

1005
1006
1010

Main Receiver B450



MAIN RECEIVER B 450

I N S T R U C T I O N M A N U A L

C O N T E N T S:

<u>INTRODUCTION</u>	2
<u>OPERATING INSTRUCTIONS</u>	3
Tuning to an A1, F1, SSB or AM Station	3.1
Operating Controls and their Functions	3.2
<u>TECHNICAL SPECIFICATION</u>	4
<u>TECHNICAL DESCRIPTION</u>	5
Mechanical	5.1
Circuit Description, General	5.2
Circuit Summary, Signal Path	5.3
Circuit Description, Signal Path Boards	5.4
Circuit Summary, Frequency Control Circuit	5.5
Circuit Description, Frequency Control Circuit Boards	5.6
Circuit Description. Power Pack	5.7
<u>INSTALLATION</u>	6
<u>ORDINARY SERVICING</u>	7

<u>REPAIR AND ALIGNMENT</u>	8
Introduction	8.1
AC - DC Voltages	8.2
Typical Sensitivity Levels	8.3
Realignment of RF Input Circuit Unit (29), MHz-Switch Unit (28) and RF TUNER UNIT (27)	8.4
Realignment of 1st Mixer Unit (30)	8.5
Realignment of 1.4 MHz Mix. and Ampl. Unit (12)	8.6
Realignment of Filter Section Unit (10)	8.7
Realignment of Beat Oscill. + AF - Gate + Line Ampl. Unit (11)	8.8
Realignment of Audio Ampl. Unit (18)	8.9
Realignment of AGC Ampl. and Detection Unit (13)	8.10
Realignment of MHz Loop Unit (21)	8.11
Realignment of VCO Unit (23)	8.12
Realignment of Tuner Unit (25)	8.13
Realignment of Ref. Freq. and Lock Unit (17)	8.14
Realignment of 73.6 MHz Loop Unit (20)	8.15

<u>CIRCUIT DIAGRAMS</u>	<u>Diagram</u>
Location of Circuit Boards	4-14405
Wiring Diagram	2-14409
Frontplate Interconnections	4-14408
Block Diagram, RF and AF Paths	3-14406
Mode Control Unit (19)	3-14439
RF Input Circuit Unit (29)	3-14447
MHz Switch	4-14641
RF Tuner Unit	4-15726

CIRCUIT DIAGRAMS (continued)

1st Mixer Unit (30)	3-14448
1.4 MHz Mix. and Ampl. Unit (12)	3-14432
Filter Section Unit (10)	3-14430
Beat Oscill. + AF Gate + Line Ampl. Unit (11)	3-14431
Audio Ampl. Unit (18)	3-14438
AGC Ampl. and Detector Unit (13)	3-14433
Filter Unit (36)	4-15762
Filter Unit (35)	4-15747
Power Supply Unit (26)	4-14449
Frequency Control Circuit, Block Diagram	3-14407
MHz Band Selector Unit (31)	4-15742
MHz Code Unit (15)	3-14435
Display Unit (14)	3-14434
MHz Loop (21)	3-14441
V.C.O. Unit, 75-105 MHz (23)	3-14443
Master Loop Unit (22)	3-14442
Tuner Unit (25)	3-14671
Time Base Counter/Latch Unit (16)	3-14436
Ref. Freq. and Lock Unit (17)	3-14437
73.6 MHz Loop Unit (20)	3-14440
Junction Panel Unit (24)	4-14661

PARTS LISTS

10

Main Receiver	4-13500 7, 8, 9/9
Filter Section Unit (10)	4-14410 2, 3, 4, 5, 6/6
Beat Oscill. + AF Gate + Line Ampl. Unit (11)	4-14411 2, 3, 4, 5, 6/6
1.4 MHz. Mix. and Ampl. Unit (12)	4-14412 2, 3/3

PARTS LISTS (continued)

AGC Ampl. and Detector Unit (13)	4-14413 2, 3, 4, 5/5
Display Unit (14)	4-14414 2/2
MHz Code Unit (15)	4-14415 2, 3/3
Time Base Counter/Latch Unit (16)	4-14416 2, 3/3
Ref. Freq. and Lock Unit (17)	4-14417 2, 3, 4, 5/5
Audio Amplifier (18)	4-14418 2, 3/3
Mode Control Unit (19)	4-14419 2/2
73.6 MHz Loop Unit (20)	4-14420 2, 3, 4/4
MHz Loop (21)	4-14421 2, 3, 4/4
Master Loop Unit (22)	4-14422 2/2
V.C.O. Unit, 75 - 105 MHz (23)	4-14423 2, 3/3
RF Input Circuit Unit (29)	4-14427 2, 3/3
1st Mixer Unit (30)	4-14428 2, 3, 4/4
Power Supply Unit (26)	4-14429 2/2
MHz Switch (28)	4-14640 2, 3/3
Junction Panel (24)	4-14660 2/2
Tuner Unit (25)	4-14670 4, 5/5
RF Tuner Unit (27)	4-14742 2/2
Frontplate	4-14880 2/2
Terminal Box	4-15640 2/2
Extension Board (01)	4-15730 2/2
Extension Board (02)	4-15735 2/2
Protection Lamp Unit (32)	4-15744 2/2
Filter Unit (35)	4-15750 2/2
Filter Unit (36)	4-15751 2/2
Filter Unit (Term. Box)	4-15755 2/2

2. INTRODUCTION

Receiver B 450 is a high-quality communication receiver, covering the frequency range from 10 kHz to 30 MHz.

The receiver is designed to receive all modes of telephony, telegraphy, and telex operations used on board ships, with optional use of each mode of operation.

The frequency range is divided into 30 bands, each band being 1 MHz. The receiver has continuous tuning within each band.

A phase-lock button with lock indication locks the frequency to the highly stable internal TCXO (temperature compensated crystal oscillator) in order to obtain an absolute crystal stability on each frequency.

The frequency read-out is a digital display, showing the tuned frequency with a resolution of 10 Hz.

The electric circuits are solid-state throughout, and integrated circuits are used extensively. These features involve that the receiver is ready for operation immediately after having been switched on.

The front-end filters, which are provided for all frequencies of more than 1 MHz, are switched, and automatically tuned, without operation of any extra knobs.

The mechanical construction is modular, with a view to facilitating servicing. The overall shape is a low-profile 19" rack unit for easy bracket mounting.

3. OPERATING INSTRUCTIONS

3.1 Tuning to an A1, F1, SSB or AM Station

1. Set "MODE" switch to the desired mode and bandwidth.
2. Switch-on the "AGC".
3. Turn "RF-GAIN" fully clockwise.
4. Adjust "AF-GAIN" to a convenient volume.
5. Select the desired frequency using the "BAND MHz" and "TUNING kHz" knobs.
6. Adjust "CLARIFIER" to a natural sound of speech, when the desired station is modulated.
7. Press the phase-lock buttons. The built-in lamp is lighted.
8. In some cases it may be advantageous to use the manual "RF-GAIN" either together with the "AGC" on or with the "AGC" switch in off-position, to reduce any background noise coming up in speech pauses.

3.2 Operating Controls and their Functions

BAND MHz: The frequency range is divided into 30 bands of 1 MHz each.

TUNING kHz: For continuous tuning within each band.

MODE: The "MODE" switch has seven positions:

AM: Reception of double and single sideband modulation with full carrier.

LSB: Reception of single-sideband modulation with suppressed or reduced carrier. Lower sideband.

USB: Reception of single-sideband modulation with suppressed or reduced carrier. Upper sideband.

FSK: Reception of telex signals.

FSK-N: Reception of telex signals, narrow bandwidth.

CW: Reception of unmodulated signals.

CW-N: Reception of unmodulated signals.
Narrow bandwidth.

CLARIFIER: For accurate tuning of the frequency.

RF-GAIN: Combines manual adjustment of receiver,
RF-gain and ON-OFF switch for the power
supply.

AF-GAIN: Manual adjustment of receiver AF-gain.

LOCK: Phase-lock button, locks the frequency
to the TCX0.

AGC MODE: The switch has three positions:

1. FAST, for fast release time.
2. OFF, automatic-gain-control switch off.
3. SLOW, for slow release time.

AERIAL PAD: The switch has two positions:

1. 20 dB attenuation of the antenna input
signal.
2. 0 dB attenuation of the antenna input
signal.

METER: The meter indicates the actual gain con-
trol voltage to 1st mixer.

4. TECHNICAL SPECIFICATION

Frequency range:	10 kHz - 30 MHz
Frequency stability:	± 10 Hz / 15 min.
Frequency accuracy without recalibration:	± 100 Hz / 4 years
Frequency selection MHz:	30 bands of 1 MHz each
Frequency selection kHz:	Continuous tuning
Frequency phase locking:	10 Hz steps
Frequency indicator:	7 digit display with 10 Hz resolution
Clarifier:	± 300 Hz
Modes of reception:	A1, A2, A2H, A3, A3A, A3H, A3J, F1
Antenna impedance:	0.1 MHz to 4 MHz, 10 Ohm + 250 pF 4 MHz to 30 MHz, 50 Ohm
Image reception:	> 60 dB
IF rejection	> 60 dB
Cross modulation:	Unwanted signal level 90 dB/1 μ V SPACED ± 20 kHz, less than - 36 dB
Automatic gain control:	Output level increase for a signal increase of +100 dB, less than 10 dB
Attack time:	10 msec
Release time:	SLOW: 2 seconds FAST: 0.1 sec
Audio output: Loudspeaker:	3 W/ 5 Ohm
Phone:	10 mW/600 Ohm
Line 1:	0 dBm/600 Ohm balanced
Line 2:	0 dBm/600 Ohm balanced
Ambient temperature:	Full specs. 0°C to 40°C Operation - 15°C to +55°C

Receiver
B 450

Power supply: 110/220 VAC, 50 Hz to 60 Hz
40 VA

Supply voltage variation: $\pm 10\%$

Dimensions:	<u>Rack:</u>	<u>In cabinet:</u>
	Height: 133 mm	175 mm
	Depth : 350 mm	420 mm
	Width : 482 mm	525 mm
	Weight: 12 kg	21 kg

Sensitivity:

		<u>Max. input for 10 dB SINAD:</u>
0.1 MHz to 4 MHz	AM	16 dB / 1 μ V
	AM-N	13 dB / 1 μ V
	LSB/USB	2 dB / 1 μ V
	FSK/CW	-4 dB / 1 μ V
	FSK-N/CW-N	-8 dB / 1 μ V
4 MHz to 30 MHz	AM	12 dB / 1 μ V
	AM-N	9 dB / 1 μ V
	LSB/USB	-2 dB / 1 μ V
	FSK/CW	-6 dB / 1 μ V
	FSK-N/CW	-10 dB / 1 μ V

Selectivity:

<u>Mode Switch position:</u>	<u>Pass Bandwidth kHz at -6 dB: +)</u>	<u>Stop Bandwidth kHz at -60 dB:</u>
AM	+/- 4	+/- 10
AM-N	+/- 1.2	+/- 2
LSB	- 2.7 to - 0.35	- 3.4 to + 0.5
USB	+ 2.7 to + 0.35	+ 3.4 to - 0.5
FSK	+/- 0.6 kHz at - 2 dB	+/- 1.75
FSK-N	+/- 0.1 kHz at - 2 dB	+/- 1.2
CW	+/- 0.6 kHz at - 2 dB	+/- 1.75
CW-N	+/- 0.1 kHz at - 2 dB	+/- 1.2

+) except as noted.

5. TECHNICAL DESCRIPTION

5.1 Mechanical

The receiver is built up of sturdy, anti-corrosive treated steel plates, the construction thus being particularly rigid and rugged.

The receiver contains a total of 24 prints, 5 of them, i.e., those numbered (11), (13), (15), (16) and (17), being of plug-in type, and 7, i.e., those numbered (12), (20), (21), (22), (23), (25) and (30), being placed in separate screen boxes.

5.2 Circuit Description, General

The printed circuits are all numbered, the numbers being (10) - (36), both included.

The Wiring Diagram on page 9-2 shows the interconnections of the individual prints. The circuit functions are seen from the block diagrams on pages 9-4 and 9-18.

5.3 Circuit Summary, Signal Path

The antenna signal passes via a protecting lamp through the variable primary circuits and the RF amplifier. The signal, having passed the RF amplifier, is mixed in the 1st mixer with 75 - 105 MHz to the first intermediate frequency of 75 MHz. In the 2nd mixer the 75 MHz frequency is mixed with 73.6 MHz to the 2nd intermediate frequency, 1.4 MHz. The 2nd intermediate frequency, depending on the MODE setting, is filtered in a filter bank consisting of a total of five crystal filters. After the filtering, the signal is detected, either in an SSB detector or an AM detector. The LF signal is led to two 600Ω line outputs and one low-impedance output amplifier.

5.4 Circuit Description, Signal Path Boards

RF Input Circuit, Unit (29)

The antenna signal enters via a 0 dB/20 dB attenuator, which is controlled by relay K1 via a switch on the frontplate of the receiver. With frequencies lower than 1 MHz relays K2 and K3 are activated by the MHz BAND selector, in such a manner that the antenna signal passes through a low-pass filter consisting of L2, L3, C5 and C9, and from there further on to 1st MIXER UNIT (30). Diodes CR3 and CR4 protect Unit (30) from too high antenna signals. With frequencies higher than 1 MHz the signal passes through the variable primary circuits which are tuned synchronously with the BAND MHz and TUNING kHz knobs. The BAND MHz knob turns the two prints, MHz-SWITCH UNIT (28), which for each MHz position cut in a tuned parallel circuit (for the 1 - 2 MHz range only a capacitor however) in parallel over the two variable coils in RF TUNER UNIT (27) and the bottom coils L1 and L5 in unit (29):

RF TUNER UNIT (27) follows the TUNING kHz Knob. Transformers T1 and T2, and T4 and T5 in unit (29) adapt the signal to, respectively, the primary circuits and the RF amplifier Q1, and 1st MIXER UNIT (30).

1st Mixer Unit (30)

The antenna signal is led through a low-pass filter, which cuts off at approx. 30 MHz, into a diode mixer, U1. As mixing signal is introduced through a band-pass filter a 75 - 105 MHz signal from VCO UNIT (23). The difference signal, which is always 75 MHz, is taken out through a band-pass filter, is amplified in Q2, and is filtered in crystal-filter X1 the 6 dB bandwidth of which is $75 \text{ MHz} \pm 13 \text{ kHz}$, the signal is amplified in Q4 and passes on to the 1.4 MHz MIX. AND AMPL. UNIT (12). Amplifiers Q2 and Q4 are AGC controlled from the AGC AMPL. AND DETECTOR UNIT (13) via pin diodes CR1 and CR2, which function as variable emitter resistors.

1.4 MHz Mix. and Ampl. Unit (12)

The 1st intermediate frequency is mixed in unit (12) with a 73.6 MHz signal from the 73.6 MHz LOOP UNIT (20) in diode mixer U1. The difference, 1.4 MHz, is filtered in crystal filter Y1, the 6 db pass-band of which is $1.4 \text{ MHz} \pm 4 \text{ kHz}$. This filter determines the selectivity of the receiver in MODE AM. The 1.4 MHz signal is amplified in U2, which is AGC controlled from the AGC AMPL. AND DETECTOR UNIT (13), and passes on, balanced, to FILTER SECTION UNIT (10).

Filter Section Unit (10)

Unit (10) has a filter bank consisting of four crystal filters which, depending on the setting of the MODE knob on the receiver front plate, can be coupled in to the 2nd intermediate frequency and provide the required selectivity. Switching between the filters is effected by means of a 15 V DC voltage from the MODE CONTROL UNIT (19), which opens, respectively closes, diodes CR1 - CR10 at the filter inputs. When a filter is selected, e.g., FL1, USB, pin diode CR3 opens and thus blocks all the other diodes at the filter inputs. Q5 admits current and thus opens for Q4 and Q12, in such a manner that the 1.4 MHz signal passes through to amplifier U1. U1 is AGC controlled from AGC AMPL. AND DETECTOR UNIT (13). The output from U1 is fed to BEAT OSCILL. + AF - GATE + LINE AMPL. UNIT (11).

Beat Oscill. + Af - Gate + Line Ampl. Unit (11)

In the AM MODE, the 2nd intermediate frequency of 1.4 MHz is detected in product detector U2. U2 consists of an amplifier with high amplification and a balanced mixer. The AM signal is fed to the inputs of, respectively, the amplifier and the mixer in U2. The amplifier clips the AM signal and uses it for mixing with the AM signal in the built-in mixer. The AF signal is first, through switch U4 which is controlled by MODE CONTROL UNIT (19), led to amplifier U5, and from there to AUDIO AMPL. UNIT (18). In the SSB, CW or F1 mode, the 2nd intermediate frequency is detected in the balanced mixer U1. The Beat-signal comes from one of the three crystal-oscillators, depending on the selected MODE.

With mode CW the oscillator frequency is 11206 kHz. This frequency is divided by 8 in U3, to 1400.750 kHz. After mixing in U1 is thus ob-

tained a 750 Hz beat-tone.

In mode F1 the oscillator frequency is 11212 kHz, the resulting AF signal thus being changed by 1.5 kHz. Mode SSB results in a beat-signal of 1400 kHz frequency. Selection of the proper beat oscillator is done via MODE CONTROL UNIT (19).

The AF output from U1 goes via U4 to U5, and from there to AUDIO AMPL. UNIT (18) and AGC AMPL. AND DETECTOR UNIT (13).

The output of amplifier U5 is also, via two potentiometers, connected to two 600Ω line amplifiers, U6 and U7.

Audio Ampl. Unit (18)

The AF signal from BEAT OSCILL. + AF - GATE + LINE AMPL. UNIT (11) enters UNIT (18) via VOLUME potentiometer R2. The signal is amplified in Q1, Q2 and in push-pull output stage Q4, Q5. Potentiometer R8 and Q3 determine the bias current in Q4 and Q5.

AGC Ampl. and Detector Unit (13)

In the AM MODE the 1.4 MHz of the 2nd intermediate frequency is amplified by Q2, detected by the envelope detector CR2, CR3, and various resistors and capacitors. Q3, R29 and C17 rectify the AF signal, which is then, as a proportional DC voltage, led to amplifiers U4, U5, and from there to various AGC controlled RF stages. The AGC hang-time can be changed through the AGC switch on the receiver frontplate.

Q6, in position FAST, connects R24, 47 KΩ, instead of the series connection R24, R25, totalling 4.7 MΩ, and thus reduces the time-factor. Q10 blocks diode CR6 in position OFF, in such a manner that the AGC voltage is determined solely by the RF GAIN knob.

In MODE SSB, CW or F1, the AF signal passes from U1 in unit (11) to amplifier Q1. The output from there goes to the AGC circuit U3. The AGC voltage from U3 is amplified in U4, U5, and goes from there to various AGC controlled RF stages. Changing of the hang-time is effected by Q4, controlled from the AGC switch, cutting C16 in or out. Q7 blocks CR5 when the AGC switch is in position OFF.

Amplifier U5, supplying AGC voltage to 1st MIXER UNIT (30) and to 1.4 MHz MIX. AND AMPL. UNIT (12), supplies also METER, on the receiver frontplate, with a voltage proportional to the RF amplification.

Unit (13) is provided with a muting-input which, by application of 24 V DC, causes that Q9 goes "high" and in turn regulates the amplification in the RF stages down to minimum.

Mode Control Unit (19)

The MODE knob on the receiver frontplate controls a +15 V DC voltage which opens and blocks diodes, in such a manner that any functions,

which are to be triggered in the receiver by switchover from one mode of operation to another, develop correctly. Q1 is activated by selection of MODE AM-N, in such a manner that the counter in TIME BASE AND COUNT/LATCH UNIT (16), which controls the display, is shifted by +1.5 kHz. At the same time as Q1 is activated, the USB filter in FILTER SECTION (03) is selected via diode CR9 in unit (19). As a result the required reception frequency passes symmetrically through the asymmetric USB filter.

Filter Units (36) and (35)

The purpose of these filters is prevention of undesirable irradiation from, e.g., a transmitter in the neighbourhood of the receiver.

5.5 Circuit Summary, Frequency Control Circuit

The Frequency Control Circuit consists of a series of units which, on the basis of information from the frequency-determining knobs on the receiver frontplate, generate the required signals to the RF circuit.

The Frequency Control Circuit can be phase-locked to a high-stable TCXO (Temperature Compensated Crystal Oscillator). This oscillator is used, firstly, as reference for the internal frequency counter for control of the display and, secondly, as reference for the phase-locked oscillators. When required, the high-stable variable oscillator can be phase-locked to the TCXO, in such a manner that the frequency stability of the receiver is determined solely by the TCXO.

5.6 Circuit Description, Frequency Control Circuit Boards

MHz Code Unit (15)

Data selectors U1 - U4 are connected via 30 leads to the MHz BAND switch. The selectors key their inputs, controlled by multi-vibrator Q1 + Q3 via counter U6 + U7. Synchronously herewith two sets of counters are operating, consisting of, respectively, U10 + U11 and U12 + U13. U10 + U11 count 0 - 1 - 2 ----- 29 BCD, corresponding to the MHz BAND switch and thus to the receiver range; U12 + U13 count from 79 to 108 binarily. When one of the selectors shows input, the data from the outputs of the two counters will be latched in U14, U15 and U16.

The binary information from U12 + U13 is used in MHz LOOP UNIT (21). The MHz information from U10 + U11 is used for the DISPLAY UNIT (14).

In case of underflow/overflow indication from COUNTER UNIT (16), when the variable oscillator TUNER UNIT (25) is outside of the range proper, U10 + U11 adjust the counter reset, in such a manner that the display frequency always remains correct. An exception is underflow in range 00 MHz, which is indicated as 99. Simultaneously with adjustment of counter reset, Q2, respectively Q4, will switch on an LED in the display, to indicate such underflow/overflow.

Display Unit (14)

To Unit (14) is fed, from MHz CODE (15), the MHz information, and, from COUNTER UNIT (16), the kHz information in BCD form. The display is directed, by a series of BCD, to 7 segment decoders. The red-filter before the displays is polarized with a view to avoiding inconvenient reflexes, and to securing better legibility. The lowest significant figure is $\times 10$ Hz.

Time Base and Count/Latch Unit (16)

Unit (16) consists of a frequency counter used for the kHz information for DISPLAY UNIT (14), and a circuit generating time-base signals to the counter and to the REF. FREQ. AND LOCK UNIT (17).

From TUNER UNIT (25) arrives a 3-4 MHz signal, which is amplified and clipped to TTL level by Q1 + Q2, and is then led, firstly, out to the REF. FREQ AND LOCK UNIT (17) and, secondly, internally to the frequency counter, U18 + U14 + U11 + U8 + U4 + U2, and the synchronizing circuit, U12 + U15 + U9 + U5 + U3 + U6 + U13.

The synchronizing circuit synchronizes the signal from TUNER UNIT (25) with a 20 MHz signal from REF. FREQ AND LOCK UNIT (17), which is produced by doubling of the 10 MHz TCXO reference.

U2 is used for indication of the underflow/overflow function. LOCK function input locks the latch circuit for DISPLAY UNIT (14).

The counter circuit is displaced by +1.5 kHz when the MODE knob is in position AM-N.

Tuner Unit (25)

This permeability-tuned, high-stable oscillator is, via a mechanical transmission, controlled by the TUNER kHz knob. The transmission rate is approx. 25 rotations per MHz, corresponding to approx. 111 Hz/degree.

The tuner can be fine-adjusted by two capacitance diodes. CR2 is used for locking of the oscillator frequency when the lock-knob is activated. The adjustment range is approx. ± 1000 Hz.

CR1 is controlled by the CLARIFIER knob, the scope of variation being approximately ± 500 Hz.

MHz Loop (21)

The two programmable counters, U1 and U2, receive their input data from MHz CODE UNIT (15). The inputs are 79 - 80 - 81 - - -, up to 108, in binary form.

A 100 kHz reference signal from the 73.6 MHz LOOP UNIT (20), obtained by dividing the 10 MHz TCXO signal, is fed through NAND gate U3 to

Flip-Flop U5. In U5 the 100 kHz is further divided, down to 50 kHz, which is used as reference for the frequency-locking of the 79 - 108 MHz oscillator, Q1 and Q2.

The output from Q2 is passed on, firstly, to MASTER LOOP (22), and, secondly, internally to ten-divider U7. The output from U7, 7.9 - 10.8 MHz, is divided by two in flip-flop U4, and passes from there into the two counters U1 and U2, which divide down to 50 kHz when the frequency-locking system, consisting of U4, U5, U3, and the integrator U6, has locked oscillator Q1 by means of capacitance diodes CR6 and CR7. The output voltage from U6 is also used externally as a rough-tuning voltage for the 75 - 105 MHz oscillator, and is therefore, via a filter, fed to the MASTER OSC. VCO UNIT (23).

Master Loop (22)

Unit (22) has 3 input signals: 79 - 108 MHz from MHz LOOP (21); 75 - 105 MHz from MASTER OSC. VCO UNIT (23); and 3 - 4 MHz from TUNER UNIT (25). The signals from units (21) and (23) are mixed in U1, and their difference (3 - 4 MHz) is compared with the signal from unit (25) in a phase-discriminator consisting of Smith Trigger U2 and Flip-Flop U3. U3 transmits information to integrator U4, which supplies fine-tuning voltage to the VCO oscillator in unit (23).

Master Osc. VCO Unit (23)

The oscillator in unit (23) is voltage controlled via a rough-tuning DC signal from MHz LOOP (21) and a fine-tuning DC signal from MASTER LOOP (22). The oscillator operates in the 75 - 105 MHz frequency-range. It has two outputs: one for the 1st MIXER UNIT (30) and one for the MASTER LOOP (22).

Ref. Freq and Lock Unit (17)

This circuit consists of a 10 MHz TCX0, which is used as reference frequency for the receiver, and a frequency-lock unit.

