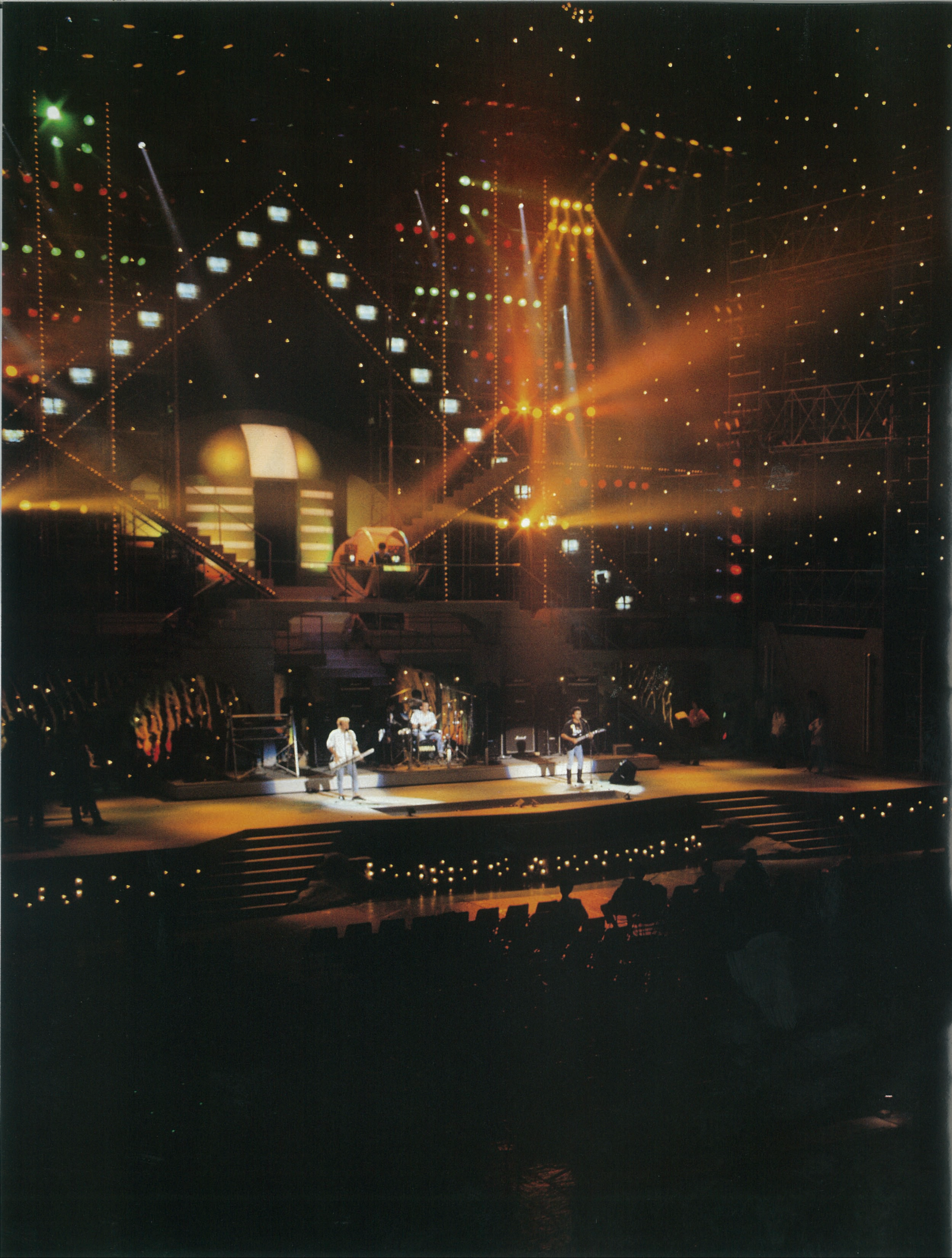


# **DIGITAL INSTRUMENTS**

'88-'89

**YAMAHA**





Digital technology has had a greater impact on life in recent years than any other scientific innovation. This holds true even in the innately artistic fields of music and sound production. Better tools allow artists to create better art, and engineers to create better sound with which to show off the artists' art. It is here that Yamaha's contribution is unparalleled. Yamaha digital music equipment represents the finest blend of space-age semiconductor and LSI production technology with traditional values of art and craft. This is technology applied purely and simply to the goal of making better music and sound. Yamaha technology for your goal.

## YAMAHA DIGITAL INSTRUMENT LINE-UP

DIGITAL PROGRAMMABLE ALGORITHM SYNTHESIZERS ..	3 ~ 5
ELECTRONIC & ELECTRIC PIANOS .....	6
FM TONE GENERATORS .....	7 ~ 8
DIGITAL RHYTHM PROGRAMMERS .....	9
DIGITAL SEQUENCE RECORDERS .....	10
MIDI MASTER & REMOTE KEYBOARDS .....	11
WIND MIDI CONTROLLER .....	12
MIDI PERIPHERALS .....	13 ~ 14
SIGNAL PROCESSORS/KEYBOARD MIXERS .....	15 ~ 16
ELECTRONIC PERCUSSION SYSTEMS .....	17
KEYBOARD AMPLIFIERS .....	18
SOFTWARE .....	19
ACCESSORIES .....	20
MIDI SYSTEM APPLICATIONS .....	21 ~ 22



# DIGITAL PROGRAMMABLE ALGORITHM SYNTHESIZERS

## DX7II D/FD



DX7II-D



DX7II-FD

The new generation of DX synthesizers is here in the DX7IIFD and DX7IID. In addition to improved dual-channel 6-operator 32-algorithm digital FM tone generators, the mark-II DXs provide a wealth of new features that offer more versatile voicing capability, broader expressive control, more natural ensemble effects, significantly increased data storage capacity (particularly in the DX7IIFD with its built-in micro floppy disk drive) and much, much more. Here's a brief summary of some of the most exciting new features:

- 2-channel 6-operator 32-algorithm FM tone generator
- Improved FM technology delivers superior sound quality
- Full compatibility with existing 6-operator FM voices
- Dual, split and single play modes
- 64-voice internal memory
- 32 performance memories combine voice and function parameters (modulation, aftertouch, foot controller, etc.) as well as play modes (dual, split, single).
- Stereo outputs
- Micro-tuning capability permits use of alternate tuning systems
- Fractional level scaling for unprecedented level scaling precision and control
- Random pitch simulates intonation of acoustic instruments
- Stereo pan with touch, LFO, key number or EG-control
- 16-key multiple LFO timing for live, natural ensemble sound
- Aftertouch pitch control offers fingertip pitch bend
- Pitch EG with adjustable range for extra fine adjustment
- Full MIDI implementation offers vast MIDI system control
- Comprehensive 40-character × 2-line LCD

### SPECIFICATIONS

● **KEYBOARD:** 61 keys (C1–C6), with Initial/After touch ● **TONE GENERATOR:** FM Tone Generator (6 operators, 32 algorithms) ● **SIMULTANEOUS NOTE OUTPUT (LAST NOTE PRIORITY):** 1-voice: 16 notes (single play), 2-voices: 8 notes (Dual play), 2-voices: 16 notes (Split play) ● **INTERNAL MEMORY:** 64-voices/32 performances, 2 micro tunings, 1 system set-up ● **EXTERNAL ROM MEMORY:** 128 voices/64 performances, micro tunings, fractional level scaling ● **EXTERNAL MEMORY:** RAM cartridge (Optional, RAM4), Micro floppy disk (Optional, MF2DD) = Internal Memory × 40, MIDI exclusive data ● **CONTROL SLIDERS AND SWITCHES:** Volume slider, Continuous sliders CS1, CS2 (Data entry), Data entry switch × 2, Mode setting switch × 12, Voice switch × 32 ● **CONTROLS:** PITCH BEND WHEEL, MODULATION WHEEL ● **EXTERNAL CONTROL TERMINALS:** BREATH CONTROL, SUSTAIN, FOOTSWITCH (Sustain, Portamento, Key hold, Soft), FOOT CONTROL 1 (Volume, Modulation, Voice parameter), FOOT CONTROL 2 (Volume, Modulation), RAM-ROM CARTRIDGE SLOT, MIDI IN-OUT-THRU ● **OUTPUT TERMINALS:** Output

- Dual alpha-numeric LED display
- New cartridges for voice, performance, micro-tuning, fractional level scaling data
- Internal 720 k-byte (formatted) 3.5" micro floppy disk drive on "FD" model stores voice, performance, micro-tuning and fractional scaling data
- DX7IIFD micro floppy disk drive also functions as a MIDI data recorder for external MIDI equipment
- Dual continuous sliders for data entry and real-time parameter control
- Dual foot controllers
- Breath controller
- Dual foot switches

A/MIX, B, Headphones ● **DISK DRIVE (DX7II FD ONLY):** 3.5" Micro floppy disk, built-in. 2DD 1M (720K bytes when formatted) ● **DISPLAY:** LC: 40 letters × 2 line (illuminated), LED: 7 segments × 2 ● **POWER REQUIREMENTS, POWER CONSUMPTION:** General model 110-120 V/220-240 V, 50/60 Hz, 15 W, U.S. & Canadian models 120 V, 50/60 Hz, 15 W ● **DIMENSIONS (W × H × D):** 999 × 85.8 × 333.7 mm (39-3/8 × 3-3/8 × 13-1/8") ● **WEIGHT:** DX7IID: 10.5 kg (23.1 lbs.), DX7IIFD: 11.2 kg (24.7 lbs) ● **STANDARD ACCESSORIES:** Music holder, ROM cartridge, 3.5" Micro floppy disk (MF2DD) ● **OPTIONAL ACCESSORIES:** RAM Cartridge RAM4 ● Cartridge Adaptor ADP1 ● Foot Switch FC4/FC5, Foot Controller FC7, Breath Controller BC1, BC2, Stand LG-100, MIDI Cable MIDI 01/03/15, 3.5" Micro Floppy Disk MF2DD. Accessory Kit for DX ADX20 (FC5, FC7 and BC1)

\* All specifications subject to change without notice.

## DX7S



The DX7S is a direct descendent of the legendary DX7, offering the same single-channel 6-operator tone generator format that quickly made the DX7 the most sought-after keyboard instrument in the world. In the several years that have passed between the introduction of the DX7 and the new DX7S, however, a vast amount of progress has been made. Thanks to considerable research and development, feedback from professional artists and significant advancements in the fields of electronics and semiconductor fabrication, the DX7S now delivers refined sound and response, and a range of new features that translate directly into more versatile musical expression and control. Its dual-bank 64-voice internal memory and 32 internal performance memories give it greatly expanded voice power, while a range of new features including random pitch, aftertouch pitch control, 16-key multiple LFO timing, micro tuning and fractional level scaling give the DX7S the kind of response and playability that has previously been only available with acoustic instruments.

## DX100

Here's the power of digital FM tone generation packed into a go-anywhere mini-keyboard. The DX100 can be powered from an AC adapter or batteries, so you can play or program anywhere, anytime.

### SPECIFICATIONS

● **KEYBOARD:** 49 keys (Mini key) ● **SOUND SOURCE:** FM Tone Generator (4 Operators, 8 Algorithms) ● **MEMORY FUNCTIONS:** 24-Voice INTERNAL Memory, 192-Voice PRESET Memory, 96-Voice BANK Memory ● **CONTROLS:** PITCH BEND WHEEL, MODULATION



WHEEL, VOLUME, LCD CONTRAST ● **MIDI TERMINALS:** IN, OUT, THRU ● **DIMENSIONS (W × H × D):** 628 × 75 × 218 mm (24-3/4 × 3 × 8-1/2") ● **WEIGHT:** 2.7 kg (5.9 lbs.) (including batteries) ● **POWER SUPPLY:** SUM-2 Batteries × 6, AC Adapter PA-1210 (option)

\* All specifications subject to change without notice.



## DX11



The DX11 takes the 4-operator FM tone generator format to the limit. For example, it offers full 8-voice multi-timbral operation, allowing up to 8 different voices to be played at a time from the keyboard or under control of an external sequencer. The DX11 has a fine range of 128 preset voices, while advanced editing functions with simplified editing features let you create your own voices with minimum time and effort. Of course, the DX11 is fully MIDI compatible. It transmits and responds to all types of MIDI data, making it both an extremely useful master keyboard or multi-timbral tone generator for sequencer control. Despite its vast sonic talents, you'll find the DX11 to be a remarkably cost-effective package of superior sound and performance.



- Rich 8-voice multi-timbral operation.
- An advanced Quick Edit system offers significantly simplified editing control.
- Full keyboard initial and after-touch velocity response.
- A total of 224 first-class FM voices ready for instant recall: 128 preset voices, 32 internal and 64 cartridge user-programmable voices which include all necessary performance and play mode data.
- Stereo outputs deliver broad, large-scale sound and allow the implementation of a pan effect that features LFO, velocity or keyboard split panning control.
- A number of internal special effects including transposable repeat delay and a chord set function that makes it possible to play specified chords by pressing single keys.
- Microtuning capability allows the DX11 to be precisely tuned note-for-note just like a fine grand piano. It's possible to create "warm" or "tight" tunings, or to tune the entire keyboard for the music of a different era.
- Compatible with TX81Z and DX21/27/100 voice data. Voices can be transferred directly between one synthesizer/tone generator to another via the MIDI interface, to RAM4 data cartridges or cassette tape via a built-in cassette interface.
- Extra-light design using aluminum chassis constructions results in a total weight of only 7 kg.

