

Karlheinz Stockhausen

Nr. 19

SOLO

für Melodieinstrument mit Rückkopplung

UE 14789

Universal Edition

SOLO

for a melody instrument with feedback (1 instrumentalist and 4 assistants)

SOLO is a composition for one instrumentalist and may be interpreted with any melody instrument. During the performance, portions of what the instrumentalist plays are recorded on a 2-channel tape machine. Through a feedback circuit, the recorded sections are more or less densely superimposed, possibly transformed, and with a varied time delay, played back over two speaker groups, thus being mixed in with the playing of the soloist. Four assistants are required to operate the technical equipment.

The score has 6 pages of notes and 6 pages with FORM SCHEMES.

EXPLANATION OF THE SCORE:

- (a) There are 6 pages of notes. The pitches are notated within a range of ca. 3 octaves; some notes are doubled at the octave: one plays either the upper or the lower, depending on the compass of the instrument. In order to fit into the range of the chosen instrument, all notes are to be transposed by the same interval (one may not transpose single pages or systems). If an instrument with a compass of 4 or 5 octaves (or more) is chosen, then all notes in the upper octave may be transposed up one (or two) octave(s) and/or all notes in the lower octave down one (or two) octave(s).

All tones sound as notated. Each accidental applies only to one note. Rising or falling or waving lines (to be interpreted exactly) represent glissandi.

- (b) Four different timbres are prescribed: N (normal), I, II, III. Arrows between these symbols indicate continuous transitions between timbres (for example, N → III → N). The four particular timbres are to be determined by the instrumentalist and may be produced on the same instrument; he may also choose several instruments, or even apply more than one timbre to each symbol, depending on the context.

[In a version for a flutist, the following timbres were used: N: flute; I: piccolo and flute with emphasized overtone content, and recorder; II: flute with simultaneously hummed tones; III: alto flute (in transitions such as N → III, the flutist on the transverse flute attempted to imitate increasingly, with the aid of labials, the timbre of the alto flute). In a version for trombone, the following timbres were chosen: N: open; I: straight mute; II: wawa mute; III: cup mute and plunger and hat]

Differentiation of timbres may also be achieved through electro-acoustical means (contact microphones, filters, modulators, etc.; see (γ)).

In addition to the four timbres, there are the following indications:

ETWAS GERÄUSCHHAFT or GERÄUSCHHAFT or SEHR GERÄUSCHHAFT (somewhat noisy or noisy or very noisy). These noise colorations may be interpreted freely (for example, more or less overblowing, key noise, bow scratching, electro-acoustical noise modulation, etc.; see (γ)).

(C) The r
propo

Small
flutte

PREPAR

(1) The c

(2) Ther
one c

(3) A for
one c
ratio

(4) Ever
6sec
[F] = 1
of no
fore
and l

(5.1) Each
arra

der c
the s
↓ ir
↳ ir
th
be

← ir
↔ ir
p.

↑ ir
s
"cc
ir

(5.2) A n
par
"cc

- ly
e-
is
e
ie
- ③ The notation is either mensural (in the usual values), proportional, or mensural and proportional (in the case of accel., rit.).

Small notes (♩ , ♪ , etc.) are always to be played "as fast as possible". ≍ means flutter tongue or fast repetition.

PREPARATION OF A VERSION:

- es;
pen-
in-
ose
more)
ctave(s)
- ling
- ese
→N).
de
en
- l
nsverse
to
traight
- (con-
- ay be
ching,
- ① The order of the 6 note pages is free.
- ② There are 6 FORM SCHEMES, designated VERSION I - VI. For a performance, one of these versions is chosen.
- ③ A form scheme has 6 cycles: A B C D E F ; each of these cycles is to be assigned to one of the 6 note pages, and a note page is to be interpreted during its cycle (the duration of every cycle is fixed).
- ④ Every cycle is subdivided into periods (for example, VERSION I A = 11 periods of 6sec. each; B = $8 \times 14.2\text{sec.}$; C = $7 \times 19\text{sec.}$; D = $6 \times 25.3\text{sec.}$; E = $9 \times 10.6\text{sec.}$; F = $10 \times 8\text{sec.}$). The duration of one period determines the duration of one system of notes (in VERSION I, cycle A , each system from the chosen note page is therefore 6sec. long). From this duration, one may calculate the tempo of each system, and hence the durations of the individual notes.
- 5.1 Each FORM SCHEME has its own INTERPRETATION SCHEME. All vertically arranged symbols must be observed in the interpretation of a note page. Once the order of the note pages has been decided, then a page will be interpreted according to the symbols found in the INTERPRETATION SCHEME:
- ↓ interpret the page in regard to itself.
 - ↪ interpret the page in comparison to the following one; use more material from this page than from the following, and compare the two, alternating irregularly between them (for example, A B A A B A B A A, etc.).
 - ↩ interpret the page in comparison to the previous one (as in ↪).
 - ↔ interpret the page in comparison to the previous and the following one (for example, B A B C B C B A B, etc.).
 - ↑ interpret the page in comparison to what is being played back over the loudspeakers (which one can predict from the columns "LOUDSPEAKER I" and "LOUDSPEAKER II" - see "3rd assistant" in all VERSIONS. Naturally one must interpret ↑ only with the material of the note page chosen for this cycle.).
- 5.2 A note page has 6 (or 6×2 systems). Every system is divided into parts separated by |. The following symbols designate what should be interpreted, or "compared", according to 5.1:

interpret complete systems (as notated, from the beginning to the end of a system). The order of the systems is interchangeable. Systems must enter at the beginning of a period and follow one another without pauses. Groups of small notes in front of the first barline of a system are played at the end of the previous system as an upbeat.

interpret parts in any desired order (one may also jump from a part of one system to a part of any other system). Every part must be separated from the following by a pause (see (5.4)).

- interpret elements; every single normally printed note, every separate small note, as well as every group of small notes qualifies as 1 element. A normally printed note with one grace note also qualifies as 1 element. The order of all elements of a page is interchangeable. Every element must be separated from the following by a pause (see (5.4)).

In combinations like •| or •| or |•, the two are mixed ad lib. One need not begin with the first sign. The mixing should be such that one mode is kept for the duration of one period; the first and last period should apply both signs. For example, in VERSION I, cycle [C], •| may be interpreted: 1st period |• mixed, 2nd period •, 3rd period |, 4th period •| mixed, 5th period |, 6th period •, 7th period |• mixed, or some other way.

Connections between periods should be made, if possible, with overlapping parts or elements (enter before the end of one period and continue into the beginning of the next).

Parts and elements taken from the previous or (and) following page (←, →, ↔) retain their timbre and duration; if such a duration is longer than the present period, it is possible to hold one tone for the whole period and into the next, so that, because of the feedback, it may continue to sound for several periods. This should occur at least twice within a version. Systems taken from the previous and/or following page retain timbre and dynamics; their duration, however, is that of the present period.

(5.3) The following symbols indicate how systems, parts and elements are interpreted (or compared with one another):

≈ according to (5.2), play systems, parts, elements that are approximately the same. The criteria for sameness may be determined by various characteristics: same register (low, middle, high, or a combination of these registers; with single tones, one chooses the same pitch or a pitch in immediate proximity); same dynamics (pp-mf-ff, or a characteristic combination); same timbre (see (b)); approximately the same speed or duration; same articulation (legato - non legato, steady pitch - glissandi, steady - variable dynamics <>, steady - variable rhythms rit. - acc., etc.). The "sameness" should be clearly audible. This will be most successful when several of the criteria function together. Every note page presents a particular aspect of approximate sameness of systems, parts, and elements.

≠ according to (5.2), play systems, parts, elements that are different from one another. All the criteria mentioned for ≈ also apply here.

system).
inning of a
t of the first
at.

system to a
; by a pause

ll note, as
ed note with
age is inter-
(see 5.4).

: begin with the
ne period;
, cycle \square , . |
period • |
y.

ts or ele-
next).

n their timbre
to hold one
may continue
Systems
: duration,

l (or compared

ie same.
ame regis-
tones,

nics (pp-
ately the
1 - glissan-
, etc.). The
eral of the
approximate

one another.

|| according to 5.2, play systems, parts, elements that are contrary to one another. All the criteria mentioned for \approx also apply here. If one interprets the "contrary" relationship for a time according to only one criterion (for example, high - low register), then an alternating sequence results (high - low - high - low, etc.).

One of the note pages has 12 systems, of which every two form a pair especially suited to "contrary" interpretation of register, rhythm, etc..

Combinations $\approx \neq$ or $\approx ||$ or $\neq ||$ are interpreted like combinations in 5.2.

The criteria used in the interpretation of \approx , \neq , $||$ should be changed with every period.

5.4 Pauses between parts and elements are indicated as follows:

L relatively long pauses ("relatively" means that a "long" pause in a period of 6sec. is shorter than one in a period of 34.4sec.; a "long" pause in the latter should be as long as 15 or 20 seconds); in long periods L -pauses may last up to 50% of the period, in shorter ones, up to 90%.

┆ relatively medium-long pauses.

┌ relatively short pauses.

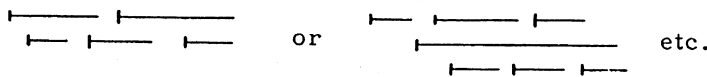
Combinations L┆ or L┌ or ┆┌ are interpreted like combinations in 5.2.

Wind instrument players may take breath during a tone exceeding the length of their breath.

5.5 The entry of every part or element ist governed by the following indications (a characteristic structure of superimpositions is prescribed for every cycle):

POLYPHON: the entries of parts and elements should fall between the entries of the playback in such a manner that various polyphonic forms arise.

