tva og Sporten's udflytning til TV-byen



CHRISTIAN ROVSING A/S · SIEMENS A/S
København · Danmark

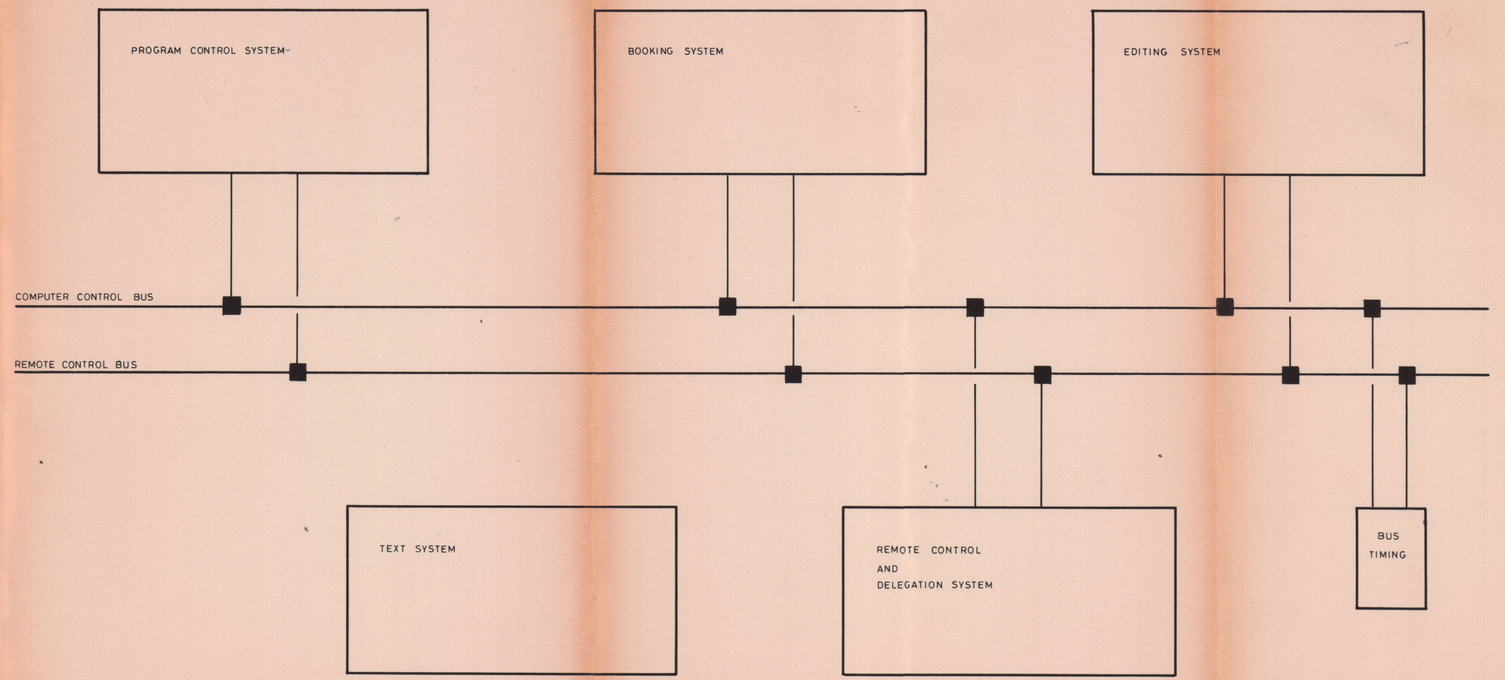
News Complex Danmarks Radio
Project DORA

Volume 2 A

INDEX

DORA System Block Diagram	T 10-153
DORA Delegation and Remote Control System	T 10-151
DORA Editing System	T 10-155
DORA Program Control System	T 10-156
DORA Booking System	T 10-154
DORA CR 80 Computer System	T 10-152
DORA Text Generator System	T 20-131
DORA Physical Layout	T 20-130
Block Diagram	0 957 442 100 AP 0
City Studio	0 957 442 200 AP 1
Mixer City Studio	2 201 AP 0
Layout Mixer City Studio	2 201 AZ 0
Studio 5	0 957 442 300 AP 1
Layout Remote Controls	2 300 AZ 0
Mixer Studio 5	2 301 AP 0
Layout Mixer Studios	2 301 AZ 0
Mini Studio (Studio M)	0 957 442 400 AP 1
Layout Remote Controls	2 400 AZ 2
Mixer Studio M	2 401 AP 0
Layout Mixer Studio M	2 401 AZ 1
Editing Rooms CNR 1/2	0 957 442 500 AP 1
Layout Remote Controls	2 500 AZ 1
Mixer CNR 1/2	2 501 AP 0
Layout Mixer CNR 1/2	2 591 AZ 0
Matrix and Master Control	0 957 442 700 AP 0
Layout Control Panels	2 700 AZ 1
Matrix Video and Audio Delegation	2 701 AZ 2
Block Diagram Delegation and Computer Control System	0 957 442 800 AP 0/1 (2 Sheets)
Matrix Remote Control Delegation	2 800 AZ 2
Telecine and ATR Delegation	2 801 AP 1
Slide Scanner Delegation	2 802 AP 2
VTR Delegation	2 803 AP 1
VCR and Slow Motion Delegation	2 804 AP 1
Character Gen. Delegation	2 805 AP 1
Camera and Mixer Delegation	2 806 AP 0
Decision Making Rooms	0 957 442 900 AP 1

DORA
System Block Diagram

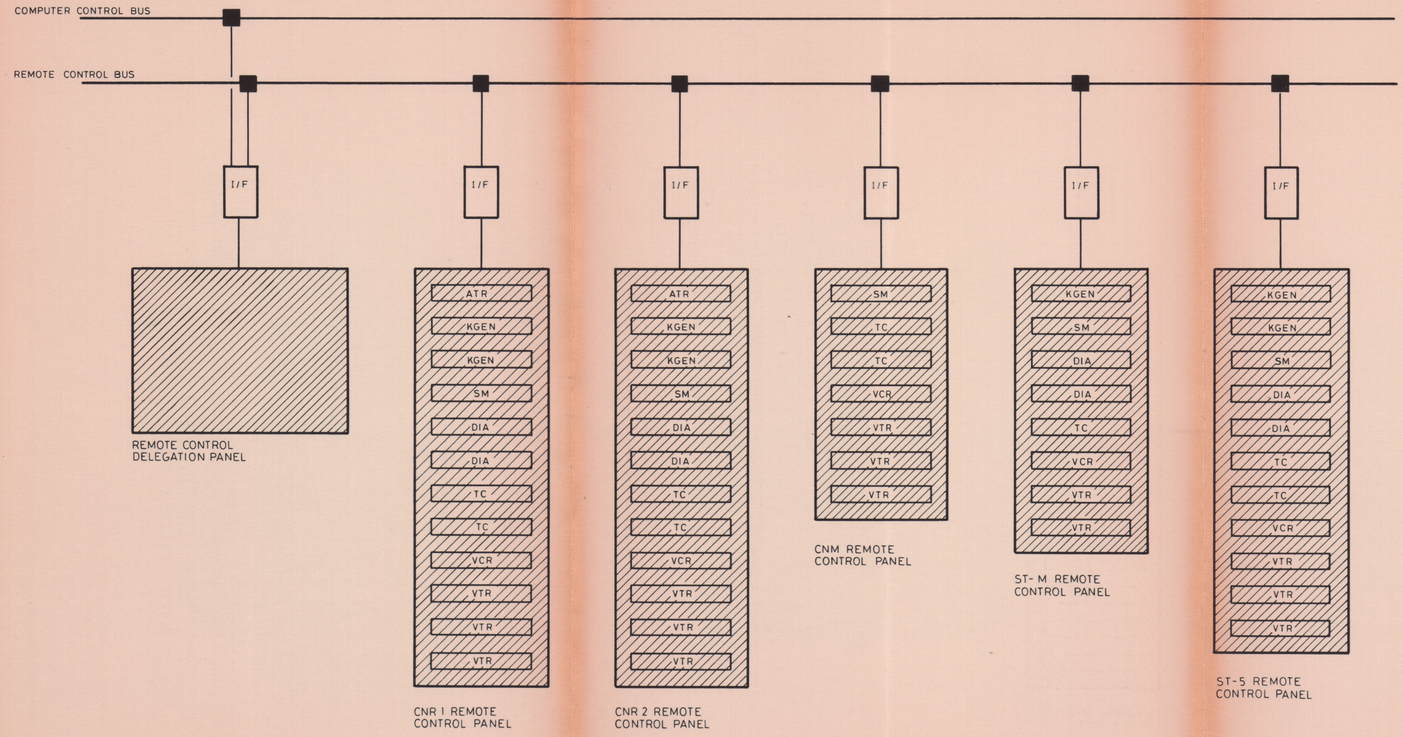


CHRISTIAN ROVSING A/S

DORA
System Block Diagram

Scale		Approved	
Date	78-04-25		
Drawn	LI / IB	T10-153	
Parts no		Sheet	of sheets
Print no			

Issue	1	
Date		
Approved		

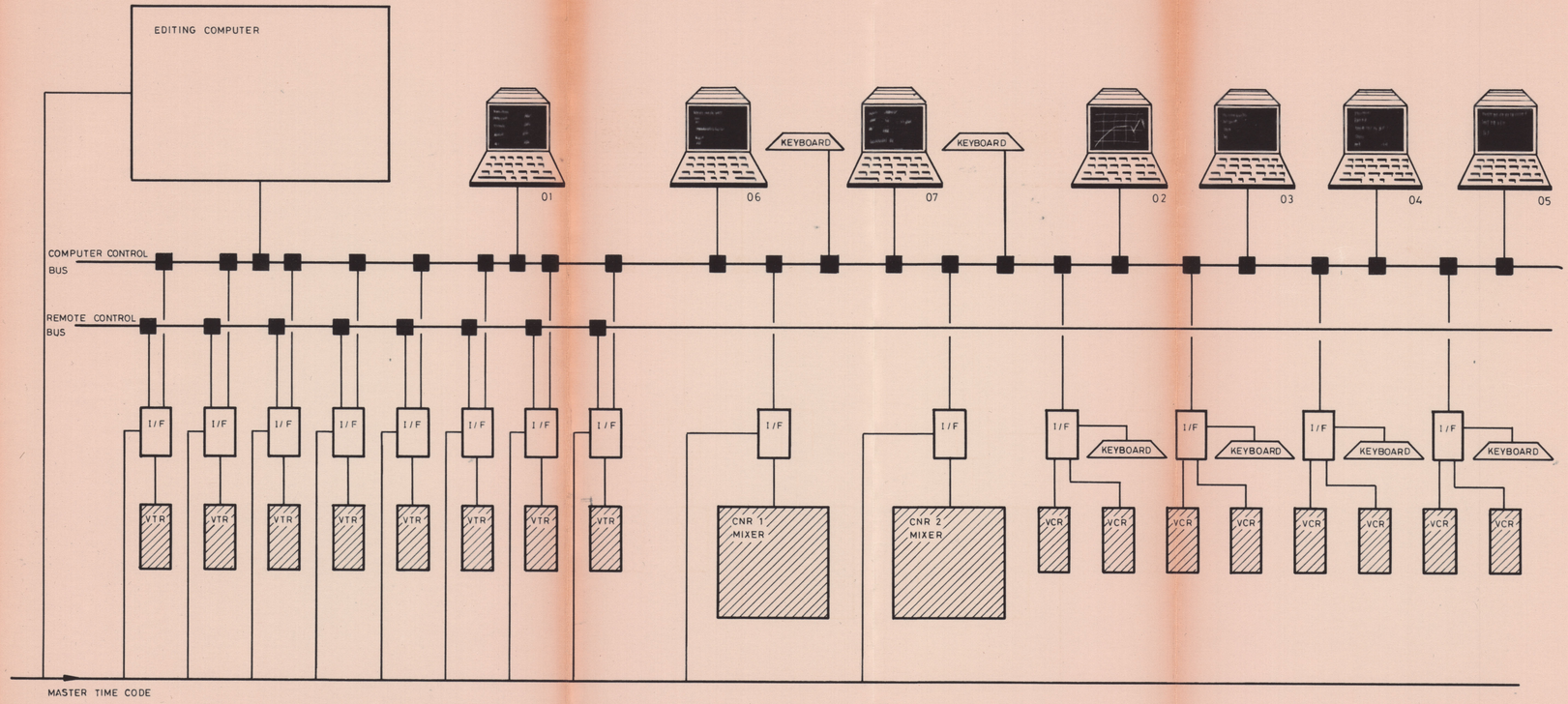


CHRISTIAN ROVSING A/S

DORA
Delegation and Remote
Control System

Scale		Approved	
Date	78-04-26		T10-151
Drawn	LI/IB	Sheet	of sheets
Parts no		Print no	

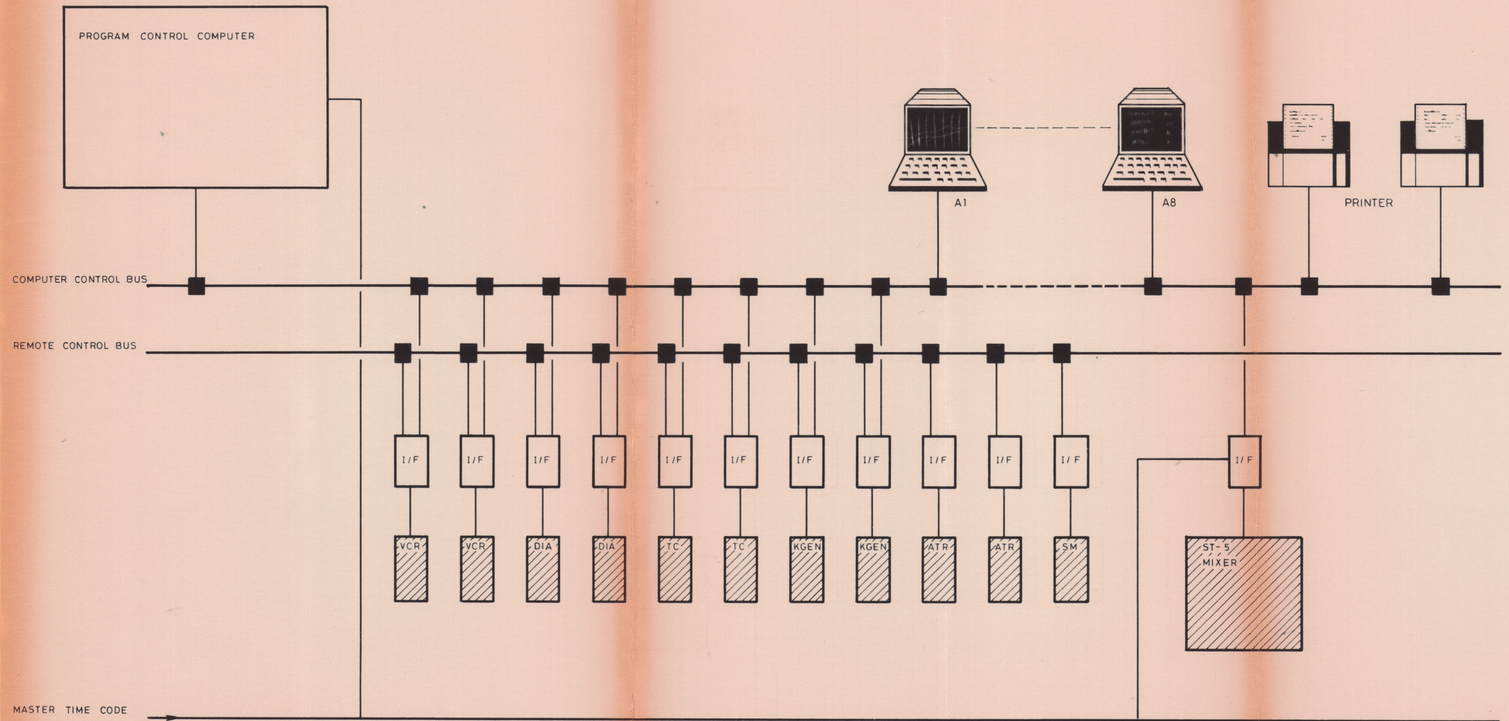
Issue	1	
Date		
Approved		



CHRISTIAN ROVSING A/S

DORA
Editing System

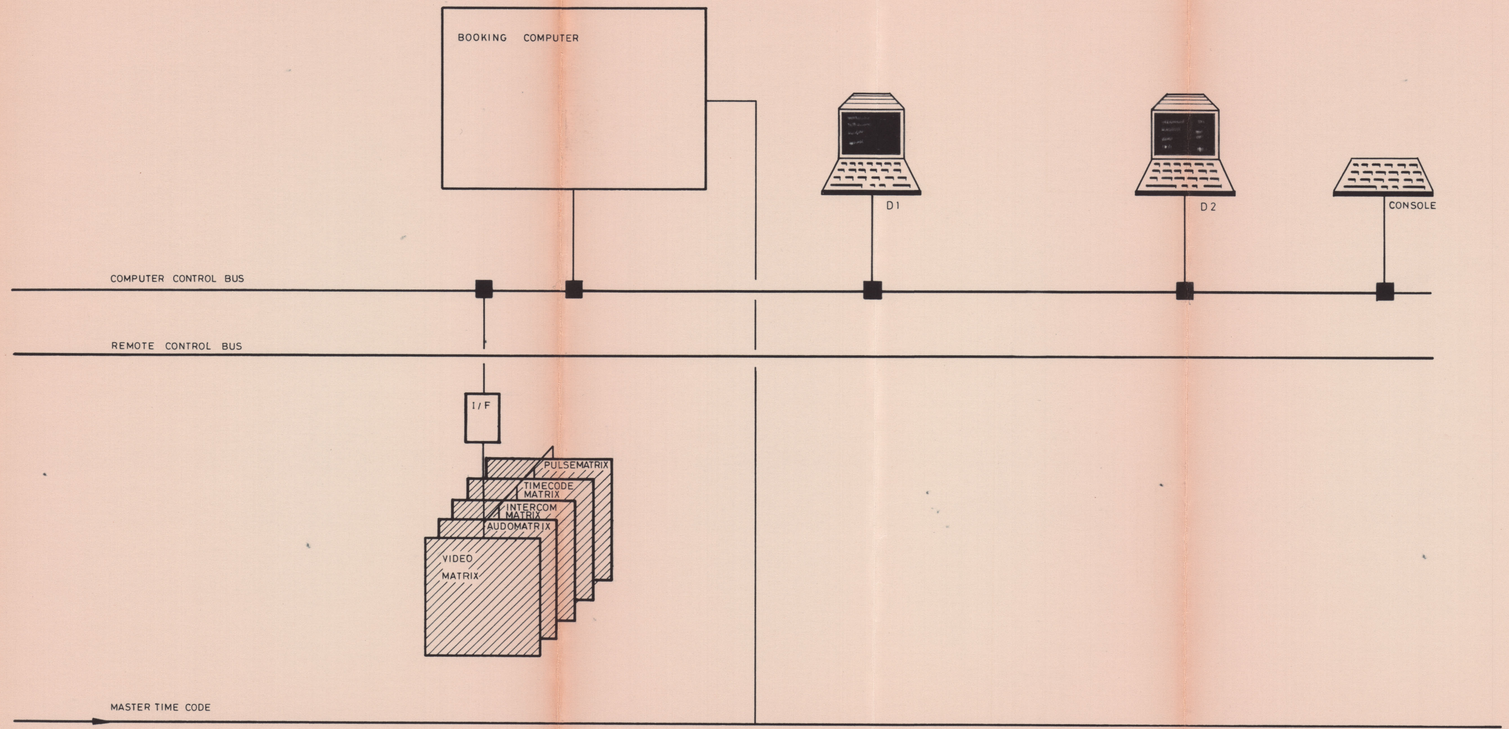
Scale:		Issue	1
Date:	78-04-25	Date	
Drawn	LI / IB	Approved	
Parts no		Approved	
Print no		Sheet	T10-155
		of	sheets



