

YAMAHA

DX100

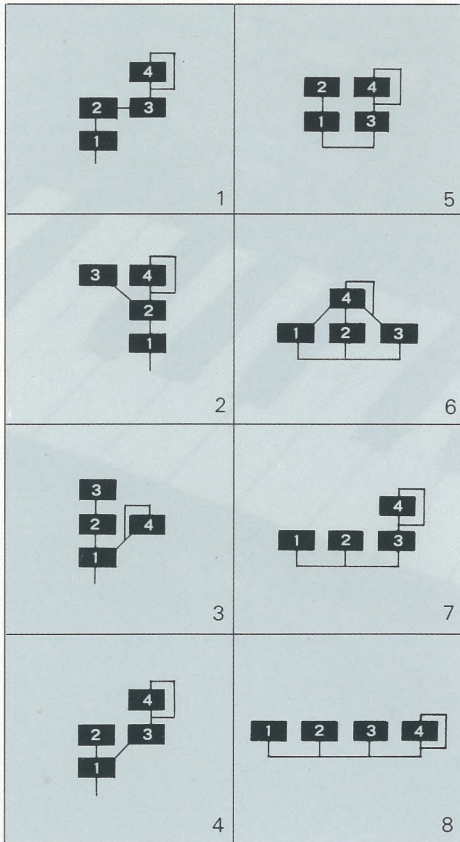
DIGITAL PROGRAMMABLE ALGORITHM SYNTHESIZER



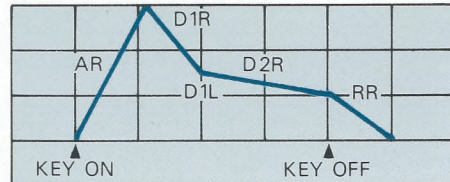
FM DIGITAL SYNTHESIS: THE BEST IDEA IS A SIMPLE ONE

Like its companions in the DX Series, the DX100 utilizes sophisticated digital FM (frequency modulation) synthesis in the creation of sound. It has four operators, each comprising a digital sine wave generator with its own five-parameter envelope generator. The DX100 combines its operators into arrangements known as "algorithms," which are illustrated on its top panel. The sophisticated envelope generators in each operator allow you precise control over the envelope characteristics for broad voice programming versatility. This results in a truly remarkable range of level and timbral variations — from accurate acoustic tones to the limits of your imagination. Generally speaking, two operators together are capable of producing extremely complex voices. With the four operators provided in the DX100, the sound possibilities are astounding.

ALGORITHM



ENVELOPE GENERATOR



But perhaps the most exciting aspect of the DX100 is that you can create, by means of the algorithms, operators, and envelope generators, your very own sounds. You can edit any of the presets, or start from scratch and create your own.

192 Preset ROM Voices

The DX100 contains a vast array of 192 preset ROM voices accessible through two separate play modes. They contain everything from highly realistic piano and guitar sounds to the outrageous "Feed Lead" and numerous sound effects. In fact, the range of voices permanently stored in MEMORY is so lifelike, you may find yourself playing things you thought possible only on other instruments!

Two Separate Play Modes

The DX100 operates in two distinct play modes: Bank Play and Internal Play. Bank Play mode contains, in 4 banks of 24 voices, the entire 192 preset voices. In this mode, you can rearrange, select, and edit any or all of the ROM voices to suit your tastes or requirements. The Internal Play mode accesses the 24-voice internal RAM. This is your personal "voice set," where you can store your edited and totally original voices for instant recall. The two play modes in the DX100 are state-of-the-art in synthesized voice selection.

DX Effects Controllers: In Touch With Your Music

The DX100 features a full complement of sophisticated controllers. With them, you can bring new expression to your music. And as voice selection on the DX100 is so easy, you can spend more time playing, instead of "adjusting" for a performance. Pitch Bend, as featured on other Yamaha DX Series synthesizers, is a highly controllable effect that can be used to add anything from a subtle, vocal quality to a wild, rock guitar feel to your solos. Your settings can even be programmed individually for each voice! the Modulation Wheel works in conjunction with the LFO (low frequency oscillator) to lend a wide range of tremolo, vibrato, and wow-wow effects to your playing. The optional BC-1 Breath Controller is a unique way to apply varying amounts of pitch or amplitude modulation for added expression. With the BC-1, the DX100 can even function like a wind instrument!

