

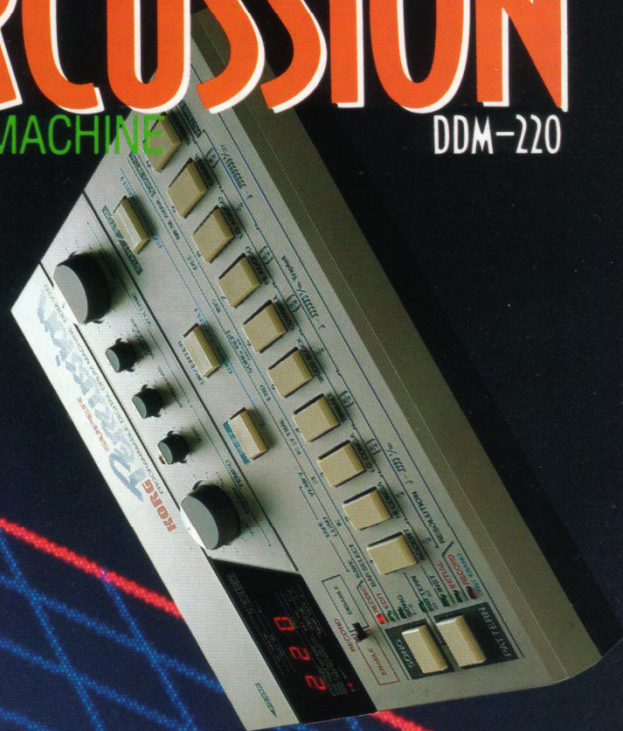
SUPER DRUMS

PROGRAMMABLE DIGITAL DRUM MACHINE DDM-110

SUPER PERCUSSION

PROGRAMMABLE DIGITAL DRUM MACHINE

DDM-220



KORG[®]

Real drum sounds using digital PCM recordings of real drums and percussion.

The DDM-110/220 each offer nine digitally recorded real drum and percussion sounds. Patterns and songs are recordable so you can save all of your compositions. Drum sounds featured in the DDM-110 are bass, snare, rimshot, low tom, high tom, closed hi-hat, open hi-hat, cymbal, and handclaps. The DDM-220 has high conga, low conga, timbale, woodblock, cowbell, high agogo, low agogo, cabasa, and tambourine. For combined drums and percussion just sync the DDM-110 and DDM-220 together with a single cable. You can program patterns in two ways. In real time you play several instruments at once or overdub an instrument at a time like you would play a drum kit. For trickier licks you can program a step at a time. Editing is also possible in both modes so you can easily erase and change things. Up to 32 different patterns can be stored on-board and these can be chained together to make songs of up to 390 bars. For longer compositions you can write in repeat signs. A fast tape interface lets you save an unlimited number of rhythm patterns and songs. You can even use the DDM-110 and DDM-220 as live percussion instruments—play along by tapping the keys.

Besides synchronized play with two of these units, you can also sync them up with MIDI and other units by adding the KMS-30 MIDI synchronizer, also from Korg. For compact size, PCM sound realism, and a breakthrough price, nothing comes close to the Korg DDM-110/220.



