

YAMAHA

AN1x

CONTROL SYNTHESIZER
ANALOG PHYSICAL MODELING



Assume Control.

The classic analog synth sound is invading the airwaves and dance floors of the world and taking modern music to ever higher levels of creativity and style. And now, with the arrival of the Yamaha AN1x Control Synthesizer, you can assume control of your sound and expand your musical universe like never before. Featuring Yamaha's new Analog Physical Modeling Synthesis, which faithfully—and reliably—models analog sound digitally, the AN1x brings the fat, familiar sounds of the classic analog synths together with intuitive

2 Scene memories with realtime morphing between Scenes

Each AN1x voice has two Scene memories which let you store "snapshots" of specific control knob settings, to effectively give you two distinct sounds—each of which are available at the touch of a Scene switch.

What's more, you can activate the "Scene Control" feature, which lets you use the Modulation Wheel (or a Foot Controller, or any other assignable continuous controller) to morph, or cross-fade between Scenes in real-time as you play.

If there's a particular sound during the morph that you want to keep, you can easily store it to one of the Scene switches for the selected voice. You can even load Scene data from another voice to the current voice.

Intuitive "modeless" system with assignable control knobs

The AN1x basically always operates in Voice Play/ Edit mode, which means that you can edit the sound as you play by turning the 8 control knobs to do things like open a filter, tweak the resonance, adjust the ring modulator, reshape the envelope, and much more.

Each knob gives you quick and easy access to one of many tone generator parameters. You can even assign a specific parameter to each knob for customized control over detailed aspects of your sound during performance. Each knob can also send Control Change messages to control specific parameters of external MIDI instruments.

Arpeggiator and Step Sequencer with MIDI data output

The AN1x features a powerful pattern generator incorporating an Arpeggiator and Step Sequencer which literally lets you create instant bass lines, backdrop phrases and trance-riffs at the simple press of a key! The pattern note, gate time, control change and other event data can be output via MIDI to trigger an external tone generator, or be recorded by an external sequencer. You can also control the tempo from an external MIDI clock signal.

Since Arpeggiator and Step Sequencer settings are stored as voice parameters, each voice can have its own customized patterns which you can turn on and off at will with the ARPEGGIO/SEQ switch.

The Arpeggiator features 10 timing subdivisions plus 30 preset arpeggiated patterns to choose from, including Up, Down, Up&Down,



Assignable X-Z ribbon controller plus easy-assign Control Matrix

As its name implies, the AN1x Control Synthesizer is designed for maximum realtime control flexibility—not only with its full complement of onboard assignable control knobs and other controllers, but with external Foot Controller and other MIDI controllers as well.

In addition to the control knobs and Pitch Bend and Modulation Wheel, the AN1x features an X-Z Ribbon Controller with horizontal slide

(X) and pressure (Z) control of filter, resonance, modulation, and much more. An easy-assign "Control Matrix" function permits quick assignment of 16 sets of source controllers (MW, FC, Key Touch, etc.) to destination parameters (Filter, Modulation, LFO, etc.)—for each voice.

4-track Free EG lets you "hand draw" knob

Although the AN1x features plenty of simple and intuitive realtime control features, a "Free EG" function is provided for those times when you wish you had a couple of extra pairs of hands.

The Free EG records realtime knob movements of up to four parameters in each voice—one parameter per track—to let you "hand draw" filter, resonance, LFO and others

realtime control features in one futuristic, highly intelligent package that will change forever the way you create and perform your own music.

A truly innovative, truly incredible sounding synth that's designed from scratch for techno, trance and every other type of modern dance music existing or yet conceived, the AN1x gives you the power to create fresh and inspiring music every time you switch it on.

and special patterns like Techno, House, Random, and much more. The arpeggiated pattern can be played across the full keyboard or to the left of a variable split point.

The Step Sequencer lets you design your own intricate 2-bar pattern loops over 16 "steps" (beats) which can be triggered from the keyboard. Here's how it works: In Step Event Edit mode, each of the 8 control knobs represents a specific beat (steps 1-8 and 9-16, respectively), and can select specific note, velocity, gate time, or control change event values.

You can create 256 sequence patterns and trigger them from the keyboard in a variety of ways. For example, you can configure a voice to play various patterns to the left side of the variable split point while shifting the pitch of the current pattern with keys to the right.