Voice Programming: Your Personalized Sound

Of course, a key to the incredible possibilities of the DX100 lies in its voice programming capability. Simply, it allows you to program all of the many voice parameters, accessible through a special Edit mode, for any of the existing voices. Or, start with the Voice Initialize function to create a "blank" voice and use your imagination.

Cassette Storage: For Limitless Variety

The DX100 is not limited to the 24-voice RAM, or to the 192-voice preset ROM. In fact, it is not limited at all, with regard to voice storage. The DX100 is equipped with a data cassette interface. Through this, you can permanently store any or all voices you have created or edited for loading whenever needed. Just insert your voice cassette into a data recorder, and command the DX100 to save or load those voices. You'll soon build an extensive library of exciting, original sounds.

MIDI Functions: Instruments That Communicate

The DX100 is MIDI-compatible, so it can send and receive MIDI information to the entire network of MIDI-equipped Yamaha musical instruments: digital sequencers, drum machines, music computers, and other DX synthesizers. MIDI stands for Musical Instrument Digital Interface, and it allows the DX100 and other MIDI-compatible musical instruments to transmit and receive all performance data. For you, the DX100 can be the nucleus of a sophisticated MIDI music system.



The CP60M is a transmit-only instrument.

Yamaha proudly presents the DX100 Digital Programmable Algorithm Synthesizer. The newest, most compact member of our revolutionary DX Series, the DX100 is the perfect performance-oriented instrument for the keyboardist new to the world of digital synthesis. Here in a handsome, highly portable package is an advanced, professional sounding keyboard synthesizer that is equally at home onstage or in your personal recording studio. The DX100 is designed for up-front performance, too. Just sling it over your shoulder, and the stage is yours. It has 192 outstanding presets from which to choose, and a superlative programmable FM tone generator system so you can create your own voices. And the DX100 is designed for versatility and ease of use. Now, with the Yamaha DX100, you can explore an entire galaxy of new sounds.



DX100 CONTROLS

PITCH BEND WHEEL:
An exciting, 3-mode selectable pitch bend effect. Adds subtle or wild expression to chords, solos.

MODULATION WHEEL:
Applies LFO pitch or amplitude modulation for vibrato, tremolo, or wow-wow effects. Lends a realistic quality to your voices.

LCD INDICATOR:
Quick visual readout of all selected voices, functions, and parameters.

OPERATOR SELECT/PB MODE/MODE SET:
Multi-function button for selected operator, Pitch Bend Mode selection/ON-OFF.

KEY SHIFT/KEY SET:
Key Shift instantly transposes keyboard pitch up or down to a programmed key. Key Set places any key within a 2-octave range of C3 to Middle C pitch.

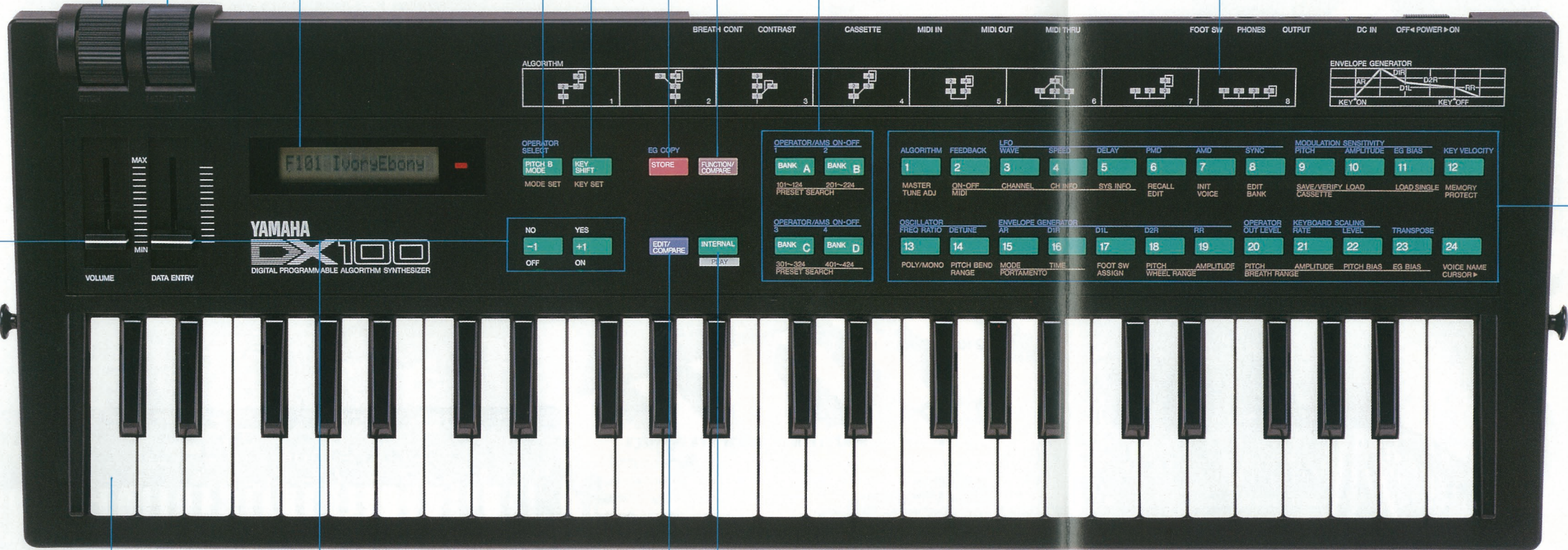
EG COPY/STORE:
Automatically copies Envelope Generator data from one operator any or all other operators. Control point for Voice Storage function.

