## DIGITAL-DRUMS DD 19, full MIDI

## ... where "live" means live



## DIGITAL-DRUMS DD 19, full MIDI in 19" rack enclosure

DIGITAL-DRUMS: a "live" drummer packed in a few ICs, with natural digitally recorded live instruments, perfectly arranged. The ideal rhythm group.

Let Kurt Bong accompany you! The instruments and rhythms can hardly be discerned from a live drummer. And which drummer has room on stage or at home to put up 44 instruments?

### The most important features:

Full MIDI: MIDI-IN, MIDI-THRU, MIDI-OUT.

44 digitally recorded natural percussion instruments.

All instruments can be played in 32 digital volume steps. Factory-programmed volumes can be modified any time you desire.

128 rhythms. With Böhm, continuous loading with a cassette recorder is not required!

128 fill-ins can be automatically switched in at

each 4th, 8th or 16th bar, or at random. Fill-ins can be individually switched in.

128 breaks, 37 short solos, 37 long solos, also useful as intro, transition or ending.

Tempo control for adjustment from 40 to 240 or as standard tempo adjustable  $\pm$  25 %. The display shows tempo and time (metre).

Automatic start.

Automatic stop at the end of a bar, final beat.

Live character through random slight attack delays for individual instruments ("human feeling").

Individual playing of instruments via MIDI.

Instruments can be spread out over the stereo panorama.

Built-in 32-digit illuminated display, 2 lines. Shows rhythm name, tempo, downbeat, song pointer . . . and, of course, is a great help with programming.

Stereo output. Option: 8 individual outputs with fixed assignment of instruments.

Eight trigger outputs for external instruments, computers etc.

Eight analogue/digital trigger inputs (for external triggering, e.g. with pads).

Function "sync. to tape" for tape-synchronisation with playback recordings.

### Programming the DIGITAL-DRUMS DD 19

All instruments touch-sensitive in 32 steps. Volume can be adjusted with touch dynamic or with a control.

128 rhythms with fill-ins, breaks and solos.

Dynamic programming in real time via MIDI – e.g. Böhm MIDI-KEY – with adjustable error correction. Metronome for timing in 1/4 or 1/8 beats.

Static programming step by step via MIDI.

Up to 32 fractions of a quarter note for each rhythm. Metres  $2\!\!/4$  to  $7\!\!/4.$ 

Up to 6 instruments can be played and programmed simultaneously.

## The "live" drummer

## with digitally recorded instruments



## D.I.Y. building - your hobby your satisfying experience

Building the DIGITAL-DRUMS DD 19 is a relaxing hobby. The kit can be built in approx. 15 hours - and anyone can do it.

## 19" cabinet

16 Maracas 17 High bongo 18 Low bongo 19 Claves 20 Wood block 21 Conga 1 22 Conga 2 23 Cowbell 24 Handclap

Stable 19" rack cabinet with 3 mm aluminium front panel, height 3U.

(2×)

2×) 2×1 sed

#### **Dimensions:**

 $(w \times h \times d) 43.6 \times 13.2 (3U) \times 16 cm$ Weight: approx. 5 kg

### The kits

DIGITAL-DRUMS DD 19 with cassette interface and 19" cabinet Order nr. 36620

Trigger interface analogue/digital, e.g. for Order nr. 36621

pads, 8 channel

Order nr. 85363 **Footswitch** 

### 44 natural digital live instruments 24 instruments + 20 instruments

1 Bass drum	Bass drum
2 Snare drum	Snare drum
3 Rim shot	Rim shot
4 Brush	Brush
5 Roll	Tom tom 1 (2
6 Tom tom 1	Tom tom 2 (2
7 Tom tom 2	Tom tom 3 (2
8 Tom tom 3	Tom tom 4 (2
9 Tom tom 4	Hi-hat closed
10 Hi-hat closed	Hi-hat st. clo
11 Hi-hat st. closed	Hi-hat open
12 Hi-hat open	Cymbal ride
13 Cymbal ride	Crash cymba
14 Crash cymbal	Tambourin
15 Tambourin	Maracas

128 perfectly arranged rhythms: 32 basic rhythms, each with 4 variations; direct selection without cassettes or cartridges.