CHRISTIAN ROVSING A/S

DORA
Program Control System

Issue	1	Approved	
Date:			
Approved			
Scale:		Approved	
Date:	78-04-25		T10-156
Drawn:	LI / IB		Sheet of sheets
Parts no:			
Print no:			



CHRISTIAN ROVSING A/S

DORA
Booking System

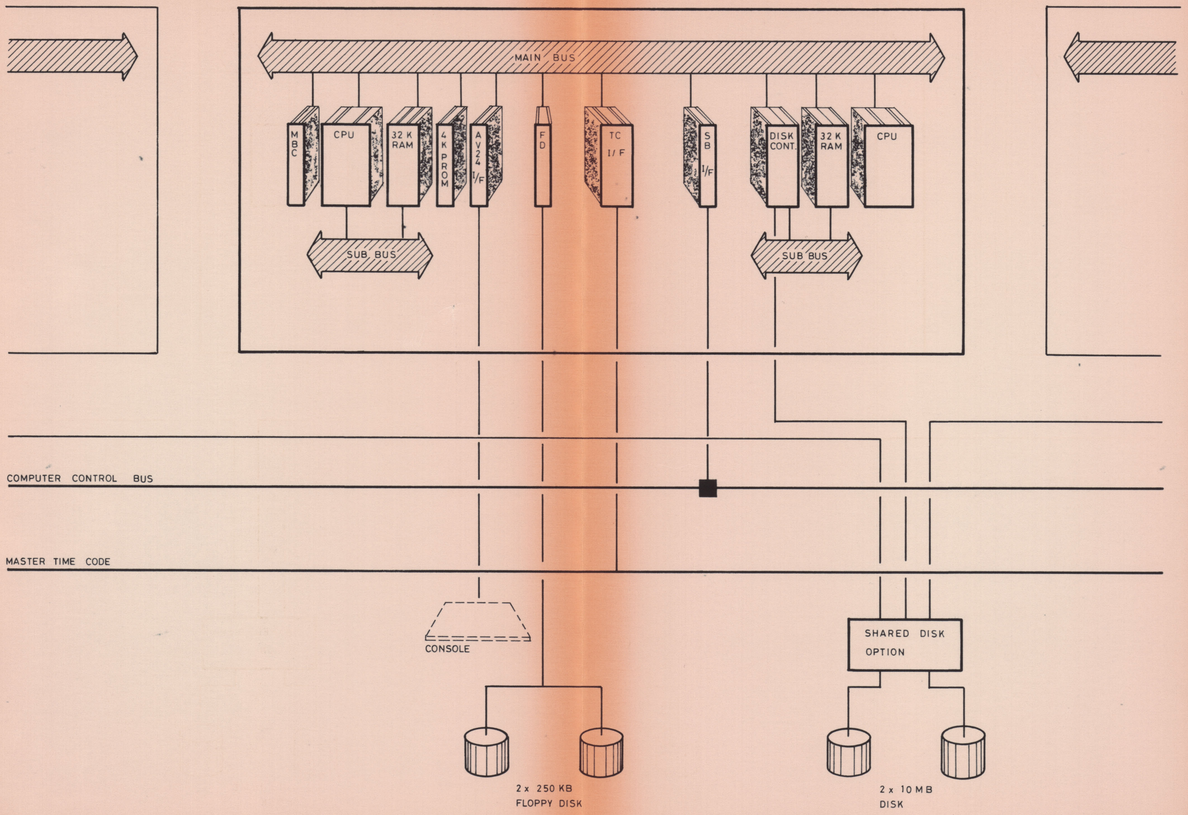
Scale	
Date	78-04-25
Drawn	LI / IB
Parts no	
Print no	

Issue	1
Date	
Approved	

Approved

T10 – 154

Sheet of sheets

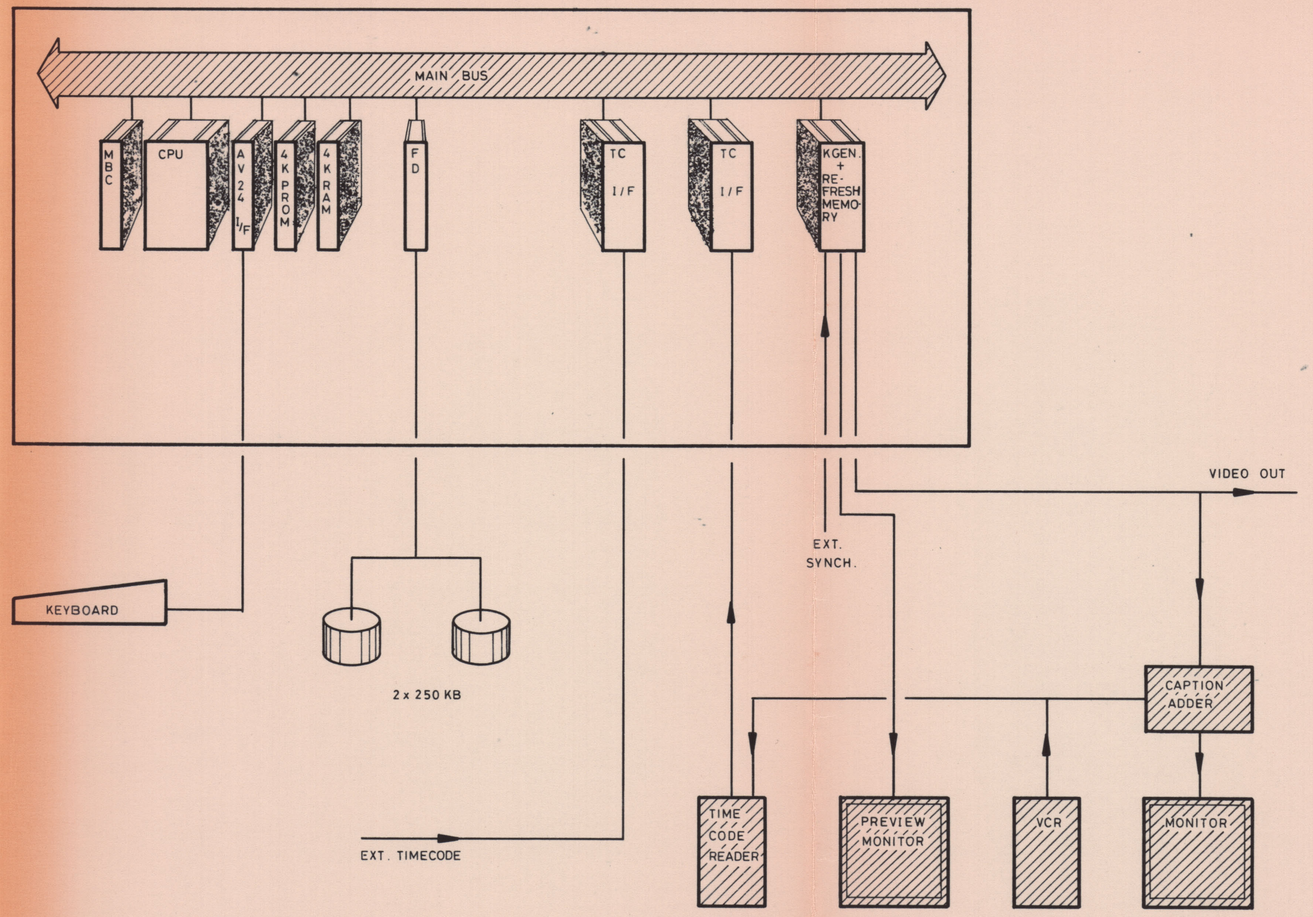


CHRISTIAN ROVSING A/S

DORA
CR80 Computer System

Scale		Approved	
Date	78-04-25		
Drawn	LI / IB		
Parts no		T10-152	
Print no		Sheet of sheets	

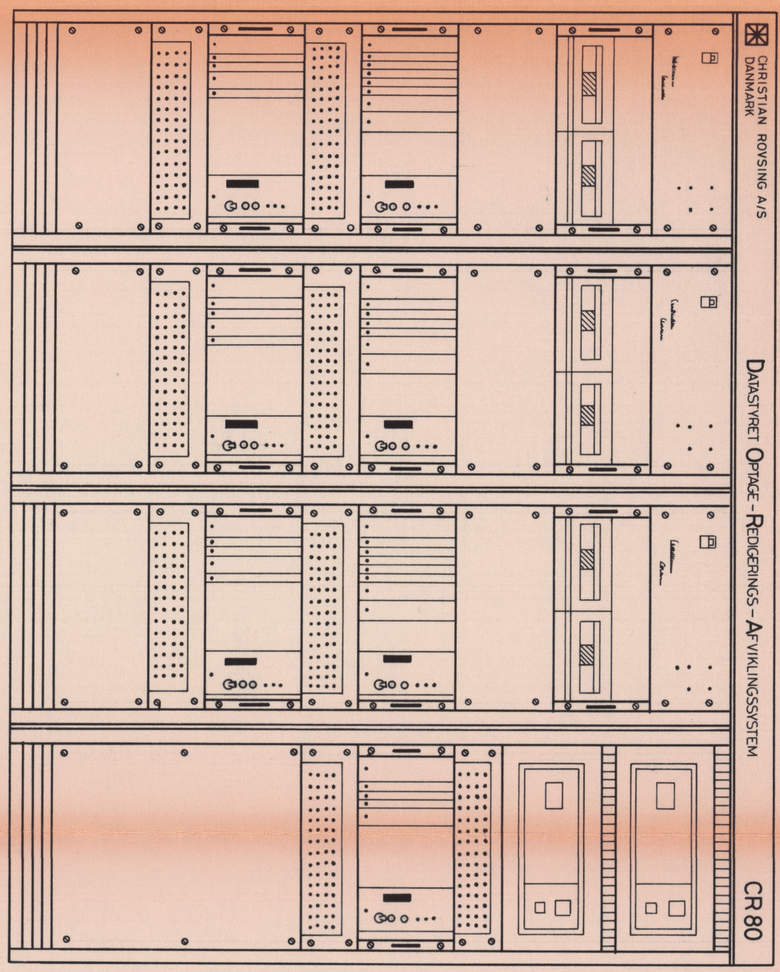
Issue	1
Date	
Approved	



CHRISTIAN ROVSING A/S

DORA
Text generator system

Scale:		Approved:		Issue:	1
Date:	78-04-25			Date:	
Drawn:	LI / IB			Approved	
Parts no			T20-131		
Print no			Sheet of sheets		



CHRISTIAN ROVSING A/S
DANMARK

DATASTYRET OPTAGE-REDIGERINGS-AFVIKLINGSSYSTEM

CR 80

CHRISTIAN ROVSING A/S

DORA

Physical Lay-out

Scale:		Approved:		Issue:	1				
Date:	78-04-25			Date:					
Drawn:	LI / IB			Approved:					
Parts no:		T 20-130							
Print no:		Sheet of sheets							

Block Diagram

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

AEF ...
FVB ...
ESG ...
ESG ...
ESG ...
EMG ...
EMG 7
EMG 8

W ...
W 370
W ...

EAF ...
EAF ...
SEP ...
SEP ...
SEP ...

GWS
EGA
VOB
EAF ...
VAF ...

MASTER CONTROL / CNM

SEE DRAWING NO. 0 957 442 700 AP

MACHINE REMOTE CONTROLS

MANUAL DELEGATION CONTROL

MANUAL MATRIX CONTROL

OPERATIONAL CONTROL INPUT/OUTPUT — MON. IN OUT

TECHNICAL CONTROL INPUT/OUTPUT — OSC CO. VECT. MON. IN / OSC CO. VECT. MON. OUT

PULSES
VIDEO
AUDIO
TIMECODE
INTERCOM
REMOTE CONTROLS

2 x

REMOTE CONTROL BUS

COMPUTER CONTROL BUS

6 EXTERNAL LINES

2 x RANK CINTEL
MARK III

TC 1

TC 2

5 x BCN 50
VIDEO TAPE RECORDER

VTR 1

VTR 2

VTR 3

VTR 4

VTR 5

MATRIX

3 x BCN 50
VIDEO TAPE RECORDER VTR-A-GROUP

VTR 6 — ST 5

VTR 7 — ST 5

VTR 8 — ST 5

MATRIX

2 x BVU 200 P
SONY U MATIC

VCR 1 — 1

VCR 2 — 2

2 x BVT 1000 PS
TIME BASE CORR.

2 x TTV 2705 / 2800
SLIDE SCANNER

DIA 1 — ST 5/STM

DIA 2 — ST 5/STM

HS 100
SLOW MOTION

2 x CHARACTER GEN.
CHIRON II

1

2

TRANSLATION ROOM

3 x TEXT GEN.
TORE SEEM

MON.

MON.

MON.

TEXT ROOM

2 x BVU 200 P
SONY U MATIC

VCR 3

VCR 4

2 x TEXT GEN.
TORE SEEM

1 — CAPT. + MASK

2 — CAPT. + MASK

CITY STUDIO

MIXER

PROD. CONTROL

P.V. LINE MAIN LINE

SEE DRAWING NO. 0 957 442 200 AP 1

2 x QUANTEL DFS 3001
FRAME SYNCHR.

1

2

MATRIX

TEST SIGNAL GENERATORS

7 x REM. CONTROLS CAM AND MIXER

1 x AUDI LOCK

P.V. LINE MAIN LINE

SEE DRAWING NO. 0 957 442 800 AP

EDITING COMPUTER

PROGRAM COMPUTER

BOOKING COMPUTER

DG : DATALINE + IDENT. GEN.
EQ. : EQUALIZER
VDA : DISTRIBUTOR

DG VDA — 2 x TC

DG VDA — 5 x VTR

DG VDA — 3 x VTR A

DG VDA — 2 x VCR

DG VDA — 2 x DIA

DG VDA — SM

DG VDA — 2 x CHAR. GEN.

DG VDA — 2 x TEXT GEN.

DG EQ — 6 x EXT.

DG EQ — 2 x CITY ST. MAIN/PV TEST

VDA — 6 x SPARE

DG EQ — ST. S

DG EQ — ST. M

DG EQ — CNR 1

DG EQ — CNR 2

DG EQ — 2 x DFS

PULSES
TIME CODE
REMOTE CONTROLS (ONLY CAM AND MIXER)
INTERCOM
2 x AUDIO

1x 6x 2x 2x 3x 2x 7x 1x — CITY ST. | EXT. 1-6 | TEXT GEN. 3/4 | FEED BACKS — ST 5

1x 2x 3x — STM

2x 1x 5x 1x — FRAME SYNCHR. | VTR-A 6-8 | VTR 1-5 | SM

3x 2x 2x — CNR 1

3x 2x 2x 4x — CNR 2 | TX LINES

10x

2 x OUTPUT MON.

2 x INPUT MON.

SEE DRAWING NO. 0 957 442 806 AP

SEE DRAWING NO. 0 957 442 700 AP

4 DECISION MAKING ROOMS

ST 5
2 x CHAR GEN.
3 x VTR A
2 x DIA.
2 x DISP.
ST M
CITY ST.
MIXER
MACHINE REMOTE CONTROL
PRODUCTION CONTROL
SEE DRAWING NO. 0 957 442 300 AP

ST M
2 x DIA.
3 x DISP.
1 x CHAR. GEN.
MIXER
MACHINE REMOTE CONTROL
PRODUCTION CONTROL
SEE DRAWING NO. 0 957 442 400 AP

CNR 1
3 x VTR / DISP
2 x DISP
2 x CHAR GEN.
MIXER
MACHINE REMOTE CONTROL
PRODUCTION CONTROL
SEE DRAWING NO. 0 957 442 500 AP

CNR 2
3 x VTR / DISP
2 x DISP
2 x CHAR GEN.
MIXER
MACHINE REMOTE CONTROL
PRODUCTION CONTROL
SEE DRAWING NO. 0 957 442 600 AP

COPY MACHINES
10 x BVU 200 P
SONY U. MATIC

VCR 5
VCR 6
VCR 7
VCR 8
VCR 9
VCR 10
VCR 11
VCR 12
VCR 13
VCR 14

DECISION MAKING ROOM I
2 x BVU 200 P SONY U MATIC
MON.
15 SLAVE
16 MASTER
SEE DRAWING NO. 0 957 442 300 AP

DECISION MAKING ROOM II
2 x BVU 200 P SONY U MATIC
MON.
17 SLAVE
18 MASTER
SEE DRAWING NO. 0 957 442 300 AP

DECISION MAKING ROOM III
2 x BVU 200 P SONY U MATIC
MON.
19 SLAVE
20 MASTER
SEE DRAWING NO. 0 957 442 900 AP

DECISION MAKING ROOM IV
2 x BVU 200 P SONY U MATIC
MON.
21 SLAVE
22 MASTER
SEE DRAWING NO. 0 957 442 900 AP

VIDEO / AUDIO CROSSPOINTS
VIDEO / AUDIO FEED BACKS
VIDEO / AUDIO CROSSPOINTS INCL. REMOTE CONTROL VIA BUS OR FE SYSTEM

				DATUM	NAME
				GEAEND.	ROSE ND.
				GEPR.	
				NORM 2.8.78	Schmidt
				GEZ. 1.6.78	EMLER
				ROBERT BOSCH GMBH GESCHÄFTSBEREICH FERNSEHANLAGEN	
ZUST.	ÄNDERUNG	DATUM	NAME		

DANMARK RADIO

NEWS COMPLEX
VIDEO BLOCK DIAGRAM

0 957 442 100 AP 0

BL.