From the TCX0 the signal is fed to two amplifiers, Q2 and Q3. Q2 adapts the signal to the frequency doubler U11, the output from U11, 20 MHz, being fed to the TIME BASE AND COUNTER CATCH UNIT (16).

Q3 is a tuned amplifier, the output of which, 10 MHz, is fed to the 73.6 MHz LOOP (20).

Frequency LOCK function ON, respectively OFF, is controlled by Flip-Flop U1. This flip-flop resets automatically when the integrator arrives at one of its two extremes, or when the frequency setting is changed. A transistor, Q1, controlled by U1, operates the lamp in the

LOCK knob. The lamp is lighted in position LOCKED. Q1 operates also relay K1, which is used for quick discharge of the integrator capacitor, C15, when locking is discontinued.

Frequency-Locking is effected as follows: The presetable counter U2, controlled by gate and clear pulses from the TIME BASE AND COUNTER LATCH UNIT (16), will always count on the basis of the output signal from TUNER UNIT (25). Upon completion of each counting period the result, inverted, is stored in latch U7.

By activation of the LOCK knob the latest inverted counter reading is added to binary "5" in adder U8, and is fed back to the data input of U2.

When U2 is started again, the said result is applied as starting value. If TUNER UNIT (25) is still set at the same frequency as before, the result shown by U2 at the end of the next counting period will be "4". This result will be repeated as long as the frequency of TUNER UNIT (25) remains unchanged. U2's output will be latched and decoded by U4 and U5, and is used for frequency-locking of TUNER UNIT (25) via integrator U10.

73.6 MHz Loop Unit (20)

From the TCXO in the REF. FREQUENCY AND LOCK UNIT (17) is received the 10 MHz reference signal, which is amplified and clipped to TTL level by Q1 and Q2, and then divided by 100 in divider U3. The resulting 100 kHz reference signal is, partly, led out of the print via NAND gate U2 to MHz LOOP UNIT (21), and, partly, to Flip-Flop U1. The oscillator, Q3 and Q5, is a voltage controlled 73.6 MHz oscillator. It has two outputs, for, respectively, 1.4 MHz MIX. AND AMPL. UNIT (12), and Counter U7, U6, U5, which divides the 73.6 MHz down to 100 kHz.

This signal is compared with the 100 kHz reference in the discriminator circuit, consisting of U1 and U2. Output from U1 locks the 73.6 MHz oscillator via integrator U4.

5.7 Circuit Description. Power Pack

The power supply is rated at 110 V AC / 220 V AC, 50 - 60 Hz.

Transformer T1, which is of toroidal type with a view to attainment of a limited stray field, supplies 9 V AC and 16 V AC, respectively, to the two rectifiers CR1 and CR2.

U1 and U2 are two integrated voltage regulators, for + 5 V DC and + 15 V DC.

6. INSTALLATION

Correct installation is of great importance with a view to ensuring proper function of the receiver. Particularly the aerial and the earth connection must be installed with great care where good duplex characteristics are required.

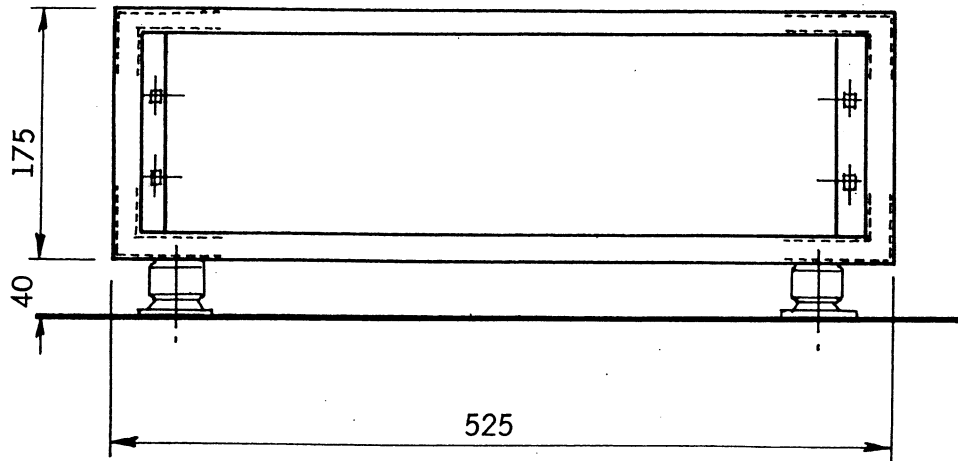
The earth lead, which should be as short as possible and should have a cross section of not less than 2.5 mm^2 , is connected to the earthing terminal at the bottom of the cabinet. Such earth lead shall not be used in common with any other electric equipment.

The connection of the aerial to the receiver is effected via Terminal Box C 572, using a coaxial cable furnished with UHF plug. The coaxial cable from C 572 to the aerial should be as short as possible, particularly where a short aerial is used.

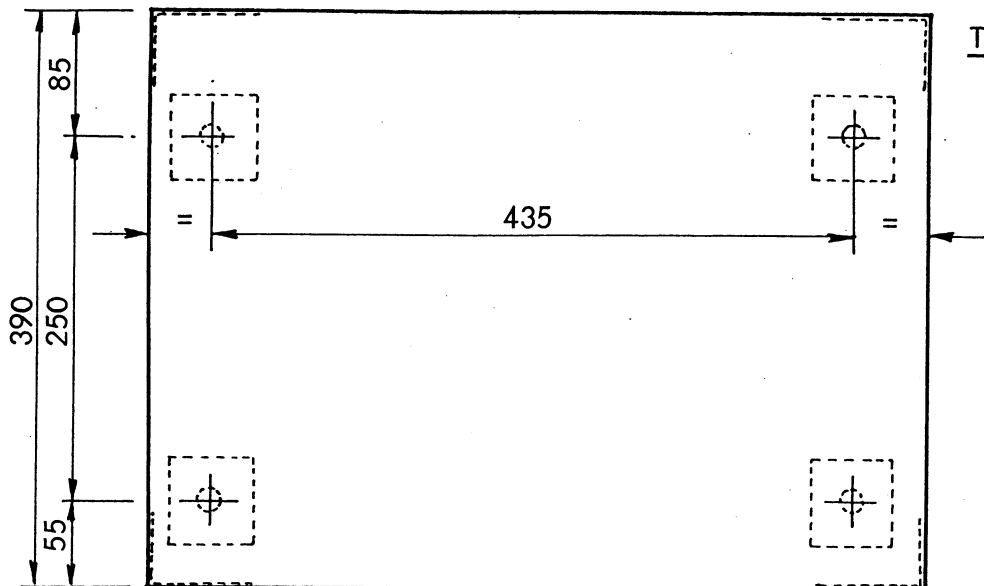
With a view to ensuring optimal duplex characteristics, the receiving aerial and the transmitting aerial should be placed as wide apart as possible.

The main connector P1, at the back of the receiver, is connected to the Terminal Box, C 570, using the appurtenant multi-cable - cf. drawing. In this terminal box junctions are established with: the Power Supply for the Receiver, AF Output, two Line Outputs, and the RX Muting.

Front view.

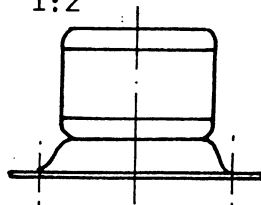


Top view.

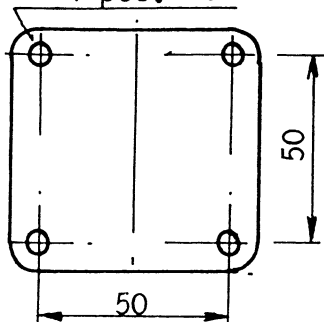


Shock absorber.

1:2



4 pcs. $\varnothing 6$



Material: 1,25mm Steel plate
full welded cabinet.

Standard finish: Light grey hammertone.

All dimensions in mm.



Amplidan A/S
Copenhagen
Denmark

Scale: 1:5

Drawn: 800523BS

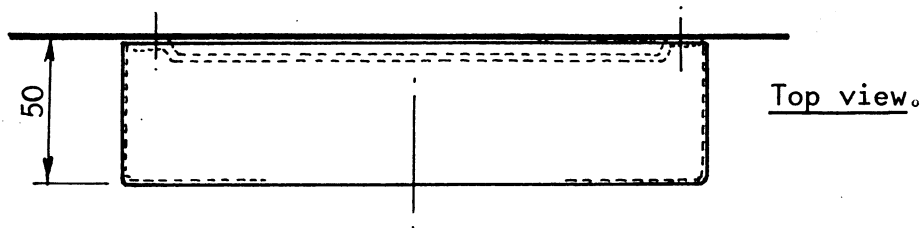
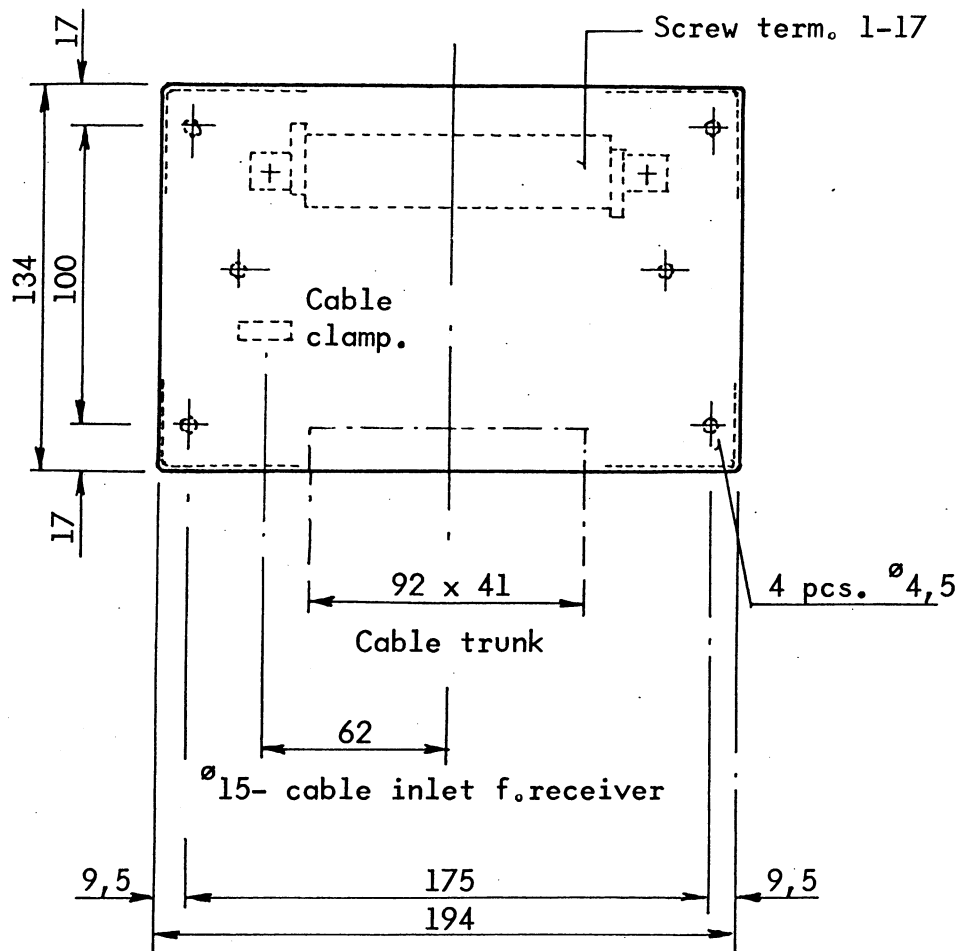
Contr:

Receiver, B. 450

Installation dimensions

Drawing No. 4-15659

Front view.



Material:

Front plate: 1,25 mm Steel plate

Rear plate: 3 mm aluminium.

Standard finish:

Light grey hammertone.

All dimensions in mm.

Conn. diagram 4-15641

Interconn. cable 4-15642

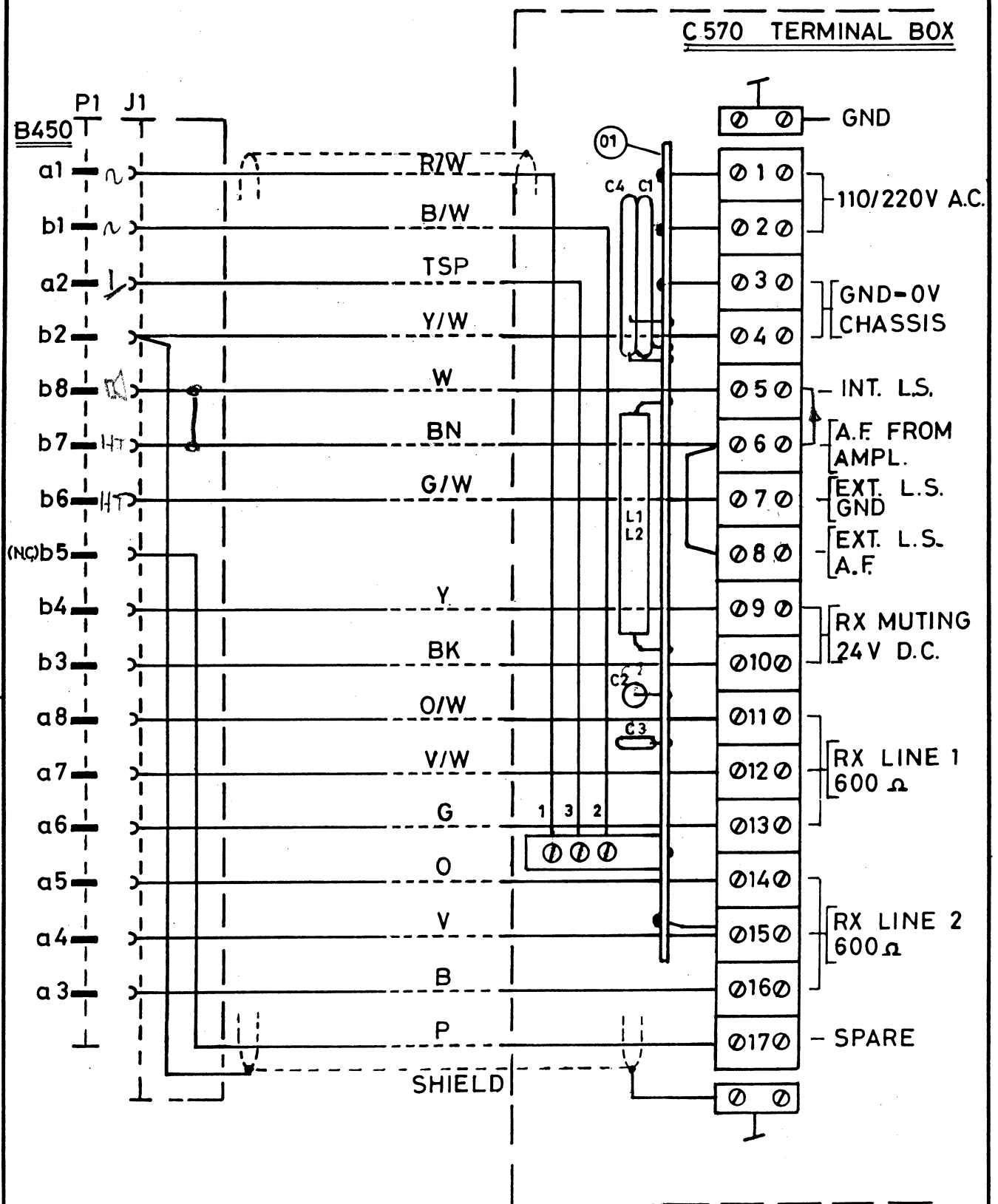


Amplidan A/S
Copenhagen
Denmark

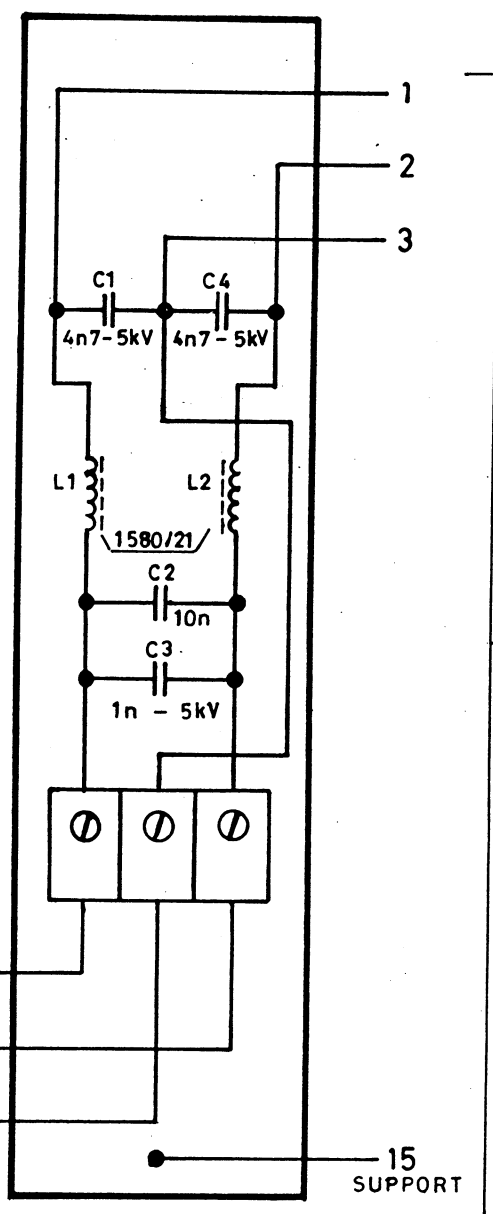
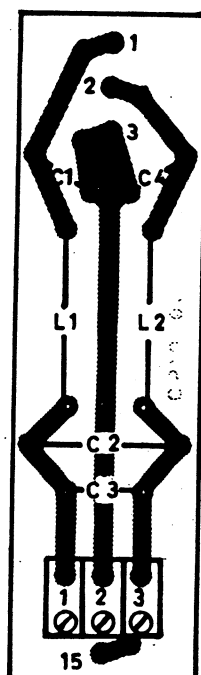
Scale: 1:2,5
Drawn: 800523BS
Contr:

Terminal Box C 570
15640
Dimensions.

Drawing No. 4-15639



SKALA / 15640	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	800307
		GODK.	CE	
		ERST.	IN41-o3o2	
		TEGN. NR.	4-15641	
	Main Receiver, B 450 Terminal Box 15640/C570-01 Connections C570 - B450.	ERST. AF		



CONNECTED TO
TERMINAL BOARD

See conn.diagr.
4-15641

CABLE TO
B 450

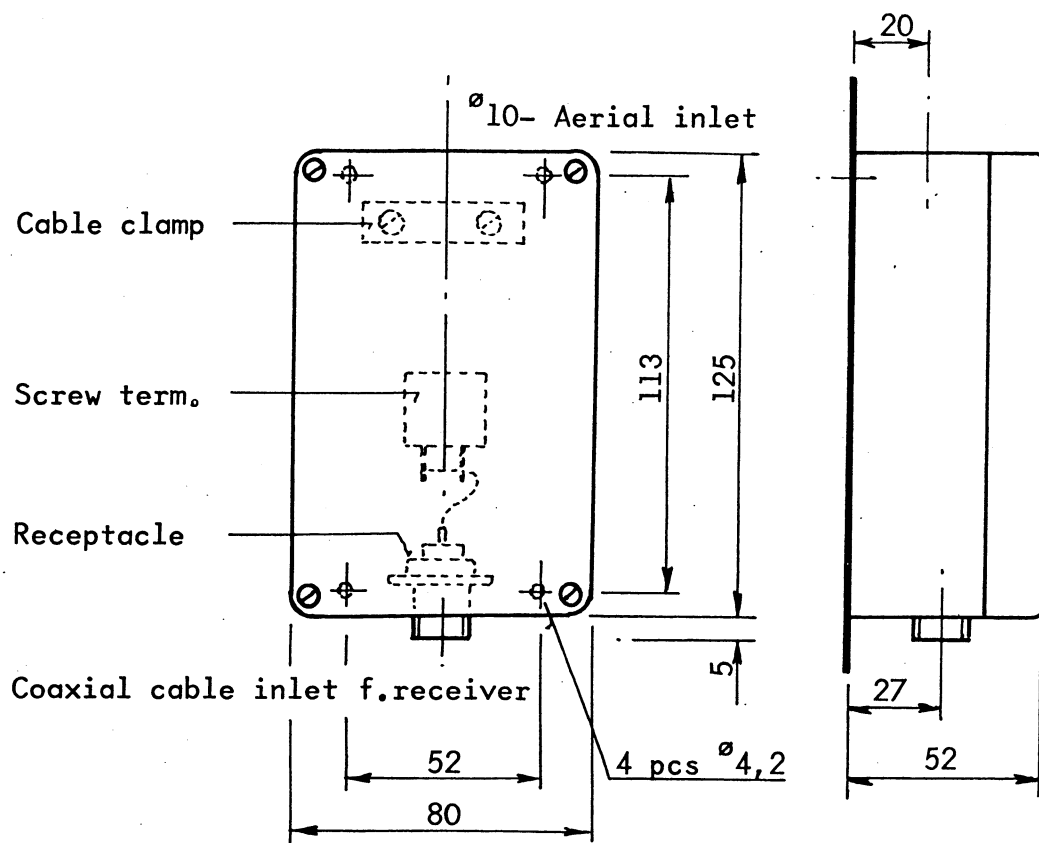
1 R/W
2 B/W
3 TSP

15
SUPPORT

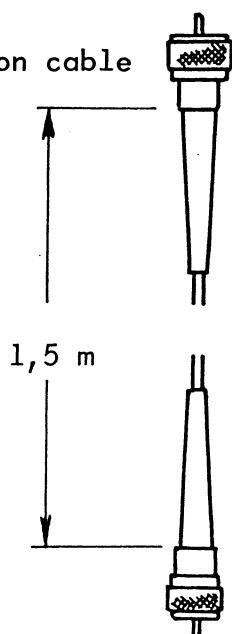
SKALA /	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	800821
15755		GODK.	CE	
	Main Receiver, B 450 Filter unit 15755/C570-01 Diagram and mounting illustration.	ERST.		
		TEGN. NR. 4-15754		
		ERST. AF		

Front view.

Side view.



Interconnection cable



Orig.fabr. Rose 26/LU
HH. 1-0813-05

Material:
Cast aluminium alloy.
IP 65, DIN 40050
Standard finish:
Light grey hammertone.

All dimensions in mm.



Amplidan A/S
Copenhagen
Denmark

Scale: 1:2
Drawn: 800523BS
Contr:

Terminal Box C 572
15645
Dimensions
Drawing No. 4-15646

7. ORDINARY SERVICING

In case of the receiver not functioning satisfactorily, find out in the first instance whether it is operated properly, or otherwise. If required, refer to sections 3.1 and 3.2.

The receiver can be adjusted to receive its power supply as 110 V AC, or as 220 VAC, in both cases 50 - 60 Hz. Check that this adjustment corresponds to the power installation.

Where the receiver is installed together with Transmitter A350A, or with A250B, the receiver will be supplied with 110 VAC power from the transmitter. Interrupter and fuses are placed in the switch and fuse panel.

The lamp in the LOCK button could be replaced when the square button is pulled out.

Display Units can be replaced upon dismantling of the frontplate, and loosening of the nuts holding unit (14).

8. REPAIR AND ALIGNMENT

8.1 Introduction

Any repair and alignment of the receiver shall be carried out solely by qualified technical personnel. Prior to undertaking any kind of repair and/or alignment, refer to Part 5, Technical Description.

The locations of the individual printed circuits are seen from Drawing 4-14405, in Part 9.

With a view to facilitating fault finding, relevant test points are indicated in each diagram.

The requirements in regard to measuring equipment have been limited to the extent this has been possible.

8.2 AC - DC Voltages

AC voltages are measured with an oscilloscope or RF-millivoltmeter with an upper frequency of not less than 105 MHz, and with an input impedance of 10 M Ω in parallel with 7 pF, and a sensitivity of approx. 20 mV/div.

DC voltages are measured with a voltmeter, minimum impedance 25 K Ω /V.

8.3 Typical Sensitivity Levels

Measuring Equipment: Signal generator 1 - 75 MHz, DC voltmeter. Input voltage to respectively 1st MIXER UNIT (30) and 1.4 MHz MIX. AND AMPL. UNIT (12), 0.90 V DC measured on terminal FL1.

Receiver Control Settings:

4.0 MHz, USB, AGC-FAST, RF-GAIN fully clockwise.

UNIT	GENERATOR	GENERATOR MODULATION	TYPICAL INPUT LEVEL
(30)-J1	4001.0 kHz, 50 Ω	0	25 dB/1 μ V EMF
(12)-J1	74999.0 kHz, 50 Ω	0	32 dB/1 μ V EMF

Input voltage to FILTER SECTION (10) and BEAT OSCILL.+ AF - GATE + LINE AMPLIFIER UNIT (11), 4.0 V DC measured at Terminal (10)-CP6.

UNIT	GENERATOR	GENERATOR MODULATION	TYPICAL INPUT LEVEL
(10)-J1	1399.0 kHz, 50Ω	0	50 dB/1μV EMF
(11)-8	1399.0 kHz, 50Ω	0	88 dB/1μV EMF

8.4 Realignment of RF Input Circuit Unit (29), MHz-Switch Unit (28) and RF TUNER UNIT (27)

Measuring Equipment: Signal generator 100 kHz - 30 MHz, oscilloscope 30 MHz.