COMPARE/FUNCTION:
Selects Function mode for setting performance parameters and accessing other utility functions. Provides instant comparison of original or preset function settings to newly selected data levels.

ALGORITHMS:
Printed panel display of all selectable algorithms for easier voice planning.

BANK A-D/OPERATOR/AMS ON-OFF:
Multi-function switches for Operator ON/OFF selection, Voice Bank selection, Preset Search.

VOICE SELECTORS:
Multi-function buttons for selecting all individual voices, functions, and editing parameters.



KEYBOARD:
Compact, 4-octave range for excellent feel, quick response. (Mini size keyboard)

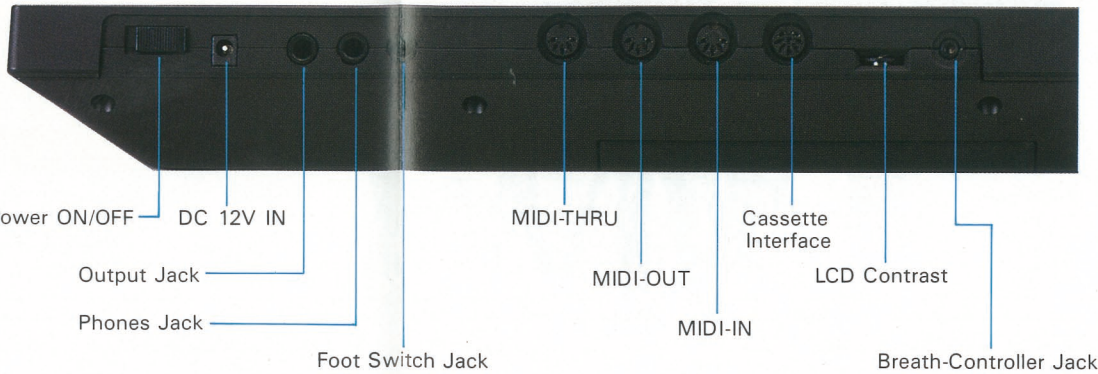
VOLUME CONTROL:
Master volume control for entire keyboard to headphones, amplifier, PA system.

DATA ENTRY CONTROLS:
Convenient slide control and No/Yes switches for voice editing/function range selection.

COMPARE/EDIT:
Selects Edit mode for editing or creating new voices. Provides quick comparison of original or preset voice parameters to newly edited parameters.

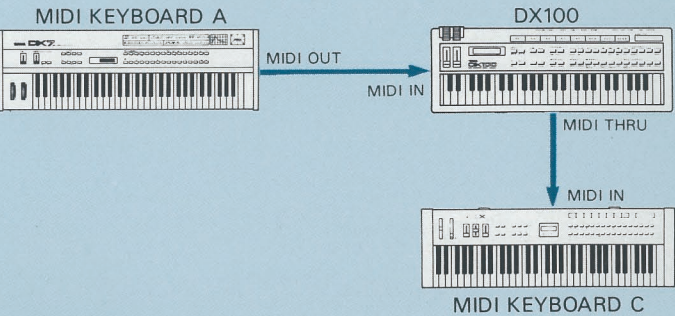
INTERNAL PLAY:
Enters Internal Play mode, 24-Voice RAM.