SUPER DRUMS

PROGRAMMABLE DIGITAL DRUM MACHINE DDM-110

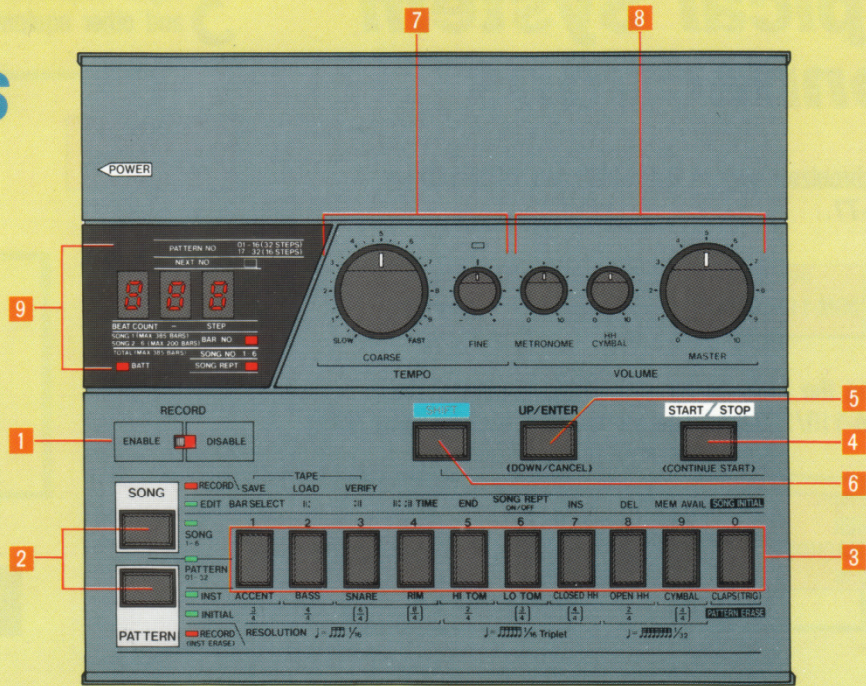


SUPER PERC

PROGRAMMABLE DIGITAL DR



Features



Front Panel

1 RECORD switch

The ENABLE setting lets you write new patterns and songs. The DISABLE position protects your compositions.

2 SONG & PATTERN multi-function keys

These step you through multiple functions so you can use the number keys for various purposes. LEDs indicate your selected function.

3 NUMBER keys

These ten keys are used for "playing" the different instrument sounds and for other purposes, according to the function selected by the SONG & PATTERN keys. This is easily checked by looking at the LEDs.

4 START/STOP key

Press once to start playback, again to stop.

5 ENTER key

This works in several ways depending on the mode and whether it is pressed with the SHIFT key.

- Used when specifying resolution.
- Used to erase previous memory contents to make space for new material.
- Used when writing in repeat signs and number of repeats.
- Has editing functions.
- Used to advance to the next step when writing in the step time mode.

6 SHIFT key

Switches the function of the START/STOP and ENTER keys. Also used when erasing sounds.

7 Tempo controls

- COARSE: For general tempo adjust
- FINE: For fine adjustment.
- TEMPO INDICATOR: LED flashes in time with the beat.

8 VOLUME controls

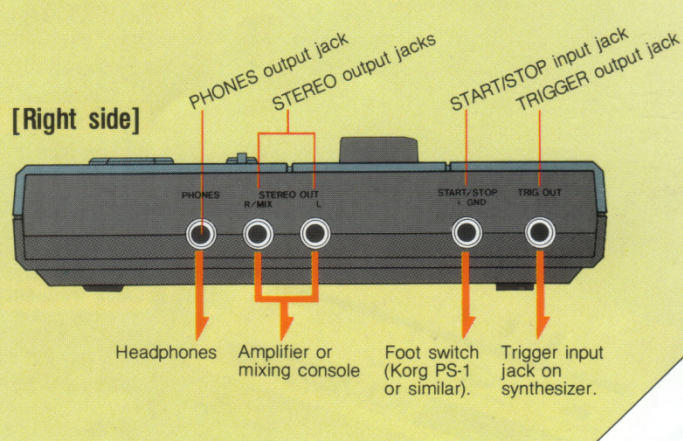
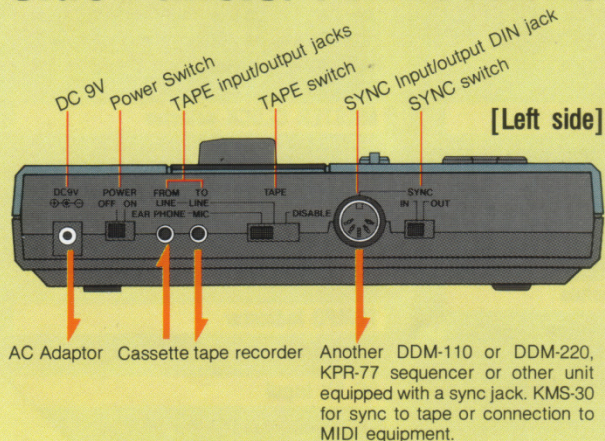
- MASTER: For overall adjustment of volume
- HH CYMBAL (DDM-110): Adjusts relative volume of hi-hat and cymbal sounds.
- CABASA TAMBOURINE (DDM-220): Adjusts relative volume of cabasa and tambourine sounds.
- METRONOME: Adjusts metronome volume.

