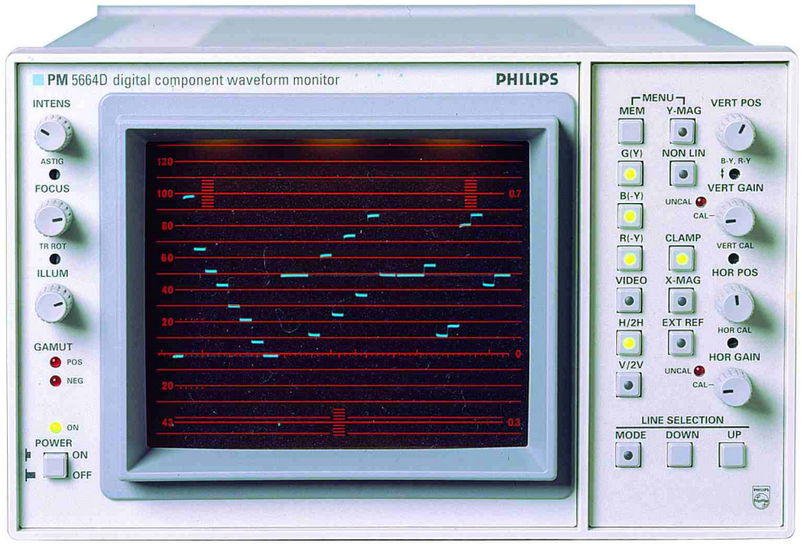
DK-Audio A/S
Marielundvej 37D
DK-2730 Herlev
Denmark

PM 5664 & PM 5664D
Component Waveform Monitor



Service Manual – section 2:

Diagrams and component placements

Diagrams and component placement.

Note: Diagrams are assembled in a sequence as below:

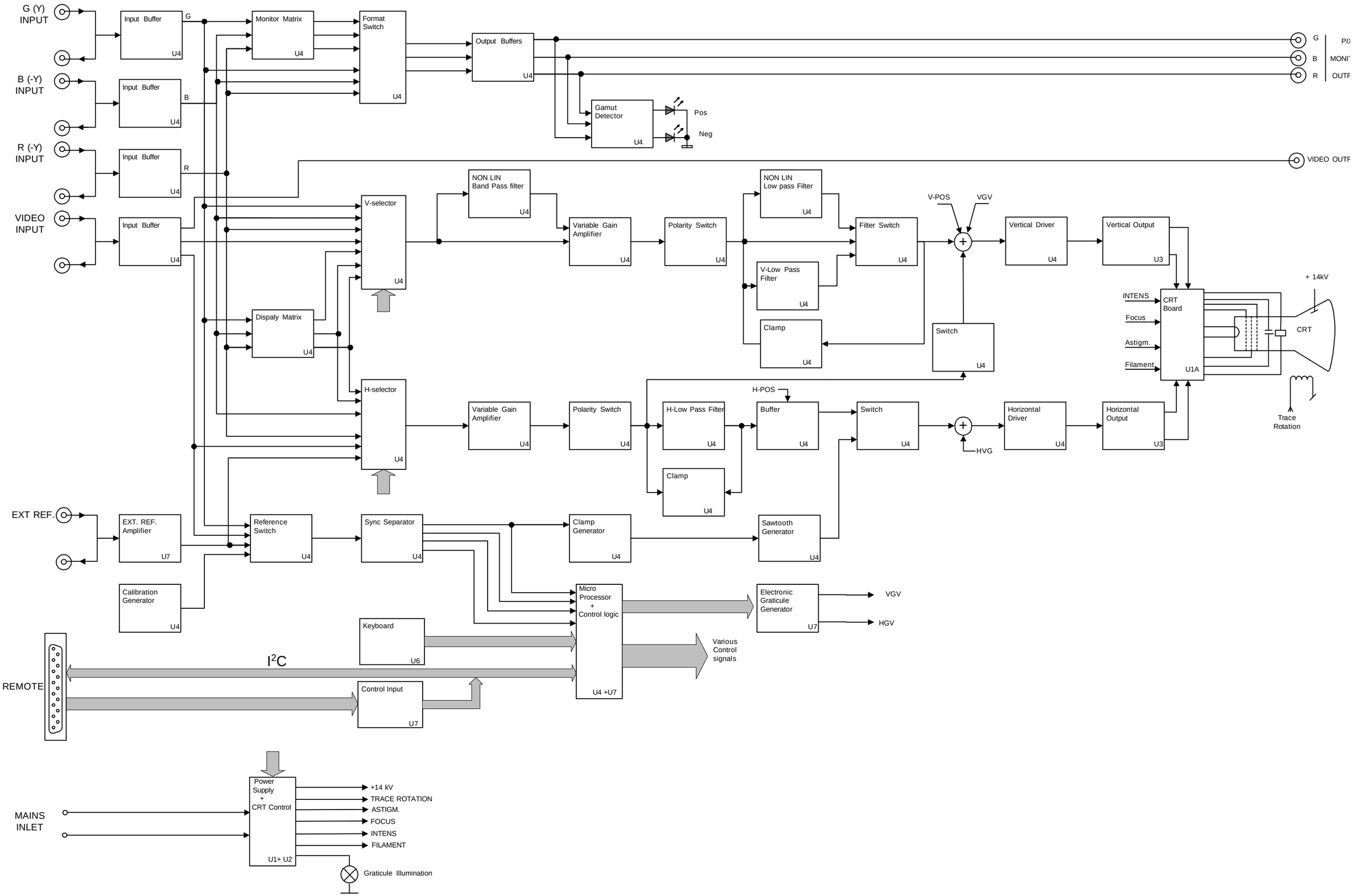
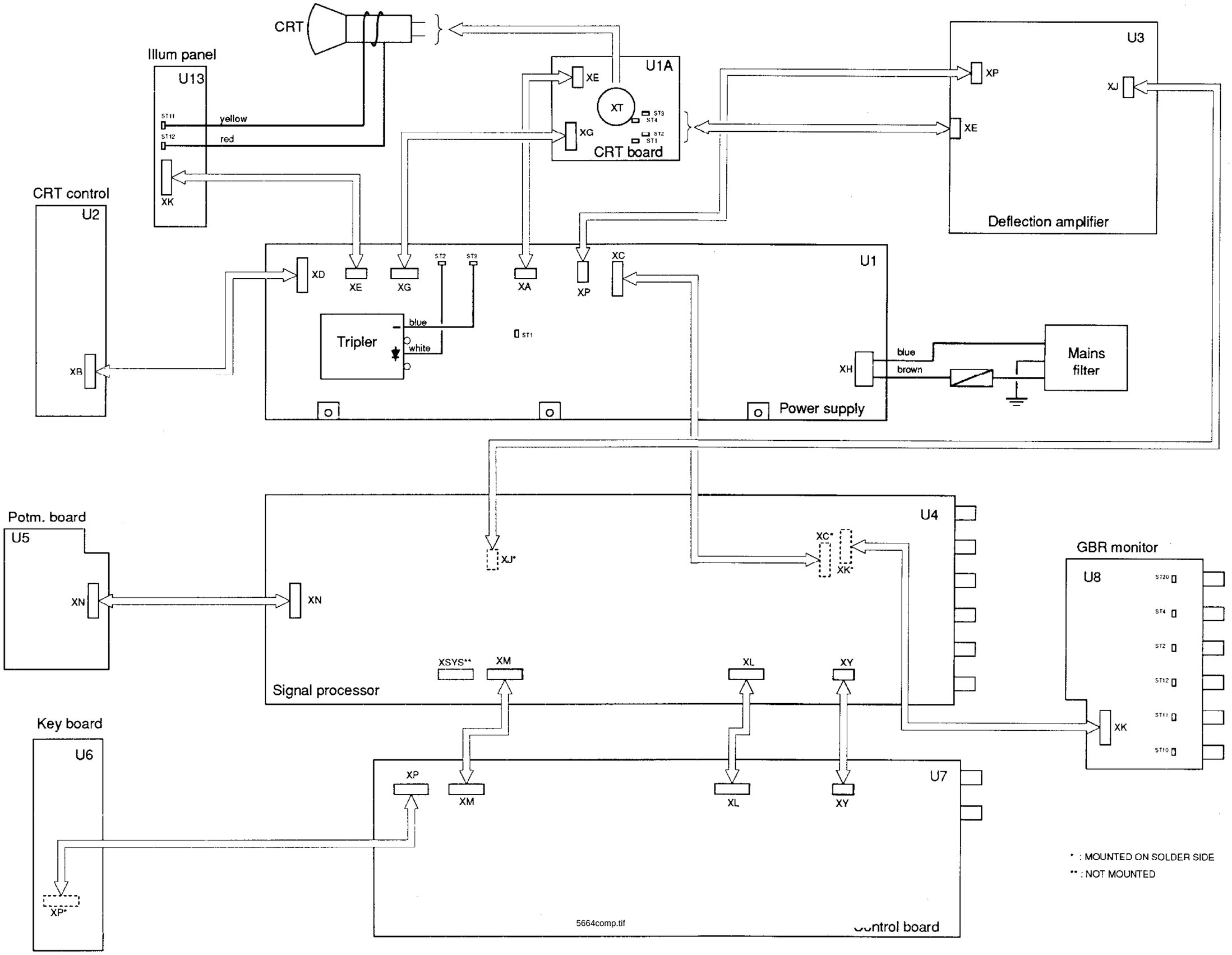
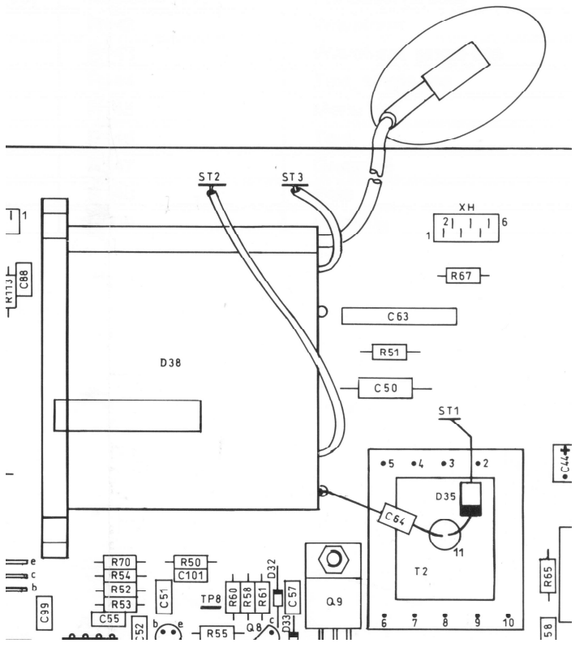
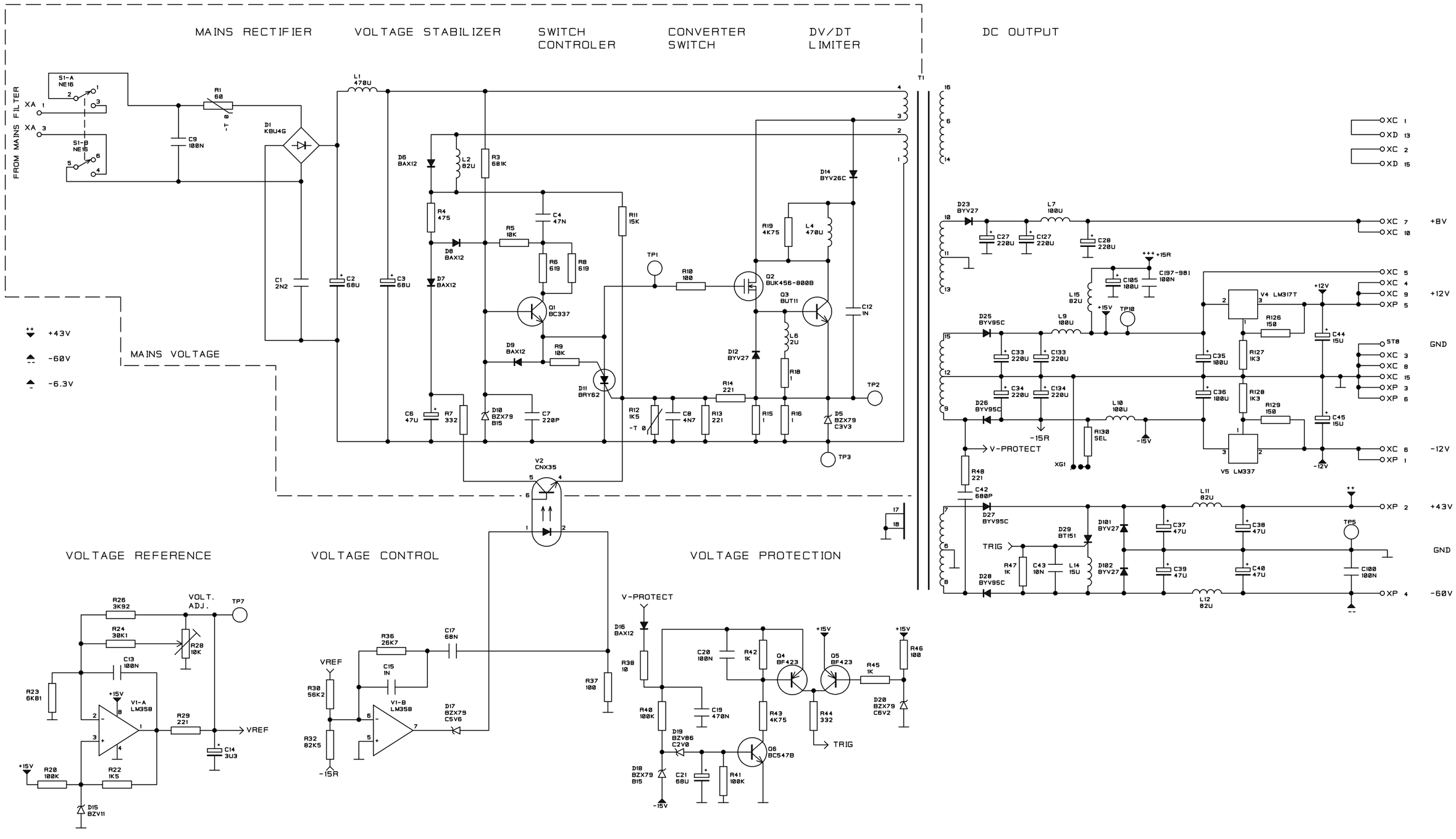