DX100 REAR



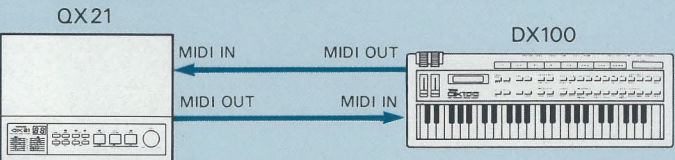
DX100 MIDI APPLICATIONS GUIDE

DX100/MIDI Keyboard/MIDI Keyboard



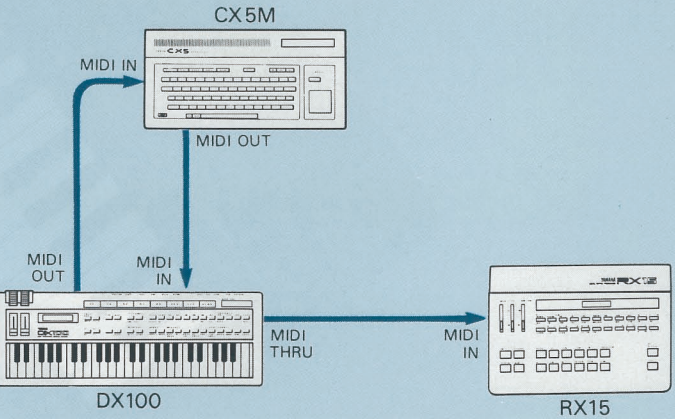
Transmit performance data from MIDI Keyboard A to the DX100, and through the DX100 to MIDI Keyboard C. The DX100 and Keyboard C will now respond instantly to all performance commands from Keyboard A.

YAMAHA QX21/DX100



Transmit performance data — chords, notes, real-time effects — from the DX100 to the QX21 Digital Sequence Recorder via the DX100 MIDI-OUT terminals. The QX21 can now digitally record and re-transmit all information to the DX100, which will then perform your compositional sequences in flawless detail.

YAMAHA CX5M/DX100/RX15



Here, the CX5M becomes a multi-channel MIDI sequencer utilizing the FM Music Composer Cartridge. The DX100 acts as a MIDI controller keyboard. The RX15 Rhythm Programmer, providing expansive drum synthesis capabilities, is synchronized to sequence playback from the CX5M, with the DX100.

ACCESSORIES



FC-5 Foot Switch



FC-4 Foot Switch



FC-9 Foot Switch



BC-1 Breath Controller



PA-1210 AC Adaptor

SPECIFICATIONS

KEYBOARD

49 Keys, (Mini keyboard)

SOUND SOURCE

FM Tone Generator (4 operators, 8 algorithms)

SIMULTANEOUS NOTE OUTPUT

8 notes, reverse priority

INTERNAL MEMORY

24-voice INTERNAL RAM (alterable)

192-voice ROM (reading only)

96-voice number bank (alterable)

EFFECTS

PITCH BEND, MODULATION, PORTAMENTO, SUSTAIN, KEY VELOCITY (reception only)

CONTROLS

PITCH BEND WHEEL, MODULATION WHEEL, VOLUME, LCD CONTRAST

EXTERNAL CONTROL TERMINALS

BREATH CONTROL, FOOT SWITCH

CONNECTING TERMINALS

OUTPUT (rated output level -20dB/output impedance 10k Ω or less), PHONES (rated output level -16dB/output impedance 47 Ω or less), FOOT SWITCH (PORTAMENTO ON-OFF/SUSTAIN ON-OFF), MIDI IN, MIDI OUT, MIDI THRU, CASSETTE (transmission speed 1,200 baud), BREATH CONTROL, DC 12V IN

POWER SUPPLY

C-size batteries x 6 (Battery life: Approx. 10 hours)

DIMENSIONS (W X H X D)

628(W) X 75(H) X 218(D) mm (24.7" x 2.9" x 8.6")

WEIGHT

2.7kg (5.9 lbs) (including batteries)

STANDARD ACCESSORIES

SUM-2 Batteries x 6, Cassette Cable, Explanation Cassette Tape

OPTIONAL ACCESSORIES

FC-4, FC-5 or FC-9 Foot Switch, BC-1 Breath Controller, PA-1210 AC Adapter, MIDI-03 or MIDI-15 MIDI Cable

*0dB-0.775Vr.m.s.

*Specifications and appearance are subject to change without notice.

DX27

DIGITAL PROGRAMMABLE ALGORITHM SYNTHESIZER

A regular key version of the DX100, the Yamaha DX27 is an outstanding performance-styled digital programmable algorithm synthesizer in an extremely portable, compact package. Its features and specifications are nearly identical to those of the DX100, so you can even use it as a MIDI on-line controller keyboard.



For details please contact:

SINCE 1887



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