### SPECIFICATIONS

• **KEYBOARD:** 61 Keys (C1—C6) with Initial/After Touch • **TONE GENERATOR:** FM Tone Generator (4 operators, 8 algorithms, 8 waves, 8-voice polyphony) • **INTERNAL MEMORY:** 128 ROM Voices, 32 RAM Voices, 32 Performances • **CONTROLS:** PITCH BEND WHEEL, MODULATION WHEEL, Master VOLUME Slider, DATA ENTRY Slider • **CONTROL SWITCHES:** Mode Select (STORE, UTILITY, EDIT/COMPARE, SINGLE, PERFORMANCE, MEMORY PROTECT), Data Entry, Cursor, Preset Select, Voice Select • **EXTERNAL CONTROL TERMINALS:** BREATH CONTROL, VOLUME, FOOT CONTROL, FOOTSWITCH, CASSETTE, MIDI IN/OUT/THRU • **OUTPUT TERMINALS:** Output I/Mix, Output II, Headphones • **DISPLAY:** 16 Characters x 2 Line LCD • **DIMENSIONS (W x H x D):** 901 x 63.3 x 297.7 mm (35-1/2" x 2-1/2" x 11-3/4") • **WEIGHT:** 7 kg (15.4 lbs.)

## PF2000 Electronic Piano

The PF2000 is an 88-key electronic piano that features authentic piano keyboard action and tone generators which are compatible with those of the top-line Yamaha DX7 synthesizers—so you have a virtually unlimited range of superlative FM voices. In fact, the PF2000 can directly use DX7 voice data cartridges. The PF2000 itself has 12 internal presets, and an additional 64 performance memories (voice + performance data) can be directly selected from an external data cartridge giving you a total of 76 voices "on-line" at any one time. The PF2000 also offers a built-in 2-track digital sequence recorder that lets you record accompaniments or complete compositions. Add to this a range of versatile MIDI functions, advanced control features and a built-in high-performance 20W + 20W amplifier and speakers, and you have an instrument that provides extraordinary musical scope.

### SPECIFICATIONS

• **KEYBOARD:** 88 keys (A1—C7) • **TONE GENERATOR:** 16—32 note polyphonic, 6-operator FM x 2 • **TRANSPOSITION RANGE:** -12—+12 semitones • **PITCH CONTROL RANGE:** -64—+63 steps (1 step—1.17 cents) • **CONTROLS:** VOLUME (metronome), SOUND CONTROLLER/BALANCE, TEMPO, TRACK I/II, START, STOP/CONTINUE, REPEAT, VOICE SELECT 1—0, DEC, INC, CARTRIDGE, VARIATION, FUNCTION, Power ON/OFF, Speaker ON/OFF • **DISPLAY:** 20-character x 2-line illuminated LCD

• **RECORDER:** 2-track (16-note polyphonic/track), approx. 2600 notes, 96 clocks/beat resolution (internal clock), 24 clocks/beat (MIDI clock) • **CONNECTORS:** PHONES x 2, OUTPUT A & B (-10 dBm), MONO OUT (-10 dBm), LINE INPUT A/MONO B (-10 dBm), MIDI IN/OUT/THRU, SUSTAIN, FOOTSWITCH, FOOT CONTROLLER 1 & 2 • **MAIN AMPLIFIER:** 20 Watts x 2 • **SPEAKERS:** 4-cm/16-cm x 2 • **DIMENSIONS (W x H x D):** 1470 x 147 x 470 mm (57-7/8" x 5-3/4" x 18-1/2") • **WEIGHT:** 39 kg (86 lbs.)



## PF85 Electronic Piano

The PF85 employs Yamaha's original AWM tone generator for totally lifelike, vibrant voices. With a velocity-responsive 88-key keyboard and a range of 5 super-realistic voices, the PF85 will satisfy the professional who requires a high-quality keyboard on which to perform or compose. Its built-in speakers and straightforward controls also make it ideal for the advanced amateur who wants an expressive electronic piano. The internal speaker system uses bass-reflex porting to deliver full, solid bass and midrange sound. The PF85 is a wise electric piano choice at all levels.

### SPECIFICATIONS

• **KEYBOARD:** 88 keys (A1—C7) • **VOICES:** Piano 1, Piano 2, E. Piano, Harpsichord, Vibe • **BUILT-IN EFFECT:** Stereo Chorus • **TRANSPOSITION RANGE:** -6—+5 semitones • **PITCH CONTROL RANGE:** ±51 cents (in 3 cent increments) • **PEDALS:** Sustain, Soft/Key Hold • **OTHER CONTROLS:** Master Volume, Transpose/MIDI, Pitch, Power ON/OFF, Speaker ON/

OFF • **CONNECTORS:** Phones, Output 1, Output 2, Line In, MIDI IN/OUT/THRU, Sustain Pedal, Soft/Key Hold Pedal • **MAIN AMPLIFIER:** 20 Watts x 2 • **SPEAKERS:** 16-cm (approx. 6") x 2 • **DIMENSIONS (W x H x D):** 1330 x 143 x 390 mm (52-3/8" x 5-5/8" x 15-3/8") • **WEIGHT:** 31 kg (68.3 lbs.)



## CP80M/CP70M/CP60M Electronic Piano



The CP80M/70M/60M Electric Pianos with MIDI are the culmination of a century of Yamaha acoustic piano craftsmanship combined with expertise in electronic instrument design. For the first time, MIDI control capability is available on these first-class acoustic/electric instruments, allowing you to play a MIDI keyboard or tone generator from the CP piano keyboard.

### SPECIFICATIONS

• **KEYBOARD:** CP80M: 88 keys, CP70M: 73 keys CP60M: 76 keys • **CONTROLS:** Power Switch, Volume, Equalizer (±12 dB at 100 Hz, 200 Hz, 400 Hz, 800 Hz, 1.6 kHz, 3.2 kHz, 6.4 kHz), Equalizer ON/OFF Switch, Effects Loop A, B, Tremolo ON/OFF Switch, Depth, Speed, MIDI ON/OFF Switch, MIDI SPLIT • **CONNECTING TERMINALS:** XLR-type Output x 2 (CP80M/70M), Phone Jack Output x 2 SEND A, B Out, RETURN A, B In, MIDI OUT, Footswitch • **DIMENSIONS (W x H x D):** CP80M: 1,460 x 941 x 1,130 mm (57-1/2" x 37" x 45") • CP70M: 1,296 x 941 x 1,047 mm (51" x 37" x 41-1/5") • CP60M: 1,304 x 930 x 683 mm (51-1/3" x 36-3/5" x 26-7/8") • **WEIGHT (including cases):** CP80M: 153.0 kg (337.3 lbs.) • CP70M: 130.0 kg (286.6 lbs.) • CP60M: 100.0 kg (220.5 lbs.) • **WEIGHT (excluding cases):** CP80M: 132.0 kg (291.0 lbs.) • CP70M: 112.0 kg (246.9 lbs.) • CP60M: 100.0 kg (220.5 lbs.)

\* All specifications subject to change without notice.

\* All specifications subject to change without notice.



# FM TONE GENERATORS

## TX16W Digital Wave Filtering Sampler

With a unique Dynamic Digital Filtering system, 32-point stereo sampling at sampling rates of up to 50 kHz, voice layering capability and a massive 1.5 megabyte internal memory (expandable to 3, 4.5 or 6 megabytes), the Yamaha TX16W has a clear edge over all other samplers in its class. It gives you all this in a sleek rack-mountable unit with built-in 3.5" floppy disk drive.



### SPECIFICATIONS

• **TONE GENERATOR:** Linear Conversion Advanced Wave Memory, 16 Simultaneous Output Notes/Voices, Last-note Priority Key Assign • **INTERNAL MEMORY:** 32 Performances, 32 Voices, 64 Timbres, 32 Filters, 1.5 Mbyte Wave Memory (max 6 Mbyte with 3 optional 1.5 Mbyte expansion boards) • **A/D CONVERSION:** 12-bit Linear • **SAMPLING RATES:** 16.7 kHz, 33.3 kHz, 50.0 kHz (Mono); 33.3 kHz (Stereo) • **DISPLAY:** 40-character, 2-line Backlit LCD • **CONTROLS:** Power Switch, 8 Function Select Keys, Data Entry Keys (10-key Pad, —, ◀, ▶, +1, —1, ENTER), Line/Mic Attenuation Switch, Input Volume Control • **TERMINALS:** MIDI IN/OUT/THRU, OUTPUT I/MIX, OUTPUT II, INDIVIDUAL OUTPUTS 1—8, HEADPHONES, SAMPLE INPUT, EXTERNAL TRIGGER INPUT, FOOTSWITCH, EXTERNAL PORT • **DIMENSIONS (W × H × D):** 480 × 94 × 372 (18-7/8" × 3-11/16" × 14-5/8") • **WEIGHT:** 6.8 kg (15 lbs.)

## TX1P Piano Tone Generator

Acoustic piano, electric piano, harpsichord and vibes—all in a 1U rackmount unit that can be controlled from any MIDI keyboard or sequencer. The five voices contained in the TX1P Piano Tone Generator are digital recordings of live instruments stored and reproduced using Yamaha's Advanced Wave Memory. The TX1P even includes three built-in effects that can add variety and life to your sound and playing style.



### SPECIFICATIONS

• **TONE GENERATOR:** AWM (Advanced Wave Memory), 16-note Polyphony • **PANEL CONTROLS:** PARAMETER: MASTER TUNE, RECEIVE CH., TRANPOSE, NOTE LIMIT, TRANPOSED DELAY • DATA ENTRY: DEC, INC • VOICE SELECT: PIANO 1, PIANO 2, E. PIANO, HARPSICHORD, VIBE • EFFECT: CHORUS, TRANPOSED DELAY, CHORD PLAY • **DISPLAY:** 7-segment LED × 2 • **CONNECTORS:** FRONT PANEL: PHONES • REAR PANEL: MIDI IN, MIDI THRU, OUTPUT I, OUTPUT II • **DIMENSIONS (W × H × D):** 480 × 45.2 × 270 mm (18-7/8" × 1-7/8" × 10-5/8") • **WEIGHT:** 3.4 kg (7.5 lbs.)

## TX802 FM Tone Generator

The full power of advanced Yamaha FM tone generator technology is yours in the remarkable TX802. It has 128 preset voices, plus 64 user and 64 cartridge memory locations that can be programmed with an almost unlimited range of voice and performance data combinations. Up to 8 different voices can be assigned to different MIDI channels, and the 8 voices can be output via stereo or 8 independent output jacks. A vast range of voice modification features is also provided.



### SPECIFICATIONS

• **TONE GENERATOR:** FM Tone Generator (6 Operators, 32 Algorithms) • **SIMULTANEOUS NOTE OUTPUT:** 16 Notes, Assignable to 8 Timbres max. • **INTERNAL MEMORY:** 64 Performances, 64 Internal Voices (User Memory), 128 Preset Voices • **EXTERNAL MEMORY:** RAM Cartridge: 64 Performances, 64 Voices • **FRONT PANEL CONTROLS & TERMINAL:** Power Switch, Tone Generator ON/OFF, Parameter Select Keys × 8, Mode Select/Edit/Store Keys × 8, Data Entry Keys (10-key Pad, ◀, ▶, +1, —1, ENTER), CARTRIDGE Slot, PHONES Jack • **REAR PANEL TERMINALS:** MIDI IN/OUT/THRU, OUTPUT I, OUTPUT II, INDIVIDUAL OUTPUTS 1—8 • **DISPLAY:** 40-character, 2-line Illuminated LCD • **DIMENSIONS (W × H × D):** 480 × 94.5 × 287 mm (18-7/8" × 3-3/4" × 11-1/4") • **WEIGHT:** 4.9 kg (10.8 lbs.)



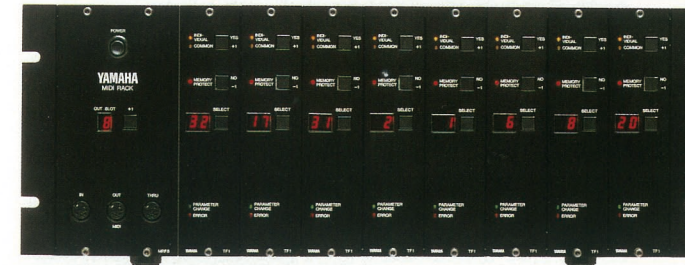
### SPECIFICATIONS

• **TONE GENERATION SYSTEM:** FM Tone Generator (4 operators, 8 algorithms) • **POLYPHONY:** Variable between 8 notes to 1 voice (last note priority) and 8 voices to 1 note (monophonic) • **INTERNAL MEMORY:** 128 preset voices in ROM, 32 user memories in RAM, 24 performance memories in RAM • **SWITCHES:** POWER, STORE/EG COPY, UTILITY, EDIT/COMPARE, PLAY/PERFORM, PARAMETER UP, PARAMETER DOWN, DEC, INC, CURSOR LEFT, CURSOR RIGHT, CURSOR • **DISPLAY:** 2 line 16 characters (reversed type) • **TERMINALS:** CASSETTE, MIDI THRU, MIDI OUT, MIDI IN, OUTPUT I/II, PHONES • **DIMENSIONS (W × H × D):** 480 × 45.2 × 282 mm (18-15/16" × 1-3/4" × 11-1/8") • **WEIGHT:** 3.4 kg (7.5 lbs.)

## TX81Z FM Tone Generator

The TX81Z is a 4-operator 8 note polyphonic FM tone generator that can be used with synthesizers or sequencers. Up to 8 "instruments" can be assigned to different channels for sequencer control. The TX81Z has 128 superb preset voices which can be used as is or edited and stored in 32 user memory locations. The TX81Z actually allows full voice programming without the need for an external synthesizer or controller.

## TX816 8-module FM Tone Generator System



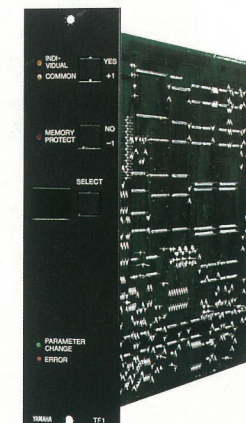
This fully professional FM tone generator system has 8 independent TF1 6-operator 32-algorithm digital FM tone generator modules. The TX816 is an ideal match for the superlative QX1 Digital Sequence Recorder or, combined with a MIDI Master Keyboard such as the KX88 or KX76 it forms the ultimate FM performance system.

