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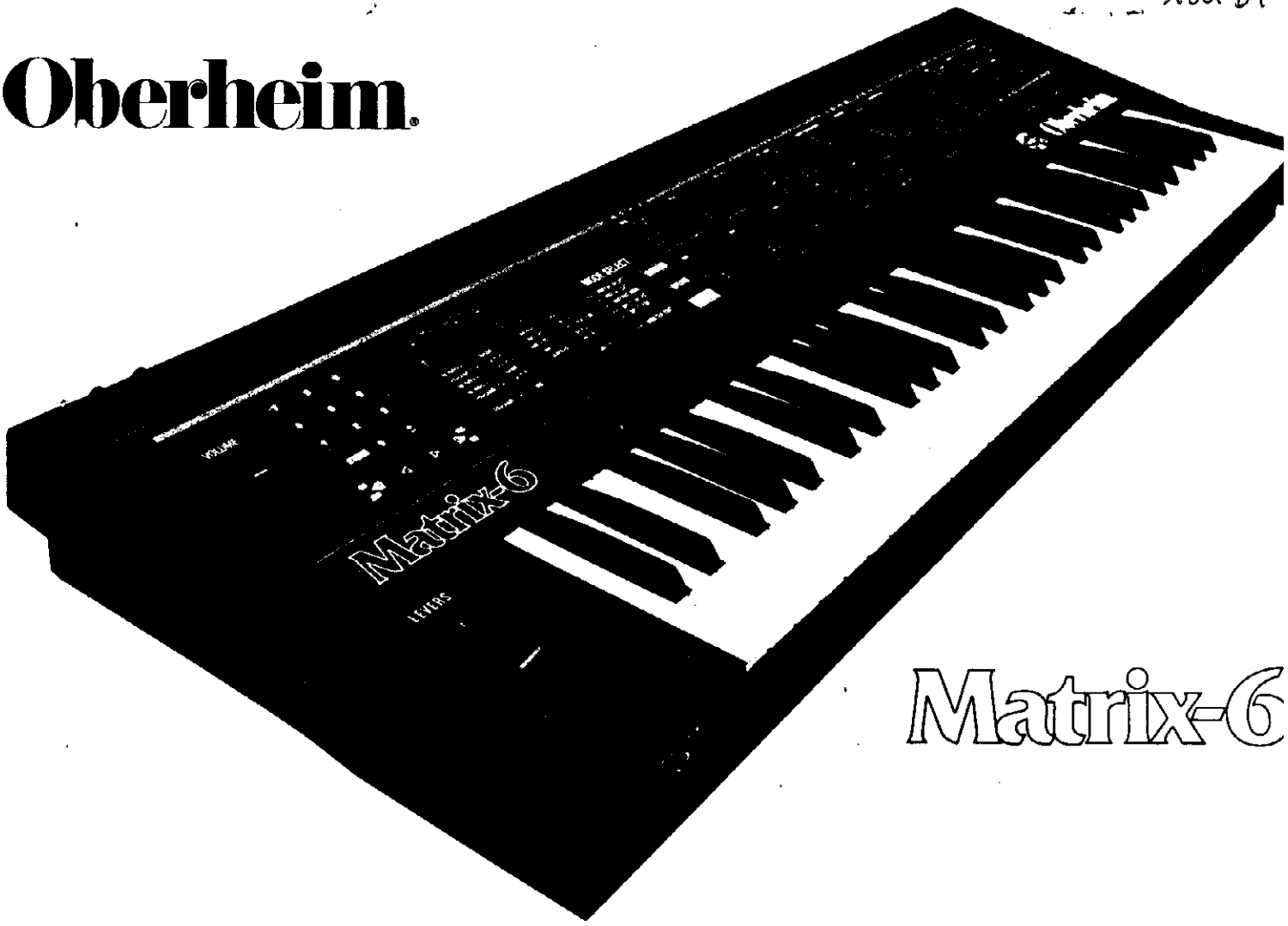

