" number system allows direct switching between related functions. Additional data entry possibilities are provided by increment and decrement buttons and a data entry dial for fast absolute value changes.

Mixing Control for Sequencer Playback

In the sequencer playback mode the 8 continuous sliders function like the faders on a mixing console, letting you balance the volume levels of the sequencer's 8 instruments for the best overall sound.

Quick Edit Modes

In addition to powerful in-depth editing features, the SY85 offers quick-edit modes that allow fast, easy editing of voice and performance data. The voice quick edit mode, for example, permits fast, easy selection of AWM waves as well as pre-programmed envelope and filter types. Simplified LFO and effect parameters are also provided. The quick edit mode provides everything you need to create complete new voice, or voice "foundations" that can later be refined using the in-depth editing features.

WED	REG>Type	Atk	Sus	Rel	Vel
6	StSlw/Pd	18	63	22	+3

QUICK EDIT PARAMETERS

Wave Groups

1:Piano	Acoustic pianos
2:Key	Other keyboards
3:Brass	Brass instruments
4:Wind	Wind instruments
5:Strings	Strings
6:A.Guitar	Acoustic guitars
7:E.Guitar	Electric guitars
8:Bass	Acoustic & electric bass
9:Folk	Folk & ethnic instruments
10:Synth	Synthesizer sounds
11:Choir	Choir & human voice
12:TPerc	Tuned percussion
13:Drum	Drums
14:Perc	Percussion instruments
15:SE	Sound effects
16:Osc	Basic oscillator waveforms

Envelope Types

00:-----	Full-edit envelope
01:Piano	Acoustic piano
02:Brass	Brass
03:SfzBrass	Sforzando brass
04:SynBrass	Synthesizer brass
05:StFast	Fast-attack strings
06:StSlw/Pd	Slow-attack strings (pad)
07:E.Bass	Electric bass
08:SynBass1	Synthesizer bass 1
09:SynBass2	Synthesizer bass 2
10:Organ	Organ
11:Guitar	Guitar
12:Pluck1	Plucked instrument 1
13:Pluck2	Plucked instrument 2
14:SynPad	Synthesizer pad
15:SynComp	Synthesizer comping (backing)
16:Percusiv	Percussive
17:S.Ideal1	Sound envelope 1
18:S.Ideal2	Sound envelope 2
19:S.Ideal3	Sound envelope 3
20:S.Ideal4	Sound envelope 4
21:Init	Initialized envelope

Filter Types

0:-----	Full-edit filter
1:VeloSoft	Velocity sensitive, soft response
2:VeloWide	Velocity sensitive, wide response
3:VeloHard	Velocity sensitive, hard response
4:VeloReso	Velocity sensitive, resonant
5:SynBass1	Synthesizer bass 1
6:SynBass2	Synthesizer bass 2
7:SynBras1	Synthesizer brass 1
8:SynBras2	Synthesizer brass 2
9:Sweep	Sweep-frequency filter
10:SlowAtak	Slow-attack filter
11:LPF_Init	Initializer LPF
12:HPF_Init	Initialized HPF
13:BP_Init	Initialized BP
14:BEF_Init	Initialized BEF
15:Thru	No filter

Built-in Sequencer and Rhythm Programmer Form a Complete Music Production System

In addition to its normal voice and performance play modes, the SY85 features a full-function sequencer with 8 standard tracks and 1 dedicated rhythm track. Internal memory is provided for 10 complete sequencer "songs" that can be selected and recorded or played as required. The songs can also be "chained" to create longer sequences. Each song has its own 16-part multi-instrument setup in which 16 different voices can be assigned to 16 different

MIDI channels. The multi-instrument setups can be driven by the internal sequencer or an external sequencer or

MIDI-01] Gate=NORM Vel=norm[ERASE][PGM]=P4C6
Gate=NORM Vel=norm[ERASE][PGM]=P4C6

music computer. Each multi-instrument setup also includes individual voice volume, note shift, tuning, panning, and effects.