BLZ.

City Studio

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ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

CONFERENCE ROOM

APPARATUS ROOM

CONTROL ROOM

FOLKETING

CITY STUDIO

4 × WALLBOXES XKK 9

KA 64

KCK CAM 1 — ZOOM — PAN/TILT HEAD — EVERSHED PED.

KCK CAM 2 — ZOOM — PAN/TILT HEAD — EVERSHED PED.

KCK CAM 3 — PAN/TILT HEAD

P 11 COL. MON

CCU 1 KC VS 408

CCU 2 KC VS 408

CCU 3 KC VS 408

CAMERA - LINE - UP

M 24 BA MON.

TEKTR 528 OSC.

ZTU 492 CAMERA SELECT.

3 × KC BH VS 568 K MAIN CONTROL PANELS

SWITCHING EQUIPMENT FOR LINE UP AND CAMERA CONTROL
3 × RC 51 KR 41
1 × P 4 ES 41D
1 × ZST 42-0R4
1 x KC TN 9A

6 × M 38 BB B/W MON.

CAMERA CONTROL

PRODUCTION CONTROL

CAM 1 | CAM 2 | CAM 3 | EXT 1 | EXT 2 | CHAR GEN | PV | PRESET | LINE | FEED BACK TV CENTRE

4 × MC 51 BB COL. MON.

1 MONITOR RACK

MIXER

CAMERA CONTROL

MC 51 BA COL. MON MATCHING

TEKTR 528 OSC.

TECHN. CONTROL

TEKTR 1421 VECT.

TEKTR 528 OSC.

MC 51 BA COL. MON.

MIXER

3 × KC QA 515
3 × KC VS 525 K
3 × KC VS 515 K
3 × KC VS 515 K1
CAMERA CONTROL PANELS

3 × EVERSHED CONTR. PANEL

MIXER TECHN. CONTR.

PROCESSOR CONTR. PANEL

CONTROL PANEL MIXER

CONTR. PANEL LOCAL REMOTE

KEY BOARD CHAR. GEN

1 DESK CAM, TECHN., PROD. CONTROL 5 UNITS

SEE DRAWING NO. 0 957 442 806 AP 0

ELECTRONIC RACK SERVO

EVERSHED PAN/TILT HEAD — CAM 1 / CAM 2 / CAM 3 — EV CAM 1 / EV CAM 2 / EV CAM 3

CCU 1-3 — CAM 1 / CAM 2 / CAM 3

RELAIS MATRIX

CAM/L1 (3 × CAM. CONTR / MATCH / EVERSHED)
CAM/L2 (3 × CAM. CONTR / MATCH / EVERSHED)
MIXER

TELEPHONE LINES FROM TV CENTRE

R 310 BW
R 410 BW
PATCH PANELS

P.P.

CAM 1
CAM 2
CAM 3
EXT 1
EXT 2
CHAR. GEN.
SPARE
TEST

EXT LINES — 2 × HC 15 EQ 41 EQUALIZER — EXT 1 / EXT 2

TORE SEE/M CHAR. GEN. INCL. FLOPPY DISK — XC CD 41 ENCODER — CHAR. GEN.

PGM 408 TEST SIGN. GEN — VDA — TEST

PEM 41 PLUGE — VDA

PGI 42 # GEN — VDA

3 × HC 215 VT 41 VIDEO DISTR

MON.

WALLBOXES

RC 1051 MC 60
VIDEO / AUDIO MIXER
MODIFIED
SEE DRAWING NO. 0 957 442 201 AP

10 (BLACK)

CCU 2 — CAM 2 RGB — CHROMA KEY IN

CCU 1-3 — CAM 1 / CAM 2 / CAM 3 / CHAR. GEN. — CAPT. IN

CAPT. MASK

TOM PRESET PV LINE

VECT. OSC. MON.

MON. (PROD. CONTR.)

HC SB 42 IC AS 42 PROCESSOR

M DATALINE GEN.

VDA — MAIN LINE TO TV-CENTRE

2 × HC 215 VT 41 VIDEO DISTR.

VDA — PV LINE TO TV-CENTRE

HEAD UNIT

HEAD UNIT

HC 15 EQ 41 EQUALIZER

MON. PROD. CONTR.

TELEPHONE LINE FROM TV CENTRE — IC YE 42 SLAVE LOCK RECEIVER — IC TG 405 DOUBLE SPG

PULSE AND SUBCARRIER DISTR.
2 × I 215 VT 41
1 × HC 215 VT 41
1 × I 13 VZ 41
6 × UN 068

LATER EXTANSION

PART OF OTHER DRAWING

PROVIDED BY CUSTOMER

EQUIPMENT MOUNTED IN 4 RACKS

ZUST.	ÄNDERUNG	DATUM	NAME
		BEARB.	ROSENDAHL
		GEPR.	
		NORM	3.7.78
		GEZ.	03.04.78 DRAUDT

DANMARKS RADIO

CITY - STUDIO

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

0 957 442 200 AP 1

BL
BLZ

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ALL RIGHTS RESERVED

PRODUCTION CONTROL

CONTROL PANEL
TECHNICAL MONITORING

MODULE FRAME
MIXER

XNG 42
POWER SUPPLY

4 × 35 - 24 NG 41
POWER SUPPLY

1 2 3 4

TEL LINE

RST 516
CONTROL UNIT AND LOGIC

RLW 9
SOURCES

RLW 9
MONITORS

1
100

CUE LIGHT TO
SOURCES AND MONITORS

CUE LINE DISTRIB

INPUTS
3-9

CAM 3

CAM 1
CAM 2
CAM 3
EXT 1
EXT 2
CHAR GEN
SPARE
SPARE
TEST
BLACK

1 2 3 4 5 6 7 8 9 10

RC 1010 EK
VIDEO CROSSBAR
10 × 4
VC 1

HC MB 41
BLACK GEN

PRESET / PROGRAM
A B

PV

TECHN
MONIT

V.D.A
HC 215 VT 41

INPUTS
1,2

CAM 1
CAM 2

CAM 1
CAM 2

RC 41 EK
VIDEO CROSSBAR
VC 3

A
B
PV

R,G,B CHROMA KEY
INPUT

CAM 2 (R,G,B)

IN A
FORE GR
IN KEY

IN B
BACK GR

RC CK 62
CHROMA KEY UNIT

OUT

100

τ 1

τ 2

2 × HC LK
DELAY EQUAL

100

SS 5

SS 6

2 × RC US
VIDEO SWITCH

RC US
VIDEO SWITCH
SS 7

PRESET MON OUT

2 ×
RC 41 EK
VIDEO CROSSBAR
VC 2

CAPT
INPUTS

CAM 1
CAM 2
CAM 3
CHAR GEN
SPARE
CAPT

MASK

IN A

IN B

RC 27 ME 66
MIXER
BTQ 66
EFFECTS GEN.

OUT

200

SS 8
RC US
VIDEO SWITCH

ELECTR
CAPT IN

ELECTR. CAPT. IN

CAPT. ADDER

CAPT
IN

ELECTR CAPT
IN

IN

RC 20 68
CAPTION ADDER

OUT

PV
OUT

300

HC 15 60 47/2
VIDEO EQUAL

LINE OUT

τ 3

RC LK
DELAY EQUAL

200

CHROMA KEY

τ 4

HC LK
DELAY EQUAL

100

MIX

CAPT. IN

RC 41 EK
VIDEO CROSSBAR
VC 4

PV

PV OUT

RC 81 EK 62
VIDEO CROSSBAR
VC 5

EXT. SIGN. IN

TECHN. MONITORING

TECHN. MONITORING OUT

CAPT. ADDER

SYNC. OUT
(CHAR GEN/CAPT. SC.)

τ 5

HC LK
DELAY EQUAL

300

PULSE
DISTRIBUTION

1 13 VZ 62
DELAY UNIT

SYNC
BLANK

SYNC 1
BLANK 2

SYNC
BLANK

BURST FLAG
SUBC

BURST FLAG
SUBC

TO THE UNITS

AUDIO MIXER

MIKRO

EXT. IN
3-9

EQUALIZER /
FILTER

AUDIO CROSSBAR

PLN

PRESET /
PROGRAM

OFF SPEAKER

INTERN
SOURCES

A
B
C
D

2 × 36 F 15
DISTR.

2 × 36 F 12
DISTR.

TEST
GEN

2 × EB 201
AUTOMATIC FADER

EMT 255
KOMPRESSOR

VU-METER

VU-METER

PGM OUT

PGM MONIT

PLN

PRESET / PROGRAM

PLN

τ 1,2	HC LK 62	2 × HC 341
τ 3,4	HC LK 62	2 × HC 341
τ 5	HC LK 62	1 × HC 341
SS 5, 6, 7, 8	RC US 62	2 × RC 285
VC 2,3	RC 241 EK 62	2 × RC 287
VC 4	RC 41 EK 62	1 × RC 287
VC 5	RC 81 EK 62	2 × RC 287

900 DELAY IN ns
1 100 DELAY TIME PLANE IN ns

			DATUM	NAME	DANMARKS - RADIO
			GEZ.		MIXER CITY STUDIO
			GEPR.		
			NORM		
			GEZ.	13.04.78	GRAUDT
ZEICHNUNG	ÄNDERUNG	DATUM	NAME	ROBERT BOSCH GMBH GESCHÄFTSBEREICH FERNSEHANLAGEN	0 957 442 201 AP 0

BL. 1
BLZ.

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

PLN
PGM
PST
PVW
DATALINE OFF
PGM
PST

EXT.1 EXT.2 SPARE SPARE TEST AUDIO OFF

OFF SPK A B C D

UNDER NORMAL OVER

CAM.1 CAM.2 CAM.3 EXT.1 EXT.2 CHAR. GEN. SPARE SPARE TEST BLACK

KEY CAM.2 CLEAR

ME CAPT.

PVW PST

V X I

S M F

MASK ON CHAR GEN

MORE SOFTNESS SOFT EDGE

BLACK CAPT CAPT LEVEL

NORMAL INVERT (CHROMA KEY) KEY MODE

KEY LEVEL LEADING EDGE KEY SHIFT TRAILING EDGE

LUM CHROMA HUE

ORIGINAL HUE

SELECTIVITY

TAKE

MARRIED

ELECTR CAPT GEN

EFF V X I

BORDER OFF BORDER SHADOW OUT LINE

ON AIR

CAPT.

X 511
X 512 2 358 010 001
X 515 2 358 010 003
X 512 2 358 010 001
X 512 2 358 010 001
X 512 2 358 010 001
X 512 2 358 010 001

R 51 KR 513-106 0 333 050 000
R 31 KR 512-005 0 324 450 000
R 41 KR 513-013 0 324 070 000
R 11 KR 512-072 0 329 360 000
R 21 KR 512-035
R 51 KR 513-109 0 333 050 000
R 21 KR 512-034 0 325 190 000
R 41 TG 512-082 0 329 350 000
R 41 KR 513-010 0 324 070 000
R 41 KR 513-012 0 324 070 000
R 51 KR 513-106 0 333 050 000
RC 5 ZU 513-001 0 330 810 000
RC 4 ZU 512-002 0 333 020 000
R 27 ZU 512-001 0 330 840 000
R 27 ZU 512-001 0 330 810 000
R 27 ZU 513-001 0 330 810 000
R 41 KR 513-009 0 324 070 000
R 41 KR 513-011 0 324 070 000
R 41 KR 513-013 0 324 070 000
R 41 KR 513-014 0 324 070 000
R 41 KR 513-015 0 324 070 000
R 41 KR 513-016 0 324 070 000
R 41 KR 513-017 0 324 070 000
R 41 KR 513-018 0 324 070 000
R 41 KR 513-019 0 324 070 000
R 41 KR 513-020 0 324 070 000
R 41 KR 513-021 0 324 070 000
R 41 KR 513-022 0 324 070 000
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R 41 KR 513-677 0 324 070 000
R 41 KR 513-678 0 324 070 000
R 41 KR 513-679 0 324 070 000
R 41 KR 513-680 0 324 070 000
R 41 KR 513-681 0 324 070 000
R 41 KR 513-682 0 324 070 000
R 41 KR 513-683 0 324 070 000
R 41 KR 513-684 0 324 070 000
R 41 KR 513-685 0 324 070 000
R 41 KR 513-686 0 324 070 000
R 41 KR 513-687 0 324 070 000
R 41 KR 513-688 0 324 070 000
R 41 KR 513-689 0 324 070 000
R 41 KR 513-690 0 324 070 000
R 41 KR 513-691 0 324 070 000
R 41 KR 513-692 0 324 070 000
R 41 KR 513-693 0 324 070 000
R 41 KR 513-694 0 324 070 000
R 41 KR 513-695 0 324 070 000
R 41 KR 513-696 0 324 070 000
R 41 KR 513-697 0 324 070 000
R 41 KR 513-698 0 324 070 000
R 41 KR 513-699 0 324 070 000
R 41 KR 513-700 0 324 070 000
R 41 KR 513-701 0 324 070 000
R 41 KR 513-702 0 324 070 000
R 41 KR 513-703 0 324 070 000
R 41 KR 513-704 0 324 070 000
R 41 KR 513-705 0 324 070 000
R 41 KR 513-706 0 324 070 000
R 41 KR 513-707 0 324 070 000
R 41 KR 513-708 0 324 070 000
R 41 KR 513-709 0 324 070 000
R 41 KR 513-710 0 324 070 000
R 41 KR 513-711 0 324 070 000
R 41 KR 513-712 0 324 070 000
R 41 KR 513-713 0 324 070 000
R 41 KR 513-714 0 324 070 000
R 41 KR 513-715 0 324 070 000
R 41 KR 513-716 0 324 070 000
R 41 KR 513-717 0 324 070 000
R 41 KR 513-718 0 324 070 000
R 41 KR 513-719 0 324 070 000
R 41 KR 513-720 0 324 070 000
R 41 KR 513-721 0 324 070 000
R 41 KR 513-722 0 324 070 000
R 41 KR 513-723 0 324 070 000
R 41 KR 513-724 0 324 070 000
R 41 KR 513-725 0 324 070 000
R 41 KR 513-726 0 324 070 000
R 41 KR 513-727 0 324 070 000
R 41 KR 513-728 0 324 070 000
R 41 KR 513-729 0 324 070 000
R 41 KR 513-730 0 324 070 000
R 41 KR 513-731 0 324 070 000
R 41 KR 513-732 0 324 070 000
R 41 KR 513-733 0 324 070 000
R 41 KR 513-734 0 324 070 000
R 41 KR 513-735 0 324 070 000
R 41 KR 513-736 0 324 070 000
R 41 KR 513-737 0 324 070 000
R 41 KR 513-738 0 324 070 000
R 41 KR 513-739 0 324 070 000
R 41 KR 513-740 0 324 070 000
R 41 KR 513-741 0 324 070 000
R 41 KR 513-742 0 324 070 000
R 41 KR 513-743 0 324 070 000
R 41 KR 513-744 0 324 070 000
R 41 KR 513-745 0 324 070 000
R 41 KR 513-746 0 324 070 000
R 41 KR 513-747 0 324 070 000
R 41 KR 513-748 0 324 070 000
R 41 KR 513-749 0 324 070 000
R 41 KR 513-750 0 324 070 000
R 41 KR 513-751 0 324 070 000
R 41 KR 513-752 0 324 070 000
R 41 KR 513-753 0 324 070 000
R 41 KR 513-754 0 324 070 000
R 41 KR 513-755 0 324 070 000
R 41 KR 513-756 0 324 070 000
R 41 KR 513-757 0 324 070 000
R 41 KR 513-758 0 324 070 000
R 41 KR 513-759 0 324 070 000
R 41 KR 513-760 0 324 070 000
R 41 KR 513-761 0 324 070 000
R 41 KR 513-762 0 324 070 000
R 41 KR 513-763 0 324 070 000
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R 41 KR 513-765 0 324 070 000
R 41 KR 513-766 0 324 070 000
R 41 KR 513-767 0 324 070 000
R 41 KR 513-768 0 324 070 000
R 41 KR 513-769 0 324 070 000
R 41 KR 513-770 0 324 070 000
R 41 KR 513-771 0 324 070 000
R 41 KR 513-772 0 324 070 000
R 41 KR 513-773 0 324 070 000
R 41 KR 513-774 0 324 070 000
R 41 KR 513-775 0 324 070 000
R 41 KR 513-776 0 324 070 000
R 41 KR 513-777 0 324 070 000
R 41 KR 513-778 0 324 070 000
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R 41 KR 513-781 0 324 070 000
R 41 KR 513-782 0 324 070 000
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R 41 KR 513-800 0 324 070 000
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R 41 KR 513-802 0 324 070 000
R 41 KR 513-803 0 324 070 000
R 41 KR 513-804 0 324 070 000
R 41 KR 513-805 0 324 070 000
R 41 KR 513-806 0 324 070 000
R 41 KR 513-807 0 324 070 000
R 41 KR 513-

Studio 5

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

CAMERA LINE UP

M 24 BA MON.

TEKTR 528 OSCILLOSCOPE

ZTU 492

3 × KC BH VS 568 K LINE UP

STUDIO

KCK CAM 4 — ZOOM — PAN / TILT HEAD EVERSHED PED.

KA 64

KC VS 408 CCU 4

RGB → MIXER

SWITCHING EQUIPMENT FOR LINE UP AND CAMERA CONTROL
3 × RC 51 KR 41
1 × P 4 ES 41
1 × ZST 42-084
1 × KC TN 9 A

KCK CAM 5 — ZOOM

KA 64

KC VS 408 CCU 5

RGB → MIXER

KCK CAM 6 — ZOOM

KA 64

KC VS 408 CCU 6

COL. MON.

16 × VI DATALINE SEPARATOR

VTR 6 A
VTR 7 A
VTR 8 A
DIA 1
DIA 2
DISP 1
DISP 2
DISP 3
DISP 4
DISP 5
DISP 6
DISP 7
ST M
CITY ST
CHAR GEN L8
CHAR GEN L9

→ PV - MONS

R 510 B W PATCH PANEL

CAM 4
CAM 5
CAM 6

3 × RC US 62 VIDEO SWITCHER

17 × HC 15 EQ 41 EQUALIZER

VDA / ADA

MATRIX PROD. COML.