Matrix-6

Matrix-6R

Matrix-6 & Matrix-6R Specifications

The six-voice synthesizer that does it all! Modeled after the Matrix-12 and Xpander, the Matrix-6 uses Oberheim's famous Matrix Modulation™ to route 3 Envelopes, 2 LFOs, Vibrato, Pressure, Velocity, 2 Ramps, a Tracking Generator and more in up to 10 desired configuration – 20 modulation sources and 32 modulation destinations in all. There are 100 programmable Single Patches and 50 programmable Split patches on-board the Matrix-6 and 6R. Patches can be created or edited through the extensive editing functions on the front panel. Alternate banks of Patches can be loaded in to the instrument via data cassette or MIDI. In the Matrix-6/6R, Split mode lets you split and layer the keyboard anywhere and play two sounds simultaneously. The keyboard itself is the same keyboard used in the Matrix-12 – great feel, plus velocity, release-velocity, pressure-sensing and a full MIDI implementation. Using the Spillover feature lets you add another Matrix-6 or 6R and use the two as one complete 12-voice instrument. The Matrix-6R has all the features of the Matrix-6 in a rack-mount package. Now shipping with 1,000 Factory Patches, the Matrix-6 and 6R now have the largest library of Factory Patches for any instrument ever by any manufacturer.

Audio Sources

6 Independent Velocity, Release and Pressure (After-Touch) responsive digitally-controlled analog Voices.
Voice Control assignment can be per MIDI Input Channel (6 Maximum), or per polyphonic grouping in two Split-mode zones.

On-Board Controllers
(Matrix-6 Only)

61 - Note (C^0 to C^5) five-Octave, Release Velocity and Pressure (After-Touch) sensitive Keyboard, non-weighted.
Velocity 3 Response Scales
Pitch Bend Lever
Double Modulation Lever

(Matrix-6 and 6R)

Foot pedal input
Foot switch input (All Controllers are reversible and MIDI assignable)

Voice Architecture

2 Digitally Controlled Oscillators ("DCOs"): Pulse and Triangle-Sawtooth Waves, Noise and Sync
1 4-Pole Low-pass Voltage Controlled Filter ("VCF") with Linear FM
2 Voltage Controlled Amplifiers ("VCAs") Linear, Exponential
3 Envelopes Generators (DADSR)
  Trigger Modes: Single/Multi, Reset, External
  Run Modes: Normal, DADR (no sustain), Freerun (complete cycle)
2 Digital Low Frequency Oscillators ("LFOs") Triangle, Up & Down Sawtooth, Square, Random, Noise and Sample w/ Various Triggering modes
2 Ramp Generators
1 Tracking Generator
1 Portamento Generator

Modulation

Matrix Modulation™ System utilizing 20 possible Sources routed to 32 possible Destinations

MIDI Implementation

MIDI IN, MIDI OUT and MIDI THRU Ports
Transmit/Receive Channel select independent per Voice (MIDI MONO Mode) or per polyphonic Zone.

Modes	Mode 1: OMNI On, Poly
	Mode 3: OMNI Off, Poly
	Mode 4: OMNI Off, Mono
Controllers	Independent Controller Number select
	Controllers ON/OFF select
	Patch Change Commands ON/OFF select
Miscellaneous MIDI Features	
	System Exclusive ON/OFF select
	MIDI Echo ON/OFF select
	Patch Mapping
	Spillover

Miscellaneous

16 Character Alpha-Numeric Vacuum Fluorescent Display
100 Single Patch Memory Location
50 Multi Patch Memory Locations
Cassette Interface – FROM (input and TO (output) ports
Trigger Input Requirements: +5V DC signal minimum, 1 ms Pulse Width
Power Requirements (factory preset): North America and Japan: 95-120v A.C., 50-60 Hz
Europe: 200-230v A.C., 50-60 Hz

Dimensions

	Matrix-6	Matrix-6R
Length	39.75 in.	18.0 in.
Width	13.75 in.	12.0 in.
Height	4.48 in.	5.25 in.
Net Weight	31 lbs.	15 lbs.
Shipping Weight	37 lbs.	19 lbs.

Optional Accessories

FS-7 Sustain Foot switch, AC Cable, MIDI Cable, Factory Patch Manual with all parameter values and performance notes.
1,000 Factory Patch Tape: 1,000 Patches by programmers from around the world.
Shipped with newer units or can be purchased from Authorized dealers or Factory-direct.

Prices and specifications are subject to change without notice.

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