Fig 2-1 Instrument block diagram


CRT
Illum panel
U13
ST11
yellow
ST12
red
XK
U1A
XE
XT
ST3
ST4
XG
ST2
ST1
CRT board
U3
XP
XJ
XE
Deflection amplifier
CRT control
U2
XB
XD
XE
XG
ST2
ST3
XA
XP
XC
U1
Tripler
blue
white
ST1
XH
blue
brown
Mains filter
Power supply
Potm. board
U5
XN
XN
XJ*
U4
XC*
XK*
GBR monitor
U8
ST20
ST4
ST2
ST12
ST11
ST10
XK
XSYS**
XM
XL
XY
Signal processor
Key board
U6
XP*
XP
XM
XL
XY
U7
5664comp.tif
Control board
* : MOUNTED ON SOLDER SIDE
** : NOT MOUNTED



Tripler connection


MAINS RECTIFIER
VOLTAGE STABILIZER
SWITCH CONTROLER
CONVERTER SWITCH
DV/DT LIMITER
DC OUTPUT
FROM MAINS FILTER
MAINS VOLTAGE
+43V
-60V
-6.3V
S1-A NE16
S1-B NE16
XA 1
XA 3
R1 60 -T Ø
C9 100N
D1 KBU4G
L1 470U
C1 2N2
C2 68U
C3 68U
D6 BAX12
L2 82U
R3 681K
R4 475
C4 47N
R5 10K
D8 BAX12
D7 BAX12
R6 619
R8 619
Q1 BC337
D9 BAX12
R9 10K
D11 BRY62
C6 47U
R7 332
D10 BZX79 B15
C7 220P
R12 1K5 -T Ø
C8 4N7
R13 221
R14 221
R15 1
R16 1
D5 BZX79 C3V3
TP3
TP2
V2 CNX35
R11 15K
TP1
R10 100
Q2 BUK456-800B
Q3 BUT11
C12 1N
D12 BYV27
L6 2U
R18 1
R19 4K75
L4 470U
D14 BYV26C
T1
D23 BYV27
L7 100U
C27 220U
C127 220U
C28 220U
+15R
C105 100U
C197-981 100N
L15 82U
+15V
TP10
V4 LM317T
+12V
R126 150
C44 15U
D25 BYV95C
L9 100U
C33 220U
C133 220U
C34 220U
C134 220U
D26 BYV95C
L10 100U
R130 SEL
-15V
-15R
V-PROTECT
XG1
C35 100U
C36 100U
R127 1K3
R128 1K3
R129 150
C45 15U
V5 LM337
-12V
R48 221
C42 680P
D27 BYV95C
L11 82U
D29 BT151
D181 BYV27
D182 BYV27
C37 47U
C38 47U
C39 47U
C40 47U
TRIG
R47 1K
C43 10N
L14 15U
D28 BYV95C
L12 82U
TP5
C100 100N
XC 1
XD 13
XC 2
XD 15
XC 7
XC 10
+8V
XC 5
XC 4
XC 9
XP 5
+12V
ST8
XC 3
XC 8
XC 15
XP 3
XP 6
GND
XC 6
XP 1
-12V
XP 2
+43V
GND
XP 4
-60V
VOLTAGE REFERENCE
VOLTAGE CONTROL
VOLTAGE PROTECTION
R26 3K92
VOLT. ADJ.
TP7
R24 30K1
R28 10K
C13 100N
R23 6K81
V1-A LM358
R29 221
VREF
C14 3U3
R20 100K
R22 1K5
D15 BZV11
R36 26K7
C17 68N
C15 1N
R30 56K2
R32 82K5
V1-B LM358
D17 BZX79 C5V6
R37 100
D16 BAX12
R38 10
C20 100N
R42 1K
Q4 BF423
Q5 BF423
R45 1K
R46 100
D20 BZX79 C6V2
R40 100K
C19 470N
R43 4K75
R44 332
TRIG
D19 BZV86 C2V0
Q6 BC547B
D18 BZX79 B15
C21 68U
R41 100K
OH30
FIRST USED IN: PM5664/U1
PCB REF.: 4008 117 0461
POWER SUPPLY
4008 109 7111
4 99-02-24
3 97-12-11
3 95-01-20
5 99-04-14
CHECK:
NAME: SML/ML/SRJ/SMa/JML
2 SH
SH 130 - 1
AB 71113 .SCM
A 04615.PCB
KU
DK-AUDIO A/S DK-2730 Herlev
DAT. 89-03-02
A3L

INTENSITY CONTROL

Z-AMPLIFIER

ILLUMINATION CONTROL

TRACE ROTATION CONTROL

DYNAMIC FOCUS

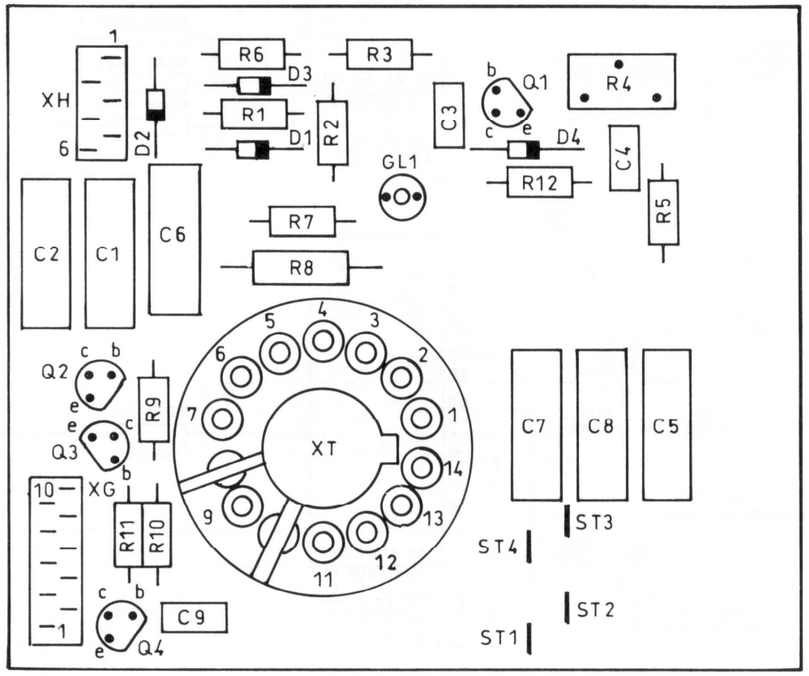
HIGH VOLTAGE GENERATOR

CRT BOARD

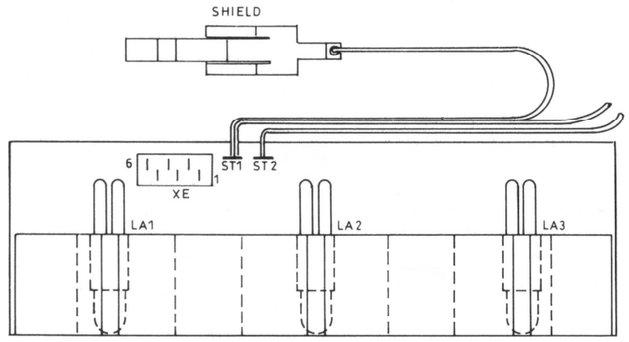
D**: Protection diodes introduced in 2003

		POWER SUPPLY	4008 109 7111	4 ~~99-02-24~~
				6 2003-08-26
				5 ~~99-04-14~~
CHECK:		NAME: SML/JML/SMa/JML	2 SH SH 130 - 2	3 ~~97-11-06~~
BA 71115 .SCM A 04616.PCB	KU	DK-AUDIO A/S DK-2730 Herlev		DAT. 89-03-02 A3L