### SPECIFICATIONS

• **INTERNAL MEMORY:** (32 voices + 32 Functions) × 8 • **AUDIO TERMINALS:** XLR OUTPUT × 8 • **CONTROL TERMINALS:** MIDI COMMON (IN, OUT, THRU) MIDI INDIVIDUAL (IN, THRU) × 8 • **POWER REQUIREMENTS:** U.S. & Canadian models: 120V 50/60 Hz • General model: 100—120/220—240 V 50/60 Hz • **POWER CONSUMPTION:** 70 W • **STANDARD ACCESSORIES:** MIDI Cable 1.5m × 8 MIDI Cable (5m), 5.25" Voice Data Disk Socket Wrench • **DIMENSIONS (W × H × D):** 480 × 176 × 346 mm (18-7/8" × 6-15/16" × 13-5/8") • **WEIGHT:** 12.0 kg (26.5 lbs.)

## TF1 FM Tone Generator Module

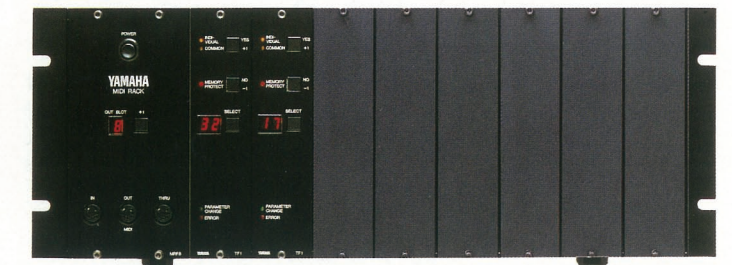
Both the TX816 and TX216 use this 6-operator 32-algorithm digital FM tone generator module. Each TF1 has 32 performance memories, combining voice and all performance functions. The TF1 functions exclusively with the TX rack system.



### SPECIFICATIONS

**MODES and SUB-MODES**  
• **PLAY MODE:** Display Program Number • Set Receive Basic Channel • Set Omni On/Off • Tune Master Pitch • **EDIT MODE:** Select Program Number for Edit • Attenuate Output Level • Limit Lowest Key • Limit Highest Key • **STORE MODE:** Select Destination • Store Voice and Function • Store Only Function • **UTILITY MODE:** Dump All Voices and Functions • Clear And Initialize All Functions • Audio Check 440 Hz; —4 dBm • Read Out Current Voltage of Battery  
**MIDI RACK FRAME**  
• **TERMINALS:** MIDI IN, MIDI OUT, MIDI THRU (5-pin DIN) • **CONTROLS:** Power ON/OFF • MIDI Out Slot Select • **MASTER CLOCK RATE:** 9.4265 MHz • **DIMENSIONS (W × H × D):** 480 × 176 × 346 mm (18-7/8" × 6-15/16" × 13-5/8") • **WEIGHT:** 600 g (1 lbs.)

## TX216 2-Module Expandable FM Tone Generator System



The TX216 is a 2-module version of the 8-module TX816. It features the same rack as the TX816, so by adding TF1 modules, it is possible to expand to a full 8-module system.

### SPECIFICATIONS

• **INTERNAL MEMORY:** (32 voices + 32 Functions) × 2 • **AUDIO TERMINALS:** XLR OUTPUT × 2 • **CONTROL TERMINALS:** MIDI COMMON (IN, OUT, THRU) MIDI INDIVIDUAL (IN, THRU) × 2 • **POWER REQUIREMENTS:** U.S. & Canadian models: 120 V 50/60 Hz • General model: 100—120/220—240 V 50/60 Hz • **POWER CONSUMPTION:** 22 W • **STANDARD ACCESSORIES:** MIDI Cable 1.5m × 2, MIDI Cable (5m), Socket Wrench • **DIMENSIONS (W × H × D):** 480 × 176 × 346 mm (18-7/8" × 6-15/16" × 13-5/8") • **WEIGHT:** 10.0 kg (22.0 lbs.)

## FB-01 FM Sound Generator



Yamaha's versatile and economical, high-performance 4-operator 8-algorithm tone generator is built into a compact and light weight unit, which features 240 preset voices in ROM, and RAM memory space for up to 96 user-programmed voices. Output is 8-note polyphonic, or groups of notes up to the 8-note limit may be assigned to different MIDI channels for independent control: e.g. 2 channels × 4 notes, 4 channels × 2 notes, etc. Different voices may be assigned to different MIDI channels for added flexibility. The FB-01 is an ideal way to expand the voice power of MIDI synthesizers, music computers or MIDI sequencing systems.

### SPECIFICATIONS

• **SOUND GENERATION SYSTEM:** FM Sound Generator (4 operators 8 algorithms) • **POLYPHONY:** Variable between 8 notes to 1 voice (last note priority) and eight voices to 1 note (monophonic) • **INTERNAL MEMORY:** 240 preset voices + Functions in ROM (5 banks × 48 voices) 96 user voices + Functions in RAM (2 banks × 48 voices) 4 preset configurations in ROM, 16 user configurations in RAM • **FRONT PANEL KEYS:** SYSTEM SETUP, INSTRUMENT SELECT, DATA ENTRY, INSTRUMENT ASSIGN, INSTRUMENT FUNCTION, VOICE FUNCTION, VOICE SELECT • **DISPLAY:** LCD, 16 characters (backlit type) • **TERMINALS:** AUDIO OUT L, R (unbalanced phone jack), MIDI IN, OUT, THRU • **POWER CONSUMPTION:** 9W • **POWER REQUIREMENTS:** U.S. & Canadian models: AC120V, 50/60 Hz General model: AC220—240V, 50/60 Hz • **DIMENSIONS (W × H × D):** 218 × 48 × 274 mm (8-7/12" × 1-11/12" × 10-5/6") • **WEIGHT:** 2.1 kg (4.6 lbs.) • **STANDARD ACCESSORIES:** MIDI cable, phone jack cable × 2 • **OPTION:** YRM-506 Voicing program RFB-01 Rack for FB-01

### RFB-01 (RACK for FB-01)



With the RFB-01 Rack Mount Adaptor, two FB-01's can easily and rapidly be mounted side-by-side in a standard rack mount. The compact FB-01 can thus be efficiently incorporated into an effects rack, for studio or stage use.

\* All specifications subject to change without notice.

\* All specifications subject to change without notice.



# DIGITAL RHYTHM PROGRAMMERS

**RX7** The RX7 offers 100 realistic sampled sounds including drum kit, Latin percussion, instrumental and special effect voices. The number of sounds available, however, is virtually unlimited because the RX7 has a powerful Voice Edit mode: pitch, volume, pan, and decay can be modified as desired. Independent LFOs are even provided for voice modulation. What's more, each individual voice can be played with 8-note polyphony and a total of 16 notes can be played simultaneously. A range of effects are also provided that permit combining up to 4 notes—e.g. add up to 3 delays to a voice or program a "shout" voice to come out in 4-part harmony. Naturally, all the RX7's original voices, or ones you create yourself, can be used in up to 100 patterns of up to 99 measures each. The patterns can then be combined to form songs, which can be further linked into chains. The RX7 also accepts MIDI velocity data permitting extremely fine control from a sequence recorder. The RX7 offers professional, state-of-the-art features in a compact, economical package.

• **SOUND SOURCE:** PCM sampled, 12-bit resolution • **NUMBER OF VOICES:** 100 • **MEMORY CAPACITY:** Patterns: 100 • Songs: 20 (up to 999 parts) • Chains: 3 (up to 90 steps) • Key Data Sets: 10 (incl. 5 user programmable sets) • **CONTROLLERS:** Sliders: Master Volume, Click Volume, Tempo, Data Entry • Buttons: ACCENT 1, ACCENT 2, STOP/CONTINUE/SHIFT/COMPARE, START/ENTER, Instrument Keys A through X (24) • Keys: Pattern and Song Operation Keys (PATTERN/SONG, PEAL TIME WRITE/SONG EDIT, STEP WRITE/INSERT, QUANTIZE/DELETE, SWING/REPEAT, CLICK/TEMPO CHANGE, PATTERN EDIT/

**RX5** Top of the Yamaha Digital Rhythm Programmer line, the RX5 offers a total of 64 voices—24 PCM-recorded voice in internal ROM, 12 in internal RAM, and another 28 in an external Waveform Data Cartridge. More pre-programmed Waveform Data Cartridges are available from Yamaha. The RX5 also offers complete voice editing capability. You can actually alter pitch, envelope and other voice characteristics. Original sounds you create can be stored in internal RAM or external RAM4 Data Cartridges. Individual outputs are provided for each instrument, allowing optimum versatility in mixing and processing the RX5's output. The RX5 is a truly professional Digital Rhythm Programmer.

**SPECIFICATIONS**  
• **SOUND SOURCE:** Internal: 12 Bit, 24 Voices • RAM: 12 Bit, 12 Voices • Waveform Data Cartridge: 28 Voices • **MEMORY CAPACITY:** 100 Patterns (Max. Length: 99 Measures) • 20 Songs (Max. Length: 999 Parts) • 3 Chains (Max. Length: 999 Steps) • 3 Sets of Key Data • **CONTROLLERS:** Sliders: Master Volume, Click Volume, Tempo, Data Entry, Instrument Volume (12) • Buttons: ACCENT 1, ACCENT 2, STOP/CONTINUE/SHIFT, START/ENTER Instruments A thru X (24) • Keys: Pattern & Song Operation Keys (PATTERN/SONG, REAL TIME WRITE/EDIT SONG, STEP WRITE/INSERT, QUANTIZE/DELETE, SWING/REPEAT, CLICK/TEMPO CHANGE, EDIT PATTERN/VOLUME CHANGE, CLEAR, COPY), REVERSE, DAMP, TEMPO, Mode & Job Keys (EDIT VOICE, CHAIN, SYNC, UTILITY, KEY ASSIGN, CASSETTE/CARTRIDGE, MIDI, JOB), Numeric Key Panel, -1/NO, +1/YES • **CONNECTIONS:** Audio Output: PHONES, L/MONO, R, Individual Outputs (12) • MIDI: IN, OUT, THRU • Interface: CASSETTE/TAPE SYNC (IN/OUT), EXT. CLOCK IN, EXT. CLOCK OUT, Waveform Data Cartridge, Sequence Data Cartridge • Control: Foot Switch • Power: DC 12 V IN • **DIMENSIONS (W x H x D):** 439 x 88 x 340 mm (17-1/4 x 3-1/2 x 13-3/8") • **WEIGHT:** 3.8 kg (8.4 lbs.)

**RX17** The RX17 combines 26 PCM drum and Latin percussion voices in one versatile, great-sounding unit. Up to 11 mono voices can be played simultaneously. You can program rhythms in realtime or step write modes, and adjust instrument voice level and accents for a natural rhythmic feel.

**SPECIFICATIONS**  
• **NUMBER OF VOICES:** 26 • **MEMORY CAPACITY:** Patterns: 100 • Songs: 10 (Up to 999 Parts) • **CONTROLLERS:** Keys: PATTERN, SONG, CAS, MIDI, JOB, LEVEL, PAN, INST CHANGE, TEMPO, BEAT CLEAR, Numeric Keys (10, Numbered 0-9), -1 NO, +1 YES, ◀ ▶, STOP/CONTINUE, START, ACCENT, Instrument Keys (13, Dual-Function) • Sliders: VOLUME, TEMPO • **CONNECTIONS:** MIDI IN, MIDI OUT • CASSETTE IN/OUT • Stereo 1/4" Jack: PHONES • Mono 1/4" Jack: Audio Out L/MONO, R • DC 12V In (Tip Positive) • **DIMENSIONS (W x H x D):** 350 x 54.5 x 202 mm (13-25/32 x 2-5/32 x 7-31/32") • **WEIGHT:** 1.4 kg (3.1 lbs.)



VOLUME CHANGE, CLEAR, COPY), EFFECT, DAMP, TEMPO, Mode and Job Keys (VOICE EDIT, KEY ASSIGN, CHAIN, CASSETTE/CARTRIDGE, SYNC, MIDI, UTILITY, JOB), Numeric Key Panel, -1/NO, +1/YES • **CONNECTIONS:** Audio Output: Phones, Left/Mono, Right, Click • MIDI: In, Out, Thru • INTERFACE: Cassette (IN/Out, DIN Connector), Data Cartridge Port • CONTROL: Foot Switch • POWER: DC 12 V In • **DIMENSIONS (W x H x D):** 439 x 78 x 270 mm (17-1/4" x 3 x 10-5/8") • **WEIGHT:** 2.95 kg (6.5 lbs.)



**RX120** The RX120 makes advanced Yamaha digital rhythm programmer technology easier to use than ever before. It has 38 high-fidelity PCM-sampled percussion sounds and 40 basic rhythm patterns. Each rhythm pattern has 3 variations, 2 fill ins, an intro ending, and break. All you have to do is select and combine the rhythm patterns and variations to create the overall "song." The RX120 still provides plenty of creative versatility with manually playable cowbell and clap voices, an accent function, start/stop and fill-in footswitches, and switchable bass drum/snare sounds.

**SPECIFICATIONS**  
• **SOUND SOURCE:** PCM sampled • **NUMBER OF VOICES:** 38 instruments, 12-note polyphony • **MEMORY CAPACITY:** Songs: 20 (up to 500 measures max.) • **PRESET MEMORY:** 40 Patterns x 8 Variations • **CONTROLLERS:** Sliders: Master Volume, Tempo • Buttons: 40 Patterns, SONG, WRITE -/+1, CLEAR, REST, REPEAT, INIT TEMPO/BD SD CHANGE, NO, YES, PATTERN VARIATION 1-3, ACCENT, TAP TEMPO, INTRO, ENDING, FILL IN A/B, BREAK, COWBELL, CLAPS, START, STOP/CONTINUE • **CONNECTIONS:** Audio Output: Phones, Left/Mono, Right • MIDI: In • INTERFACE: Cassette (IN/Out, DIN Connector), Data Cartridge Port • CONTROL: Foot Switches (Fill In, Start/Ending) • POWER: DC 12 V In • **DIMENSIONS (W x H x D):** 350 x 54.5 x 191 mm (13-3/4" x 2-1/8" x 7-1/2") • **WEIGHT:** 1.5 kg (3.3 lbs.)