- Connect signal generator to antenna-input. 50Ω.
Connect oscilloscope probe to terminal (29)-J1.
- Set receiver at frequency 1200.0 kHz. Set signal generator at the same frequency, output level.
- Trim coils (27)-L1 and (27)-L2 to maximum output.
- Set receiver at frequency 1900.0 kHz. Set signal generator at the same frequency, output level.
- Trim coils (29)-L1 and (29)-L5 to maximum output.
- Repeat b), c), d) and e) above.
- Set receiver and signal generator at frequency 2500.0 kHz.
Trim coil (28)-L1 to maximum output.
- The procedure for trimming of the other MHz bands in Unit (28) is the same as described under g) above. The centre-frequency of the band is always the trimming frequency.

8.5 Realignment of 1st Mixer Unit (30)

Measuring Equipment: Signal generator min. 0 - 105 MHz, oscilloscope minimum 105 MHz. DC voltmeter.

Receiver Control Settings: Frequency inside range, AGC-FAST, RF-GAIN fully clockwise, and Mode CW. No antenna input.

Connect signal generator to input (30)-J2, frequency 75.0 MHz. Adjust frequency and output level so that a tone is heard in the receiver-loudspeaker. Connect the voltmeter to the AGC voltage at terminal (30)-FL1. Adjust coils (30)-L7 and (30)-L10 to maximum AGC voltage.

The low-pass filter 0-30 MHz and the band-pass filter 75-105 MHz, can be checked by connecting the signal generator to the respective inputs,

and measuring, using the oscilloscope, at TP1 (C8) and TP2 (C9) respectively. Ripple in pass-band max. 2 db. Adjustment of these filters is done most conveniently by means of a spectrum analyzer and a frequency sweeper.

8.6 Realignment of 1.4 MHz Mix. and Ampl. Unit (12)

Measuring Equipment: Signal generator 75 MHz, 50Ω. DC voltmeter.

Receiver Control Settings: Frequency inside range, AGC-FAST, RF-GAIN fully clockwise, Mode CW.

Connect the signal generator to terminal (12)-J1, and the voltmeter to the AGC voltage, terminal (12)-FL1. The generator output is adjusted to reaction in the AGC voltage. Adjust coils L1, L2, L3, and L4 to maximum AGC voltage.

8.7 Realignment of Filter Section Unit (10)

Measuring Equipment: Signal generator 1.4 MHz. DC voltmeter.

Receiver Control Settings: Frequency inside range, AGC-FAST, RF-GAIN fully clockwise, Mode CW.

Connect the signal generator to terminal (10)-J1, and the voltmeter to the AGC voltage, terminal (10)-CP6.

Adjust the generator to reaction in the AGC voltage, and adjust coils (10)-L1, (10)-L11, (10)-L13 and (10)-L14 to maximum.

The receiver's mode is now changed to CW-N, LSB and USB; adjust the signal generator in frequency, and adjust coils (10)-L12, (10)-L10 and (10)-L9.

Set the receiver in mode AM; the signal generator is modulated 30%, 1 kHz, and adjust coil (10)-L8.

8.8 Realignment of Beat Oscill.+ AF - Gate + Line Ampl. Unit (11)

Measuring Equipment: Signal generator 1.4 MHz. DC voltmeter. Frequency counter.

Connect the frequency counter to pin 12 on (11)-U3. Select by turns Mode CW, FSK and SSB. Adjust the frequency to 1400.750 kHz, 1401.500 kHz and 1400.000 kHz respectively, using the trimming capacitors (11)-C12, (11)-C13, and (11)-C14.

8.9 Realignment of Audio Ampl. Unit (18)

Measuring Equipment: DC voltmeter.

Receiver Control Settings: No antenna input.

Turn potentiometer (18)-R fully counter-clockwise, and check that the power consumption, measured between +15 VDC regulator U2 (frame mounted) and terminal (18)-9, is less than 50 mA. Adjust (18)-R8 so that the power consumption increases by 20 mA.

8.10 Realignment of AGC Ampl. and Detector Unit (13)

Measuring Equipment: Signal generator 4.2 MHz, 50 Ω . DC voltmeter.

Receiver Control Settings: 4.20 MHz, USB, AGC-FAST, RF-GAIN fully clockwise.

Connect the signal generator to the receiver antenna-input, and set the generator to 4201.0 kHz, 8 db/1 μ V EMF. Connect voltmeter to terminal (13)-5, and adjust potentiometer (13)-R2 in such a manner that the voltage, nominally 3.55 VDC, starts changing (3.8 VDC). Increase generator output by 12 db, and adjust potentiometer (13)-R41 in such a manner that the voltage at terminal (13)-2, nominally 0.73 VDC, starts increasing (0.8 VDC).

Interrupt the generator, and adjust (13)-R47 to zero-reading on METER on the receiver frontplate.

8.11 Realignment of MHz Loop Unit (21)

Measuring Equipment: DC voltmeter. Frequency counter 108 MHz.

Connect voltmeter to terminal (21)-FL10; set the receiver to a frequency below 1 MHz. Adjust coil (21)-L1 to a voltage of 1.90 VDC. Connect the frequency counter to terminal (21)-J1. The frequency shall be 79.0 MHz.

Set the receiver to a frequency between 29 MHz and 30 MHz. Adjust trimming capacitor (21)-C8 to a voltage of 10.30 VDC, measured on terminal (21)-FL10. The frequency measured on (21)-J1 shall be 108.0 MHz.

Repeat adjustment of (21)-L1 and (21)-C8 until the voltages measured at 79 MHz and 108 MHz respectively are within 10 mVDC.

Check the frequency on terminal (21)-J1 for each 1 MHz shift of the "BAND MHz" knob on the receiver frontplate.

8.12 Realignment of VCO Unit (23)

Measuring Equipment: DC voltmeter. Frequency counter 105 MHz.

Connect the voltmeter to terminal (23)-C2. Connect the frequency counter to (23)-J1. Set the receiver at frequency 500.0 kHz. The voltmeter shall now read 1.90 VDC. Adjust coil (23)-L4 so that the frequency counter reads 75500.0 kHz. Now set the receiver at a frequency of 29500.0 kHz. The voltmeter shall now read 10.3 VDC. Adjust (23)-C11 to make the frequency counter show 104500.0 kHz.

Repeat the procedure until a frequency deviation of 50 kHz is attained.

8.13 Realignment of Tuner Unit (25)

Measuring Equipment: Frequency counter 4 MHz, accuracy 10^{-6} . RF voltmeter. DC voltage supply 6.8 V.

Terminals (25)-C16 and (25)-C17 are both connected to 6.80 VDC. Set coil (25)-L1 to minimum inductance, and turn it then 1.5 turns back by rotating the tuner shaft. Connect RF voltmeter and frequency counter to terminal (25)-W1. Adjust the frequency to 4.0 MHz, using (25)-L2, and check that the output level is between 50 mV and 100 mV. Turn the tuner shaft 10 rotations ahead, the frequency shall now be 3.0 MHz.

8.14 Realignment of Ref. Freq. and Lock Unit (17)

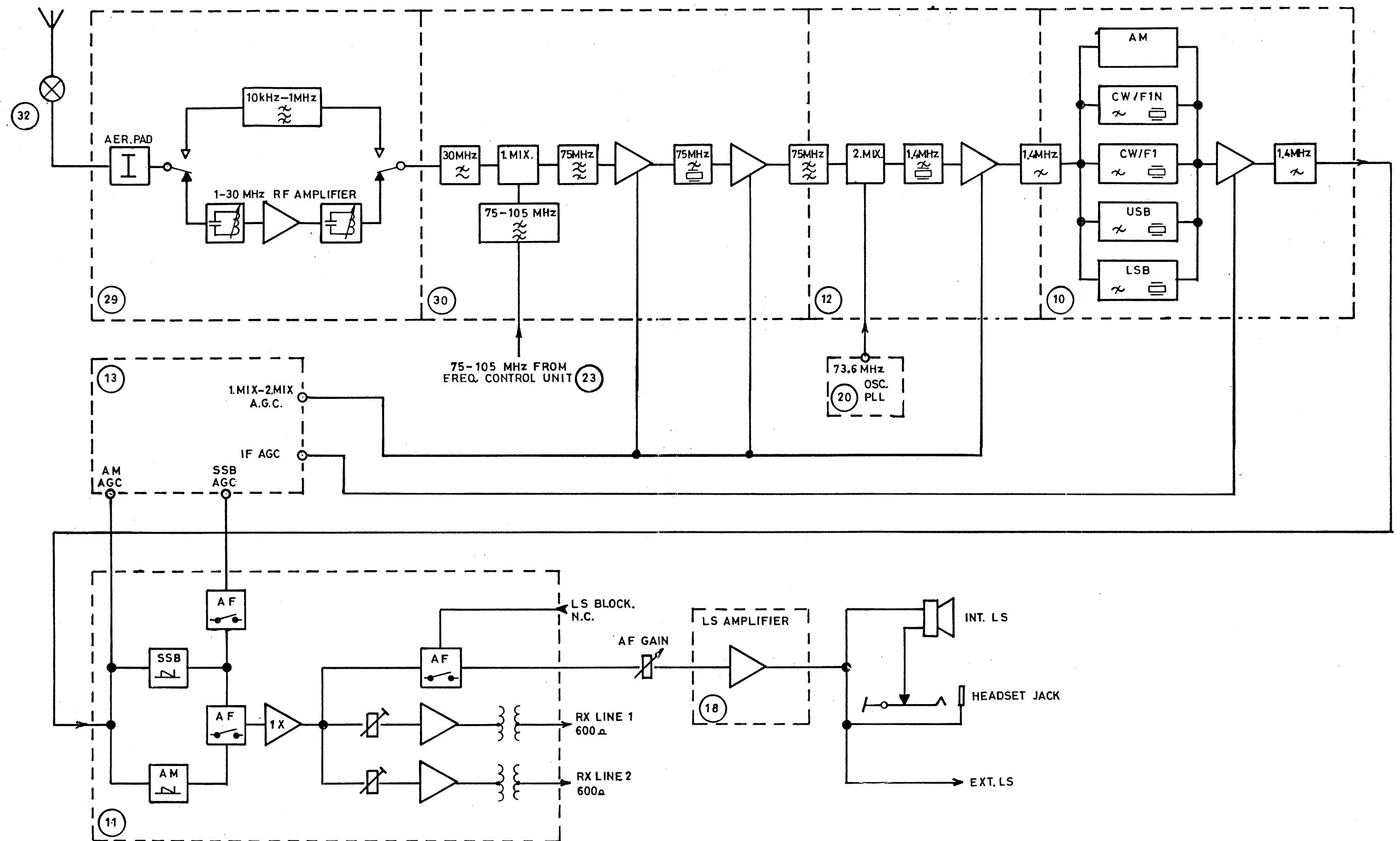
Measuring Equipment: Oscilloscope 10 MHz. Frequency counter 10 MHz, accuracy better than 10^{-7} Hz.

Connect frequency counter and oscilloscope to terminals (17)-27 and (17)-28. Adjust coil (17)-L1 to max. output, and adjust the trimming screw in the TCX0, if required, in such a manner that the frequency of 10 MHz is within ± 5 Hz.

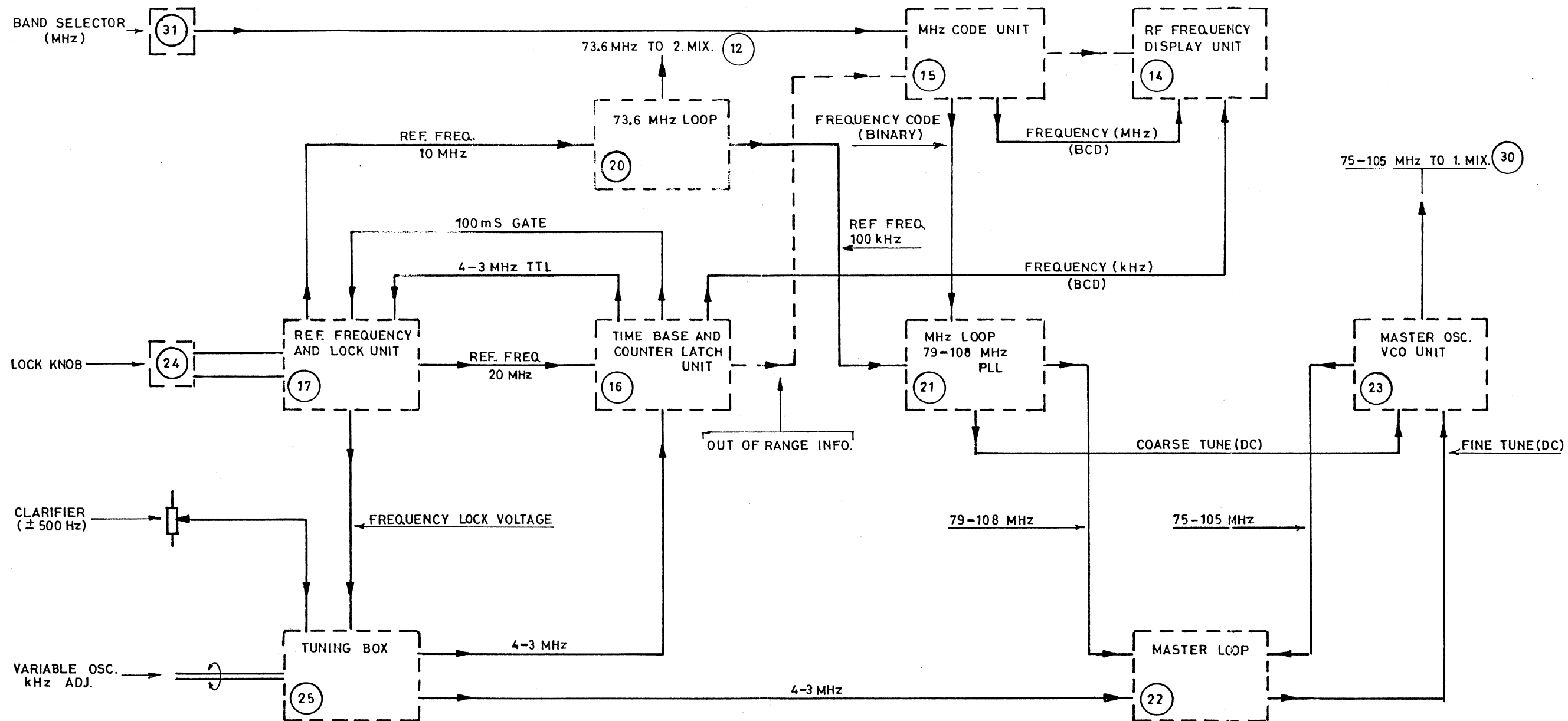
8.15 Realignment of 73.6 MHz Loop Unit (20)

Measuring Equipment: Frequency counter 73.6 MHz. DC voltmeter. Oscilloscope 73.6 MHz.

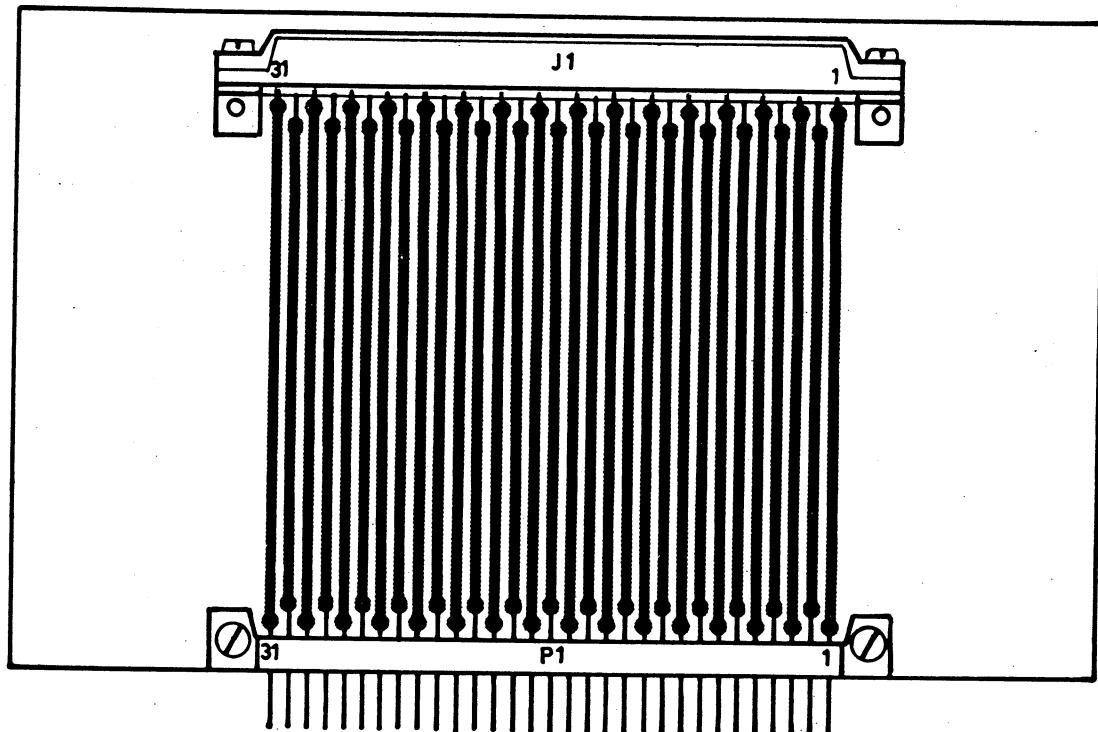
Connect frequency counter and oscilloscope to terminal (20)-J2. Connect voltmeter to (20)-U4 output (by R15-1K Ω). Turn the ferrite core of coil (20)-L1 fully out. The voltmeter now reads 0 V. Adjust the coil to make the voltmeter read 6 V. Adjust coil (20)-L2 to max. output. The output frequency shall be 73.6 MHz.



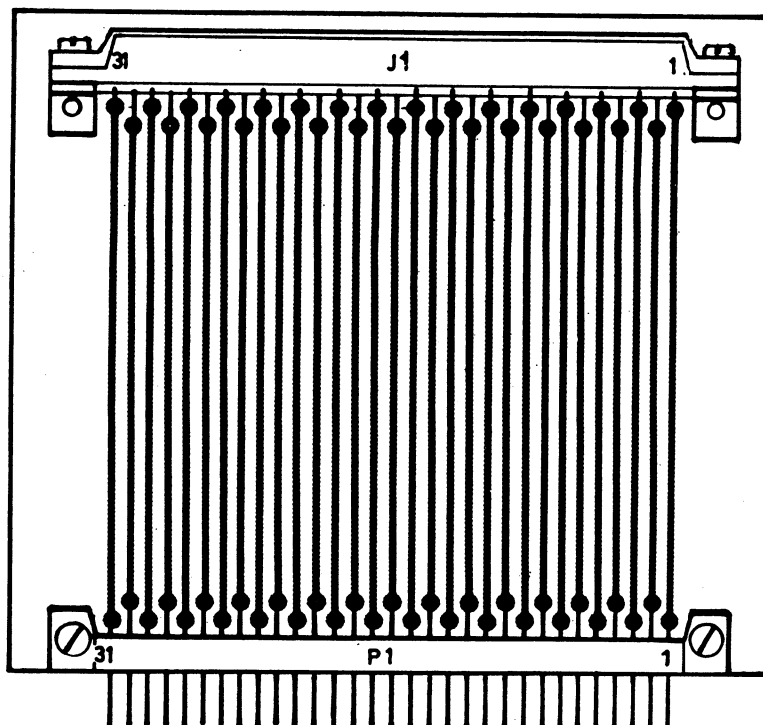
STK.	BENÆVNELSE	POS.	MATERIALE	BEMÆRKNING		
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11			TEGN.	EL	800624
				GODK.		
				ERST.	DI31-0074	
				TEGN. NR.	3-14406	
	Main Receiver, B 450 RF and AF path. Block diagram.			ERST. AF		



STK.	BENÆVNELSE	POS.	MATERIALE	BEMÆRKNING	
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11		TEGN.	EL 800625
				GODK.	CE
				ERST.	DI31-0075
				TEGN. NR.	3-14407
	Main receiver, U 450 Frequency control circuit. Block diagram.			ERST. AF	



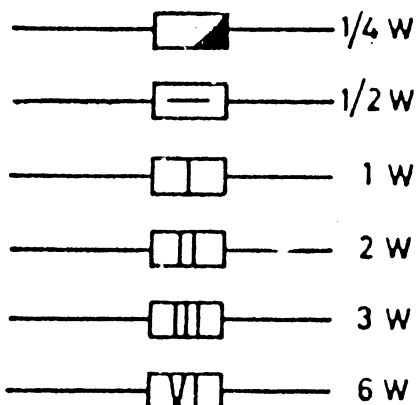
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
15730		GODK.	CE	
	Main Receiver, B 450 Extension Board 15730/B450-01 Mounting illustration.	ERST. CL41-0072		
		TEGN. NR. 4-15731		
		ERST. AF		



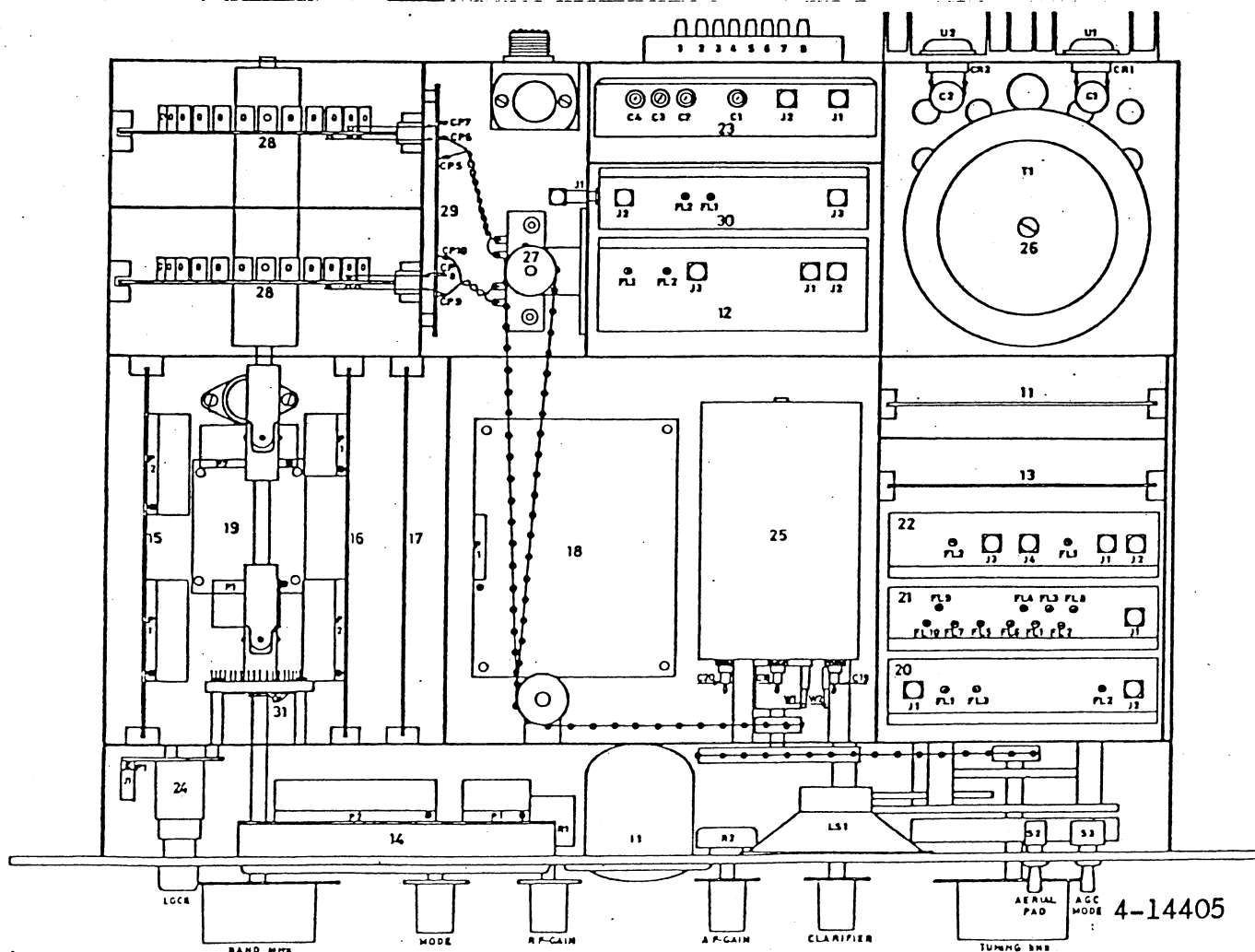
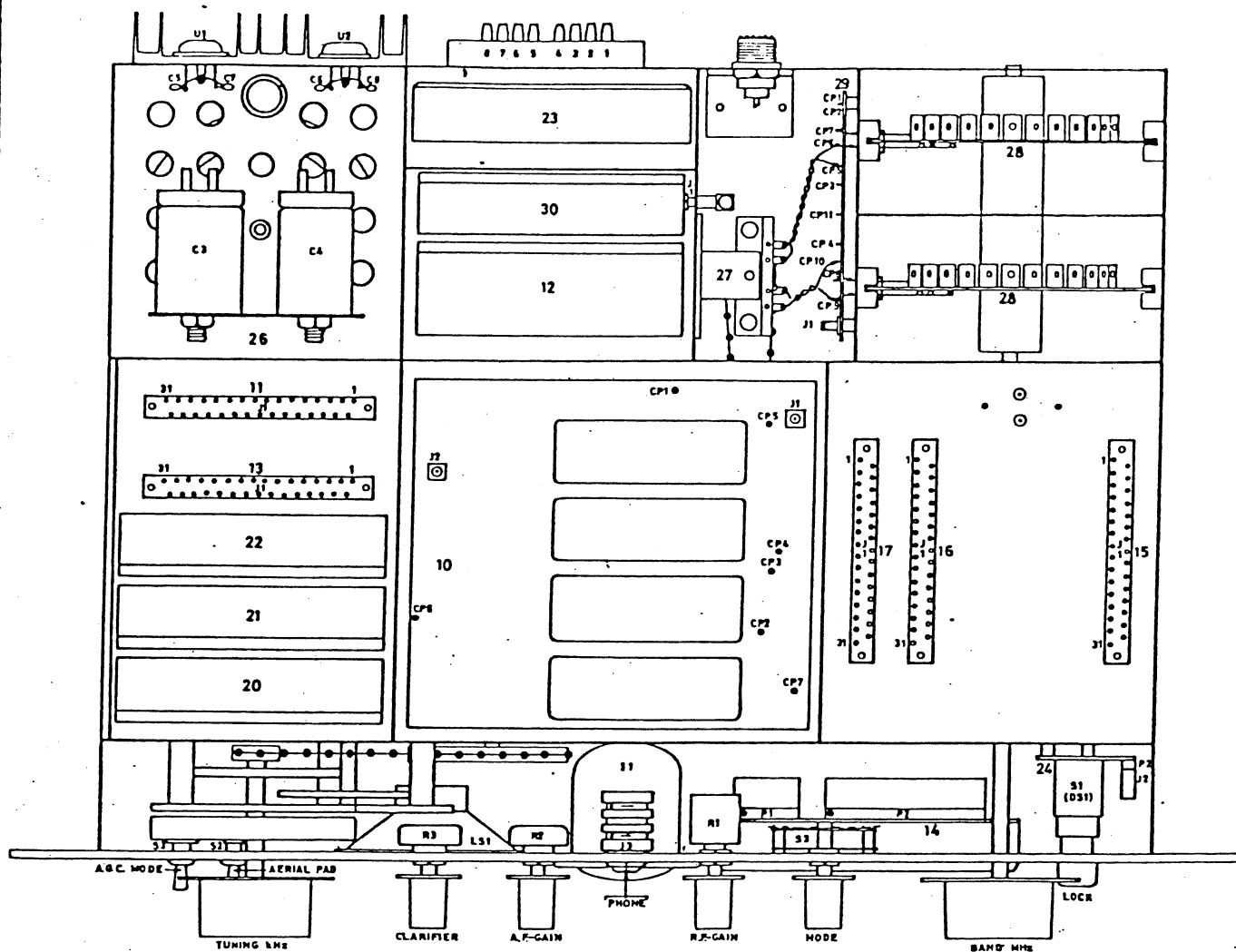
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
15735		GODK.	CE	
	Main Receiver, B 450 Extension Board 15735/B450-02 Mounting illustration.	ERST. CL41-0073		
		TEGN. NR. 4-15736		
		ERST. AF		