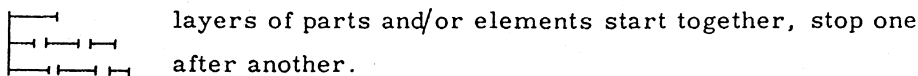
For example:

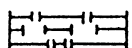


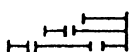
AKKORDE: the entries of parts and elements should be synchronous with the entries of the playback. Furthermore, systems and parts may be chosen and superimposed in such a manner that as many chords as possible result.

BLÖCKE: parts and elements should be superimposed in such a manner that characteristic "blocks" separated by pauses result.

The forms of the blocks should be varied:



 layers of parts and/or elements start and stop together.

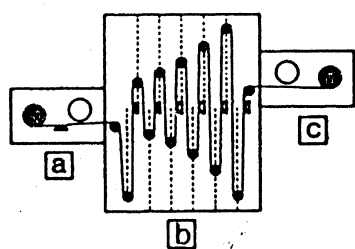
 layers of parts and/or elements start one after another and stop together.

The timing of entries should be considered in context of the determinations (5.4) (relative pauses); see also (X2). According to the demands of the structure, one may use a few pauses of different length than prescribed for the given cycle.

In order to work out a version, one should best prepare 6 pages with empty systems; for example, for VERSION I, page [A] has 11 systems, page [B] 8 systems, page [C] 7 systems, page [D] 6 systems, page [E] 9 systems, page [F] 10 systems (see (4)). According to the instructions of (5) one should then transfer into these systems in a chosen order the material from the note pages one decides to play. One can cut apart systems, parts, and elements of the note pages and glue them in a chosen order into the empty systems, copying in case of repetitions (the empty systems should therefore be drawn the same length as the systems of the note pages); or one can copy out the version completely by hand. One may use any amount of material from the note pages (most of the time, a greater or lesser amount is left out). A system may not be repeated within a cycle; furthermore, a part in a sequence of parts, or the same element in a sequence of elements, should not be repeated (naturally, a part in the context of a system, or an element in the context of a part and/or a system, may be repeated).

TECHNICAL SET-UP

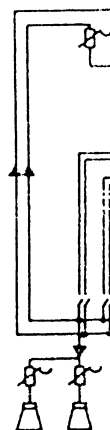
(X1) For recording, synchronisation, and playback, the following equipment is required:



- [a] 2-channel tape recorder, switched to "record", runs throughout performance.
- [b] table with guide rolls (11 moveable in tracks) and 6 stereo playback heads **D**. With a tape speed of 19cm/sec. (7 1/2ips), the longest delay (between playback heads 5 and 6 in VERSION III and IV: 30.4sec. - 45.6sec.) requires a distance of ca. 290cm (114"); therefore the table must be ca. 140cm (56") long.
- [c] tape recorder to wind up tape.

The rolls should be adjusted such that the time delay between recording head [a] and the 6 playback heads equals the durations of the periods, as indicated in the chosen form scheme. In FORM SCHEME VERSION I, the playback heads are at the following distances from the recording head: 6sec. - 8sec. - 10.6sec. - 14.2sec. - 19sec. - 25.3sec.. At any given time only one playback head is reading, and in changing from one cycle to the following, another is switched on (see ↓ as the sign to change heads in the versions).

The sequence in VERSION I is therefore: [A] 1st head, [B] 4th head, [C] 5th head, [D] 6th head, [E] 3rd head, [F] 2nd head. (switch over at the beginning of the first period or before the second of a new cycle; see ↓).



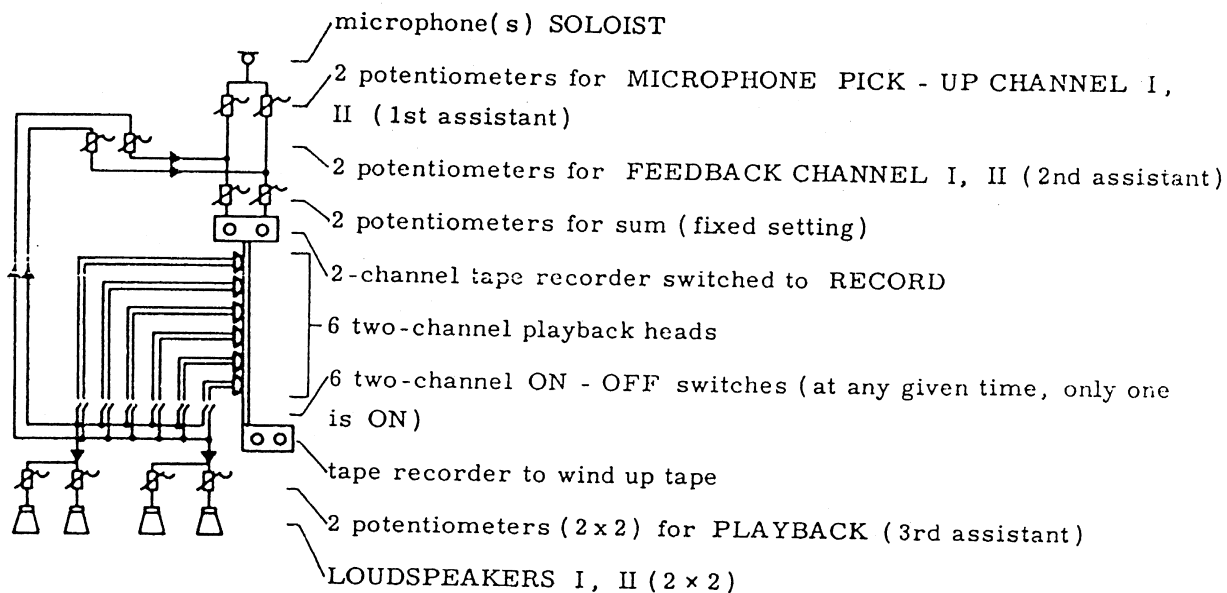
Ampli

The se
time c
speake

The n
none c
instru

(X2) In eve
Three

accor
cated
solois
cycle
nals:
perio
signal
A per
open.
SPEA

SCHEMATIC DIAGRAM:

Amplifiers must be added to this schematic.

The schematic shows how the sound picked up by the microphone(s) is fed back after a time delay, at the same time synchronised with new sounds, and played back over loudspeakers.

The microphone(s) and loudspeakers should be set up so that as little as possible or none of the playback is picked up by the microphone(s) (directional microphone near the instrument).

(x2) In every FORM SCHEME there is a FEEDBACK SCHEME.

Three assistants control:

1st: MICROPHONE PICK - UP (2 potentiometers),

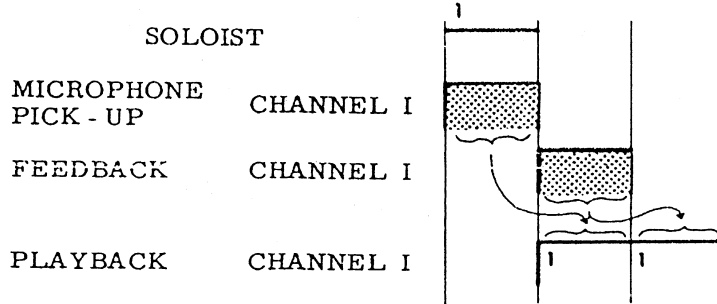
2nd: FEEDBACK (2 potentiometers),

3rd: PLAYBACK (2 potentiometers),

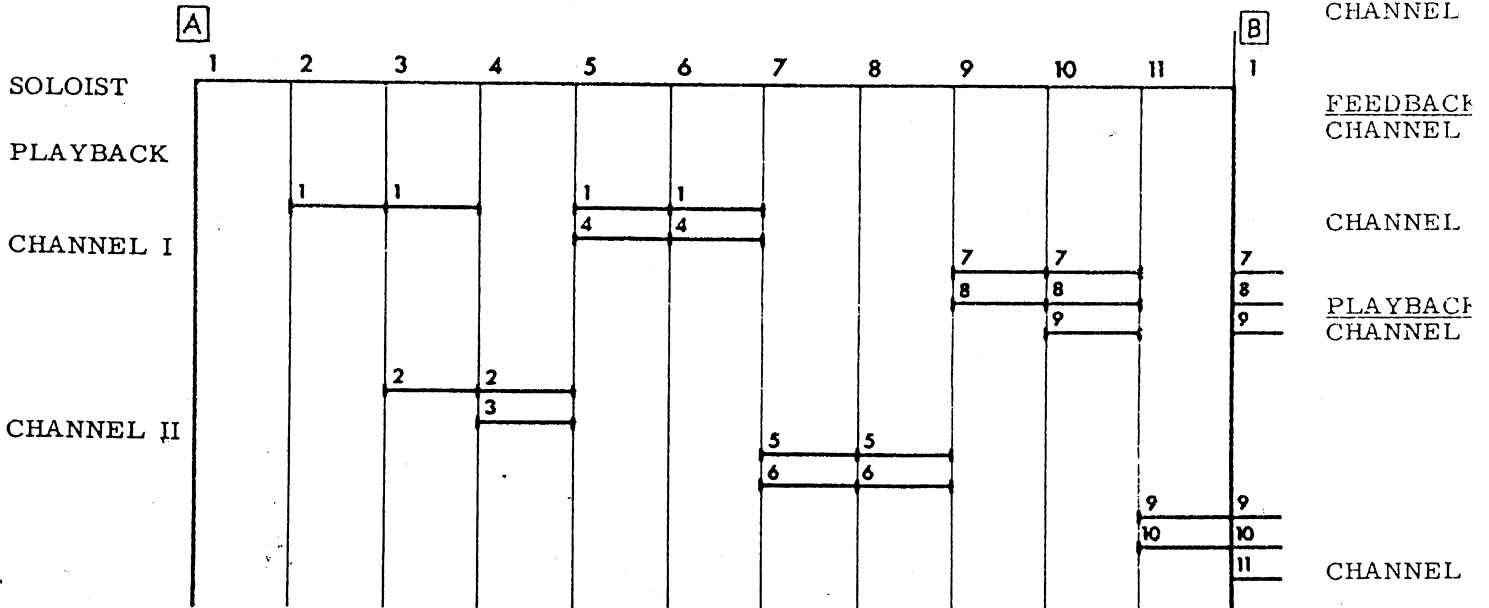
according to the FEEDBACK SCHEME (open and close the potentiometers as indicated). The 4th assistant controls the switch-over of the playback heads and gives the soloist as well as the other three assistants signals at the beginning of every period and cycle (for example, using a light-signal system, at the beginning of every period, 2 signals: 1st signal 1sec. before, as a preparation, 2nd signal at the actual beginning of the period; and 3 signals near the beginning of a cycle as an announcement, and two further signals like at the beginning of all periods).