RX120

# DIGITAL SEQUENCE RECORDERS

## QX3

This superbly designed Digital Sequence recorder offers a built-in 3.5" floppy disk drive, a large data display, a comprehensive keyboard with music markings, and a range of control and editing features that put you in total charge of your music. All 16 tracks have unlimited polyphony, and are instantly accessible at the press of a key for recording, editing or playback. A single song recorded on the QX3 can have up to 24,000 notes, and recorded songs can be chained together for continuous playback of up to 48,000 notes. Dual assignable MIDI out terminals provide extended system flexibility.

### SPECIFICATIONS

• **16 TRACKS:** Fully polyphonic • **MEMORY CAPACITY:** Approx. 24,000 Notes (48,000 Notes During Chain Play) • **FLOPPY DISK:** 3.5", 2DD (720 Kbytes) • **KEYS:** Note Value x 11, Note Name x 12, Numeric Keys x 10, F1, F2, INS, SHIFT, CHAR, ENTER, JOB COMMAND, ◀ ▶, TRACK SELECT x 8, LOAD, SAVE, MDR, TOP, LOC1, 2, 4, 8, EXIT EDIT, REC, STOP, RUN, TEMPO, MEASURE, BEAT, CLOCK • **CONTROLS:** DIAL, CONTRAST • **LEDS:** MIDI SYNC, TAPE SYNC, MIDI IN, FDD, FLOPPY DISK, TRACK 1-16, TEMPO INDICATOR, TEMPO, MEASURE, STEP, CLOCK, AUTOLOCATE • **DISPLAY:** 40-character, 2-line illuminated LCD • **TERMINALS:** CLICK, FOOT, TAPE IN, TAPE OUT, MIDI IN, MIDI OUT 1, MIDI OUT 2, MIDI THRU • **DIMENSIONS (W x H x D):** 439 x 81 x 340 mm (17-1/4" x 3-1/8" x 13-3/8") • **WEIGHT:** 4.5 kg (9.9 lbs.)

## QX5

Compact yet extremely powerful, the QX5 features 8 independent tracks which can each hold up to 16 MIDI channels of recorded music, performance, and system exclusive data. Record in real-time or step write modes with full auto-locate and punch-in capability, and 32 "macros" allow storage of segments which can later be assembled to form a complete composition. The QX5 also offers extensive editing capability.

### SPECIFICATIONS

• **8 TRACKS + 32 MACROS:** 32 note polyphony • **FRONT PANEL SWITCHES:** TEMPO (EVENT EDIT) • MEASURE (MEAS EDIT) • TRACK (TRACK EDIT) • CLOCK (LOAD/SAVE) • DISPLAY (CLICK) • AUTO LOCATE (RESET) • F1 (JOB) • F2 (CURSOR) • F3 (DECREMENT) • F4 (INCREMENT) • SHIFT • RECORD (RECORD MODE) • STOP/CONTINUE • START (ENTER) • **TERMINALS:** MIDI IN • MIDI OUT • MIDI THRU • Tape In • Tape Out • FOOT SW • Click Out • **MEMORY:** Approximately 20,000 notes (15,000 with velocity) • **MAIN OPERATION:** Record/Realtime, Punch In, Step • Play • Edit/Event Edit, Measure Edit, Track Edit • Tape/Load, Save, Verify • Set Up • MIDI • **DIMENSIONS (W x H x D):** 350 x 240 x 49 mm (13-3/4 x 9-3/8 x 1-7/8") • **WEIGHT:** 2.9 kg (6.4 lbs.)

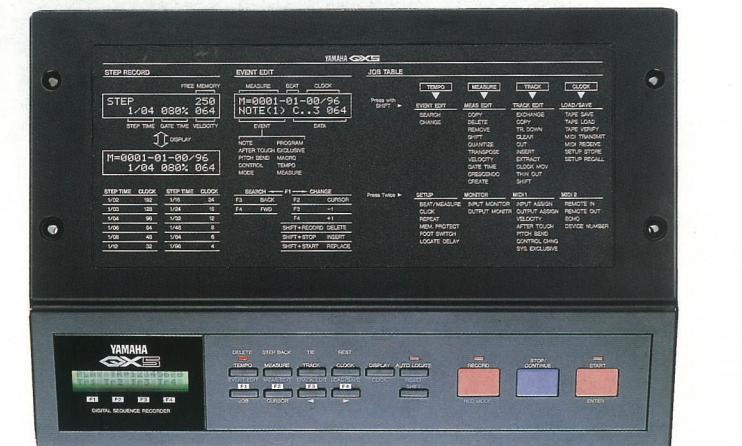
## QX1

The QX1 features a built-in floppy disk for data storage and 8 independent track—with 8 separate MIDI OUT terminals. Recording can be carried out in real-time or step-write modes, with enormous overdubbing capacity. The QX1 permits highly detailed editing and manipulation of all recorded data, and thus is an extremely useful tool for all music production fields.

### SPECIFICATIONS

• **8 TRACKS:** Fully polyphonic • **MEMORY CAPACITY:** 80,000 Notes (approx.) 32 banks (Max. 999 measures per bank), 8 chains • **TERMINALS:** MIDI (IN, THRU, OUT 1-8), TAPE SYNC (IN, OUT) FOOT SW, CLICK OUT, 5.25" Floppy Disk Drive • **DIMENSIONS (W x H x D):** 519 x 105 x 329 mm (20-7/10 x 4-1/8 x 12-15/16") • **WEIGHT:** 7.5 kg (16.5 lbs.)

QX3  
QX5



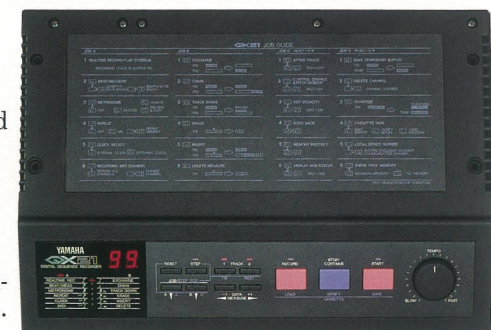
## QX21

Although it's the most economical and easy-to-use Digital Sequence Recorder Yamaha offers, the QX21 still provides considerable MIDI sequencing versatility and performance. Real-time or step time recording, overdubbing, trackdown, insertion and chaining capability provide sophisticated sequencing potential. Material can be recorded on all 16 MIDI channels for multi-channel playback.

### SPECIFICATIONS

• **2 TRACKS:** 16 Notes polyphonic, 16 MIDI channels • **MEMORY CAPACITY:** 8,100 Notes (approx.) 6,000 Notes with velocity (approx.) • **TERMINALS:** MIDI (IN, THRU, OUT), CASSETTE, FOOT SW • **DIMENSIONS (W x H x D):** 351 x 50 x 241 mm (13-7/8 x 1-8/9 x 9-1/2") • **WEIGHT:** 2.3kg (5.1 lbs.)

QX1  
QX21



\* All specifications subject to change without notice.

\* All specifications subject to change without notice.

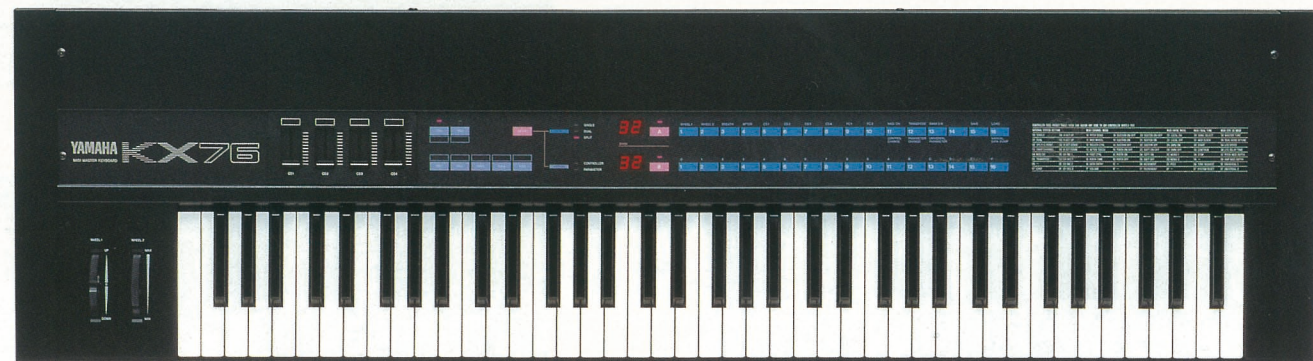


# MIDI MASTER & REMOTE KEYBOARDS

## KX88/KX76 MIDI Master Keyboard



KX88



KX76

These keyboards concentrate on complete real-time MIDI control rather than the use of internal tone generation. They have been created to fill a specific need: total control of tone generators, sequencers, and other MIDI equipment. Each controller wheel, slide control and switch is programmable to transmit specific MIDI information. The KX88 and KX76 also accept two external foot controllers, two foot switches and Yamaha's unique Breath Controller, all of which are assignable to a variety of functions. The controls provided can be programmed to cover the entire range of MIDI control functions and more — including real-time performance effects, voice selection, voice programming, function programming and others. Of course, both the KX88 and KX76 keyboards are velocity and aftertouch sensitive, putting total expressive and dynamic control right at your fingertips.

### KX88 SPECIFICATIONS

• **KEYBOARD:** 88 keys (weighted) • **MODES:** PLAY (Single/Dual/Split) CONTROLLER ASSIGN, PARAMETER ASSIGN • **TERMINALS:** Foot Control x 2, Foot Switch x 2, Breath Control, MIDI (IN, OUT) • **DIMENSIONS (W x H x D):** 1,441 x 131.5 x 347 mm (56-7/10 x 5-2/10 x 13-7/10") • **WEIGHT:** 28.5 kg (62.8 lbs.)

### KX76 SPECIFICATIONS

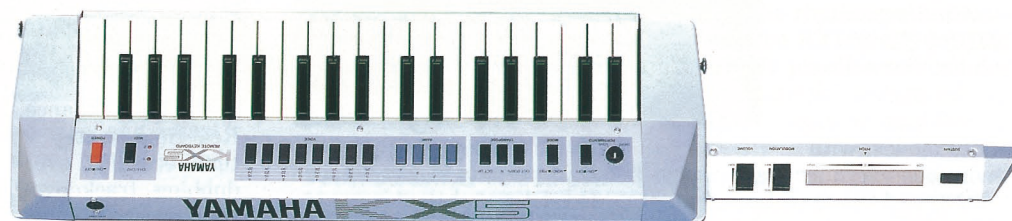
• **KEYBOARD:** 76 keys • **DIMENSIONS (W x H x D):** 1,259 x 115 x 344 mm (49-5/9" x 4-1/2" x 12-1/2") • **WEIGHT:** 17.5 kg (38.6 lbs.) • **OTHER SPECS:** Same as KX88

## KX5 MIDI Remote Keyboard

If you'd rather be out front and mobile when playing your DX synthesizer or TX tone generator, the KX5 Remote Keyboard is your ticket to freedom. The keyboard is connected to your synthesizer via a single MIDI cable, giving you complete remote control of all performance functions.

### SPECIFICATIONS

• **KEYBOARD:** 37 keys with initial/after touch response • **PROGRAM CHANGE:** 32 (4 banks x 8 voices) • **CONTROLS:** Transpose, Mono/Poly, Portamento, Volume, Modulation, Pitch Bend, Sustain, MIDI Channel (1/2) • **TERMINALS:** Breath Control, MIDI OUT • **AVAILABLE IN TWO COLOURS:** Black/Silver



KX5

KX88  
KX76

\* All specifications subject to change without notice.

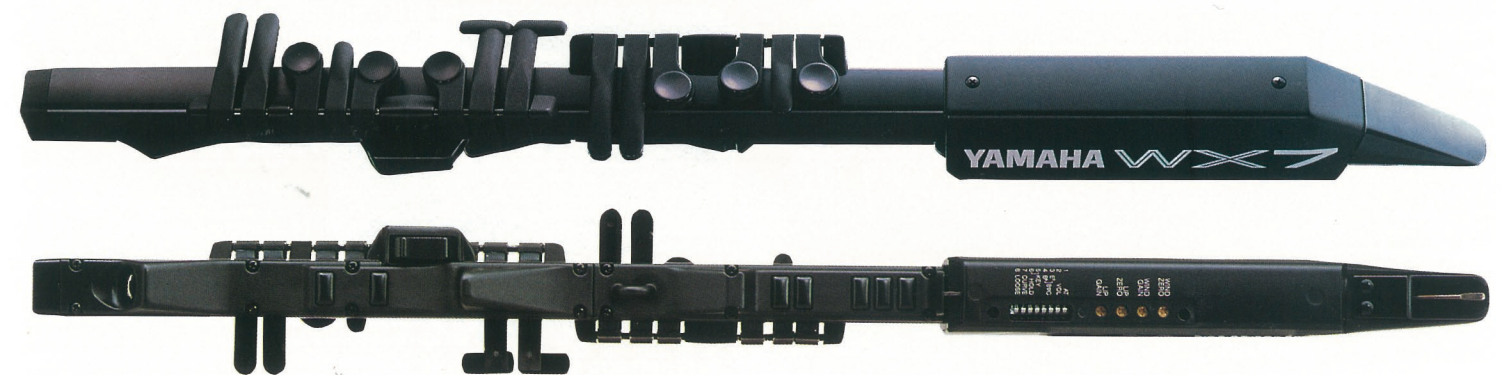
# WIND MIDI CONTROLLER



## WX7

Featuring a sleek design and advanced features, the Yamaha WX7 Wind MIDI Controller is destined to be one of the most influential MIDI controllers for years to come. Via MIDI, the WX7 allows wind-instrument players to directly play the most advanced synthesizers and tone generators available, or record directly to digital sequence recorders and MIDI computers. It does all this while placing the wind player on totally familiar ground. The WX7 uses conventional Böhm fingering, and feels much like an alto

sax to play—complete with reed. Notes can be bent by lip pressure, just as in an acoustic instrument, or by using a conveniently located pitch bend wheel. Breath pressure can be used to control volume, vibrato and tone, giving you all the expressive power you need. Simply, you gain the full breath and width of MIDI control capability without losing any of the feel, response or expression of standard wind instruments.