COLOUR CODE	
B	BLUE
BK	BLACK
BN	BROWN
G	GREEN
O	ORANGE
P	PINK
R	RED
S	GREY
V	VIOLET
W	WHITE
Y	YELLOW

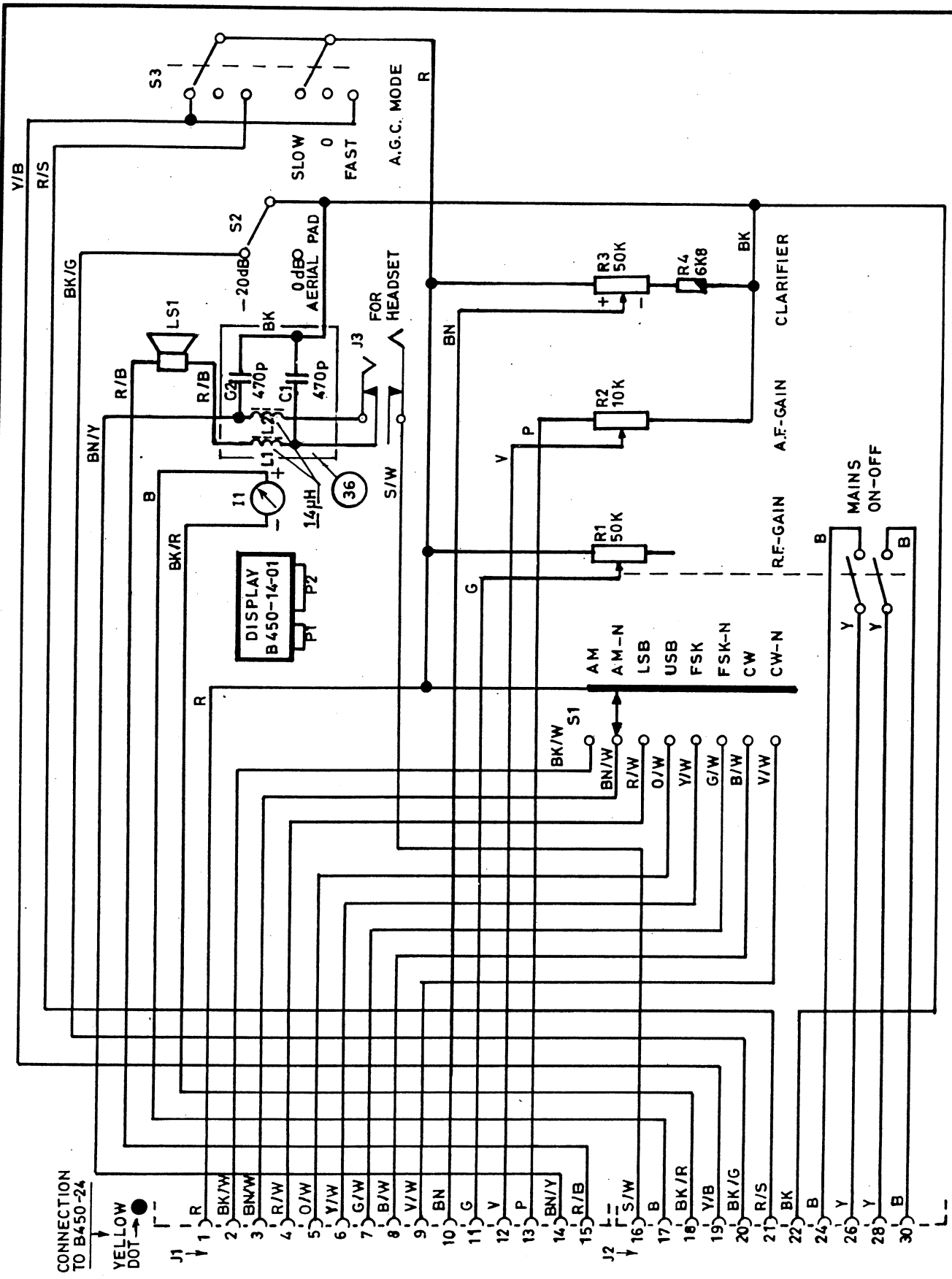
RESISTANCE LOADING CODE



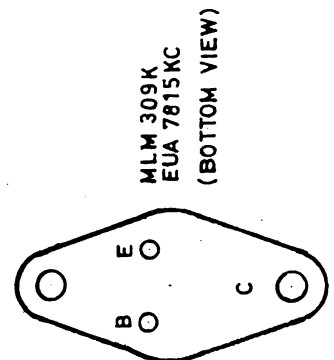
SKALA		Herlev Hovedgade 201		TEGN.	BS	801009
		2730 Herlev		GODK.	CL	
	(02) *94 35 11		ERST. TA41-o2o3			
	Wiring colour code. Resistor code.		TEGN. NR. 4-15557			
		ERST. AF				



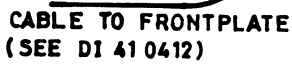
4-14405



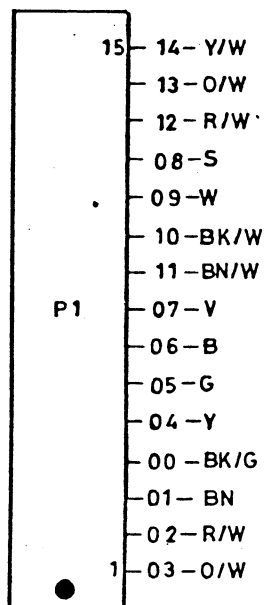
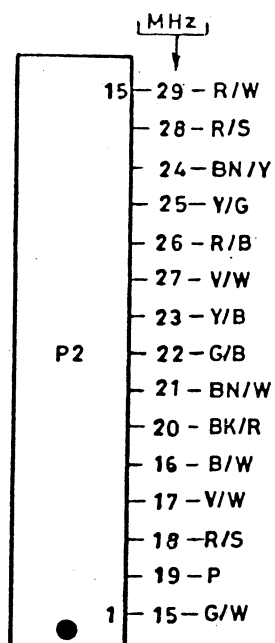
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	791003
14880		Main Receiver, B 450 Frontplate Interconnections.	GODK.	CE	
			ERST.	DI41-o412	
	TEGN. NR.		4-14408		
			ERST. AF		



J&K 2750 (01) 14 08 87

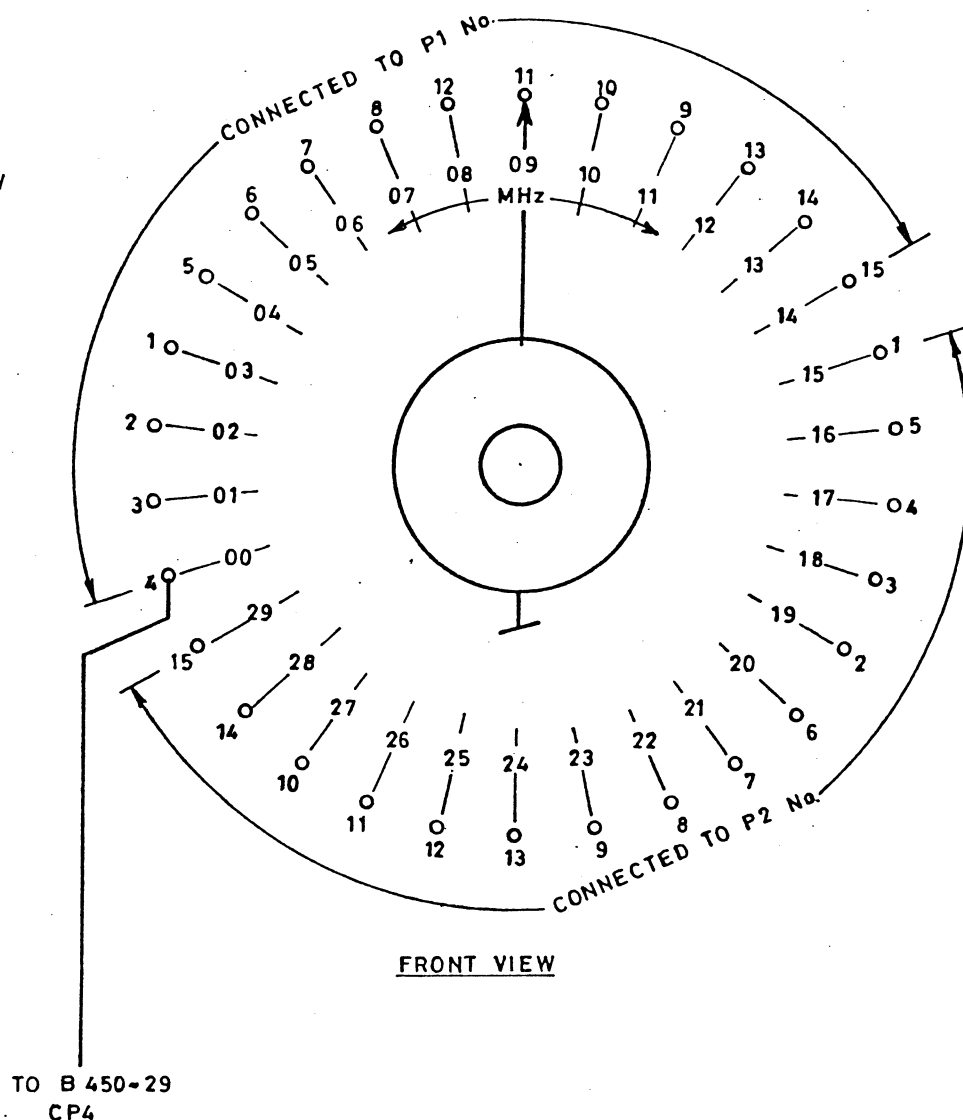


J&K 2750 (01) 14 08 87

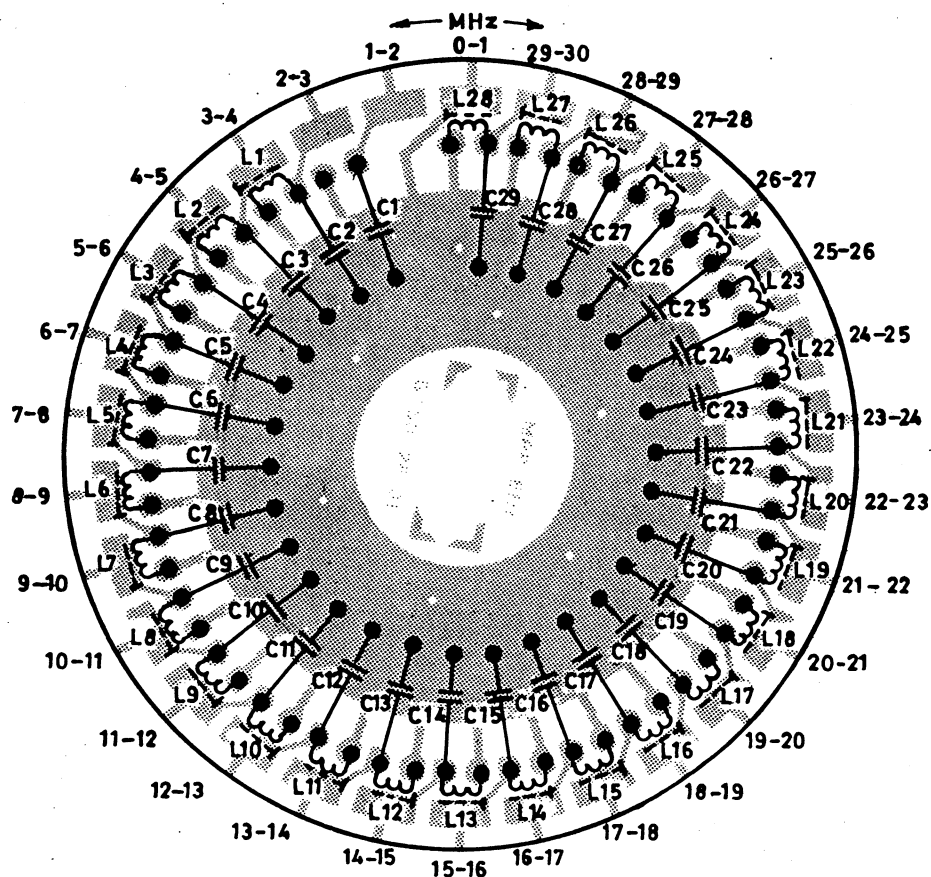


CONNECTS TO:
B 450-15
(TOP VIEW)

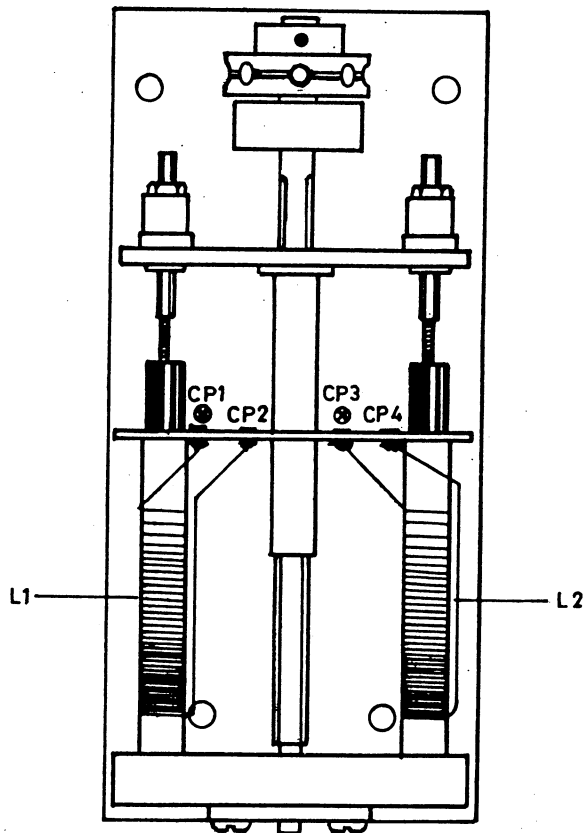
● YELLOW DOTS



SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801007
			GODK.	CE	
15741	Main Receiver, B 450 MHz band selector, 15741/B450-31-01 Diagram.		ERST. CL41-0065		
			TEGN. NR. 4-15742		
			ERST. AF		

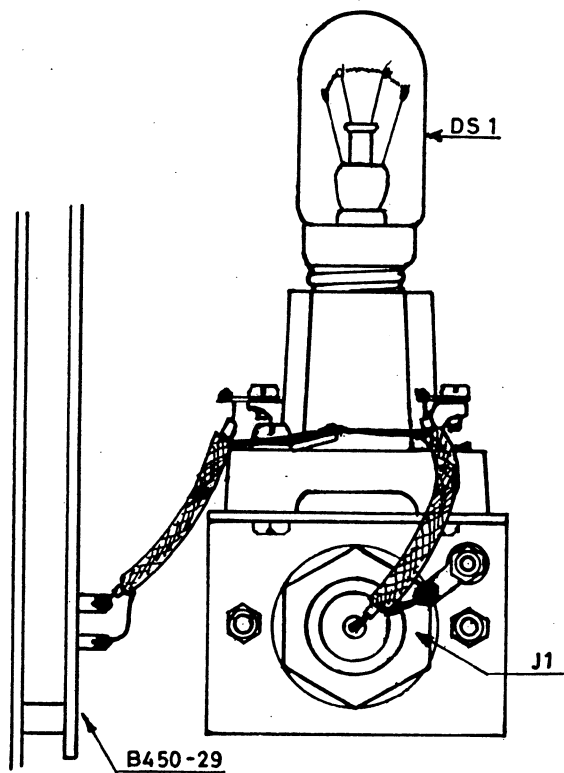


SKALA /	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	791130
14640		GODK.	CE	
	Main Receiver, B 450 MHz switch, 14640/B450-28-01 Mounting illustration	ERST. CL41-0059		
		TEGN. NR. 4-14641		
		ERST. AF		

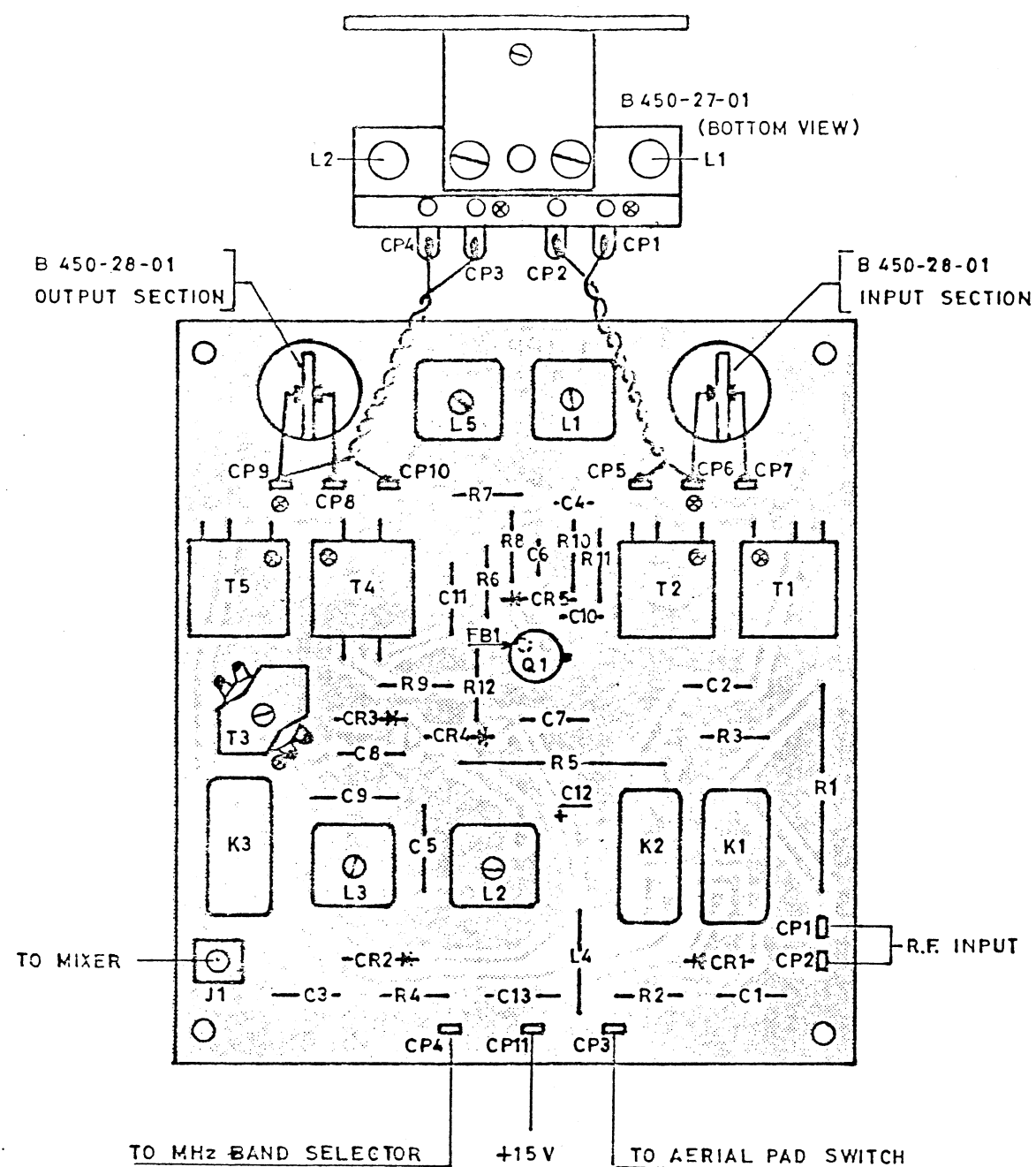


⊗ YELLOW DOT

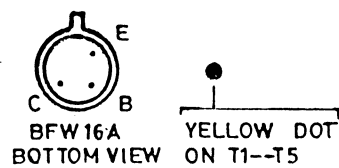
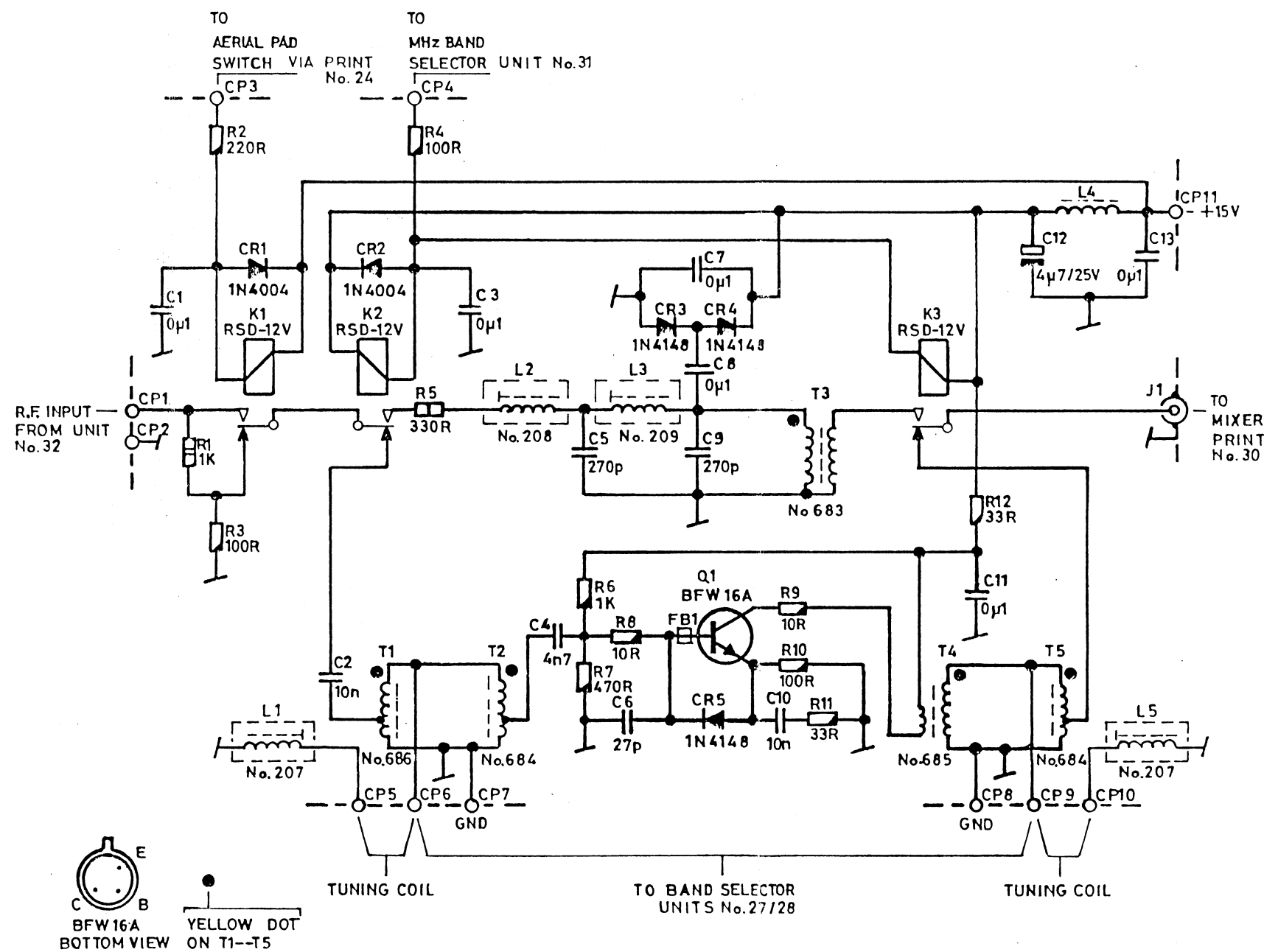
SKALA /	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	791106
14742		GODK.	CE	
	Main Receiver, B 450 RF.Tuner unit, 14742/B450-27-01 Mounting illustration.	ERST. CL41-0063		
		TEGN. NR. 4-15726		
		ERST. AF		



