



CS2x

CONTROL SYNTHESIZER



Fresh wave sounds with deeper dimensions designed to give your music the edge that will truly stand out in the crowd...

- 16 MB of hot dance music wave sounds for use with 256 cool Preset and 256 programmable User Performances, each with up to 4 freely mappable voice "Layers"
- 3 independent digital effects units which can be used simultaneously, including 12 Hewitt types, 14 Chorus types and 62 Variation types
- 8 realtime Sound Control knobs (2 assignable) give you total control over every contour and texture of your sound as you play
- 16-part multitimbral operation for XG and GM song playback (with an external sequencer or computer)
- 1 Performance (with up to 4 Layers) plus 12-part multitimbral capability for adding externally sequenced backing to your realtime play
- Built-in TO HOST computer interface simplifies desktop music system setup
- Stereo LINE INPUT for mixing in audio signals from a sampler, CD player or other system component
- Access CSx bulk data
- 779 normal voices and 30 drum kits (XG format with deeper sonic dimensions), with 64 notes polyphony
- 2 "Scene" memories in each Performance permit instant recall of favorite Sound Control knob positions, plus realtime morphing between Scenes via the Modulation Wheel
- Arpeggiator with 40 pattern types and 10 timing resolution subdivisions, plus MIDI output of Arpeggiator data

Everything you need to create your own unique sound in realtime that will slice right through the mix!