1 Pop I	17 March fox / Western	
2 Pop II	18 March beat / polka	
3 Pop III	19 March	
4 Pop IV	20 March 6/8	
5 Disco	21 Waltz / slow waltz	
6 Reggae	22 Jazz waltz / country	
7 Rock	23 Mambo	
8 Rock-shuffle	24 Limbo	
9 Slow rock	25 Samba	
10 Funk	26 Bossa Nova5/4	
11 Slowfox	27 Tango	
12 Shuffle fox	28 Bajon	
13 Foxtrot	29 Cha cha	
14 Swing	30 Rhumba	
15 Jive/Rock'n roll	31 Beguine	
16 Twist	32 Paso doble	

DIGITAL DRUMS DD 19 + BÖHMAT PM 1

Individual notes can be dynamically or statically deleted.

The standard tempo can be reprogrammed as you desire (previous tempo can be called back).

Start/stop, fill-in and break programmable with additional push-buttons.

External triggering via MIDI (start/stop, rhythm choice, tempo).

Rhythms, fill-ins, breaks and solos can be strung together as you desire; 16 songs (sequences) with up to 128 bars can be program-

Stops and restarts in the songs are possible, individual songs can be strung together:  $16 \times 127 \text{ bars} = 2032 \text{ bars}.$ 

The display shows the program steps.

All storage functions are safely stored, also in case of mains failure and after switching off.

Connection for two external switches. Programmable functions, e.g. start/stop or break. Loading and storage of new rhythms, fill-ins, breaks, song etc. via cassette-interface on Compact-Cassettes.



Kurt Bong live

## **BÖHMAT PM 1, full MIDI** perfectly arranged Extension kits

## The perfectly arranged accompaniment

Your rhythm group becomes a complete small combo or a perfect big band. You just play your solo, the BÖHMAT PM 1 will take care of everything else. With the legendary Böhm one-finger automat BÖHMAT (patented in many countries) playing music really becomes child's play and great fun.

## Ideal possibilities for combinations

Thanks to two independent MIDI inputs the BÖHMAT PM 1 accompaniment can be connected to any MIDI instrument:

BÖHMAT PM 1 + Böhm Master-Key: with key split you can play your accompaniment on the lower part of the keyboard.

BÖHMAT PM 1 + DIGITAL-DRUMS DD 19: the ideal complete accompaniment combo with a super drummer.

BÖHMAT PM 1 + your organ: with a Böhm MIDI kit you connect the BÖHMAT PM 1 to the bottom keys of the lower manual.

BÖHMAT PM 1 + computer or sequencer: the ideal accompaniment for computer freaks.

BÖHMAT PM 1 + MIDI-Pedal: The ideal pedal bass! The bass can be played monophonically or polyphonically (up to 3 voices) on the pedal keyboard or on the manual for fingered bass.

### The most important features:

Individual digital Böhm PM tone generation, the sounds are just as natural as those of the Böhm Expanders or the MUSICA-DIGITAL organs.

 $2 \times MIDI-IN$ ,  $1 \times MIDI-THRU$ ,  $1 \times MIDI-OUT$ , Omni or Poly mode. Key selection via MIDI keyboard, MIDI organ etc. MIDI channel assignment as you desire.

256 scores, 128 factory-programmed scores. Any score also with different instruments, depending on the rhythm.

One-finger accompaniment BÖHMAT: major, minor, diminished, 7th and minor 7th chords.

Automatic chords: recognition of all types of chords including all inversions. Chord memory.

Key start, key stop.

Transposition via MIDI.

The instruments (which instruments play) and the scores (the notes the instruments play) can be freely assigned to any rhythm; with the DIGITAL-DRUMS DD 19 also automatic assign-

64 instruments and orchestra sounds of which 33 factory-programmed: E-bass, string bass, synth, bass, funk bass, tuba, double bass, pianos, E-piano, brass, guitars, bells, synth. percussion, steel band etc.

Accompaniment up to 15 voices: up to 2×6 chord voices and 3 bass voices simultaneously. Individual volume controls and outputs for bass, chord and solo.