A period will be recorded if MICROPHONE PICK - UP CHANNEL I or (and) II is open. A recorded period will be played back in the next period if PLAYBACK LOUD - SPEAKER I or (and) II is open. If a period is recorded and fed back in the same

channel in the next period (see FEEDBACK CHANNEL I, CHANNEL II), then it can be played back in the period after next. If the FEEDBACK in a channel remains open for several periods, a recorded period will always be re-recorded and can be played back for one period more than the feedback is open:



The following example shows the superimpositions of the periods that occur in VERSION I **A**:



Each FEEDBACK SCHEME indicates for which periods the three assistants should open and close their 2 potentiometers \square . In the part for the playback (3rd assistant), the boxes (open potentiometers) are not hatched; instead the number of superimposed layers is indicated by the number of horizontal lines (only for graphical reasons are the boxes higher when there are more than 5 layers; they still have the same meaning, namely OPEN - CLOSE the potentiometer).

The number within a period indicates the number of more or less short interruptions, that is, closing the potentiometer, which may be distributed ad lib. within the period. Through these interruptions periods are "perforated" (listen in with earphones to the feedback), thus

the
tur
wh
The
fee

SOLOIST
MICROPHO
PICK - UP
CHANNEL

CHANNEL

FEEDBACK
CHANNEL

CHANNEL

PLAYBACK
CHANNEL

CHANNEL

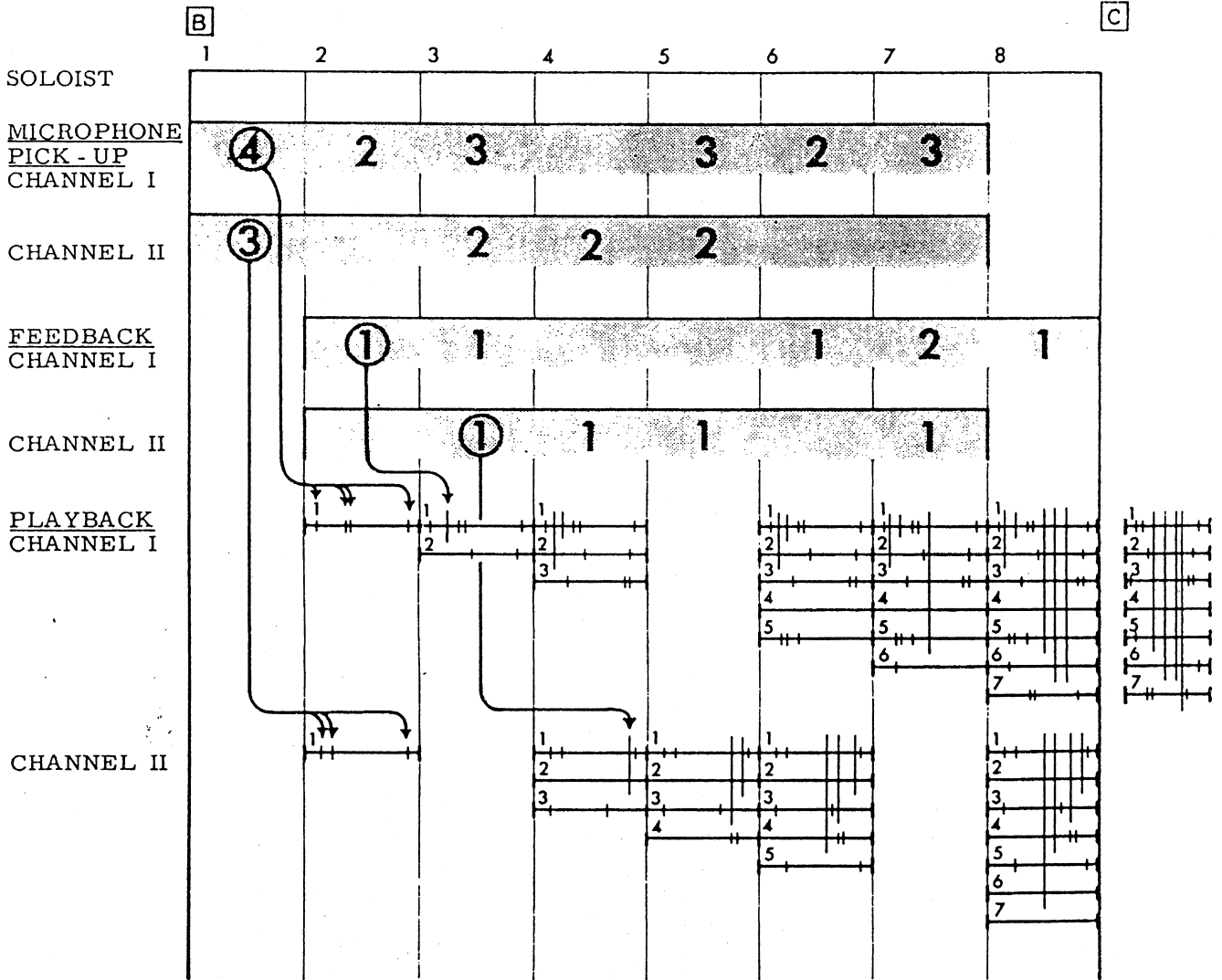
Wh
tio
sor
vol
str

can be
for sev-
for one

the canonic repetitions varied (leave out single tones from melodic sequences, "punc-
ture" held tones, etc.). Perforations may be omitted during long tones, for example,
when a tone is to be held for a whole period and beyond.

The following example shows "perforations" made by short closings of the recording and
feedback potentiometers in VERSION I [B] :

- | during a period : perforation made by MICROPHONE PICK - UP
- | during a period : perforation made by FEEDBACK



in

II

d open
he boxes
is indi-
igher when
LOSE

is, that
through
ck), thus

When speakers I and II are both open at the same time, then stereophonic alterna-
tion (irregular, ad lib.) should be effected between the speakers: at various speeds,
sometimes extremely rapid (especially with sustained sounds). The regulation of the
volume of the speakers should be extremely differentiated; react completely to the in-
strumentalist (indicated dynamics are not binding). Speaker sounds should sometimes

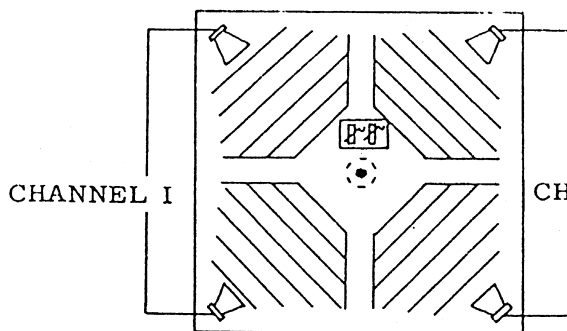
(especially during the pauses of the soloist) be extremely soft (far away). The two channels, in relationship to each other as well as to the soloist, should create several dynamic and hence spatial layers. In case each channel is played back over two (or more) parallel potentiometers and speakers, up to 5 (or more) layers are possible (two for each channel, plus soloist).

- (y) Low-pass filters may be added to the feedback system in order to reduce accumulating tape noise resulting from multiple superimposition.

Various filters, modulators, etc., may be added to create the timbral differentiations mentioned in (b).

- (z) STAGING (suggested):

Soloist in the center of the hall, surrounded by 6 music stands; on each stand one of the 6 pages, in an irregular order (for example, $\begin{matrix} 6 & 4 & 1 \\ 2 & 5 & 3 \end{matrix}$).



Microphone(s) suspended above the soloist or several on stands around him.

Small lamps for light signals attached to the stands (not visible to the public).

4 loudspeakers in the corners of the hall (elevated approximately 6 - 8 feet), 2 for channel I and 2 for channel II.

The 3rd assistant should control the volume of the speakers from a place very close to the soloist, so that he can see and react to him. The other assistants and their equipment may be anywhere in the hall, or even in a control room outside the hall.

As long as the equipment for the feedback is not available, one may, as a compromise solution, make a 2-channel tape which contains everything as presented in the two columns PLAYBACK LOUDSPEAKER I and LOUDSPEAKER II. The soloist can then, in performance, play to a stereophonic playback over speakers controlled by an assistant.

In order to obtain a good mixture between the direct sound of the soloist and the sound from the speakers, one may amplify the instrumentalist over several added speakers suspended from the ceiling or placed between the other speakers.