XG VOICE LIST

Piano	Dalcimr2	SidumOr	Bass	SmthFrtl	Impact	Dark Trp	Diet Saw	Glacier	Creper	Ond	Shower
GrandPno	HardVibe	SidumO2	Aco Bass	Strines	Strings3	BrightTrb	Big Lead	Time Pad	Big Pan	Percussive	Thunder
BritePno	Orgel	GospelOr	EngrBass	Violin	Syn Str5	MuteTrp2	HeavySyn	PolarPad	Odin	TnkBell	Wind
Ei Grand	SineMrb	ClkGrpIO	PickBass	Viola	Male Aah	AnnBrs1	SynthAah	RotarStr	Carb	Agogo	Stream
HnkyTonk	Balaton	ChureGr	Frctless	Cello	BrsStrub	AnnBrs2	WagpSyn	ClckPad	Fairy	StesDrum	Bubble
E Piano1	ChrchBel	Guitar	SlapBas1	Contrabs	DoubleHit	DrkTrPft	Mondo	Lite Pad	LoadGlok	Woodblok	Feed
E Piano2	Cimbalom	NylonGtr	SlapBas2	Trem Str	BrsStab80	MelloTb	RezzySaw	GlassPad	AtmosPad	TakoDrum	Dog
Harp1	Balmba	SteelGtr	SynBas1	Pizz Str	Bas Hit	FlurdIn	Dim Saw	Pan Pad	Ring Pad	MeloTom	Horse
Clavi	Carillon	Jazz Gr	SynBas2	Harp	BasHit+	Road	2 Osc	SweePy	Syn Drum	Syn Drum	Twst2
GndPnoK	Santur	CleanGtr	MelloSB1	Timpani	6th Hit	SprnoSax	Toy Lead	Ana. Pad	ChrBel	RevCymb	Kitty
BrtPnoK	Log Drum	Mute Gtr	Seq Bass	Slow Vin	6thHit +	Aho Sax	Big Frve	Inopia	Planet	Mel Tom2	Growl
EiGrPnoK	Orgn	Ovdrive	FingDr	Sw TrStr	Euro Hit	TempSax	Dim Saw	Celestial	Ritnal	Ans Tom	Haunted1
HnkyTnkK	DrawOrgn	Dist Gr	SynBn1DK	Susp Str	EuroHit+	Bari.Sax	PulseSaw	SquarPad	Creation	Rev Cym2	Ghost
Ei Pno1K	PercOrgn	GtrHarmo	ClkSynB	YangChin	VoiceHmn	Oboe	Dr Lead	CC Pad	VibeBell	Real Tom	Maou
Ei Pno2K	RockOrgn	DrRhmG	SynBz2DK	Urganite	Bass	Eng Horn	VelcLead	Snow Pad	TnHeaven	ElecPerc	Call
Harp2K	ChrchOrg	LeadGtr	LeadGtr2	Trumpet	Bassoon	Clarinet	Recorder	StarBst	Rock Tom	DoorSack	DoorSack
Clavi K	ReedOrgn	SteelGtr	AcidBass	Strings2	Trmbone	Clarinet	Digger	Synth Effects	Bonang	Digger	DoorSlam
MelloGrp	Accordion	MelloGtr	FlangeBa	Syn Str1	Tuba	Sax Sect	Vent Syn	Rain	MilkyWay	Azrgan	ScrachC
MelloEP1	Harmnica	DistGr2	SynStr2	Ruby	Male Trp	BrlTrkS	ReedFan	SoundTrk	ReedFan	ScrachS	ScrachS
Harp2.2	TangAc2	NylonGtr3	ResoBass	ChoirAah	Fr. Horn	SoftTenr	DistLead	Crystal	AirBells	Casinet	WindChim
ClaviWah	70sPcOr1	Jazz Amp	MutePkBa	VoiceOoh	BrsSect	HyprAlto	Vox Lead	Atmosphr	Night	Gr.Cassa	Telphon2
DetCP80	DetDwOr	ChorusGt	Fretles2	SynVoice	SynBrs1	TrSax 2	Fat&Pkly	Bright	BellHarp	RevSnar1	Ignition
Chor EP1	DetPcOr	12StrGtr	PunchTm	OchHit	SynBrs2	BasGtr	SoloSine	Goblins	Gilston	Alnar	Squel
Chor EP2	ChurOrg3	DistGtr3	SmthSynB	S.Strngs	BrsSec3	Pipe	PureLead	Echoes	GameImba	GlasPerc	Exhaust
DX Hard	Accordit	PowerGtr2	Fretles3	S.SiwStr	FrtHrSolo	Piccolo	HardSync	Sci-Fi	Puffy	RevSnar2	Crash
DXLegend	Harmo. 2	PowerGtr1	Fretles4	S.Choir	Quack Br	Flute	WireLead	Echoes 2	Smoky	Gamelan	Siren
