ELKA SYNTHEX TECH SPECS







ELKA SYNTHEX is an eight voice polyphonic professional synthesizer. It works equally well in studios, with creative experimenters and also in live performances on stage. There are no parameter settings; functions are accessed directly and immediately by the musician. All settings are programmable (except main tuning, balance, volume, joystick, and sequencer-control) and up to 40 programmes may be stored. Another 40 preset programmes are further made available.

The five-octave keyboard can be divided from any selected position to establish two four-voice keyboards. Using the DOUBLE setting it is additionally possible to overlay two sounds together.

A joystick with its own LFO, four-line sequencer (step-by-step and real-time programmable), MIDI interface, etc. complete this professional synthesizer.

KEY FEATURES:

DIGITAL PITCH CONTROL, guarantees no need for re-tuning

MULTIMODE FILTER: 24 dB/octave LOW PASS, 6 dB/octave BAND PASS 1, 12 dB/octave BAND PASS 2, 12 dB/octave HIGH PASS

TRIANGLE, SAWTOOTH, SQUARE, and IMPULSE waveforms separately from both oscillators.

PULSE WIDTH MODULATION between oscillators 1 and 2.

DIGITAL RING OSCILLATOR

FILTER-KEYBOARD- TRACKING, adjustable.

POLYPHONIC GLIDE: Adjustable from -32 to -31 half notes.

POLYPHONIC PORTAMENTO: for a single tone and for an accord.

80 PROGRAMMES: 40 memories (freely programmable) and 40 presets.

CONTINUOUS EDITING: Simultaneous entry and editing is possible to modify the content of the programme.

SPLIT of the keyboard from an arbitrary position to form two fully independent keyboard sections.

DOUBLE for overlaying two programmes.

MONO- and STEREO OUTPUTS (100 percent channel separation!)

CHORUS EFFECT in three variations.

SEQUENCER: four lines of 256 steps with the LOOP function, selectable tone mode at all times, SPLIT (division from an arbitrary position of the keyboard).

TECHNICAL DATA

MAIN CONTROLS PANEL PRESET MEMORY WRITE - BANK: 1, 2, 3, 4 (programme loading)

- PROGRAMME: 0-9 (programme loading)

SPLIT: Keyboard division from an arbitrary position

DOUBLE: two programmes simultaneously (each with four sounds)

UPPER: Upper half of the keyboard from the split position LOWER: Lover half of the keyboard from the split position.

- CASETTE INTERFACE: SAVE (write over), SAVE HS (high-speed overwrite), LOAD (load from cassette)

VOLUME

- MASTER (main volume)
- BALANCE (between UPPER and LOWER)
- MONO/STEREO mode selection

JOYSTICK

LFO 2: FREQUENCE, DELTA FREQUENCE

TO OSC:: BEND DEPTH, LFO 2 DEPTH (strength of affection) UPPER/BOTH/LOWER (right,/left/both keyboard sections)

TUNING (continuous adjustment)

MASTER TUNE: ± full note DETUNE OSC-2: ± 1/4 note

OSC-2 SYNC: in/out synchronization oscillator 2

OSCILLATORS: Two oscillators both with:

OCTAVES: 16', 8', 4', 2', 1'

TRANSPOSITIONS: from 0 to 12 half note steps

WAVEFORM: TRIANGLE, SAWTOOTH, SQUARE, PULSE, PWM (Pulse Width Modulation), RING MODULATOR

PULSE WIDTH: from 0 % to 100 %.

VOLUME

NOISE GENERATOR

WHITE (white noise)

PINK (pink noise)

VOLUME

MULTIMODE FILTER

LOW PASS: 24 dB/octave BAND PASS 1: 6 dB/octave BAND PASS 2: 12 dB/octave HIGH PASS 12 dB/octave

FREQUENCY: Adjustment of the limit frequency

ENVELOPE: Envelope curve adjustment ENV +/-: Reversal of the envelope controls.

RESONANCE: Adjustment from 0 up to characteristic oscillation.

KEYBOARD: Tracking control from 0 to 100 percent.

FILTER ENVELOPE (ADSR)

- ATTACK time: from 2 ms to 10 s - DECAY time: from 2 ms to 20 s - SUSTAIN travel: from 0 % to 100 % - RELEASE time: from 2 ms to 20 s.

AMPLIFIER ENVELOPE (ADSR)

- ATTACK time: from 2 ms to 10 s - DECAY time: from 2 ms to 20 s - SUSTEIN level: from 0 % to 100 % - RELEASE time: from 2 ms to 20 s

EMVELOPE CONTROLS RELEASE: Keyboard on/off HOLD: Keyboard on/off

CHORUS:

1: Light slow

2: Heavy slow

3: Heavy fast

LOW FREQUENCY OSCILLATOR (LFO)

- FREQUENCY: from 0.05 Hz to 50 Hz
- DELAY: from 5 ms to 30 s
- DEPTH A: Intensity control for OSC 1, OSC 2, PWM 1, PWM2
- DEPTH B: Intensity control for FILTER ADSR, AMPLIFIER ADSR
- ROUTING A: Selector for OSC 1, OSC 2,PWM 1, PWM 2
- ROUTING B: Selector for FILTER ADSR, AMPLIFIER ADSR

GLIDE, PORTAMENTO

SPEED

GLIDE AMOUNT: from -32 to +31 half notes

OSC 1: on/off OSC 2: on/off GLIDE: on/off

PORTAMENTO: on/off

SEQUENCER

FUNCTIONS

WRITE: Record a sequence, legato and staccato available

PLAYBACK: single sequence or multiple sequences

FREQUENCY: playback speed GATE: STACCATO/LEGATO control

EDIT (modify a sequence)

WRITE (Record a sequence)

BEATS/RESTS (Step-by-step programming)

DELETE (Erase last step)

PLAYBACK with real-time programming capability

EDIT

FORWARD STEP BACKWARD STEP

INSERT

DELETE

PLAYBACK
READY/RESTART/STOP
START, RESTART, TRANSPOSE (Tonal mode selection)
SPLIT for free set-up of the sequencer trigger range from the keyboard
KEY-SET for modifying the output tonality
LOOP (Automatic Playback)

OUTPUT PANEL

AUDIO OUTPUTS LOWER (left keyboard section) UPPER (right keyboard section)

FILTER CONTROL
External voltage input (External filter control)
UPPER-BOTH-LOWER muting

FOOT SWITCHES (Foot keyboard connector for remote connection)
PROGRAM ADVANCE
GLIDE
HOLD
RELEASE (ADSR)

CASETTE INTERFACE ON/OFF selector FROM CASETTE input OUTPUT LOW LEVEL OUTPUT

COMPUTER INTERFACE MIDI output, serial chaining with other equipment

WRITE ENABLE

lon/off switch to protect against accidental programme erasure

SEQUENCER CONTROL
INTERNAL/EXTERNAL synchronization selector
SYNC INPUT: for external synchronization
SYNC OUTPUT: TTL-level, 1 ms pulse

DIMENSIONS (L x D x H [mm]: 1095 x 500 x 165

WEIGHT 25 kg (without stand)

ACSESSORIES (with extra cost)
Stand with adjustable tilt
Flight case
MIDI interface
Foot keyboard for remote operation