

The Xpander features six independently programmable voices with a different sound on each, ideal for use with multi-track sequencers, MIDI controllers such as Guitar controllers and Wind instruments with pitch to voltage as well as conventional keyboards. Voices can be set for different MIDI channels or CV/Gates, allowing the Xpander to bridge the gap between new and existing technologies. Each Voice has 2 VCOs,

a 15-mode filter, 2 VCAs, linear FM, 5 Envelopes, 5 LFOs, and much more. All this sound generating power is programmed together in any desired configuration using Oberheim's Matrix Modulation™ and can be stored in any of 100 programmable Single patch locations. There are also 100 Multi patches which allow storing combinations of different sounds on each voice. The Oberheim Sound in an expansion module.

Audio Sources	6 Independent Velocity, Release Velocity and Pressure (After-Touch) responsive analog Voices. Voice Control Assignment: — MIDI Input Channel (1 per Voice up to 6 maximum) — MIDI controlled polyphonic grouping in up to three Zones. — Analog Gate and Control Voltage input (1 per Voice up to 6 maximum)	
Controllers	Local	2 Non-dedicated Pedal Inputs
	MIDI In	2 Non-dedicated MIDI Modulation "Levers" or wheels 2 Non-dedicated MIDI Pedals
Voice Architecture	2 Voltage Controlled Oscillators ("VCOs") 1 15-Mode Voltage Controlled Filter ("VCF") 15 Voltage Controlled Amplifiers ("VCAs") 1 FM Modulation Generator 1 Lag Processor 3 Tracking Generators 5 Digital Envelopes 5 Digital Low Frequency Oscillators ("LFOs") 4 Ramp Generators 1 Noise Generator	
Modulation	Matrix Modulation™ System utilizing 27 possible Sources routed to 47 possible Destinations in up to 20 "Modulation Pages" per Voice. 12 Permanent ("hardwired") modulations per Voice.	
Audio	¼" high impedance, unbalanced outputs: Stereo LEFT and RIGHT MONO 1 direct Audio Output per Voice	
MIDI Implementation	MIDI IN, MIDI OUT and MIDI THRU Ports Transmit and 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 Velocity Scale select Gate/CV-to-MIDI conversion (Poly or Mono)	
Miscellaneous	Three 40-Character Fluorescent Displays 100 SINGLE Patch Memory Locations 100 MULTI Patch Memory Locations "Chain" Programming Mode Cassette Interface — FROM (input) and TO (output) ports Trigger Input Requirements: +5V DC signal minimum, 1 ms Pulse Width Power Requirements (user selectable): North America and Japan: 95–120V A.C., 50–60 Hz Europe: 200–230V A.C., 50–60 Hz	
Dimensions	Length	33 in. (83.8 cm.)
	Width	12¾ in. (32.4 cm.)
	Height (maximum, including feet)	5⅝ in. (13.7 cm.)
	Net Weight	18 lbs., 20 oz. (8.2 kg.)
	Shipping Weight	26 lbs. (11.8 kg.)
Optional Accessories	FS-7 Sustain Footswitch	



Oberheim
Practical Innovation Continues

© 1987 Oberheim
A Division of ECC Development Corporation
11650 West Olympic Blvd., Los Angeles, CA 90064
(213) 479-4948