Translation of the texts in the FORM SCHEMES

VERSION I**FEEDBACK - SCHEME**

	<u>SOLOIST</u>
<u>1st ASSISTANT</u> MICROPHONE PICK - UP	CHANNEL I CHANNEL II
<u>2nd ASSISTANT</u> FEEDBACK	CHANNEL II CHANNEL II
<u>3rd ASSISTANT</u> PLAYBACK	LOUDSPEAKER I LOUDSPEAKER II

INTERPRETATION SCHEME

①

- ② POLYPHONIC AND SEVERAL BLOCKS
- ③ MANY CHANGES (movement between speakers)
- ④ CHORDS AND BLOCKS
- ⑤ POLYPHONIC AND SEVERAL CHORDS
- ⑥ DURATION

VERSION II

- ①_{t₁} see t₁ VERSION I
 - ②_{t₂} CHORDS AND BLOCKS (separate blocks with |)
 - ③_{t₃} POLYPHONIC AND CHORDS
 - ④_{t₄} 1st period reacts to last of D
 - ⑤_{t₅} (L between blocks, | between parts and elements)
 - ⑥_{t₆} SHORT, DYNAMICS ad lib.
 - ⑦_{t₇} 2 times SHORT, DYNAMICS ad lib.
 - ⑧_{t₈} DURATION
- ① The same is in both channels; mix ad lib. stereophonic motion and parallel envelopes at all speeds (also extremely slow ones); speaker with dotted lines should be opened less and with interruptions.

VERSION III

- ①_{t₁} see t₁ VERSION I
- ②_{t₂} CHORDS AND BLOCKS (in 4th and 7th periods)
- ③_{t₃} FAST CHANGES (movement between speakers)
- ④_{t₄} POLYPHONIC AND 2 BLOCKS ≡ (in 3rd, 5th, and 7th periods)
- ⑤_{t₅} OCCASIONAL ACCENTS
- ⑥_{t₆} POLYPHONIC AND SEVERAL CHORDS
- ⑦_{t₇} DURATION

VERSION IV

- (t₁) see t₁ VERSION I
- (t₂) In cycle [A] the numbers indicate elements to be left out
- (t₃) Interruptions near the end
- (t₄) 1st period ↓
- (t₅) POLYPHONIC AND SEVERAL CHORDS
- (t₆) POLYPHONIC AND SEVERAL BLOCKS
(separate blocks with [L])
- (t₇) (| between blocks, [between elements)
- (t₈) CHANGES (movement between speakers)
- (t₉) 3 times differently short
- (t₁₀) 1st period reacts to last of [E]
- (t₁₁) CHORDS AND BLOCKS (separate blocks with [L])
- (t₁₂) DURATION

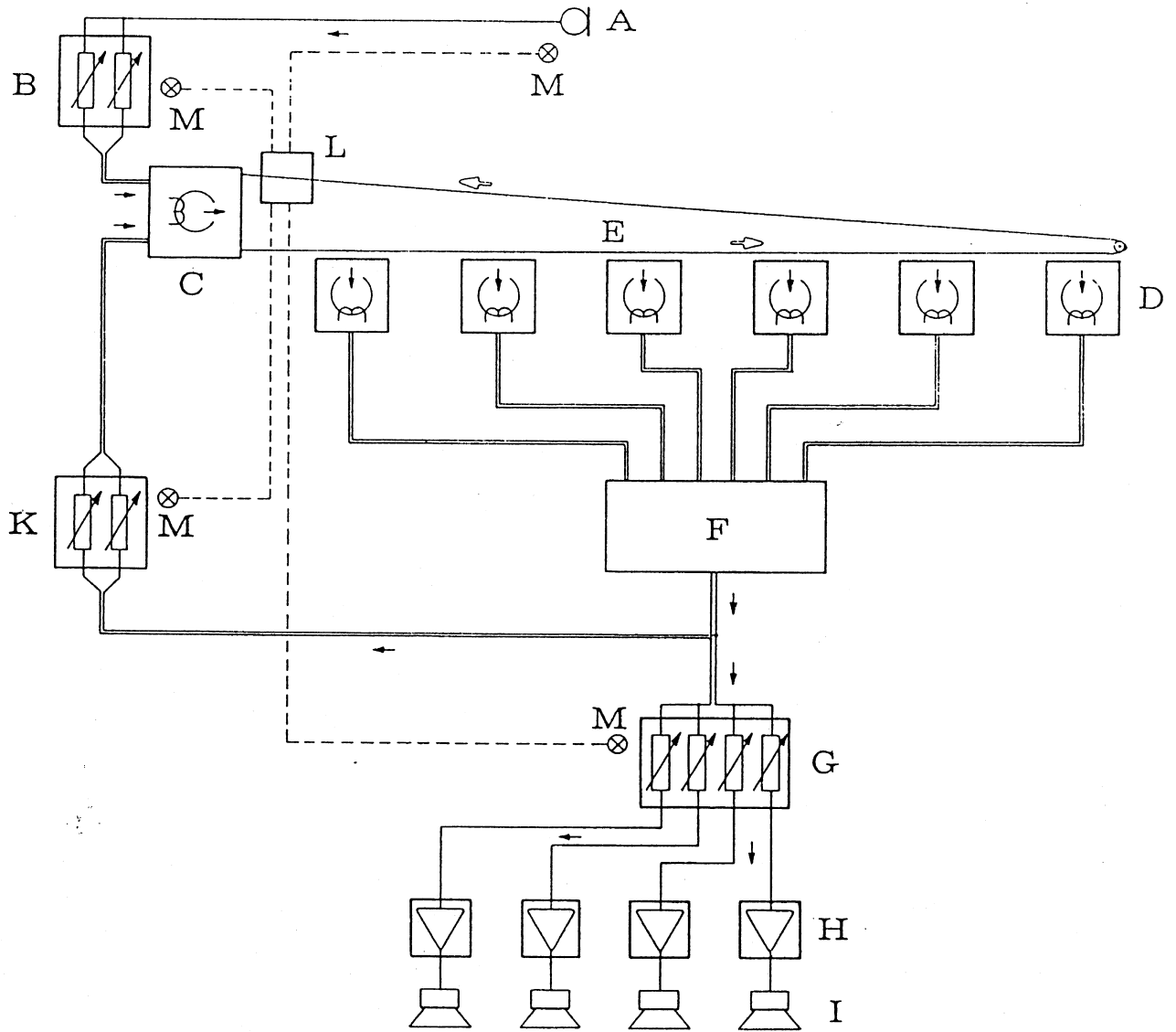
VERSION V

- (t₁) see t₁ VERSION I
- (t₂) CHORDS AND BLOCKS (separate | blocks with [L])
- (t₃) 1st period reacts to last of [C]
- (t₄) (separate • blocks with [L])
- (t₅) FAST CHANGES (movement between speakers)
- (t₆) POLYPHONIC AND CHORDS
- (t₇) DURATION

VERSION VI

- ① t_1 see t_1 VERSION I
 - ② t_2 increasingly shorter interruptions
 - ③ t_3 1st period ↓
 - ④ t_4 (| between blocks, | between parts)
 - ⑤ t_5 2 times FAST CHANGES (movement between speakers)
 - ⑥ t_6 several shorter inserts ad lib.
 - ⑦ t_7 | very long
 - ⑧ t_8 2 times SLOW CHANGES, 1 time synchronous
 - ⑨ t_9 CHORDS AND BLOCKS (separate blocks with |)
 - ⑩ t_{10} several very short accents, isolated and together
 - ⑪ t_{11} POLYPHONIC AND BLOCKS (separate blocks with |)
 - ⑫ t_{12} DURATION
- ① In [C] 1st period: leave out 1 isolated element and one element out of every part (indeterminate number). In the 2nd period leave out 2 elements.

SCHEMATIC DIAGRAM

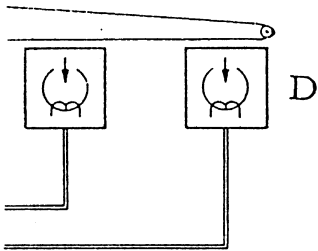


APPARATUS FOR SOLO

An early design for the tape apparatus was based upon fixed guide roles and moveable (sliding) playback heads. It was on this principle that the first apparatus for SOLO was built in 1968, in the "Studio voor Elektronische Muziek" of the Rijksuniversiteit in Utrecht. A tape loop is led straight over 3 stands, and the playback heads - each with its own amplifier - are horizontally moveable. The apparatus can be set up and taken down quickly and is easily transportable.

G. M. Koenig, director of the studio, kindly furnished the following photographs and explanatory notes.

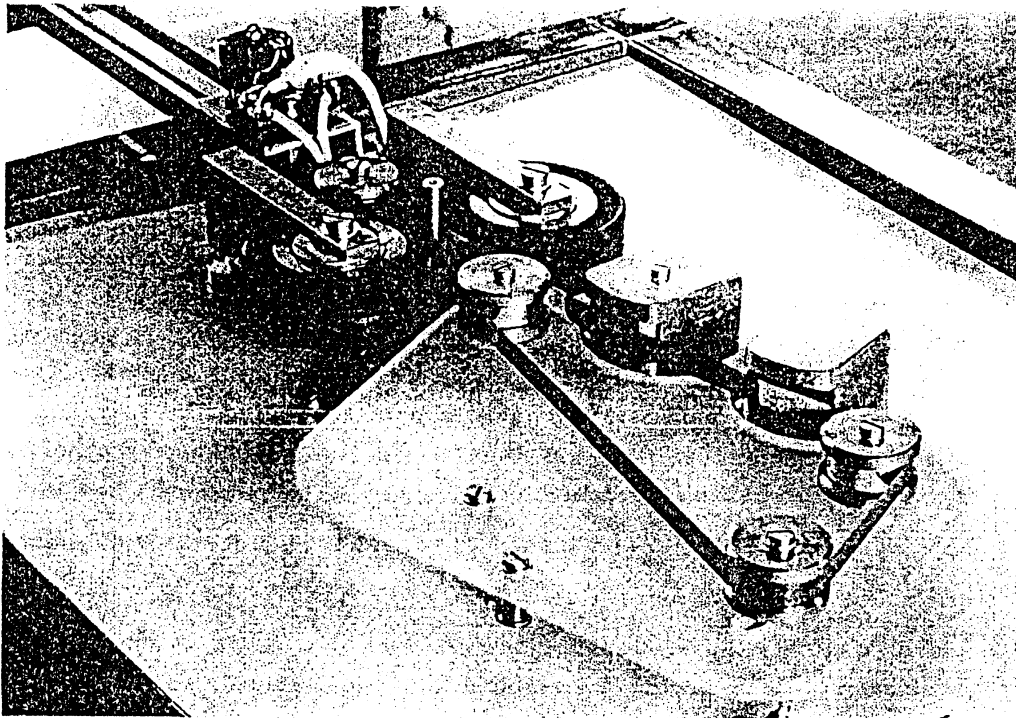
The apparatus may be rented for performances from the "Studio voor Elektronische Muziek", Plompstorengracht 14 - 16, Utrecht, Holland