Harp3	60sOr1	60sOr2	Civ Bass	Srdrdr	Slow Str	Recorder	Brl Lever	SynDrCmp	ChaiBell	Train	Train
PianoStr	Lite Org	Nvln&Sil	JazzRhm	LegatoSt	Trumpet2	PanFlute	Soft Wri	Popcorn	RevKick1	JetPlane	JetPlane
EiGrPno2	60sDr2	FunkGtr1	BakDistEG	LoFi Hit	Tuba 2	Boole	SineLead	Echo Pan	Ebanc	S.Gamlan	Starship
HandlEP	70sDr1	FeedbkGt	TechnGt	Ch.Aah2	TrmP	Shakbchi	SynPckch	Sitar	RevCnDr	Burst	Burst
DX Phase	CharOrg2	SlkBody	ModulBa	Arco Str	Trmbone2	Whistle	Pulse Ld	WarmAtms	Banjo	Rama Cym	Coaster
Dream	DrawOrg2	MuteSIG	DX Bass	MidBrs	MidBrs	Ocarina	SynLead	HollowRls	Shamisen	Rev Tom1	Submarin
EiGrPno3	60sDr3	FeedGtr2	FngSlap	MedChoir	Soft Brs	PanFlut2	Seq.Ana	Prologue	Koto	AsianBel	Laugh
DX Analog	PercOrg2	VclGtrm	VclSlap	VclStrng	60sStrng	Kawal	SynthPd	Keylock	Keylock	Rev Tom2	Scream
DXKototEP	Even Bar	FunkGtr2	VXLprght	Syn Str3	PolyBrs	Synth Lead	NewAgePd	GlockChi	Bagpipe	Sound Effects	Punch
VX EI P1	16-2-2/3	Gt.Pinch	FngBass2	OchHit2	SynBrs3	SquareLd	Warm Pad	Nylon EP	Fiddle	FretNoiz	Heart
VX EI P2	NylonDm	RckRhm2	Jazzy Ba	Ochestr	Warm Trp	Saw Ld	PolySynPd	CleanBel	Shanai	BrlNoiz	Footstep
60sEI P1	Puff Org	Jazz Man	Slapper	Warm Str	FrtHorn 2	CallioPd	ChoirPd	ChorBell	MuteBnjo	Seashore	Applaus2
PulseCiv	Organ Ba	RckRhm1	Orbiter	GrandPad	JumpBrs	Chiff Ld	BowelPad	ClaviPad	DetSitar	Twet	MchinGun
PiercC1	JazOrgn	CleanGtr2	X WireBa	ChoirStr	Trk TBSec	CharanLd	MetalPad	HemoRain	Sitar 2	Telphone	LaserGun
Keyboard Percussiv	KotomOrg	AcidHarmo	Med.Bass	SynVoice2	Trk TBSec2	Voice Ld	Halo Pad	Ancestr	BigKalm	Xplozoin	Xplozoin
Celesta	OrgFlute	MidF.Gtr	Thum&Slp	Ochstr2	HornOch	Fifth Ld	SweepPad	SynMalet	Shanai 2	Applause	Firework
Glocken	TngoAc2	GtFeedbk	Sqr Bass	Kingdom	BrsFall	BassLd	ThickPad	NylnHarp	Tambra	Gumbot	Gumbot
MusicBox	70sDr2	MidF.Gtr2	AkPulse	Choral	BrsSec2	SquarLd2	Soft Pad	FantaBel	Rabab	ScrachC	ScrachC
Vibes	WarmLDr	GtrHrmo2	RubberBa	Treatnch	SyBrsSub	Sine Pad	Sine Pad	Saguro	GatngNz	GatngNz	GatngNz
Marimba	SloRotar	NasalGtr	CS Lght	70s Str	SynBrs4	LMSquare	Shwimmer	EchoBell	Taisho-k	CtngNz2	CtngNz2
Xylophon	TrmOrgFl	NastGst	Fish	Velo Str	Hr Brass	ThickSaw	Converge	Starz	Pungi	DstCutNz	DstCutNz
TribalBel	CherOrg	Ukulele	MedBass	Syn Str4	Chorifrs	BrstLow	Fantasy	AironWnd	Tamboura	Sr Slap	Sr Slap
Dulcimer	ClkOrgn	Mandolin	HardReso	StrngAah	MelloBrs	Hollow	Horn Pad	Rave	Gopichni	B.Slide	B.Slide
Vibes K	PatRotar	PdlSteed	VoiceDoo	AnVelBrl	Dyna Saw	PolyPd80	SltCryst	Kanon	Gonich	P.Scrap	P.Scrap
Marimbak	DrawOrg3	Mu.DstGt	Hammer	AnaVoice	AnVelBr2	Stroud	Heaven	Harp Vox	Hichrki	F.KChk	F.KChk

