

FLAME

MIDI-TALKING-SYNTH

v1.02

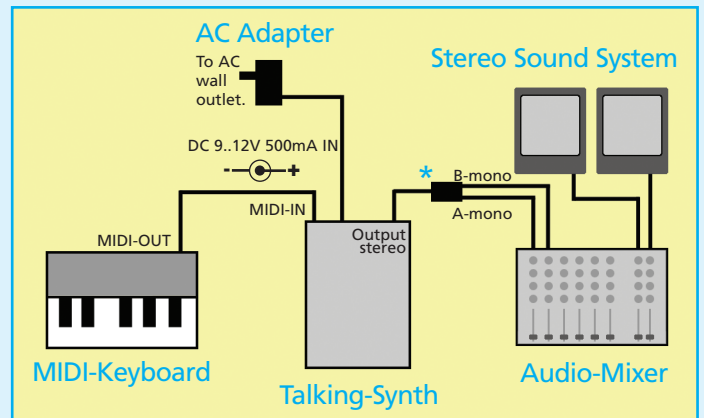
QUICK START HERE

PLAY SOUNDS IN SEQUENCER MODE

1. Connecting cables
2. Set all switches and controls in position like on frontpanel illustration (see below)
3. Turn on Talking-Synth (push rocker switch off-site on rear panel)
4. Play joystick TALK out of center position to play sounds
5. If you hear sounds, to switch the left HOLD toggle switch by way of now frozen joystick position.
6. Now play other controls such as joystick NOTE.
7. Play other sound combinations with selector switch SOUND and/or toggle switches TALK/SYNTH
8. Use RANDOM effects:
 - Turn on toggle switches RANDOM
 - RANDOM control in center position = off
 - Play in positions left/right different effects
9. Use TREMOLO effect:
 - Start internal sequencer
 - Turn on toggle switches TREMOLO

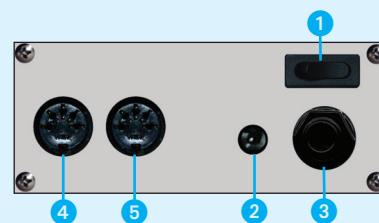
SETTING UP YOUR SYSTEM

The diagram below shows the basic connections in a setup using the Talking-Synth, a external keyboard and a stereo sound system with audio mixer.



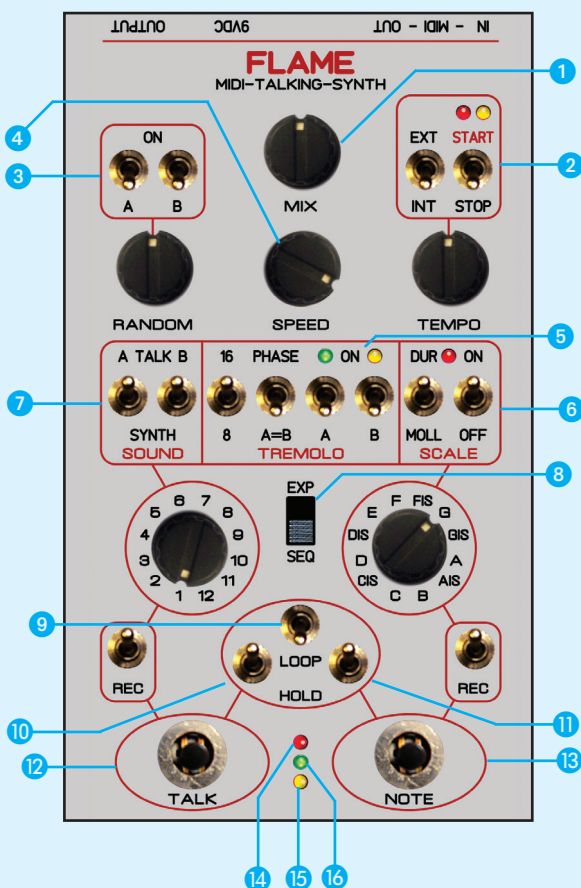
* use a audio splitter from stereo to left/right mono outputs
output left = SpeakJet-A output right = SpeakJet-B