9 Display

Shows a wealth of information to keep track of what's happening.

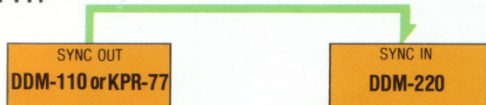
Function Key Settings	Number Key Functions
EDIT LED is on	Used for editing songs and adding repeat signs.
SONG LED is on	Lets you select a song number for recording or playback.
PATTERN LED is on	Ready for selection of a pattern number for recording or playback.
INST LED is on	Each key generates the instrument sound written below it. The accent key gives a louder, accented sound when pressed with another key.
INITIAL LED is on	Lets you select resolution and beats per bar (time signature) for any pattern that you wish to write.

Side Panels/Connections

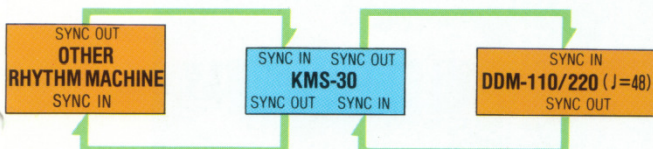


Typical System Connections

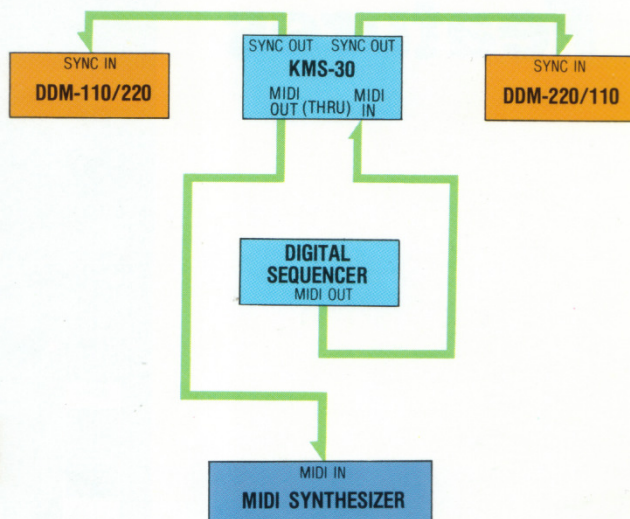
1 Synchronized play of DDM-220 and DDM-110 or KPR-77.