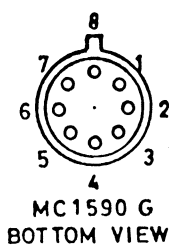
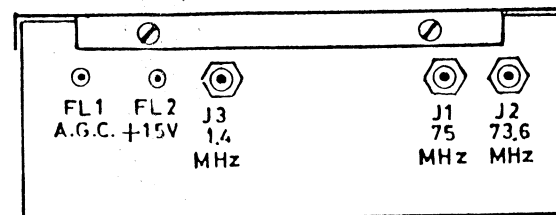
SKALA /	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN. EL 800215	
15744		GODK. <i>CE</i>	
	Main Receiver, B 450 Protection lamp unit, 15744/B450-32-01 Mounting illustration	ERST. CL41-0069	
		TEGN. NR. 4-15745	
		ERST. AF	



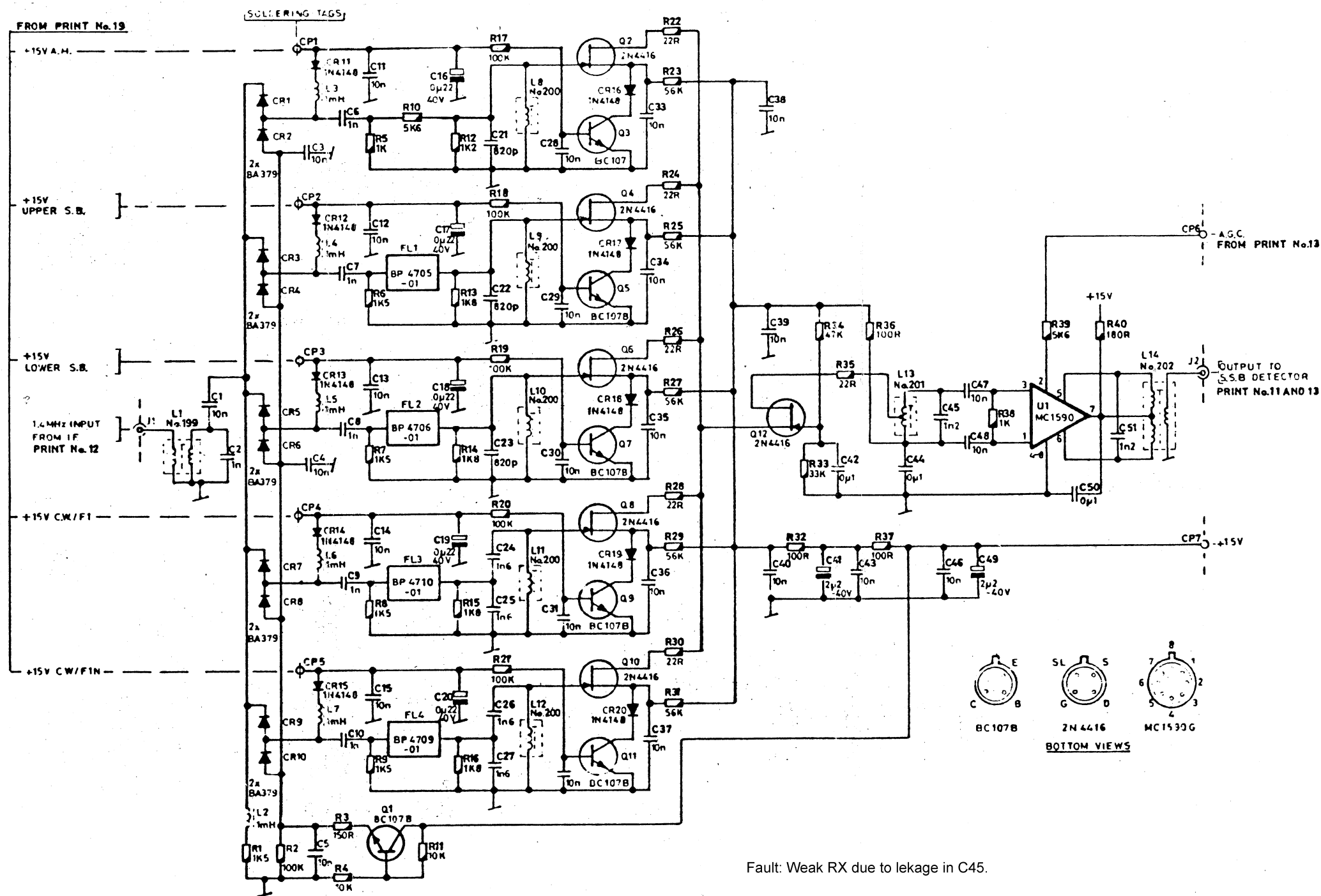
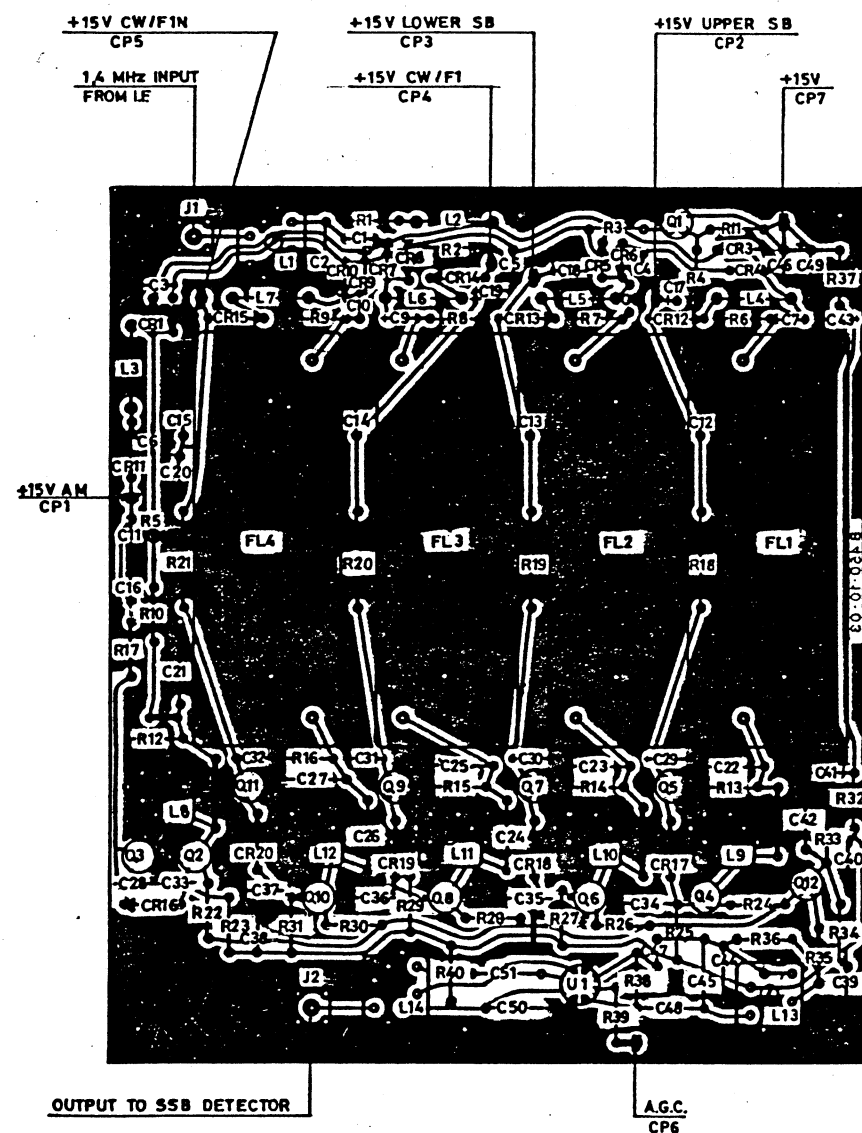
⊗ YELLOW DOTS



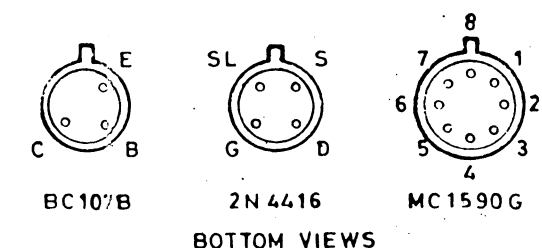
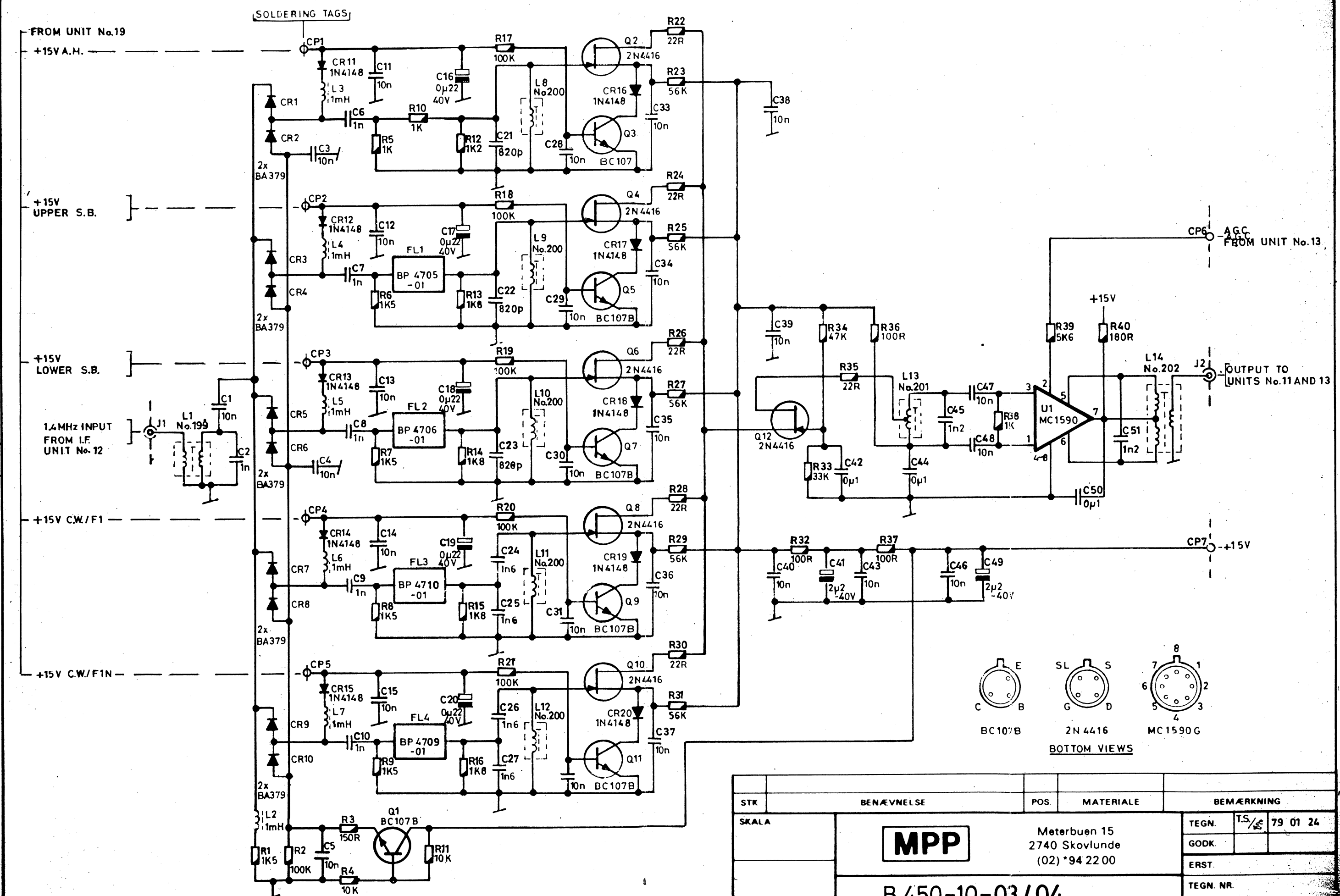
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
14427		GODK.	CE	
	Main Receiver, B 450 RF input circuit, 14427/B450-29-02 Diagram and mounting illustration	ERST.	DI41-o4p5	
		TEGN. NR.	3-14447	
		ERST. AF		



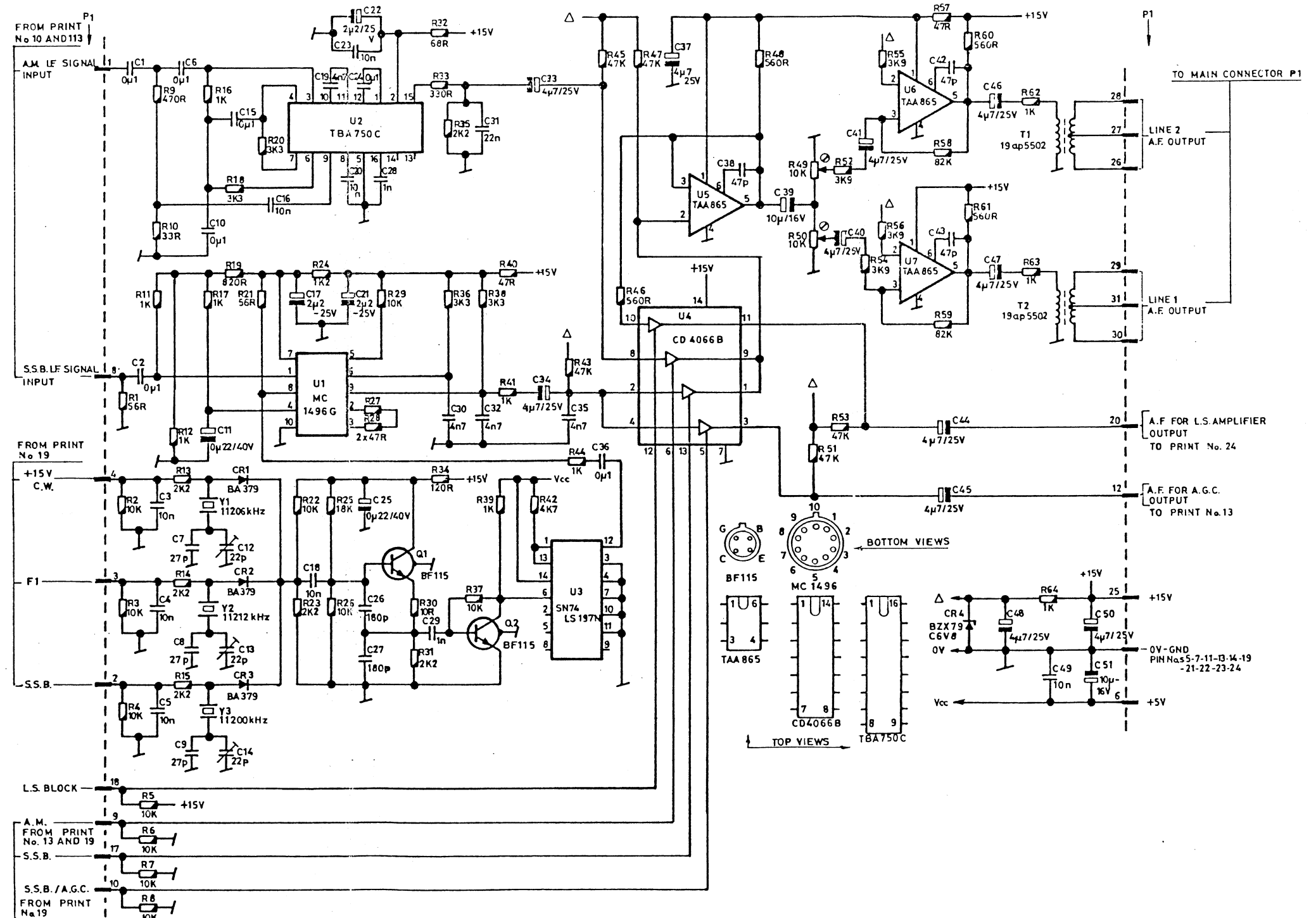
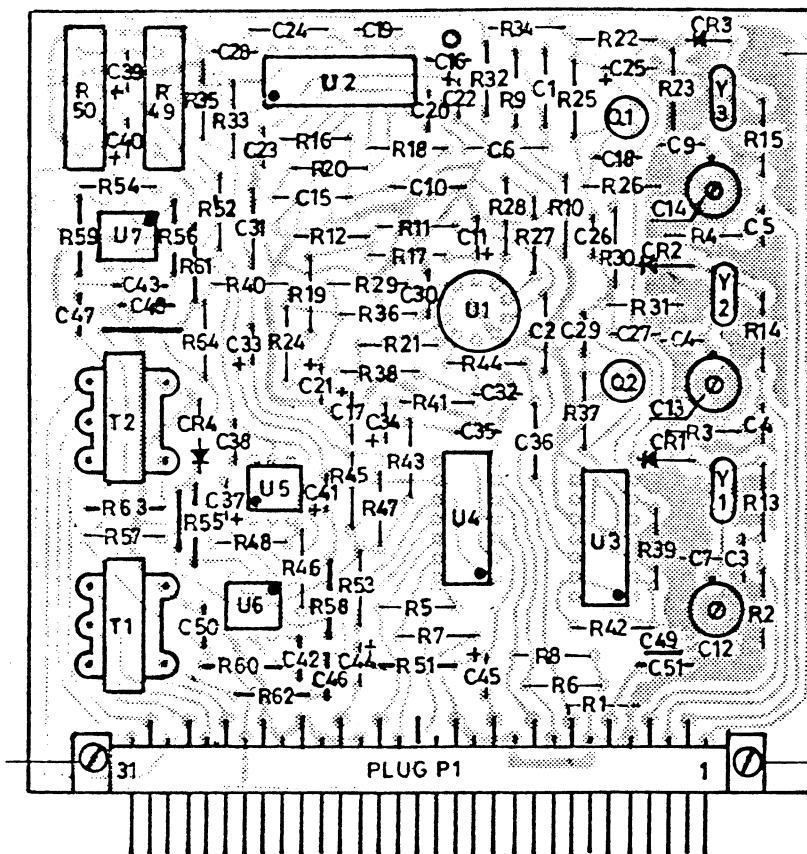
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
			GODK.	CE	
14412	Main Receiver, B 450 1,4 MHz mixer and amplifier, 14412/B450-12-04 Diagram and mounting illustration		ERST.	DI41-o397	
			TEGN. NR.	3-14432	(12)
			ERST. AF		



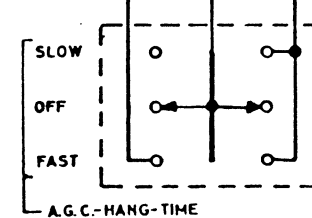
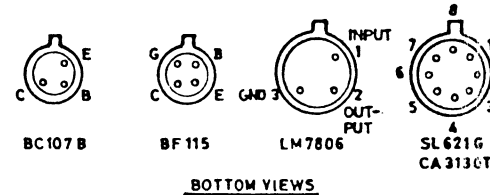
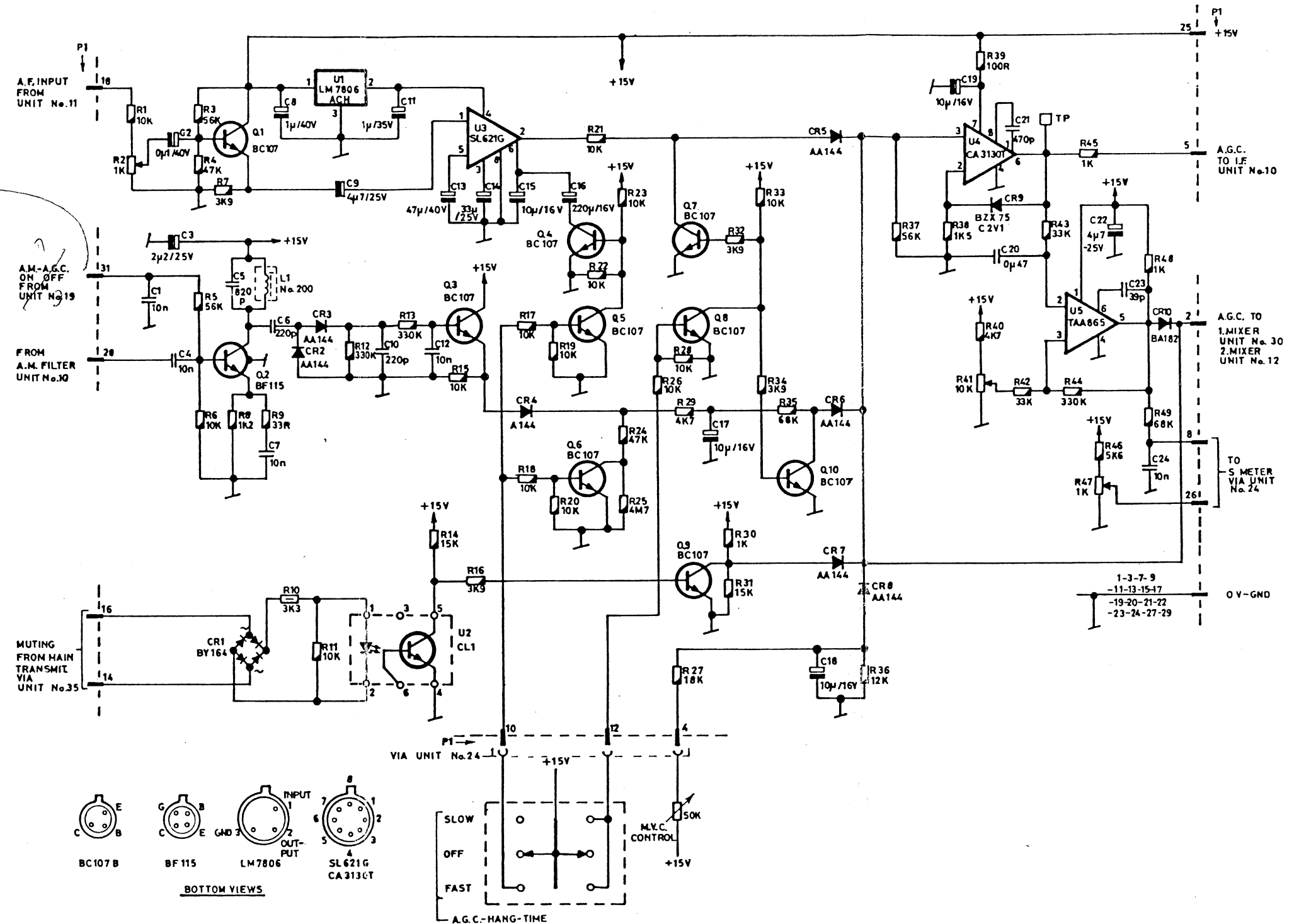
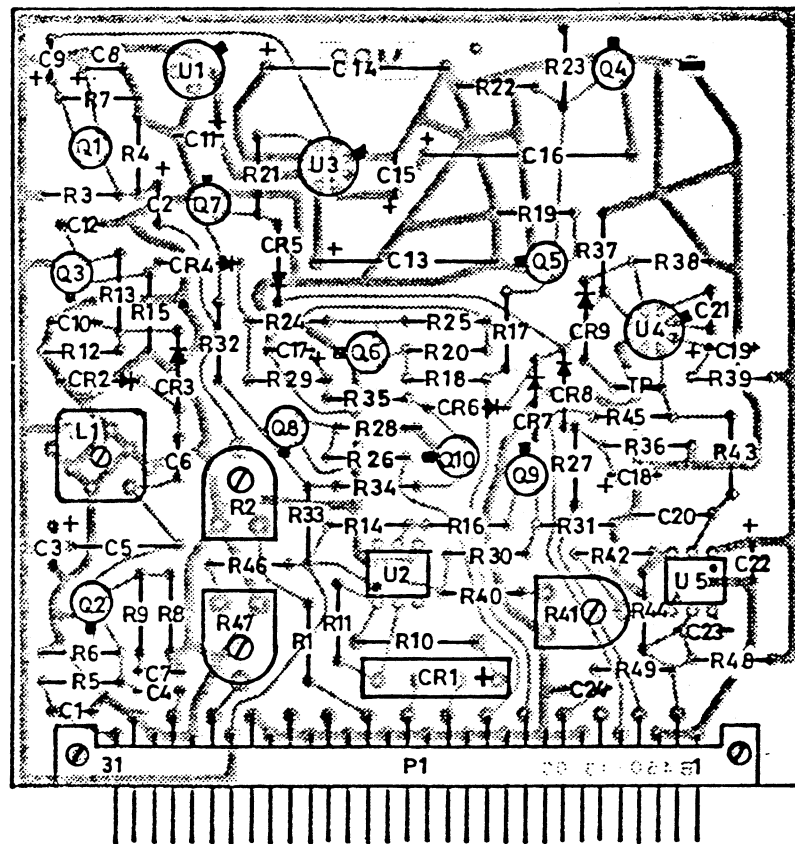
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
			GODK.	CE	
14410	Main Receiver, B 450 Filter section, 14410/B450-10-C3 Diagram and mounting illustration		ERST.	DI31-0061	
			TEGN. NR.	3-14430 (10)	
			ERST. AF		