REAR PANEL



- 1 Power switch (off-site=on)
- 2 DC-IN Jack 9..12V 500mA
Polarity: $\ominus \oplus$
- 3 Audio output Jack stereo
left: SpeakJet-A
right: SpeakJet-B
- 4 MIDI-IN connector
- 5 MIDI-OUT connector


FRONT PANEL




- 1 MIX Volume A + B
- 2 SEQUENCER SYNC CONTROL
 - internal / external MIDI-Clock
 - Start / Stop internal Sequencer
 - LED red / yellow: bar / clock pulse (beat)
 - Ruler: Tempo 10..222 (center=116)
- 3 RANDOM CONTROL
 - Random on / off A + B
 - Ruler: center=off, left/right=different effects
- 4 SPEED A + B
 - Talk durations of phonems and sounds
- 5 TREMOLO CONTROL
 - Audio tremolo against int./ext MIDI-Clock
 - Switch 8 / 16: phase length
 - Switch phase: in-or-out phase
- 6 SCALE
 - Set Scale filter on/off + DUR=major/MOLL=minor scale + Scales C-B
 - LED red: detect MIDI-IN values in EXPANDER mode
 - to blink per bar (visual control for joystick record) in SEQ mode (stop)
- 7 SOUND
 - Switch between Talk or Synth sounds (x-y fields of phonems)
 - Set sound bank 1..12
- 8 SWITCH Sequencer / MIDI-Expander
- 9 SWITCH LOOP (play phonems in loop or not)
- 10 HOLD joystick TALK (frozen joystick position)
- 11 HOLD joystick NOTE (frozen joystick position)
- 12 JOYSTICK TALK
 - play sounds (x-y fields of phonems), up=play lone sounds of list down=play sounds of list one after another in circle, center=off
 - REC switch: record joystick motions, length 2 bars (top=to chart joystick positions bottom=play recording)
- 13 JOYSTICK NOTE
 - to tune Note and Bending sound effect
 - REC switch: record joystick motions, length 2 bars (top=to chart joystick positions bottom=play recording)
- 14 LED red: POWER ON
- 15 LED green: SPEAKING Speakjet A
- 16 LED yellow: SPEAKING Speakjet B

PLAY SOUNDS IN EXPANDER MODE

1. Connecting cables
2. Set switch **8** in position SEQ
3. Turn on Talking-Synth
(push rocker switch off-site on rear panel)
4. Set MIDI-Chanel 10 of external keyboard
5. Play Note-On with external keyboard
6. Control sounds with:
 - joystick NOTE (Note, Bending effect)
 - rule SPEED (durations of sounds)
 - rule SOUND (sound benches 1..12)

 Please note:
In EXPANDER mode it's not possible to send or receive MIDI-Clock!
receive MIDI channel is fixed on 10


 Please note:
In SEQUENCER mode it's possible to toggle external and internal MIDI-Clock, without losing synchronisation!

MIDI CONTROLLER

In SEQUENCER and EXPANDER mode Talking-Synth sends MIDI Controller data values on MIDI-Channel 1 and 2. Per rule will be two control change values transmitted on MIDI channel 1 and 2 with the same control change number (see in top list for numbers).

LIST OF MIDI CONTROLLER NUMBERS

MIX:	control change 7 (volume)
RANDOM:	control change 1 (modulation)
SPEED:	control change 71 (harmonic)
TEMPO:	control change 72 (release time)
JOY TALK x:	control change 91 (effect depth)
JOY TALK y:	control change 92 (effect depth)
JOY NOTE x:	control change 93 (effect depth)
JOY NOTE y:	control change 94 (effect depth)

 Please note:
Transmitted MIDI channels are fixed on 1 + 2
All value ranges are between 0..127

SOUNDS SEQUENCER MODE

No	Talk-A	Talk-B	Synth-A	Synth-B
1	Babble01	Babble01	Robot01	Robot01
2	Babble02	Babble02	Beeps01	Beeps01
3	Babble03	Babble03	Biological01	Biological01
4	Babble04	Babble04	Alarms01	Alarms01
5	Babble05	Babble05	TouchTone01	TouchTone01
6	Babble06	Babble06	Alarms01	TouchTone01
7	Babble07	Babble07	TouchTone01	Biological02
8	Babble08	Babble08	Noise02	Noise02
9	Babble09	Babble09	Noise01	Noise01
10	Babble10	Babble10	Noise01	Noise02
11	Babble06	Babble08	Robot01	TouchTone01
12	Babble03	Babble04	Beeps01	Alarms01