Stereo output with optimum division of the individual voices over the stereo panorama.

Display for score number and parameters.

Tuning (pitch)  $\pm$  1 half tone.

## Programming the accompaniment

Selection of individual instruments.

64 instruments, each with 42 parameters, can be freely programmed.

128 individual accompaniment scores can be stored in real time or step by step via MIDI; separate channels for bass, solo 1 and solo 2.

Up to 255 quarter notes for each accompaniment score. Maximum subdivision up to 1/96

## D.I.Y. building - your hobby your satisfying experience

D.I.Y. building is a relaxing hobby. The BÖHMAT PM 1 can be built in approx. 8 hours and anybody can do it.

### 19" cabinet

Height: only 4.4 cm (2U), 3 mm aluminium front panel

### **Dimensions:**

 $(w \times h \times d)$  43.6  $\times$  4.4  $\times$  30.6 cm Weight: 4 kg

## The kits

**BÖHMAT PM 1** (including cabinet) Order nr. 36630

Cassette interface for loading and storage of new sounds and scores on Compact-cassettes

Order nr. 36631

## Sound Group 1, 2, 3 with Ensemble (with storage) for the MUSICA DIGITAL 1000/1030

The sound groups 1, 2 and 3 have - just like sound group 4 - a memory with safe contents, even after switching the organ off. Sound group 1 and 2 can be extended with the same individual ensemble for strings, orchestral sounds and synthesizer sounds with which sound group 3 is already equipped. Thus you can program your individual sounds into any sound group.

Sound Group 1, (storable) Sound Group 2, (storable)

Order nr. 38091 Order nr. 38092

Sound Group 3, (storable) including Ensemble

Order nr. 38093

Ensemble for Sound group 1 or 2 (each group requires one kit)

Order nr. 38088

## Böhm Special Service: Sound Group 5 and 6 **MUSICA DIGITAL 1030** to customer's specifications

You send us a floppy-disc with sounds you have programmed yourself and we will supply you the sound group 5 or 6 with your own sounds stored in an IC. Thus you can individually arrange the sounds of your MUSICA DIGITAL 1030 as you desire.

Your personal Sound Group 5

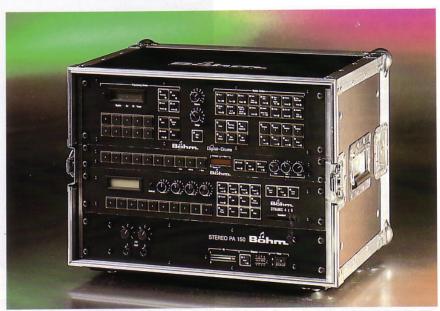
Order nr. 38095

Your personal Sound Group 6

Order nr. 38096

Your personal Sound Group 1 to 4 for the MUSICA DIGITAL 1000/1030 is available upon request. You can, for instance, build a pure classical or church organ.

See also page 9 bottom.



19" rack with DIGITAL-DRUMS DD 19, BÖHMAT PM 1, Expander 4×9, and amplifier PA 150

## B 300 – B 350 PROFESSIONAL Cabinets for PROFESSIONAL Sound



PROFESSIONAL CABINET B 350

## B 300 and B 350: Professional cabinets for professional sound

In addition to the proven cabinets B 100 and B 250 we now present two top class cabinets: the Professional Cabinets B 300 and B 350. These Professional Cabinets should not fail on any stage.

Selected Electro-Voice loudspeakers for substantial bass and brilliant treble. High-fidelity reproduction. Extremely low distortion.

Really "made for the road": Special "road wood" cabinet covered with resilient elegant "black carpet".

**Perfect in every detail:** sturdy handles, reinforced corners, removable front grilles. Jack sockets for parallel connection of second cabinet.

**Special features of the Professional cabinet B 350:** treble attenuation up to – 12 dB in 3 dB steps. Four rugged castors. Can be split into two channels for separate bass and mid-range/treble amplifiers.