3 programmable stereo multi-effects and 3-band stereo EQ for each voice

You can enhance the stereo dimension of each voice with programmable Reverb (8 types) and Delay effects (5 types—including Tempo Delay, which matches the delay time to the current tempo), as well as a 3-band stereo EQ. There are 14 Variation Effects too, including Chorus, Phaser, Auto Pan, Compressor, Pitch Change, Distortion, and more. Effect settings are stored as voice parameters, so each voice can have its own customized effect assignments. The Delay and Reverb can be configured in a serial or parallel connection, and an Effect Bypass lets you turn off specific effects at will, which is especially handy when editing a voice.

128 voices, 10 notes polyphony and multiple voice layering options

There are 128 voices preprogrammed and ready to go which showcase the power and range of the VCO, VCF and VCA—and Arpeggiator and Step Sequencer—each of which can be overwritten to store 128 of your own.

Six types of layers to choose from for each voice give you detailed control over how the two voice Scenes are configured to play in relation to each other, including Dual (both Scenes layered), Split (one Scene assigned to each side of a variable split point), and Unison, which lets you achieve those incredibly thick sounds of legendary analog synths.

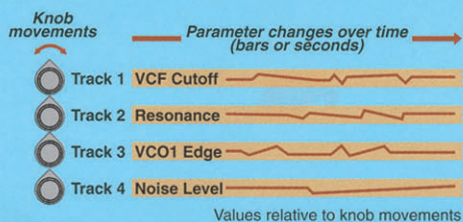


movements in realtime

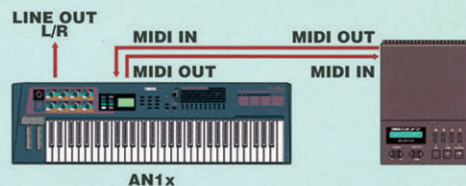
over a determined length of time, between 1/2-bar and 8 bars (determined by tempo), or in "absolute" time between 1 and 16 seconds.

The parameter changes associated with the Free EG sequence will automatically play back as recorded when you subsequently play the voice from the keyboard—with one of several loop variations.

You can record each parameter in separate track passes, or all tracks at once—synchronized with the Step Sequencer or Arpeggiator.



Connecting a MIDI data storage device such as the Yamaha MIDI Data Filer lets you save and load all voice and other data to floppy disks.



Rear Panel



Specifications

FUNCTIONS	Keyboard	61 Keys (Initial/After Touch)
	Tone Generator	Analog Physical Modeling VCO1 (Sync, FM), VCO2, VCF (Ring Modulator, Noise, FEG), VCA (AEG)
	Polyphony	10 notes (max.)
	Multi Timbres	Max. 2 timbres (with polyphony of 5 + 5 notes)
	Voice	128 User voices
	Layer	Single, Unison, Dual, Dual Unison, Split Unison
	Arpeggiator	30 patterns, 10 timing subdivisions
	Step Sequencer	Max. 16 steps (Note, Velocity, Gate Time, Control Change) 128 Voice patterns + 128 User patterns
	Free EG	4 tracks per voice; Length: Bar (1/2, 1, 3/2, 2, 3, 4, 5, 6, 8), Seconds (1.0 – 16.0)
	Effects	Variation x 14: Chorus 1, 2, Flanger, Symphonic, Phaser, Auto Pan, Rotary Speaker, Pitch Change, Aural Exciter, Compressor, Wah, Distortion, Overdrive, Amp Simulator Reverb x 8: Hall 1, 2, 3, Room 1, 2, Stage 1, 2, Plate Delay x 5: Delay LCR, Delay LR, Echo, Cross Delay EQ x 1: 3-band stereo
CONTROLLERS	SCENE 1, 2 (with Scene Control), KNOB PARAMETER GROUP switches x 8, PROGRAM CHANGE keypad (0-9, -/NO, +/YES/ENTER), PORTAMENTO (On, Off), LAYER, STORE, ARPEGGIO/SEQ (On, Off), Edit Rotary switch, Parameter Value UP/DOWN switches x 10, POWER switch	
DISPLAY	Pitch Bend Wheel (assignable) Modulation Wheel (assignable) X-Z Ribbon Controller (assignable) CONTROL Knobs x 8 (assignable) Volume Knob	
CONNECTORS	Custom LCD with LED backlight, LED x 10 (red) PHONES OUTPUT (L/MONO, R) FOOT VOLUME (FC7; assignable) FOOT CONTROLLER (FC7; assignable) FOOT SWITCH (FC4; assignable) MIDI IN, OUT, THRU DC IN	
POWER SUPPLY	AC Adaptor (Yamaha PA-3B or equiv.)	
DIMENSIONS (W x D x H)	976 x 285 x 103 mm (38-3/8" x 11-1/4" x 4")	
WEIGHT	7.5kg (16 lbs., 8 oz)	

Specifications and appearance subject to change without notice.