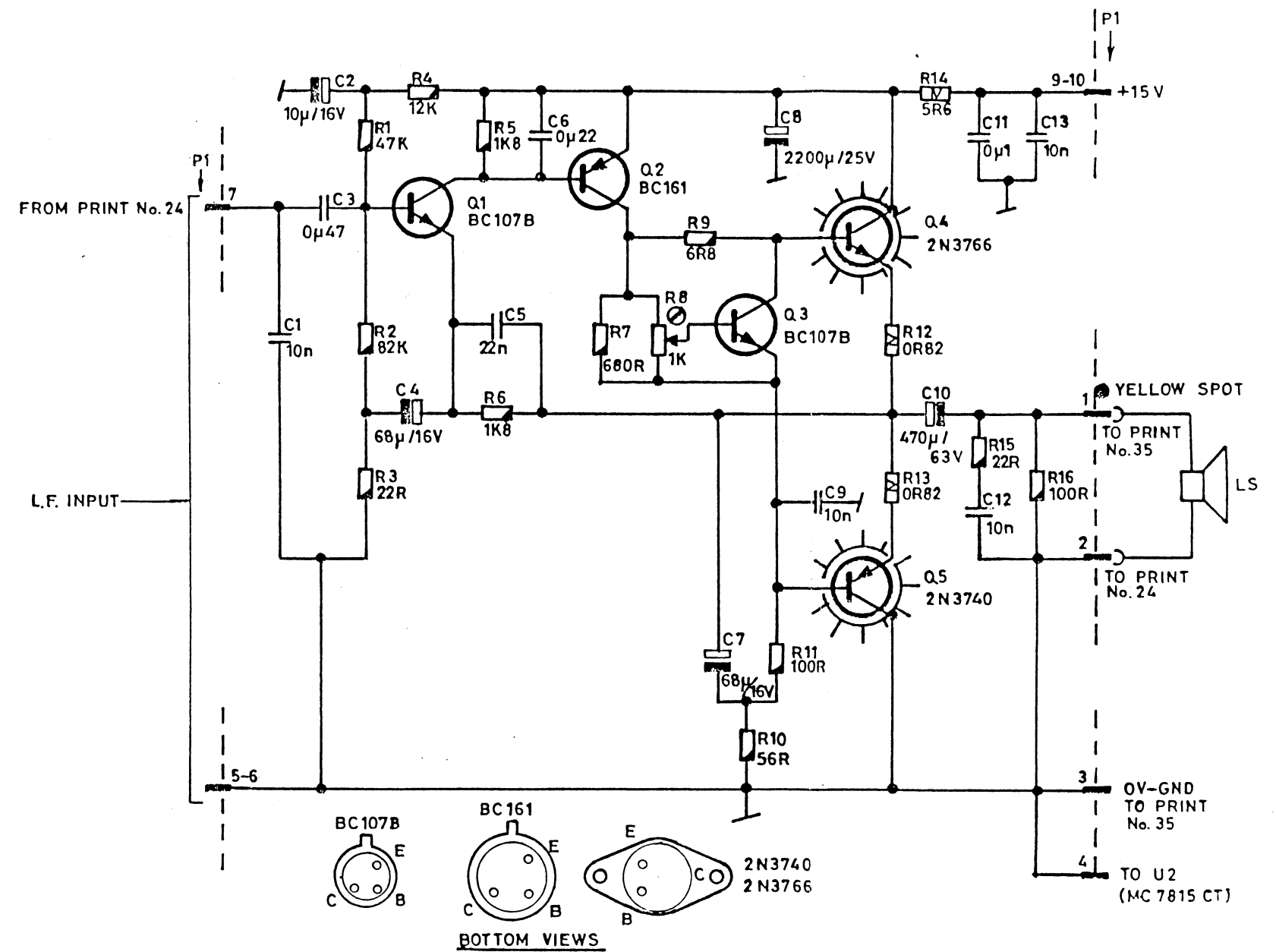
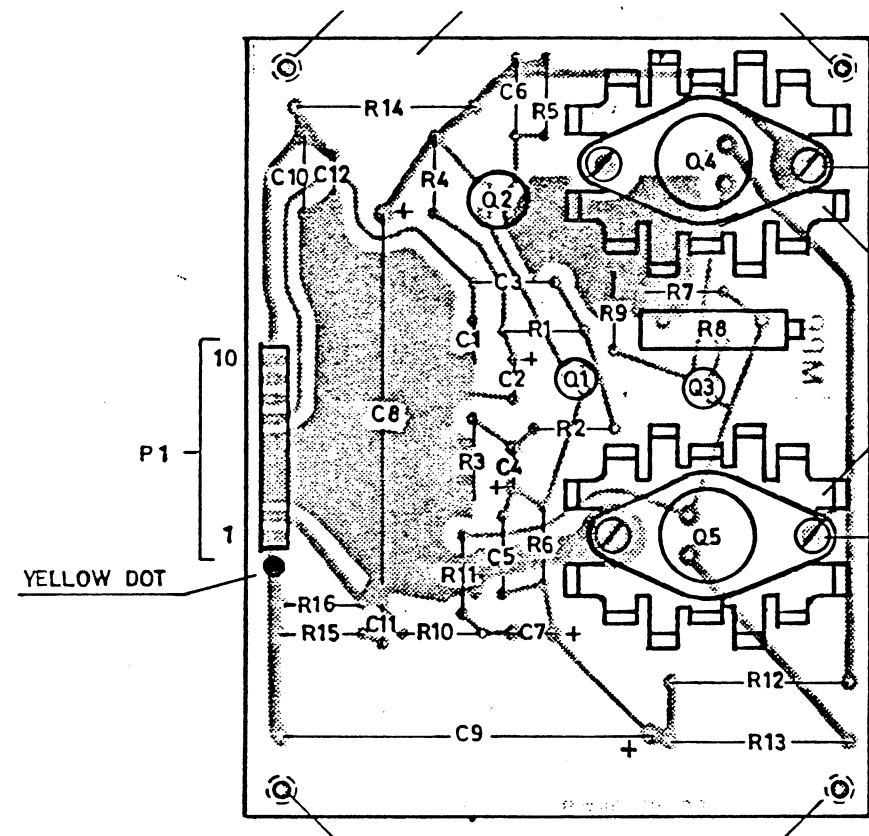
STK	BENÆVNELSE	POS.	MATERIALE	BEMÆRKNING
SKALA	MPP	Meterbuen 15 2740 Skovlunde (02) *94 22 00	TEGN. T.S./S 79 01 24	GODK.
	B 450-10-03/04	FILTER SECTION	TEGN. NR.	DI 31 0061
			ERST. AF	



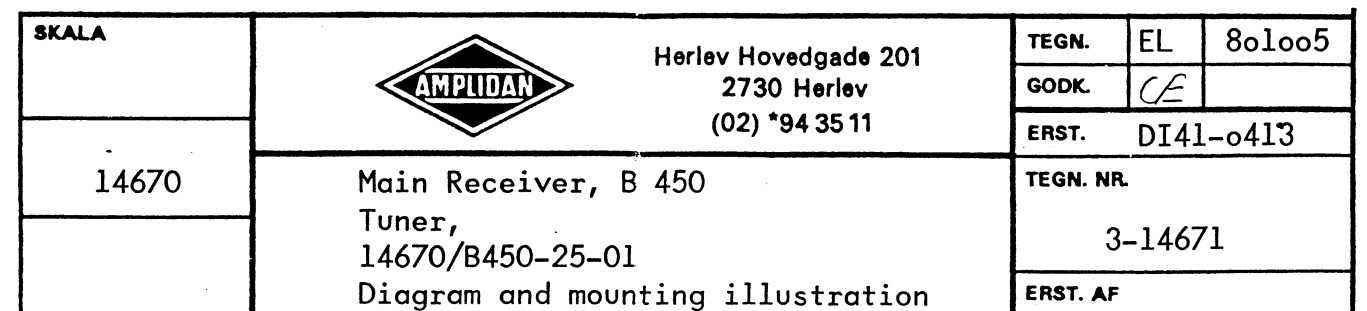
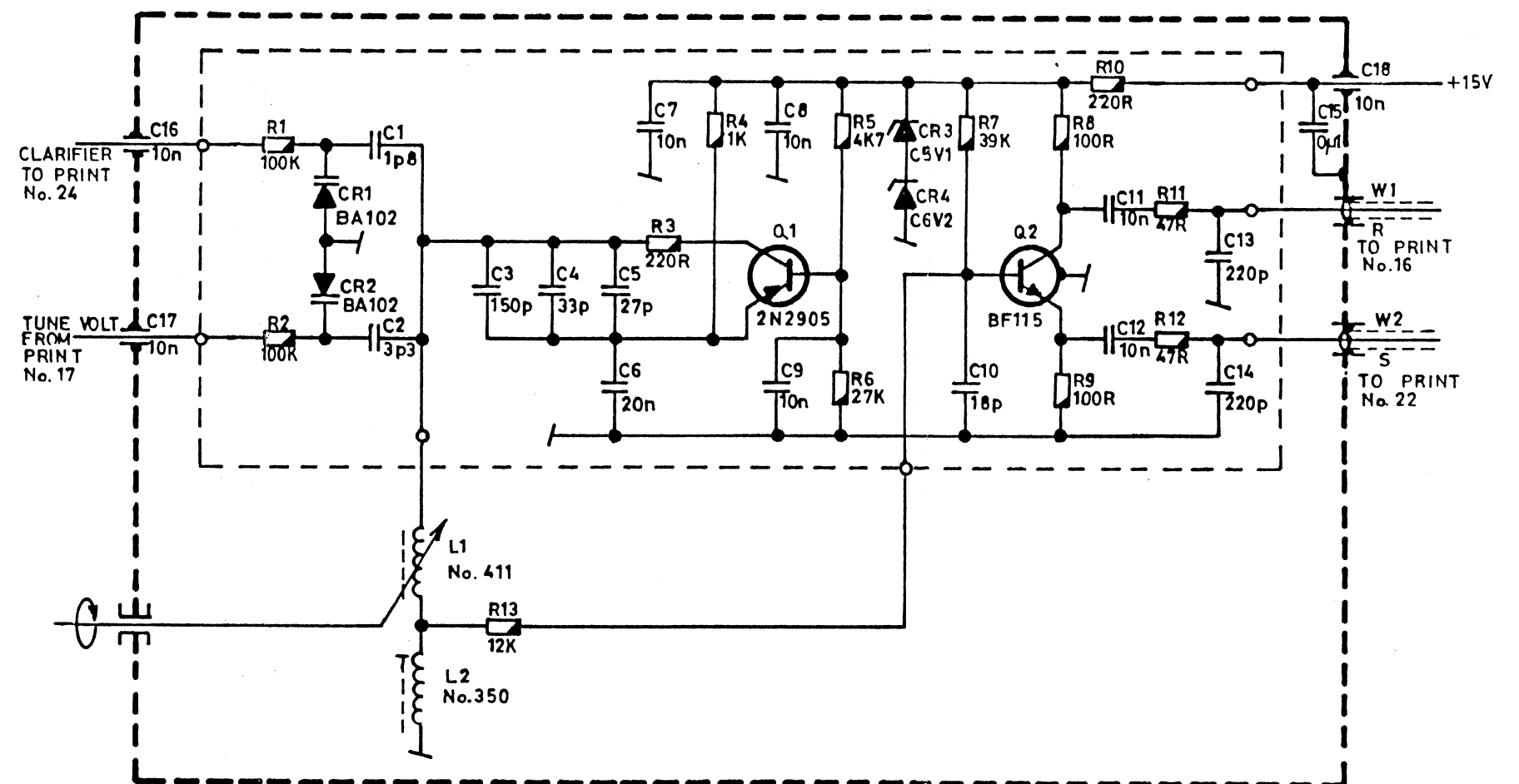
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
			GODK.	CE	
			ERST.	DI31-0065	
14411	Main Receiver, B 450 Beat oscill. + AF gate + Lineamp1., 14411/B450-11-02 Diagram and mounting illustration		TEGN. NR.	3-14431	
			ERST. AF	11	

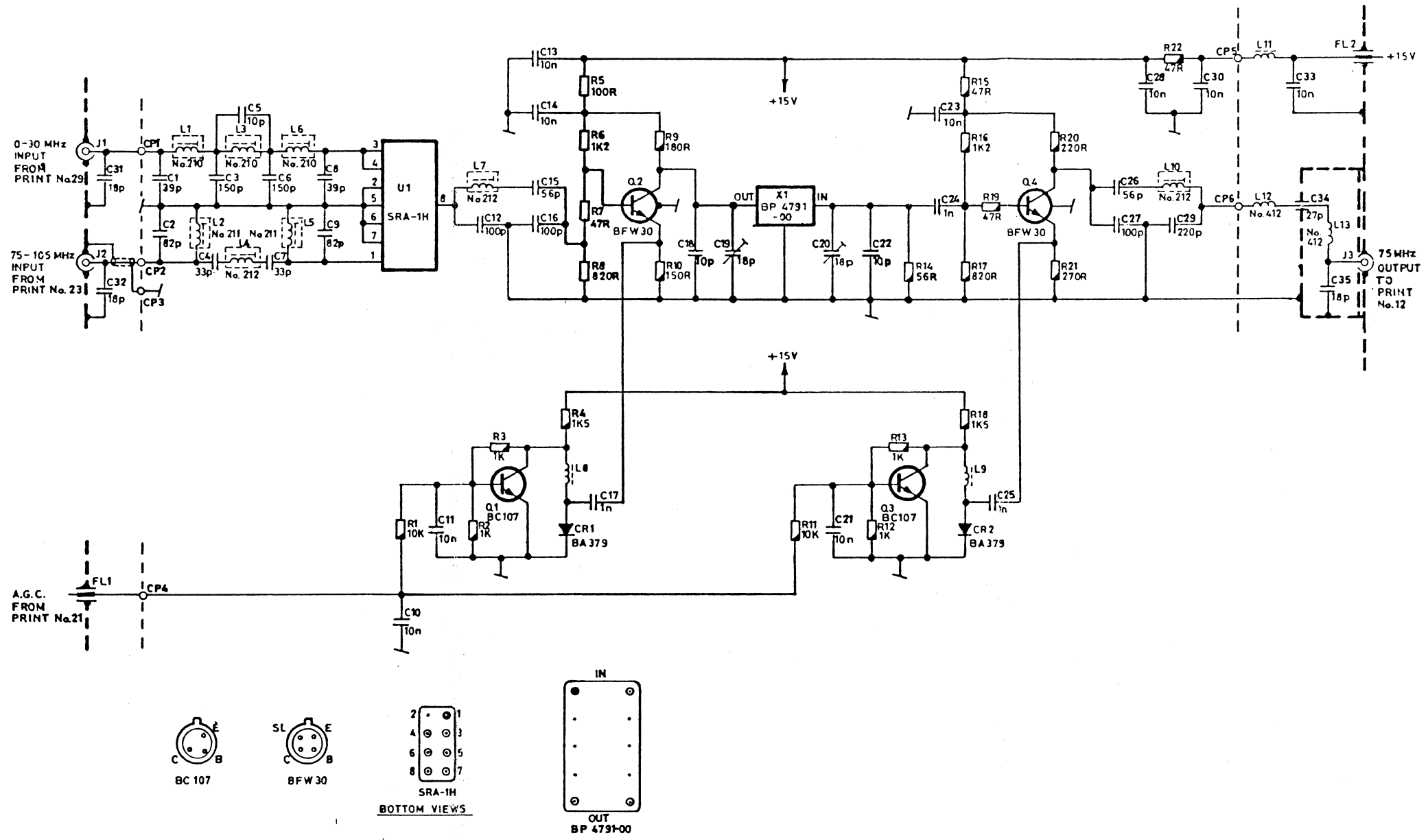
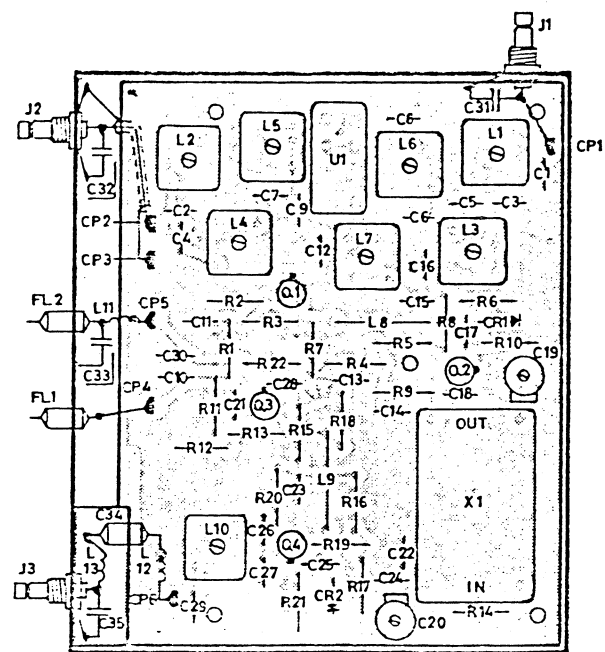


SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
14413			GODK.		
	Main Receiver, B 450 AVC-amplifier and detector, 14413/B450-13-03 Diagram and mounting illustration		ERST.	DI31-0062	
			TEGN. NR.	3-14433	
			ERST. AF		

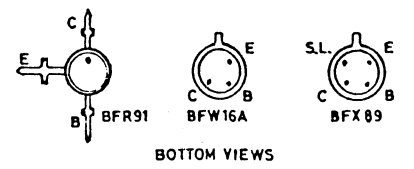
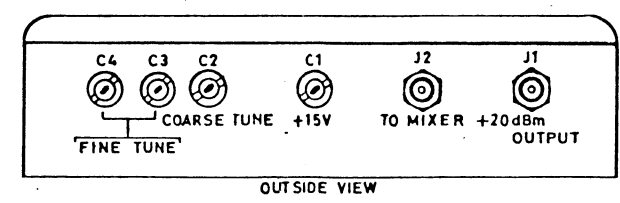
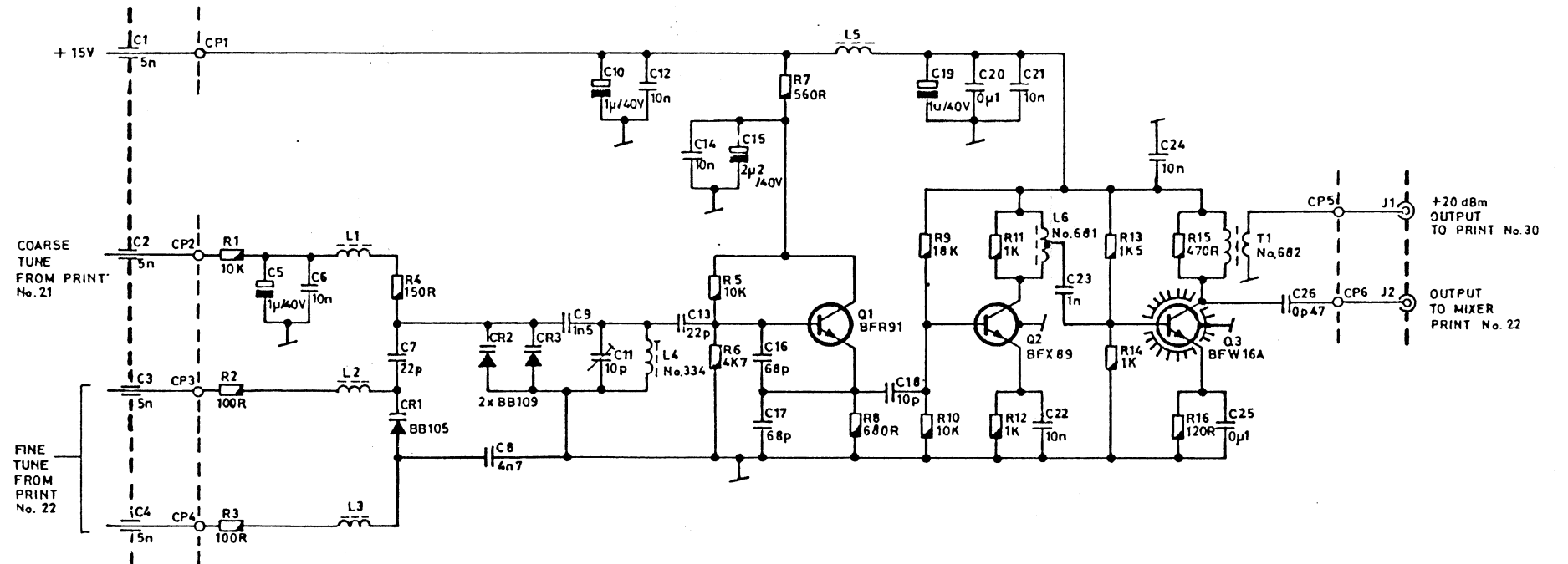
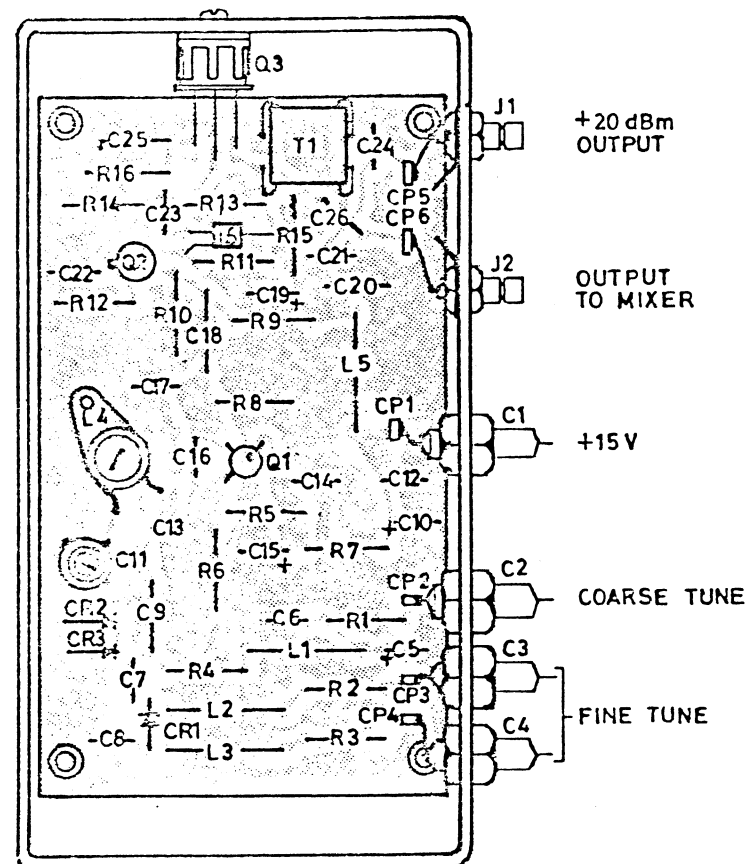


SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
		GODK.	CE	
14418	Main Receiver, B 450 Audio amplifier, 14418/B450-18-03 Diagram and mounting illustration	ERST.	DI41-o399	
		TEGN. NR.	3-14438	
		ERST. AF		

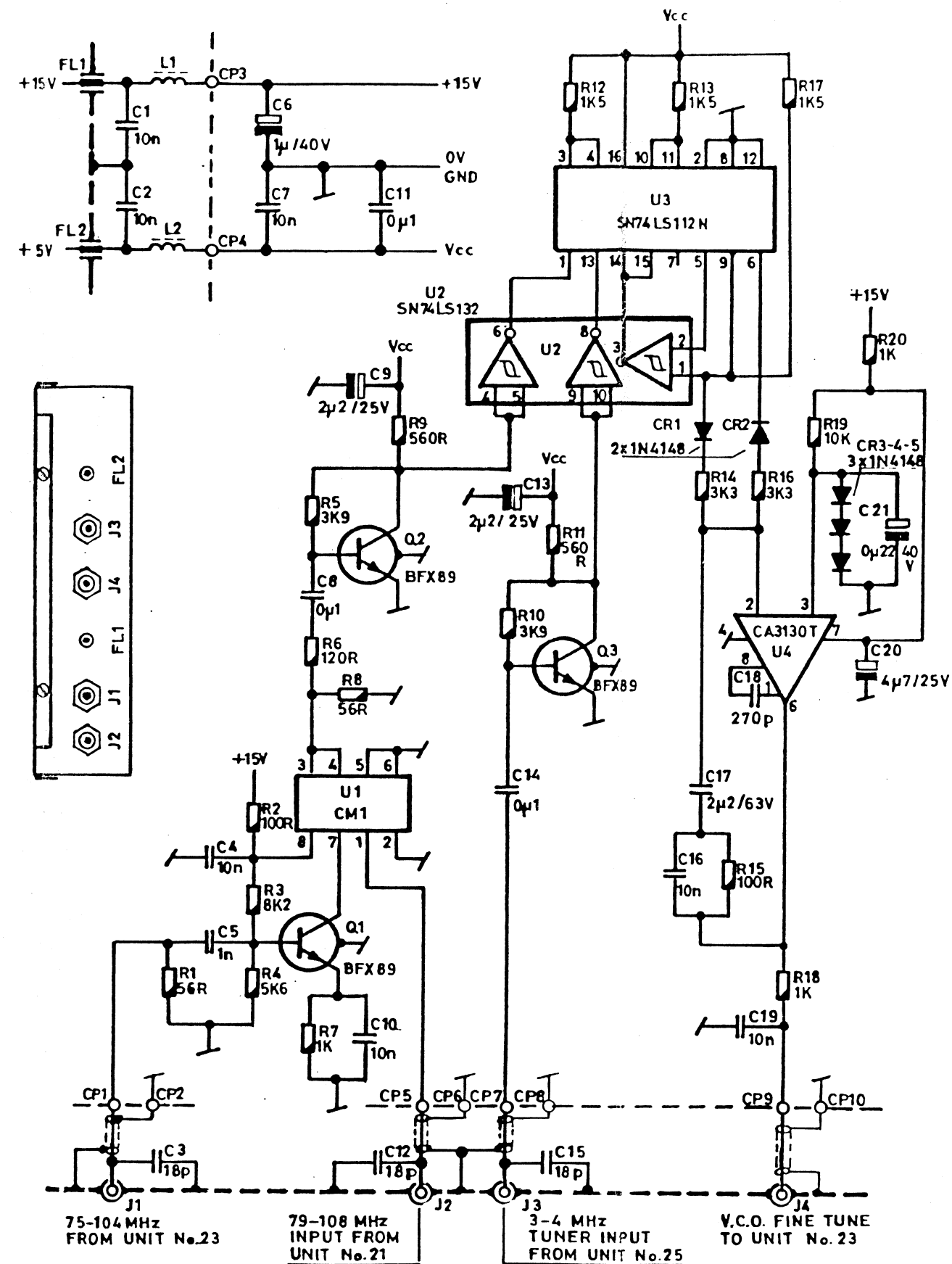
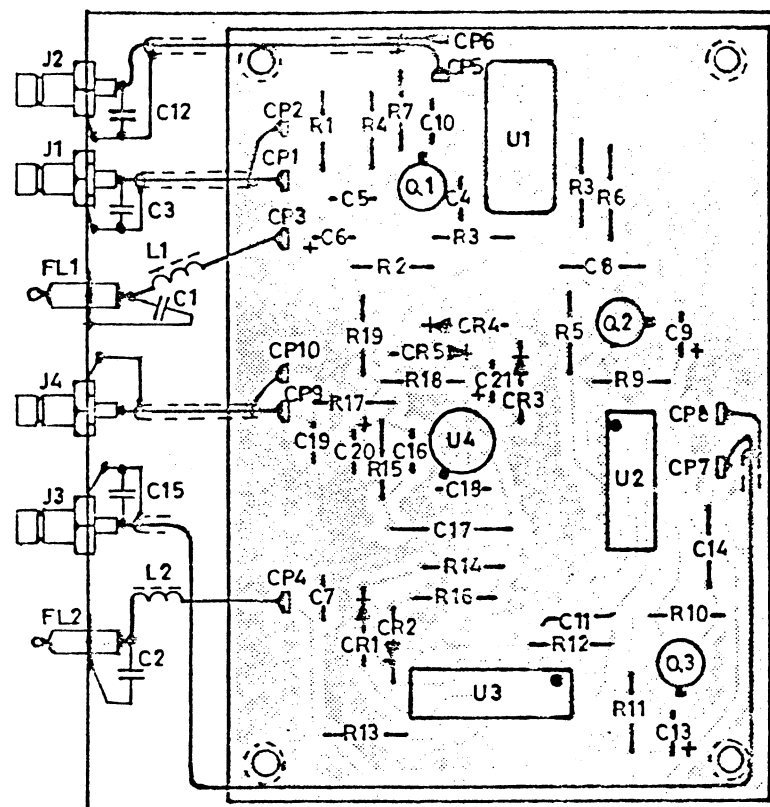