### SPECIFICATIONS

• **SENSORS:** Wind Sensor (Breath Pressure), Lip Sensor (Lip Pressure) • **CONTROLS:** Keys x 14, Pitch Bend Wheel, Key Hold, Program Change, Octave Transpose (-2 to +3 octaves) • **TERMINALS:** DC IN/MIDI OUT (Single Connector) • **MIDI TRANSMIT CHANNELS:** 1 or 3 (Normal mode), 1+2 or 3+4 (Dual Play mode) • **DIP SWITCHES:** After Touch, MIDI Volume, Transpose to B flat, Transpose to E flat, Key Hold Normal/Follow, Dual Play No Breath/Use Breath, Wind Curve Select, Loose Lip/Tight Lip • **TRIMMERS:** Lip Zero, Lip Gain, Wind Zero, Wind Gain • **DIMENSIONS (W x H x D):** 57 x 538 x 64 mm (2-1/4" x 21-1/4" x 2-1/2") • **WEIGHT:** 380 grams (13-1/2 oz.) • **POWER SOURCE:** MIDI/Power Pack (Included. Uses 6 "AA" batteries) or optional PA-1 AC Adapter

WX7

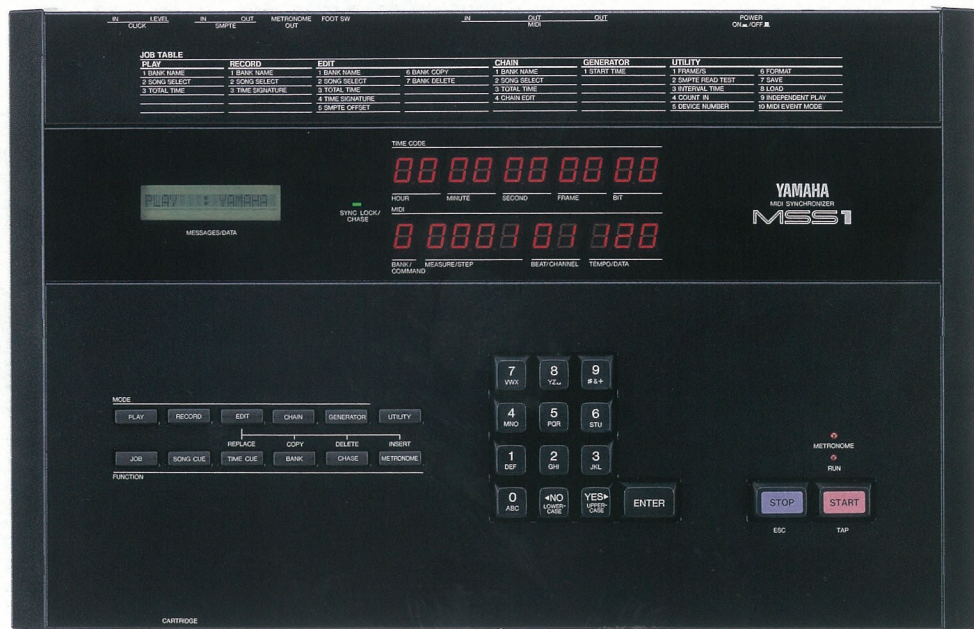
\* All specifications subject to change without notice.



# MIDI PERIPHERALS

## MSS1 MIDI Synchronizer

The Yamaha MSS1 MIDI Synchronizer is an easy, cost-effective way to synchronize MIDI devices to SMPTE time code. The MSS1 can precisely lock any clock-driven MIDI device to SMPTE time code replayed from a multitrack or video tape, and it's fully compatible with all four SMPTE formats (30, 30 drop-frame, 25 or 24 frames/sec.). A precision SMPTE time code generator is built-in so you can even record your own SMPTE time code tracks. A large 10-bank memory permits internal storage of tempo data for 10 different "songs," and a chain mode automatically plays banks in sequence allowing the creation of extremely long compositions. Internal memory data can also be saved to external RAM4 data cartridges for high-volume, long-term storage.



### SPECIFICATIONS

• **SYNCHRONIZATION:** MIDI clock signal to SMPTE time code (30, 30 drop-frame, 25, 24 fps) • **MEMORY:** 16 k-bytes, lithium battery backup • Max. 150 tempo change points • Max. 1795 program/control change points • Max. memory (7178 beats) @ tempo 120, 4/4: approx. 60 minutes • **CONNECTORS:** CLICK IN, SMPTE IN, SMPTE OUT, METRONOME OUT, FOOT SW IN, MIDI IN, MIDI OUT (x2), RAM CARTRIDGE • **CONTROLS:** Keys: PLAY, RECORD, EDIT, CHAIN, GENERATOR, UTILITY, JOB, SONG CUE, TIME CUE, BANK SELECT, CHASE, METRONOME, INC, DEC, ENTER, STOP, START, 10-key numeric pad • Variable Control: Click input level control • **DISPLAYS:** LEDs: SYNC, METRONOME, RUN, 7-segment x 20 • LCD: 16 characters x 1 line, backlit • **DIMENSIONS (W x H x D):** 439 x 73.5 x 286 mm • **WEIGHT:** 3.8 kg (8.4 lbs)

## MEP4 MIDI Event Processor



Here's an exciting example of what can be done with digital signal processing. The MEP4 allows you to modify any MIDI signal in virtually any way you wish. You can separate data on different MIDI channels and send them to independent MIDI OUT terminals, for example. You can change a MIDI message to a different message; e.g. you could change a pitch bend message into a modulation message. You could transpose notes on a specified MIDI channel up or down by any amount. The MEP4 even lets you delay MIDI signals to create a variety of echo effects. Delay and transposition can be combined to create automatic arpeggios. The possibilities are limitless.

### SPECIFICATIONS

• **MEMORY:** 60 programs • **PROCESSORS:** 4 • **PROCESSOR FUNCTIONS:** Channel Filter, Message Filter, Data Modifier, Data Presetter, Delay Processor, Output Assigner • **TERMINALS:** FOOT SW MIDI (IN, THRU, OUT x4) • **DIMENSIONS (W x H x D):** 480 x 45.2 x 282 mm (18-7/8 x 1-3/4 x 11-1/8") • **WEIGHT:** 3.3 kg (7.3 lbs.)

## MJC8 MIDI Junction Controller



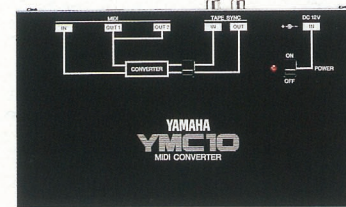
The Yamaha MJC8 MIDI Junction Controller has been designed specifically to facilitate MIDI signal patching and re-routing even within highly sophisticated MIDI setups. The MJC8 features eight MIDI IN and eight MIDI THRU terminals on the rear panel. Each MIDI IN terminal is independently assignable to any THRU terminal for exceptionally broad patching flexibility. 50 different patch configurations of this type may be stored in the MJC8's internal memory for instant recall whenever needed.

### SPECIFICATIONS

• **PATCH MEMORIES:** 50 • **DISPLAY WINDOW:** 16 characters x 2 lines LCD (backlit), Output monitor LED x 8 • **FRONT PANEL KEYS:** 6 Keys (STORE, MEMORY SELECT, Cursor key x 2, DEC/NO, INC/YES) • **REAR PANEL TERMINALS:** MIDI IN x 8, MIDI THRU x 8 • **POWER SUPPLY (POWER CONSUMPTION):** U.S. & Canadian models 120 V ± 15% (10 W) • General model 220 ~ 240 V ± 15% (10 W) • **HOUSING:** Rack mount 1 U type, Black • **DIMENSIONS (W x H x D):** 480 x 45 x 274 mm (18-7/8 x 1-3/4 x 10-3/4") • **WEIGHT:** 3.25 kg (7.17 lbs.)

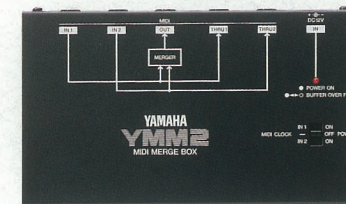
## YMC10 MIDI Converter

The YMC10 converts MIDI synchronization signals to an FSK signal which can be recorded on tape. At playback the YMC10 reconverts the FSK signal back to standard MIDI timing format, allowing MIDI devices to be synchronized to tape playback.



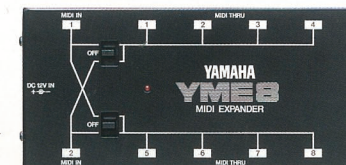
## YMM2 MIDI Merge Box

The YMM2 MIDI Merge Box combines two MIDI signals and transmits them via a single output which can be connected to any standard MIDI receiving device. This can significantly simplify procedures, reduce the need for repatching, permit previously impossible hookups, and generally let you make the very most out of your MIDI equipment.



## YME8 MIDI Expander

The YME8 has 2 MIDI IN terminals and two groups of 4 MIDI THRU terminals. Each MIDI THRU group may be switched to receive its signal from either MIDI IN terminal for quick, easy signal re-routing.



## MCS2

### MIDI Control Station

The MCS2 is capable of transmitting all MIDI Control Change messages via its slider controls and keys. This makes it an ideal companion for MIDI instruments which do not offer MIDI Control Change transmission capability: e.g. the PF80 and PF70 Electronic Pianos or CP-series Electric Pianos with MIDI. Two MIDI IN terminals permit merging external MIDI data with the MCS2's own data.

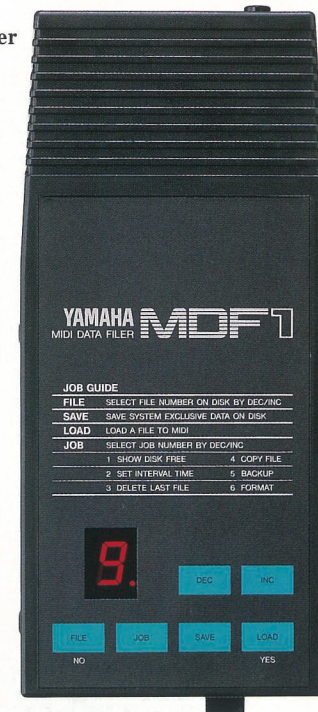


### SPECIFICATIONS

• **SWITCHES:** Program Change 1-8, Bank Hold • **SWITCH TYPE CONTROLLERS:** Push Switch 1-3, Foot Switch 1-2 • **CONTINUOUS TYPE CONTROLLERS:** Pitch Bend Wheel, Modulation Wheel, Breath Controller Jack, Foot Controller Jack 1-2, Continuous Slider 1-2 • **CONNECTING TERMINALS:** MIDI IN 1, MIDI IN 2, MIDI OUT, DC IN • **DIMENSIONS (W x H x D):** 350 x 53.7 x 202.5 mm (13-3/4 x 2-1/8 x 7-15/16") • **WEIGHT:** 1.3 kg (2.9 lbs.) • **POWER REQUIREMENT:** DC9 V — 12 V (PA-1 supplied)

## MDF1 MIDI Data Filer

The MDF1 is a compact, easy-to-use 2.8-inch Quick-Disk data storage system that hooks up to MIDI equipment directly via the MIDI interface. With it, you can create entire libraries of voices, sequences or rhythm patterns that can be accessed quickly and easily whenever needed. Operating the MDF1 is very easy: just six light-touch keys and a numeric LED display give you total control.



### SPECIFICATIONS

• **DISK CAPACITY:** 64 kbytes per side unformatted • 59.9 kbytes per side formatted • **STORAGE MEDIUM:** 2.8-inch Quick-Disk • **DISPLAY:** 7-segment LED • **TERMINALS:** MIDI IN, MIDI OUT, MIDI THRU, DC IN 10V • **POWER SUPPLY:** Yamaha PA-4 AC Adapter (supplied) • **DIMENSIONS (W x H x D):** 114 x 75 x 263.3 mm (4-1/2 x 2-7/8 x 10-3/8") • **WEIGHT:** 1.6 kg (3.5 lbs.) • **ACCESSORIES:** MIDI cable x 1 • Black Quick-Disk x 1

## MFC1 MIDI Foot Controller



This handy, versatile device lets you operate MIDI equipment via foot control, leaving your hands free to play an instrument or perform other operations. It is capable of transmitting MIDI Program Change numbers to select voices on a synthesizer, select different programs on a MIDI-compatible effect unit such as the Yamaha SPX90 Digital Multi-effect Processor, etc. With the addition of an optional foot controller and footswitch, the MFC1 can also transmit MIDI Control Change data for foot control of volume, modulation, portamento, sustain, and other functions. A CHAIN mode lets you transmit a programmed sequence of MIDI commands just by pressing a footswitch.

### SPECIFICATIONS

• **MEMORY MODE:** Memories BANK A, 1—4. BANK B, 1—4. • Memory contents: MIDI program change numbers 001—128, programmable • Footswitch Assignable MIDI control change numbers 000—127. • Foot controller Assignable MIDI control change numbers 000—127. • **CHAIN MODE:** Chains BANK A, 1—2. BANK B, 1—2. • Chain contents 20 STEPS per CHAIN: program change number footswitch control change, foot controller control change, START, STOP, CONTINUE. • **MIDI TRANSMISSION CHANNEL:** 1—16, programmable. • **DIMENSIONS (W x H x D):** 466 x 53 x 197 mm (18-3/8" x 2-1/8" x 7-3/4") • **WEIGHT:** 1.7 kg (3.7 lbs.)

\* All specifications subject to change without notice.

\* All specifications subject to change without notice.



# SIGNAL PROCESSORS/KEYBOARD MIXERS

## DMP7 Digital Mixing Processor

The DMP7 is a totally new concept in "music processing," integrating a high-performance 8 x 2 digital line-level mixing console with revolutionary Yamaha digital effects. All parameters—from fader positions to effects and EQ settings—are programmed and stored in digital memory. Up to 30 complete system configurations incorporating more than 200 parameters can be stored in internal memory and recalled at the touch of a key for instant "scene" changes. External RAM-4 cartridges provide an extra 67 memories each. For extensive, easily accessible automation control the DMP7 is also MIDI compatible. MIDI commands from external equipment can be used to automatically switch "scenes," or a MIDI sequence recorder can be used to store mixdown and effects change operations in real time!