PERFORMANCE LIST

Ministry	Transine	Ramp	Lipstick	Banners	SweepPd	GndEP	SioStrng	Fretless	RimScrch	Firework	RockMkr
Timbready	DJ Zap	Fat Soap	Metropol	HolyMbr	Pnc&Str	Drums	60Strng	SteelOrgl	Enegls	Enegls	TechRock
TekScene	XChoir	Coastal	WavePad	Sparkle	DarkStr	Jaco	Atlantis	N.Y. 99	Vibe-izm	Vibe-izm	Vibe-izm
Boodoo	Happysyn	Squash	SytrChord	Awaken	Kiseki	Old One	Sweet	Slap	Plankins	SuperArp	NewFunk
Roulette	Tektar	Cosmic	CHoak	4AD	Despair	ChorusEP	Obicstr	Uprght	Hand On	FunkyBro	FunkyBro
LongDay	Gos	FazalLine	Larynx	Thermon	DX EP1	Jupiter	BoogieOn	Science	Kirama	Ochstrs	Ochstrs
Walrus	Noiz+Rez	Gigabass	Scary	Pan	More Ice	Wurlitrz	Simple	DX Super	Sewer	Classical	Mr. Mute
Sync303	VocalGym	SubBs	AkDist	Athens	Chemical	Wurholo	HornSect	Kickt	Swamp	DRUG	WWinds
MDMA	Astral	Lately	WallDey	Abandone	Ayerkok	Clavinet	Jump!	Kasimodo	Radium	X.Sweep	999 Kit
Chordal	SharpLd	Electron	Bitcomp	BellTrll	BlueBook	RezClav	FatBrs	Lounge	HipNosys	Nexus	Bo8 Kit
HardMorf	VanDriva	Stroller	Torture	AirBlower	Moonweed	Jimmy	Syn&Brs	BellZee	Cryton	Katarsis	4 by 4
Faust	Bohkyoh	Syko	M2	Emerald	Alobar	Emerson	CS Warm	DoraDora	TubChoka	Rave	Elec Kit
TrckHook	Pizzoon	Bomber	Big Tune	Ethereal	Kenistry	Full B	Anaswell	Masala	Dark SE	AN Velo	8900 Kit
TechLead	Insomnia	Warp	Nevada	AutoSaw	Abyss	GospelB	OBSX	NuTribal	Hammer	Memes	Session
Europe	SynSteel	Rider	Ocean	Birds	Dandelio	Swish	FatAnne	Emergency	Patty	Messa	Messa
Raveline	Tranzc	HomeOrg	Red Wine	Geometry	OchHits	Full	Obssy	ArFrcce	Obssy	Reflect	Reflect
HouseYa!	Taurus	Money	FatSweep	AcidHits	Ranks	BloodHrp	TrckFX	Drumatic	Euro Kit	Euro Kit	Euro Kit
Earth	Punchy!	GtrRncH	Shadow	Fx Bell	FunkyHit	SuperVox	Steel	Bad Man	7th Rndm	WishUe	WishUe
CS15	101 Bass	DropBass	Dreampad	Beauty	Concert	Spral	RoundSl	SpecWarp	X2-Sweep	DanceFec	DanceFec
MimSaw	303Wave	Bad Ass	FlutePad	Ghosts	Ward	DreepHouz	ChkStrat	Ligo	TankSwp	DrigPhase	DrigPhase
BluGreen	OctaBass	Pop Comp	HinLo	Breathy	CP99	ThaDoorz	RokNasty	Magneto	Acidosis	Ready	Ready
Rapl.in	Harmo	Analog	Venus	Transpad	LoFi	Stryng	Stack	Cyber SE	MadKeef	Becoming	Becoming

Specifications

KEYBOARD	61 keys with Initial Touch	CONTROLS	CONTROLS STANDBY/ON, VOLUME, PITCH, MODULATION, Sound Control Knobs B, SCENE 1/2, Numeric Keypad, ENTER, Mode Select (PERFORMANCE, MULTI, STORE, UTILITY), ARPEGGIATOR, SHIFT/OCTAVE, PART/LAYER w/, PRESET USER PROGRAM w/, Edit Parameter, Rotary Switch, Parameter Value Up/Down buttons 10
ZONE GENERATOR	AWM2 (Wave ROM 16MB)	DISPLAY	LCD (Back Lit)
POLYPHONY	64 notes	TERMINALS	PHONES (Stereo Phone), OUTPUT (Phone): L/MONO/R, DC IN, FOOT VOLUME, FOOT CONTROLLER, FOOTSWITCH, INPUT, TO HOST, HOST SELECT, MIDI IN/OUT/THRU
MULTI TIMBRE	16 or one Performance + 12	POWER SUPPLY	AC adaptor PA-3B or equivalent AC adaptor
PERFORMANCE	256 Presets, 256 Users	DIMENSIONS	976 (W) x 285 (D) x 103 (H)mm (38-3/8" x 11-1/4" x 4-1/16")
VOICE	Normal Voices	WEIGHT	5.7kg (12 lbs., 9 oz.)
		ACCESSORIES	Yamaha AC Adaptor PA-3B Owner's Manual, Data List
	Voices For Performances		
	Drum Voices		
ARPEGGIATOR	40		
EFFECT	Reverb 12, Chorus 14, Variation 62		