FIRST USED IN: PM5664/U1
PCB REF.: 4008 117 0461

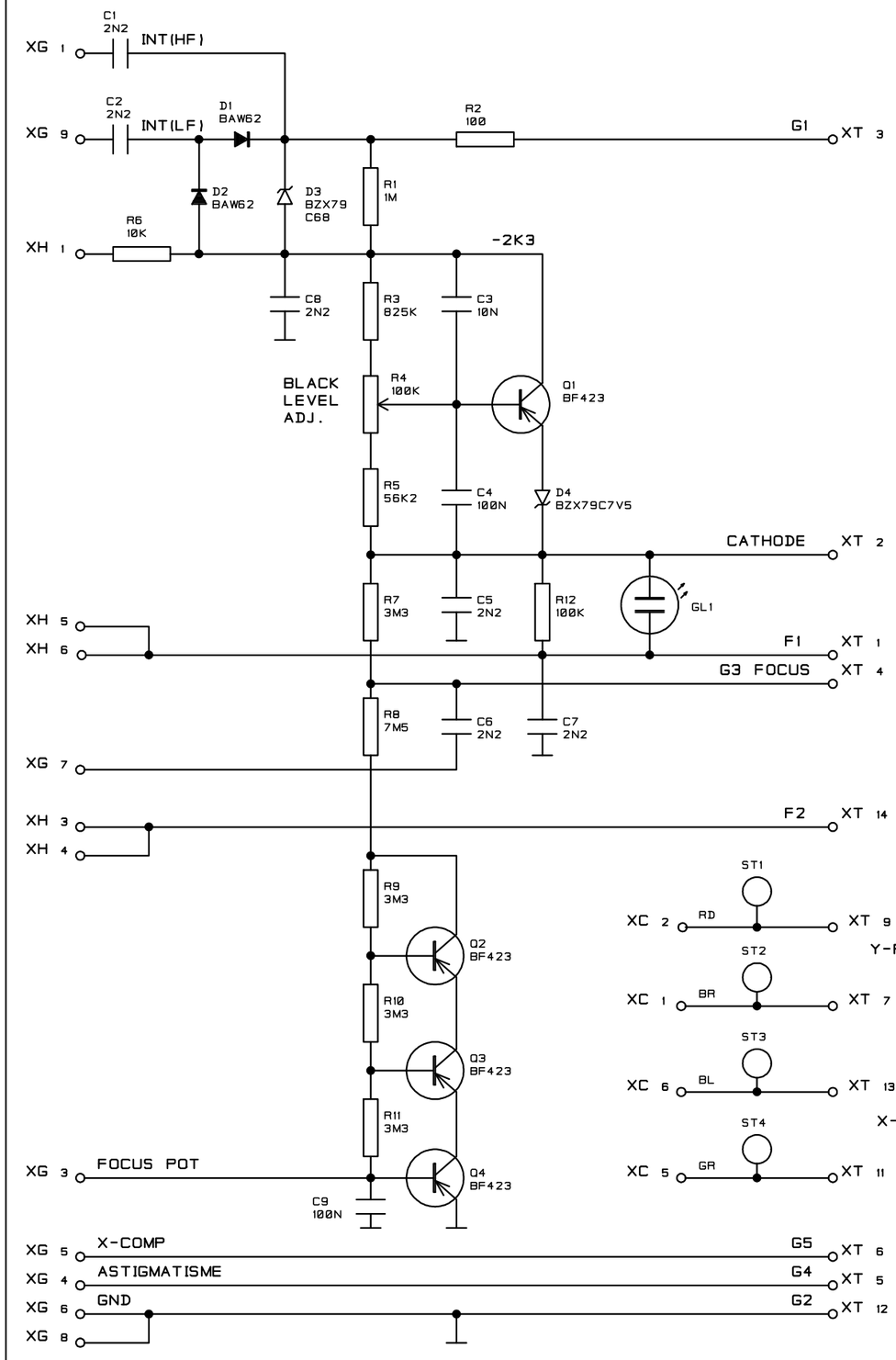


UNIT 1A - CRT Board



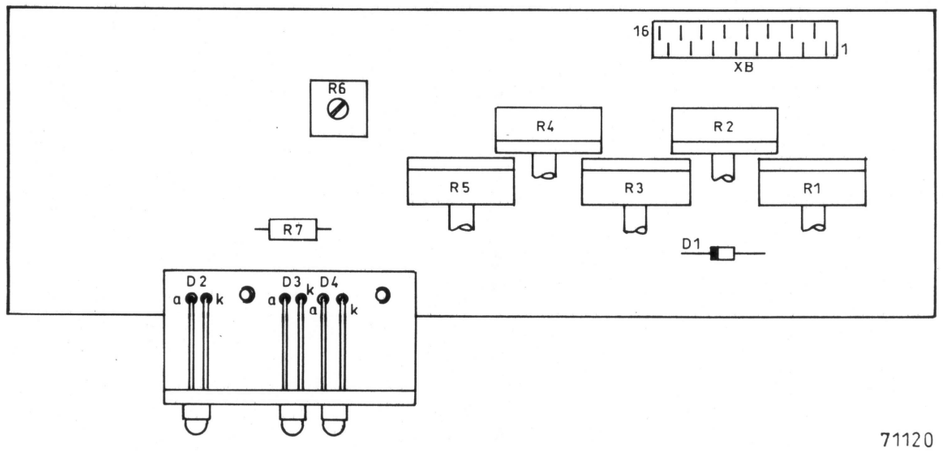
Trace rotation
ST1 - Red, ST2 -Yellow

Unit 1.1 - Illum Panel

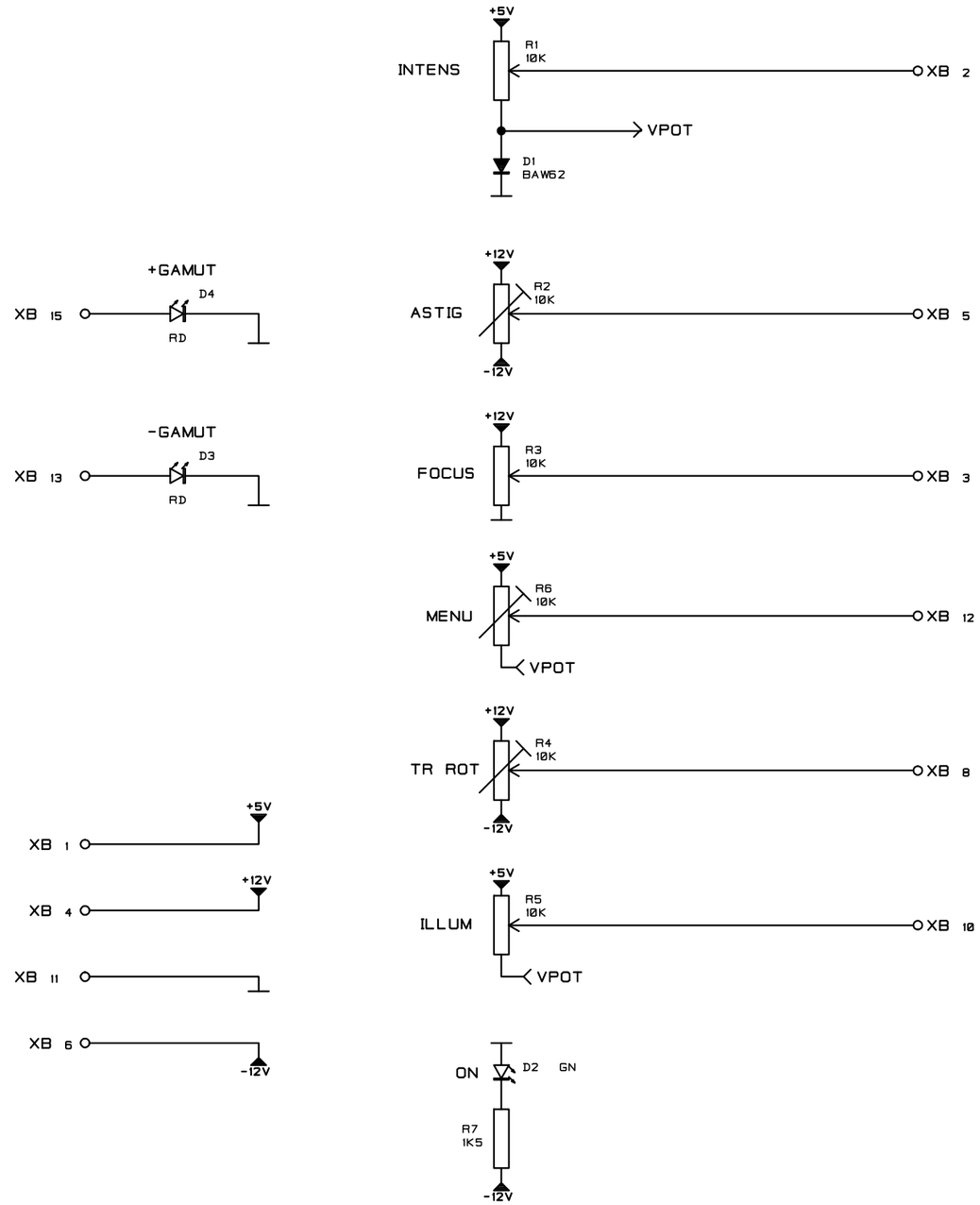


FIRST USED IN : PM5664/U1A
PCB REF.: 4008 117 0497

A .SCM 71571 .SCM AM .PCB 04972 .PCB	CRT BOARD	4008 109 7157	. . 1 . 1	89-12-11 90-03-21 91-06-29
NAME SML/BBN/ML/SM/SRJ		1 SH SH - 130 - 1	.	
KU	DK-AUDIO DK-2730 HERLEV		DAT	89-02-27 A4H

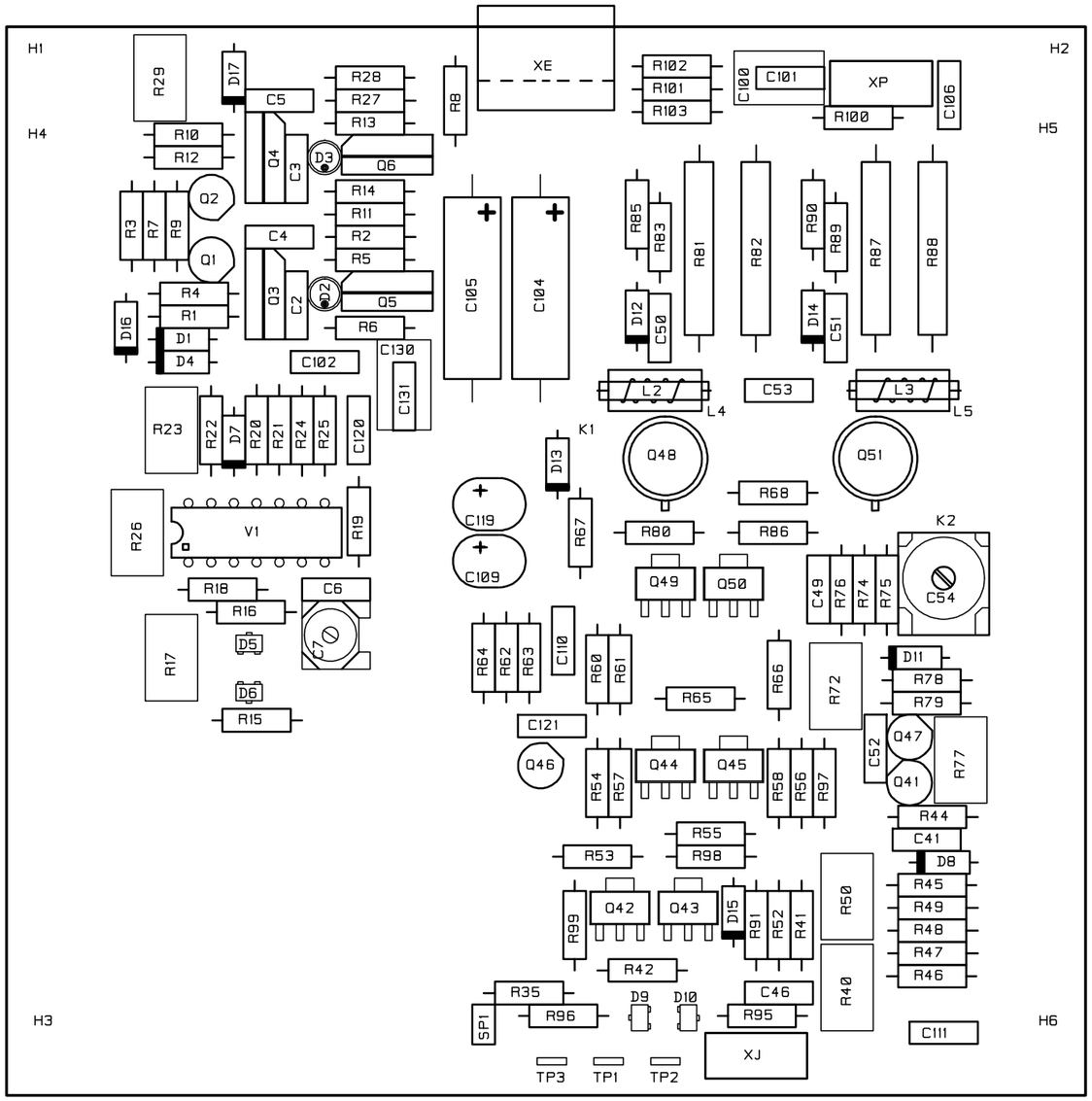


UNIT 2 - CRT control Board



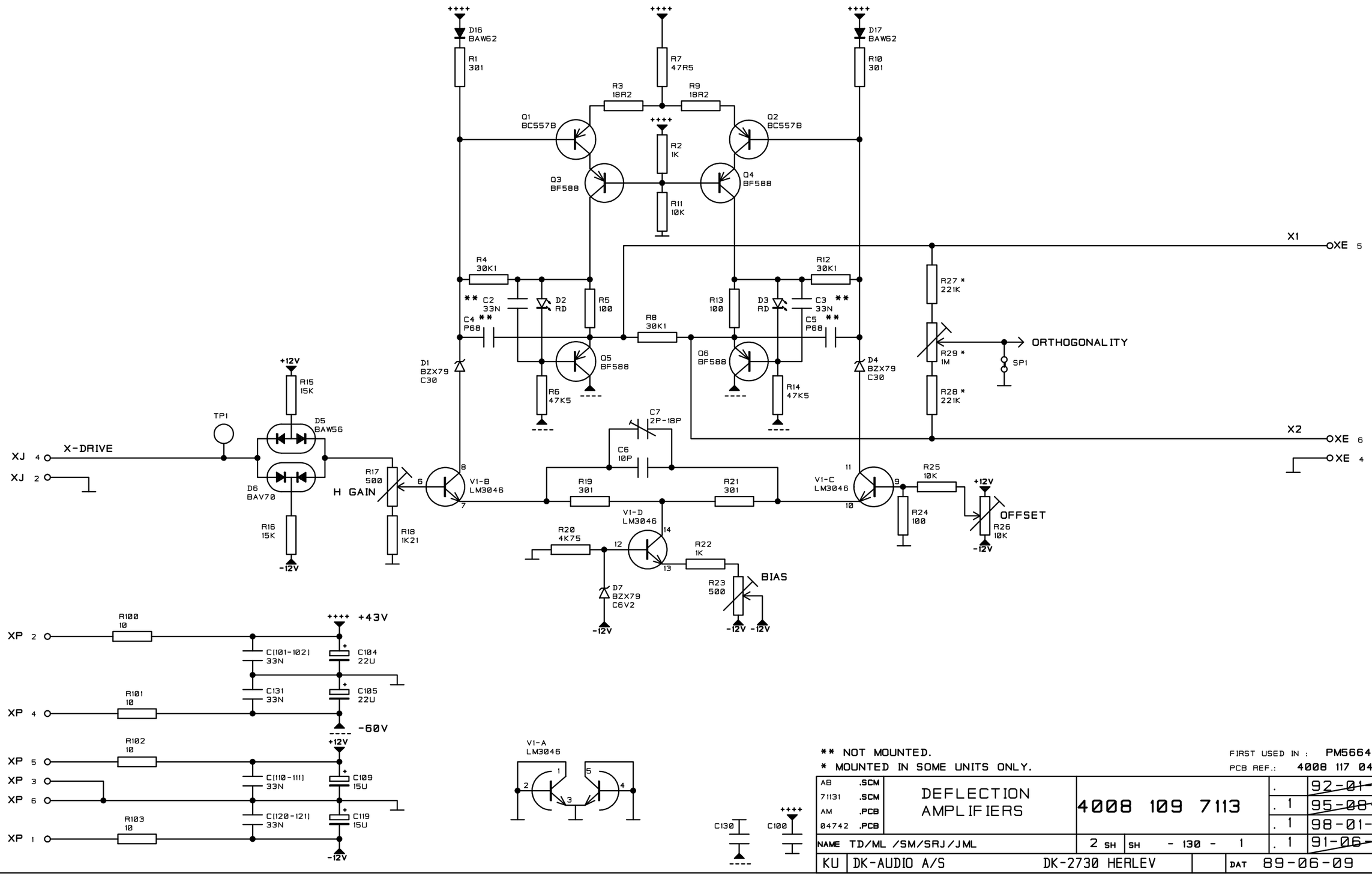
FIRST USED IN: PM5664/U2
PCB REF.: 4008 117 0462