2 Using the KMS-30 for synchronized play of the DDM-110/220 and another rhythm machine (non MIDI).



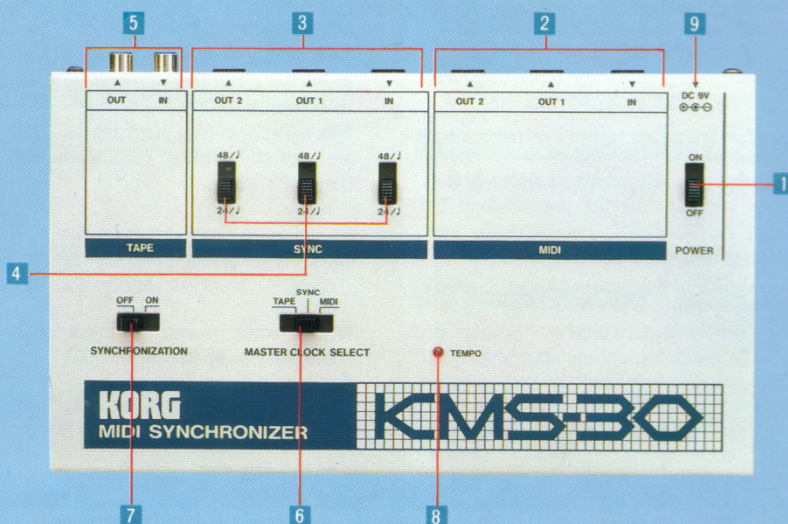
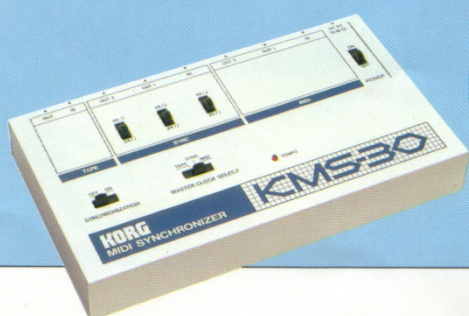
3 Digital sequencer used to control DDM-110, DDM-220, and other equipment.



KMS-30 MIDI SYNCHRONIZER

Korg presents the solution to timing problems between drum machines, sequencers, and tape decks. Especially exciting is the KMS-30's ability to sync MIDI and conventional units. Now you can use a conventional sync signal to control a MIDI instrument or use MIDI timing and start/stop data to run a non-MIDI drum machine. Just as valuable is sync-to-tape capability. Put a MIDI or other sync signal on tape then sync up with it again for overdubs.

For maximum compatibility the sync in/out jacks can be set to 24 or 48 clock pulses per beat. For extra versatility the two MIDI outputs work as MIDI THRU jacks when your master timing signal is coming from a MIDI unit. You'll also appreciate the synchronization ON/OFF switch. It lets you keep connected while playing in real time, then switch to a synchronized sequence whenever you like. At last you can put it all together with one compact interface—the KMS-30 from Korg.



Features

1 Power switch

5 TAPE jacks

2 MIDI jacks

The KMS-30 can convert sync or MIDI timing signals to a special tape clock signal that is easily recorded on your multi-track machine. During tape playback you can sync your drum machines, sequencers, and synths to the tape clock to enable multiple overdubs using the same equipment (MIDI or not). The KMS-30 keeps everything in perfect time.

You have one input and two outputs. The input can be used to obtain MIDI clock data from a MIDI equipped synth, sequencer, or rhythm machine. In this case the MIDI outputs work as MIDI THRU jacks, providing all MIDI data from the source unit.

3 SYNC jacks

6 MASTER CLOCK selector

Again, there are two outputs and one input. The input can be used to drive the MIDI outputs (as well as the SYNC outputs) or you can drive the SYNC outputs from a master MIDI input.

Choose MIDI, SYNC, or TAPE to be your master clock source.

4 Clock frequency switches

7 SYNCHRONIZATION ON/OFF switch

Input and output jacks have individual switches for setting clock frequency (pulses per beat) to 24 or 48.

Turns synchronization on and off between MIDI, SYNC, and TAPE sections.

8 TEMPO indicator

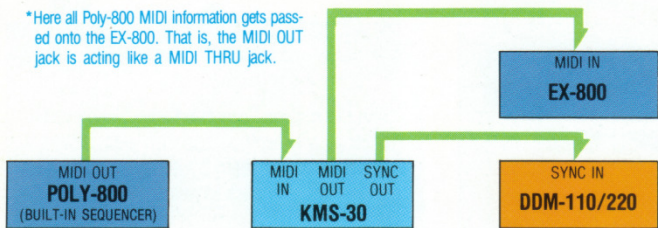
This LED flashes in time with the beat.

9 DC 9V input

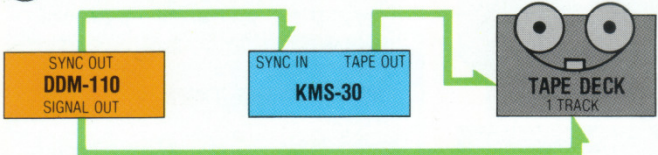
For connecting the AC adaptor.