For details please contact:



YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan
<http://www.yamaha.co.jp>

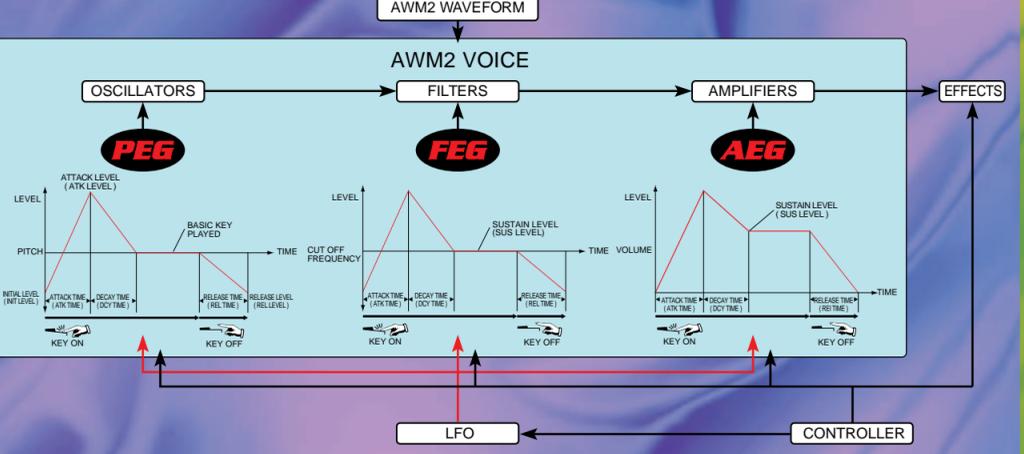
ISO9001
JQA-1868

ISO9001
JQA-1868

ISO9001
JQA-1868



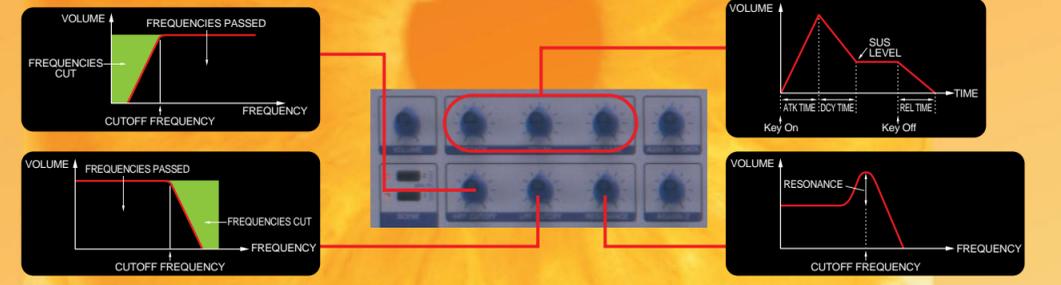
AWM2 Voice Structure



CS2x voices are comprised of an AWM2 waveform plus pitch, filter and amplitude envelope generator parameters which you can manipulate in a variety of ways using LFO, Sound Control knobs and other controllers to create precisely the sound you want.