VIDEO / AUDIO MATRIX

VTR 6 A
VTR 7 A
VTR 8 A
DIA 1
DIA 2
DISP 1
DISP 2
DISP 3
DISP 4
DISP 5
DISP 6
DISP 7
STUDIO M
CITY STUDIO
CHAR GEN DISP 1

VDA / ADA
VIDEO MATRIX
VDA / ADA

PV CITY ST → MON. / PROD. C.

RC GF 62 COL BACKGR GEN.

CAPT + MASK

CHAR GEN DISP 8
CHAR GEN DISP 9
CAM 6
DIA 1

CCU 6

PEM 41 PLUGE

PG 1 42 GRID-PATTERN GEN.

VDA
VDA

2 × HC 215 VT 41 VIDEO DISTRIBUTOR

MONS

R 310 BW PATCH PANEL

PULSE DISTR.
PULSE DISTR. PROD. COMPL.

RC US 62 VIDEO SWITCHER

IC SI 41 FASK DECODER

PULSE AND SUBC. DISTR.
2 x I 215 VT 41
1 x MC 215 VT 41
2 x I 13 VZ 62
6 x UN 068

CAM 4
CAM 5
CAM 6
VTR A6
VTR A7
VTR A8
DIA 1
DIA 2
DISP 1
DISP 2
DISP 3
DISP 4
DISP 5
DISP 6
DISP 7
STUDIO M
CITY STUDIO
CHAR GEN DISPL8
COL BGD
20 (BLACK)
IN

CCU 4,5 — CAM 4, CAM 5 — RGB CHROMA KEY IN

CCU 6 — CAM 6, DIA 1 — CAPT. IN

AUTOMATIC MIXER
VIDEO AND AUDIO
RC 2041 MC
MODIFIED
SEE DRAWING NO. 0 957 442 301 AP1

TOM OUT
PV OUT
PRESET OUT
CHR KEY OUT
LINE OUT

OSC. / VECT.
MON.
MON.
VI DATALINE SEPARATOR PROD. C.
MON. / PROD. C.

HC SB 42 IC AS 42 PROCESSOR

VI DATALINE GENERATOR

HC 215 VT 41 VIDEO DISTRIBUTOR — VDA

R 310 BW PATCH PANEL → MATRIX, WALL BOXES STUDIO

9 × X5-24NG41 POWER SUPPLY

PRODUCTION CONTROL

4 × M 38 BB B/W MONITOR: CAM 4 | CAM 5 | CAM 6 | PV CITY STUDIO

16 × M 38 BB B/W MONITOR: VTR 6 A | VTR 7 A | VTR 8 A | DIA 1 | DIA 2 | DISP 1 | DISP 2 | DISP 3 | DISP 4 | DISP 5 | DISP 6 | DISP 7 | CITY STUDIO | STUDIO M | CHAR. GEN DISP L8 | CHAR. GEN DISP L9

ALL MONITORS IN 1 RACK

CAMERA CONTROL: TEK 528 OSCILLOSCOPE | MC 51 BA COL. MON. MATCHING

2 × X5-24NG41 POWER SUPPLY

TECHNICAL CONTROL: TEK 528 OSCILLOSCOPE | TEK 1421 VECTORSCOPE | MC 51 BA COL. MON.

DATA DISPLAY AND KEYBOARD: TECHN. CONTROL | EDITOR

MC 51 BB CHR. KEY

MC 51 BB COL. MON. PV

MC 51 BB COL. MON. PRESET

MC 51 BB COL. MON. LINE

3 x DATA DISPLAY AND KEYBOARD: VISION MIXER | SOUND MIXER | PRODUCER

MIXER

MIXER

CAMERA CONTROL PANEL

3 × KC VS 525 K
3 × KC VS 515 K
3 × KC VS 515 K 1
3 × KC QA 515

4 | 5 | 6

1 DESK CAM. / TECHN. CONTR. 3 UNITS

EVERSHED CONTR. PANEL CAM. 4

SEE DRAWING 0 957 442 806

2 × EVERSHED CONTROL

2 × CAM. CONTR. AND MATCHING

2 × CAMERA PRESELECT

CONTR. PANEL TECHN. MONIT. (PART OF MIXER)

CONTR. PANEL PROCESSOR

REMOTE CONTROLS

2 × DIA G
2 × CHAR. GEN. E
3 × VTR D
2 × TC A
1 × SLOW MOT F
1 × VCR C

SEE DRAWINGS NO 0 957 440 801-806

MIXER CITY STUDIO

CONTR. PANEL PRODUCTION MODE

R 201 KR 510 DATALINE ON/OFF

CONTROL PANEL MIXER

1 DESK PROD. CONTR 4 UNITS

ELECTRONIC RACK SERVO INCL. STORE

PAN/TILT/PED. CAM. 4

C. R. COMPUTER BUS

C. R. COMPUTER CONTROL INTERFACE

EQUIPMENT MOUNTED IN 5 RACKS

EQUIPMENT FROM C. ROUSING

PART OF OTHER DRAWINGS

		DATUM	NAME
	BEARB.		ROSENDAHL
	GEPR.		
	NORM	5.10.77	
	GEZ.	27.9.77	SCHWEGLER

ZUST. | ÄNDERUNG | DATUM | NAME

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DANMARKS- RADIO

STUDIO 5

0 957 442 300 AP 1

BL.
BLZ

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AEF...
FVB...

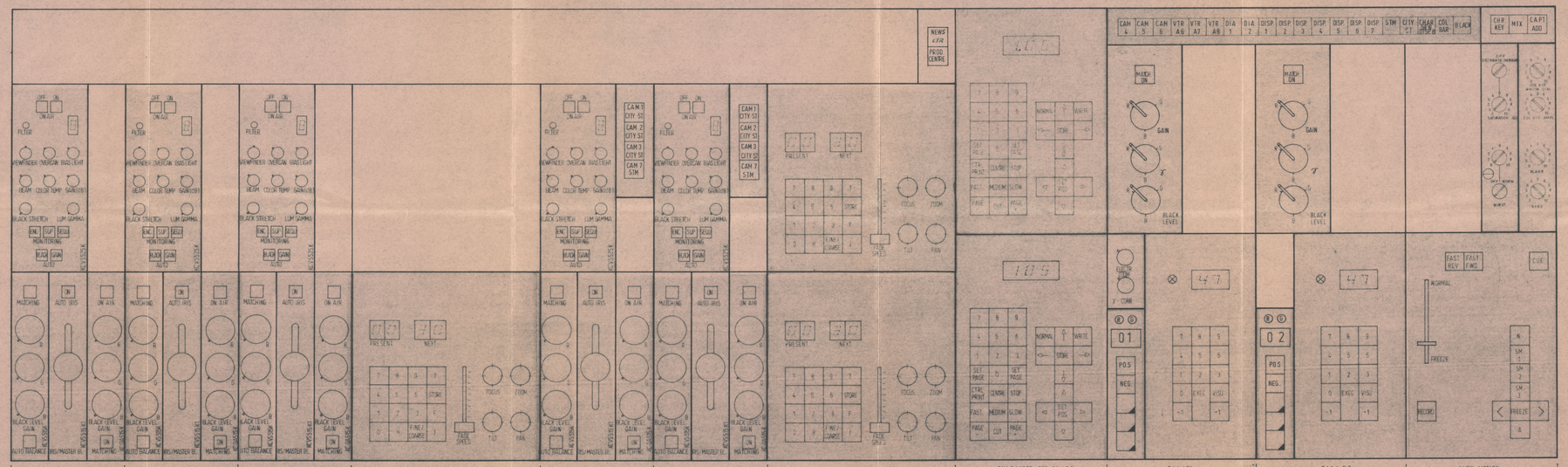
ESG
ESG...
ESG...
EMG...
EMG 7
EMG 8

W...
W 370
W...

EAF...
EAF...
SEP...
SEP...
SEP...

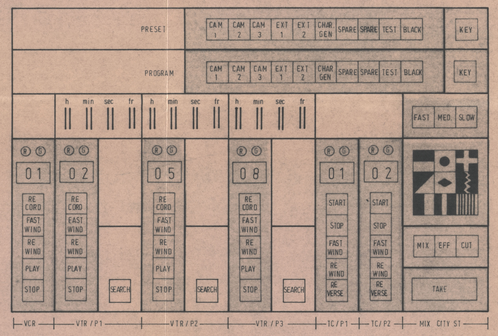
GRS
EGA
VDR
E...
E...
VKF...

MODULEFRAME CAMERA / TECHNICAL CONTROL



480 x 1600 mm

MODULFRAME PRODUCTION CONTROL



280 x 440 mm

| | | |

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PRODUCTION CONTROL

CONTROL PANEL
TECHNICAL MONITORING

MODULE FRAME
MIXER

XNG 42
POWER SUPPLY

IFIC-BUS

4 × XS-24 NG 41
POWER SUPPLY
1 2 3 4

RST 616
CONTROL UNIT AND LOGIC

RLW 9
SOURCES

RLW 9
MONITORS

CUE LINE DISTRIB.

CUE LIGHT TO SOURCES AND MONITORS

RC 2010 EK
VIDEO CROSSBAR
20 × 4
VC 1

CAM 4
CAM 5
CAM 6
VTR 6
VTR 7
VTR 8
DIA 1
DIA 2
DISP 1
DISP 2
DISP 3
EXT. DISP 1
EXT. DISP 2
EXT. DISP 3
EXT. DISP 4
ST. M.
CITY ST.
CHAR GEN. DISP 1
COL. GEN.

INPUTS 3 -19

CAM 6

HC MB 41
BLACK GEN.

PRESET / PROGRAM
A B

PV

TECHN MONIT

V.D.A
HC 215 VT 41

INPUTS 1,2

CAM 4
CAM 5

RC 85
VIDEO SWITCH
SS 4

RC 41 BK
VIDEO CROSSBAR
VC 3

A
B
PV

R.G.B CHROMA KEY INPUTS

CAM 4 (R.G.B)
CAM 5 (R.G.B)

3 × RC US
VIDEO SWITCH
SS 1-3

IN A FORE GR
IN B BACK GR
K KEY
RC CK 62
CHROMA KEY UNIT
OUT
100

τ 1
τ 2
2 × HC LK
DELAY EQUAL
100

τ 5
HC LK
DELAY EQUAL
300

SS 5
SS 6
2 × RC US
VIDEO SWITCH

RC US
VIDEO SWITCH
SS 7

PRESET MON OUT

2x
RC 42 EK 62
VIDEO CROSSBAR
VC 2

CAM 6
DIA
CHAR GEN. DISP 1
CHAR GEN. DISP 2

CAPTION ADDER INPUTS

CAPT 1 CAPT 2 MASK 1 MASK 2

IN A IN B
RC 21 MG 66
MIXER
RTQ 66
EFFECTS GEN
OUT
200

CAPT 1 CAPT 2 MASK 1 MASK 2
IN IN IN IN
IN
RC ZU 68
CAPTION ADDER
OUT
HUE
PV 2
PV 1
300

RC TS 65 47/2
VIDEO EQUAL

LINE OUT

τ 3
HC LK
DELAY EQUAL
200
CHROMA KEY

τ 4
HC LK
DELAY EQUAL
100
MIX

CAPT. IN

RC 81 EK 62
VIDEO CROSSBAR
VC 4

PV

PV OUT

EXT. SIGN. IN

RC 81 EK 62
VIDEO CROSSBAR
VC 5

TECHN. MONITORING

TECHN. MONITORING OUT

CAPT. ADDER

SYNC OUT
(CHAR GEN./CAPT. SC.)

I 13 VZ 62
DELAY UNIT

SYNC 1
BLANK 2

SYNC
BLANK
BURST FLAG
SUBC

PULSE DISTRIBUTION

TO THE UNITS

AUDIO MIXER

MIKRO

EQUALIZER / FITTER
1a
1b

EXT. IN 3 -19

AUDIO CROSSBAR

PLN

PRESET / PROGRAM

OFF. SPEAKER

INTERN SOURCES
A
B
C
D

2 × 3 EF 15
DISTR.

2 × 3 EF 12
DISTR.

TEST GEN

2 × 49 201
AUTOMATIC FADER

EMT 255
KOMPRESSOR

VU-METER

PGM OUT

PGM MONIT

PLN

PRESET / PROGRAM

PLN

τ 1,2	HC LK 62	2 × HC 341
τ 3,4	HC LK 62	2 × HC 341
τ 5	HC LK 62	1 × HC 341
SS 1,2,3,4	RC US 62	2 × RC 285
SS 5,6,7,8	RC US 62	2 × RC 285
VC 2	RC 42 EK 62	2 × RC 287
VC 3	RC 41 EK 62	1 × RC 287
VC 4	RC 81 EK 62	2 × RC 287

900 DELAY IN ns
1 100 DELAY TIME PLANE IN ns

			DATUM	NAME	DANMARKS - RADIO
			BEARB.	ROSENDAHL	MIXER STUDIO 5
			GEPR.		
			NORM	24.4.84	
			GEZ.	14.04.84	DRAUDT
(D)		07.2.89	ROBERT BOSCH GMBH		0 957 442 301 AP0
(ISO)	ÄNDERUNG	DATUM NAME	GESCHÄFTSBEREICH FERNSEHANLAGEN		BL.

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ALL RIGHTS RESERVED

PLN

PGM

X 515
0 358 010 003

PST

PVW

DATA LINE ON

X 515
0 358 010 003

PGM

PST

VTR 6 | VTR 7 | VTR 8 | DISP. 1 | DISP. 2 | DISP. 3 | DISP. 4 | DISP. 5 | DISP. 6 | DISP. 7 | ST-M | CITY ST. | AUDIO OFF

R 201 KR 510-076 0 329 440 000

X 510
2 358 010 005

BACKGROUND UNDER-OVER

CAM. 4 | CAM. 5 | CAM. 6 | VTR A6 | VTR A7 | VTR A8 | DIA. 1 | DIA. 2 | DISP. 1 | DISP. 2 | DISP. 3 | DISP. 4 | DISP. 5 | DISP. 6 | DISP. 7 | ST. M | CITY ST. | CHAR. GEN DISP. 8 | COL. BACKGR GEN. | BLACK

CHAR. GEN DISP. 9 | PV ROW

OFF SPK | A | B | C | D

R 51 KR 513-106 0 333 050 000

UNDER | NORMAL | OVER

R 31 KR 512-005 0 324 450 000

X 512
2 358 010 001

KEY CAM. 4 | KEY CAM. 5 | CLEAR

R 31 KR 512-005

X 511

ME | CAPT. 1 | CAPT. 2

R 31 KR 512-005

X 512

V | X | I

R 41 KR 513-013 0 324 070 000

S | M | F

R 41 KR 513-013 0 324 070 000

TAKE

R 11 KR 512-072 0 329 360 000

MARRIED

R 11 KR 512-072 0 329 360 000

ON AIR

R 11 KR 512-072 0 329 360 000

EFF | V | X | I

R 41 KR 513-013 0 324 070 000

X 513

ON AIR

OVER DRIVE

LUM

CHROMA

HUE

R 61 TM 523-004 0 331 320 000

SOFT EDGE

BLACK CAPT

CAPT LEVEL

MOR SIZE-VERT

MOR-POS-VERT

SOFT

IN VERT

ON

MASKING

R 2 ZU 513-001 0 330 850 000

MASK ON

CHAR GEN

CAM. 6

DIA

CHAR. GEN DISP. 8

CHAR. GEN DISP. 9

R 51 KR 513-106 0 333 050 000

BORDER OFF

BORDER

SHADOW

OUT LINE

R C 4 ZU 512-001 0 330 850 000

CAPT. 1

TIME

R C 4 ZU 512-002 0 333 020 000

CAPT. 2

POINT ON

R 61 TM 523-004 0 331 320 000

SELECTIVITY

R 61 TM 523-004 0 331 320 000

KEY MODE

KEY LEVEL

LEADING EDGE

KEY SHIFT

TRAILING EDGE

R 61 KM 515-001 0 333 920 000

POSIT ON

R 61 TM 523-004 0 331 320 000

MANUAL CONTROL

R 11 KR 512-072 0 329 360 000

* MAYBE COMPUTER CONTROLLED

** ONLY COMPUTER CONTROLLED
IN CASE OF ON AIR EDITING SEQUENCES

DANMARKS RADIO

LAYOUT MIXER
STUDIO 5

0 957 442 301 AZ 0

	DATUM	NAME
BEARB.		HÖHN
GEPR.		
NORM	24.9.79	
GEZ.	25.4.78	MANSTEIN

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH
FERNSEHANLAGEN

LIST	ÄNDERUNG	DATUM	NAME

BL.

BLZ.

Mini Studio

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

CAMERA LINE UP

STUDIO M

M 24 BA MON.

TEKTR 528 OSCILLOSCOPE

KC 8H VS 568K MAIN CONTR. PANEL

RST 62 CONTROL UNIT CAM. LINE UP AND MATCHING

KCK CAM 7 — ZOOM — PAN/TILT HEAD

KA 64

CCU 7 KC VS 408 INCL. KCTN 9

6 × DATALINE SEPARATOR

DISP. L1
DISP. L2
DISP. L3
DIA 1
DIA 2
CHAR. GEN.

MON./PROD. CONTR.

P 11 COL. MON.