Voice List

No.	Cat.	Voice Name	No.	Cat.	Voice Name	No.	Cat.	Voice Name	No.	Cat.	Voice Name	No.	Cat.	Voice Name	No.	Cat.	Voice Name	No.	Cat.	Voice Name			
1	Co	Relaxx	17	Sq	Doves	33	Ba	Wonder	49	St	Analog	65	Ld	HardSync	81	Pd	PortPad	97	Pc	Woob	113	Fx	RhythmCity
2	Sq	Terraform	18	Sq	BPF Morph	34	Ba	Duck Bass	50	St	Lush	66	Ld	Chick	82	Pd	Sacred	98	Fx	WelcomBk	114	Fx	CyberBag
3	Ba	Celluloid	19	Sq	Seismic	35	Ba	Prophetic	51	St	Chocolate	67	Ld	Stevie	83	Pd	Sweep&S/H	99	Fx	Magic	115	Se	CyberClock
4	Br	MajorBrass	20	Fx	Earth	36	Ba	Harmosync	52	St	Stringz	68	Ld	Floyd75	84	Pd	Slip	100	Fx	Hypno	116	Se	Flutter
5	Pd	Soar	21	Co	Vinnie	37	Ba	Kangaroo	53	St	String Pad	69	Ld	Synchromes	85	Pd	Polyswell	101	Fx	Soundtrack	117	Se	Industrial
6	Ba	Hardcore	22	Co	Detroit	38	Ba	Acid 1	54	Sc	Billy	70	Pd	High Sweep	86	Co	Padbells	102	Fx	Morphyum	118	Se	Moment
7	Ba	Uni-Bass	23	Co	Plastik	39	Ba	Acid 2	55	Sc	Fetish	71	Pd	Ice Pad	87	Pf	DX E.Piano	103	Fx	WindString	119	Se	We All Die
8	Ld	MegaDrone	24	Co	ChinaTech	40	Ba	Acid 3	56	Sc	P-5 Compy	72	Pd	Sprinkler	88	Pf	Condenser	104	Fx	Vangelizm	120	Sq	Cactus
9	Ld	SyncLead	25	Co	Silence	41	Br	Soft Brass	57	Sc	Stakka	73	Pd	GreatMorph	89	Pf	WhitneyEP	105	Fx	Chandelier	121	Sq	Overdrive
10	St	Legato	26	Ba	Dog Bass	42	Br	Hard Brass	58	Sc	Dust	74	Pd	Church Bel	90	Or	DrawOrgan	106	Fx	FreeEGRthm	122	Sq	Omega
11	Sq	Alan	27	Ba	Slum	43	Br	Bronze	59	Sc	WarmPoly	75	Pd	Deep Blue	91	Or	16+2.2/3	107	Fx	Heaven	123	Sq	Csus4
12	Ba	Mini	28	Ba	Loud	44	Br	Fatty	60	Sc	Rhubarb	76	Pd	Da Padd	92	Or	Garage	108	Fx	Mars	124	Sq	TekkLine
13	Se	Chemical	29	Ba	MiniLow	45	Br	Quincy	61	Ld	Susy	77	Pd	Water Pad	93	Or	House	109	Fx	Porpoise	125	Sq	Highway
14	Pd	SyncSweep	30	Ba	Kickbass	46	Br	CS80 Brass	62	Ld	OB-8	78	Pd	Night Sky	94	Or	Pipes	110	Fx	Jack	126	Sq	Saturn
15	Sc	Caner	31	Ba	Sub Sub	47	Br	Tangiers	63	Ld	Lucky	79	Pd	Oberweich	95	Pc	Hi Q Reso	111	Fx	Microdot	127	Sq	Poptart
16	Pf	MorphEP	32	Ba	Hardstep	48	Br	Brassmorph	64	Ld	Earth Lead	80	Pd	PolyTen	96	Pc	Koan	112	Fx	Polaris	128	Sq	VirtlScene

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