Analog-style Realtime Control Over Your Sound

Nothing compares to being able to grab a knob and change a sound in realtime – especially when it comes to the type of intricate and evolving synth sounds used in today's dance music productions. That's why the CS2x has 8 Sound Control knobs which give you direct access to key sound parameters like envelope (attack, decay, release), filter (high pass and low pass), and resonance. Two extra assignable knobs can be assigned to control the parameter of your choice, whether it be stereo panning, Arpeggiator tempo, effect send level or one of many others. You can store your favorite knob positions in the two Scene memories for instant recall as you play. With the CS2x, you're guaranteed direct control over your sound at all times.

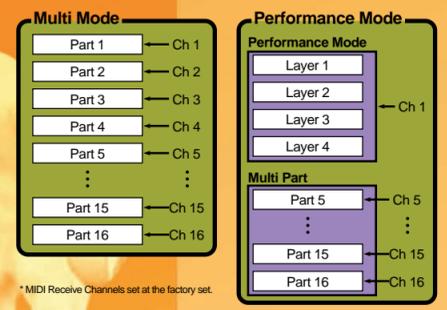


Handy "Scenes" And Realtime Scene Morphing

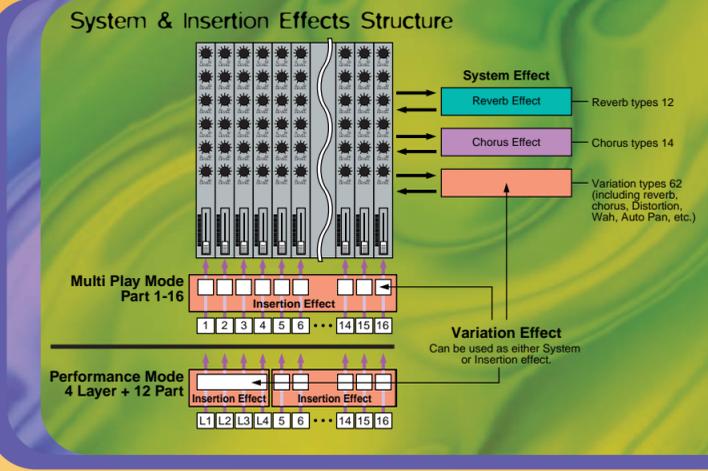
With the infinite variety of sounds you can get out of the CS2x using the Sound Control knobs, you'll be glad you can store your favorite knob positions in the two Scene memories. Simply pressing a Scene button as you play will recall the sound you want, which makes Scenes handy for quickly changing the sound between verses and choruses and lead breaks. A Scene Control function lets you use the Modulation Wheel or a connected Foot Controller to "morph" between the two Scene sounds in realtime.

Rich Performance "Layers" And Easy Panel Editing

The CS2x comes with a comprehensive collection of phat "state-of-the-street" dance sounds and killer emulations of classic "retro" analog synths specially selected for today's electronic music production scene plus a selection of instrument Voices for a wide variety of contemporary music styles. The 256 Preset and 256 programmable User Performances and easy-to-use panel editing functions are another reason the CS2x is such a powerful synth capable of sensationally rich and highly complex sound textures. A Performance is comprised of up to 4 individual voice Layers that can be played simultaneously or that can each be assigned to play only in specified Velocity and Key Ranges. Also included in each Performance are the Arpeggiator settings, Sound Control knob positions and two stored Scenes ("snapshots" of the knob positions), plus all other panel edit parameters – including Reverb, Chorus and Variation effect settings. What's more, Multi Play In Performance Mode lets you use your Performances along with 12 other XG or GM sounds driven by an external MIDI sequencer. So while your sequenced backing tracks are kickin' the groove, you can play the keyboard and manipulate your sounds in realtime using all the great Performance mode features like the Arpeggiator, the Control Knobs and morphable Scenes.



* MIDI Receive Channels set at the factory set.