4 Using Poly-800 to control DDM-110/220, and EX-800.

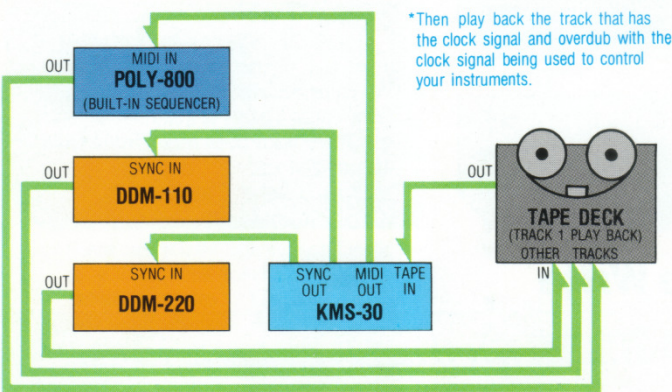
*Here all Poly-800 MIDI information gets passed onto the EX-800. That is, the MIDI OUT jack is acting like a MIDI THRU jack.



5 Tape clock used for multi-track recording.

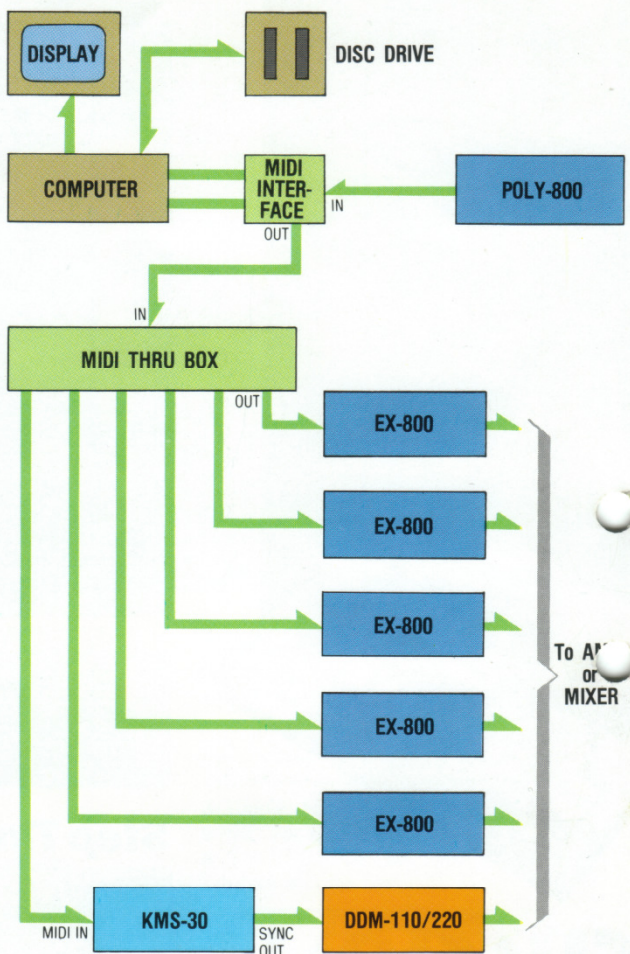


*Start by recording the tape clock on one track of the tape.



*Then play back the track that has the clock signal and overdub with the clock signal being used to control your instruments.