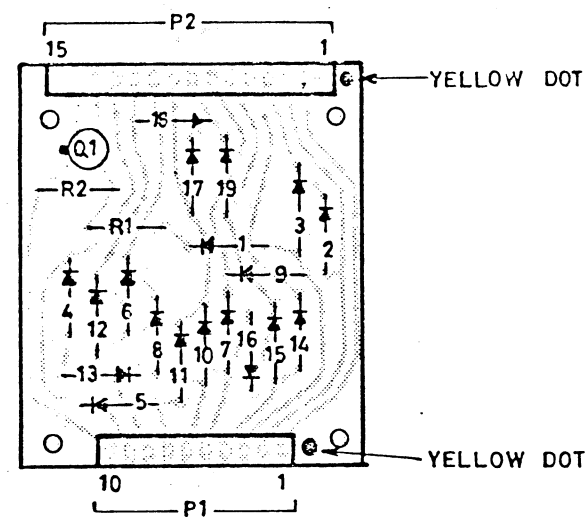
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
			GODK.	CE	
14428		Main Receiver, B 450 1 mixer unit, 14428/B450-30-03/04 Diagram and mounting illustration	ERST.	DI31-0060	
			TEGN. NR.	3-14448 (30)	
			ERST. AF		



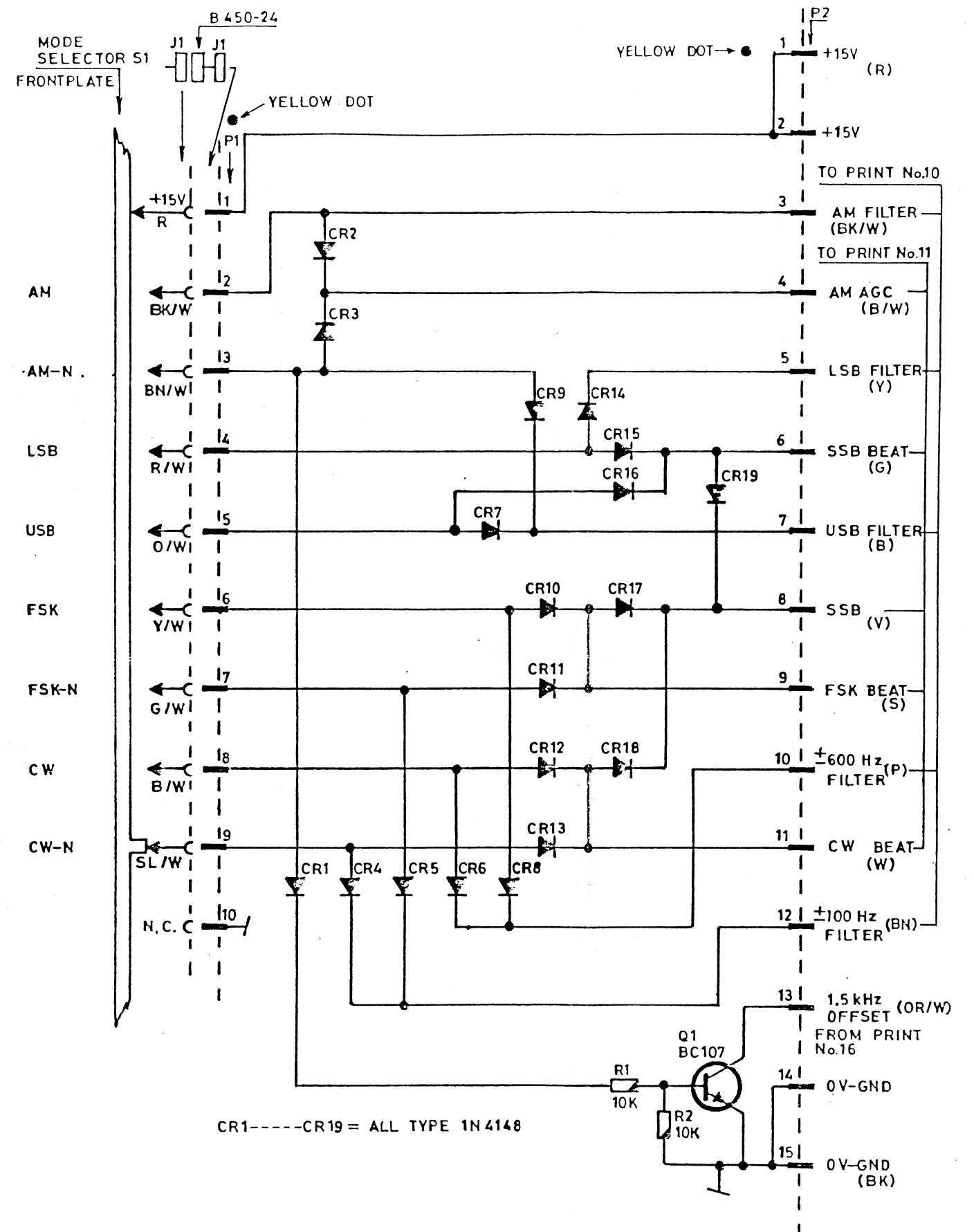
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
14423			GODK.	CE	
			ERST.	DI31-0070	
	Main Receiver, B 450 V.C.O. unit 75-105 MHz, 14423/B450-23-02 Diagram and mounting illustration		TEGN. NR. 3-14443		
			ERST. AF		



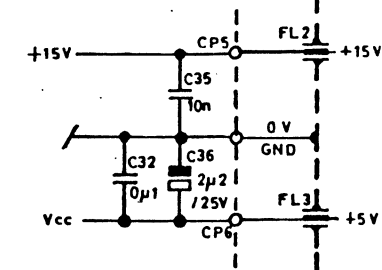
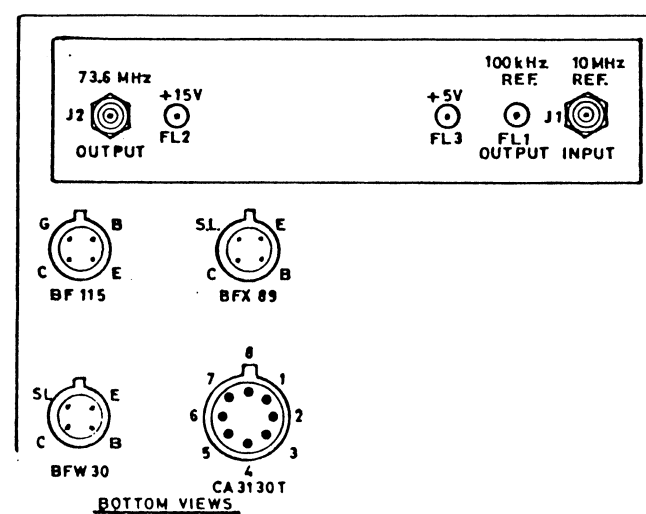
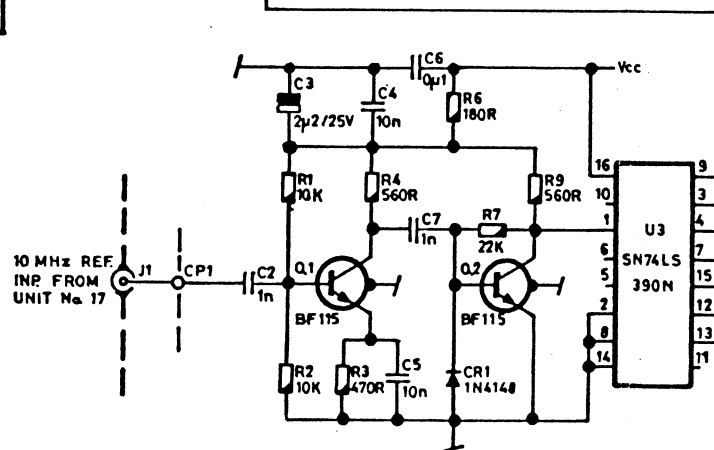
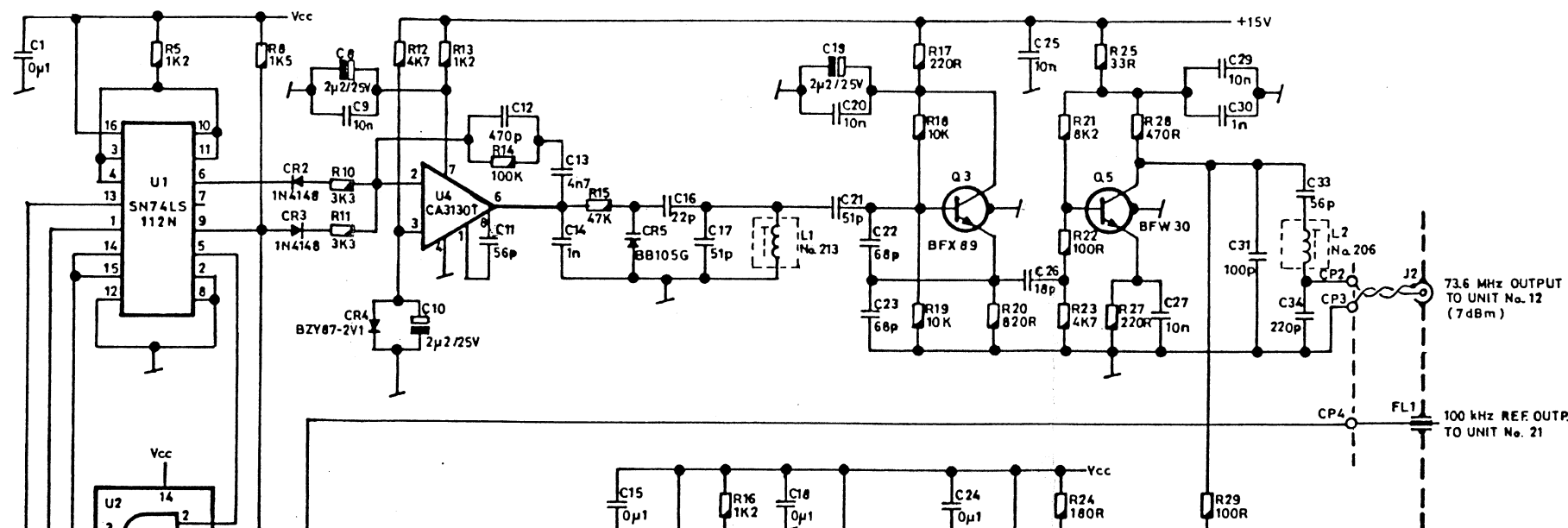
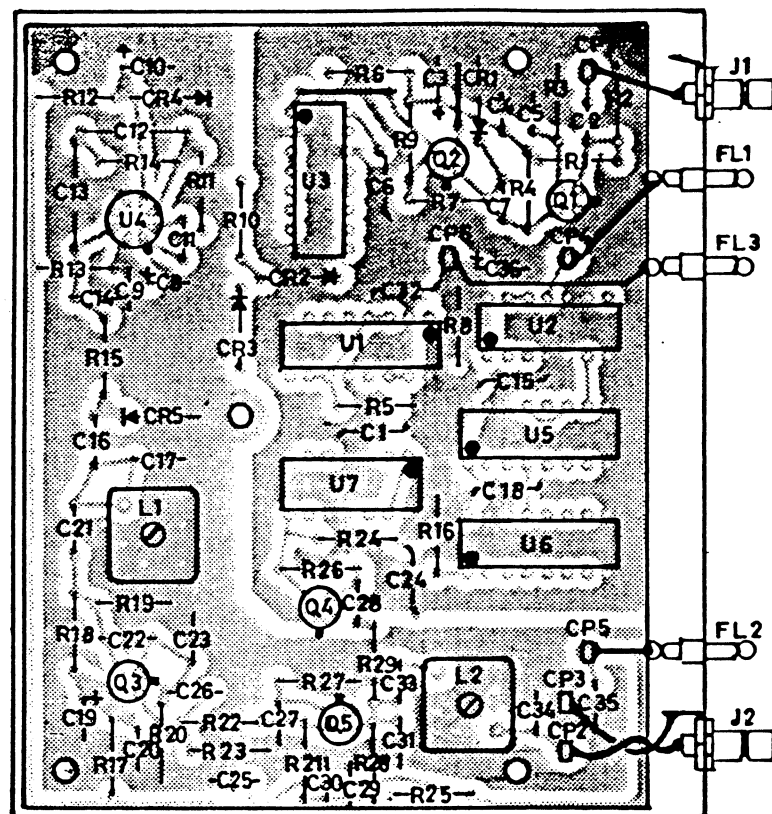
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
			GODK.	CE	
14422	Main Receiver, B 450 Master loop, 14422/B450-22-01 Diagram and mounting illustration		ERST. DI31-o396		
			TEGN. NR. 3-14442	ERST. AF	



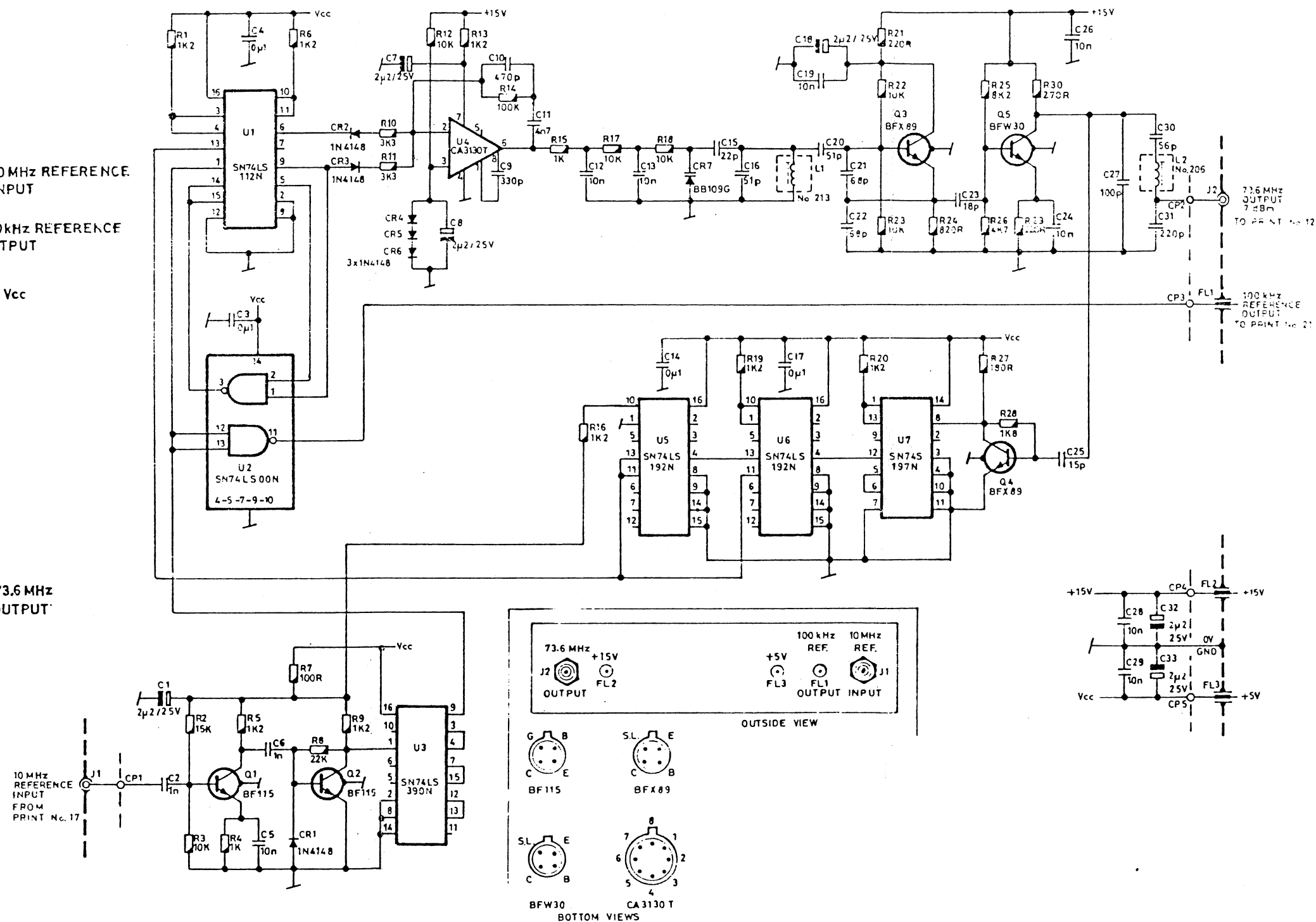
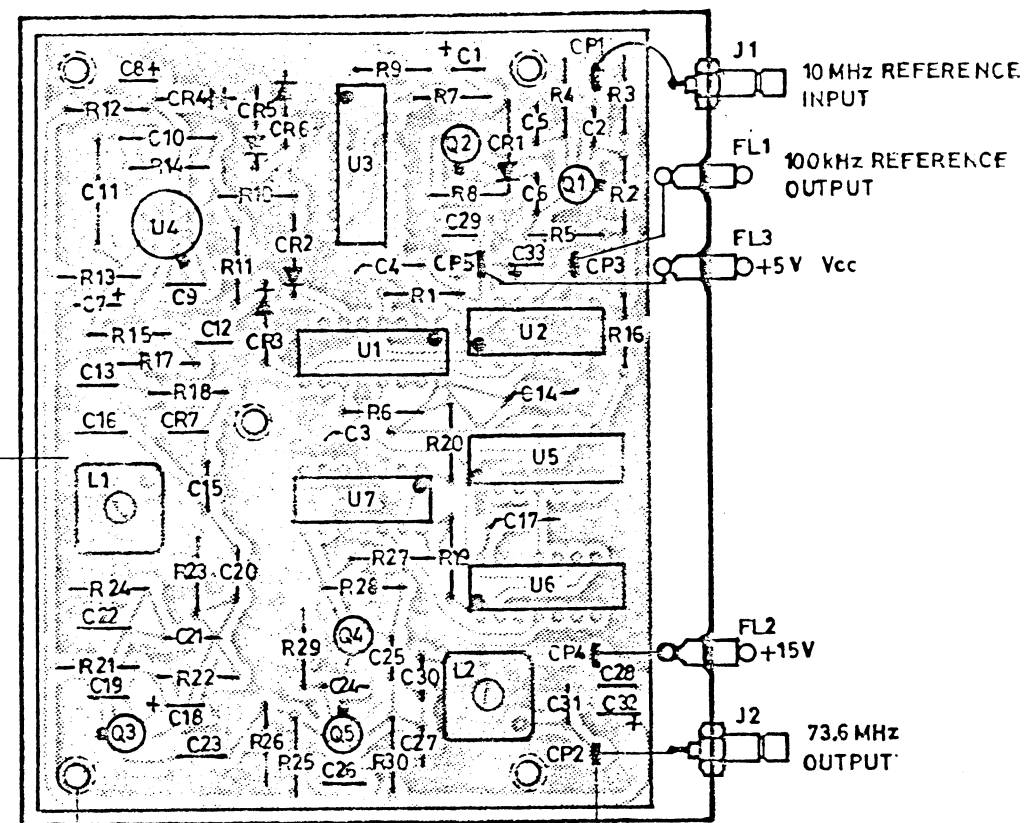
FIGURES WITHOUT LETTER DESIGNATIONS INDICATE CR (DIODES)



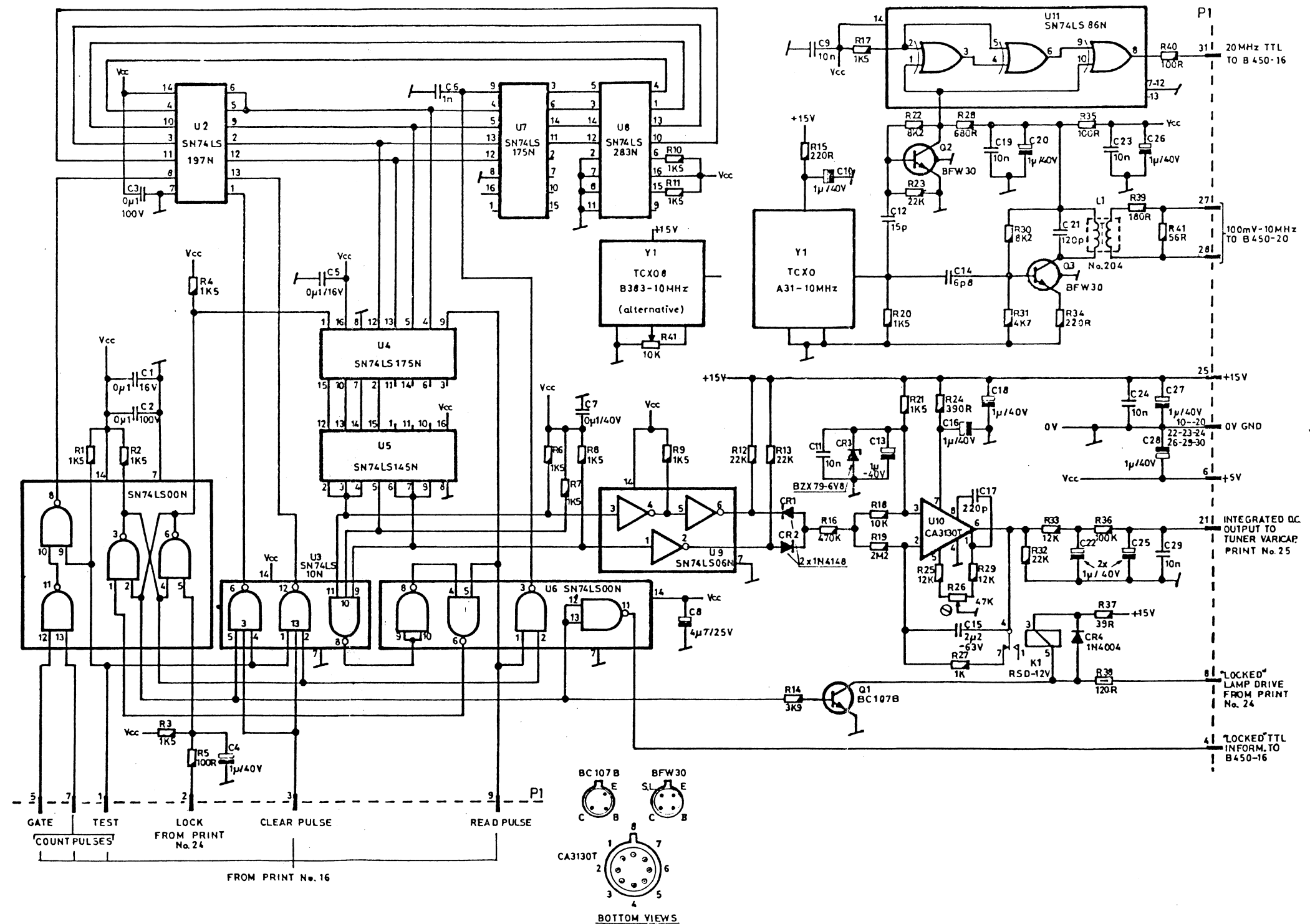
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
		GODK.		
14419	Main Receiver, B 450 Mode control unit, 14419/B450-19-02 Diagram and mounting illustration	ERST.	DI41-o411	
		TEGN. NR.	3-14439	
		ERST. AF		