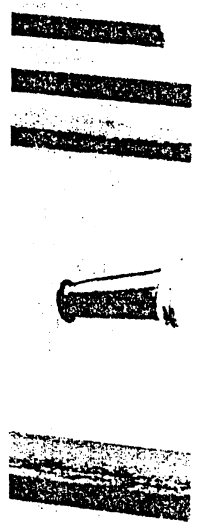
Explanations of the schematic:

A	microphone
B	recording level potentiometers
C	erase-record head (stereo)
D	moveable playback heads (stereo) with amplifiers
E	tape loop
F	switches for playback head selection
G	playback-level potentiometers
H	power amplifiers
I	loudspeakers
K	feedback-level potentiometers
L	optical metronome ⁺⁾
M	small lamps of the optical metronome for the assistants

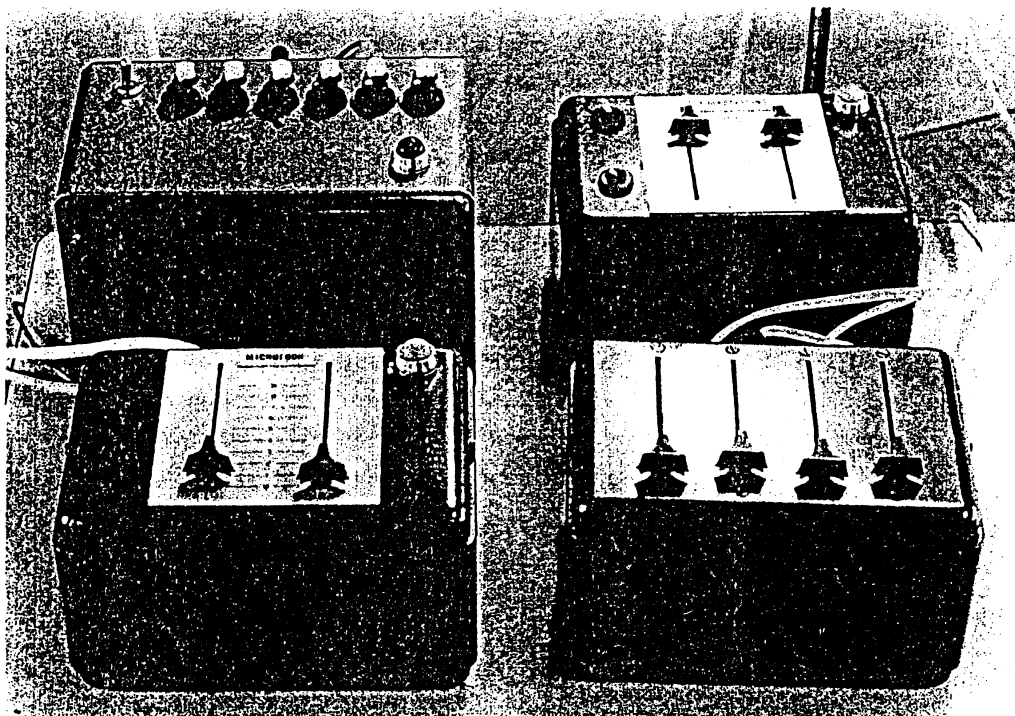
⁺⁾ The optical metronome senses marks (black) on the back side of the tape, blinking the four small lamps correspondingly. The tape loop should be made from AGFA PER 555, the tape for which the playback amplifiers were calibrated.



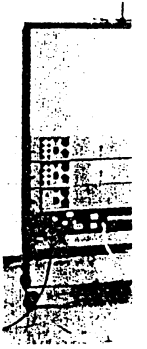
Tape drive, erase-record heads; the capstan is located between the pressure idlers; top left, optical metronome; a black mark on the tape is visible between the two heads.



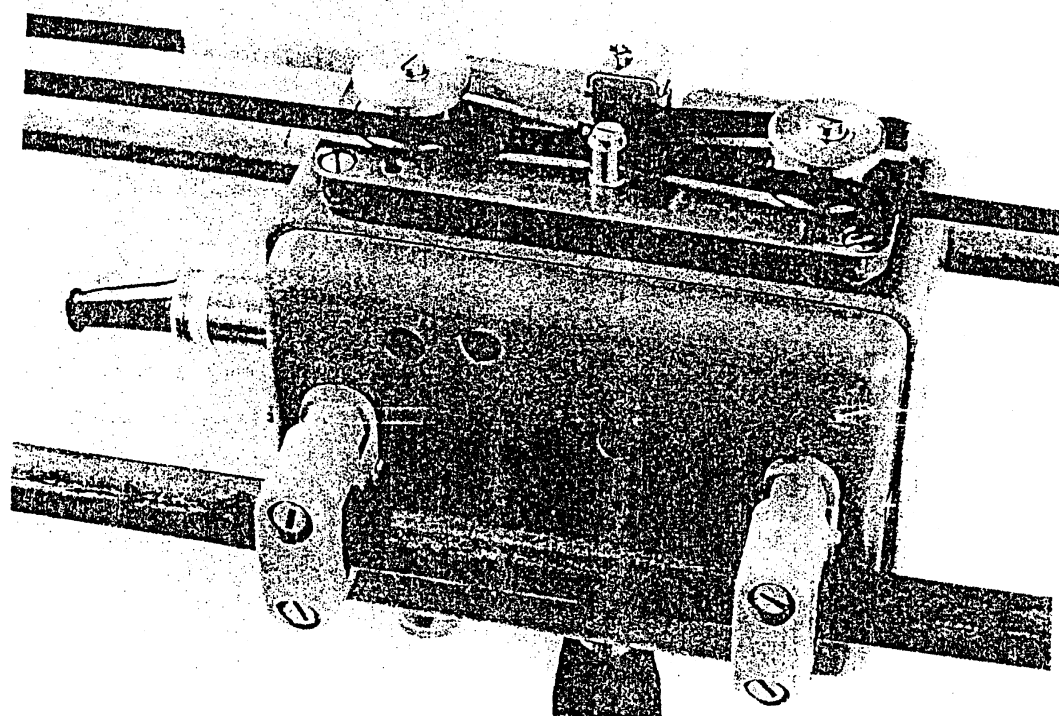
Playback



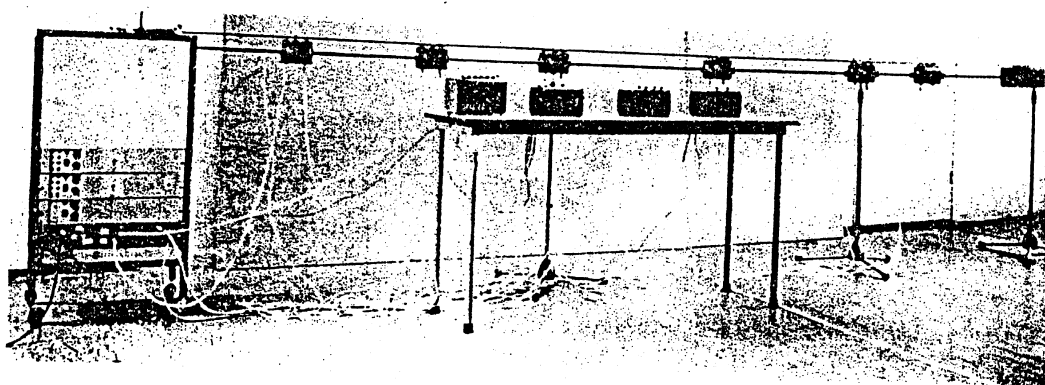
Control Boxes: top left, switches for playback head selection; top right, potentiometers for feed-back; bottom left, recording potentiometers; bottom right, playback potentiometers.



Total view; a
amplifiers, s
table with co



s; Playback unit, consisting of playback head, guide rolls and amplifier.