A .SCM 71121 .SCM ABCK .PCB 04621 .PCB	CRT CONTROL	4008 109 7112	.	87-04-29
			. 1	89-04-19
			. 1	89-11-22
NAME HI/PE/ML/SM/HBS/SM		1 SH SH - 130 - 1	. 1	88-09-12
KU	DK-AUDIO DK-2730 HERLEV	DAT 86-05-22		A4H



UNIT 3 - Deflection Board

HORIZONTAL OUTPUT AMPLIFIER

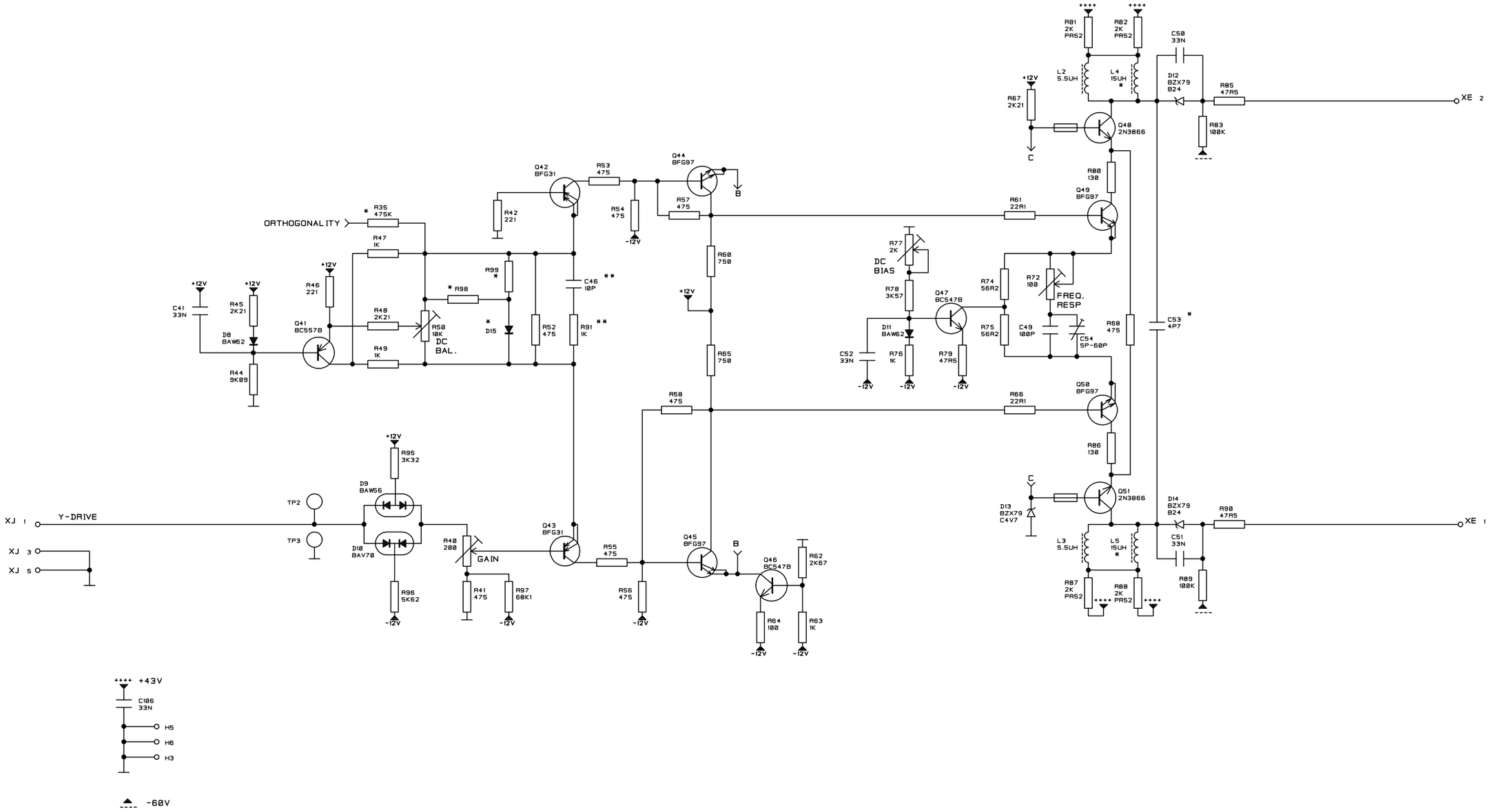


** NOT MOUNTED.
* MOUNTED IN SOME UNITS ONLY.

FIRST USED IN : PM5664/U3
PCB REF.: 4008 117 0474

AB .SCM 71131 .SCM AM .PCB 04742 .PCB	DEFLECTION AMPLIFIERS	4008 109 7113		.	~~92-01-27~~
				. 1	~~95-08-09~~
				. 1	98-01-07
NAME TD/ML /SM/SRJ/JML		2 SH	SH - 130 - 1	. 1	~~91-06-29~~
KU	DK-AUDIO A/S	DK-2730 HERLEV		DAT 89-06-09	A3L

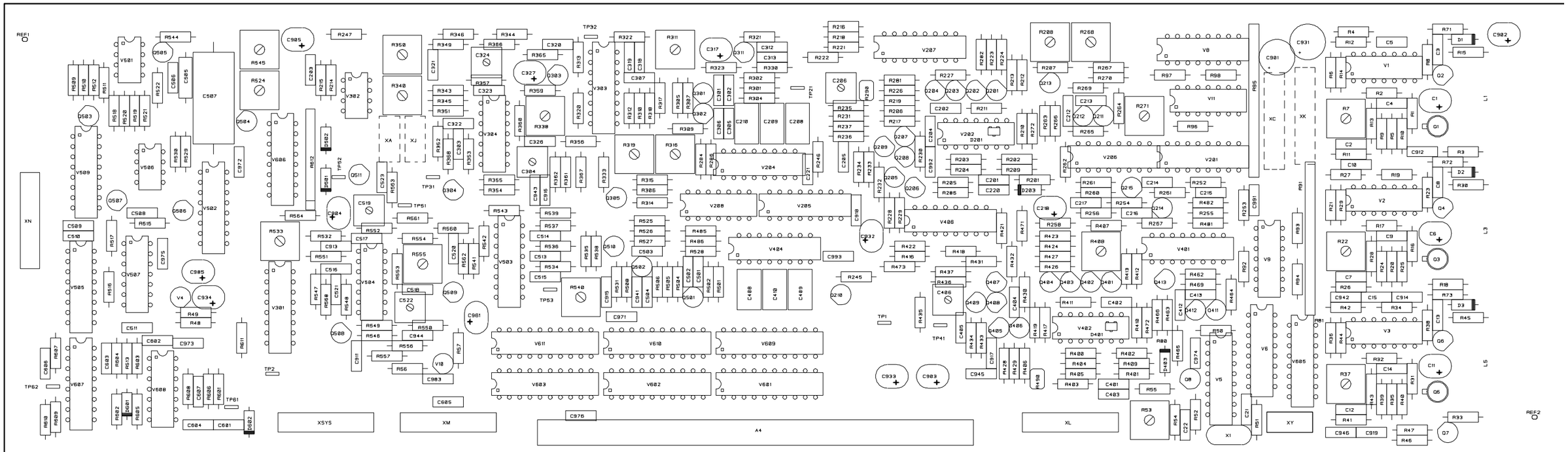
VERTICAL OUTPUT AMPLIFIER



* MOUNTED IN SOME UNITS ONLY
** NOT MOUNTED

FIRST USED IN: PM5664/U3
PCB REF.: 4008 117 0474

BA .SCM 71131 .SCM AM .PCB 04742 .PCB	DEFLECTION AMPLIFIERS	4008 109 7113	.	~~92-01-27~~
			. 1	98-01-07
			. 1	~~90-08-17~~
NAME TD/SM/ML/TD/SM/SRJ		2 SH SH - 130 - 2	. 1	~~90-12-11~~
KU	DK-AUDIO A/S	DK-2730 HERLEV	DAT 89-06-09	A3L



UNIT 4 - Signal Processor

CALIBRATION - GENERATOR

DISPLAY MATRIX

INPUT BUFFER

SYNC-SEPARATOR

MØNITOR MATRIX

* NOT MOUNTED

FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

SIGNAL PROCESSOR	4008 109 7081	3	94-08-10
		2	~~90-06-13~~
		2	~~91-03-13~~
		2	~~92-01-27~~
CHECK:	NAME: TD.D/SM/ML/SMa/JML	6	SH	SH 130 - 1	2	92-01-27
ABCDEF 70813 .SCM A04634 .PCB	KU PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY	DAT 88-05-18	A3

VARIABLE GAIN

POLARITY SWITCH

BUFFER

NON LIN BP-FILTER

V-SELECTOR

MULTIPLE CLAMP

* NOT MOUNTED.

		SIGNAL PROCESSOR	4008 109 7081		2 92-01-27 / 3 94-08-10 / 2 ~~90-08-17~~ / 2 ~~90-12-11~~
CHECK:		NAME: SML/SM/ML/SRJ	6	SH SH 130 - 2	
BCDEFA 78013 .SCM A04634 .PCB	KU	PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT 88-05-18	A3

FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

RESPONSE SWITCH

MOUNTED ON US
VERTICAL POSITION
+12V
-12V
XN 12
V509-B 74HC4053
PE
V506-A LF353N
R343 4K75

NON LIN FILTER

V-SIGNAL
R330 475
R321 3K92
Q311 BC547B
C312 100P
C313 330P
C317 68U
R323 2K21
R322 33R2

V-LP FILTER

R301 2K43
R302 1K3
Q301 BC547B
C302 27P
C301 82P
R304 2K21
R305 1K1
R307 681
C305 120P
C306 100P
Q302 BC557B
R309 2K21
R306 475
R315 1K
R316 500
STAR/VECTOR GAIN ADJ
V208-D MC34085
Q305 BC547B
R314 750
R333 1K
R317 221
TP32
R312 221
R313 221
R310 221
R320 221
R318 221
R319 100
GYP ADJ
C319 82P
C320 5P6
C307 22P
C318 * 47P
V303 74HC4051
LPF
N-L
PHX5
V-CLAMP
BEGIN
R367 1K5
Q303 BC547B
R365 1K
R349 22K1
R350 10K
R366 1K
C327 10N

VERTICAL DRIVE

R354 475
Q304 BF450
C303 1P5
R368 2K
V304-A 3146
R351 56R2
R352 3K92
R353 332
R355 2K21
R356 750
V304-B 3146
TP31
XJ 1
C322 68P
C324 3P5
X5 FREQ-RESP
R357 1K
R360 1K
R359 75
R338 100
X5 ADJ.
C323 4P7
C326 18P
X1 FREQ-RESP
C304 * 18P
V304-C 3146
VM
R361 1K5
R362 4K75

H-SIGNAL

H-SIGNAL
V207-A 74HC4053
ADD
-5V
V301-C 74HC4053
VGV SH-6
GRAT-ENA
V-GRATICULE SIZE ADJ
R340 2K
R345 5K62
R344 1K
R346 1K
C321 10P

V304-D 3146

* NOT MOUNTED

FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

SIGNAL PROCESSOR	4008 109 7081		3	94-08-10
			2	~~90-08-14~~
			2	90-08-17
CHECK:	NAME: BLI/SM/ML/SMa	6 SH SH 130 - 3	2	~~92-01-27~~
CABDEF 70813 .SCM A04634 .PCB	KU PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT 88-05-18	A3

VARIABLE GAIN

H-CAL1
H-VAR GAIN
"H-UNCAL"
MOUNTED ON U5
XN 16
XN 5
XN 3
XN 2
XN 14
XN 1
XN 13
10K
10K
R416 15K
R418 10K
R422 2K67
R421 *
R406 6K19
V406-C 74HC4053
HVE SH-6
R419 *
D401 BAV70
R417 5K62
-12V
GREF SH-2
RUNC SH-6
+12V
C402 100N
R403 475K
C403 4P7
R405 221K
C401 220P
R404 2K
V402 LM1496
GAIN
R402 100
R400 100
R409 4K75
R401 *
D403 * BAW62
R410 100
R411 100
R408 100
R407 100
R412 475
R413 475
R426 3K32
Q401 BC557B
Q402 BC557B
Q403 BC557B
Q404 BC557B
R427 3K32
R423 3K32
R424 3K32
R430 1K
C404 100N
Q405 BF199
Q406 BF199
R428 221
R429 221
R471 3K32
HI
R473 3K32
V406-B 74HC4053
R433 332
Q409 BF450
TP41
R434 221
C405 18P
H-SIGNAL SH-3
Q407 BF199
Q408 BF199
R431 2K21
R432 1K
C406 18P
R436 909
R437 1K5
R435 2K21