6 × HC 15 EQ 41 EQUALIZER

VIDEO/AUDIO MATRIX
VDA
VIDEO MATRIX

R 510 BW PATCH PANEL PP

CAM. 7
DISP. L1
DISP. L2
DISP. L3
DIA. 1
DIA. 2
CHAR. GEN. DISP. L4

VIDEO AND AUDIO MIXER RC 1041 MC 60 MODIFIED

SEE DRAWING NO: 0 957 442 401 AP1

IN: CAM. 7, DISP. L1, DISP. L2, DISP. L3, DIA. 1, DIA. 2, CHAR. GEN. DISP. L4, SPARE, SPARE, 10 (BLACK)

CCU 7 — RGB CAM 7 — RGB CHR KEY IN

CAPT. IN: CAM. 7, DIA 1, DIA 2, CHAR. GEN. DISP. L4

TOM OUT
PRESET OUT
PV OUT
LINE OUT

OSC./VECT.
MON./PROD. CONTR.
DATALINE SEPARATOR
HC SB 42 IC AS 42 PROCESSOR
VI DATALINE GEN.
Y/VDA
HC LK 62 VIDEO DELAY UNIT
PATCH PANEL PP
VIDEO/AUDIO MATRIX
MON/STUDIO

R 310 BW PATCH PANEL PP

PEM 41 PLUGE
PGI 42 GRID-PATTERN GEN.
V.D.A.
V.D.A.
2 × HC 215 VT 41 VIDEO DISTR.
MONS

PULSE DISTR — IC SI 41 FASK-DECODER

PULSE AND SUBCARRIER DISTR.
2 × I 215 VT 41
1 × HC 215 VT 41
1 × IC 13 VZ 62
4 × UN 068

PRODUCTION CONTROL

7 × M 38 BB B/W MONITOR

CAM. 7 | DISP. 1 | DISP. 2 | DISP. 3 | DIA 1 | DIA 2 | CHAR. GEN. DISP

CAMERA/TECHNICAL CONTROL

TEKTR 528 OSCILLOSCOPE CAM./TECHN. CONTR. — CCU 7
MC 51 BA COL. MON. MATCHING/TECHN. CONTR. — MIXER
TEKTR 1421 VECTORSCOPE
TEKTR. 528 OSCILLOSCOPE

MC 51 BB COL. MON. PV
MC 51 BB COL. MON. PRESET
MC 51 BB COL. MON. LINE
— MIXER

REMOTE CONTROLS

KC VS 529 K, KC VS 515 K, KC VS 515 K1, KC DA 515	EVERSHED CONTR. PANEL	MIXER TECHN. MONITOR	PROCESSOR CONTR. PANEL	0 2× DIA	E 1× CHAR. GEN.	D 2× VTR	C 1× VCR	A 2× TC	F 1× SM	R 101 KR DATALINE ON/OFF	CONTROL PANEL MIXER

SEE DRAWING NO. 0 957 442 806 AP0

SEE DRAWING NO 0 957 442 801-806

1 DESK CAM./TECHN./PROD. CONTR. 5 UNITS WIDE

6×X5-24NG41 POWER SUPPLY

CONTROL ROOM

DATA DISPLAY AND KEY BOARD — ONLY DISPLAY OF SCHEDULE

COMP. BUS

1 MONITOR RACK

EQUIPMENT MOUNTED IN 4 RACKS

C.R. EQUIPMENT

PART OF OTHER DRAWING

		DATUM	NAME
	BEARB.		ROSENDAHL
	GEPR.		
	NORM	3.V.78	
	GEZ.	31.03.78	DRAUDT

ZUST. | ÄNDERUNG | DATUM | NAME

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DANMARKS RADIO

STUDIO M

0 957 442 400 AP1

BL.
BLZ.

MODULFRAME CAMERA / TECHNICAL CONTROL

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
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AEF
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

TECHNICAL MONITORING

CAM 7 | DISP 1 | DISP 2 | DISP 3 | DIA 1 | DIA 2 | CHAR GEN DISP 9 | SPARE | SPARE | BLACK

CHR KEY | MIX | CAPT.

LOCAL | REMOTE

X 582

X 546

X 525

X 525

X 525

X 515

X 555

MATCH

GAIN

BLACK LEVEL

OFF ON
ON AIR
FILTER
VIEWFINDER | OVERCAN | BIAS LIGHT
BEAM | COLOR TEMP | GAIN (CB)
BLACK STRETCH | LUM GAMMA
ENC | SUP | SECO
MONITORING
BLACK | GAIN
AUTO

MATCHING
AUTO BALANCE
BLACK LEVEL GAIN
KCVS515K1

AUTO IRIS
IRIS/MASTER BL.
KCVS515K1

ON AIR
ON
MATCHING
BLACK LEVEL GAIN
KCVS515K1

PRESENT | NEXT
STORE
FINE / COARSE
FADE SPEED
FOCUS | ZOOM
TILT | PAN

105

ELECTR ZOOM
Y-CORR

47

SET PAGE | CTRL PRINT | CENTRE | STOP | FAST | MEDIUM | SLOW | PAGE | CUT
NORMAL | WRITE | STORE | SET POS

R G
01
POS
NEG

7 8 9 / 4 5 6 / 1 2 3 / 0 EXEC VISU / -1 +1

R G
02
POS
NEG

FAST REV | FAST FWD | CUE
NORMAL
FREEZE
RECORD
N | SM 1 | SM 2 | SM 3 | FREEZE | A

CAMERA | EVERSHED | CHARACTER GENERATOR | DIA / P1 | DIA / P2 | SLOW MOTION

480 × 960 mm

MODULFRAME PRODUCTION CONTROL

X 511 | h min sec fr | h min sec fr | X 521

X 512 | X 512

R G
01 | 01 | 05 | 01 | 02

RE CORD | FAST WIND | RE WIND | PLAY | STOP
SEARCH

START | STOP | FAST WIND | RE WIND | RE VERSE

VCR | VTR / P1 | VTR / P2 | TC / P1 | TC / P2

240 × 280 mm

				SCALE 1:2	DANMARKS-RADIO
				DATUM / NAME	
				BEARB. — ROSENDAHL	LAYOUT STUDIO M
				GEPR. —	
				NORM. 25.4.78	
				GEZ. 24.4.78 ZUBROD	
ZUST.	ÄNDERUNG	DATUM	NAME	ROBERT BOSCH GMBH GESCHÄFTSBEREICH FERNSEHANLAGEN	0 957 442 400 AZ 2 — BL. — BLZ.

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

PRODUCTION CONTROL

CONTROL PANEL
TECHNICAL MONITORING

MODULEFRAME
MIXER

1XNG 42
POWER SUPPLY

4 x XS-24 NG 41
POWER SUPPLY
1 2 3 4

FROM IFIC-BUS

RST 516
CONTROL UNIT AND LOGIC

RLW 9
SOURCES
RLW 9
MONITORS
1
20
CUE LIGHT TO SOURCES AND MONITORS

CUE LINE DISTRIB

INPUTS 2-9

RC 1010 EK
VIDEO CROSSBAR
10 x 4
VC 1

CAM 7 1
DISP 1 2
DISP 2 3
DISP 3 4
DIA 1 5
DIA 2 6
CHAR GEN DSP 7
SPARE 8
SPARE 9
BLACK 10

HC MB 41
BLACK GEN

PRESET / PROGRAM
A B
PV
TECHN MONIT

V.D.A
HC 215 VT 41
INPUT 1
CAM 7

RC 41 EK
VIDEO CROSSBAR
VC 3
A
B
PV

R,G,B CHROMA KEY INPUT
CAM 7

RC CK 62
CHROMA KEY UNIT
IN A FORE GR
IN B BACK GR
IN KEY
OUT
100

τ 1
τ 2
2 x HC LK DELAY EQUAL
100

τ 5
HC LK DELAY EQUAL
300

SS 5
SS 6
2 x RC US VIDEO SWITCH

RC US VIDEO SWITCH SS 7

PRESET MON OUT

CAPTION ADDER INPUTS 2-4
CAM 7
DIA 1
DIA 2
CHAR GEN DSP
CAPT
MASK
2x RC 41 EK VIDEO CROSSBAR VC 2

ELECTR CAPT IN
CAPT ADDER

RC 21 ME 66
MIXER
RTQ 55
EFFECTS GEN
IN A
IN B
OUT
200

SS 8
RC US
VIDEO SWITCH
ELECTR CAPT IN

CAPT IN
MASK IN
ELECTR CAPT IN
IN
OUT
PV OUT
RC ZU 68
CAPTION ADDER
300

RC 15 ED 47/2
VIDEO EQUAL

LINE OUT

τ 3
HC LK DELAY EQUAL
200
CHROMA KEY

τ 4
HC LK DELAY EQUAL
100
MIX

CAPT IN

RC 41 EK
VIDEO CROSSBAR
VC 4

PV
PV OUT

EXT SIGN IN

RC 81 EK 62
VIDEO CROSSBAR
VC 5

TECHN. MONITORING
TECHN. MONITORING OUT

CAPT ADDER
SYNC OUT (CHAR GEN./CAPT SC.)

1 13 VZ 62
DELAY UNIT
SYNC 1
BLANK 2
SYNC
BLANK
BURST FLAG
SUBC
PULSE DISTRIBUTION
TO THE UNITS

AUDIO MIXER

MIKRO
EXT IN 3-9
EQUALIZER / FILTER
1o
1h
AUDIO CROSSBAR
1 2 3 4 5 6 7 8 9 10
PLN
PRESET / PROGRAM

OFF SPEAKER
INTERN SOURCES
A
B
C
D

2 x EF 15 DISTR
2 x EF 12 DISTR

2 x EB 201
AUTOMATIC FADER
PRESET / PROGRAM
PLN

TEST GEN 1M

EMT 255
KOMPRESSOR
VU-METER
VU-METER
PGM OUT
PGM MONIT
PLN

τ 1,2 HC LK 62 2 x HC 341
τ 3,4 HC LK 62 2 x HC 341
τ 5 HC LK 62 1 x HC 341
SS 5,6,7,8 RC US 62 2 x RC 285
VC 2,3 RC 241 EK 62 2 x RC 287
VC 4 RC 41 EK 62 1 x RC 287

900 DELAY IN ns
1 100 DELAY TIME PLANE IN ns

				DATUM	NAME
				GEZ.	
				GEPR.	
				NORM	
				GEZ. 1980-79	DRAUDT
				ROBERT BOSCH GMBH	
				GESCHÄFTSBEREICH	
				FERNSEHANLAGEN	
1		20.2.80			
INDEX	ÄNDERUNG	DATUM	NAME		

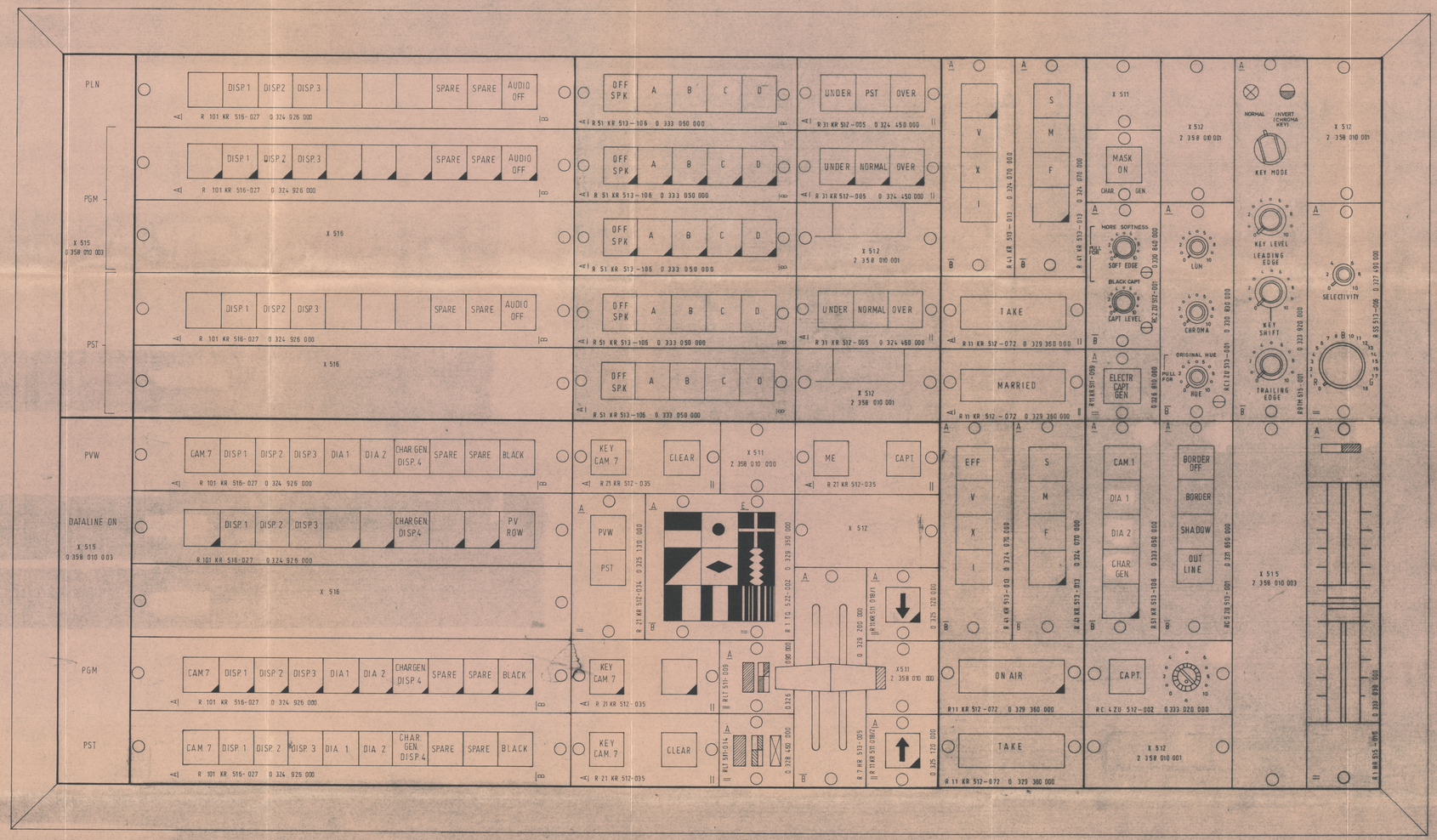
DANMARKS - RADIO

MIXER STUDIO M

0 957 442 401 AP 0

BL.
BEZ.

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED



| | | |

Editing Rooms CNR

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

EDITING ROOM
CNR 1

DATA DISPLAY AND KEY BOARD

CONTROL ROOM
8 × M 38 BB / BW MON.

PV CITY ST.
DISP. L1
DISP. L2
VTR DISP. L3
VTR DISP. L4
VTR DISP. L5
CHAR. GEN DISP. L6
CHAR. GEN DISP. L7

TECHNICAL CONTROL
TEKTR. 528 OSCILLOSCOPE
TEKTR. 1421 VECTORSCOPE
MC 51 BA COL. MON.
MIXER

PRESET
P.V
LINE
3 × MC 51 BB COL. MON.
1 MONITOR RACK
MIXER
SEE DRAWINGS NO. 0 957 442 801-806

CITY STUDIO REMOTE CONTROLS
2 × CAMERA CONTROL
2 × EVERSHED CONTROL
MIXER
2 × CAMERA PRESELECT
SEE DRWG. NO 0 957 442 806

TECHN. MONITORING

FUNCTIONAL EDITING KEY BOARD

R 101 KR DATALINE ON / OFF
MANUAL CONTROL PANEL MIXER

D 3 × VTR
C 1 × VCR
B 2 × TC
G 2 × DIA
E 2 × CHAR. GEN.
F 1 × SLOW MOT
M 1 × ATR
REMOTE CONTROLS
1 DESK 5 UNITS

COMPUTER BUS

7 × VI DATALINE SEPARATOR
DISP. L1
DISP. L2
VTR DISP. L3
VTR DISP. L4
VTR DISP. L5
CHAR. GEN DISP. L6
CHAR. GEN DISP. L7

C.R. COMPUTER CONTROL INTERFACE

3 × X5-2 × NG41 POWER SUPPLY

RC 2014 VT 694 VDA

R 510 BW PATCH PANEL

VIDEO / AUDIO MATRIX

P. P.

DISP. L1
DISP. L2
VTR DISP. L3
VTR DISP. L4
VTR DISP. L5
CHAR. GEN DISP. L6
CHAR. GEN DISP. L7

VIDEO / AUDIO MIXER
RC 1041 MC 60
MODIFIED
SEE DRAWING NO. 0 957 442 501 AP 1

IN
1
2
3
4
5
6
7
SPARE 8
9
10 (BLACK)

CAPT-MASK
CAPT-MASK
CAPT. IN 1
2
3
4

PV
PRESET
TOM
LINE

VI DATALINE SEPARATOR
MONS PROD. CONTROL
OSC. / VECT.
VI DATALINE GENERATOR
2 / VDA
HC LK 62 VIDEO DELAY
P. P.
PATCH PANEL
MATRIX

PULSE MATRIX
IC SI 41 FASK DECOD
PULSE DISTRIBUTION
I 215 VT 41
HC 215 VT 41
I 13 VZ 62
6 × UN 068

EQUIPMENT MOUNTED IN 3 RACKS
C. ROVSING EQUIPMENT
PART OF OTHER DRAWING

EDITING ROOM
CNR 2
(EQUIPPED LIKE CNR 1)

DANMARKS - RADIO

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	18.5.78	
GEZ.	7.4.78	R. M.

