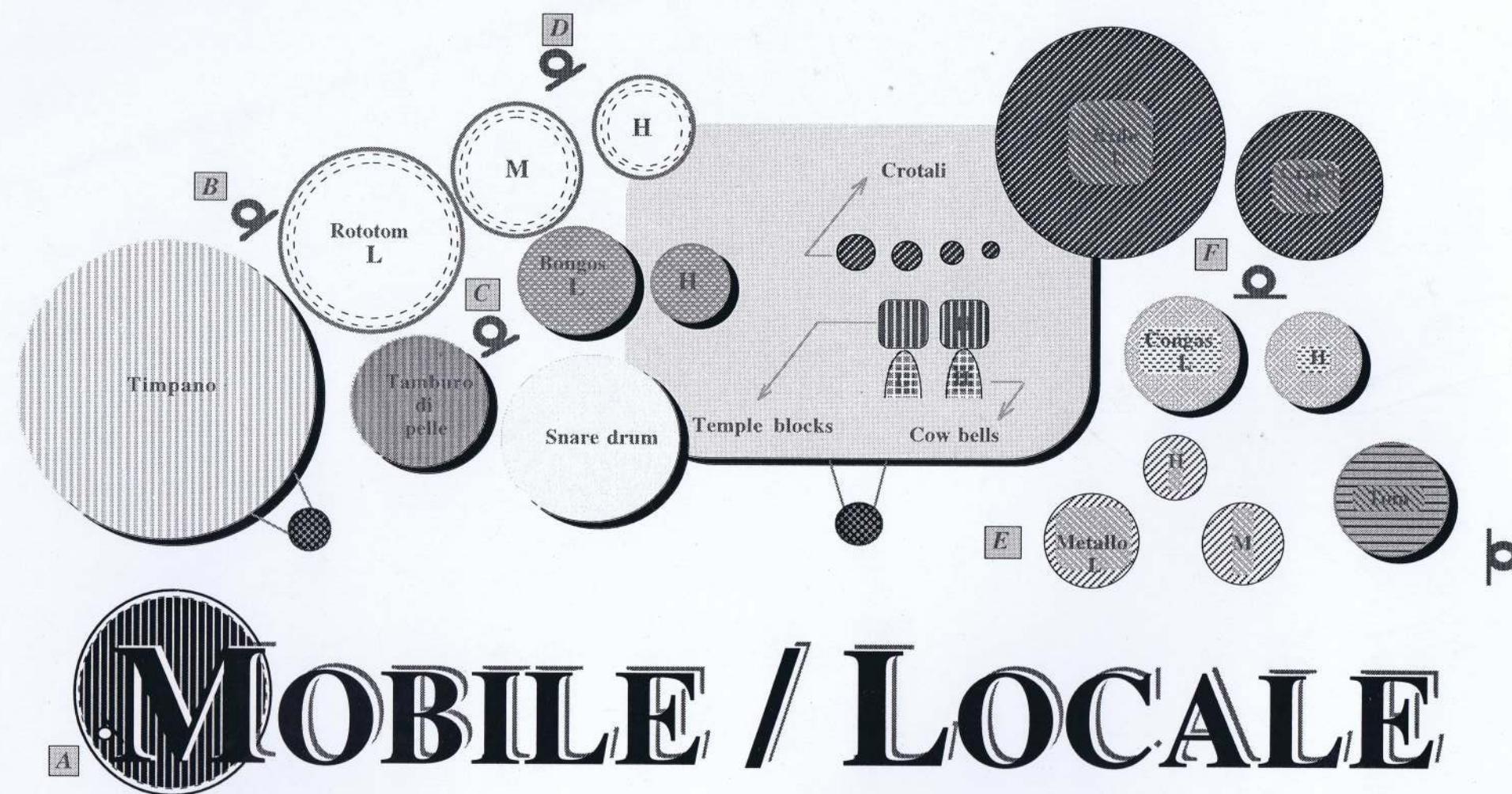


MICHELANGELO LUPONE



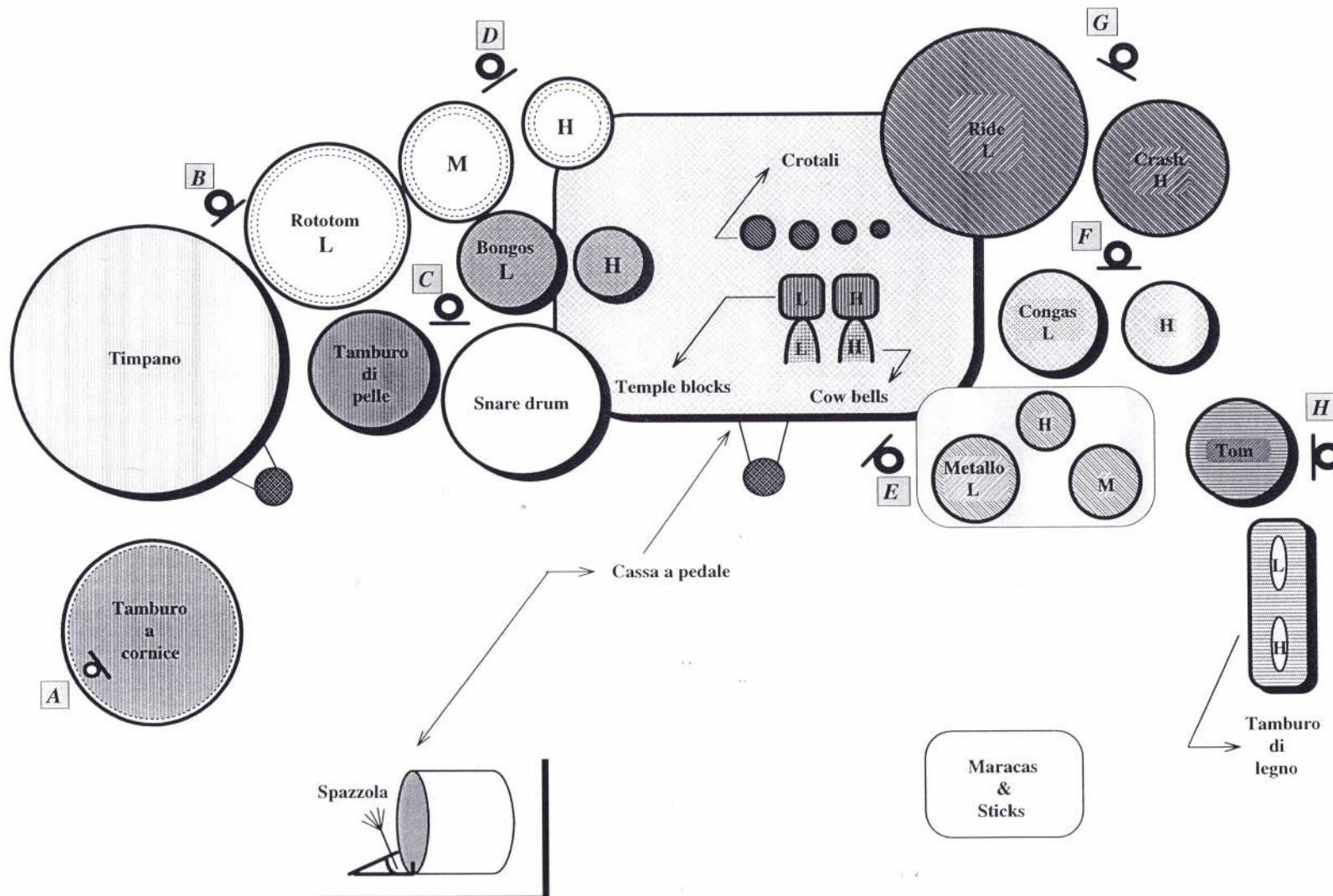
# Mobile / Locale

*per percussioni, nastro magnetico, live electronics  
for percussions, tape, live electronics*

(Friburgo 1991)

© Michelangelo Lupone

## Disposizione degli strumenti per l'esecuzione - Instruments position for performance



- La disposizione può essere modificata in base alla grandezza degli strumenti
- Il **Tamburo a cornice**, dove indicato viene suonato con le dita della mano sinistra
- Il microfono **A** deve essere del tipo clip e fermato sul telaio del tamburo
- Il **Tamburo di pelle** deve avere poca risonanza
- Lo **Snare drum** suona senza le corde
- Il **Roto tom** deve permettere piccoli glissandi

the placement can be modified in accordance to instruments dimensions

the frame drum, where shown, must be played with the left hand fingers

microphone **A** must be clip type and placed on the frame

the leather drum must have a short resonance

the snare drum must be played without strings

the roto toms must allow small glissandi

Il microfono **E** deve rilevare soprattutto il suono della spazzola

I **Tamburi di metallo** leggero possono essere oggetti di latta, alluminio o altri metalli, purché dello stesso tipo e con intonazione (vedi *Strumenti*)

La carta sul **Tom** deve essere molto sonora e fermata sulla pelle superiore

Il **Tamburo di legno** può essere sostituito con 2 oggetti di legno, purché dello stesso tipo e con intonazione (vedi *Strumenti*)

microphone **E** must especially take the brush sound

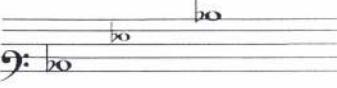
metal light tins must be tinware, aluminium or other metal objects, but all of the same material, and with pitch (see *Instruments*)

the paper on the tom must be sounding and must be stopped on the leather top

wood drum can be replaced with 2 different wood objects but of the same material and with pitch (see *Instruments*)

## Strumenti

1 Timpano con pedale - Kettle drum with pedal



1 Tamburo a cornice - Frame drum  50 - 60 cm

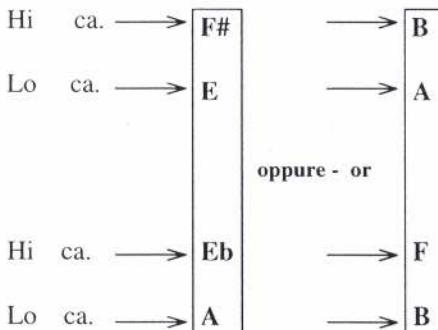
1 Cassa a pedale con spazzola metallica - Pedal drum with wire brush

1 Tamburo con pelle naturale - Drum with natural leather

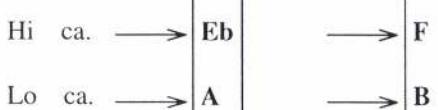
1 Cassa rullante senza corde - Snare drum without snares

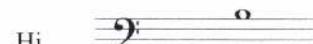
2 Maracas

2 Cowbells



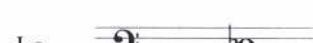
2 Temple blocks



Hi 

3 Rototom

Md 

Lo 

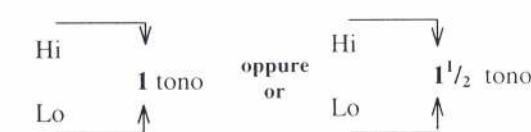
Hi  $\rightarrow$  Eb

2 Bongos

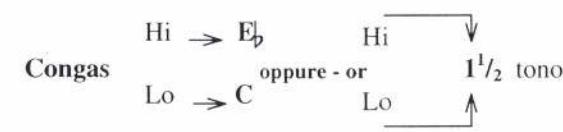
Lo  $\rightarrow$  A

## Instruments

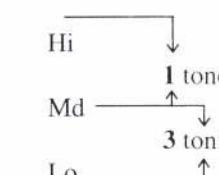
Tamburo di legno con 2 altezze  
Wood drum with 2 pitches



Congas

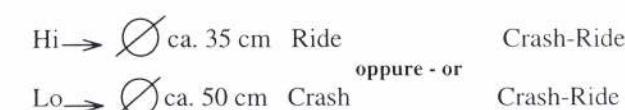


3 Tamburi di metallo leggero  
Light metal drum



Tom Tom con carta sulla pelle superiore - Tom Tom with paper on the top

2 Piatti - Cymbals



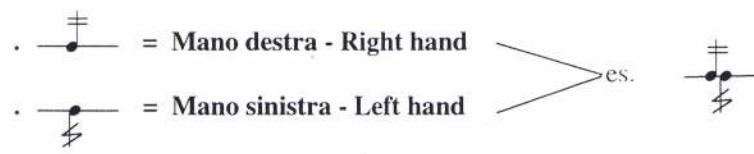
4 Crotali - Crotals  
note reali



## Simboli

## Symbols

- . B = Bordo - Edge
  - . C = Centro - Centre
  - . B → C     C → B = Dal ... Al ... - From ... To ...     *A tempo*
  - . B ↗ C = Dal ... Al ... - From ... To ...     *Liberamente*
  - . Cup = Cupola del piatto - Cymbal top
  - . RS = simile al rim shot - similar to rim shot



. MD + MS = Ordinario



= 2 azioni simultanee sullo stesso strumento  
2 actions must be performed on the same instrument



↓ = Variazione del glissando



- . MD = Mano destra - Right hand
  - . MS = Mano sinistra - Left hand



$\dagger$  =  $\text{♩}$  = 210 MM. es.  $\dagger$  ossia  $\overline{\text{dotted note}}$  7:2



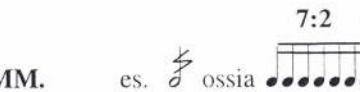
 =  540 MM. es.  ossia 

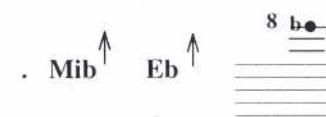
## Simboli

## Symbols

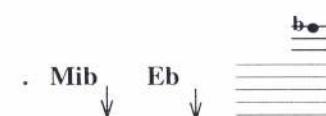
 = Strusciato con spazzola - Rustling noise with wire brush    *A tempo*

Crotali - Crotals

 =  = 210 MM.    es.  ossia  7:2



 =  = 360 MM.    es.  ossia  6



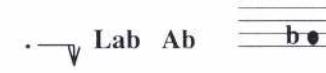
 =  = 540 MM.    es.  ossia  9

Timpano - Kettle drum

  = Strusciato circolare sul bordo con spazzola  
circular rustling noise on the edge with wire brush  
*lento*      *veloce*  
*slow*      *fast*

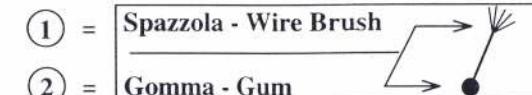


  = Strusciato con spazzola libero - Free rustling noise with wire brush



Spazzole e bacchette - Brushes and Sticks

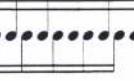
. tr~~~~~ = Trillo ordinario - normal

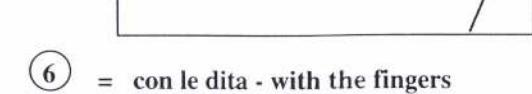
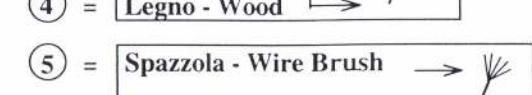
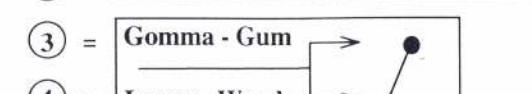


tr M

~~~~~

11

. tr M ~~~~~ = Trillo *a tempo*    es. —————— azione - action   
tr M ~~~~~



⑥ = con le dita - with the fingers

## **Strumenti audio      Audio equipment**

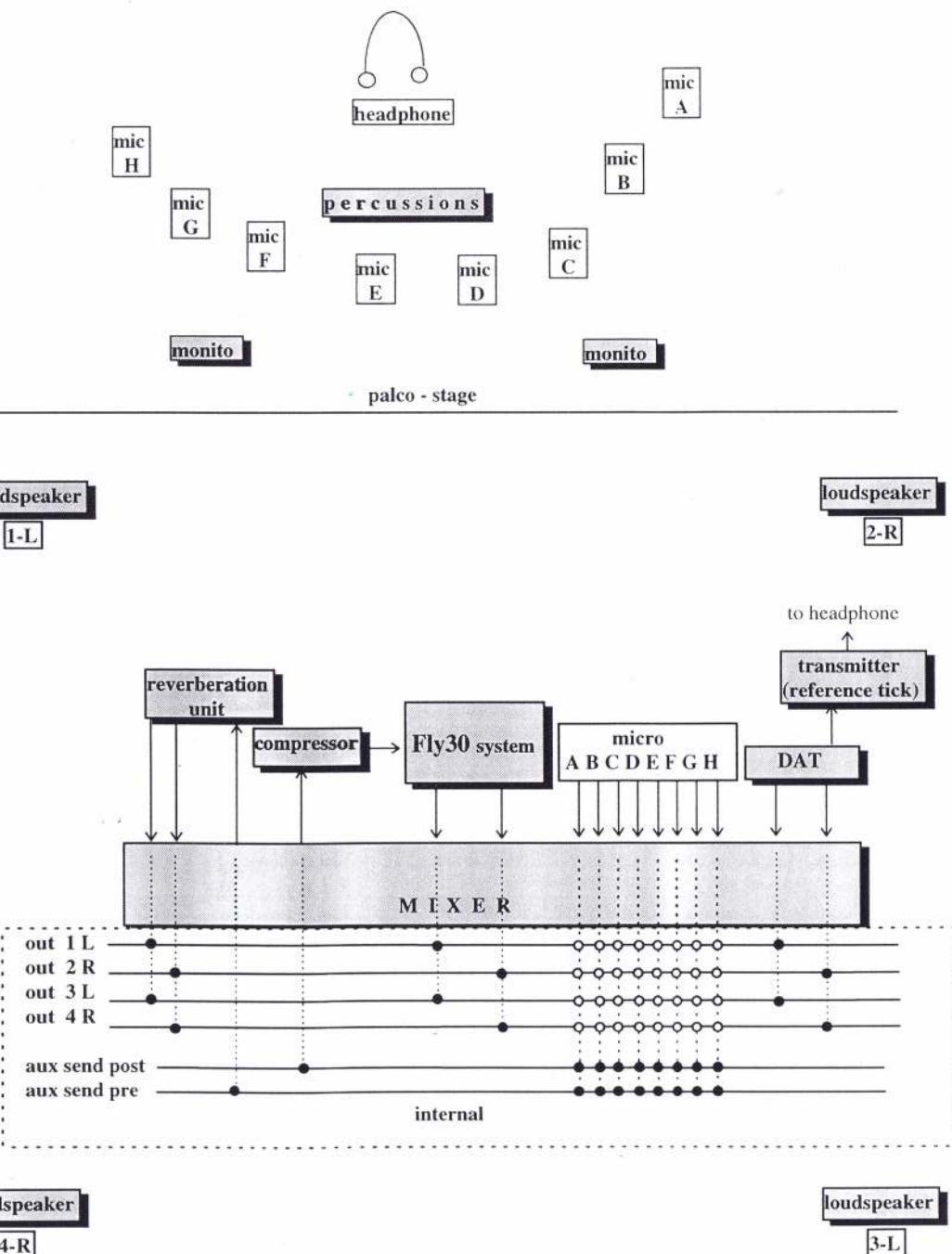
- |                                                                                                                                                                                     |                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| • 1 <b>Fly30</b> system (singola o doppia board)<br>o sistema equivalente con calcolo a 32 bit<br>in virgola mobile (vedi Note Tecniche)                                            | <b>Fly30</b> system with single or double board<br>or equivalent 32 bit floating point system<br>(see Note Tecniche)                                 |
| • 1 <b>DAT</b> due canali 44.1 KHz S.R.<br>o sistema multicanale se viene<br>registrato il tick di riferimento<br>per il percussionista                                             | <b>DAT</b> two channels 44.1 KHz S.R.<br>or multichannels system if you use<br>reference tick sound for the percussionist                            |
| • 1 <b>MIXER</b> 16/4 (2 Aux post fader)                                                                                                                                            |                                                                                                                                                      |
| • 5 <b>microfoni</b> tipo cardioide                                                                                                                                                 | cardioid microphones                                                                                                                                 |
| • 1 <b>microfono</b> in miniatura con clip<br>(Tamburo a cornice)                                                                                                                   | miniature clip microphone<br>(Frame drum)                                                                                                            |
| • sistema di diffusione audio a 4 canali<br>indipendenti                                                                                                                            | 4 independent channels audio system                                                                                                                  |
| • 2 monitor da palco                                                                                                                                                                | stage monitors                                                                                                                                       |
| <i>sistemi di ottimizzazione</i>                                                                                                                                                    |                                                                                                                                                      |
| • 1 unità di riverbero                                                                                                                                                              | <i>optimization systems</i>                                                                                                                          |
| • 1 sistema DAT multicanale (2 tracce<br>per la copia del DAT 2 canali<br>Mobile/Locale, 1 traccia sincronizzata<br>per la registrazione e riproduzione<br>del tick di riferimento) | multichannels DAT (2 tracks for<br>Mobile/Locale copy from 2 channels DAT,<br>1 synchronized track for reference tick sound<br>recording and playng) |
| • cuffia monoaurale o binaurale con<br>sistema radio di trasmissione e ricezione<br>se si usa il tick di riferimento per il<br>percussionista                                       | monoaural or binaural headphone<br>with radio transmitter-receiver if you<br>use reference tick sound for the percussionist                          |
| • 1 sistema di compressione con controlli<br>di soglia, rapporto di compressione, attacco<br>rilascio del suono                                                                     | compressor system with manual controls<br>threshold, ratio, attack, release                                                                          |

## Microfoni e uscite - Microphones and outputs

**Left = outputs 1 & 3      Right = outputs 2 & 4**

- |     |          |       |       |     |          |       |       |
|-----|----------|-------|-------|-----|----------|-------|-------|
| . . | <b>A</b> | 50% L | 50% R | . . | <b>E</b> | 75% R | 25% L |
| . . | <b>B</b> | 75% L | 25% R | . . | <b>F</b> | 75% R | 25% L |
| . . | <b>C</b> | 75% L | 25% R | . . | <b>G</b> | 50% R | 50% L |
| . . | <b>D</b> | 50% L | 50% R | . . | <b>H</b> | 75% R | 25% L |

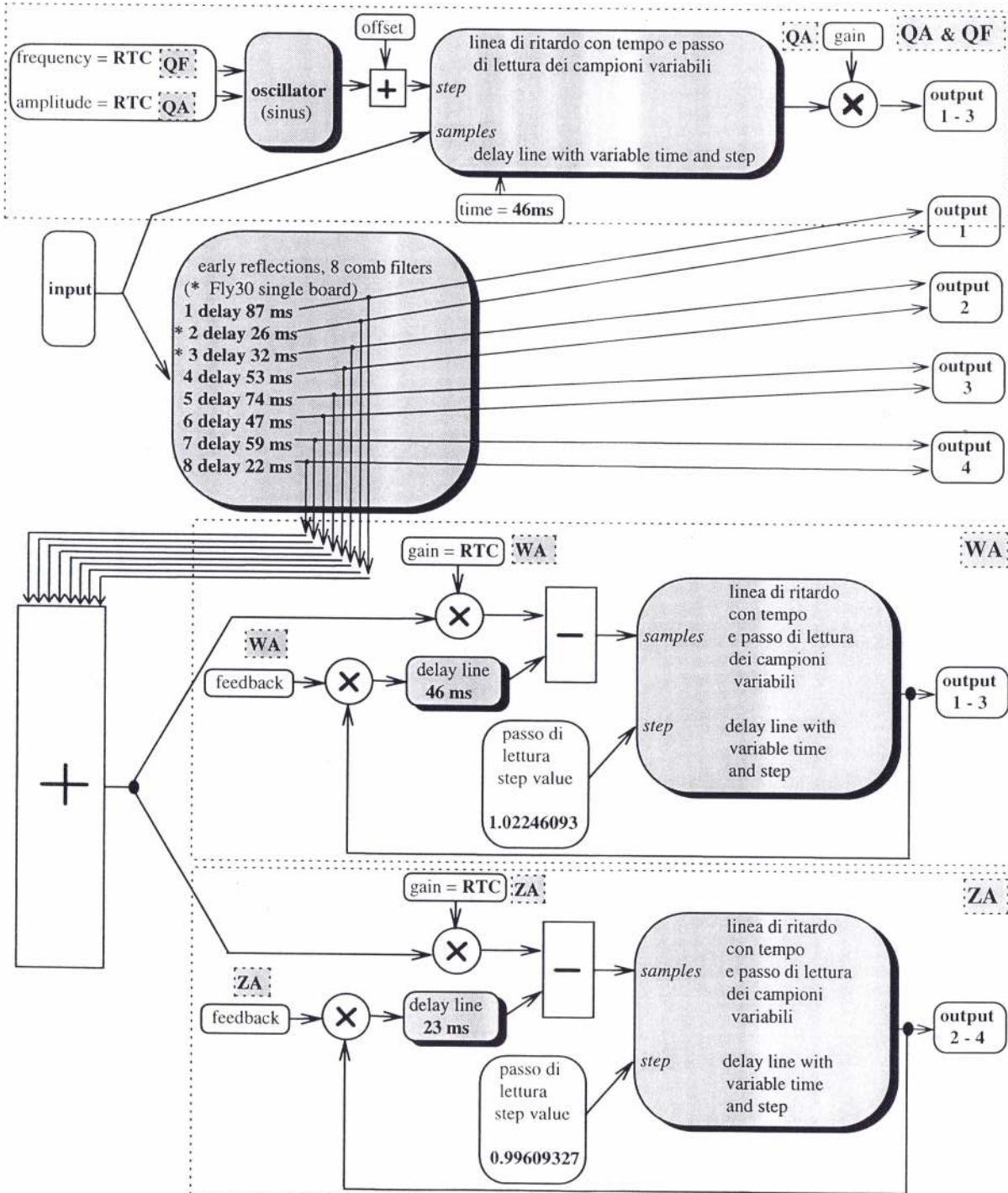
## Schema di connessione patch



# Live electronics

Schema del sistema di elaborazione del suono  
Sound elaboration diagram

vedi anche Fly30 system - see also Fly30 system



# Fly30 system

Implementazione logica su sistema singola scheda  
single board logic patch  
(doppia scheda vedi Live electronics - double board see Live electronics)

. RTC

. L

. R

. V

. QA, QF, WA, ZA

Real Time Control

valori controllati in esecuzione - variable values during the performance

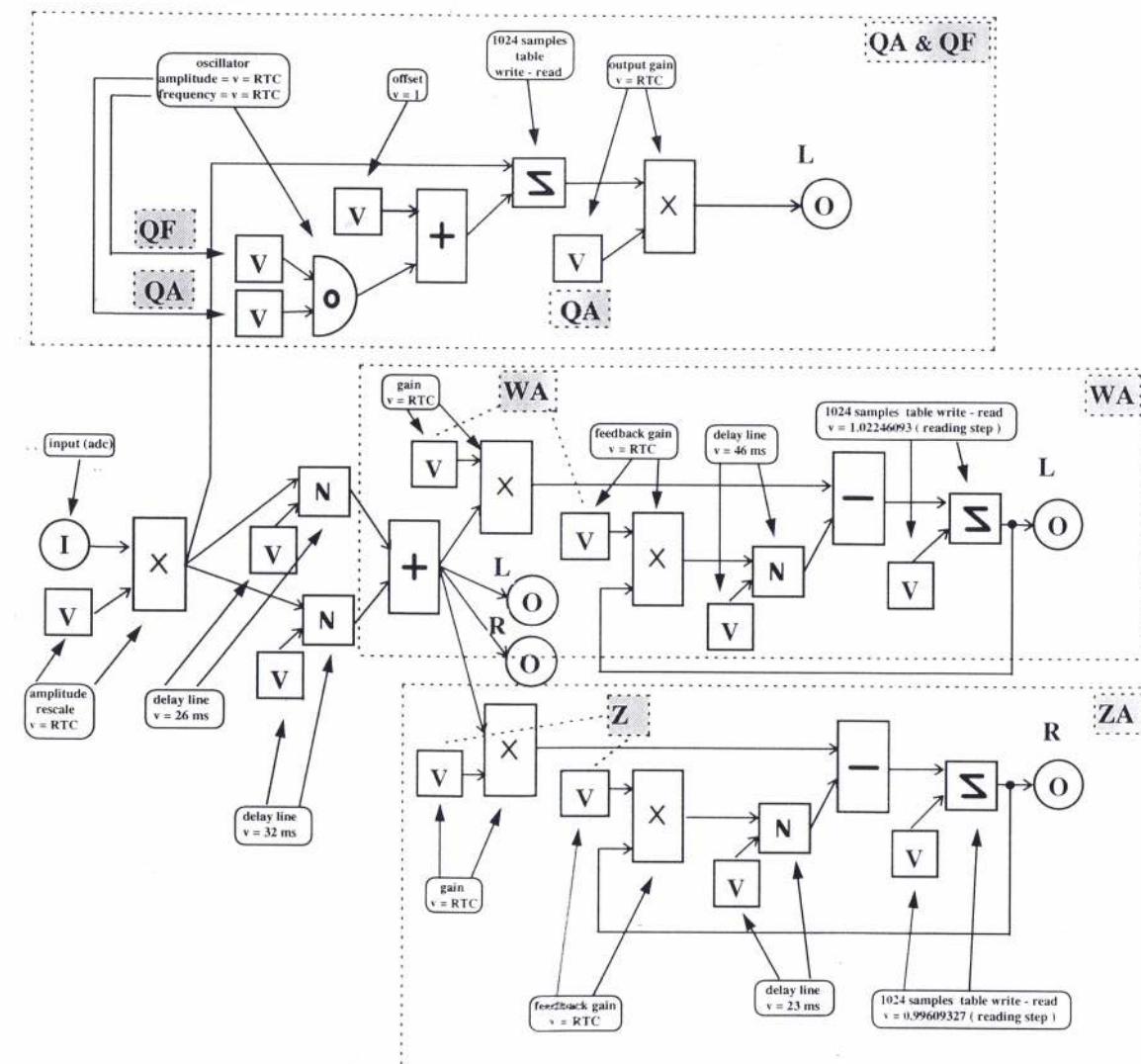
Canale di uscita 1 - channel output 1

Canale di uscita 2 - channel output 2

Valori riferiti a 22.05 KHz frequenza di campionamento

Values at 22.05 KHz sample rate

vedi Simboli di partitura - see Score symbols



## Simboli

### Live electronics

- . A = 2 controlli - 2 controls (ampiezza e guadagno - amplitude and gain)  
il rapporto deve essere scelto in base alla esecuzione  
ratio must be chosen in accordance to the performance
- . F = frequenza - frequency
- . QA & QF = patch con 3 controlli - patch with 3 controls ( 2  $\Rightarrow$  A & 1  $\Rightarrow$  F )
- . WA = patch con 2 controlli - patch with 2 controls ( 2  $\Rightarrow$  A )
- . ZA = patch con 2 controlli - patch with 2 controls ( 2  $\Rightarrow$  A )
- . 1 3/4 ½ 1/4 = variazione totale di A - total variation of A
- . QF1 = 320 Hz
- . QF2 = 22 Hz
- . QF3 = 8 Hz
- . QF4 = .1 Hz

$>$ ,  $<$ ,  $=$ , rapporto di intensità acustica - sound intensity ratio

- . ALG1 = QA + WA + ZA dove-where QA = WA e WA = ZA  
QF = indipendente - independent
- . ALG2 = QA + WA + ZA dove-where QA  $>$  ( WA + ZA )  
QF = indipendente - independent
- . ALG3 = QA  
QF = indipendente - independent
- . ALG4 = WA + ZA dove-where WA  $>$  ZA
- . ALG5 = WA + ZA dove-where WA  $<$  ZA
- . ALG6 = WA + ZA dove-where WA = ZA

## Symbols

### Nastro magnetico - Tape

I simboli sono relativi e di riferimento per la esecuzione  
Symbols are only for reference during performance

- high pitch | low pitch
- . = Durata - Duration
- . = Glissando
- . = suono breve - short sound
- . = suono simile al Jeté di spazzola - like Jeté with wire brush
- . = suono simile allo strisciato - like rustling noise
- . = combinazione Jeté/strisciato - Jeté/rustling noise combination
- . = suono costante - fixed sound
- . = suono con variazione di ampiezza - sound with amplitude variation

## Simboli - Symbols

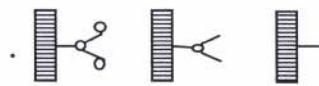
*segue nastro magnetico  
tape*



= suono con variazione di altezza - sound with pitch variation



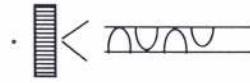
= suono con variazione di ampiezza e altezza  
sound with amplitude and pitch variation



= Clusters



= Cluster granulare - granular

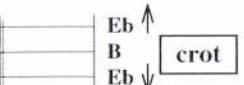


= Cluster mobile - mobile

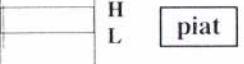
. „ „ , , = Rallentando

## Partitura - Score

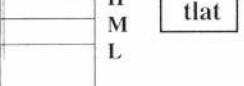
Crotali - Crotals



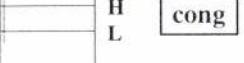
Piatti - Cymbals



Tamburi di metallo (latta) - Tin drums



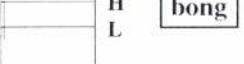
Congas



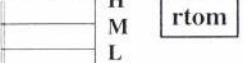
Tamburo di legno - Wood drum



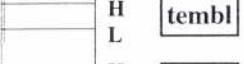
Bongos



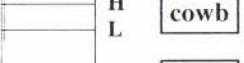
Roto tom



Temple blocks



Cow bells



Maracas



Snare drum



Tamburo con pelle naturale - Natural leather drum



Tamburo con carta - Drum with paper



Cassa a pedale - Pedal case



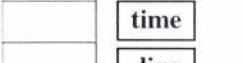
Tamburo a cornice - Frame drum



Timpano con pedale - Kettle drum pedal



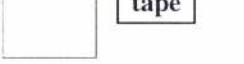
Tempo - Time



Live electronics

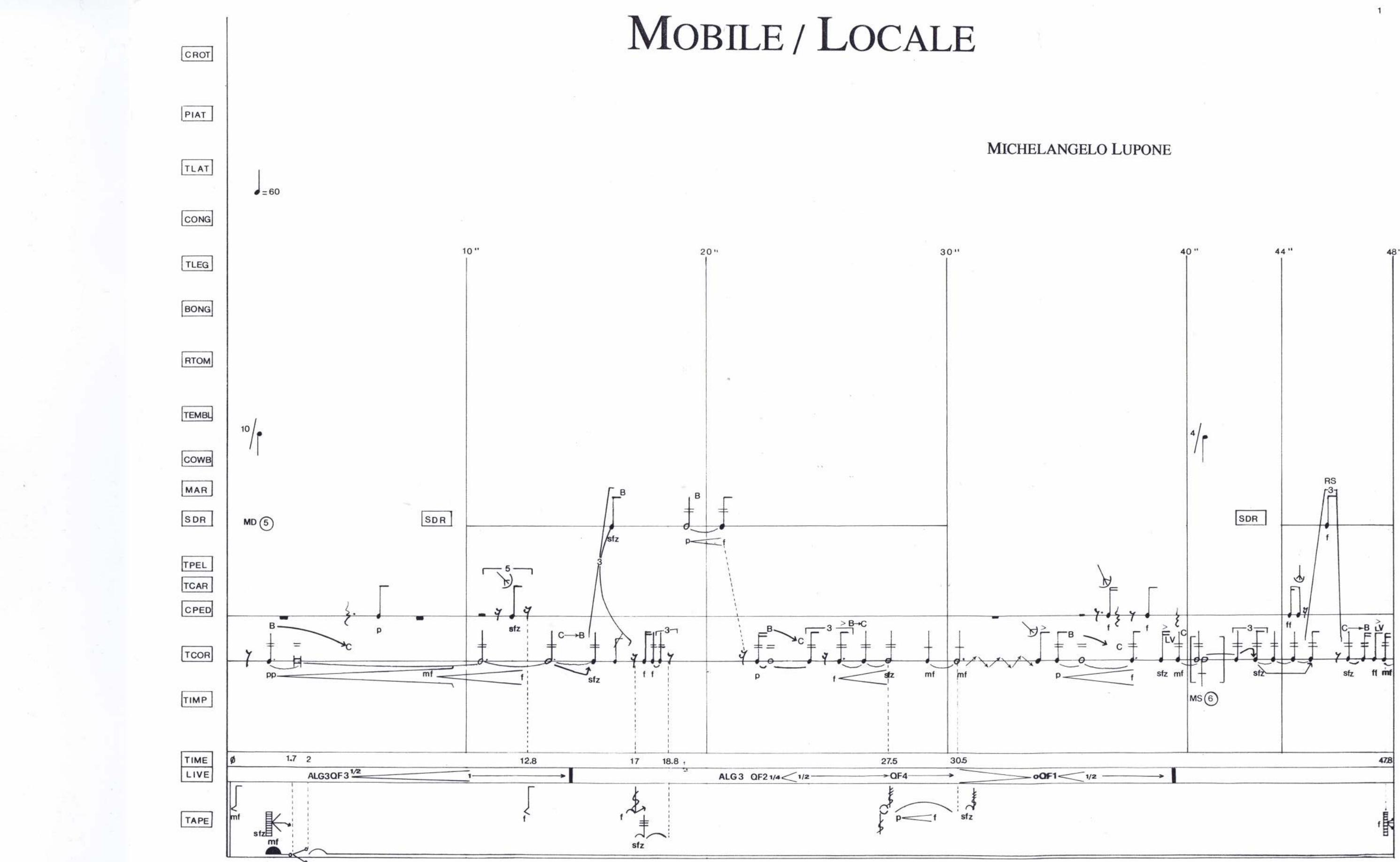


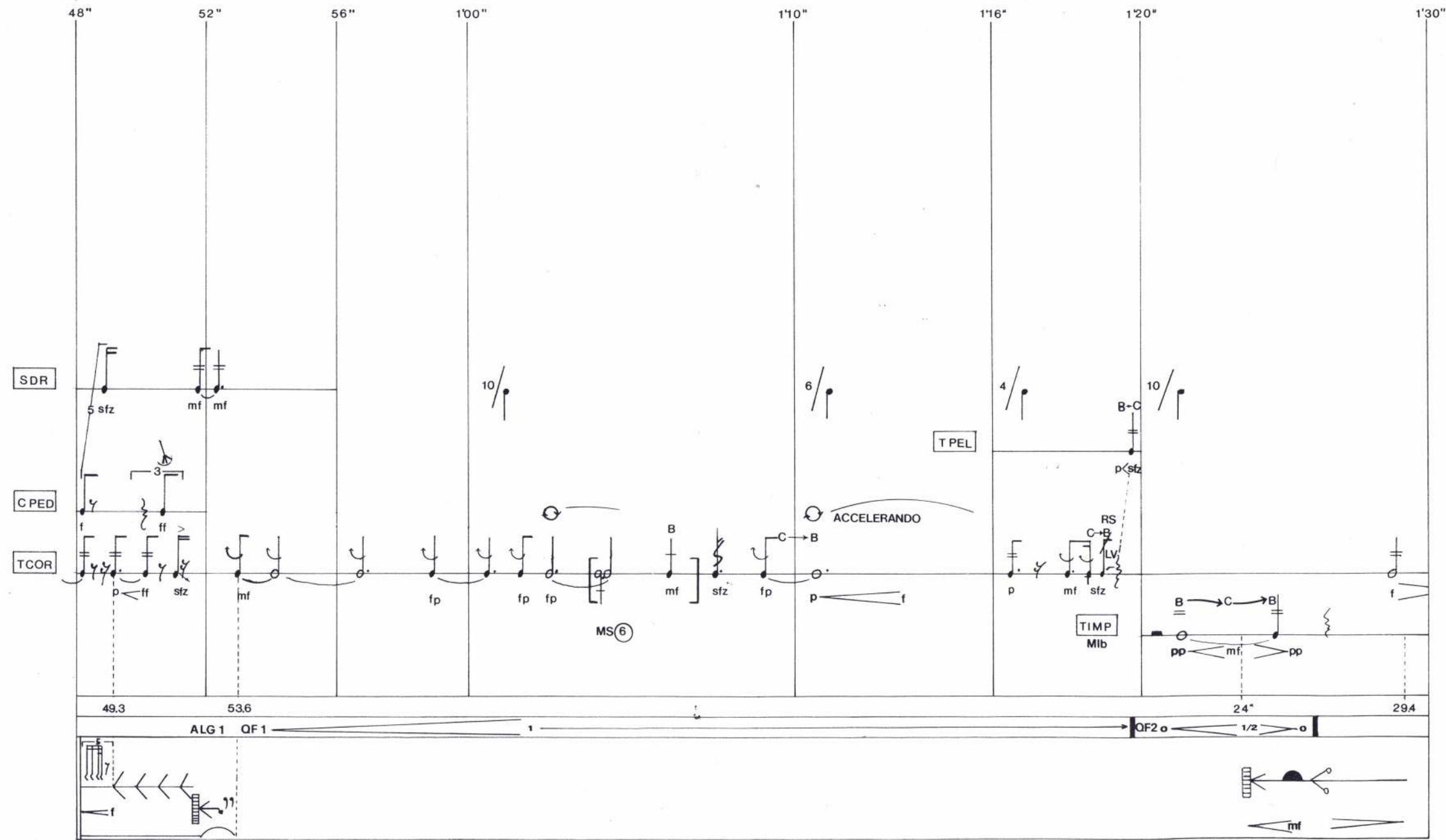
Nastro magnetico - Tape

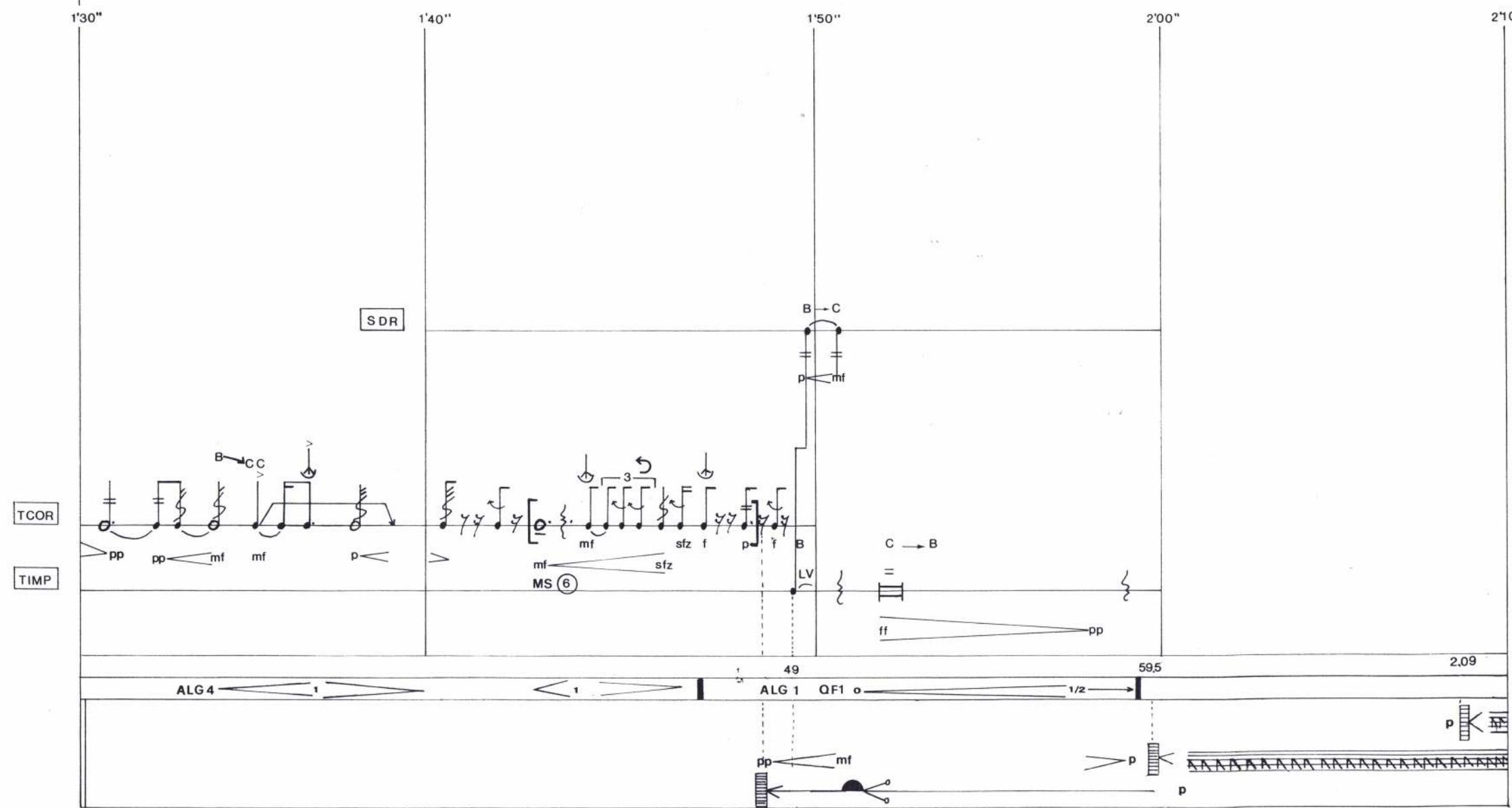


## MOBILE / LOCALE

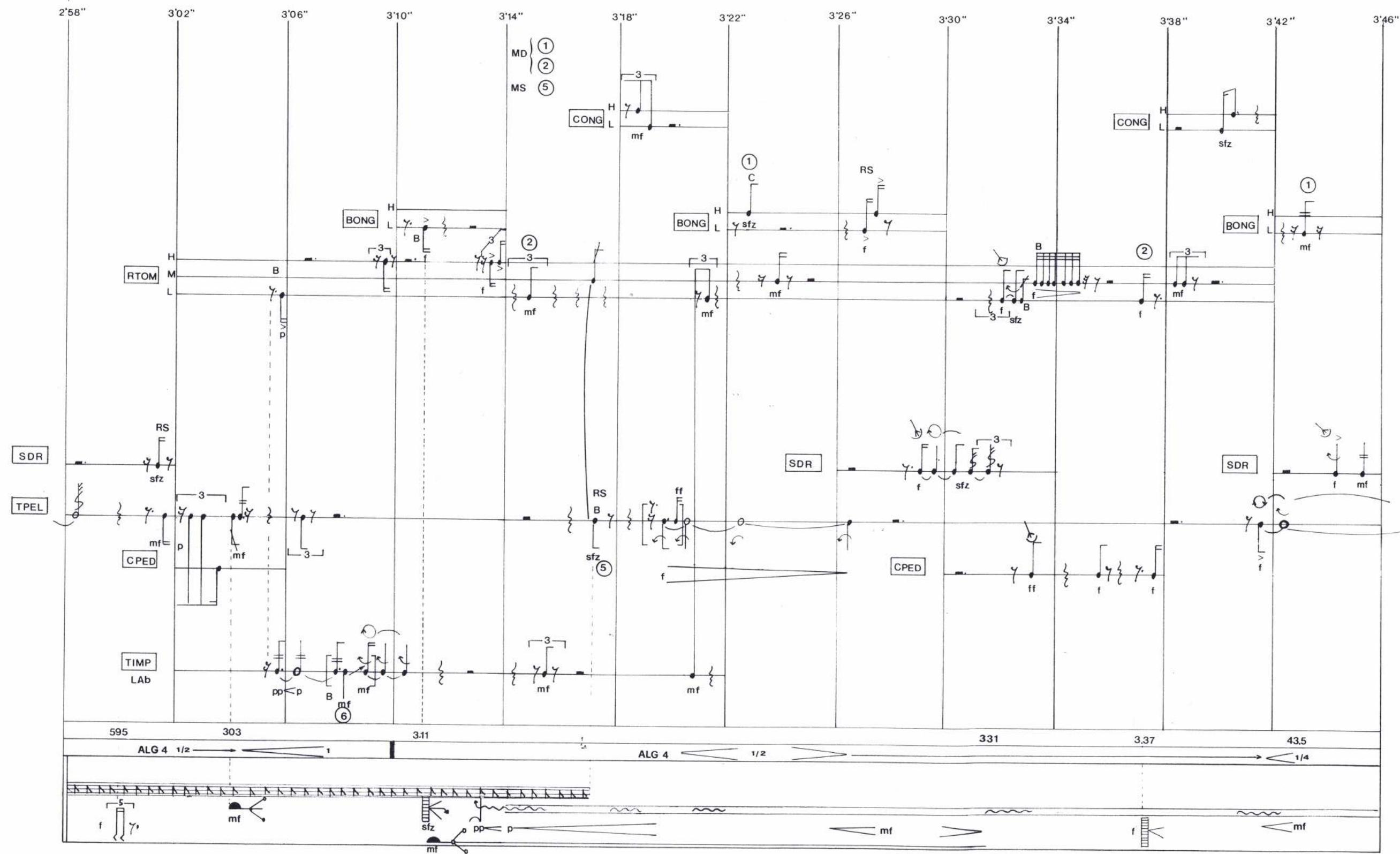
MICHELANGELO LUPONE

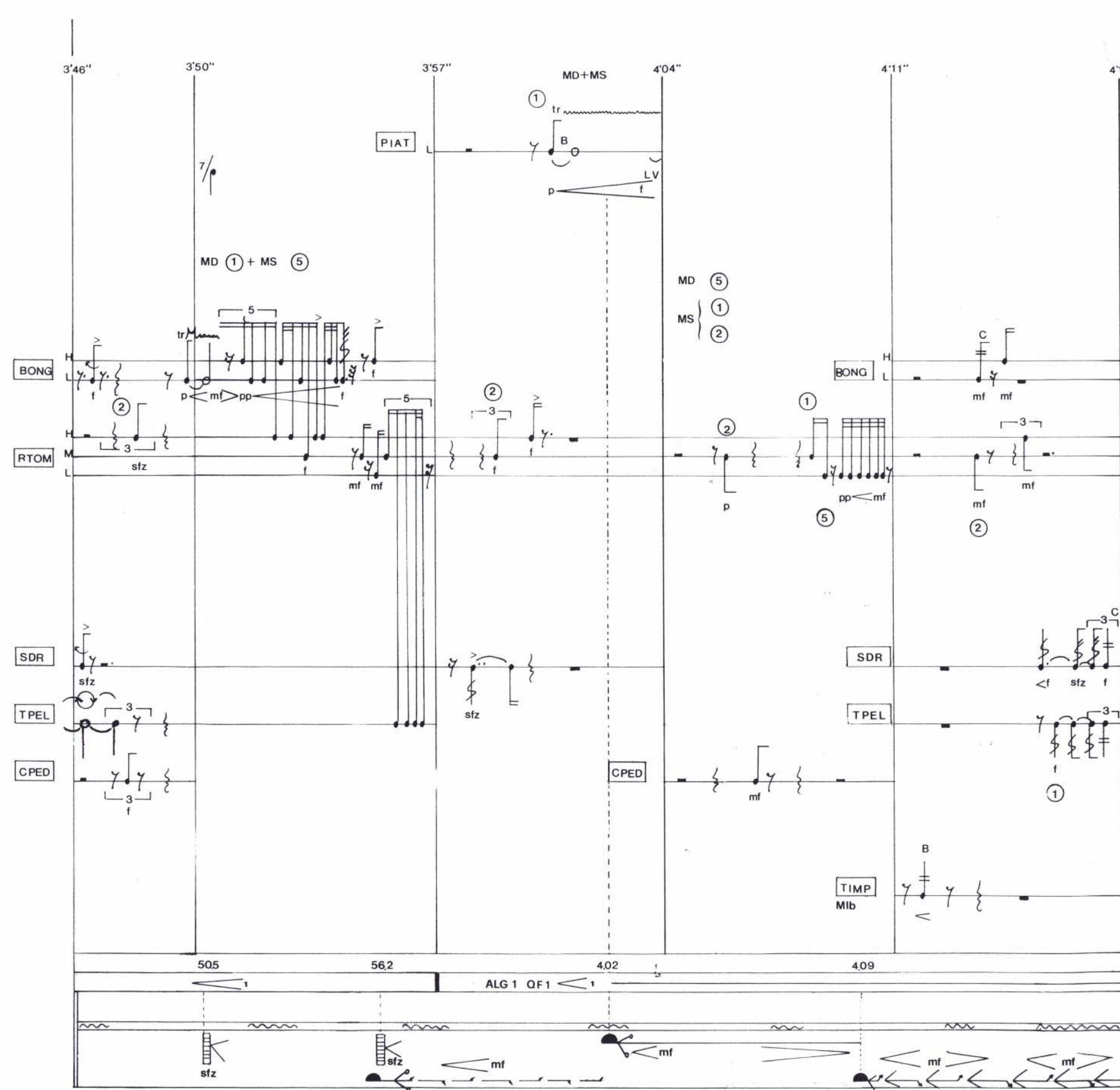












4'18"

**BONG** H  
L

**RTOM** M  
L

**SDR**

**TPEL**

**TIMP** M<sub>b</sub>

10/|

4'28"

**MD + MS**

3:2

mf f

mf

10/|

4'35"

**ALG 2 QF4**

**QF3**

**QF2**

4'38"

**ACCELERANDO**

**PROGRESSIVO**

**mf sempre**

4'48"

5/|

4'53"

7/|

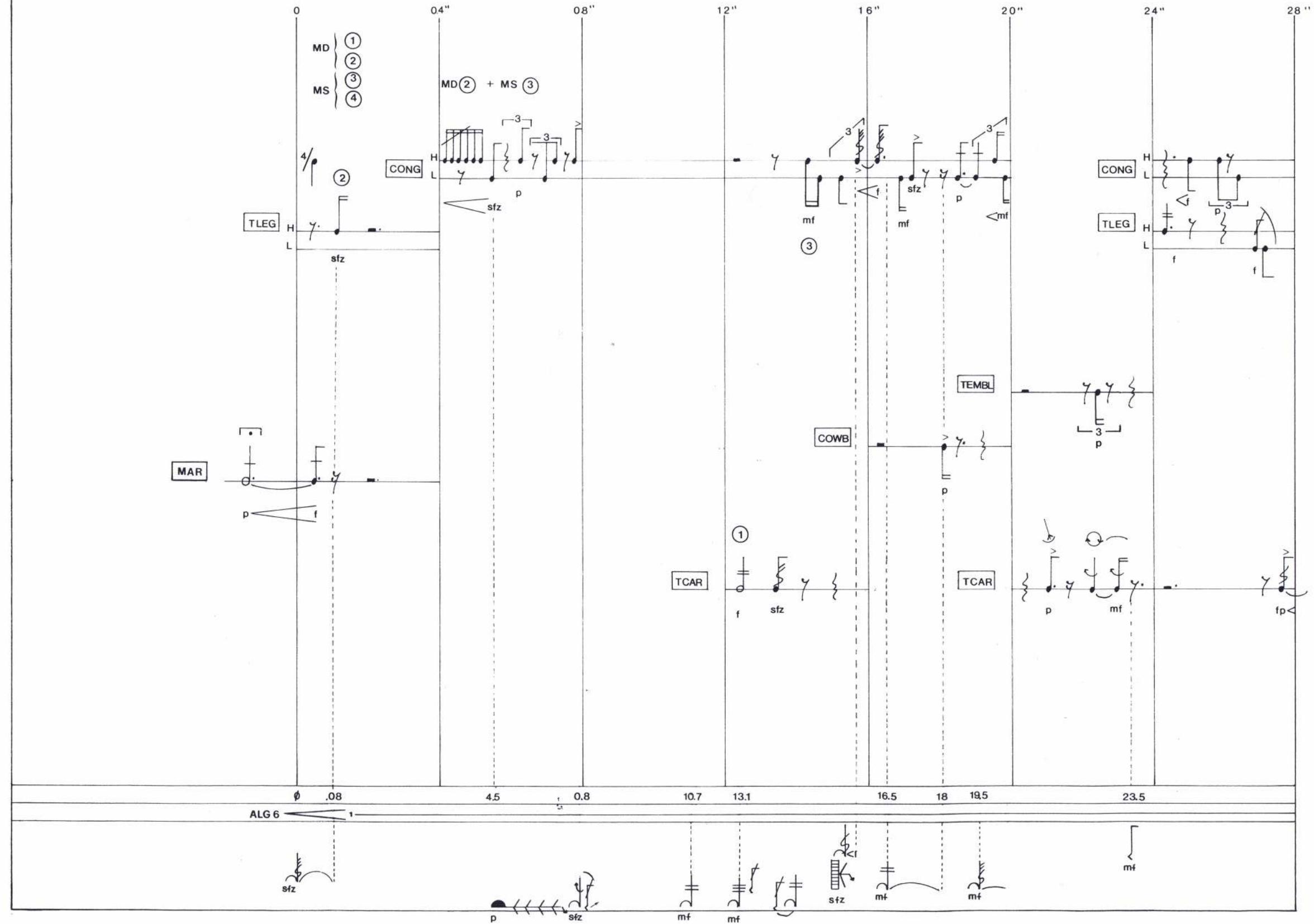
4'59"

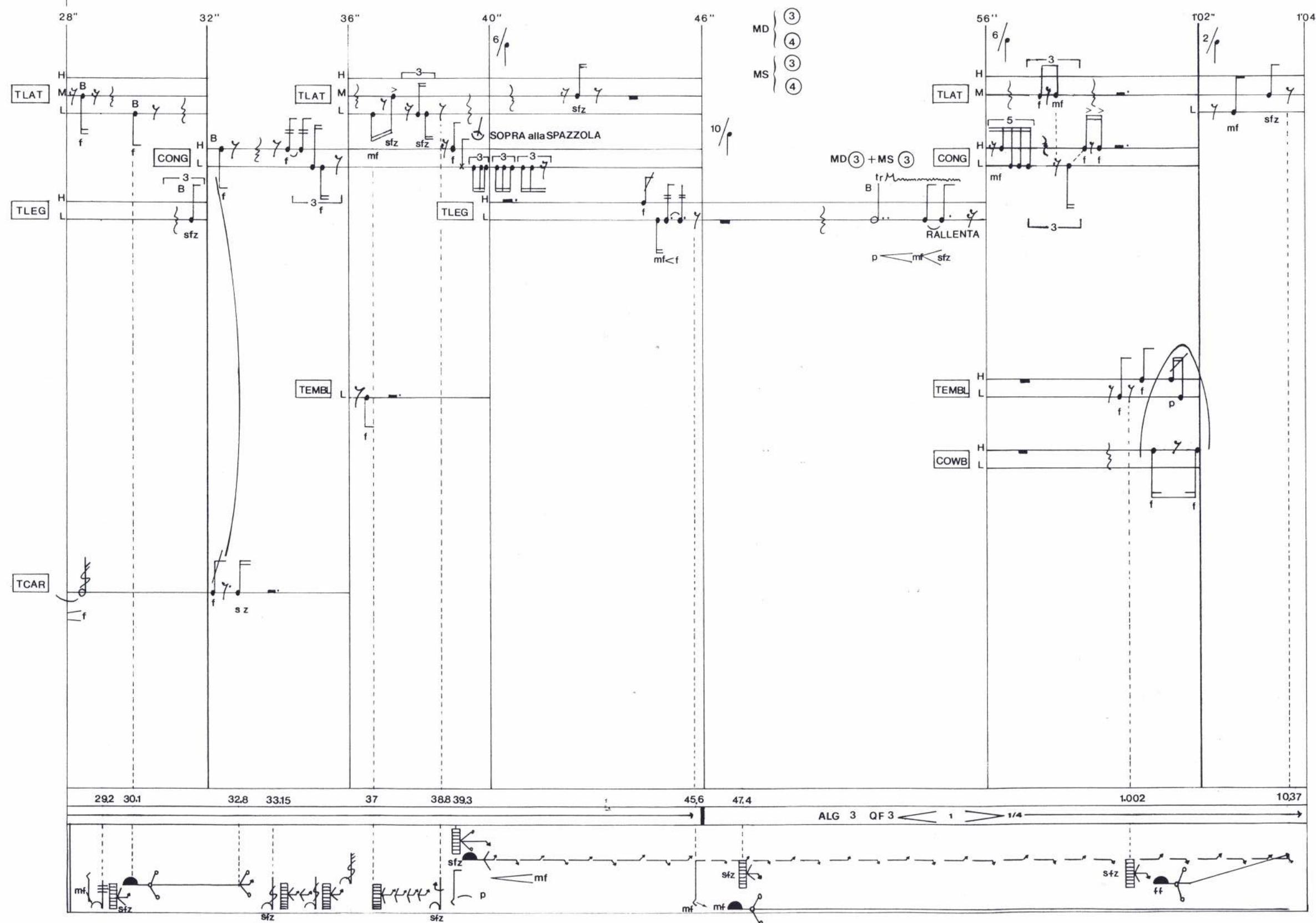
4.22

4.29

4.35

4.53





MD (4) MD (6)  
oppure  
MS (4) MS (6)

1'04" 20

1

TLAT

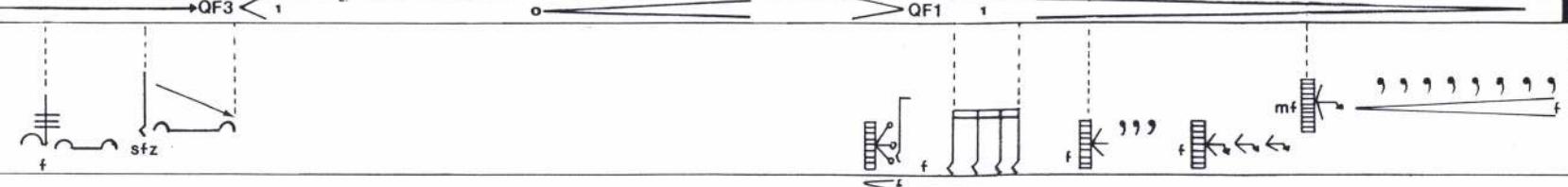
p sempr

; sfz \_\_\_\_\_]

sf

1'24"

9.5 1025 11 1 16.3 17.15 18.5 19.2 20.6 22.4



MD (3)  
MS (3)

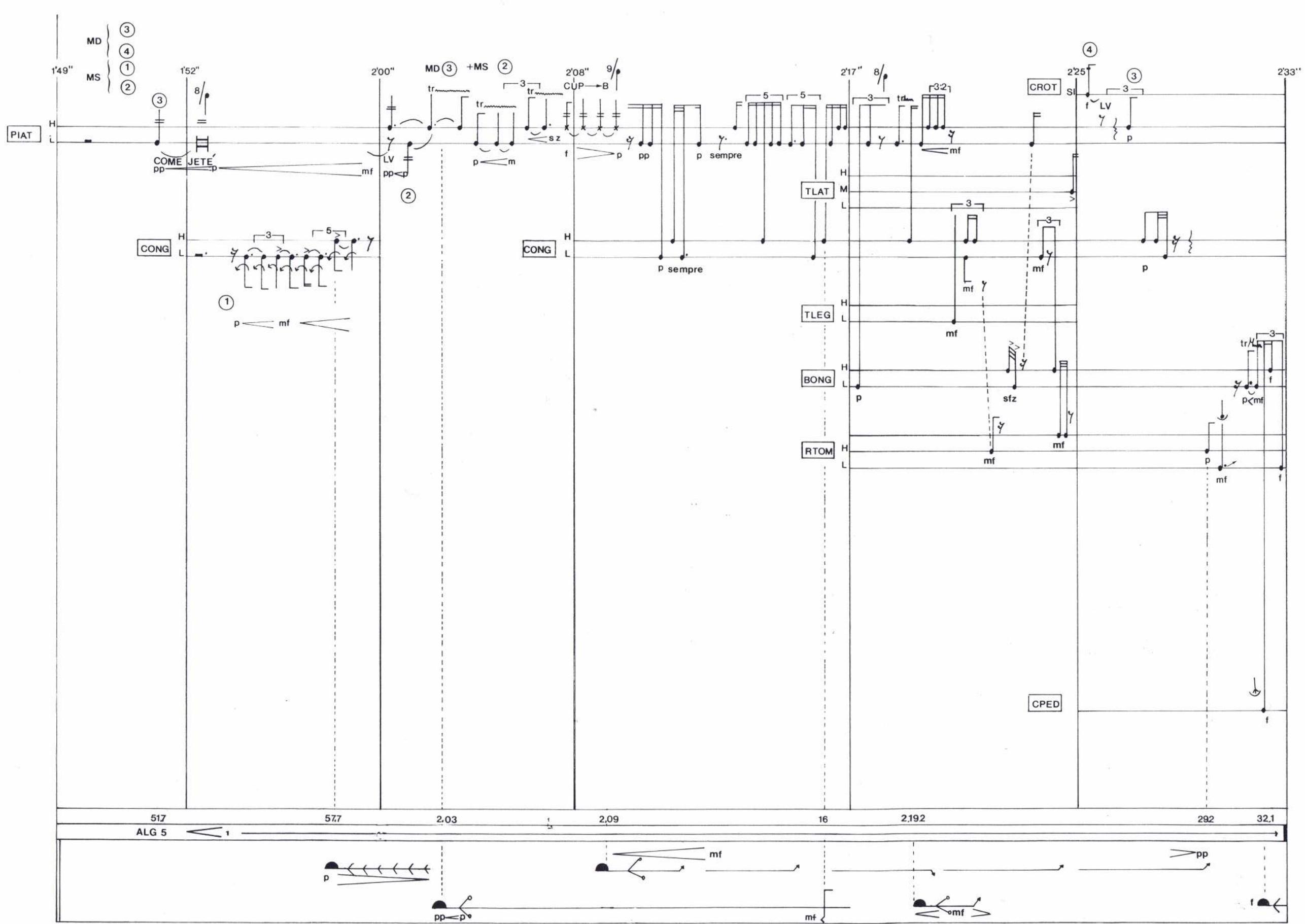
1'24" 1'49"

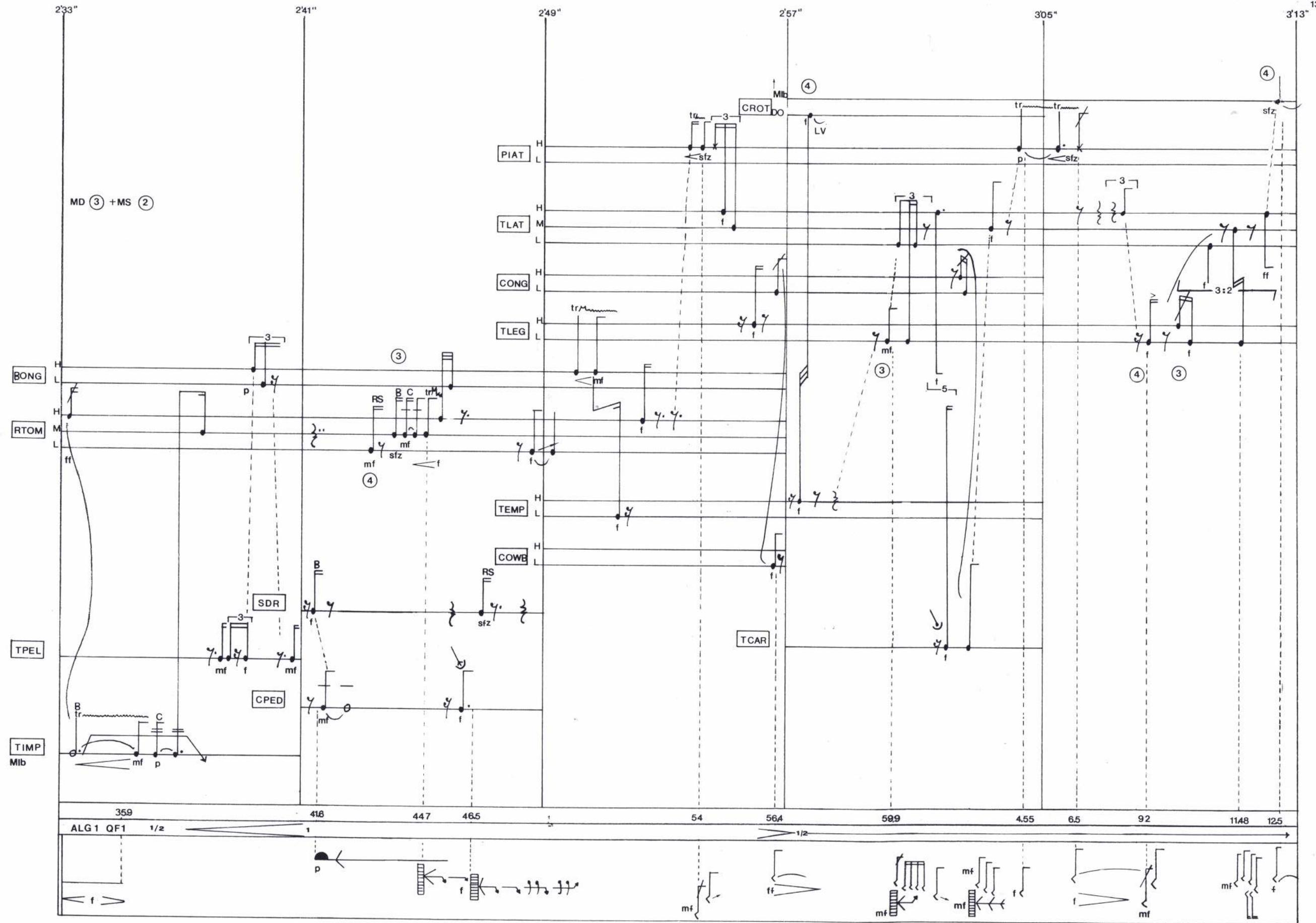
24/

TLAT H M L  
TLEG H L

p mf semper  
mf

ALG 5 1 28.2 31.2 3.2 40.9 4.3 46.9





**CROT**  
 MB  
 MT  
 f  
 13/p

$\textcircled{3}$  +  $\textcircled{2}$  oppure  $\textcircled{6}$  +  $\textcircled{6}$

**CONG**  
 pp CRESCENDO POCO

MD  $\textcircled{3}$  + MS  $\textcircled{2}$

**TEMBL**  
 f

**COWB**  
 trM  
 p < f

16,6 205 29,3  
 ALG 6 1/4 o 1 1/4

V f mf p

334"

**CONG**

12/|

3'46"

**COWB**

**MAR**

**TCAR**

3/4

0 38" 412 44.3 45 46.3 50.4 52

**Mobile/Locale**

produzione musicale elettronica - computer music production  
CRM -Centro Ricerche Musicali (1991)

Note tecniche

Nastro magnetico - Tape : Fly10 system

Live electronics: Fly30 system

Per il nastro DAT e informazioni tecniche  
for DAT tape and technical information

**CRM - Centro Ricerche Musicali**  
via Lamarmora 18 - I - Roma  
Tel. (06) 4464161 Fax (06) 4467911  
E-mail: [crm@wmail.axnet.it](mailto:crm@wmail.axnet.it)