PROFESSIONAL CABINET B 300

Technical data	B 300	B 350
Nominal power:	300 Watts	350 Watts
Peak power:	500 Watts	600 Watts
Impedance:	8 Ohms	8 Ohms
Effective power:	0.1 Watts	0.1 Watts
Efficiency (1W/1m):	101 dB	101 dB
Frequency range:	35 Hz – 18 kHz	25 Hz – 18 kHz
Bass loudspeaker:	15" = 380 mm Ø	18" = 460 mm ∅
•	63 mm voice coil	63 mm voice coil
Middle range loudspeaker:	600 Hz – 4 kHz	600 Hz – 4 kHz
Treble loudspeaker:	4 kHz – 18 kHz	4 kHz – 18 kHz
		Switch:
		0, -3, -6, -12 dB
Dimensions ( $w \times h \times d$ ):	62 × 75 × 35 cm	71 × 90 × 49 cm
Weight:	48 kg	61 kg
Order nr. ready-built:	52400	52 450



Floppy MUSICA DIGITAL 800/810

## Floppy-disc drive for MUSICA DIGITAL 800/810

Kit with driver/controller PCB, power supply, high-quality 3 ½" floppy-disc drive and elegant cabinet. The floppy-disc is required for connection.

Description see general catalogue page 25.

Order nr. 36662

Floppy-disc Interface

Blank floppy-disc

Order nr. 36618 Order nr. 65100

## Sound Editor ATARI ST for Expander DYNAMIC 12/24

Via the ATARI ST Sound Editor all parameters are clearly-arranged shown on the monitor and can be selected and modified by means of the mouse or the keyboard (see also: general catalogue page 41).

Sound Editor ATARI ST Order nr. 38042 (Price identical with Sound Editor Commodore C 64 – Order nr. 38040).

# **Expander MD 800 with DIGITAL-DRUMS...** a complete organ in a 19" rack



Expander MD 800

## Small dimensions – great possibilities: a complete organ

Did you know that the Expander MD 800 comprises the complete MUSICA DIGITAL 800 organ without manuals and power amplifier?

Complete: natural sounds. DIGITAL-DRUMS. accompaniment, presets, BMC, reverb, microphone- and recorder-connections etc.

## Thanks to MIDI: Connections without problems

With two independent MIDI inputs and an additional pedal connection the Expander MD 800 is a universal sound system.

### Easy to control

Registration is as simple as with an organ. Each voice can be selected by means of clearly marked push-buttons.

### Expander MD 800 in flightcase

In the figure on the last page you see the Expander MD 800 together with the stereo power amplifier PA 150 mounted into a 19" rack - in a slanted position for easy control and on a stable aluminium stand.

## MIDI-Accordion or accordion with Böhm MIDI 2004 + Expander MD 800

MIDI makes it possible. Accordion + Expander: a complete organ with the fantastic Böhm Sound.

## Two MIDI-Keyboards + Expander MD 800

Two keyboards, e.g. two Böhm MIDI-KEYs, can be simultaneously connected to the Expander MD 800: a two-manual organ or two separate key boards. Additional pedal available.

## Also for your organ: Expander MD 800

Enjoy the familiar sound of your organ and the Böhm sound of the sound miracle Expander MD 800. For the connection we recommend the Böhm kit MIDI 2004. You play two organs simultaneously on the same manual and on the pedal.

Stable 19" cabinet with 3 mm aluminium front panel, connections optionally on the front panel or on the back panel.

19" cabinet, easy for transport

**Dimensions:** (w  $\times$  h  $\times$  d) 43.6  $\times$  35.2 (8U)  $\times$ 12 cm

Weight: approx. 10 kg

## D.I.Y. building - your hobby your satisfying experience

D.I.Y. building is a relaxing hobby. The Expander MD 800 can be built in approx. 30 hours and anyone can do it.

## **Basic kit Expander MD 800**

Can be played by connection to a stereo set. An incredible number of sounds and possibilities for playing and programming, including 19" Order nr. 36700 cabinet

For musical and technical features and the extensions see the Böhm catalogue D.I.Y. KIT SYSTEM pages 20 to 25 (MUSICA DIGITAL 800 T) and our price-list supplement 1.