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

EDITING ROOMS CNR

0 957 442 500 AP 1

BL
BLZ

ZUST. ÄNDERUNG DATUM NAME

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
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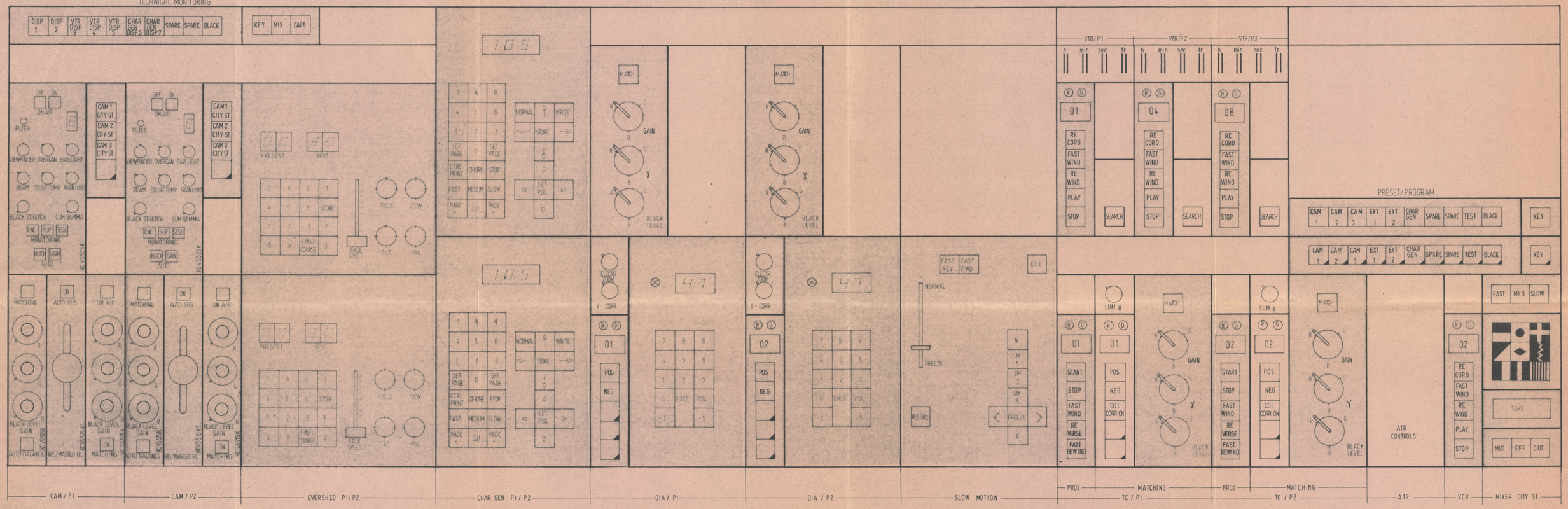
VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GND
EGA
VOB
ESS
EVG
VKF
EUG

MODULFRAME REMOTE CONTROLS



480 × 1600 mm

			SCALE 1:2		DANMARKS - RADIO
				DATUM / NAME	
			BEARB.	ROSENDAHL	LAYOUT CNR1/2
			GEPR.		
			NORM 26.4.78		
			GEZ. 24.4.78	SKODA	
ZUST.	ÄNDERUNG	DATUM	NAME	ROBERT BOSCH GMBH GESCHÄFTSBEREICH FERNSEHANLAGEN	0 957 442 500 AZ 1 BL. BLZ

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
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CONTROL ROOM

CONTROL PANEL
TECHNICAL MONITORING

MODULE FRAME
MIXER

XNG 42
POWER SUPPLY

4 × XS-24 NG 41
POWER SUPPLY

IF (C-BUS)

RST 610
CONTROL UNIT AND LOGIC

RLW 9
SOURCES

RLW 9
MONITORS

CUE LINE DISTRIB

CUE LIGHT TO SOURCES AND MONITORS

MATRIX

DISP 1
DISP 2
VTR DISP 3
VTR DISP 4
VTR DISP 5
CHAR GEN DISP6
CHAR GEN DISP 7
SPARE
BLACK

HC MB 41
BLACK GEN

RC 1010 EK
VIDEO CROSSBAR
10 × 4
VC 1

PRESET / PROGRAM
A B

PV
TECHN MONIT

HC LK
DELAY EQUAL

RC 05
VIDEO SWITCH
SS 7

PRESET MON OUT

IN A IN B
RC 21 ME 66
MIXER
RTQ 166
EFFECTS GEN
OUT

SS 8
RC 05
VIDEO SWITCH

ELECTR CAPT IN

CAPTION ADDER INPUTS
DISP 1
DISP 2
CHAR GEN DISP 1
CHAR GEN DISP 2

2x
RC 41 EK
VIDEO CROSSBAR
VC 2

CAPT
MASK

ELECTR CAPT IN

CAPT ADDER

CAPT IN MASK IN ELECTR CAPT IN
IN
OUT
PV OUT
RC ZU 68
CAPTION ADDER

RC 15 60 47/2
VIDEO EQUAL

LINE OUT

HC LK
DELAY EQUAL

TGU

CAPT IN
MIX

RC 41 EK
VIDEO CROSSBAR
VC 4

PV
PV OUT

EXT. SIGN. IN

TECHN. MONITORING
HC 81 EK 62
VIDEO CROSSBAR
VC 5

TECHN. MONITORING OUT

CAPT ADDER
SYNC OUT
(CHAR GEN /CAPT SC.)

PULSE DISTRIBUTION
SYNC
BLANK
BURST FLAG
SUBC

1 13 VZ 52
DELAY UNIT
SYNC 1
BLANK 2

TO THE UNITS

AUDIO MIXER

EXT. IN 1-9

EQUALIZER / FILTER

AUDIO CROSSBAR

PVN
PRESET / PROGRAM

OFF SPEAKER
INTERN SOURCES
A
B
C
D

2×3EF 15 DISTR
2×3EF 12 DISTR

PRESET / PROGRAM
PLN

2×EB 201
AUTOMATIC FADER

TEST GEN

EMT 255
KOMPRESSOR

VU-METER
VU-METER

PGM OUT
PGM MONIT
PLN

ℰ 4	HC LK 62	1× HC 343
ℰ 5	HC LK 62	1× HC 341
SS 7.0	RC 05 62	1× RC 285
VC 4	RC 41 EK 62	1× RC 287

900 DELAY IN ns
1.100 DELAY TIME PLANE IN ns

DANMARKS - RADIO

MIXER EDITING ROOM
CNR 1 / CNR 2

0 957 442 501 AP 0

	DATUM	NAME
GEZ	30.04.79	DRAGOLI
NORM	24.11.78	
TP/K		
M BAR		ROSENDAHL

PROJEKT-SCHUTZ (EMPFINDLICHKEIT) BEREICH
GEHEIMHALTUNGSGRAD

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

PLN

PGM

PST

X 525
0 358 010 003

PVW

DATALINE ON

X 515
0 358 010 003

PGM

PST

DISP. 1 | DISP. 2 | VTR DISP. 3 | VTR DISP. 4 | VTR DISP. 5 | CHAR.GEN. DISP. 6 | CHAR.GEN. DISP. 7 | SPARE | SPARE | AUDIO OFF

OFF SPK | A | B | C | D

R 51 KR 513–106 0 333 050 000

UNDER | NORMAL | OVER

R 31 KR 512–005 0 324 450 000

X 512
2 358 010 001

V | X | I

S | M | F

R 41 KR 513–013 0 324 070 000

TAKE

R 11 KR 512–072 0 329 360 000

MARRIED

X 511

MASK ON

CHAR. GEN.

X 512
2 358 010 001

X 515

X 513

MORE SOFTNESS

SOFT EDGE

BLACK CAPT.

CAPT LEVEL

RC 420 512–001 0 330 840 000

LUM

CHROMA

ORIGINAL HUE

HUE

PULL 2 FOR

RC 420 513–001 0 330 840 000

ELECTR CAPT GEN

R 51 KR 513–106 0 333 050 000

R 41 KR 513–009 0 324 070 000

ME | CAPT.

X 531

X 522
2 358 010 100

PVW | PST

R 21 KR 512–034 0 329 130 000

R 11 TA 522–002 0 329 350 000

EFF | V | X | I

R 41 KR 513–010 0 324 070 000

DISP. 1 | DISP. 2 | CHAR.GEN. DISP. 6 | CHAR.GEN. DISP. 7

R 51 KR 513–108 0 333 050 000

BORDER OFF | BORDER | SHADOW | OUT LINE

RC 520 513–001 0 329 850 000

X 515
2 358 010 003

R 41 KR 513–013 0 324 070 000

R 41 KR 513–011 0 324 070 000

R 41 KR 513–009 0 324 070 000

R 41 KR 513–008

Video/Audio Matrix

DANMARKS - RADIO

MATRIX AND MASTER CONTROL

0 957 442 700 AP 0

ROBERT BOSCH GMBH
FERNSEHTECHNIK
FERNSEHANLAGEN

MASTER CONTROL / CNM

OPERATIONAL CONTROL

TECHNICAL CONTROL

CR INTERFACE

CR COMPUTER BUS

CR REMOTE CONTR. BUS

REMOTE CONTROL PANELS

MANUAL DELEGATION CONTROL PANELS

2 × QUANTEL DFS 3001
PAL-DIGITAL FRAMESTORE SYNCHRONIZER

2 × RC 1010 KX
SWITCHING CMD AND MASK SIGNAL OUT (CONT SIGNALS TO SOURCES
(ON AIR INDICATION, RED)

2 × VIDEO CROSSBAR

RC 1010 KX
RC 3040 KX
VIDEO MATRIX

TFK
AUDIO MATRIX
(2 AUDIO CHANNELS)

VIDEO MATRIX CONTROLS: PART OF INTERCOM MATRIX

CUE LIGHT OUTPUTS TO SOURCES
(ON AIR INDICATION, RED)

2 AUDIO CHANNELS AND TIMECODE MATRIX
WILL BE CONTROLLED BY TFK INTERFACE
VIA SERIAL LINE FROM C.R INTERFACE

NOT EQUIPPED

SPARE

MONITOR OUTP

MONITOR INP 1-30

MONITOR INP 31-40

CAPTION INSERTER FEEDS TO SOURCES

STUDIO FEEDS AUDIO TAPE RECORDERS

STUDIO FEEDS TX LINES

RECORDING LINES
COPY MACHINES
SLOW MOTION

EXT GEN 1 x 4

3 × 510 BW
VIDEO PATCH PANEL
TFK
AUDIO PATCH PANEL

6 × RC US 62
VIDEO SWITCHER

RC US 62
VIDEO SWITCHER
TFK
AUDIO SWITCHER

4 × RC 301 KX
VIDEO CROSSBAR
4 TFK
AUDIO CROSSBAR

2 × R 510 BW
VIDEO PATCH PANEL

TEX
AUDIO PATCH PANEL

13 × 3EF 15
ADA
2 × RC 2014 VT 694
VOA
10 × HC 15 ED 41
EQUALIZER

23 × BERGER
EQUALIZER

2 × AUDIO
VIDEO
FROM SOURCES

SEE DRAWING NO. 0 957 442 806

SEE DRAWING NO. 0 957 442 700 AZ

LAYOUTS SEE DRAWING NO. 0 957 442 700 AZ

3 × RC 215 VT 41
VIDEO DISTR

DUMPULSE FASK
FROM CONT CENTRE

6 × RC US 62
VIDEO SWITCHER

2 × R 410 BW
PATCH PANEL

RC 41 EK 52
VIDEO CROSSBAR

4 × HC LK 62
VIDEO DELAY

VOA

CUT SI

TEILEAV LINE
TO CITY
STUDIO

ASOUDLOCK
COMPARATOR
AND
TRANSMITTER

MODEM

MASTER CNM

PULSE FEEDS TO DESTINATIONS

19 × Z = IC VZ 41
FASK DELAY UNIT

R 210 BW
PATCH PANEL

TFK
AUDIO
PATCH PANEL

TFK
AUDIO CROSSBAR
SMPTE TIME CODE / USERBITS
MATRIX

SMPTE CODE
FROM
SOURCES

MASTER
TIMECODE
GENERATOR

IC SI 41
FASK DEC

MAIN SPG

SPARE

DATALINE
TIMECODE
FROM
SOURCES

RC 1010 KX
DATALINE TIME CODE
MATRIX

TEXT GEN
3 x 4

CODE
READER

2 × HC 215VT 41
VIDEO DISTR

VOA

VIDEO DELAY

VCR 5-14
COPY MACHINES

VIR 1-5

VOA
GROUP

TFK
PATCH PANEL

C.R INTERFACE

FE EQUIPMENT MOUNTED IN 8 RACKS
CHR BOXING INTERFACES MOUNTED IN 1 RACK

EQUIPMENT

PART OF
OTHER DRAWING

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

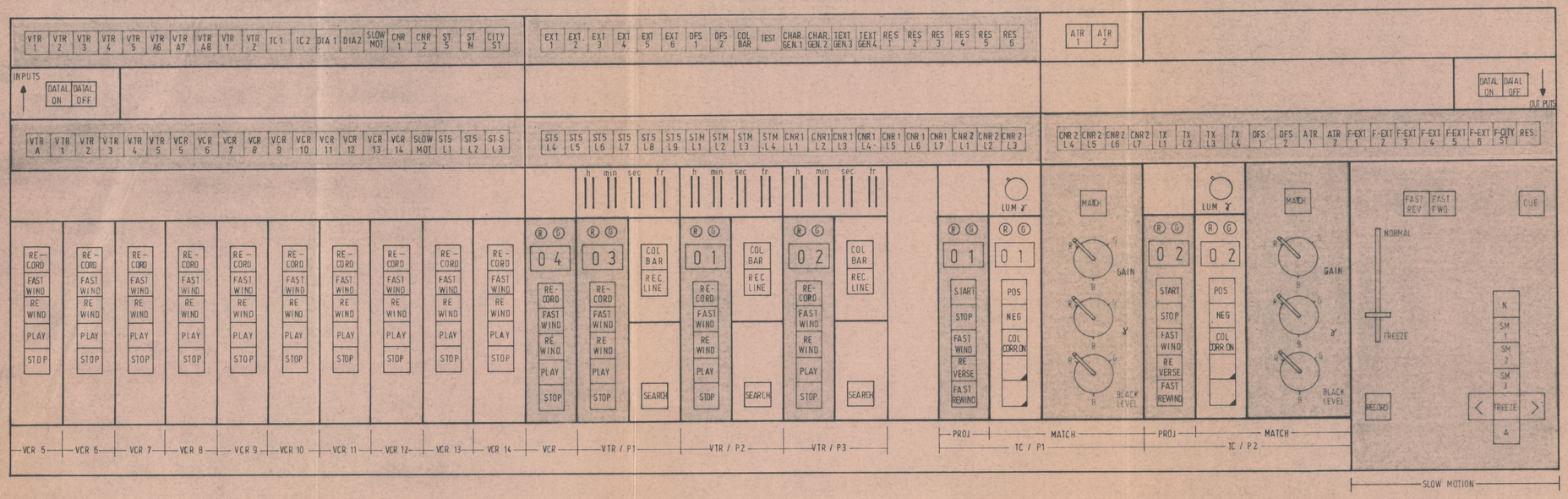
VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

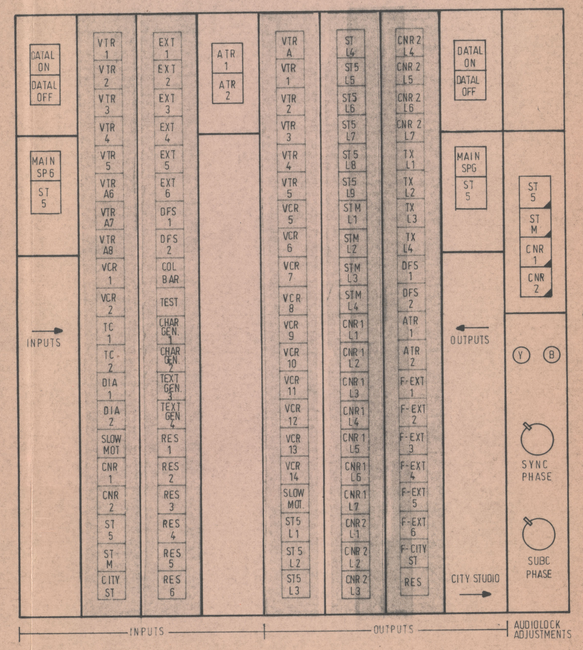
EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

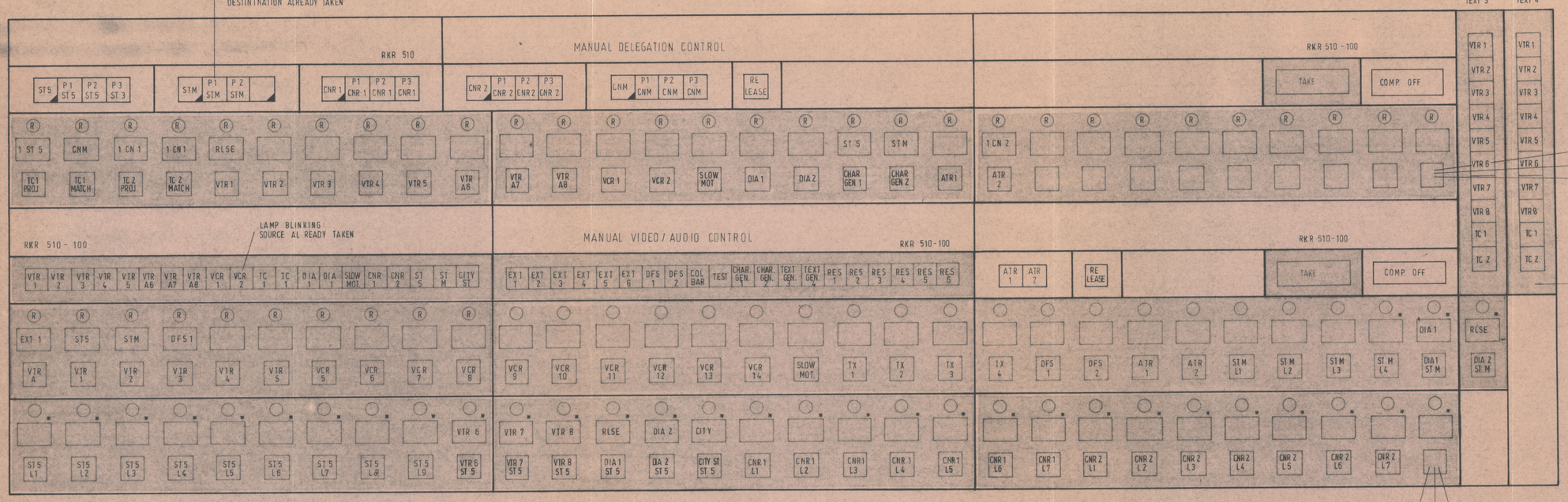
MODULFRAME OPERATIONAL CONTROL



MODULFRAME TECHNICAL CONTROL



MODULFRAME OPERATIONAL CONTROLS



SUBTITLING
TEXT 3 TEXT 4

VTR 1 VTR 2 VTR 3 VTR 4 VTR 5 VTR 6 VTR 7 VTR 8 TC 1 TC 2

(R) RED ON AIR INDICATION (PREVENTS FROM SWITCHING)
(G) READY INDICATION (GREEN)

LAMP ILLUMINATED: READY FOR TAKE
LAMP BLINKING: SOURCE IS ALREADY DELEGATED
LAMP BLINKING FAST: IMPOSSBLE DELEGATION

SWITCHING TIME CODE MATRIX

ONLY INDICATION

LAMP ILLUMINATED: READY FOR TAKE
LAMP BLINKING: DESTINATION IS ALREADY TAKEN (ONLY VALID FOR STUDIO FEEDS MARKED *)
LAMP BLINKING FAST: IMPOSSIBLE CONNECTION

SCALE 1:2

DANMARKS - RADIO

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	26.4.74	
GEZ	20.4.78	ZOBROT

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

ZUST. ÄNDERUNG DATUM NAME

LAYOUT MASTER CONTROL CNM

0 957 442 700 AZ 1

BL.
BLZ.

1000 DIN A 1 - 8.78 - Ernst Richter Nachf. Kln

FOR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
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MASTER TIMECODE

VTR 1
VTR 2
VTR 3
VTR 4
VTR 5
VTR A 6
VTR A 7
VTR A 8

VCR 1
VCR 2

TC 1
TC 2

DIA 1
DIA 2

SLOW MOT.

CNR 1
CNR 2
ST 5
ST M
CITY ST.