### SPECIFICATIONS

• **ANALOG SECTION:** Total Harmonic Distortion: 0.03% @ STEREO OUT, +17 dB, 1kHz • Frequency Response: 20Hz–20kHz • **DIGITAL SECTION:** A/D, D/A Conversion: 16 bit • Sampling Frequency: 44.1 kHz • Internal Program Memory: 1–30 • Data Cartridge Memory: 31–97 • **MIXING PARAMETERS:** Channel Inputs: Phase Normal/Reverse, 3-band EQ (Freq. Low: 32 Hz–800 Hz, Mid: 250 Hz–8.0 kHz, High: 1.0 kHz–18 kHz, Gain: ±15 dB, Q: 0.1–5.0, P/S: Peaking/Shelving [Low and High bands only], EQ: ON/OFF), Channel Switch ON/OFF, Channel Level, Motor-drive fader Pan L-C-R (17 steps) • Channel Effect Send: Channel effect send 1–3 Pre/Post Level (2nd function of motor-drive channel faders) • Effect Master: Effect Send 1–3 Effect select, Effect parameter set, Effect Return 1–3 Level (Motor-drive fader), ON/OFF • Stereo Master: Stereo Level Motor-drive fader, Stereo Switch ON/OFF, Compressor ON/OFF, Ratio • **FUNCTIONS:** Foot volume, Channel copy, Solo, Fader auto/manual, Fade time, RAM cartridge initialize, Data entry & foot volume exchange, Battery check • **DISPLAY:** Channel Input 1–8 Level (8-segment LED



peak meter), Effect Send 1–8 Level (8-segment LED peak meter), Stereo Out L/R Level (Left & right channel 8-segment LED peak meters), Memory no. (2-digit 7-segment LED), Parameter Display (16-character x 2-line LCD, backlit) • **REAR PANEL:** Connectors: Channel inputs 1–8, Effect send, Effect return L/R, Stereo out L/R, Phones, Foot volume, MIDI IN/OUT/THRU, Digital cascade IN/OUT • Controls: Power ON/OFF, Channel gain trimmers 1–8 • **DIMENSIONS (W x H x D):** 480 x 139.4 x 435 mm (18-7/8" x 5-1/2" x 17-1/8") • **WEIGHT:** 10.5 kg (23.1 lbs.)

## REX50 Digital Multi-Effector

The REX50 is a remarkably versatile, compact multi-effects unit that can be used by guitarists, keyboard players, home recording enthusiasts, mixing engineers—anyone involved with music. It offers a selection of 30 top-quality effects including digital reverb, gated reverb, echo, flange, phase and a group of superb distortion effects. The distortion effects actually combine distortion with other effects (reverb, flange, etc.) for extraordinary sound processing versatility. In addition to the 30 preprogrammed memory locations, there are 60 "user memory locations" which can be used to store your own edited versions of the preset effect programs. The REX50 is also MIDI compatible.

### SPECIFICATIONS

• **ELECTRICAL CHARACTERISTICS:** Effect Freq. Response: 20 Hz–12 kHz • Dynamic Range: Effect = 74 dB, Direct = 80 dB • Distortion: 0.1% max. @ 1 kHz • **INPUT:** Number of Channels: Unbalanced x 2 (Phone Jack) • Nominal Level: –10 dBm • Impedance: 10 k-ohms • Level Control: Rotary, continuous • Level Monitor: 3-segment LED • **A/D, D/A CONVERSION:** Number of Channels: 1 • Sampling Freq.: 31.25 kHz • Quantization: 16 bits • **OUTPUT:** Number of Channels: Unbalanced x 2 (Phone Jack) • Nominal Level: –10 dBm • Impedance: 10 k-ohms • Mixing: Effect only, effect + direct signal • **MEMORY:** Presets (ROM): 1–30 • User Memory (RAM): 31–90 (Battery Backup) • **MIDI CONTROL:** Memory selection (1–90) by MIDI program change number • MIDI triggering of programs 14 and 16 • MIDI base key selection for program 17 • **FRONT PANEL:**



Keys: MEMORY, PARAM, ▲, ▼, STORE, RECALL, UTILITY, BYPASS • Display: 16 char. x 2 line LCD, 2-digit 7-segment LED • **REAR PANEL:** Control: LEVEL • Footswitch Jacks: BYPASS, MEMORY, INPUT, OUTPUT • MIDI Terminals: IN • STEREO MIX Switch: ON/OFF • **DIMENSIONS (W x H x D):** 274 x 44 x 196.2 mm (10-3/4" x 1-3/4" x 7-3/4") • **WEIGHT:** 1.7 kg (3.7 lbs.)

\* All specifications subject to change without notice.

## KM802/KM602 Keyboard Mixers

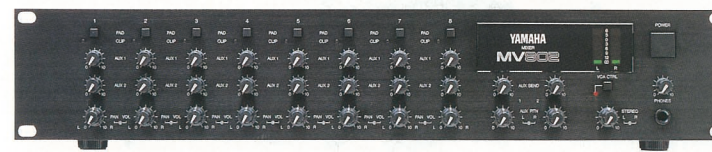


Your choice of a high-performance 8 x 2 or 6 x 2 keyboard mixer to perfectly blend and balance your keyboard system. The KM802 features 3 AUX sends on six of its input channels and 3 stereo AUX returns allowing easy integration of a multi-effect system with your keyboard setup.

In addition to single AUX sends on channels 1 through 4 (with a stereo AUX return), the KM602 features a built-in stereo chorus effect on the same four channels.

Both models feature sleek, stylish design, and easy-to-read color-coded fader position markers. Naturally they also maintain Yamaha's uncompromising quality standard, providing superior sound quality as well as extended reliability.

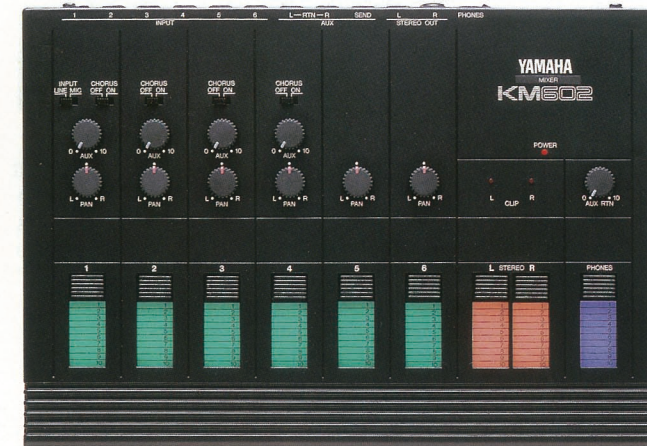
## MV802 Rack Mount Mixer



The Yamaha MV802 is a high-quality 8 x 2 line mixer packaged in a compact 19" rack-mount cabinet. Input channels 1 and 2 can be switched to provide microphone-level input. Two independent auxiliary submix sends with stereo returns provide compatibility with the new generation of digital reverb, delay and effect units. Foot VCA control of master volume level lets you control the level of a group of keyboards or tone generators while playing an instrument. Two MV802s can be cascaded to provide a total of 16 inputs. Both balanced XLR and unbalanced phone-jack stereo outputs are provided.

### SPECIFICATIONS

• **TOTAL HARMONIC DISTORTION:** Less than 0.1%, 20 Hz–20 kHz @ +14 dB into 600 ohms • **FREQUENCY RESPONSE:** +1, –1.5 dB, 20 Hz–20 kHz @ +4 dB into 600 ohms (STEREO OUT) • **MAXIMUM OUTPUT LEVEL:** +20 dB into 600 ohms @ 0.2% THD, 20 Hz–20 kHz, STEREO OUT (balanced) • **HUM AND NOISE** (20 Hz–20 kHz, Rs=150 ohms, Input Pad @ –40 dB) –122 dB equivalent input noise, –90 dB residual output noise (STEREO OUT) • **POWER REQUIREMENTS:** 110–120/220–240 VAC, 50/60 Hz • **POWER CONSUMPTION:** 20 watts • **DIMENSIONS (W x H x D):** 480 x 88 x 243 mm (18-7/8 x 3-4/9 x 9-1/2") • **WEIGHT:** 4.1 kg (9.0 lbs.)



### SPECIFICATIONS

**KM802 • FREQUENCY RESPONSE:** 20 Hz–20 kHz (+1, –2 dB) at 10 k-ohms 0 dB (STEREO OUT), –10 dB (AUX SEND 1–3) • **TOTAL HARMONIC DISTORTION:** (20 Hz–20 kHz, 10 k-ohms, +10 dB) Less than 0.05% • **HUM & NOISE:** (20 Hz–20 kHz) Rs=150 ohms, GAIN=MAX. (CH1, 2) Input Noise (CH1, 2): –122 dB Equivalent•Residual Output Noise (STEREO OUT) –90 dB•STEREO OUT Master fader at nominal and all CH fader at minimum –76 dB • **CH1, 2 EQUALIZER:** HI: 10 kHz shelving•LO: 100 Hz shelving ±15 dB Maximum • **POWER REQUIREMENTS:** (U.S. and Canadian models) AC 110/120 V, 50/60 Hz • (General model) AC 110/120 V, 220/240 V 50/60 Hz • **DIMENSIONS (W x H x D):** 354 x 85 x 303 mm (13-15/16 x 3-5/8 x 11-15/16") • **WEIGHT:** 2.6 kg (5.7 lbs.) • **KM602 • FREQUENCY RESPONSE:** 20 Hz–20 kHz (±1 dB) at 10 k-ohms 0 dB (STEREO OUT), –10 dB (AUX SEND) • **TOTAL HARMONIC DISTORTION:** (20 Hz–20 kHz, 10 k-ohms, +10 dB) Less than 0.05% • **HUM & NOISE:** (20 Hz–20 kHz) Rs=150 ohms, GAIN=MAX. (CH1) Input Noise (CH1) –118 dB Equivalent•Residual Output Noise (STEREO OUT) –90 dB•STEREO OUT Master fader at nominal and all CH fader at minimum –76 dB • **MAXIMUM OUTPUT LEVEL:** (20 Hz–20 kHz, 10 k-ohms, THD 0.2%) +20 dB • **POWER REQUIREMENTS:** (U.S. and Canadian models) AC 120 V, 50/60 Hz • (General model) AC 110/120 V, 220/240 V 50/60 Hz • **DIMENSIONS (W x H x D):** 290 x 65 x 204 mm (11-7/16 x 5-1/2 x 8-1/16") • **WEIGHT:** 1.5 kg (3.3 lbs.)

## SPX90II Digital Multi-effect Processor



The reference standard for all digital effect units. In addition to extremely natural reverb and echo effects, the SPX90II offers a vast range of modulation type effects, freeze (sampling), pitch change, compression, parametric equalization and gate effects. (Use existing specs—may need minor modification)

### SPECIFICATIONS

• **INPUT: Number of Channels:** Unbalanced x 1 (Phone Jack) • **Nominal Level:** –20 dBm/+4 dBm, Selectable • **A/D D/A CONVERSION: Number of Channels:** A/D ..1 D/A ..2 • **Sampling Freq.:** 31.25 kHz • **Quantization:** Linear 16 Bit • **Band Width:** 20 Hz to 12 kHz • **OUTPUT: Number of Channels:** Unbalanced x 2 (Phone Jack) • **Nominal Level:** –20 dBm/+4 dBm, Selectable • **Mixing:** Direct Signal, Effect Signal • **Bypass:** ON/OFF • **MEMORY: Presets (ROM):** 1–30 • **User Memory (RAM):** 31–90 (Non Volatile) • All parameters except Input Level, can be memorized. • **MIDI CONTROL:** MIDI channel, PGM number, Note On/Off • **ELECTRICAL CHARACTERISTICS: Dynamic Range** Reverb: more than 75 dB•Delay: more than 81 dB•**Distortion** Bypassed Signal: less than 0.01%•Effect Signal: less than 0.03% • **Band Width** Bypassed Signal: 20 Hz to 12 kHz•Effect Signal: 20 Hz to 12 kHz • **POWER SUPPLY** U.S. & Canadian Models: 110 V–120 V, 60 Hz•General Model: 220 V–240 V, 50/60 Hz • **POWER CONSUMPTION:** U.S. & Canadian models: 20 W • General model: 20 W • **DIMENSIONS (W x H x D):** 480 x 45.2 x 285 mm (18-7/8 x 1-3/4 x 11-1/4") • **WEIGHT:** 3.2 kg (7 lbs.) • **OPTIONAL REMOTE CONTROL (model RC7):** PRESET PROGRAM 1–30, USER MEMORY 31–37

\* All specifications subject to change without notice.



# ELECTRONIC PERCUSSION SYSTEMS

## PTX8 Percussion Tone Generator



A Yamaha Electronic Percussion System based on the PTX8 Percussion Tone Generator offers the drummer or percussionist tremendous creative potential. While providing the capability to produce a virtually limitless range of totally new percussion sounds, it maintains the solid feel and sound of traditional drums with a top-quality internal PCM tone generator system. In one slim, easy-to-use unit the PTX8 Percussion Tone Generator neatly integrates 8 independent tone generators as well as all the editing/control functions you need for superior sound and versatility. 8 rear-panel inputs accept any combination of percussion pads you require.