The SY85 sequencer offers all the functions and features you need for serious music production, and directly drives the SY85 multi-timbre setups. You can record in real-time to capture the spontaneity of a performance, using the step-write mode for precisely-timed fast or complex passages, and using the punch-in feature to "fix" a portion of a previously recorded track.

Rhythm parts can be recorded as "patterns" and then assembled to form the complete rhythm track. The SY85 comes with 100 pre-programmed rhythm patterns, both in memory and on disk, that you can simply select and use. The SY85 even supplies a range of high-quality AWM2 drum and percussion samples combined in "drum kit" voices — so you don't need an external drum machine.

The SY85 can also read and play standard MIDI sequence data files for compatibility with a wide range of other sequencers and music workstations.

RHYTHM PATTERNS

PTN #	PTN NAME	PTN #	PTN NAME	PTN #	PTN NAME
00	Funk1.V	34	Rock3.V	67	Ballad1.V
01	Funk1.F	35	Rock3.F	68	Ballad1.F
02	Funk1.C	36	Rock3.C	69	Ballad1.C
03	Funk2.V	37	Metal.V	70	Ballad2.V
04	Funk2.F	38	Metal.F	71	Ballad2.F
05	Funk2.C	39	Metal.C	72	Ballad2.C
06	Techno1.V	40	Zydec.V	73	NewAge.V
07	Techno1.F	41	Zydec.F	74	NewAge.F
08	Techno1.C	42	Zydec.C	75	NewAge.C
09	Techno2.V	43	R&B1.V	76	Jazz1.V
10	Techno2.F	44	R&B1.F	77	Jazz1.F
11	Techno2.C	45	R&B1.C	78	Jazz1.C
12	Techno3.V	46	R&B2.V	79	Jazz2.V
13	Euro1.V	47	R&B2.F	80	Jazz2.F
14	Euro1.F	48	R&B2.C	81	Jazz2.C
15	Euro1.C	49	Shuffle1.V	82	Reggae1.V
16	Euro2.V	50	Shuffle1.F	83	Reggae1.F
17	Euro2.F	51	Shuffle1.C	84	Reggae1.C
18	Euro2.C	52	Shuffle2.V	85	Reggae2.V
19	House1.V	53	Shuffle2.F	86	Reggae2.F
20	House1.F	54	Shuffle2.C	87	Reggae2.C
21	House1.C	55	FunkSfl.V	88	Latin.V
22	House2.V	56	FunkSfl.F	89	Latin.F
23	House2.F	57	FunkSfl.C	90	Latin.C
24	House2.C	58	Fusion1.V	91	LatnRck.V
25	House3.V	59	Fusion1.F	92	LatnRck.F
26	House3.F	60	Fusion1.C	93	LatnRck.C
27	House3.C	61	Fusion2.V	94	Samba.V
28	Rock1.V	62	Fusion2.F	95	Samba.F
29	Rock1.F	63	Fusion2.C	96	Samba.C
30	Rock1.C	64	NewRock.V	97	Bossa.V
31	Rock2.V	65	NewRock.F	98	Bossa.F
32	Rock2.F	66	NewRock.C	99	Bossa.C
33	Rock2.C				

External Storage: 3.5" Floppy Drive and Data Cards

For convenient mass data storage, the SY85 features a built-in 3.5" floppy disk drive that can be used to store both synthesizer and sequencer data. Floppy disks are a convenient way to store and transport data, and you can easily make copies of data you want to share with others.

Synthesizer data can also be saved to compact Yamaha MDC64 memory cards. A single card holds a complete set of 256 voices and 128 performance combinations. The SY85 also has a waveform card slot that accepts pre-programmed cards containing sample data that goes with an associated voice card, or separate samples that you can load into the sample RAM and use to create your own voices.