Arpeggiator Pattern List

No.	Name	Comments
1	UpOct1	The chord (or phrase) ascends up to 1 Octave.
2	UpOct2	The chord (or phrase) ascends up to 2 Octaves.
3	UpOct4	The chord (or phrase) ascends up to 4 Octaves.
4	DownOct1	The chord (or phrase) descends down to 1 Octave.
5	DownOct2	The chord (or phrase) descends down to 2 Octaves.
6	DownOct4	The chord (or phrase) descends down to 4 Octaves.
7	UpDownOct1	The chord (or phrase) ascends up to 1 Octave, then descends.
8	UpDownOct2	The chord (or phrase) ascends up to 2 Octaves, then descends.
9	UpDownOct4	The chord (or phrase) ascends up to 4 Octaves, then descends.
10	UpDownOct1	The chord (or phrase) descends down to 1 Octave, then descends. (This feature is slightly different from type UpDownOct1.)
11	UpDownOct2	The chord (or phrase) descends down to 2 Octaves, then descends. (This feature is slightly different from type UpDownOct2.)
12	UpDownOct4	The chord (or phrase) descends down to 4 Octaves, then descends. (This feature is slightly different from type UpDownOct4.)
13	RandomOct1	Plays up and down randomly between 1 Octave, based on the chord you play.
14	RandomOct2	Plays up and down randomly between 2 Octaves, based on the chord you play.
15	RandomOct4	Plays up and down randomly between 4 Octaves, based on the chord you play.
16	Techno-A	Typical techno sequence TYPE A. (Euro techno type.)
17	Techno-B	Typical techno sequence TYPE B. (UK Type with Velocity.)
18	Techno-C	Typical techno sequence TYPE C. (Japan techno type.)
19	Techno-D	Typical techno sequence TYPE D. (German techno type.)
20	DnHouse	Backing sequence with House music feel. (Bass left hand, Chord play for right hand.)
21	SynopopA	Synopopation type sequence TYPE A.
22	SynopopB	Synopopation type sequence TYPE B. (Octave moves extremely.)
23	ECdndrn	Moving pattern sequence with echo.
24	TRMzrto	Moving filter sequence with echo.
25	TrncpLine	Sequencing filter sequence.
26	PulseLine	The sequence mixed with bass line and sequence line.
27	BaseLineA	Arpeggio phase TYPE A for bass.
28	BaseLineB	Arpeggio phase TYPE B for bass. (With Velocity.)
29	BaseLineC	Arpeggio phase TYPE C for bass.
30	BaseLineD	Arpeggio phase TYPE D for bass.
31	Ocean	Chromatic Arpeggio, nice for textures, using up to 4 input notes.
32	X-Sweep	Duophonic Arpeggio, two arpeggios moving in opposite directions, using up to 3 input notes.
33	Lamb	Duophonic Arpeggio, nice with complex chords, using up to 5 input notes.
34	Thips	Note Repetition Pattern, with velocities, using up to 2 input notes.
35	HarCore	Monophonic Arpeggio Line, using up to 3 input notes.
36	Chore	Triphonic Monophonic Line, using up to 3 input notes.
37	Chordal	Chromatic Chordal Sweep, using up to 3 input notes.
38	Orbl	Triphonic Chordal Movement, using up to 5 input notes, try different chords in each hand.
39	VelZurr	Monophonic Arpeggio Line, with velocities, using up to 4 input notes.
40	MusLine	Monophonic Sequence, very short notes, using up to 2 input notes.

40 Phat Arpeggiator Patterns With MIDI Output

Want to have some real fun? Then switch on the Arpeggiator and play a chord. The CS2x will create automatic arpeggiated chords based on the notes you play. With the 40 arpeggio types and 10 timing resolution subdivisions available, you can literally get carried away for hours on end creating a vast array of arpeggios. An Arpeggiator Hold function lets the arpeggios continue to loop even after taking your hands from the keyboard, and an Arpeggiator Split function lets you play the arpeggiated chords to the left of the split point while playing normally to the right. The Arpeggiator works exceptionally well with an external MIDI sequencer, as the CS2x can either control or be controlled by the clock of the external device. What's more, since the CS2x's Arpeggiator data can be output via MIDI, you can record its note and timing events into a track of the external sequencer, or have it "trigger" the voices of other MIDI synthesizers or external tone generators.