SOUNDS EXPANDER MODE

Patch	Sounds
1	Words: short words + numerics / times
2	Words: short words + technics / astronautics
3	Words: short words + music / pop culture
4	Words: short words + nature / people
5	Words: short words + phrases
6	Phoneme + Allophone
7	Sound Effects
8	Words: short words + numerics / times
9	Words: short words + technics / astronautics
10	Words: short words + music / pop culture
11	Words: short words + nature / people
12	Words: short words + phrases

Patch 7: Sound Effects

Note	Sound
0-36	Robot 01
37-45	Robot 02-10
46-55	Alarm 01-10
56-65	Beeps 01-10
66-75	Biological 01-10
76-85	DTMF 0-9
86	DTMF *
87	DTMF #
88	Sonar Ping
89	Pistol Shot
90-127	Wow

More Informations, User Manual and Demo Sounds
<http://flame.fortschritt-musik.de>

Patch 6: Phoneme + Allophone

Note	Sound	Sample Words	Note	Sound	Sample Words
0-36	IY	See, Even, Feed	72	OWWWW	Go, Hello, Snow
37	IH	Sit, Fix, Pin	73	JH	Dodge, Jet, Savage
38	EY	Hair, Gate, Beige	74	VV	Vest, Even
39	EH	Met, Check, Red	75	ZZ	Zoo, Zap
40	AY	Hat, Fast, Fan	76	ZH	Azure, Treasure
41	AX	Cotten	77	DH	There, That, This
42	UX	Luck, Up, Uncle	78	BE	Bear, Bird, Beed
43	OH	Hot, Clock, Fox	79	BO	Bone, Book Brown
44	AW	Father, Fall	80	EB	Cab, Crib, Web
45	OW	Comb, Over, Hold	81	OB	Bob, Sub, Tub
46	UH	Book, Could	82	DE	Deep, Date, Divide
47	UW	Food, June	83	DO	Do, Dust, Dog
48	MM	Milk, Famous	84	ED C	ould, Bird
49	NE	Nip, Danger, Thin	85	OD	Bud, Food
50	NO	No, Snow, On	86	GE	Get, Gate, Guest
51	NGE	Think, Ping	87	GO	Got, Glue, Goo
52	NGO	Hung, Song	88	EG	Peg, Wig
53	LE	Lake, Alarm	89	OG	Dog, Peg
54	LO	Clock, Plus, Hello	90	CH	Church, Feature
55	WW	Wool, Sweat	91	HE	Help, Hand, Hair
56	RR	Ray, Brain, Over	92	HO	Hoe, Hot, Hug
57	IYRR	Clear, Hear, Year	93	WH	Who, Whale, White
58	EYRR	Hair, Stair, Repair	94	FF	Food, Effort, Off
59	AXRR	Fir, Bird, Burn	95	SE	See, Vest, Plus
60	AWRR	Part, Farm, Yarn	96	SO	So, Sweat
61	OWRR	Corn, Four, Your	97	SH	Ship, Fiction, Leash
62	EYIY	Gate, Ate, Ray	98	TH	Thin, month
63	OHIY	Mice, Fight, White	99	TT	Part, Little, Sit
64	OWIY	Boy, Toy, Voice	100	TU	To, Talk, Ten
65	OHIH	Sky, Five, I	101	TS	Parts, Costs, Robots
66	IYEH	Yes, Yarn, Million	102	KE	Can't, Clown, Key
67	EHLL	Saddle Spell	103	KO	Comb, Quick, Fox
68	IYUW	Cute, Few	104	EK	Speak, Task
69	AXUW	Brown, Thousand	105	OK	Book, Took, October
70	IHWW	Two, New, Zoo	106	PE	People, Computer
71	AYWW	Our, Ouch, Owl	107-127	PO	Paw, Copy