Comprehensive MIDI Implementation Plus MDR Facilities

Since the SY85 may be asked to perform in any MIDI system, it has been provided with a comprehensive set of MIDI parameters for maximum compatibility and versatility. Receive and transmit channels are independently programmable, a program change assignment table maximizes voice selection versatility, MIDI bank select messages can be received and transmitted for expanded voice selection capability, and a range of bulk dump functions make data transfers to bulk storage devices quick and easy. A range of "MDR" (MIDI Data Recorder) functions can be used to receive bulk data from external MIDI devices which can then be saved to floppy disk.



PERFORMANCE LIST

BANK I

Vce#	Name	Vce#	Name	Vce#	Name	Vce#	Name
A1	CO Dream	C1	CO Orch	E1	CO Jazzr	G1	CO Pnooh
A2	KY Piano	C2	KY Digi1	E2	OR Gimme	G2	OR Nave
A3	SP Aztec	C3	SP Faery	E3	SP Lite	G3	SP Ace
A4	SC Wyrz	C4	SC Talk	E4	SC Buzz	G4	SC Point
A5	CH Choir	C5	CH OohAh	E5	CH Munch	G5	CH Comet
A6	BA Pick1	C6	BA Pick2	E6	BA Rezzo	G6	BA Guppy
A7	ST Rosin	C7	ST Pitz	E7	ST Dark	G7	ST Big
A8	BR Stab	C8	BR Sfz	E8	BR Saw	G8	BR Fatti
B1	CO Soire	D1	CO Sable	F1	CO E.S.P	H1	CO Inca
B2	OR Bee	D2	KY Roody	F2	KY Elek	H2	KY Funky
B3	SP Lush	D3	SP Slide	F3	SP Stars	H3	SP Vekta
B4	SC Rude	D4	SC Klav	F4	SC Snaps	H4	SC Pizza
B5	CH Breth	D5	CH Vespa	F5	CH Abyss	H5	CH Oral
B6	BA Swap	D6	BA -Fret	F6	BA Mini	H6	BA Doom
B7	ST Octvs	D7	ST Rings	F7	ST 2002	H7	ST Tron
B8	BR Pro5	D8	BR Forte	F8	BR Obie	H8	BR Swell

BANK II

Vce#	Name	Vce#	Name	Vce#	Name	Vce#	Name
A1	CO Ncert	C1	CO Stass	E1	CO Gospl	G1	CO Kings
A2	KY Loud	C2	KY Digi2	E2	OR Cheap	G2	KY Calio
A3	SP Carol	C3	SP Whino	E3	SP Pluto	G3	SP Anlog
A4	SL Mitey	C4	SL L7	E4	SC Clank	G4	SC Wind
A5	ME Orion	C5	ME Honto	E5	ME Ecko	G5	ME Spark
A6	GT Amped	C6	GT Phunk	E6	GT Harm	G6	GT 12Str
A7	SE Rolls	C7	SE Xeno	E7	SE Zoom	G7	SE Files
A8	WN Tenor	C8	WN Alto	E8	BR Reeds	G8	BR Miles
B1	CO DXStr	D1	CO Megin	F1	CO Ethos	H1	CO Happi
B2	OR Sine	D2	KY Jerry	F2	KY PnoMW	H2	KY Digi3
B3	SP Venus	D3	SP Hinx	F3	SP Synth	H3	SP Arpeg
B4	SL Chick	D4	SL Eazy	F4	FI Santo	H4	TP Bells
B5	ME Glitz	D5	ME Mars	F5	ME Alien	H5	ME Hit
B6	GT Strat	D6	GT Rock	F6	GT EI12	H6	GT Acctc
B7	SE C-tar	D7	SE Storm	F7	SE Delay	H7	SE Hero
B8	WN Sacks	D8	WN Panic	F8	BR Lips	H8	BR Fanfr