POLARITY SWITCH

BUFFER

H-SELECTOR

SH-1 R
R481 47R5
R482 2K67
V401 74HC4051
SH-1 ER
SH-1 B
SH-1 R
SH-1 CV
SH-1 PB
SH-1 PR
SH-6 H0
SH-6 H1
SH-6 H2
A0 A1 A2 VEE
-5V
R463 332
Q413 BF450
C412 22P
R466 332
R462 2K21
Q411 BF199
Q412 BF199
R464 2K21
R465 1K
R469 2K21
* C413
R472 2K21

MULTIPLE CLAMP

R485 1K
R486 2K21
V404 4052
V208-B MC34085
V205-B NE5517
H-CLAMP SH-3
CPLS SH-2
C408 1U
C409 1U
C410 1U
HC0 HC1 SH-6
R490
-T 0

V205-C NE5517

* NOT MOUNTED

FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

SIGNAL PROCESSOR	4008 109 7081			2	~~90-02-27~~
				3	94-08-10
				2	~~90-10-24~~
CHECK:	NAME: SML/SM/SRJ/SMa/JML	6	SH SH 130 - 4	2	~~91-01-25~~
DEFABC 70813 .SCM A04634 .PCB	KU PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT 88-05-18		A3

H-LP FILTER

SH-4 H-SIGNAL
R501 2K43
R502 1K3
C502 27P
C501 82P
Q501 BC547B
R505 1K1
R506 681
R504 2K21
C503 120P
C504 100P
R508 2K21
Q502 BC557B
R528 475
R525 3K32
R526 2K
HPOS
V208-A MC34085
R527 750
Q510 BC547B
D503 BAW62
TP53
R531 1K
V406-A 74HC4053
H-SIGNAL
SH-6
H-CLAMP SH-4

MOUNTED ON U5
HORIZONTAL POSITION
XN 6
R530 12K1
V506-B LF353N
V509-C 74HC4053
R529 10K
PE SH-6
HPOS

TIME BASE

R545 100K
10 US ADJ
R544 182K
50HZ/60HZ SWITCH
V502-B 74HC4053
525
R519 2K67
R518 3K32
R521 1K
TP52
R520 1K82
HPOS
V501-B LF353N
R522 221
R509 8K25
R510 100K
R511 18K2
R512 61K9
V501-A LF353N
Q505 BC557B
SAW TOOTH GENERATOR
C505 270P
C506 27P
Q503 BST72A
SH-6 TB0
R524 5K
0 2 US ADJ
Q504 BST72A
SH-6 TB1
V502-C 74HC4053
C507 100N
H/V
D501 BZV79 C3V9
D502 BZV79 C3V9
R534 221
C513 33P
R535 221
R536 221
R537 221
C515 15P
C514 18P
R538 221
R539 221
R540 100
GBR STAR GAIN ADJ
V503 74HC4051
R541 825
R542 392
R543 357
HM0
HM1
X-Y
R560 1K
R561 1K
C520 10N
Q509 BC547B
R562 1K5
BEGIN
V301-B 74HC4053
HGV SH-6
R533 2K
R532 5K62
H-GRATICULE SIZE ADJ
GRAT-ENA SH-6

R513 10K
H
C511 47P
V507-B 74HC00
V507-C 74HC00
H/V
TB0
TBR
V505-A 74HC109
V505-B 74HC109
V507-A 74HC00
X-Y
C508 330P
R515 1K
Q506 BC547B
TB SH-5
Q507 BC547B
R517 22K1
C509 10N
C510 220P
R516 8K25

HORISONTAL DRIVE

R546 475
Q508 BF450
V504-A LM3146
V504-B LM3146
TP51
C521 1P5
R568 2K
R563 100
XJ 3
XJ 4
R547 3K92
R548 332
R549 2K21
R550 750
R551 56R2
C516 68P
C519 3P5
X5 PHASE
R552 1K
R553 1K
R554 75
R555 100
1 U5 ADJ.
C518 * 12P
C522 18P
X1 PHASE
C517 4P7
R556 1K5
R557 4K75
V504-C LM3146
HM0
* NOT MOUNTED
V504-D LM3146
V502-A 74HC4053
R564 1K
C523 10N
Q511 BC547B

FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

SIGNAL PROCESSOR	4008 109 7081			3	94-08-10
				2	~~90-08-14~~
				2	~~91-01-25~~
CHECK:	NAME: SML/SM/ML/SRJ/SMa	6	SH SH 130 - 5	2	~~94-01-27~~
EFABCD 70813 .SCM A04634 .PCB	KU PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT 88-05-18	A3	

UP PORT

V601 74HC574 — V609 74HC574

XL 1	V0	SH-2	
XL 2	V1	SH-2	
XL 3	V2	SH-2	
XL 4	H0	SH-4	
XL 5	H1	SH-4	
XL 6	H2	SH-4	
XL 7	2-3	SH-2	
XL 8	GRAT-ENA	SH-3	
XL 9	P3EN		

V602 74HC574 — V610 74HC574

CAL	SH-2.1	
VC0	SH-2	
VC1	SH-2	
NON	SH-4	
HC0	SH-4	
HC1	SH-4	
PE	SH-3.5	
XL 10	P4EN	
TBR	SH-5	

V603 74HC574 — V611 74HC574

V1	SH-2		
H1	SH-4		
HM0	SH-5		
HM1	SH-5		
VM	SH-3		
X-Y			
XL 11	P5EN		
HDL	SH-2		

C607 47P — V608-D 74HC132 — HDL SH-6

V301-A 74HC4053

XM 1	HGV	SH-5	
XM 3	VGV	SH-3	
XM 7			
BEGIN	SH-3.5		

IIC PORT

V605 PCF8574 (IIC ADDR 40)

XM 8	SCL	
XM 9	SDA	
GBR	SH-1	
ERS	SH-1	
AC	SH-1	
T-SEL	SH-1	
N-L	SH-3	
CVS	SH-1	
HVE	SH-4	
VVE	SH-2	

V606 PCF8574 (IIC ADDR 42) — R612-E/C/A/B/D/F 6 X 2K7 *

ADD	SH-3
LAMP	SH-6
525	SH-5
TB0	SH-5
TB1	SH-5
H/V	SH-5
PHX5	SH-5
LPF	SH-3

FREE RUN OSCILLATOR

R602 221K, D601 BAW62, R603 1M, R601 1M, C602 220P, C601 100N, V608-A 74HC132, TP61, R605 1K, SH-1 LINE, H SH-2.3.4.5.6

CLAMP GENERATOR

R604 33K2, C603 220P, V607-B 74HC4538, R607 10K, C606 220P, V607-A 74HC4538, TP62, BEGIN, R611 4K75, D602 BAW62, R609 4K75, R610 1K, SH-6 CAL, CP, XK 14

C604 100N, R606 1M, V608-B 74HC132, V608-C 74HC132, SH-1 SYNC, T-SEL SH-6

ID: XL 12, XC 12
I1: XL 13, XC 13
I2: XL 14, XC 14
GAWI: XL 16, XK 13

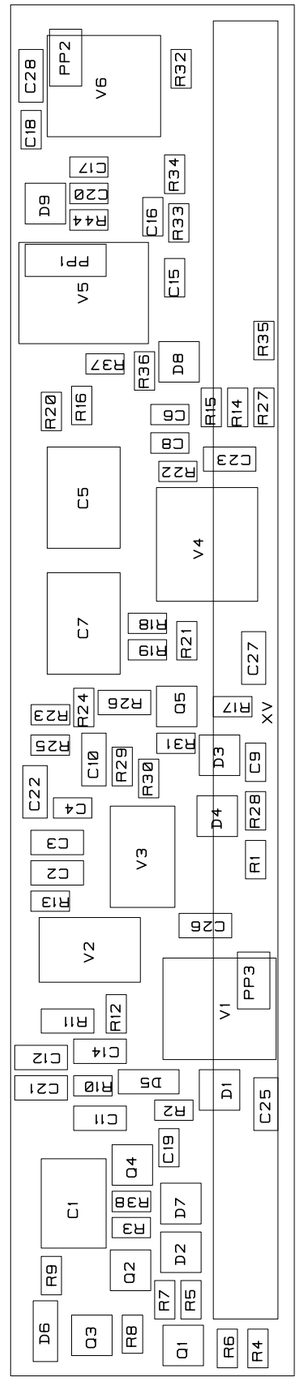
LAMP XC 16
TB XL 15
H XM 16
XM 13
-12V

+12V
SH-2 VUNC XM 11
SH-4 HUNC XM 5
XM 6
XM 2
XM 4
C605 100N XM 10, XC 3

* NOT MOUNTED

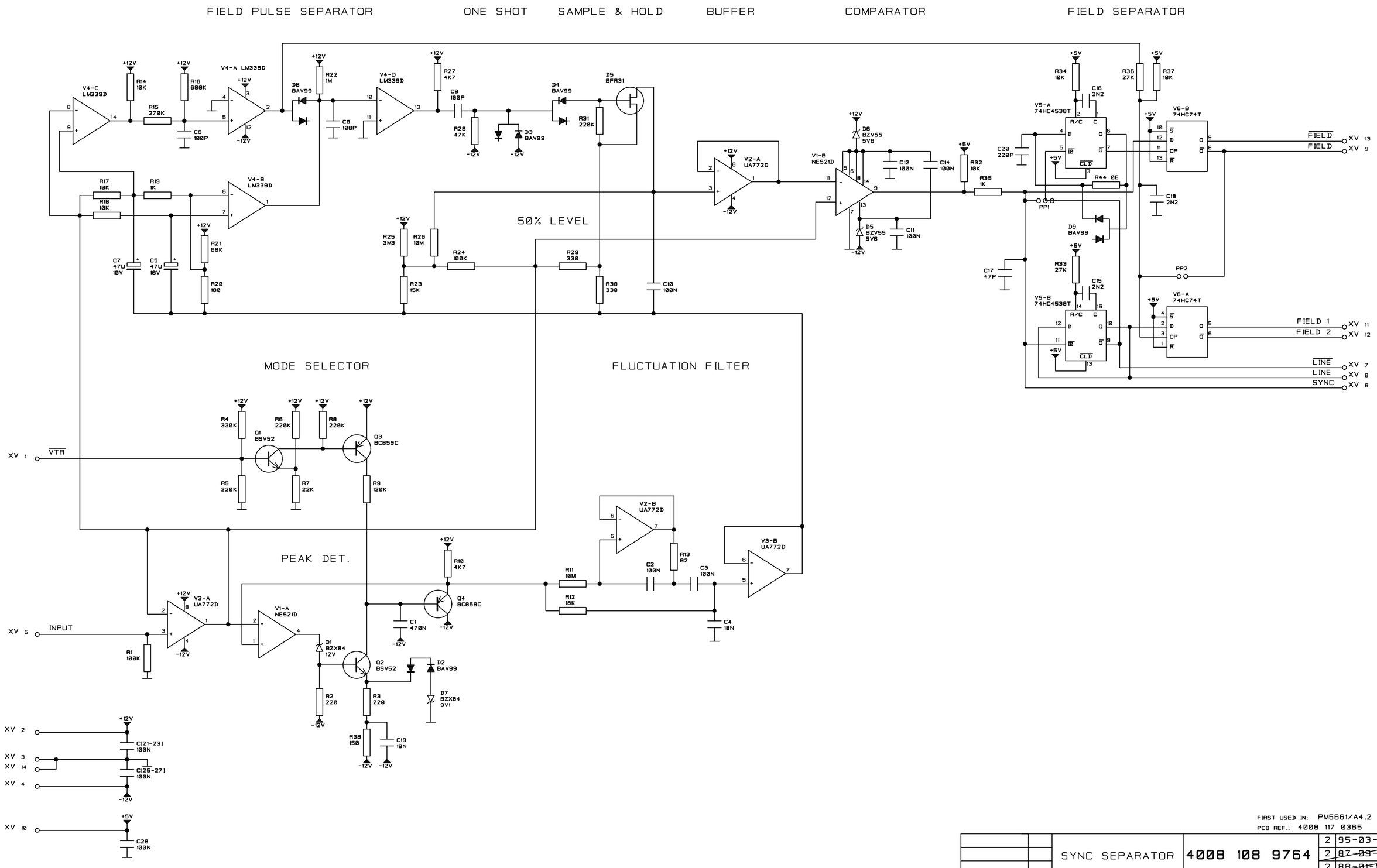
FIRST USED IN: PM5664/U4
PCB REF.: 4008 117 0463

	SIGNAL PROCESSOR	4008 109 7081		3	94-08-10
				2	~~90-08-14~~
				2	~~91-06-19~~
CHECK:	NAME: SML/SM/ML/SRJ/SMa	6	SH SH 130 - 6	2	~~92-01-27~~
FABCDE 70813 .SCM A04634 .PCB	KU PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY			DAT 88-05-18	A3