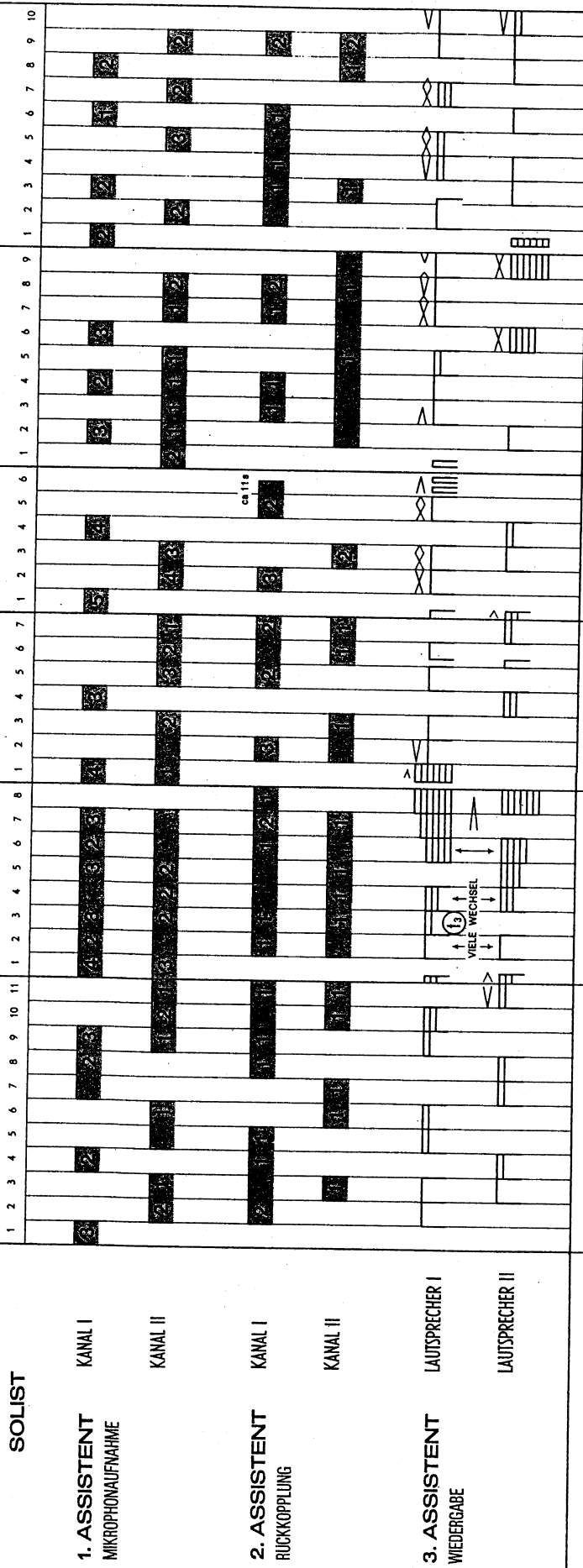


Total view; at left, tape drive and recording complex, at right playback heads with amplifiers, slideable on two brass tubes supported by stands; in the foreground table with control boxes.

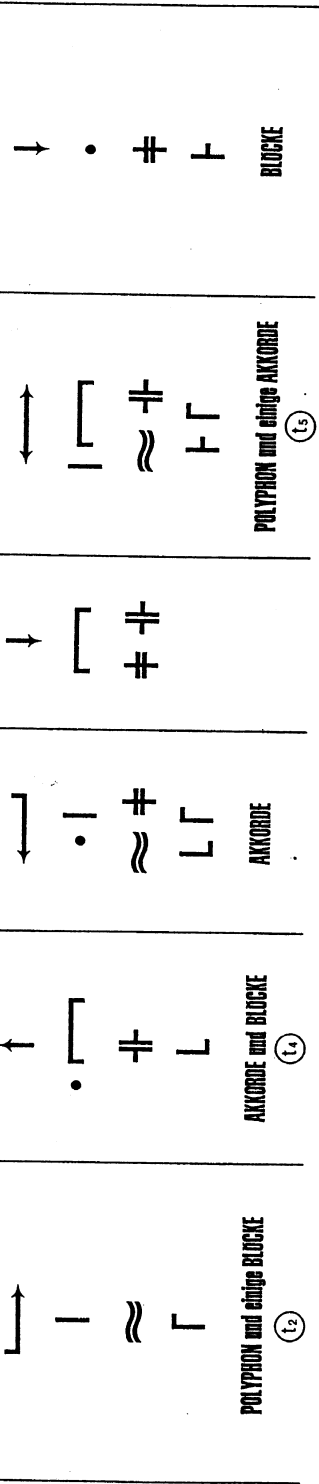
FORMSCHEMA VERSION I

A (66 s) **B** (113,6 s) **C** (133 s) **D** (151,8 s) **E** (95,4 s) **F** (80 s) **DAUER** (1s) **10'39,8"**

RÜCKKOPPLUNGS-SCHEMA

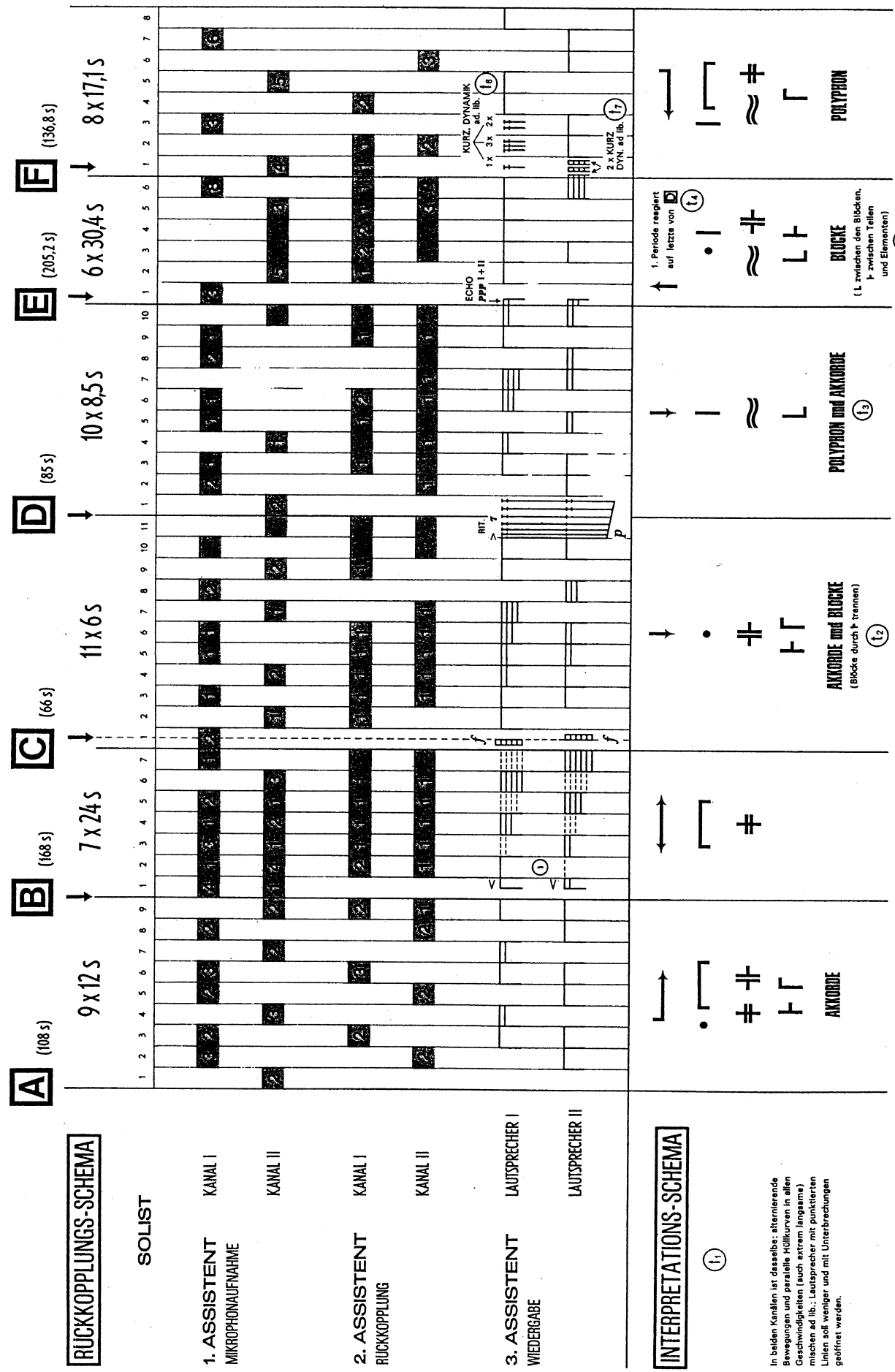


INTERPRETATIONS-SCHEMA (1s)



FORMSCHEMA VERSION II

DAUER ⁽¹⁶⁾
12'49"



RÜCKKOPPLUNGS-SCHEMA

SOLIST

1. ASSISTENT
MIKROPHONAUFNAHME

KANAL II

2. ASSISTENT
RÜCKKOPPLUNG

KANAL II

3. ASSISTENT
WIEDERGABE

LAUTSPRECHER I

LAUTSPRECHER II

INTERPRETATIONS-SCHEMA

(1) In beiden Kanälen ist dieselbe, alternierende Bewegungen und parallele Hüllkurven in allen Geschwindigkeiten (auch extrem langsame) mischen ad lib.; Lautsprecher mit punktierten Linien soll weniger und mit Unterbrechungen geöffnet werden.