EXT. 1
EXT. 2
EXT. 3
EXT. 4
EXT. 5
EXT. 6

DFS 1
DFS 2

COL. BAR
TEST

CHAR. GEN. 1 — CAPT. + MASK
CHAR. GEN. 2 — CAPT. + MASK
TEXT GEN. 1 — CAPT. + MASK
TEXT GEN. 2 — CAPT. + MASK
6 x SPARE

PV CITY ST.

ATR 1
ATR 2

1 2 3 4 5 6 — VTR A GROUP
7 8 9 10 11 12 13 14 15 16 — VTR RECORDING LINES
17 — SLOW MOT.
18 19 20 21 22 23 24 61 62 — VCR COPY MACHINES
25 26 27 63 — STUDIO 5 FEEDS
28 29 41 42 43 64 — STUDIO M FEEDS
30 31 44 45 46 65 — CNR 1 FEEDS
32 33 34 35 — CNR 2 FEEDS
36 37 — TX LINES
48 47 — DFS 1, DFS 2
38 39 — ATR 1, ATR 2
51 52 53 54 55 56 — TECHN. MON.
56 — FEED BACK LINES
TEXT GEN 3/4

SOURCE WITH TIMECODE IN VERT. INTERV. OF VIDEO SIGN.
ONLY PULSE DELEGATION FUNCTIONS: VIDEO AND AUDIO DISTRIBUTED IN PARALLEL
VIDEO / AUDIO CROSSPOINT
AUDIO ONLY CROSSPOINT
ADDITIONALLY TIME CODE
AUTOMATIC FEEDBACK CROSSPOINT
PROHIBITED CROSSPOINTS
CROSSPOINTS WITH INTERCOM ADDITIONALLY

ZUST.	ÄNDERUNG	DATUM	NAME
		BEARB.	ROSENDAHL
		GEPR.	
		NORM	11. 4. 78
		GEZ.	10. 4. 78 HANSTEIN

DANMARKS RADIO

VIDEO - AUDIO - MATRIX

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH
FERNSEHANLAGEN

0 957 442 701 AZ2

BL.
BLZ.

Delegation Description

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
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CNR 1
EDITING ROOM

CNR 2
EDITING ROOM

CNM
MASTER CONTROL

DATA DISPLAY AND KEY BOARD

REMOTE CONTROLS

TC/P1 | TC/P2 | DIA/P1 | DIA/P2 | VTR/P1 | VTR/P2 | VTR/P3 | ATR | VCR | CHAR GEN P1 | CHAR GEN P2 | SLOW MOT | 2x REM CAM | 2x PAN/TILT | MIXER CITY STUD | CAM AND PAN/TILT SELECTION

SEE DRAWING NO. 0 957 442 805 AP

C.R INTERFACE

REMOTE CONTROLS

TC/P1 | TC/P2 | VTR/P1 | VTR/P2 | VTR/P3 | VCR | SLOW MOT | 10 x VCR COPY MACHINES

SEE DRAWING NO. 0 957 442 804 AP

MANUAL CONTROL PANEL VIDEO / AUDIO MATRIX

DELEGATION CONTROL PANELS

TC | DIA | VTR | VCR | SLOW MOT | CHAR GEN | ATR

PRINTER | KEY BOARD

OPERATIONAL CONTROL: INPUT SELECTION | OUTPUT SELECTION

TECHNICAL MONITORING: INPUT SELECTION | OUTPUT SELECTION

COMP BUS

REM BUS

FROM SHEET 1

MIXER

ST5

CNR 1

CNR 2

DECISION MAKING ROOM 1

VCR 15 SLAVE | VCR 16 SLAVE / MASTER

DECISION MAKING ROOM 2

VCR 17 SLAVE | VCR 18 SLAVE / MASTER

DECISION MAKING ROOM 3

VCR 19 SLAVE | VCR 20 SLAVE / MASTER

DECISION MAKING ROOM 4

VCR 21 SLAVE | VCR 22 SLAVE / MASTER

VIDEO / AUDIO MATRIX
SEE DRAWING NO. 0 957 442 700 AP

PULSE CROSSBAR
SEE DRAWING NO. 0 957 442 700 AP

EDITORS ROOM

C.R OWNING EQUIPMENT

PROVIDED BY CUSTOMER

EQUIPMENT FROM OTHER SUPPLIERS

SHEET: 2

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	6.7.78	
GEZ.	3.4.78	ALBAT

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH
FERNSEHANLAGEN

DR - DANMARK

DELEGATION-AND COMPUTER CONTROL SYSTEM
BLOCKDIAGRAM

0 957 442 800 APO

BL. 2
BLZ. 2

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

BOOKING COMPUTER
EDITING COMPUTER
PROGRAM CONTROL COMPUTER
FLOPPY DISK
FLOPPY DISK
FLOPPY DISK

STUDIO 5
PRODUCTION CONTROL

DATA DISPLAY AND KEY BOARDS
EDITOR
PRODUCER
VISION MIXER
SOUND MIXER
TECHN. CONTR.

REMOTE CONTROLS MIXER
A TC / P1
A TC / P2
C VCR
D VTR/P1
D VTR/P2
D VTR/P3
L MIXER CITY STUD
SEE DRAWING NO 0 957 442 806 AP

REMOTE CONTROLS
E CHAR GEN P1
E CHAR GEN P2
F SLOW MOT
G DIA/P1
G DIA/P2
REM. CAM. P1
REM. CAM. P2
PAN/TILT P1
PAN/TILT P2
CAM. AND PAN/TILT SELECTION
SEE DRAWING NO 0 957 442 806 AP

C.R. INTERFACE

STUDIO M
PRODUCTION CONTROL

DATA DISPLAY AND KEY BOARD
ONLY DISPLAY OF SCHEDULE

REMOTE CONTROLS MIXER
A TC
VTR/P1
VTR/P2
VCR

REMOTE CONTROLS
CHAR GEN.
SLOW MOT.
DIA/P1
DIA/P2
CAM.
PAN/TILT
SEE DRAWING NO 0 957 442 806 AP

C.R. INTERFACE

TIMER
TIMER
COMP. BUS
REM. BUS
MASTERTIME CODE GENERATOR
19 x C.R. INTERFACE

TO SHEET 2
TO SHEET 2

TC 1 RANK CINTEL MARK III
TC 2 RANK CINTEL MARK II
DIA 1 THOMSON TTV 2705 TTV 2800
DIA 2 THOMSON TTV 2705 TTV 2800
VTR 1 BCN 50
VTR 2 BCN 50
VTR 3 BCN 50
VTR 4 BCN 50
VTR 5 BCN 50
VTR 6 A BCN 50
VTR 7 A BCN 50
VTR 8 A BCN 50
VCR 1 SONY BVU 200 P TBC BVT 1000 P
VCR 2 SONY BVU 200 P TBC BVT 1000 P
HS 100 AMPEX SLOW MOTION
CHAR. GEN. 1 CHIRON II
CHAR. GEN. 2 CHIRON II
ATR 1
ATR 2

CHAR. GEN. 1: FLOPPY DISK, KEY BOARD
CHAR. GEN. 2: FLOPPY DISK, KEY BOARD

TEXT AND REHEARSAL ROOM
TEXT GEN 3 TORE SEEM
TEXT GEN 4 TORE SEEM
FLOPPY DISK
FLOPPY DISK
KEY BOARD
KEY BOARD

ROVSING EQUIPMENT
PROVIDED BY CUSTOMER
EQUIPMENT FROM OTHER SUPPLIERS'

SHEET: 1

ZUST.	ÄNDERUNG	DATUM	NAME

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	6.4.78	
GEZ	30.3.78	ALBAT

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DR - DANMARK

DELEGATION-AND COMPUTER CONTROL SYSTEM
BLOCKDIAGRAM

0 957 442 800 AP 1

BL. 1
BLZ 2

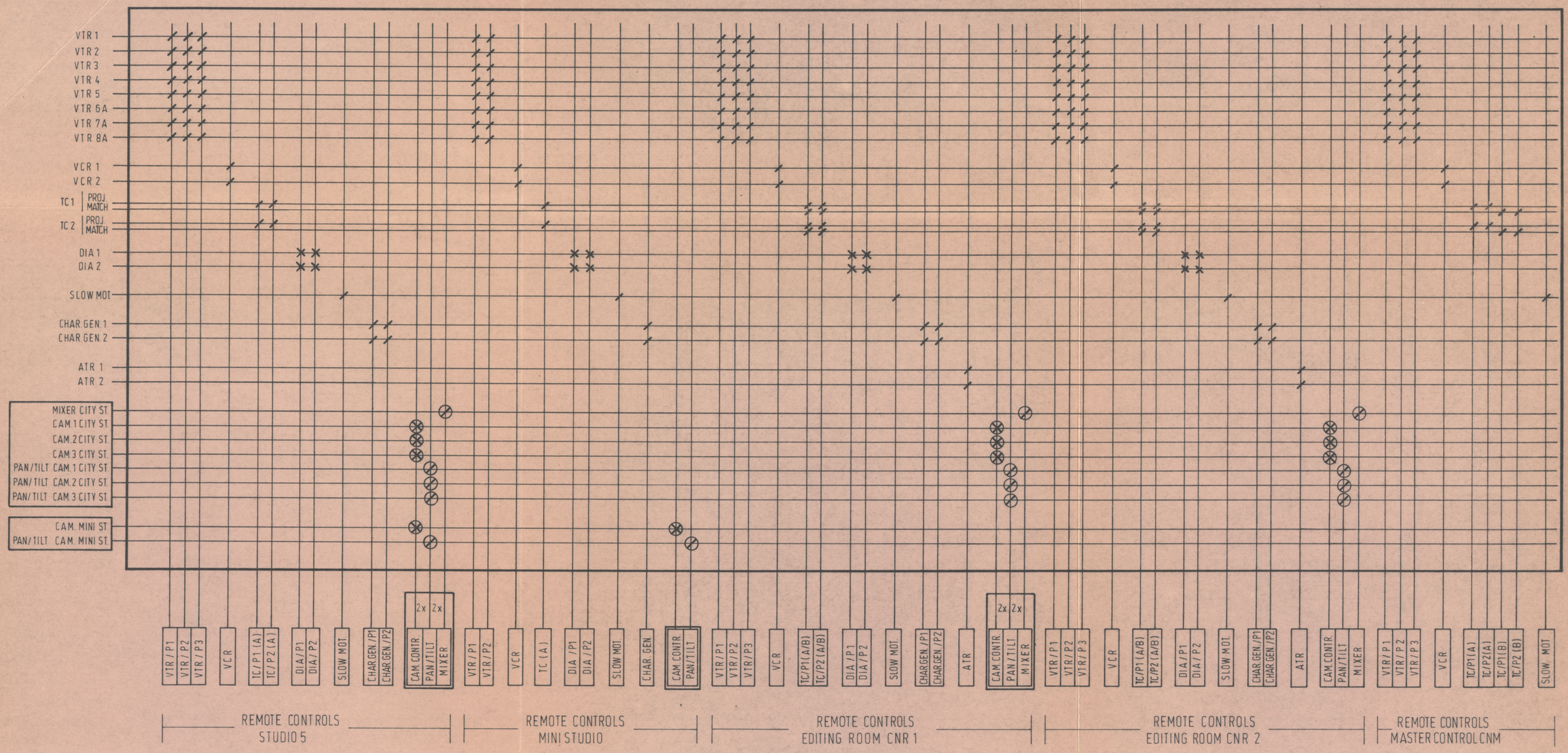
FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

AEF
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GR
EGA
VOB
ESS
EVG
VKF
EUG



CONNECTIONS VIA BUS

CONNECTIONS INCLUDING CAM.CONTR.FUNCT. VIA BUS

CONNECTIONS VIA FE-SYSTEM (ONLY MANUAL SELECTION IN STUDIO PROD. CONTR.)

DIFFERENT FUNCTIONS CAN BE DELEGATED ONLY TOGETHER

ZUST.	ÄNDERUNG	DATUM	NAME

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	30.3.78	
GEZ.	29.3.78	HANSTEIN

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DANMARKS-RADIO

MATRIX
REMOTE CONTROL DELEGATION

0 957 442 800 AZ 2

BL.
BLZ.

FOR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

MATRIX
ON AIR INDICATION
C.R INTERFACE
REM IN
DL TC IN
3 x X 5 - 24 NG 41
POWER SUPPLY
FILM TIMER
CODE READER (MODIFIED)
DATALINE TIMECODE
TC 1
INCL AUTOM. COL. CORR.
PULSE DISTR.
IC SI 41 FASK DECOD.
VIDEO OUT
YRGB
XC LO 41 PAL ENCODER
DL TC IN
VIDEO IN
VI DATALINE GEN.
VIDEO OUT
VIDEO/ AUDIO MATRIX
RANK CINTEL MARK II

MATRIX
ON AIR INDICATION
C.R INTERFACE
REM IN
DL TC IN
FILM TIMER
CODE READER (MODIFIED)
DATALINE TIMECODE
TC 2
INCL AUTOM. COL. CORR.
PULSE DISTR.
IC SI 41 FASK DECOD.
VIDEO OUT
YRGB
XC CO 41 PAL ENCODER
DL TC IN
VIDEO IN
VI DATALINE GEN.
AUDIO OUT
VIDEO/ AUDIO MATRIX
RANK CINTEL MARK III

C.R INTERFACE
TIME CODE READER
DL TC
ATR 1
AUDIO/ TIMECODE MATRIX
SMPTE TC
TC IN
AUDIO IN
TC OUT
AUDIO OUT
TC SMPTE
STUDER A 80
AUDIO/ TIMECODE MATRIX

C.R INTERFACE
TIME CODE READER
DL TC
ATR 2
AUDIO/ TIMECODE MATRIX
SMPTE TC
TC IN
AUDIO IN
TC OUT
AUDIO OUT
TC SMPTE
STUDER A 80
AUDIO/ TIMECODE MATRIX

3 x X 5 - 24 NG 41
POWER SUPPLY

C.R COMPUTER BUS
C.R REMOTE CONTROL BUS

STUDIO 5
POWER SUPPLY
C.R. INTERFACE
REMOTE CONTROL
TC/P1 A
TC/P2 A

STUDIO M
POWER SUPPLY
C.R. INTERFACE
REMOTE CONTROLS
TC/P1 A
TC/P2 A

CNR1
EDITING ROOM
POWER SUPPLY
C.R. INTERFACE
REMOTE CONTROLS
TC/P1 A+B
TC/P2 A+B
ATR H

CNR 2
EDITING ROOM
POWER SUPPLY
C.R. INTERFACE
REMOTE CONTROLS
TC/P1 A+B
TC/P2 A+B
ATR H

MASTER CONTROL/CNM
POWER SUPPLY
C.R. INTERFACE
REMOTE CONTROLS
TC/P1 A
TC/P1 B
TC/P2 A
TC/P2 B

TC REMOTE CONTROL PANELS

TYPE A
ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF MACHINE
START
STOP
REWIND
FAST WIND

TYPE B
ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF MACHINE
AUTOMATIC COL. CORR. ON/OFF
LUM GAIN
LUM BLACK LEVEL
LUM γ CORR.
COL. MATCH. GAIN
COL. MATCH. BLACK LEVEL | JOY STICKS
COL. MATCH. γ

ATR REMOTE CONTROL PANELS

TYPE H
NO OF MACHINE
START
STOP
TIME CODE DISPLAY

EQUIPMENT MOUNTED IN 1 RACK
C.ROVSING EQUIPMENT
PROVIDED BY DR

ZUST.	ANDERUNG	DATUM	NAME

	DATUM	NAME
BEARB.		ROSENDAHL
GEPR.		
NORM	5.7.78	
GEZ.	5.4.78	SKODA

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DANMARKS-RADIO

TELECINE AND ATR DELEGATION

0 957 442 801 AP 1

BL.
BLZ.

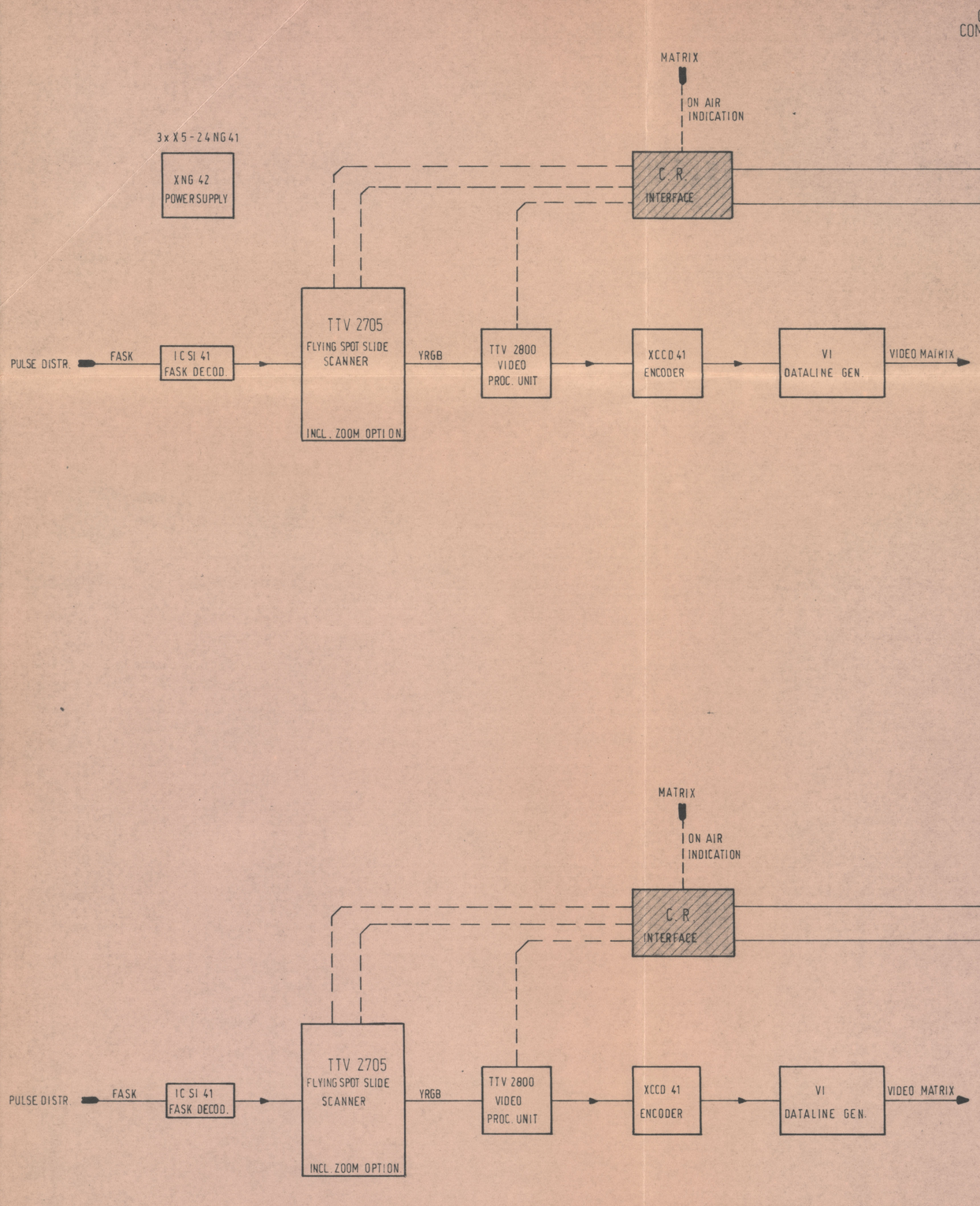
FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

AEF
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG



REMOTE CONTROL PANELS TYPE G:

ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF MASCHINE
SLIDE NO DISPLAY
10 BUTTON KEYBOARD FOR RANDOM SLIDE SELECTION
NEXT SLIDE BUTTON

ZOOM POTENTIOMETER

LUM GAIN
LUM γ-CORR.
LUM BLACKLEVEL
COL. MATCHING BLACK
COL. MATCHING γ
COL. MATCHING LUM

JOYSTICKS

EQUIPMENT MOUNTED IN 2 RACKS

C. ROVSING EQUIPMENT

ZUST.	ÄNDERUNG	DATUM	NAME
		BEARB.	ROSENDAHL
		GEPR.	
		NORM 5.4.78	
		GEZ. 5.4.78	R.M.