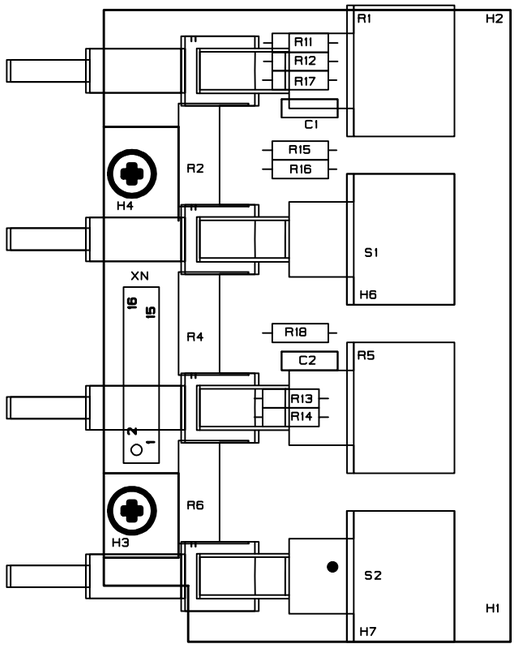
Unit 4.1 Signal processor subassembly: Sync separator

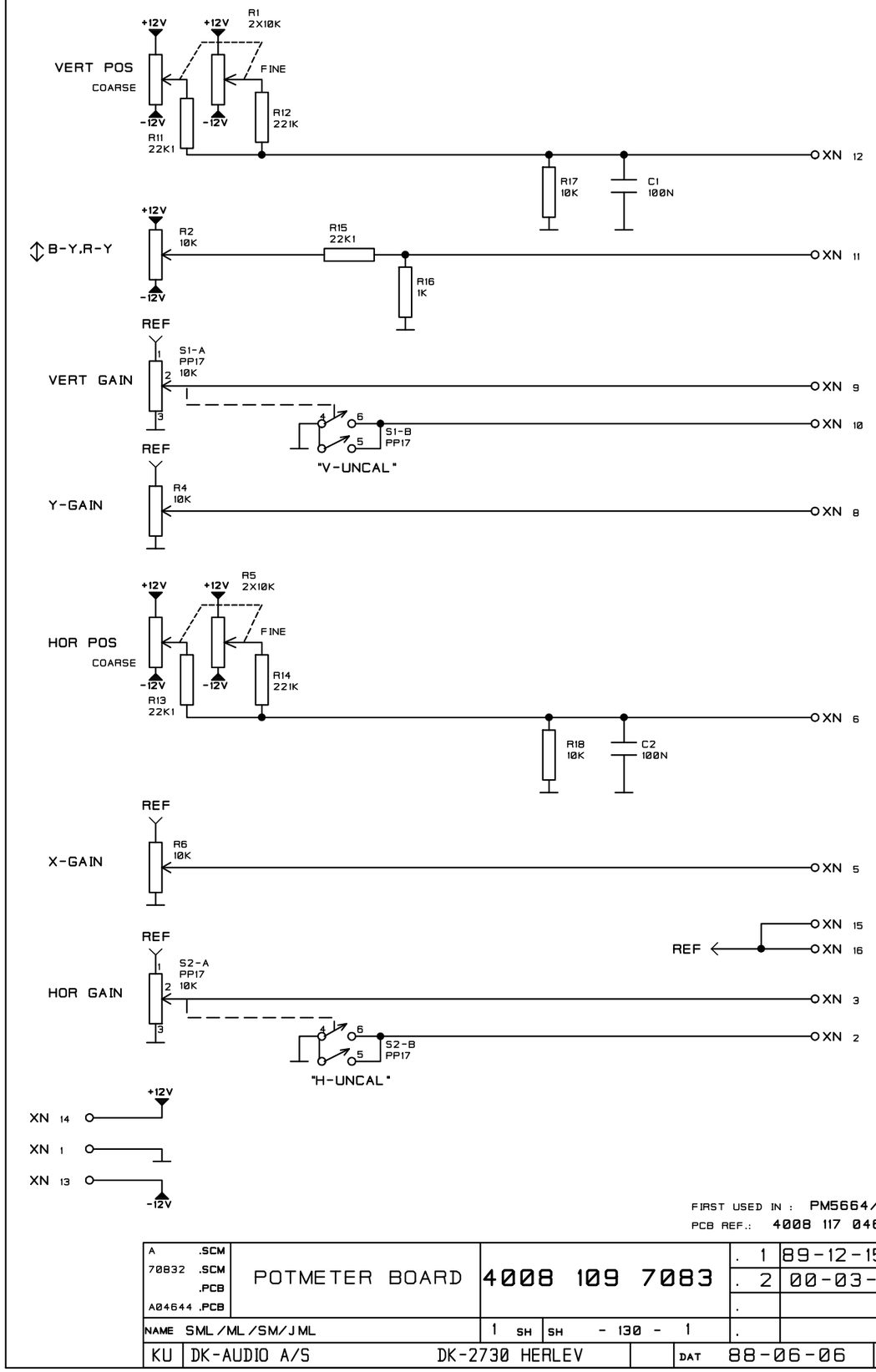
SYNC.AND FIELD SEPARATOR

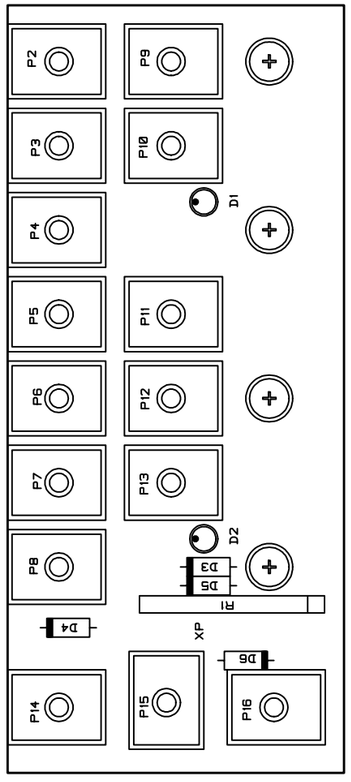


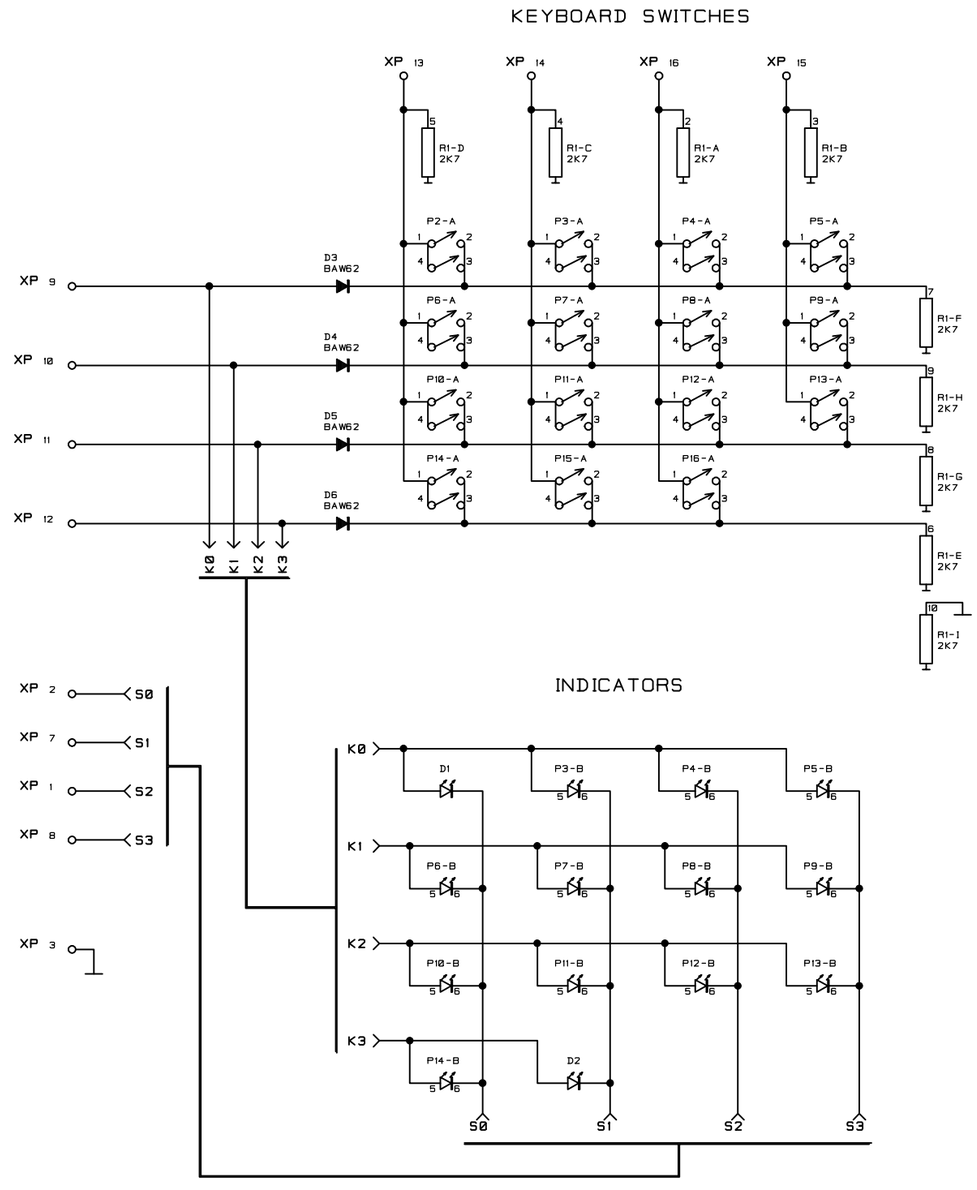
FIRST USED IN: PM5661/A4.2
PCB REF.: 4008 117 0365

SYNC SEPARATOR	4008 108 9764		2	95-03-01
			2	~~87-09-03~~
			2	~~88-01-12~~
CHECK:	NAME: HA.I/SM/JML	2 SH SH 130 - 2	2	~~88-03-16~~
AX 97642.SCM A03654.PCB	KU	DK-AUDIO A/S DK-2730 Herlev	DAT. 86-01-28	A3L


R1
H2
R11
R12
R17
C1
R15
R16
R2
H4
S1
H6
XN
16
15
2
1
R4
R18
C2
R5
R13
R14
R6
H3
S2
H1
H7

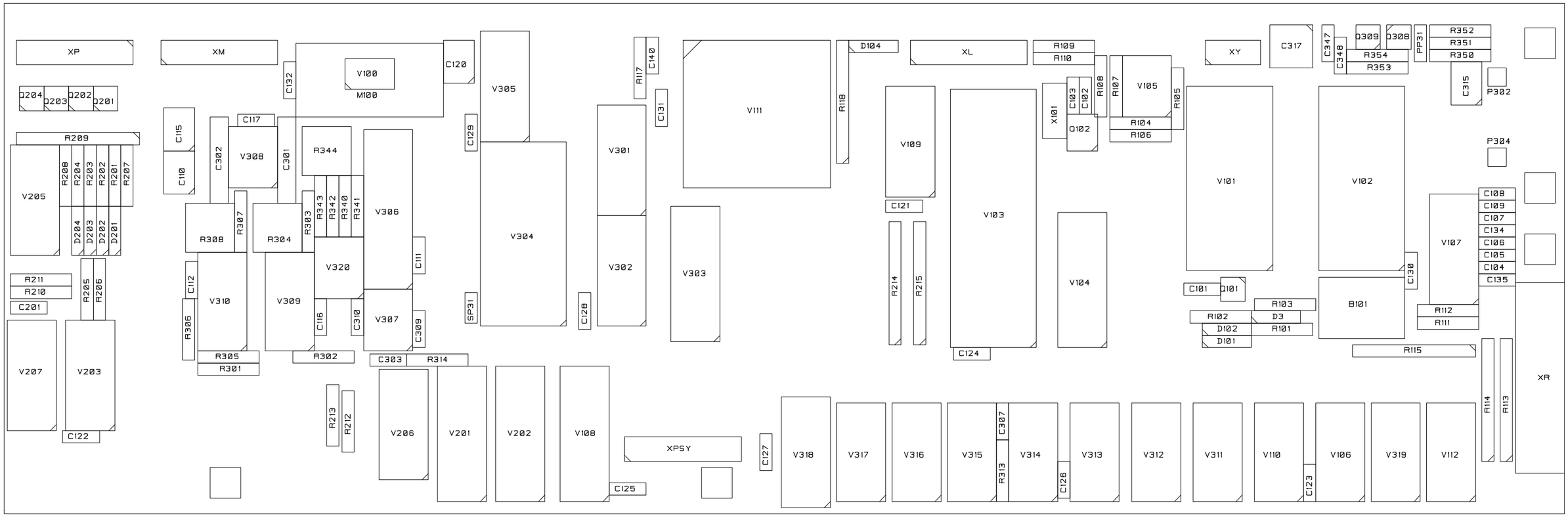

+12V
+12V
R1
2X10K
VERT POS
COARSE
FINE
-12V
-12V
R12
22K
R11
22K1
XN 12
R17
10K
C1
100N
+12V
R2
10K
B-Y,R-Y
R15
22K1
XN 11
R16
1K
-12V
REF
S1-A
PP17
10K
VERT GAIN
XN 9
XN 10
S1-B
PP17
"V-UNCAL"
REF
R4
10K
Y-GAIN
XN 8
+12V
+12V
R5
2X10K
HOR POS
COARSE
FINE
-12V
-12V
R14
22K
R13
22K1
XN 6
R18
10K
C2
100N
REF
R6
10K
X-GAIN
XN 5
XN 15
REF
XN 16
REF
S2-A
PP17
10K
HOR GAIN
XN 3
XN 2
S2-B
PP17
"H-UNCAL"
+12V
XN 14
XN 1
XN 13
-12V
FIRST USED IN : PM5664/U5
PCB REF.: 4008 117 0464
A .SCM
70832 .SCM
.PCB
A04644 .PCB
POTMETER BOARD
4008 109 7083
. 1 89-12-15
. 2 00-03-11
NAME SML/ML/SM/JML
1 SH SH - 130 - 1
KU DK-AUDIO A/S DK-2730 HERLEV
DAT 88-06-06
A3L





FIRST USED IN: PM5664/U6
PCB REF.: 4008 117 0465

A .SCM 70841 .SCM ACKS .PCB 04652 .PCB	KEYBOARD	4008 109 7544	. 1	~~89-12-19~~
			. 1	~~90-08-28~~
			. 1	97-11-14
NAME TD/ML/HBS/SM/JML		1 SH SH - 130 - 1	.	
KU DK-AUDIO A/S		DK-2730 HERLEV	DAT 88-08-19	A3L


XP
XM
XL
XY
XR
XPSY
V100
M100
V101
V102
V103
V104
V105
V106
V107
V108
V109
V110
V111
V112
V201
V202
V203
V205
V206
V207
V301
V302
V303
V304
V305
V306
V307
V308
V309
V310
V311
V312
V313
V314
V315
V316
V317
V318
V319
V320
B101
Q102
X101
P302
P304
PP31
SP31
C101
C102
C103
C104
C105
C106
C107
C108
C109
C110
C111
C112
C115
C116
C117
C120
C121
C122
C123
C124
C125
C126
C127
C128
C129
C130
C131
C132
C134
C135
C140
C301
C302
C303
C307
C309
C310
C315
C317
C347
C348
D101
D102
D104
D201
D202
D203
D204
Q201
Q202
Q203
Q204
Q308
Q309
R101
R102
R103
R104
R105
R106
R107
R108
R109
R110
R111
R112
R115
R117
R118
R205
R206
R207
R208
R209
R210
R211
R212
R213
R214
R215
R301
R302
R303
R305
R306
R307
R308
R310
R311
R312
R313
R314
R340
R341
R342
R343
R344
R350
R351
R352
R353
R354
D3

RAM

ROM

CPU

ADDR. LATCH

TO SHEET 2 &3

D101 BAT85
D102 BAT85
R101 10K
B101 3V
C101 100N
V101 8464
R102 10K
Q101 BC547B
D3 BAV20
R103 2K21
V102 27C256
C102 27P
C103 27P
X101 12MHZ
V103 8031
Q102 BF256A
CP1
R108 68Ω
V104 74HC573
V108 * 74HC574
PBEN
EXTEND
P1.4
XPSY 1
XPSY 2
XPSY 4
XPSY 5
XPSY 6
XPSY 7
XPSY 8
XPSY 9
XPSY 10
XPSY 11
XPSY 15
BEGIN
LOADPOS
UPDATE
EXTEND
P1.4
P1.5
FIELDINT
END
DONE/PROG
CLOCK
DATA
PSEN
WR
RD
A15
ALE
EA
RST
RXD
TXD
INT0
INT1
T0
T1

INTENSITY CONTROL

625/525
TVSYS
DATA
CLOCK
DONE/PROG
V111 2064PGA68
AWRESET
RESET
PWRDWN
CCLK
I/O-DIN
I/O-DOUT
I/O-LDC
I/O-HDC
I/O-XTAL1
I/O-XTAL2
MO
M1
M2-I/O
R118 = 1K
R118-C
R118-A
R118-E
R118-D
GAWI
XL 12
XL 13
XL 14
XL 15
XL 16
D104 BAW62
GRATBLK
R117 22K1
C140 100P
FIELDINT
CP1
FIELD1
FIELD
R

V109 74HC138
PIEN
P2EN
P3EN
P4EN
P5EN
P6EN
P7EN
PBEN
XL 9
XL 10
XL 11

V112-A 74HC74
V112-B 74HC74
V106-D 74HC04
V112-B 74HC00
V106-C 74HC04
V112-A 74HC00
RDEN

RESET

V105 ICL8212
R104 47K5
R105 22K1
R106 1M
R107 1K
V106-A 74HC04
AWRESET

V106-B 74HC04

CONTROL INPUT

R113-G
R113-B
R113-A
R113-C
R113-D
R113-E
R113-F
R113-H
R113-I
R114-E
R114-B
R115-B
R114-C
R115-C
R115-D
R114-D
R115-E
R111 100
R112 100
R109 100
R110 100
V107 PCF8574
IIC ADDR. H44
DD0
DD1
DD2
DD3
DD4
DD5
DD6
DD7
C104 1N
C105 1N
C106 1N
C107 1N
C108 1N
C109 1N
C134 1N
C135 1N
R113 = 2K7
R114 & R115 = 10K

V100 7805
C110 15U
C115 15U
C111-112 100N
C116-117 100N
C132 100N
C120 15U
C121-131 100N
+12V
-12V

XM 11
XM 13
XM 12
XM 10
XM 15
XM 9
XM 8
XM 16
XR 2
XR 1
XR 9
XR 11
XR 7
XR 14
XR 6
XR 13
XR 5
XR 12
XR 3
XR 10
FIELD
SDA
SCL
H

* NOT MOUNTED

FIRST USED IN: PM 5664/U7
PCB REF.: 4008 117 0530

ABC SCM 74491 .SCM AM PCB 05301 .PCB	CONTROL BOARD	4008 109 7449 M.B.	. 1	91-03-14
NAME TD/ML /SM		3 SH SH - 130 - 1		
KU	PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT 88-08-18	A3L

INPUT PORT

RDEN
V201 74HC573
R212 100K
R213 100K
XM 14
XM 5 AUNC
XM 6 VUNC
TVSYS 625/525
FIELDI
B0 B1 B2 B3
AD0 AD1 AD2 AD3 AD4 AD5 AD6 AD7

DRIVERS

FROM SHEET 1
R209-I 1K
R209-D 1K
R209-C 1K
R209-B 1K
R209-A 1K
Q201 BC327
Q202 BC327
Q203 BC327
Q204 BC327
XP 9
XP 10
XP 11
XP 12

DISPLAY PORT

V202 74HC574
D201 BAW62
D202 BAW62
D203 BAW62
D204 BAW62
R204 1K
R203 1K
R202 1K
R201 1K
V205 4052
PTEN
P7EN
V203 DS75494
V206 74HC670
R205 47R5
R206 47R5
R207 47R5
R208 47R5
S0
S1
S2
S3
XP 2
XP 7
XP 1
XP 8
XP 3

R214-A R215-A R214-B R215-B R215-C R214-D R215-D R215-E
DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7
R214 = 1K
R215 = 1K

R211 221K
R210 100K
C201 1N
V207 74HC4060
SC0
SC1

4008 117 0465

KEYBOARD SWITCHES

XP 19
XP 20
XP 21
XP 22
XP 23
XP 24
XP 25
XP 26
D4 BAW62
D5 BAW62
D6 BAW62
K0 K1 K2 K3
R1-D R1-C R1-A R1-B
R1 = 10K
P2-A P3-A P4-A P5-A
P6-A P7-A P8-A P9-A
P10-A P11-A P12-A P13-A
P14-A P15-A P16-A
R1-F R1-H R1-G R1-E R1-I

INDICATORS

XP 4 S0
XP 17 S1
XP 5 S2
XP 18 S3
XP 6
K0 K1 K2 K3
D1 D2
P3-B P4-B P5-B
P6-B P7-B P8-B P9-B
P10-B P11-B P12-B P13-B
P14-B

DQ0 DQ1 DQ2 DQ3 DQ4 DQ5 DQ6 DQ7
XL 1 XL 2 XL 3 XL 4 XL 5 XL 6 XL 7 XL 8
(QUICT)
DATABUS

FIRST USED IN: PM 5664/U7
PCB REF.: 4008 117 0530

BCA SCM 74491 .SCM P74491 .PCB A 05301 .PCB	CONTROL BOARD	4008 109 7449 M.B.	. 1	91-03-14
NAME TD/ML /SM		3 SH SH - 130 - 2		
KU	PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT	88-08-19 A3L

ELECTRONIC GRATICULE GENERATOR

ROM

COUNTCLOCK
V301 74HC193
V302 74HC193
BEGIN
S1
S2
V304 27C256
D6
D7
LE-X/Y
PLOAD
V305 74HC670
OE-X/Y
V303 74HC574
FROM SHEET 1
AD0
AD1
AD2
AD3
AD4
AD5
AD6
AD7
PZEN
SH1
Q7
Q8
EXTEND
SP31
Q6

DAC

V306 AD7537
P0
P1
WRT
UPD
CS
C309 27P
C310 27P
V307-A LF353N
V307-B LF353N
V320-A LF353N
V320-B LF353N
R340 2K
R341 1K
R342 1K
R343 3K92
R344 200

SAMPLE/HOLD

SAMPLE
R301 1K
R302 1K21
V309 HA5320
R303 4K75
HSHAPE
R304 2K
C301 2N2
V308-A LM353N
HGV
XM 1
XM 2
XM 4
VERTICAL ZERO DC ADJ.
V310 HA5320
R305 1K5
R306 1K
R307 4K75
VSHAPE
R308 2K
C302 2N2
V308-B LF353N
VGV
XM 3

BEGIN

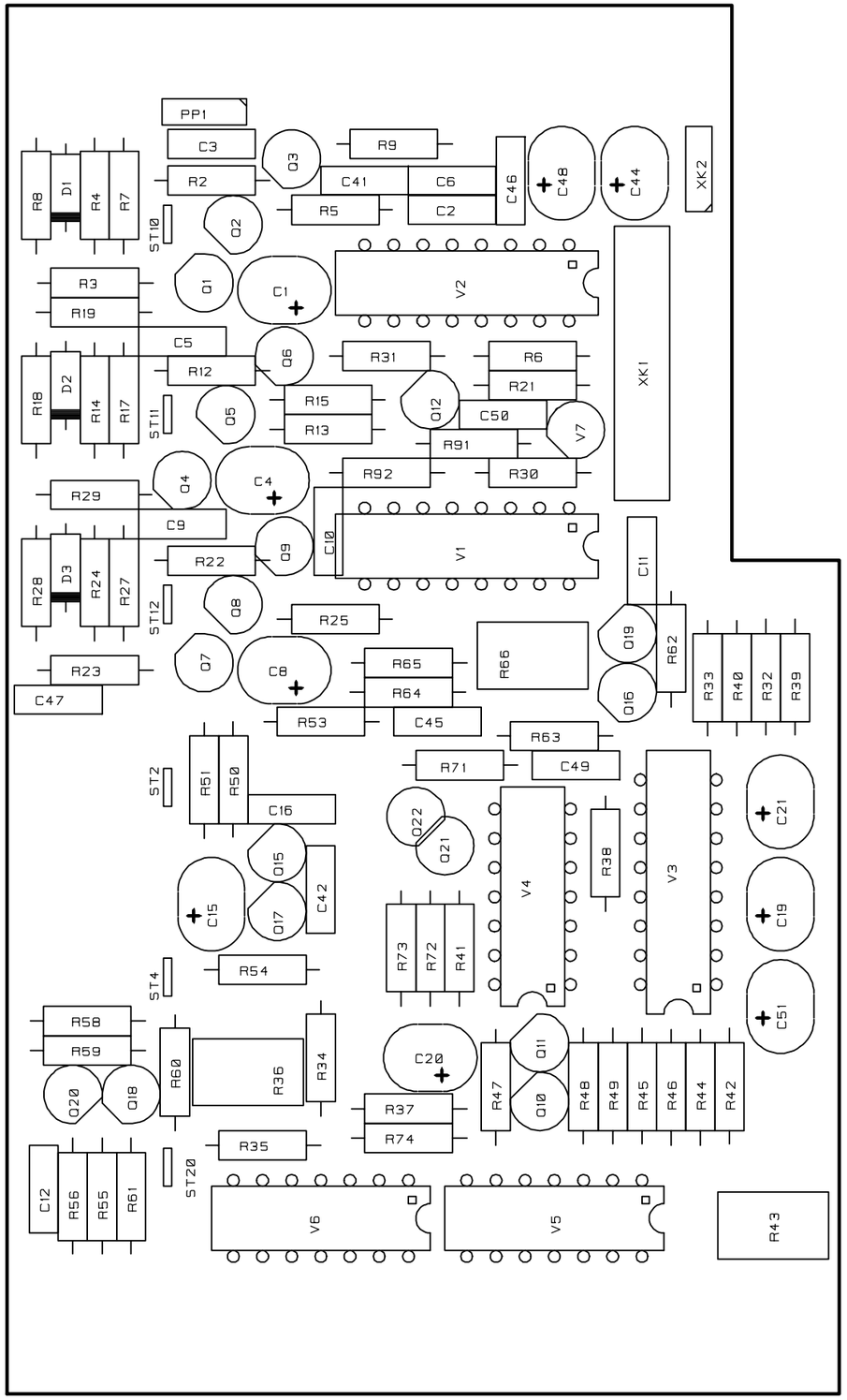
BEGIN
XM 7
V106-E 74HC04
V311-A 74HC00
V311-B 74HC00
V311-C 74HC00
V311-D 74HC00
V312-A 74HC08
V312-B 74HC08
V312-C 74HC08
V312-D 74HC08
V313-A 74HC32
V313-B 74HC32
V313-C 74HC32
V313-D 74HC32
V314-A 74HC08
V314-B 74HC08
V314-C 74HC08
V314-D 74HC08
V315-A 74HC00
V315-B 74HC00
V315-C 74HC00
V315-D 74HC00
V316-A 74HC74
V316-B 74HC74
V317-A 74HC74
V317-B 74HC74
V318 4040
V319-A 74HC00
V319-B 74HC00
V319-C 74HC00
V319-D 74HC00
V110-C 74HC00
V110-D 74HC00
V106-F 74HC04
P0
P1
LE-X/Y
OE-X/Y
CS
PLOAD
UPDATE
SAMPLE
GRATBLK
END
COUNTCLOCK
R313 2K21
C307 27P
R314 2K21
C303 0PF

EXT.REF.AMPLIFIER

P302
P304
C315 15U
R350 2K21
PP31
R351 22K1
R352 2K21
R353 2K21
C348 100N
Q308 BF450
Q309 BF199
R354 562
C317 220U
C347 100N
XY 1
XY 2
XY 3
XY 4
XY 5

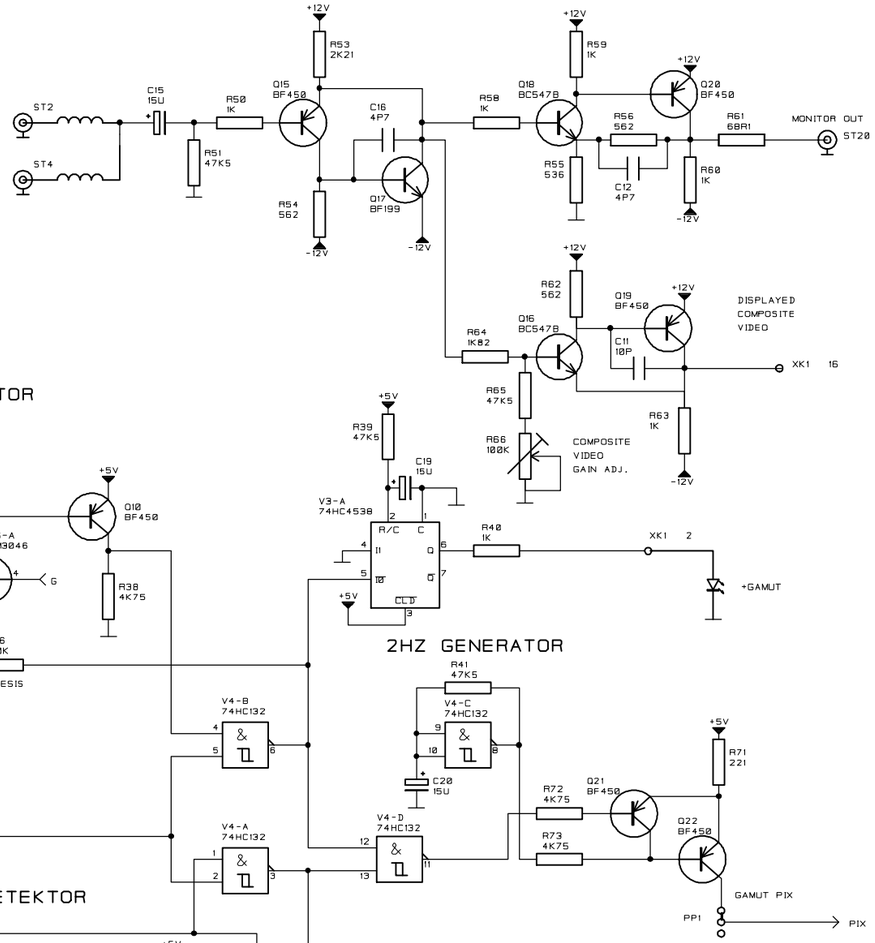
FIRST USED IN: PM 5664/U7
PCB REF.: 4008 117 0530

CAB .SCM 74491 SCM P74491 .PCB A 05301 PCB	CONTROL BOARD	4008 109 7449 M.B.	1	91-03-14
			. 1	94-07-04
NAME TD/ML /SM/JML	3 SH SH - 130 - 3		.	
KU	PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY	DAT 88-08-17		A3L



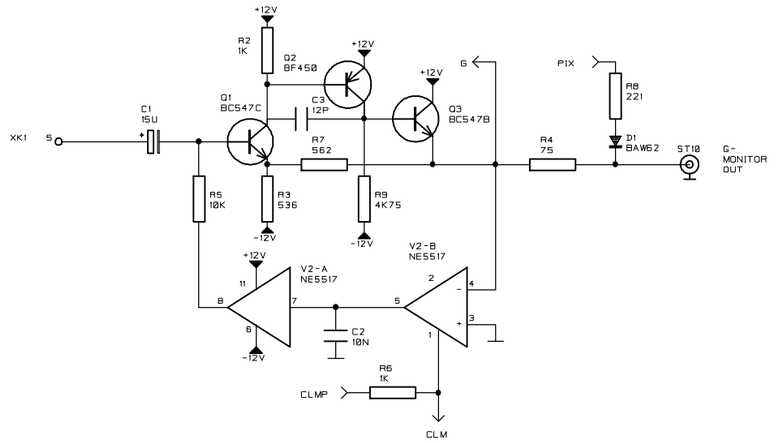
UNIT 8 - GBR Board

COMPOSITE VIDEO AMPLIFIER

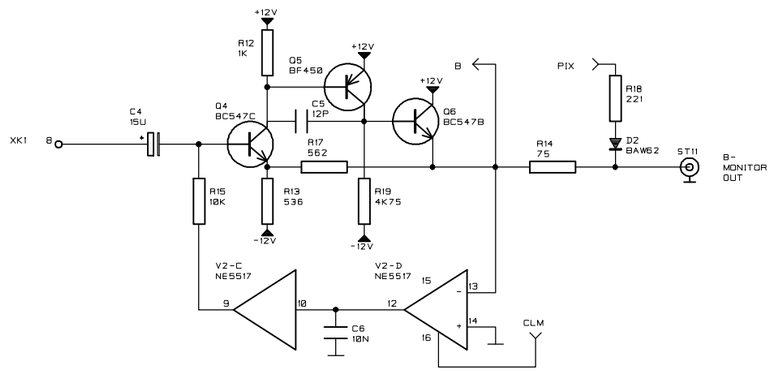


GBR BUFFERS

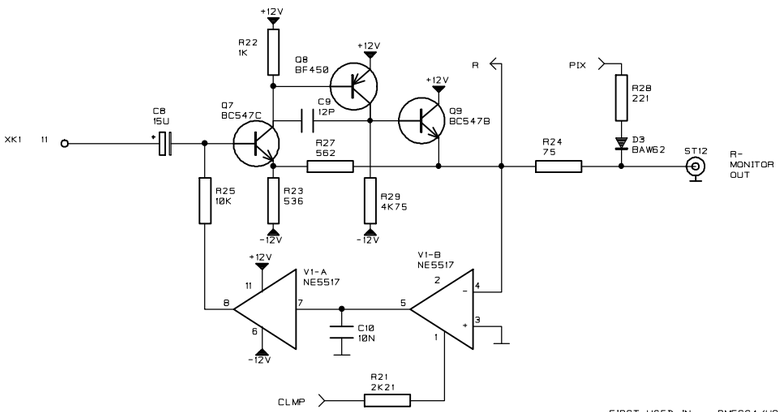
G-AMP



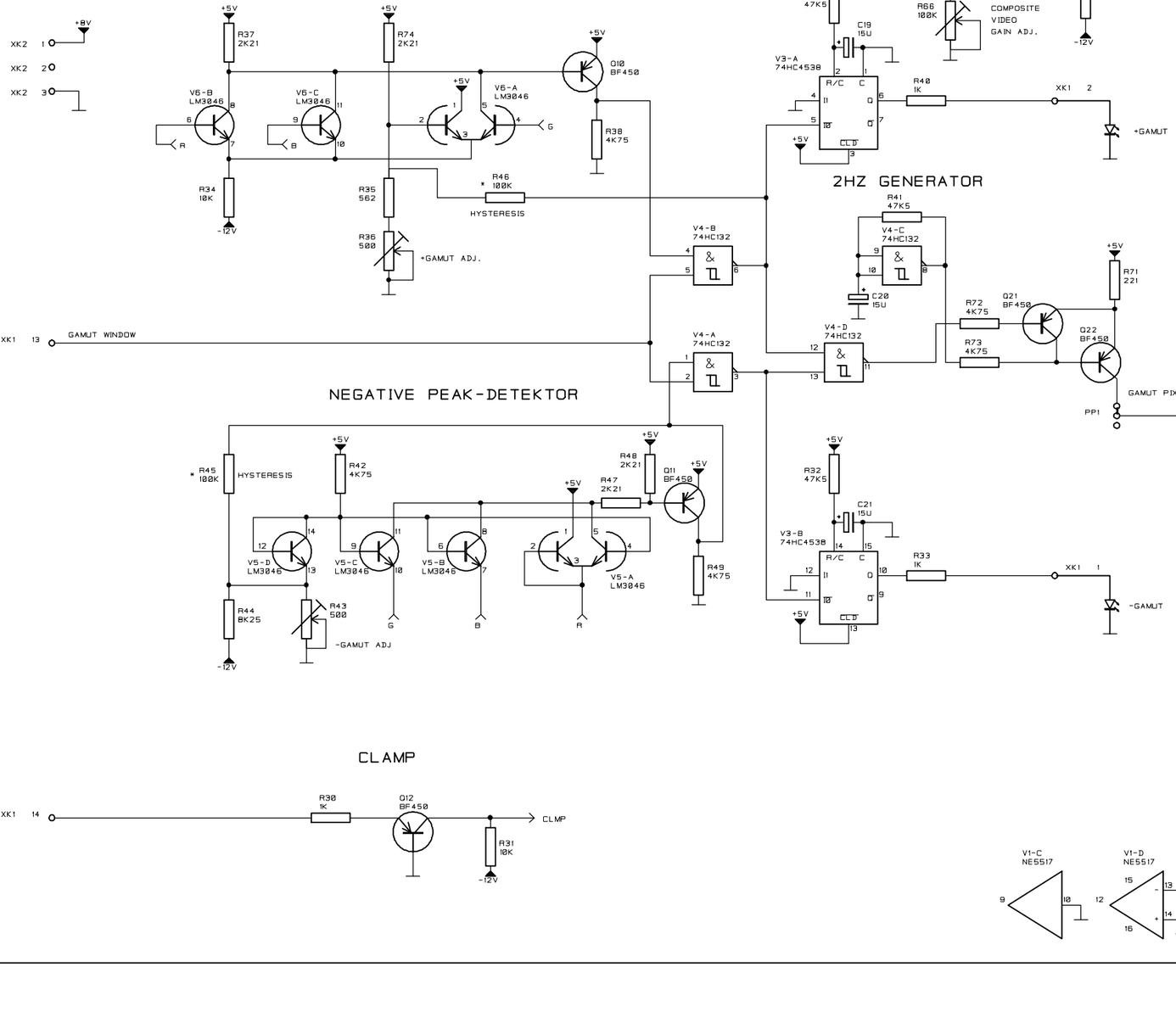
B-AMP



R-AMP



POSITIVE PEAK-DETEKTOR



2HZ GENERATOR

NEGATIVE PEAK-DETEKTOR

CLAMP

* NOT MOUNTED

FIRST USED IN. PM5664/U8
PCB REF.. 4008 117 0467

A .SCM 71141 .SCM AM .PCB 04671 .PCB	GBR MONITOR OUT	4008 109 7114	. 1 . 2 . 1 . 1	91-07-02 97-10-15 90-08-17 91-01-02	
NAME SML /ML /SML /SM /SRJ/JML		1 SH SH - 130 - 1			
KU	PHILIPS TV TEST EQUIPMENT DK-2605 BRØNDBY		DAT	88-05-24	A3L