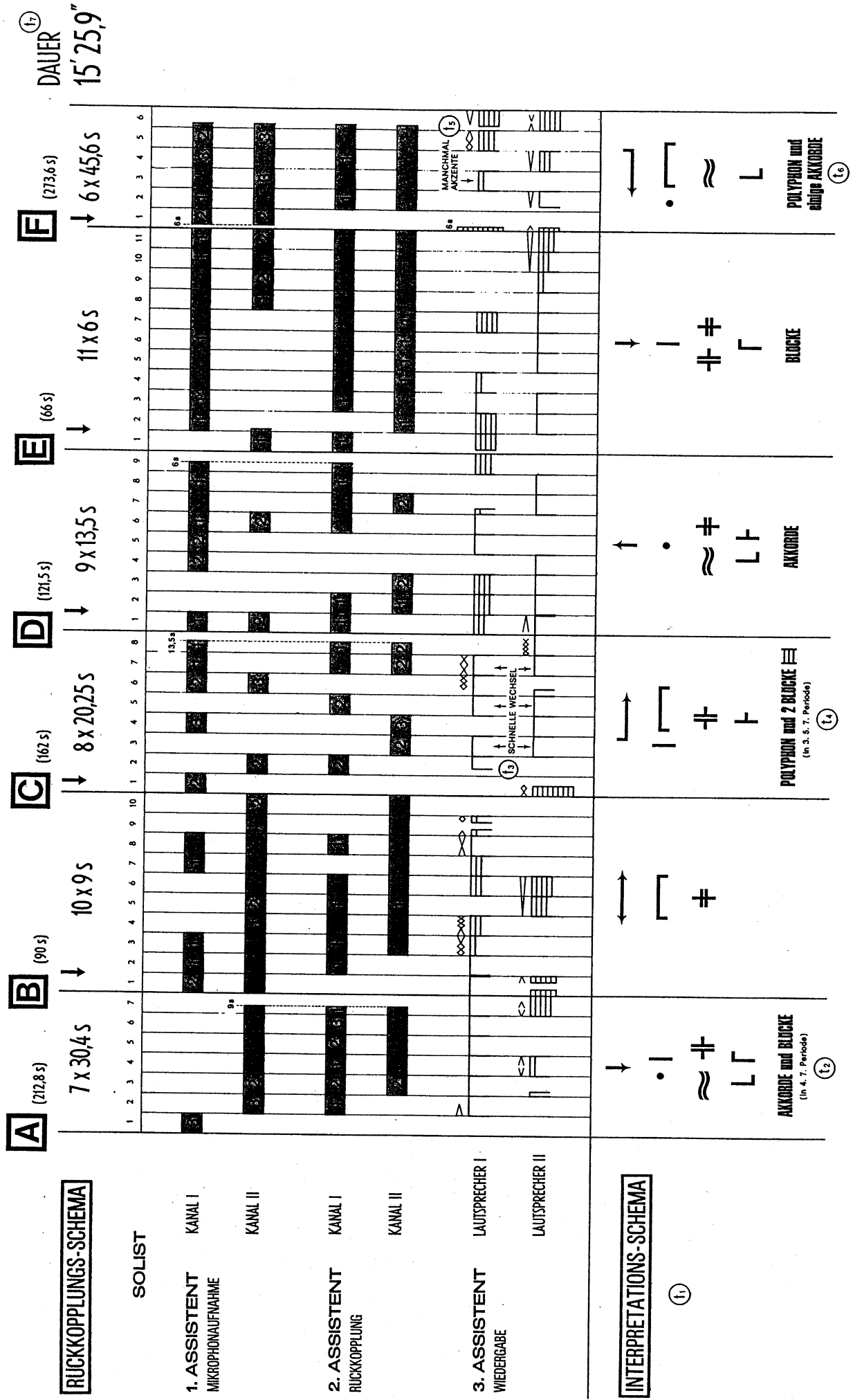
1. Periode reagiert auf letzte von (14)
POLYPHON

BLOCKE
(L zwischen den Blöcken, F zwischen Teilen und Elementen) (15)

AKKORDE und BLOCKE
(Blöcke durch F trennen) (12)