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DANMARKS RADIO

SLIDE SCANNER DELEGATION

0 957 442 802 AP 2

BL.
BLZ.

FÜR DIESE ZEICHNUNG BEHALTEN
WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

STUDIO 5
STUDIO M
CNR 1 EDITING ROOM
CNR 2 EDITING ROOM
CNM MASTER CONTROL

VTR/P1 D
VTR/P2 D
VTR/P3 D
POWER SUPPLY
C.R. INTERFACE

C.R. REMOTE CONTROL BUS
C.R. COMPUTER BUS

REMOTE CONTROL PANELS
TYPE D=
ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF MACHINE

STOP
PLAY
RECKID
FAST WIND
FAST REWIND

COL BAR ON

SEARCH BUTTON
SEARCH PROGRAMMING

EQUIPMENT MOUNTED IN 1 RACK
C.R.INSING EQUIPMENT
PART OF OTHER DRAWING

SEE DRAWING NO. 0 957 442 700 AP0
SMPTE TIMECODE/USERBITS MATRIX
VTR1 VTR2 VTR3 VTR4 VTR5 VTR6 VTR7 VTR8 VC1 VC2 ATR1 ATR2 MASTER TC
VTR1-5 VTR ATR1,2 A-GROUP
VCR5-14

SEE DRAWING NO 0 957 442 700 AP0
RC 3010 VTR
DL TIMECODE MATRIX
VTR 1 VTR 2 VTR 3 VTR 4 VTR5 VTR6 VTR7 VTR8 TC 1 TC 2
SYNC GEN

DL MASTER TIME CODE
MATRIX
ON AIR INDICATION
C.R. INTERFACE
DL TC
VIDEO/AUDIO MATRIX
VID IN
VT-DATALINE GENERATOR
DL TC
DL USER

ADA
VDA
VDA

2x AUDIO
SMPTE TC
DL TC
DL USERB
AUD 1,2 OUT
AUD 3 OUT
VID OUT
AUD 1,2 IN
AUD 3 IN
REF IN
VID IN
FASK
PULSE MATRIX

VTR 1
VTR 2
VTR 3
VTR 4
VTR 5
VTR 6
VTR 7
VTR 8

6x XS-24-NG41
POWER SUPPLY VTR 1-8

PC 265 V1.41
VIDEO DISTR
VDA

PC 18 41
AC CD 41
COL BAR GEN

HC 15 EQ 41
VIDEO EQUAL

8x RC 20N VTR4
VDA
8 x 3 EF 15
ADA

8x RC US 62
VIDEO SWITCHER

8x BCN 50
INCLUDING
MONITORING/TIMECODE GEN

R 410 BW
PATCH PANEL

VIDEO/AUDIO MATRIX

		DATUM	NAME
	BEARB.		ROSENDAHL
	GEPR.		
	NORM	7.4.78	
	GEZ.	7.4.78	ALBAT

ZUST. ÄNDERUNG DATUM NAME

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH
FERNSEHANLAGEN

DANMARKS RADIO

VTR DELEGATION

0 957 442 803 AP1

BL.
BLZ.

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

STUDIO 5
REMOTE CONTROL
VCR C
SLOW MOTION F
POWER SUPPLY
C.R. INTERFACE

STUDIO M
REMOTE CONTROL
VCR C
SLOW MOTION F
POWER SUPPLY
C.R. INTERFACE

C.N.R. 1
EDITING ROOM
REMOTE CONTROL
VCR C
SLOW MOTION F
POWER SUPPLY
C.R. INTERFACE

C.N.R. 2
EDITING ROOM
REMOTE CONTROL
VCR C
SLOW MOTION
POWER SUPPLY
C.R. INTERFACE

MASTER CONTROL CNM
REMOTE CONTROL
VCR C
SLOW MOTION F
POWER SUPPLY
C.R. INTERFACE
C.R. INTERFACE

SLOW MOTION CONTROL PANELS
TYPE F

VCR REMOTE CONTROL PANELS
TYPE C
ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF MACHINE
START
STOP
RECORD
FORWIND
REWIND

EQUIPMENT MOUNTED IN 1 BACK
C.R. DRIVING EQUIPMENT

TYPE I
START
STOP
RECORD
REWIND
FORWIND

10 x CONTROL PANELS
VCR 5
VCR 6
VCR 7
VCR 8
VCR 9
VCR 10
VCR 11
VCR 12
VCR 13
VCR 14

C.R. REMOTE CONTROL BUS
C.R. COMPUTER BUS

VIDEO MATRIX
V VID VI-DATALINE GEN. DL TC/USER
HS 100 SLOW MOTION
HIC MB 41 BLACK-BURST GENERATOR
3x X5-24N-41 POWER SUPPLY
IC SI 41 FASK DECODER
VIDEO MATRIX
PULSE DISTR

MATRIX ON AIR INDICATION
C.R. INTERFACE
DL IN
3EF15 ADA
VID VI-DATALINE GEN. DL USER DL TC
DL USER BITS
DL TIMCODE
TIME CODE READER
SMPTE TIMCODE
C.R. INTERFACE

VIDEO AUDIO MATRIX
TEK 528 OSC.
MC 37 BB COL MON
BVU 200 P SONY U-MATIC
AUD OUT
TC OUT
TIMECODE IN
SYNC IN
VCR 1
SMPTE
BVT 1000 P TIME BASE CORRECTOR
3EF15 ADA
SMPTE TC
MASTER TC
PULSE DISTR
IC SI 41 FASK DECODER

VIDEO AUDIO MATRIX
TEK 528 OSC.
MC 37 BB COL MON
BVU 200 P SONY U-MATIC
AUD OUT
TC OUT
TIMECODE IN
SYNC IN
VCR 2
SMPTE
BVT 1000 P TIME BASE CORRECTOR
3EF15 ADA
SMPTE TC
MASTER TC
PULSE DISTR
IC SI 41 FASK DECODER
3x X5-24N-41 POWER SUPPLY

COPY MACHINES
10x DATALINE SEPARATOR AND TIME CODE INSERTER
10x DL INSERTER
10x BVU 200 P SONY U-MATIC
10x M 24 BB BVW MONITOR
TIMECODE IN
VIDEO IN
AUDIO IN
OUT
VCR 5
VCR 6
VCR 7 VCR 8 VCR 9 VCR 10 VCR 11 VCR 12
VCR 13
VCR 14
DL IN
DL OUT
SMPTE TC
VIDEO
AUDIO
VIDEO AUDIO MATRIX
PIDA / VIDA
2x T215 VT 41
1x HC215 VT 41
SAP
VCR 5-14
IC SI 41 FASK DECODER
PULSE DISTR
PULSE DISTRIBUTION FOR COPY MACHINES
6x X5-24N-41 POWER SUPPLY

ZUST	ÄNDERUNG	DATUM	NAME
		BEARB.	ROSENDAHL
		GEPR.	
		NORM	19.4.78
		GEZ.	13.4.78 ZUBROD

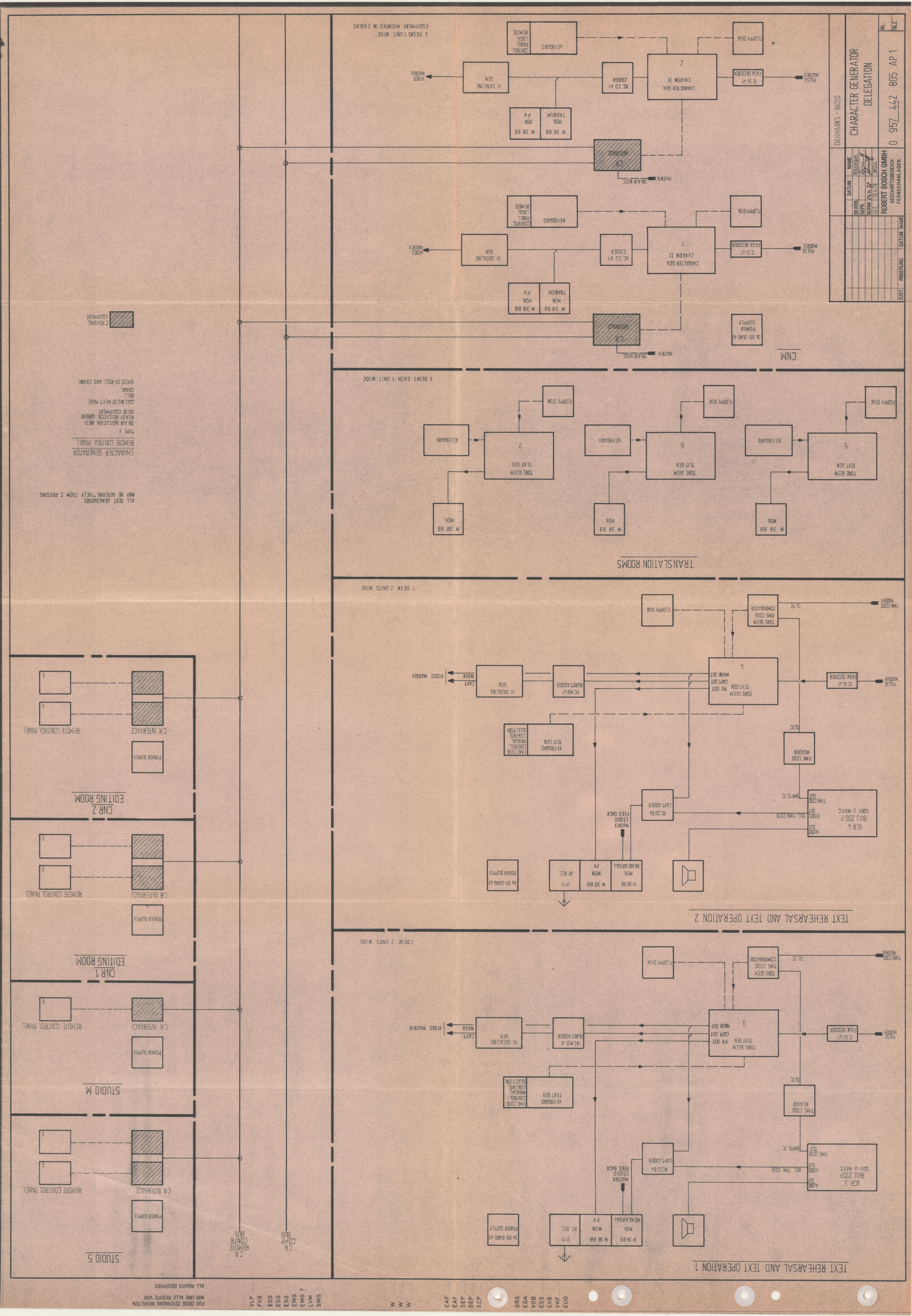
DANMARKS-RADIO

VCR-DELEGATION
INCL. SLOW MOTION

ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

0 957 442 804 AP1

BL
BLZ


DANMARKS - RADIO
CHARACTER GENERATOR DELEGATION
0 957 442 805 AP1
ROBERT BOSCH GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN
NAME
DATUM
BEARB
GEPR
NORM
ÄNDERUNG
DATUM
NAME
ZUST
BL
BLZ
CNM
CHARACTER GEN. CHIRON II
FASK DECODER
FLOPPY DISK
KEYBOARD
CONTROL PANEL LOCAL REMOTE
VI DATALINE GEN
VIDEO MATRIX
PULSE MATRIX
M 38 BB MON TRANSM PV
CR INTERFACE
ON AIR INDIC
MATRIX
3x XS-24NG 41 POWER SUPPLY
2 DESKS 1 UNIT WIDE EQUIPMENT MOUNTED IN 2 RACKS
3 DESKS EACH 1 UNIT WIDE
TRANSLATION ROOMS
TOBE SEEM TEXT GEN.
TIME CODE MANUAL CONTROL SELECTION
1 DESK 2 UNITS WIDE
TEXT REHEARSAL AND TEXT OPERATION 1
TEXT REHEARSAL AND TEXT OPERATION 2
TIME CODE COMPARATOR
TIME CODE READER
VCR 3 BVU 200P SONY U-MATIC
VCR 4 BVU 200P SONY U-MATIC
HC M8 41
BURST ADDER
CAPT ADDER
RC ZU 64
MATRIX STUDIO FEED BACK
INCL TIME CODE
SAMPLE TC
TIME CODE MATRIX
DLTC
CAPT MASK
PV OUT CAPT OUT MASK OUT
P 11 RF REC
M 38 BB MON REHEARSAL
CROSSING EQUIPMENT
ALL TEXT GENERATORS MAY BE ALTERNETIVELY FROM C ROSSING
CHARACTER GENERATOR REMOTE CONTROL PANEL
TYPE E
ON AIR INDICATION (RED)
READY INDICATION (GREEN)
NO OF EQUIPMENT
CALLING OF NEXT PAGE
ROLL
CRAWL
SPEED OF ROLL AND CRAWL
CNR 2 EDITING ROOM
CNR 1 EDITING ROOM
STUDIO M
STUDIO 5
REMOTE CONTROL PANEL
POWER SUPPLY
C.R INTERFACE
C.R REMOTE CONTR BUS
C.R COMP BUS
FOR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED
VLP FVB ESG ESG ESG EMG EMG 7 LVM SMG
W W W
EAF EAF SEP SEP SEP
GRS EGA VOB ESS EVG VKF EUG

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

CITY STUDIO

MASTER CONTROL
CNM

STUDIO 5

CNR 1
EDITING ROOM

CNR 2
EDITING ROOM

STUDIO M

CAMERA CONTROL

CAMERA REMOTE CONTROL

MIXER CONTROL PANEL
TYPE L
PV-ROW
PRESET ROW
TAKE
TRANSITION MODE
TIME CONSTANT

PREPARED FOR LATER EXTENSION

PART OF OTHER DRAWINGS

DANMARKS RADIO

CAMERA AND MIXER DELEGATION

0 957 442 806 APO

BR. 46.7

WOHNWERT BÜSCHEL GMBH
GESCHÄFTSBEREICH FERNSEHANLAGEN

DATUM NAME
BEARB. ROSENDAHL
GEZ. 06.04.78 RAUDY
NORM

Decision Making Rooms

FÜR DIESE ZEICHNUNG BEHALTEN WIR UNS ALLE RECHTE VOR
ALL RIGHTS RESERVED

VLP
FVB
ESG
ESG
ESG
EMG
EMG 7
LVM
SMG

W
W
W

EAF
EAF
SEP
SEP
SEP

GRS
EGA
VOB
ESS
EVG
VKF
EUG

C.R. COMPUTER BUS

DECISION MAKING ROOM 1

DATA DISPLAY AND KEY BOARD

FUNCTIONAL EDITING KEY BOARD

MC 37 BB COL. MON.

L 301 VL

C.R INTERFACE

DATA LINE STOP MOT VCR 16
DATA LINE VCR 16
TIMECODE IN VCR 16
DATA LINE STOP MOT VCR 15
DATA LINE VCR 15
TIMECODE IN VCR 15

VIDEO
AUDIO
SL MAST SL MAST
VIDEO/AUDIO SWITCHER

2 × SONY U-MATIC BVU 200 P

VCR 15 SLAVE I
VIDEO OUT
AUDIO I OUT
AUDIO II OUT
SMPTE-CODE

HC 215 VT 41 3 EF 15
VDA
ADA

VCR 16 SLAVE II / MASTER
VIDEO IN
AUDIO I IN
AUDIO II IN
VIDEO OUT
AUDIO I OUT
AUDIO II OUT
SMPTE-CODE

HC 215 VT 41 3 EF 15
VDA
ADA

TIMECODE GEN INCL. SYNC SEP
VIDEO IN
TIMEC. IN
SMPTE-CODE

DATALINE SEPARATOR
DATA LINE STOP MOT.

DATALINE SEPARATOR
DATA LINE STOP MOT.

3xX5-24NG41 POWER SUPPLY

CODE READER
DATA LINE

CODE READER
DATA LINE

1 DESK 2 UNITS WIDE EQUIPMENT MOUNTED IN 1 RACK

DECISION MAKING ROOM 2

EQUIPPED LIKE ROOM 1

VCR 17 VCR 18

DECISION MAKING ROOM 3

EQUIPPED LIKE ROOM 1

VCR 19 VCR 20

DECISION MAKING ROOM 4

EQUIPPED LIKE ROOM 1

VCR 21 VCR 22

EQUIPMENT FROM C. ROVSING

					DANMARKS - RADIO
				DATUM / NAME	
				BEARB. / ROSENDAHL	DECISION MAKING ROOMS
				GEPR. / NORM 6.4.78	
				GEZ. 040478 / DRAUDT	
ZUST.	ÄNDERUNG	DATUM	NAME	ROBERT BOSCH GMBH GESCHÄFTSBEREICH FERNSEHANLAGEN	0 957 442 900 AP 1 BL. BLZ.