VOICE LIST

BANK I

No.	Voice Name
A1	SP Makro
A2	SP Movie
A3	SP SawSt
A4	SP Poly
A5	SP Sweet
A6	SP Phaze
A7	SP Abyss
A8	SP Glass
B1	AP Grand
B2	AP Rock
B3	AP Tack
B4	AP Chors
B5	AP Dance
B6	AP Touch
B7	KY EP 1
B8	KY EP 2
C1	BA Wood
C2	BA Pitz
C3	BA Fingr
C4	BA Pick1
C5	BA Pick2
C6	BA Frtls
C7	BA Thump
C8	BA Slap
D1	ST Power
D2	ST Sectn
D3	ST Arco
D4	ST Pizz
D5	ST Deep
D6	ST Sfz
D7	ST Violn
D8	ST JeanL

BANK II

No.	Voice Name
A1	SP Sweep
A2	SP Space
A3	SP Nasty
A4	SP Smoky
A5	SP Goner
A6	SP Vizon
A7	SP Slow
A8	SP Sqare
B1	KY EP 3
B2	KY EP 4
B3	KY EP 5
B4	KY EP 6
B5	KY EP 7
B6	KY EP 8
B7	KY EP 9
B8	KY EP 10
C1	BA Syn 1
C2	BA Syn 2
C3	BA Syn 3
C4	BA Syn 4
C5	BA Syn 5
C6	BA Syn 6
C7	BA Syn 7
C8	BA Syn 8
D1	ST Sizzl
D2	ST Brizz
D3	ST Thin
D4	ST Dark
D5	ST Synth
D6	ST Anlog
D7	ST Combo
D8	ST Tron

No.	Voice Name
E1	SC Jrney
E2	SC Mute
E3	SC Metal
E4	SC Vox
E5	SC Aha!
E6	SC Topia
E7	SC Wires
E8	SC Vocal
F1	BR Tpts
F2	BR Stab
F3	BR Toto
F4	BR Rezz
F5	BR Saw
F6	BR SawSF
F7	BR Wow
F8	BR Swell
G1	GT Harm
G2	GT Strt3
G3	GT Dist
G4	GT Warm
G5	GT Comp2
G6	GT Wah
G7	GT Feed
G8	GT Jazz
H1	ME Voics
H2	ME Torni
H3	ME Soro
H4	ME Grind
H5	ME Gizmo
H6	ME Bottl
H7	ME Templ
H8	DR Zones

BANK III

No.	Voice Name
A1	SP Paddy
A2	SP Nehan
A3	SP Wine
A4	SP Hyper
A5	SP Big
A6	SP Exita
A7	SP Freqs
A8	SP Mello
B1	KY EP 11
B2	KY EP 12
B3	KY Clav 1
B4	KY Clav2
B5	KY Hrspi
B6	KY Acrdn
B7	KY Cali1
B8	KY Cali2
C1	BA Syn 9
C2	BA Syn10
C3	BA Syn11
C4	BA Syn12
C5	SL Digi
C6	SL Lead
C7	SL Saw 1
C8	SL Saw 2
D1	TP Timp
D2	TP Glock
D3	TP Hands
D4	TP Mmba
D5	TP Steel
D6	TP Tubal
D7	TP Vibes
D8	TP Xylo

No.	Voice Name
E1	SC Synnr
E2	SC Digi1
E3	SC Bari
E4	SC Scaff
E5	SC Bell
E6	SC Digi2
E7	SC Rezz
E8	SC Digi3
F1	BR Syn 1
F2	BR Syn 2
F3	BR Syn 3
F4	BR Syn 4
F5	WN Tenor
F6	WN Alto
F7	WN Sopr
F8	WN Bari
G1	SE Rain
G2	SE Star
G3	SE BDup
G4	SE Templ
G5	MI Ride
G6	SE Alert
G7	BR East
G8	BR Tooth
H1	SE Indus
H2	SE Chou
H3	SE Demon
H4	SE Dropr
H5	SE Wind
H6	SE Rezo
H7	SE Noize
H8	DR GMIDI