### SPECIFICATIONS

• **TONE GENERATOR:** Type: Waveform Memory, PCM (12-bit linear) • Pitch Range: -3 — +12 octaves (10-cent steps) • Envelope: Variable • **WAVEFORMS:** Internal: 26 • External Cartridge: 28 • **MEMORY CAPACITY:** Internal Voice: 64 • Internal Kit: 32 • Internal Chain: 10 x 32 steps • Edit Buffer: Voice x 1, Kit x 1 • Recall Edit Buffer: Voice x 1, Kit x 1 • RAM4 Cartridge Voice: 64 • RAM4 Cartridge Kit: 32 • RAM4 Cartridge Chain: 10 x 32 steps • **CONTROLLERS:** Pad Select x 8 keys, Cursor x 2 keys, Parameter x 2 keys, Memory/Data x 2 keys, Mode Keys (INTERNAL, CARTRIDGE, CHAIN SENSITIVITY, VOICE EDIT, UTILITY, MIDI, STORE/ENTER), Phone/Stereo Out Volume Control • **CONNECTORS:** Pad Input x 8, Individual Line Output x 8, Stereo Output L/MONO & R, Stereo Headphone Jack (8Ω), INCREMENT, DECREMENT, FOOTSWITCH, MIDI IN/OUT/THRU • **DIMENSIONS (W x H x D):** 480 x 90 x 195.5 mm (18-7/8" x 3-1/2" x 11-5/8") • **WEIGHT:** 5.4 kg (11.9 lbs.)

## PMC1 Percussion MIDI Converter



The exciting new Yamaha Electronic Percussion System gives you direct access to the virtually unlimited capabilities of MIDI control. You can now apply percussion performance techniques to advanced synthesizers, drum machines and other MIDI compatible music equipment. You can produce traditional drum sounds, dynamic electronic drum sounds, even piano, brass, strings, harpsichord or synthesizer. Further, you have extensive, synthesizer-like expressive control over what you play. You, the percussionist, can take control of an entire orchestra. The Yamaha Electronic Percussion System means much more than just exciting new sounds and expressive control. Yamaha musical instrument expertise and craftsmanship ensure that the Electronic Percussion System is ultimately "playable," responding fully to the needs of today's discerning musician.

### SPECIFICATIONS

• **MEMORIES/INTERNAL:** 32 memories, 8 chains, 20 links per chain • **CARTRIDGE:** 32 memories, 8 chains, 20 links per chain • **SWITCHES:** MEMORY INC. MEMORY DEC. PAD SELECT 1-8. DATA INC/YES. DATA DEC. INTERNAL CARTRIDGE. LOAD /RECEIVE. SAVE/TRANSMIT. MIDI A/B. CHAIN. VOICE/FUNCTION. STORE. CHANNEL. NOTE. PROGRAM CHANGE. GATE TIME. SUSTAIN. FOOT CONTROL. SIMUL-NOTES. DYNAMIC NOTE SHIFT • **CONTROLS:** Pad Sensitivity 1-8 • **TERMINALS:** MIDI IN. MIDI OUT A, B. MEMORY SELECT. SUSTAIN PEDAL. FOOT CONTROL. PAD IN 1-8 • **DIMENSIONS (W x H x D):** 480 x 90 x 296 mm (18-15/16" x 3-1/2" x 11-1/2") • **WEIGHT:** 4.6 kg (10.14 lbs.) • **INCLUDED ITEMS:** DX/TX Voice data ROM cartridge. TX816 Voice floppy disk



**PTT8/PSD8**  
Tom/Snare Percussion Pad

**PBD8**  
Bass Percussion Pad



**PBD1**  
Bass Drum Pad

**PTT1**  
Small Drum Pad



WS-802 Tom Stand

\* All specifications subject to change without notice.

PTX8

PTT8  
PSD8  
PBD8

PMC1

PBD1  
PTT1  
WS-802

# KEYBOARD AMPLIFIERS

## KS531

Featuring a full three-way speaker system designed for absolute response precision, the KS531 represents the peak of performance in keyboard amplification. Ruggedly built with the road in mind, the KS531 features recessed carrying handles, stacking corners, and durable leatherette covering that retains its good looks through years of hard use. 100 watts of power gives your music the boost it needs.

### SPECIFICATIONS

• **OUTPUT POWER:** 100 W (RMS) • **SPEAKERS:** High-Drive & Horn Mid-1 x 8" (20 cm) Low-1 x 15" (38 cm) 4 Input Channels • **DIMENSIONS (W x H x D):** 564 x 649 x 394 mm (22-1/4" x 25-1/2" x 15-1/2") • **WEIGHT:** 36.2 kg (79.6 lbs.)



## KS50

Like the KS100, the KS50 offers full, wide response for accurate reproduction of the outstanding expressive capabilities of high-performance keyboards. It features top-performance woofer and high-frequency units for dynamic, natural sound, and has four mixing inputs for connection of up to four keyboards. Naturally, the KS50 is also sturdily constructed to withstand the rigours of professional use.

### SPECIFICATIONS

• **OUTPUT POWER:** 50 W (RMS) • **SPEAKERS:** Woofer 1 x 12" (30 cm) + Tweeter 4 Input Channels • **DIMENSIONS (W x H x D):** 402 x 582 x 292 mm (15-5/8" x 22-8/9" x 11-1/2") • **WEIGHT:** 19.0 kg (41.9 lbs.)

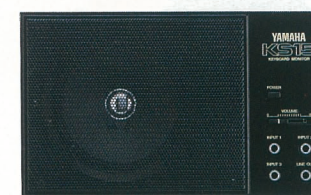


## KS15

This exceptionally compact monitor system offers a surprising range of features: high-performance 5" speaker, 10-watt amplifier, three inputs, linear volume control, and a line output jack for direct line feed. The KS15 is the ideal practice amp for keyboard players or guitarists. Its sound quality is so fine, in fact, that it can effectively be used as a power booster for portable cassette players.

### SPECIFICATIONS

• **OUTPUT POWER:** 10 W (RMS) • **SPEAKERS:** 1 x 5" (12 cm) 3 Input Channels • **DIMENSIONS (W x H x D):** 279 x 171 x 170 mm (11 x 6-3/4" x 6-3/4") • **WEIGHT:** 3.0 kg (6.6 lbs.)



## KS100

Specially designed for use with today's high-performance keyboards, the KS-100 offers wide, flat response that effectively reproduces every musical nuance played—right up to the most soaring, shimmering highs. The KS100 features four-channel mixing inputs that permit connection of up to four keyboards. A full 100 watts output provides plenty of punch for even large performances.

### SPECIFICATIONS

• **OUTPUT POWER:** 100 W (RMS) • **WOOFER:** 1 x 15" (38 cm) • **TWEETER:** Driver & Horn 4 Input Channels • **DIMENSIONS (W x H x D):** 472 x 658 x 372 mm (18-4/7" x 25-8/9" x 14-5/8") • **WEIGHT:** 34.2 kg (75.4 lbs.)

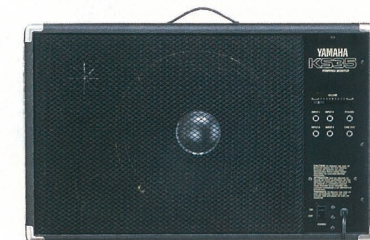


## KS35

The KS35 features a 30-watt amplifier driving a two-way speaker system consisting of a 10" woofer and high-performance Piezo tweeter that delivers smooth response right up to 20,000 Hz. The KS35 has four instrument inputs, a linear volume control, a line output for direct feed to a mixing console or recording equipment, and a headphone jack for private monitoring.

### SPECIFICATIONS

• **OUTPUT POWER:** 30 W (RMS) • **SPEAKERS:** Woofer 1 x 10" (25cm) + Tweeter 4 Input Channels • **DIMENSIONS (W x H x D):** 550 x 300 x 435 mm (21-5/8" x 11-3/4" x 17-1/8") • **WEIGHT:** 10.6 kg (23.4 lbs.)



## KS10

In an extraordinarily compact, convenient unit, the KS10 offers remarkable power and clean, accurate sound. Volume and low-boost controls are front-mounted for convenient operation, and a full 20 Hz to 20 kHz frequency response means that the music you play is precisely reproduced. 6.5 watts power output is plenty for practice and studio monitoring

### SPECIFICATIONS

• **OUTPUT POWER:** 6.5 W • **SPEAKER:** 1 x 4" (10 cm) 1 Input Channel • **DIMENSIONS (W x H x D):** 136 x 164 x 153 mm (5-1/3" x 6-4/9" x 6") • **WEIGHT:** 1.8 kg (4 lbs.)



\* All specifications subject to change without notice.

KS531  
KS100  
KS50

KS35  
KS15  
KS10



SOFTWARE

Yamaha synthesizers, tone generators, rhythm machines and other models that use external data cartridges offer extended data storage and access capability. Yamaha Data Cartridges let you take full advantage of this capability by providing a range of pre-programmed data "libraries" that you can put to immediate use.

DX7 VOICE AND PERFORMANCE DATA

- VRC-107  
SPECIAL SELECTION "DAVID BRISTOW"
- VRC-108  
SPECIAL SELECTION "GARY LEUENBERGER"
- VRC-109  
STUDIO 64
- VRC-110  
SPECIAL SELECTION "BO TOMLYN"
- VRC-111  
SPECIAL SELECTION "BO TOMLYN II"
- VRC-112  
LIVE 64 TRIGGER



DX7II VOICE AND PERFORMANCE DATA

- VRC-1001  
DECAY GROUP (Voice & Performance)
- VRC-1002  
SUSTAIN GROUP (Voice & Performance)
- VRC-1003  
PERCUSSION & S.E. GROUP (Voice & Performance)
- VRC-1004  
MICHAEL BODDICKER (Voice & Performance)
- VRC-1005  
STUDIO PROFESSIONAL



DX7S VOICE ROM SERIES

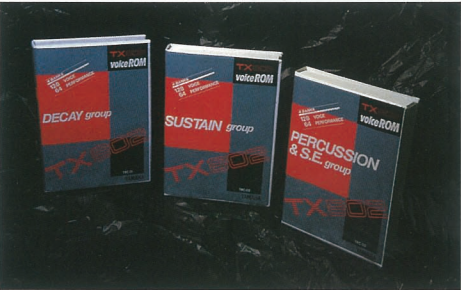
- VRC-01S (Available soon)
- VRC-02S (Available soon)
- VRC-03S (Available soon)

DX11 VOICE ROM

(Available soon)

TX802 VOICE & PERFORMANCE DATA

- TRC-01  
DECAY GROUP
- TRC-02  
SUSTAIN GROUP
- TRC-03  
PERCUSSION AND S.E. GROUP



WX7 VOICE DATA BANK FOR TX81Z & TX802

- WDB01  
64 VOICES & 48 PERFORMANCES FOR TX81Z
- WDB02  
128 VOICES & 128 PERFORMANCES FOR TX802



WAVEFORM DATA FOR RX5 & PTX8

- WRC01  
BASIC PERCUSSION
- WRC02  
JAZZ & FUSION
- WRC03  
HEAVY METAL
- WRC04  
EFFECT



DATA DISKS FOR TX16W DBS SERIES SOUND SAMPLING DATA BANK DISKS



TX16W SOUND SAMPLING DATA BANK

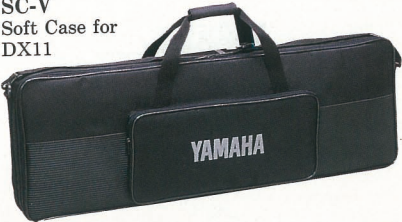
No.	GROUP NAME	TITLE
101*	KEYBOARD 1	PIANO 2
102	KEYBOARD 2	HARPSICHORD 1
103	KEYBOARD 3	CELESTA 1
201*	STRINGS 2	4 STRING INSTRUMENTS 1
202*	STRINGS 3	VIOLA & VIOLIN 1
203	STRINGS 4	C. BASS & CELLO 1
204	STRINGS 5	TREMOLO 1
205	STRINGS 6	PIZZICATO 1
206*	STRINGS 7	HIT STRINGS 1
301	WOOD WIND 1	FLUTE & PICCOLO 1
302	WOOD WIND 2	BASSOON (FAGOTT) ENGLISH HORN & OBOE 1
303	WOOD WIND 3	B. CLARINET & CLARINET
304*	BRASS 2	TROMBONE & TRUMPET 1
305*	BRASS 3	TUBA & HORN 1
306*	BRASS 4	HORN UNISON 1
307	BRASS 5	CHORD SECTION 1
308*	SAX 1	FOUR SAXES 1
309*	SAX 2	BARITONE & TENOR 1
310*	SAX 3	ALTO & SOPRANO
401	GUITAR 2	E. GUITAR LEAD
402	GUITAR 3	E. GUITAR CHORD
403	GUITAR 4	A. GUITAR LEAD
404*	HARP 1	SCALE 1
405*	HARP 2	PHRASE 1
501	CHOIR	POPS VOICE (FEMALE) 1
601*	DRUM 1	KIT 1
602*	DRUM 2	KIT 2
603	TUNED PERCUSSION 1	VIBE 1
604	TUNED PERCUSSION 2	MARIMBA 1
605	TUNED PERCUSSION 3	GLOCKEN 1
606	TUNED PERCUSSION 4	TIMPANI & GONG
607*	TUNED PERCUSSION 5	TUBLAR BELLS 1 & STEEL DRUMS 1
608*	PERCUSSION 1	LATIN
609*	PERCUSSION 2	WIND CHIME & HANDBELL
610*	PERCUSSION 3	CIMBALS & GRAN CASSA
701*	ETHNIC 1	SHAMISEN 1
702	ETHNIC 2	KOTO 1
703*	ETHNIC 3	PHRASE 1
801	SOUND Efect 1	NATURE
802*	SOUND Efect 2	ANIMALS & HUMANS 1
803	SOUND Efect 3	MACHINE 1
901*	COMBINATION 1	ORCHESTRA HIT