AKKORDE

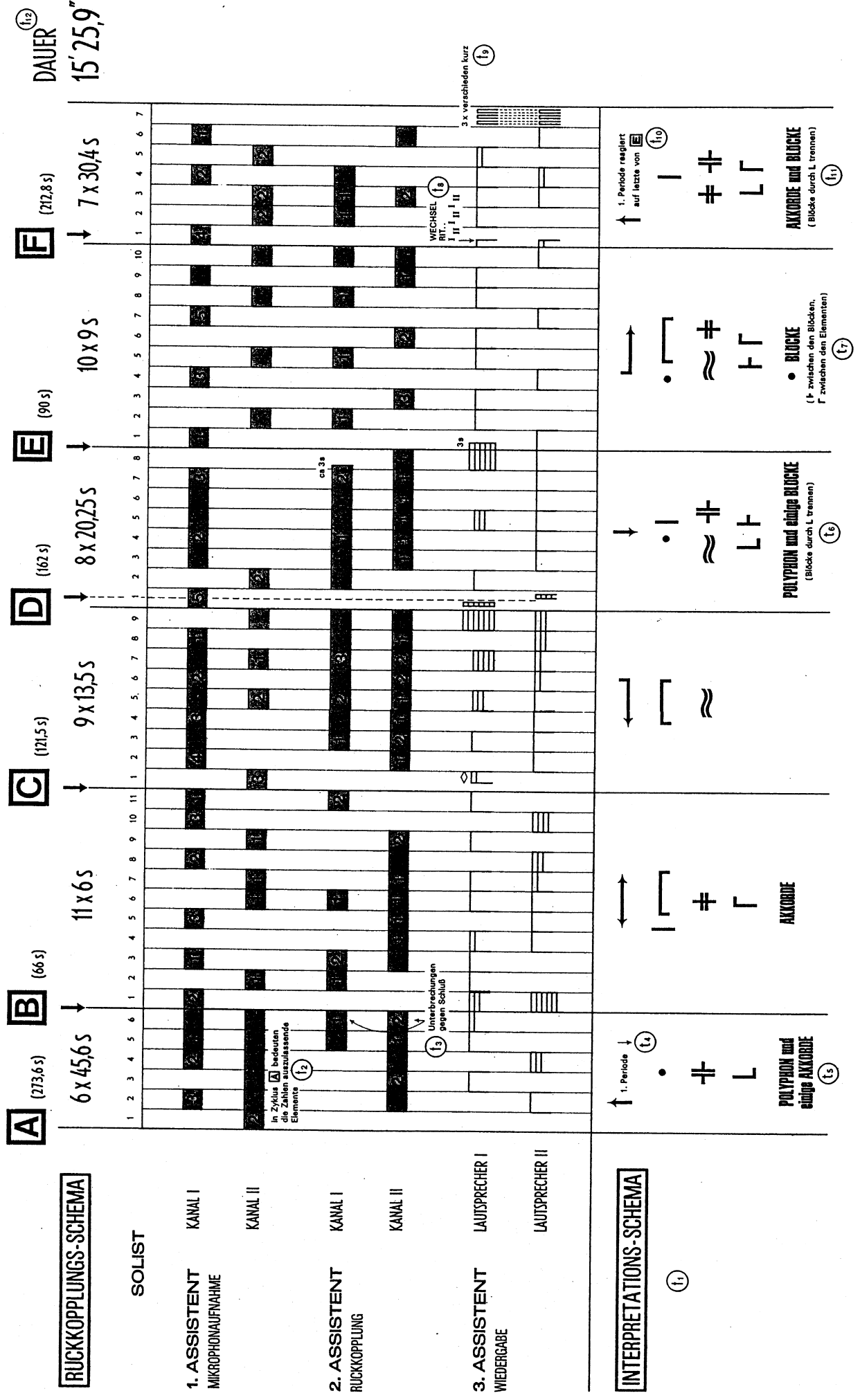
FORMSCHEMA VERSION III



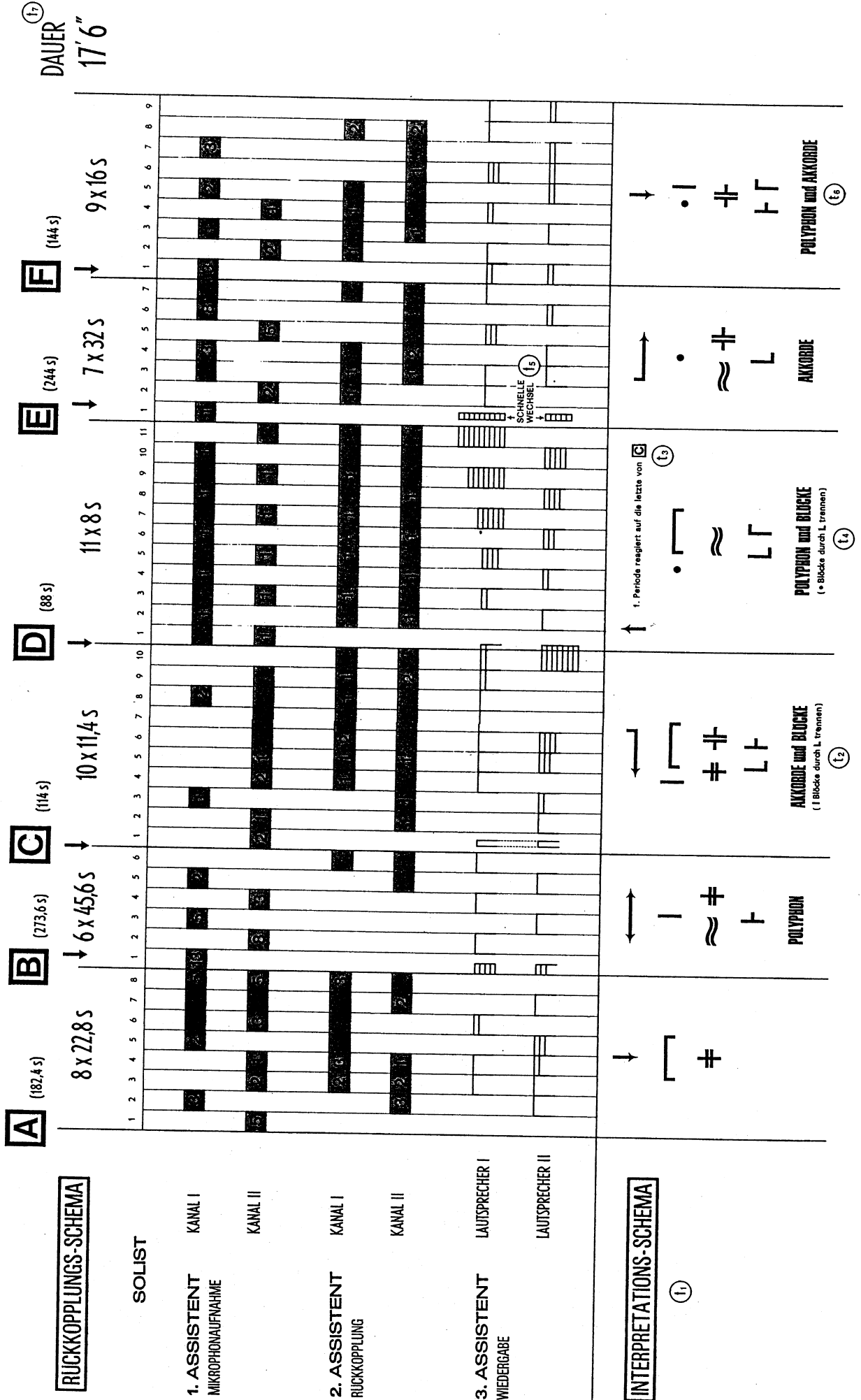


258575

FORMSCHEMA VERSION IV



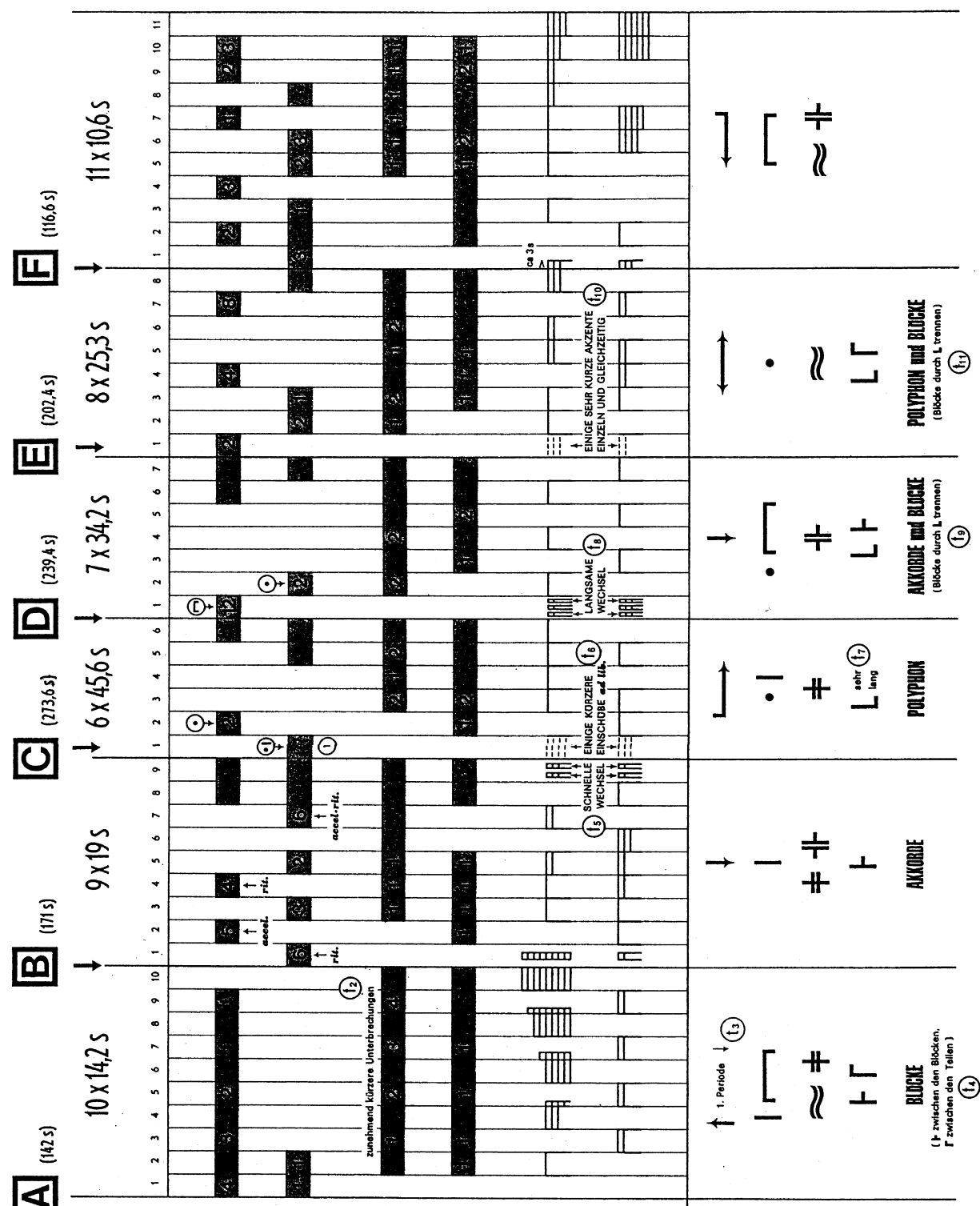
FORMSCHEMA VERSION V



758572

FORMSCHEMA VERSION VI

DAUER ⁽¹²⁾
19'5"



RUCKKOPPLUNGS-SCHEMA

SOLIST

1. ASSISTENT
MIKROPHONAUFNAHME

KANAL I

KANAL II

2. ASSISTENT
RUCKKOPPLUNG

KANAL I

KANAL II

3. ASSISTENT
WIEDERGABE

LAUTSPRECHER I

LAUTSPRECHER II

INTERPRETATIONS-SCHEMA

(1) In \square 1. Periode: 1. Element; 2. Element; 3. Element
auslassen, in 2. Periode 2. Element auslassen.
(F zwischen den Blöcken,
F zwischen den Teilen)

758575

SOLO D

N

I

ETWAS GERÄUSCHHAFT
VIBR. LANGSAM PERIOD.
ACCEL. RIT. VIBR. MASSIG PERIOD.
RIT. ACCEL.

N

II

SEHR GERÄUSCHHAFT

N

III

GERÄUSCHHAFT

Auf dieser Seite kann sowohl jede einzelne kleine Note (♩) für sich als auch eine normale Note mit kleiner Note (♩♩ oder ♩♩♩) sowie eine normale Note mit Abschlag (♩) als Element gelten.



SOLO A

GLISS. F - E - GLISS. II N GLISS. ff

GLISS. G A' GLISS. II GLISS. N GLISS. ff

GLISS. G - F - F - F PP PP

GLISS. E - D - D - D PP GLISS. N

GLISS. C - D PP PP

GLISS. A' - A' GLISS. II N GLISS. ff

Alle Gruppen kleiner Noten staccato oder legato ab Ibbtum

258575

SOLO

Musical score for a solo piece, featuring six staves (III, N, V, II, I, I) with various performance instructions and dynamics. The score includes markings for *ff*, *LANGSAM*, *ACCEL.*, *RIT.*, *TRILL.*, *VIBR.*, *GLISS.*, and *1 Gruppe*. The bottom staff includes the instruction *KLEINE NOTEN NICHT ANSTOSSEN*.

III *ff* *RIT.* *TRILL. RIT.* *ACCEL.*

N *ff* *ff*

V *ff* *1 Gruppe* *sempre* *LANGSAM* *ACCEL.* *VIBR. LANGSAM* *VIBR. SCHNELL* *SCHNELL* *VIBR. MASSIG* *VIBR. SCHNELL*

II *ff*

I *ff* *ACCEL.* *GLISS.* *RIT.*

I *ff* *I* *N* *I* *N* *I* *RIT.*

KLEINE NOTEN NICHT ANSTOSSEN



258575

SOLO

The musical score is organized into six staves, labeled I through N. Staff I contains a melodic line with dynamics ranging from *ff* to *mf*. Staff II features a similar melodic line with dynamics from *ff* to *f*, and includes performance markings for *RIT.* and *ACCEL.* Staff III shows a lower register line with dynamics from *f* to *ppp*, including a *GLISS.* marking. Staff N contains a line with dynamics from *ff* to *ppp*. Staff M (labeled with Roman numerals II, N, II, N, II) shows fingering and dynamics from *pp* to *ff*. Staff N (labeled with Roman numerals III, N, III, N, III) shows fingering and dynamics from *pp* to *ff*. The bottom staff includes vibrato markings: *VIBR. LANGSAM* and *VIBR. SCHNELL*.

SOLO

I *pp* *pp* *ppp* *mf* *p* *ppp* *p*

I *pp* *ff* *ppp*

I *pp* *pp* *ff* *f* *ppp* *mf* *p* *p* *ppp* *p*

I *pp* *ppp* *mf*

I *pp* *pp* *f* *mf* *ff* *f* *ppp* *mf* *p* *mf* *ppp* *pp*

I *pp* *ppp* *mf* *p* *ppp*

258575

SOLO F

The musical score is organized into several systems, each with a Roman numeral label (III, N, III, N, I, N, II, N, I, N, II, N) on the left side. The notation includes treble clefs, notes, rests, and various performance markings such as *pp*, *ACCEL.*, *RIT.*, and *SEHR GERÄUSCHHAFT*. Vertical dashed lines indicate structural divisions. The score includes complex rhythmic patterns, including groups of notes and tremolos.

Alle rhythmisierten kleinen Noten und Gruppen kleiner Noten sollen sich auf dasselbe Tempo beziehen; auch diese Gruppen gelten als 1 Element.

SOLO

The musical score is a solo piece consisting of six staves of music. The notation includes various dynamics and articulations, with vertical dashed lines indicating specific time points across all staves.

- Staff 1:** Dynamics include *pp*, *pp*, *ppp*, *mf*, *p*, *ppp*, and *p*.
- Staff 2:** Dynamics include *pp*, *ff*, and *ppp*.
- Staff 3:** Dynamics include *pp*, *pp*, *ff*, *f*, *ppp*, *mf*, *p*, *p*, *ppp*, and *p*.
- Staff 4:** Dynamics include *pp*, *ppp*, and *mf*.
- Staff 5:** Dynamics include *pp*, *pp*, *f*, *mf*, *ff*, *f*, *ppp*, *mf*, *p*, *mf*, *ppp*, and *pp*.
- Staff 6:** Dynamics include *pp*, *ppp*, *mf*, *p*, and *ppp*.