6 Using a personal computer for control of DDM-110/220 and EX-800.



SUPER DRUMS DDM-110 / SUPER PERCUSSION DDM-220 SPECIFICATIONS

■TONE GENERATORS—DDM110: Bass Drum, Snare Drum, Rimshot, High Tom, Low Tom, Closed High-hat, Open High-hat, Cymbal, Handclaps. ■TONE GENERATORS DDM-220: Hi Conga, Lo Conga, Timbale, Woodblock, Cowbell, Hi Agogo, Lo Agogo, Cabasa, Tambourine. ■ACCENT: All instruments; ON/OFF; Stop. ■TEMPO CONTROL: Coarse (SLOW—FAST); FINE (+ ~ -); Tempo indicator. ■VOLUME: Master, Metronome, HH/Cymbal (DDM-110), Cabasa/Tambourine (DDM-220). ■PATTERN KEYS: Pattern Mode, Instrument Mode, Initial Mode, Record Mode. ■SONG KEYS: Song Mode, Pattern Mode, Edit Mode, Record Mode. ■NUMBER KEYS (SOUND SOURCE KEYS): Pattern Number Select, Song Number Select, Instrument Select, Initial Select, Pattern Erase, Song Initial Bar Select, Repeat, Repeat Time Select, Song Repeat (ON/OFF), Insert, Delete, End, Memory Avail, Tape Interface (Save, Load, Verify). ■RECORD SWITCH: ENABLE/DISABLE ■START/STOP KEY: START/STOP ■ENTER KEY: Enter, Step Up/Down, Cancel. ■SHIFT KEY: Enter Key Function Select; Continue

Start; Instrument Erase. ■PATTERN MEMORY: 32 Patterns (Maximum number of steps: 32 for pattern numbers 1-16; 16 for pattern numbers 17-32). ■SONG MEMORY: 6 Songs; Maximum Memory Capacity: 385-390 bars. ■DISPLAY: Pattern Number, Song Number, Bar Number, Step Number, Beat Count, Key Number, Memory Avail, Tape Interface Modes, Battery Check. ■SYNC: 5-Pin DIN Jack IN/OUT Switch. ■TAPE INTERFACE: Tape Switch (DISABLE/FROM/TO), FROM Jack, TO Jack. ■INPUTS: DC 9V; Start/Stop (GND). ■OUTPUTS: Stereo Out (R/MIX, L), Phones, Trigger Out (GND). ■POWER SUPPLY: Six 1.5V "Penlight" AA size (SUM-3) batteries or AC adaptor (DC 9V, 300mA), Power Switch. ■DIMENSIONS: 226(W)×196(D)×49(H)mm ■WEIGHT: 880g (including batteries) ■SUPPLIED ACCESSORIES: Shielded Audio Cord (2.5m), Batteries (UM-3×6), AC adaptor.

OPTIONAL ACCESSORIES

■Pedal Switch/PS-1 ■Stereo Headphones/KH-1, ■Soft Case ■5-Pin DIN Cord

KMS-30 SPECIFICATIONS

■MIDI SECTION: MIDI IN×1, MIDI OUT×2. ■SYNC SECTION: SYNC IN×1, SYNC OUT×2, 24/48, Clock Frequency Switches×3 ■TAPE SECTION: TAPE IN×1 TAPE OUT×1 ■SYNCHRONIZATION: ON/OFF×1 ■MASTER CLOCK SELECT: MIDI/SYNC/TAPE Selector×1 ■TEMPO: LED Indicator×1 ■POWER: ON/OFF×1 ■INPUT/OUTPUT JACKS: MIDI IN×1 (DIN Jack), MIDI OUT×2 (DIN Jacks), SYNC IN×1 (DIN Jack), SYNC OUT×2 (DIN Jacks), TAPE IN×1 (RCA Phono Jack) TAPE OUT×1 (RCA Phono Jack), DC9V IN×1 ■DIMENSIONS: 232(W)×35(H)×131(D)mm ■WEIGHT: 850g ■SUPPLIED ACCESSORIES: AC Adaptor (9V)×1

OPTIONAL ACCESSORIES

■MIDI Cable

*Specifications and features are subject to change without notice for further improvement

N O T I C E

Korg products are manufactured under strict specifications and voltages required by each country. These products are warranted by the Korg distributor only in each country. Any Korg product not sold with a warranty card or carrying a serial number disqualifies the product sold from the manufacturer's/distributor's warranty and liability. This requirement is for your own protection and safety.

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