\* Available soon

ACCESSORIES

Carrying Case

SC-V  
Soft Case for  
DX11



LG-80  
Leg Stand



LC-7IHH  
for DX7IHD/FD, 7S



LGA-1 Optional Adapter  
for LG-80



ARM1 Rack Mount Adapter

LC-QX1  
for QX1



LC-RX5  
for RX5



LG-30  
Leg Stand



LG100  
Leg Stand



RAM1  
RAM Cartridge



RAM4  
RAM Cartridge



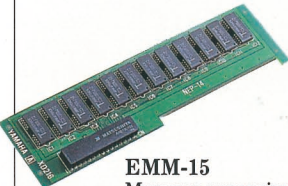
ADP1  
Cartridge Adaptor



MF2DD  
3.5" Micro Floppy Disk



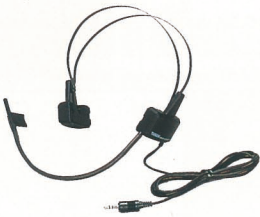
QD  
2.8" Quickdisk



EMM-15  
Memory expansion  
module for TX16W



BC1  
Breath Controller



BC2  
Breath Controller



PA1210  
AC Adaptor



MIDI-03/15  
MIDI-03: 3 meters  
MIDI-15: 15 meters



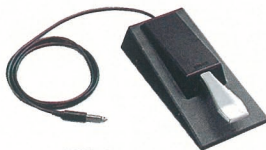
FC-4  
Foot Switch



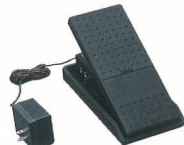
FC-5  
Foot Switch



FC-7  
Foot Controller



FC-8  
Foot Controller



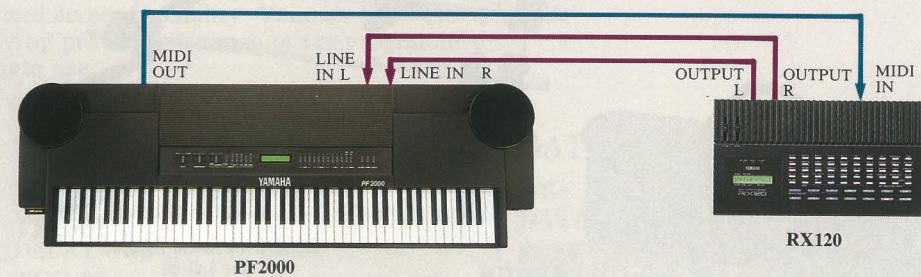
FC-9  
Foot Controller



# MIDI SYSTEM APPLICATIONS

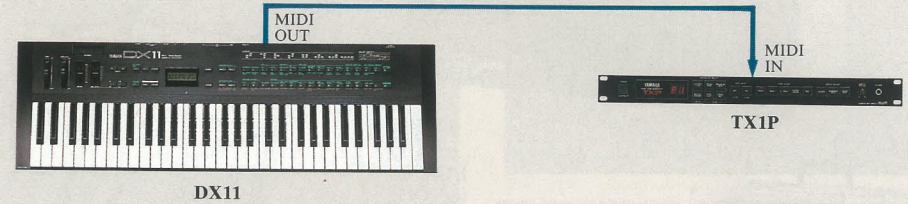
## 1. Electronic Piano & Rhythm

This system combines the superb voices of the PF2000 Electronic Piano with the ultimate easy-operation and natural sound of the RX120 Digital Rhythm Programmer.



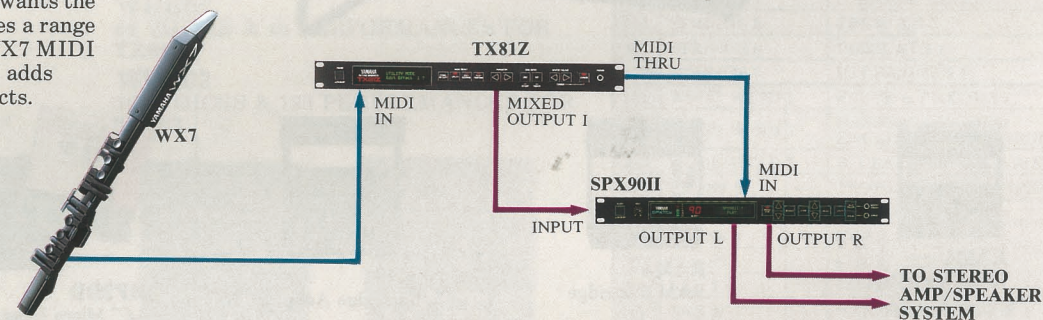
## 2. FM Plus Super-real AWM Piano

In addition to an extensive range of FM voices provided by the DX11, the TX1P provides 5 extra super-realistic AWM voices so you have the exciting sound of FM plus perfectly natural piano, harpsichord and vibes right at your fingertips.



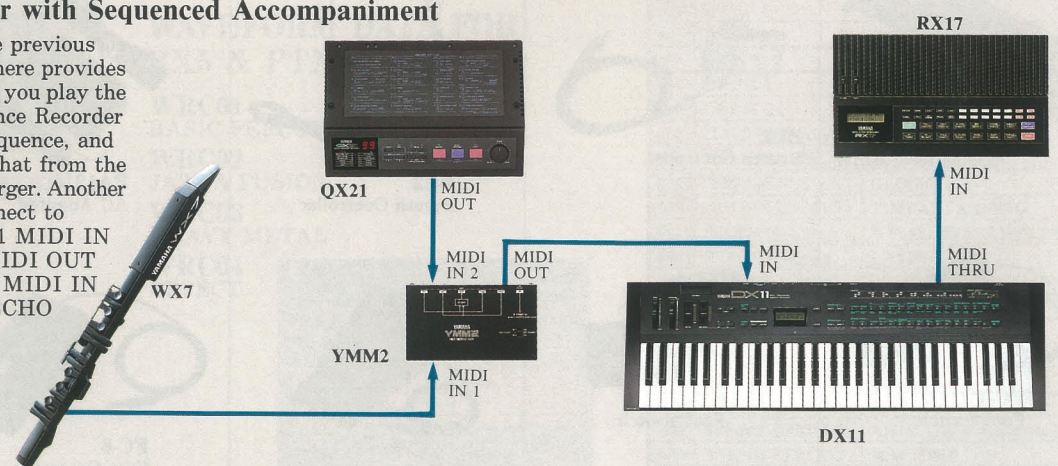
## 3. MIDI Wind Controller with FM Voices and Effects

The setup shown here is an ideal basic system for the wind-instrument player who wants the power of MIDI. The TX81Z provides a range of outstanding FM voices for the WX7 MIDI Wind Controller, and the SPX90II adds natural reverb, echo and other effects.



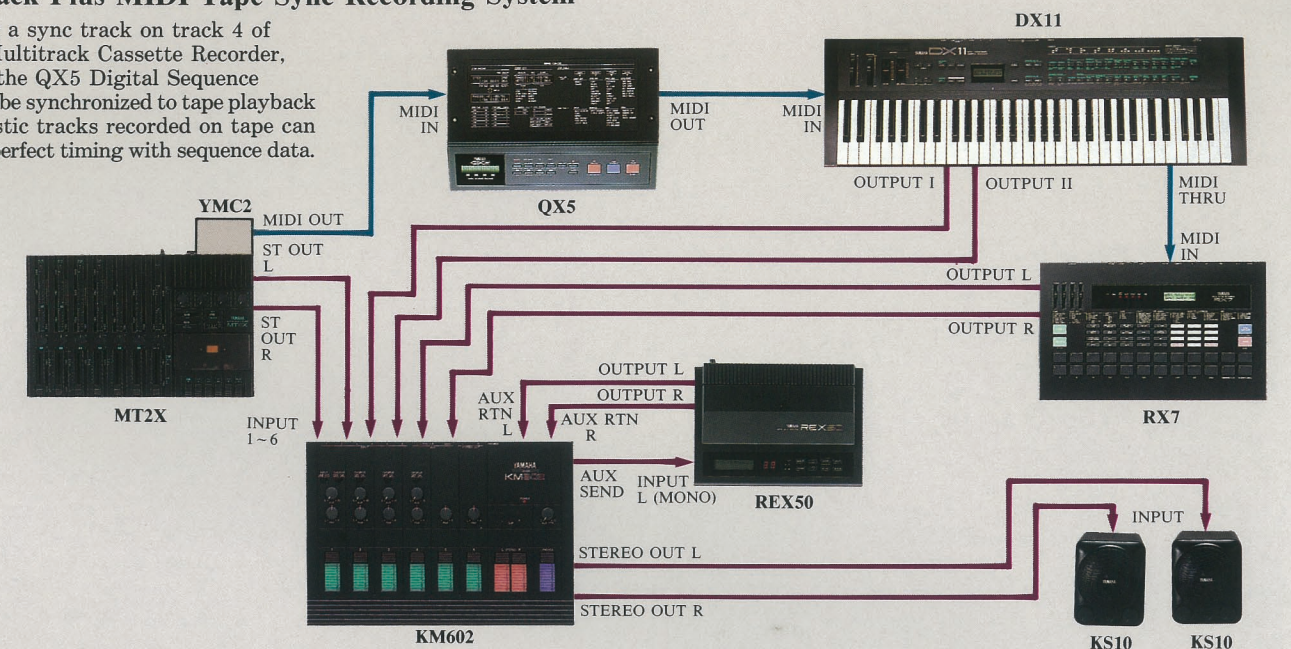
## 4. MIDI Wind Controller with Sequenced Accompaniment

Going one step further than the previous WX7 system, the setup shown here provides sequenced accompaniment while you play the WX7. The QX21 Digital Sequence Recorder provides the accompaniment sequence, and its MIDI data is merged with that from the WX7 using the YMM2 MIDI Merger. Another way to do this would be to connect to WX7 MIDI output to the QX21 MIDI IN connector, connect the QX21 MIDI OUT connector directly to the DX11 MIDI IN connector, and turn the QX21 ECHO BACK function ON.



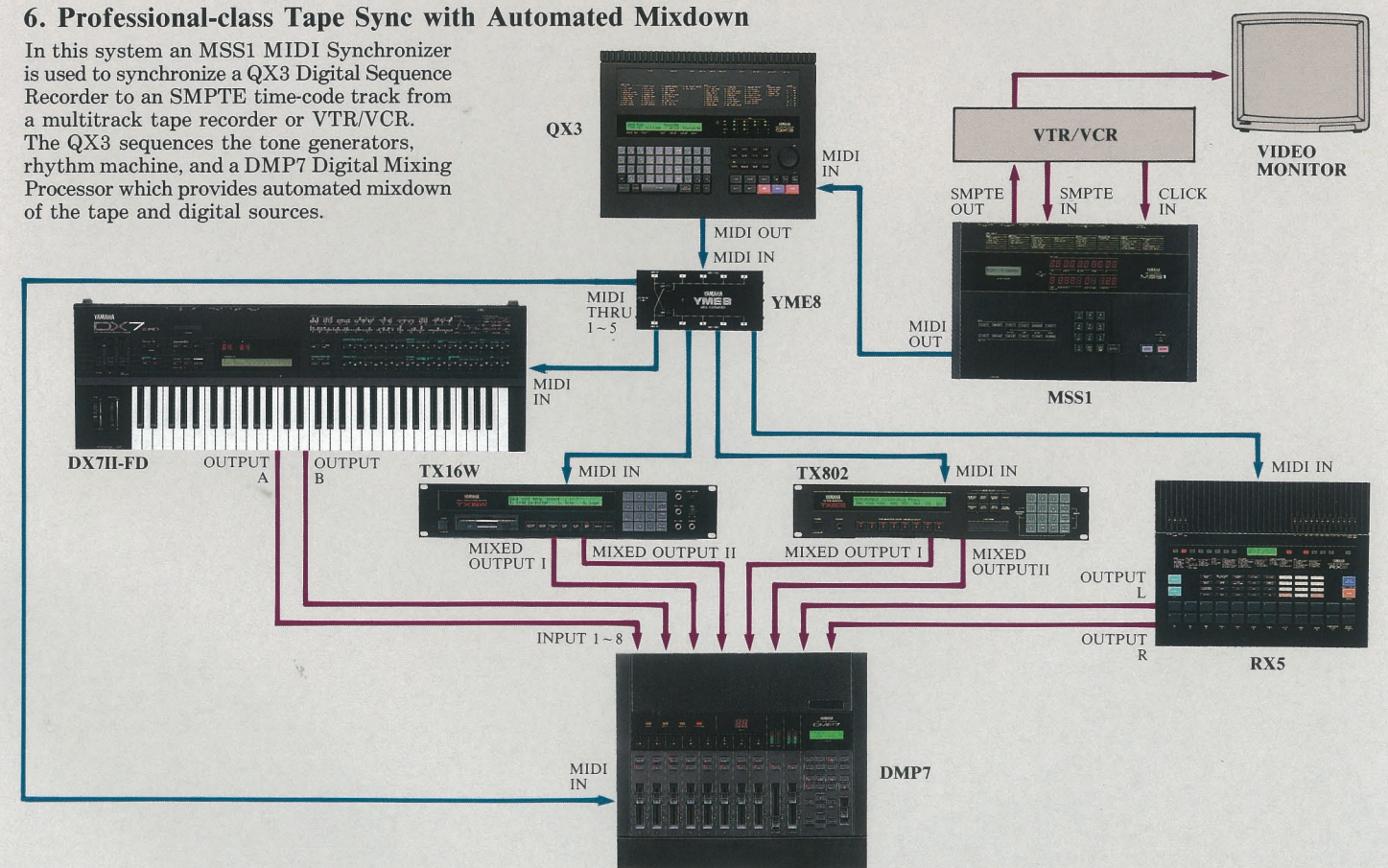
## 5. Multitrack Plus MIDI Tape Sync Recording System

By recording a sync track on track 4 of the MT2X Multitrack Cassette Recorder, Playback of the QX5 Digital Sequence Recorder can be synchronized to tape playback so that acoustic tracks recorded on tape can be played in perfect timing with sequence data.



## 6. Professional-class Tape Sync with Automated Mixdown

In this system an MSS1 MIDI Synchronizer is used to synchronize a QX3 Digital Sequence Recorder to an SMPTE time-code track from a multitrack tape recorder or VTR/VCR. The QX3 sequences the tone generators, rhythm machine, and a DMP7 Digital Mixing Processor which provides automated mixdown of the tape and digital sources.







For details please contact:

**YAMAHA**

YAMAHA CORPORATION  
P.O.Box 1, Hamamatsu, Japan

LCK205 88710 © Printed in Japan