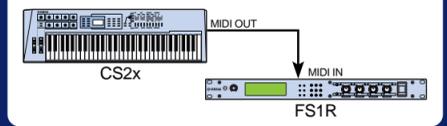
Versatile MIDI Capabilities

The CS2x also has a Multi Play mode with 779 XG normal voices and 30 drum kits (including TG300B compatibility). You can play any of the XG voices from the keyboard as "1 part", or you can assign up to 16 of them across "16 parts" for multitimbral desktop music production using an external MIDI music sequencer. A built-in TO HOST terminal eliminates the need for a special MIDI interface between the CS2x and a computer. And since the CS2x is designed for XG and GM formats, you can easily control all voice and effect selections as well as individual parameter settings via MIDI program change, control change and system exclusive messages programmed in the sequencer tracks of the song. (It's also great for playing back commercially available SMF type Standard MIDI Files.) The CS2x is so versatile it can be connected to various types of other MIDI and audio components to create an expanded system.

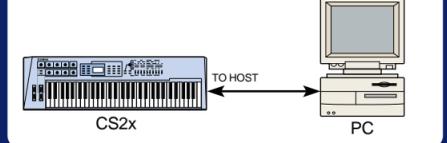
When it comes to programming the CS2x's detailed edit parameters, what you see is what you get! Because all Edit mode parameters are available in a grid of six menu prints on the panel and accessible by twisting the Edit Parameter Rotary switch and pressing the corresponding data entry button, you'll never have to wade through layers of submenus. It's really that simple.

System Examples

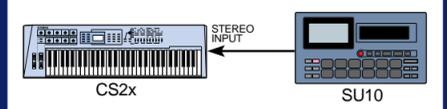
1. CS2x + Tone Module (such as Yamaha FS1R) for extra voices
The CS2x's arpeggiator can control an external tone module.



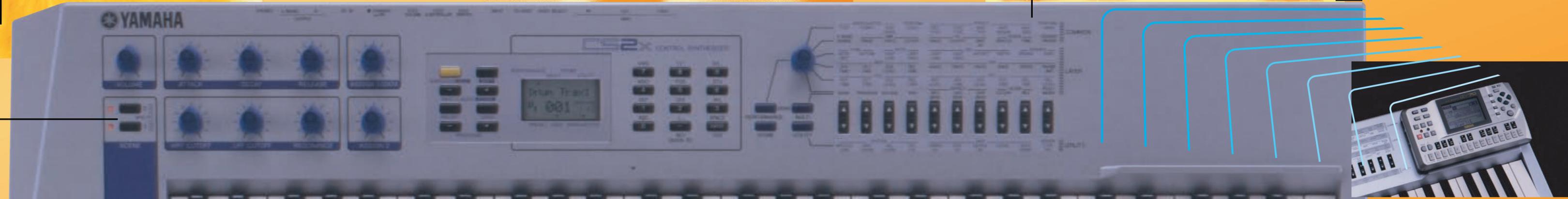
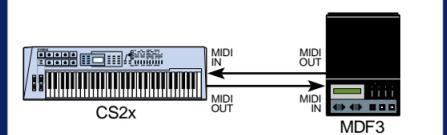
2. CS2x + PC for multitimbral sequencing
The CS2x's TO HOST terminal can be used for direct connection to a computer with a sequencer application.



3. CS2x + SU10 for adding sampled sounds
The samplers stereo audio signals can be mixed with the CS2x's via a stereo input jack.



4. CS2x + MDF3 (for data storage)
This combination provides for music sequence playback, including MIDI bulk data exchange.



Together with the QY70 Music Sequencer, the CS2x can become a compact but very powerful music production system, as well as a versatile live performance tool that you can play anywhere you want!