BANK IV

No.	Voice Name
A1	CH Aah
A2	CH Ooh
A3	CH Ghost
A4	CH Vespa
A5	CH Vocod
A6	CH Pure
A7	CH Quire
A8	CH Breth
B1	OR Jaz B
B2	OR Perc
B3	OR Smoke
B4	OR Dist
B5	OR Cheap
B6	OR Click
B7	OR Pipes
B8	OR Airy
C1	SL Squar
C2	SL Sync
C3	SL Cutty
C4	SL Hamma
C5	SL Pulse
C6	SL Dist
C7	SL Lyle
C8	SL Whisl
D1	TP SynDr
D2	TP Loggy
D3	TP Angle
D4	TP Bambu
D5	TP Syn
D6	TP Siam
D7	TP Tinkl
D8	TP Agone

No.	Voice Name
E1	FI Blue1
E2	FI Kalim
E3	FI Sitar
E4	FI Harp
E5	FI DulcM
E6	FI DulcD
E7	FI Dudel
E8	FI Blue2
F1	WN Pan
F2	WN Clari
F3	WN Basso
F4	WN Oboe
F5	WN Picc
F6	WN Recor
F7	WN Flute
F8	WN Breth
G1	FI Lip
G2	WN SaxSF
G3	SE Heli
G4	MW EGBia
G5	AT EGBia
G6	MI EPNP
G7	MI Hiss
G8	MI Crash
H1	SE Gobin
H2	SE Up&Up
H3	SE S&H
H4	SE Hyena
H5	SE It
H6	SE Hell
H7	SE Pops
H8	DR Efect

AP: Acoustic Pianos, BA: Acoustic & Electric Bass, BR: Brass Instruments, CH: Choir, CO: Combination, FI: Folk Instruments, GT: Guitar, KY: Other Keyboards, ME: Musical Effect, OR: Organ, SC: Synthesizer Comping (Backing), SE: Sound Effect, SL: Synthesizer Lead, SP: Synthesizer Pad, ST: Strings, TP: Tuned Percussion, WN: Wind Instruments

SPECIFICATIONS

Keyboard:	61 keys, initial and after-touch response.
Tone Generator System:	AWM2 (2nd-generation Advanced Wave Memory), 30-note polyphony. 16-instrument multi-timbre mode with dynamic voice allocation.
Internal Memory:	Wave ROM: 6 megabytes (48 Mbits). Wave RAM: 0.5 megabyte, expandable to 3.5 megabytes using Yamaha SYEMB06 memory modules (x 2) and standard SIMM memory modules (x 2, access time less than 80 nanoseconds). Internal RAM: 256 voices, 128 performance combinations, 10 multi-play setups.
External Memory:	3.5" 2DD floppy disk drive. Wave card slot x 1. Voice card slot x 1.
Sequencer:	Tracks: 9 (8 normal + 1 rhythm). Songs: 10 songs. Simultaneous notes: 32. Capacity: Approx. 20,000 notes (including 8,000 in rhythm track). Rhythm patterns: 100. Record modes: Real-time, step, and punch-in. Resolution: 1/48 quarter note (internal clock), 1/24 quarter note (MIDI sync).

Effects:	90 types (dual DSP units).
Displays:	40-character x 2-line LCD. 27 LEDs.
Controllers:	Wheels: pitch, modulation. Sliders: Output x 2, function x 8. Dial: Data entry dial.
Panel Switches:	53: function select matrix x 10, exit, enter, store, memory x 3, group x 8, program x 8, function x 8, data entry x 2, page x 3, sequencer x 6, others x 2.
Connectors:	Headphones, audio output x 4 (Output 1: L/Mono & R, Output 2: L & R), foot controller, sustain switch, volume pedal, MIDI in, MIDI out, MIDI thru.
Power Requirements:	US & Canadian models: 120 V, 20 W. General model: 220 ... 240 V, 20 W.
Dimensions (W x D x H):	1024 x 367 x 119 mm (3'4-3/8" x 14-1/2" x 4-3/4")
Weight:	14 kg (30 lbs 13 oz)
Supplied Accessories:	MCD64 memory card x 1 Factory set data disk
Optional Accessories:	SYEMB06 expansion memory board (0.5 Mbyte per board). MCD64 memory card

Specifications and appearance subject to change without notice.

For details please contact:

