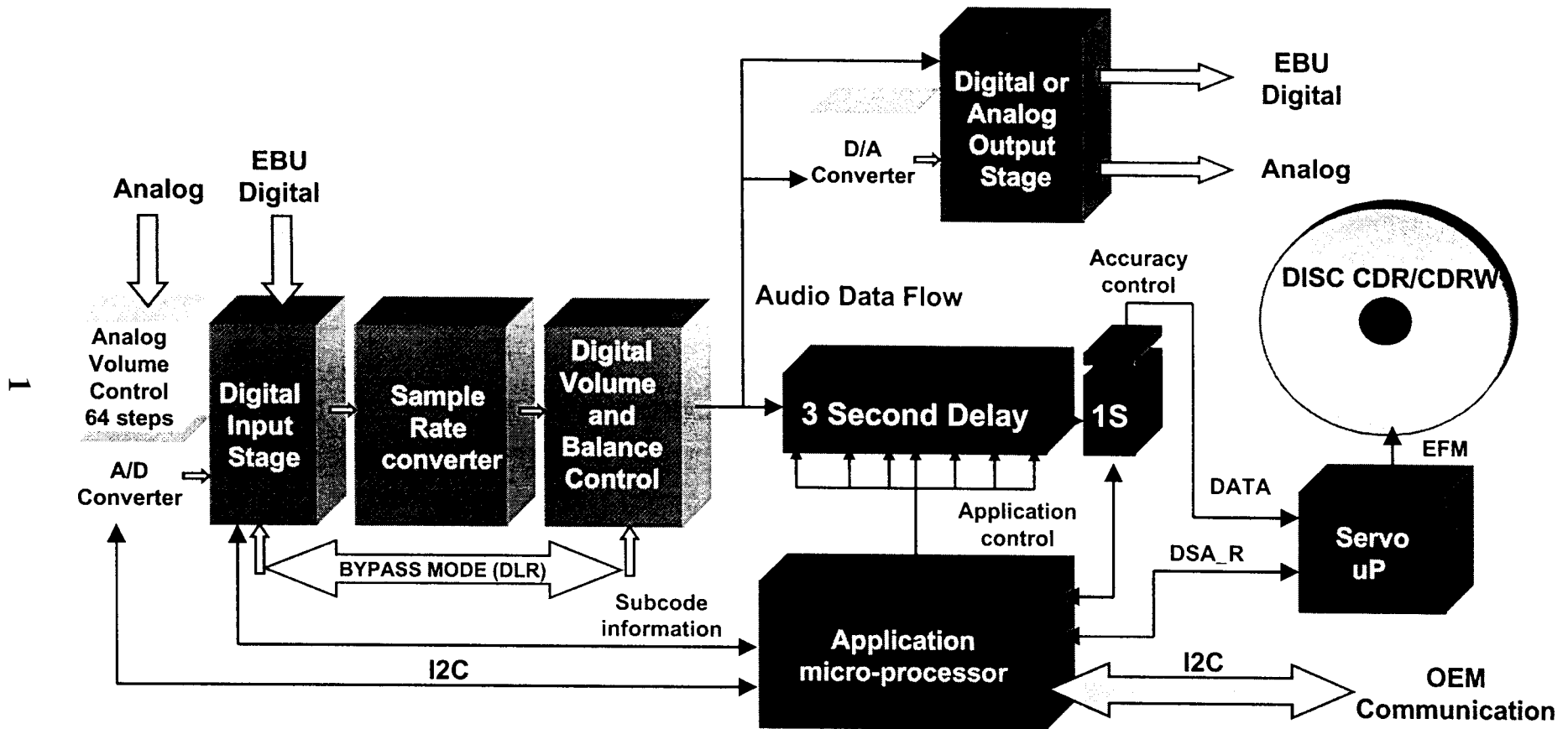
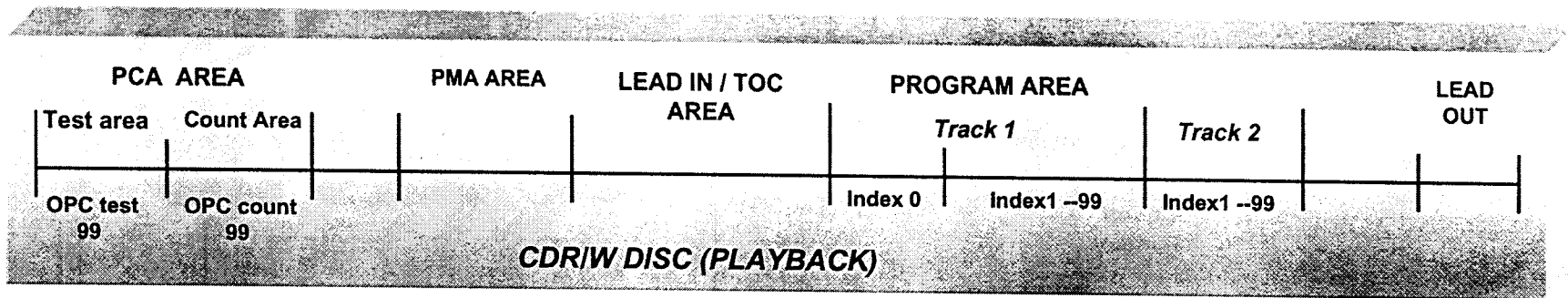


AUDIO DATA FLOW TO EFM ON THE DISC

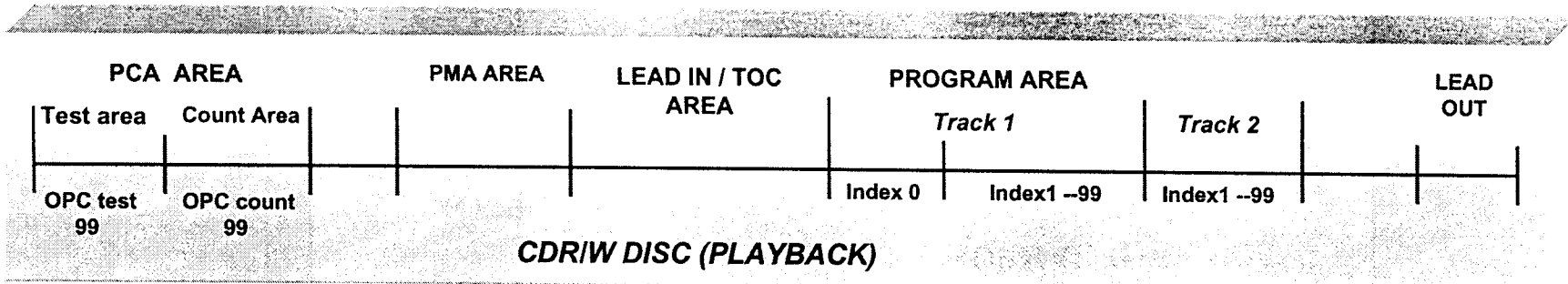


AREA'S ON THE DISC

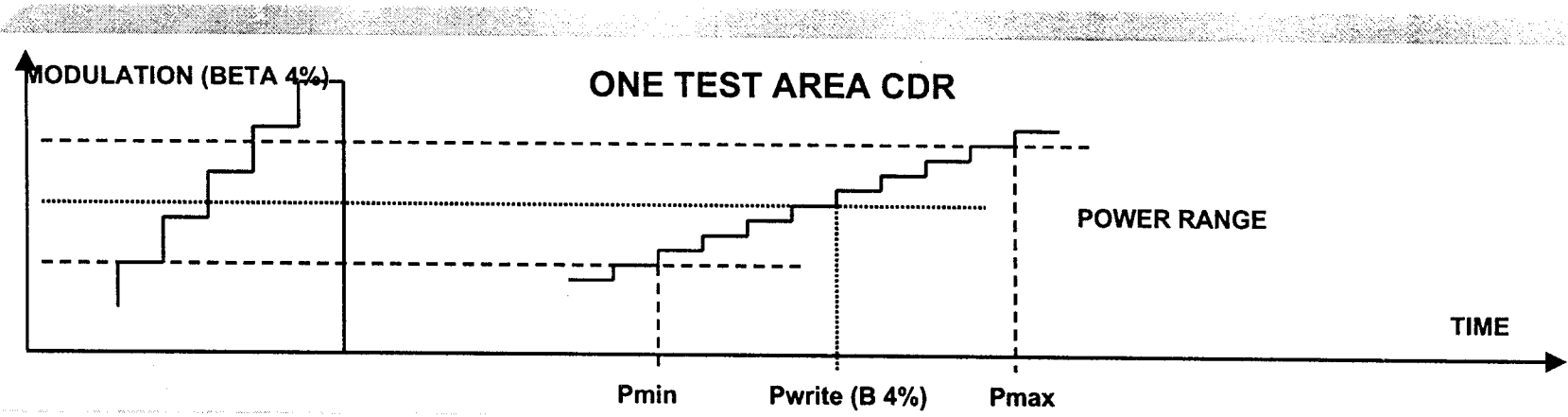
2



TEST AREA'S ON THE DISC

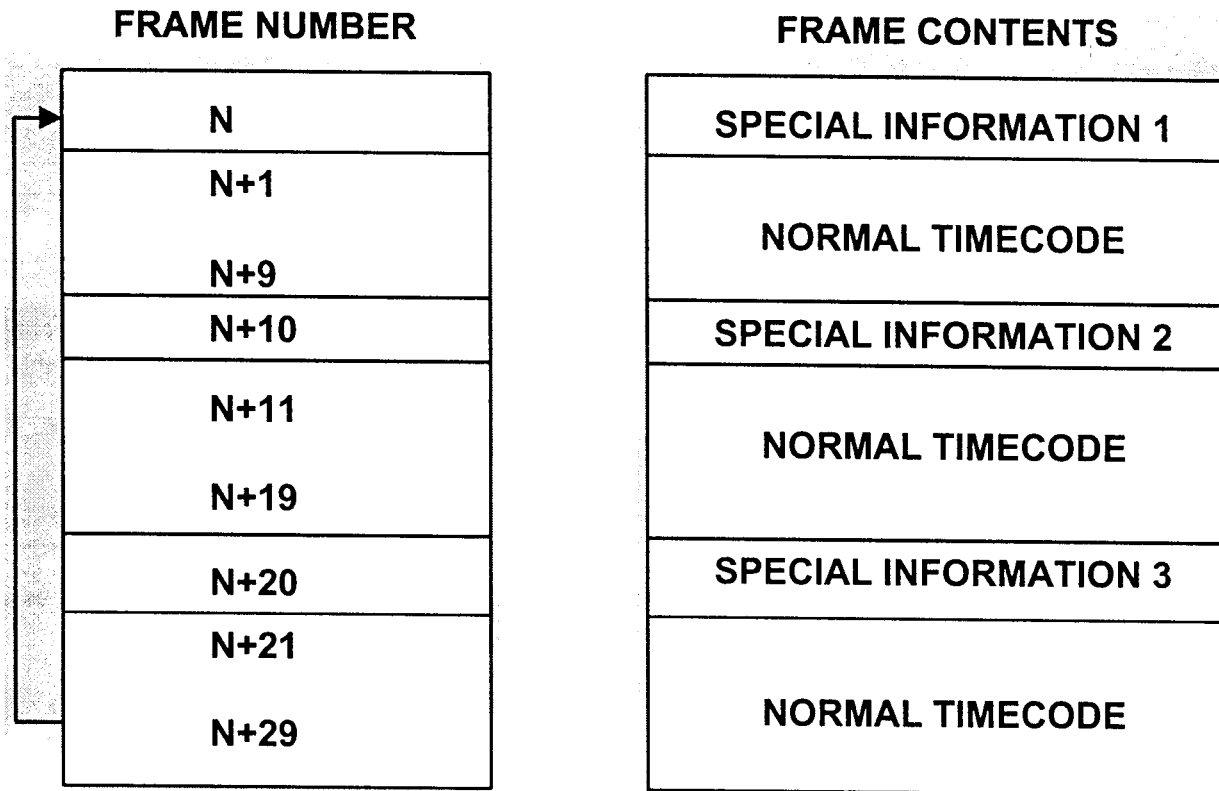


3



ATIP CODED INFORMATION

LEAD-IN AREA



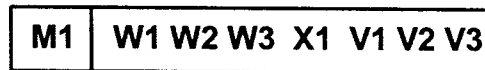
SPECIAL INFORMATION 1

■ SPECIAL INFORMATION

- *WRITE POWER*
- *APPLICATION CODE*
- *DISC TYPE IDENTIFICATION*

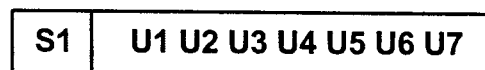
5

BIT 5



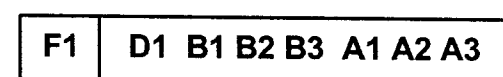
1

BIT 13



0

BIT 21



1

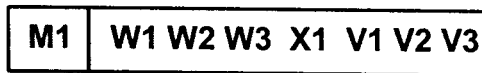
W1W3 : OPTIMUM WRITE POWER
X1 : RESERVED FOR FUTURE
V1V3 : REFERENCE SPEED
U1U7 : DISC APPLICATION CODE
D1 : DISC TYPE
B1B3 : DISC SUB-TYPE
A1A3 : PRESENCE OF ADDITIONAL
INFORMATION

SPECIAL INFORMATION 1'

■ SPECIAL INFORMATION

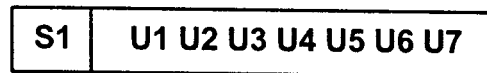
■ WRITE POWERAPPLICATION CODE

BIT 5



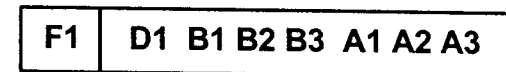
1

BIT 13



0

BIT 21



1

W1 ...W3 : OPTIMUM WRITE POWER

000 : Pind = 4.0 mW

001 : Pind = 4.4 mW

010 : Pind = 4.9 mW

011 : Pind = 5.4 mW

100 : Pind = 5.9 mW

101 : Pind = 6,5 mW

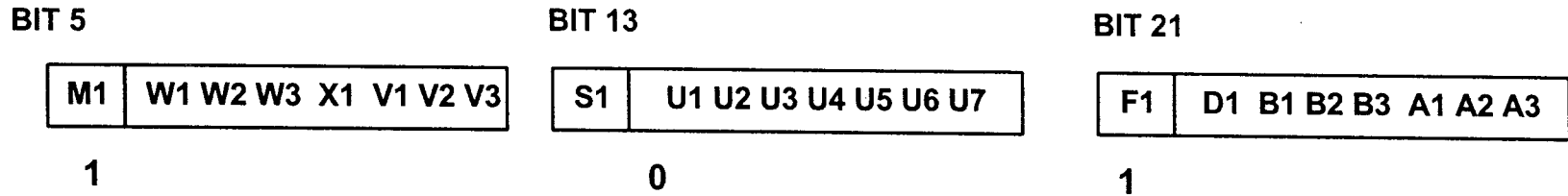
110 : Pind = 7,2 mW

111 : Pind = 8,0 mW

SPECIAL INFORMATION 1''

■ SPECIAL INFORMATION

■ DISC APPLICATION CODE



U1 = 0 DISC FOR RESTRICTED USE

U2 ... U7 = 000000 GENERAL PURPOSE DISC

U2 ... U7 = OTHERS IDENTIFICATION CODE FOR SPECIAL PURPOSE

U1 = 1 DISC FOR UNRESTRICTED USE

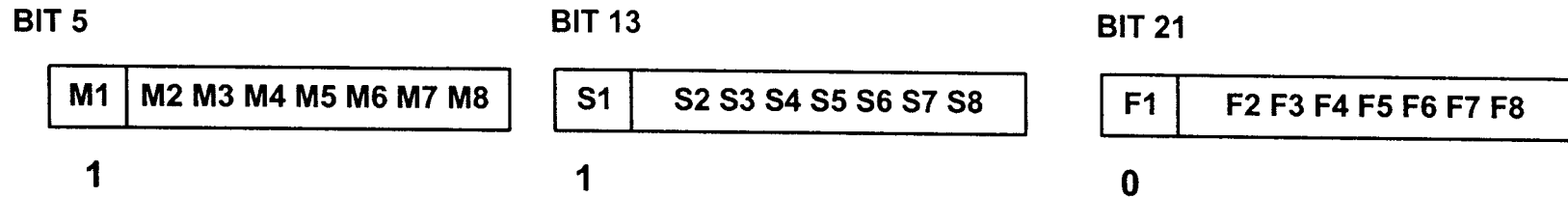
U2 ... U7 = 000000 DISC FOR UNRESTRICTED USE = AUDIO DISC

U2 ... U7 = OTHERS RESERVED

SPECIAL INFORMATION 2

■ SPECIAL INFORMATION

■ START TIME OF LEAD-IN AREA



∞

M1 IS ALWAYS FORCED TO BINARY 1

S1 IS ALWAYS FORCED TO BINARY 0

F1 IS ALWAYS FORCED TO BINARY 0

M1M8 : MINUTES 97

S1S8 : SECONDS 45

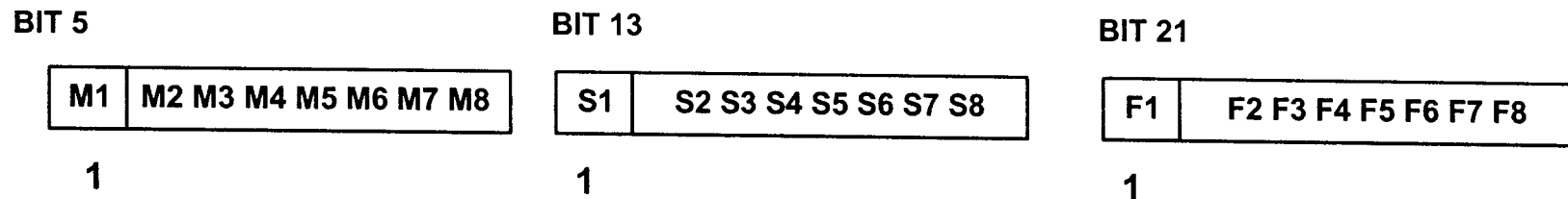
F1F8 : FRAMES 01

} START OF TOC ON A CDR DISC

SPECIAL INFORMATION 3

■ SPECIAL INFORMATION

■ START TIME OF THE LAST POSSIBLE LEAD-OUT



M1 IS ALWAYS FORCED TO **BINARY 0**

S1 IS ALWAYS FORCED TO **BINARY 0**

F1 IS ALWAYS FORCED TO **BINARY 0**

M1M8 : MINUTES 70

S1S8 : SECONDS 15

F1F8 : FRAMES 01

} START OF LAST POSSIBLE LO

Subcode in PMA AREA

CONTR	ADR	TNO	POINT	MIN	SEC	FRAME	ZERO	PMIN	PSEC	PFRAME
-------	-----	-----	-------	-----	-----	-------	------	------	------	--------

CONTR : CHANNEL INFO 00X0 = 2 AUDIO CHANNELS WITHOUT PRE-EMPHASIS } ONLY FOR AUDIO
 00X1 = 2 AUDIO CHANNELS WITH PRE-EMPHASIS }

ADR : KIND OF INFORMATION = 1 TOC ITEMS (Start and stop time) 3, 4, 5, 6 ARE USED FOR SKIP AND UNSKIP INFO
 = 2 disc identification used for OPC value

TNO : 00

POINT: 1 .. 99 TRACK NUMBER

MIN, SEC , FRAME : IF ADR = 1 STOP TIME OF POINT N TRACK

ZERO: COUNTER WHICH LABELS THE SUCCESSIVE FRAMES IN A UNITY OF 10 FRAMES

PMIN, PSEC , PFRAME : IF ADR = 1 START TIME OF POINT N TRACK

Subcode in LEAD-IN AREA

CONTR	ADR	TNO	POINT	MIN	SEC	FRAME	ZERO	PMIN	PSEC	PFRAME
-------	-----	-----	-------	-----	-----	-------	------	------	------	--------

CONTR : CHANNEL INFO 00X0 = 2 AUDIO CHANNELS WITHOUT PRE-EMPHASIS }
 00X1 = 2 AUDIO CHANNELS WITH PRE-EMPHASIS } ONLY FOR AUDIO

ADR : KIND OF INFORMATION = 1 TOC ITEMS (Start and stop time)
 = 5 MULTISESSION DISC

TNO : 00

POINT: 1 .. 99 TRACK NUMBER

POINT: A0 PMIN VALUE OF FIRST RECORDED TRACK / FRAME = 00 / PSEC = SPECIFIES THE SESSION FORMAT (00 AUDIO)

POINT: A1 PMIN VALUE OF THE LASTRECORDED TRACK / FRAME = 00 / PSEC = 00

POINT: A2 PMIN PSEC PFRAME START POSITION OF THE LEAD-OUT

POINT: B0 MIN SEC FRAME START POSITION OF THE NEXT POSSIBLE LEAD-IN
 (POINT: B0 B1,B2,B3,B4 IS ALSO USED FOR SKIP AND UNSKIP INFO)

POINT: C0 MIN SEC FRAME COPY OF THE ATIP WITH MSB CODED 101 TOGETHER WITH B0

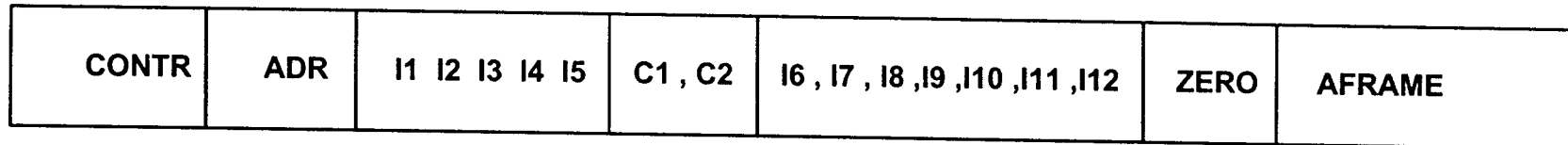
POINT: C1 MIN SEC FRAME COPY OF THE ATIP WITH MSB CODED 101 TOGETHER WITH B0

MIN, SEC , FRAME : IF ADR = 1 MODE 1

ZERO: 00

PMIN, PSEC , PFRAME : IF ADR = 1 START TIME OF POINT N TRACK

Subcode in PROGRAM AREA



CONTR : CHANNEL INFO 00X0 = 2 AUDIO CHANNELS WITHOUT PRE-EMPHASIS }
 00X1 = 2 AUDIO CHANNELS WITH PRE-EMPHASIS } **ONLY FOR AUDIO**

BIT 1 SCMS

ADR : KIND OF INFORMATION = 3 TOC ITEMS (Start and stop time)

C1,C2 : BIT 30,31 = 00 : I1 .. I12 = ISRC

= 11 : I1 .. I12 = RID

= 01 : I1 .. I12 = TBD

ZERO: 4 BITS = 0000

AFRAME : FRAME VALUE OF THE ABSOLUTE TIME, IN LINE WITH ATIP OF UNRECORDED DISC

THE RID CODE IS COMPOSED OF 3 GROUPS IN THE FOLLOWING WAY

GROUP 1 : MANUFACTURER CODE I1 .. I3 PHI

GROUP 2 : REPRESENT THE TYPE CODE I4 .. I6 DR70

GROUP 3 : RECORDER UNIQUE NUMBER I8 .. I12 76876