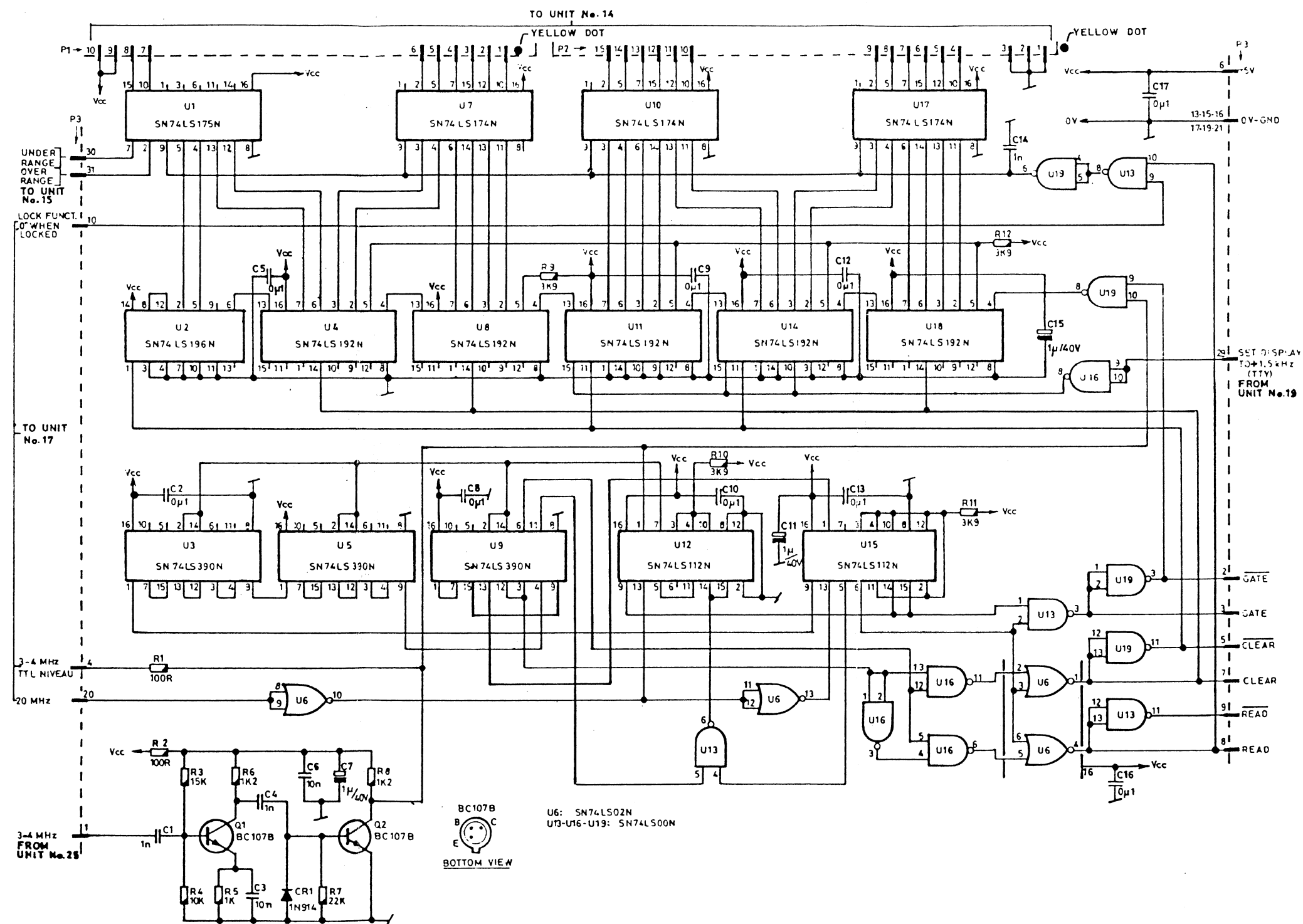
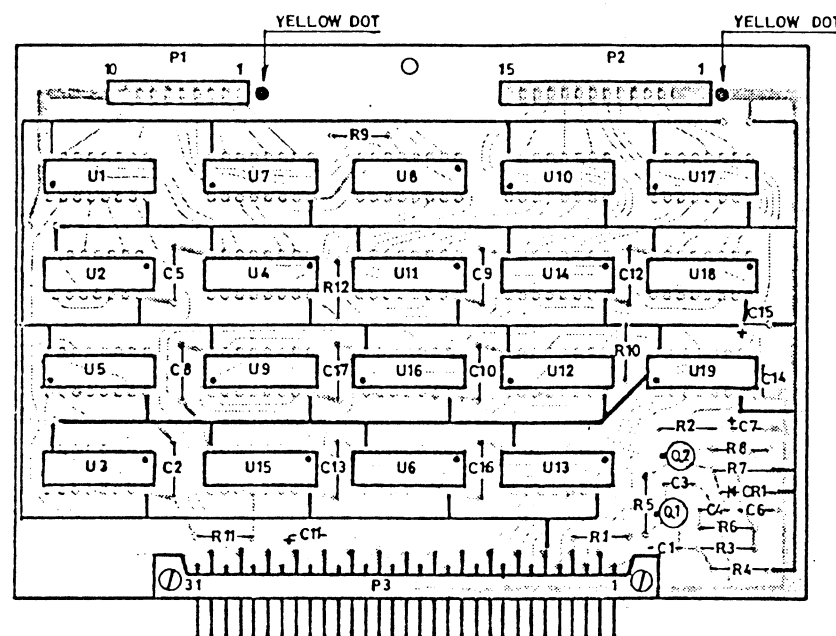
Skala	Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	Tegn.	EL	81o4o6
1442o		Godk.		
	Main Receiver, B 450 73,6 MHz loop 1442o/B450-20-03 Diagram and mounting illustration	Erst.	DI31-oo58	
		Tegn nr.	3-1444o	
		Erst. af		



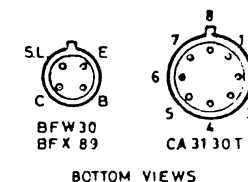
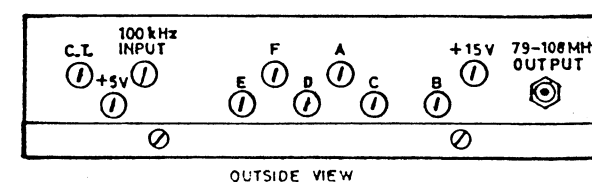
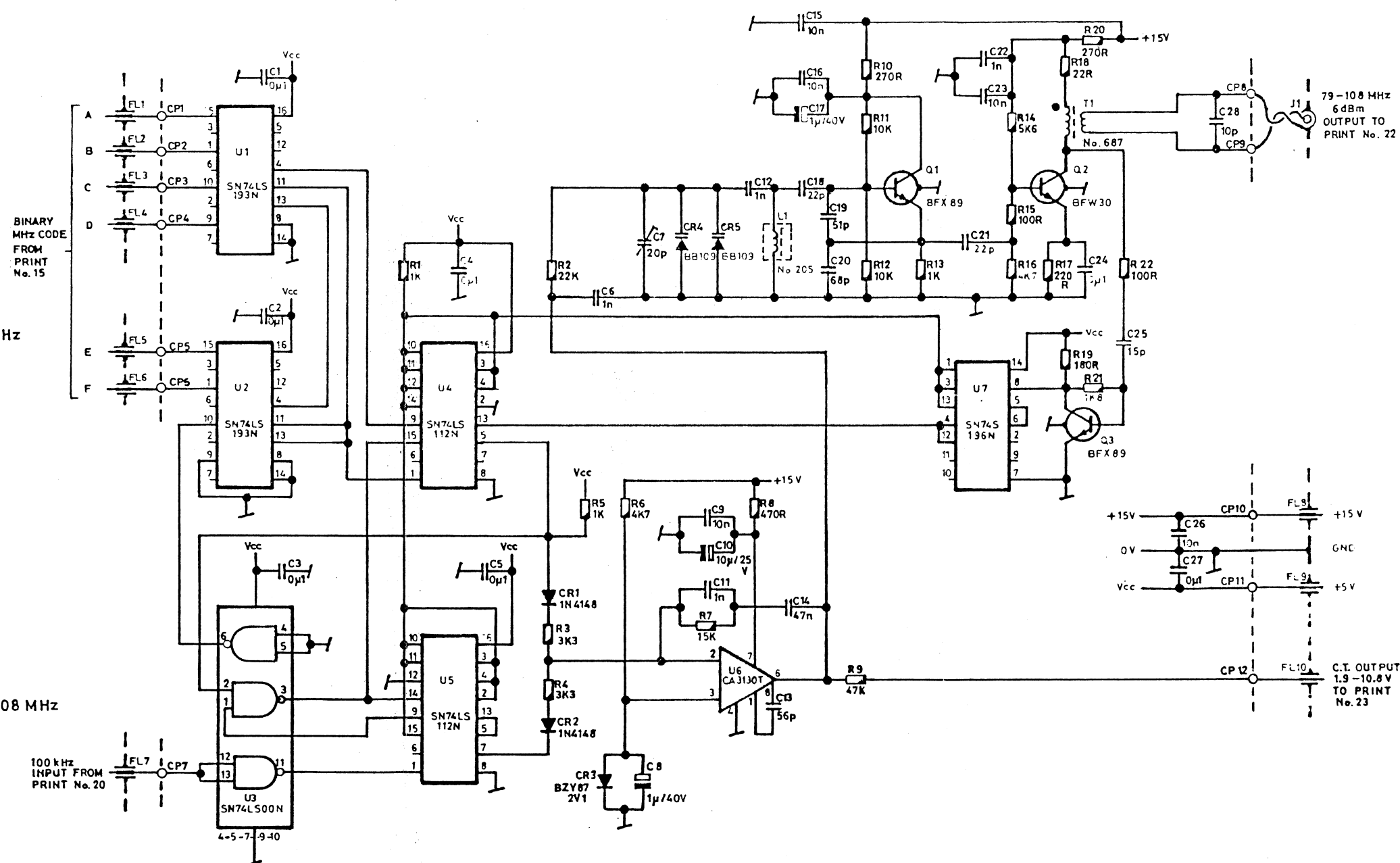
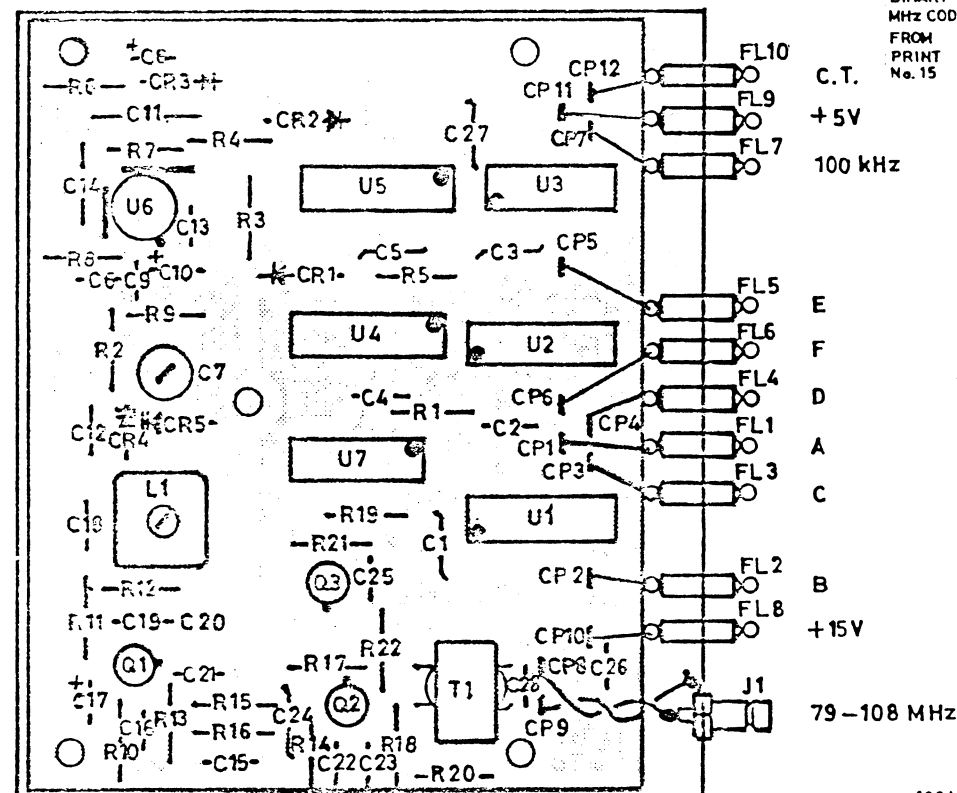
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
			GODK.	CE	
14420	Main Receiver, B 450 73,6 MHz loop, 14420/B450-20-02 Diagram and mounting illustration		ERST. DI31-0058		
			TEGN. NR. 3-14440		
			ERST. AF		



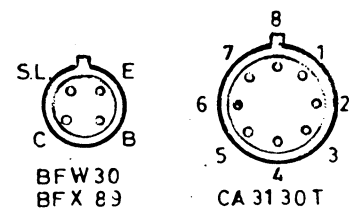
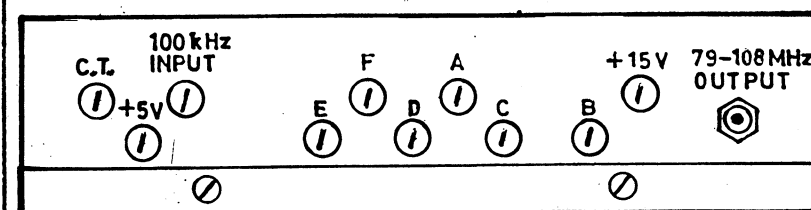
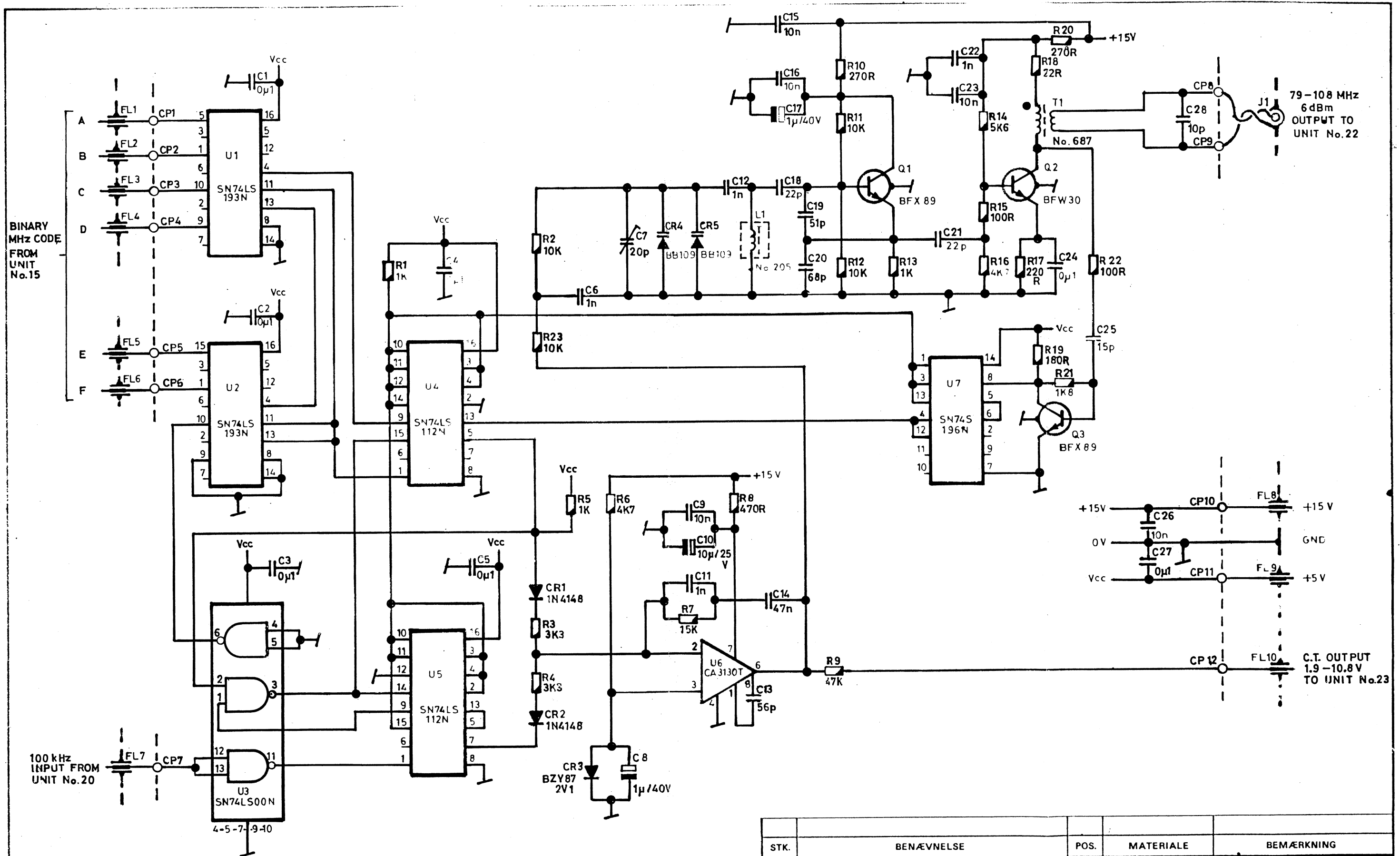
SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
			GODK.	CE	
14417	Main Receiver, B 450 Ref. freq. and lock unit, 14417/B450-17-01 Diagram and mounting illustration		ERST.	DI31-0056	
			TEGN. NR.	3-14437	
			ERST. AF		



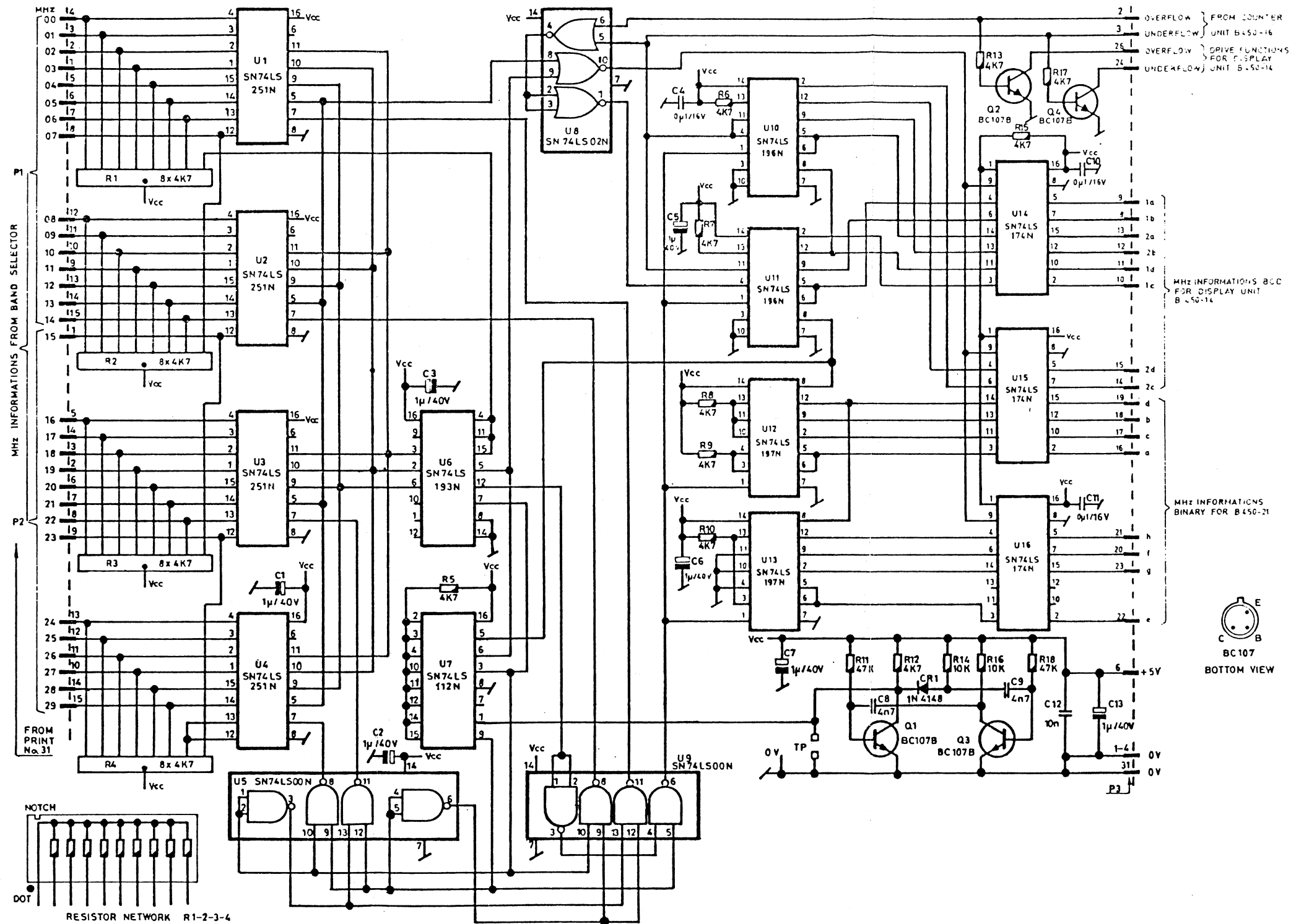
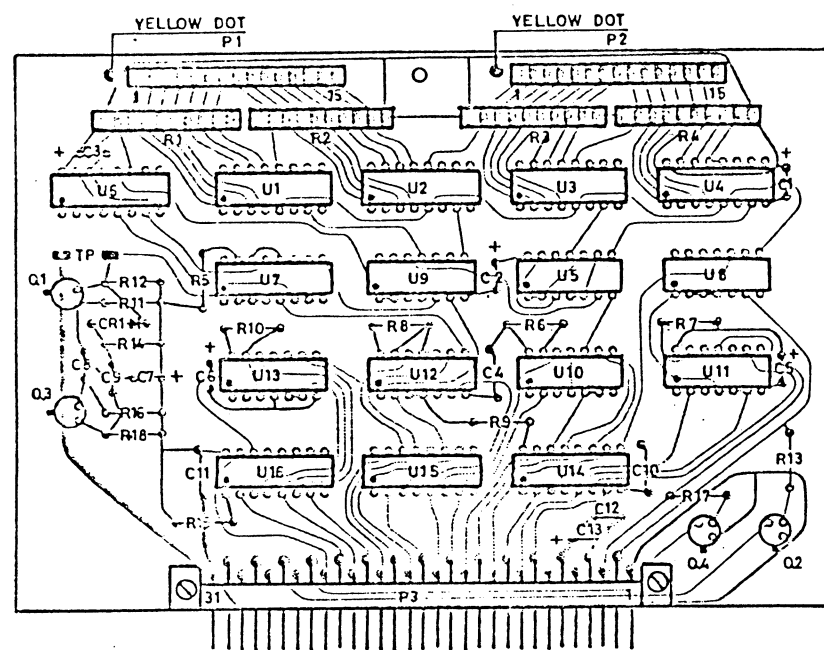
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
		GODK.	CE	
14416	Main Receiver, B 450 Time base counter/latch unit, 14416/B450-16-02/03 Diagram and mounting illustration	ERST.	DI31-0055	
		TEGN. NR.	3-14436	
		ERST. AF		



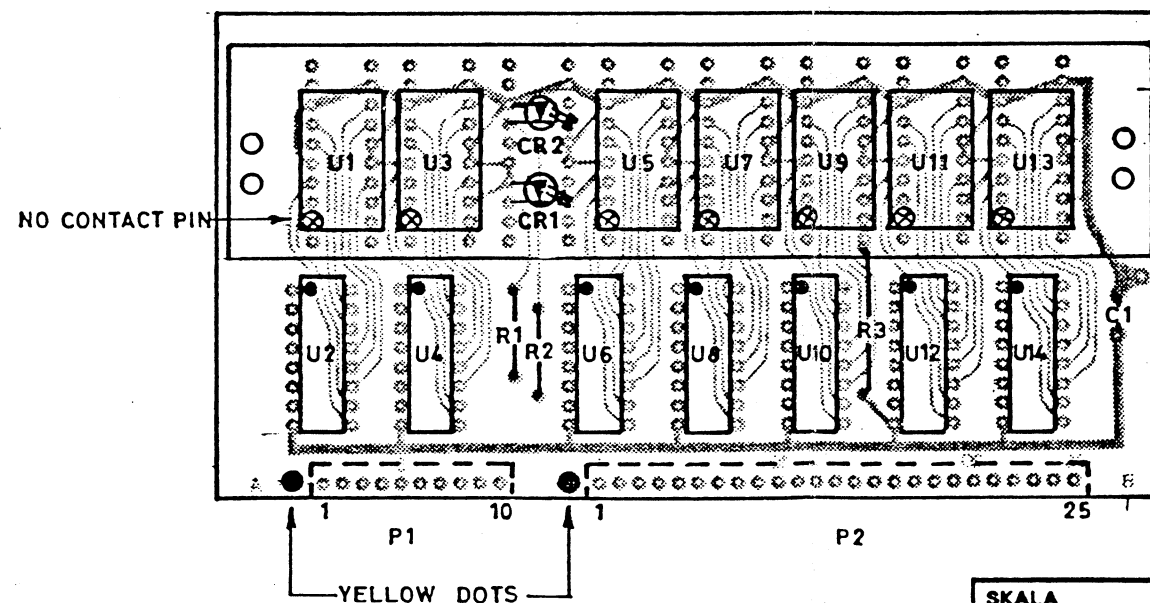
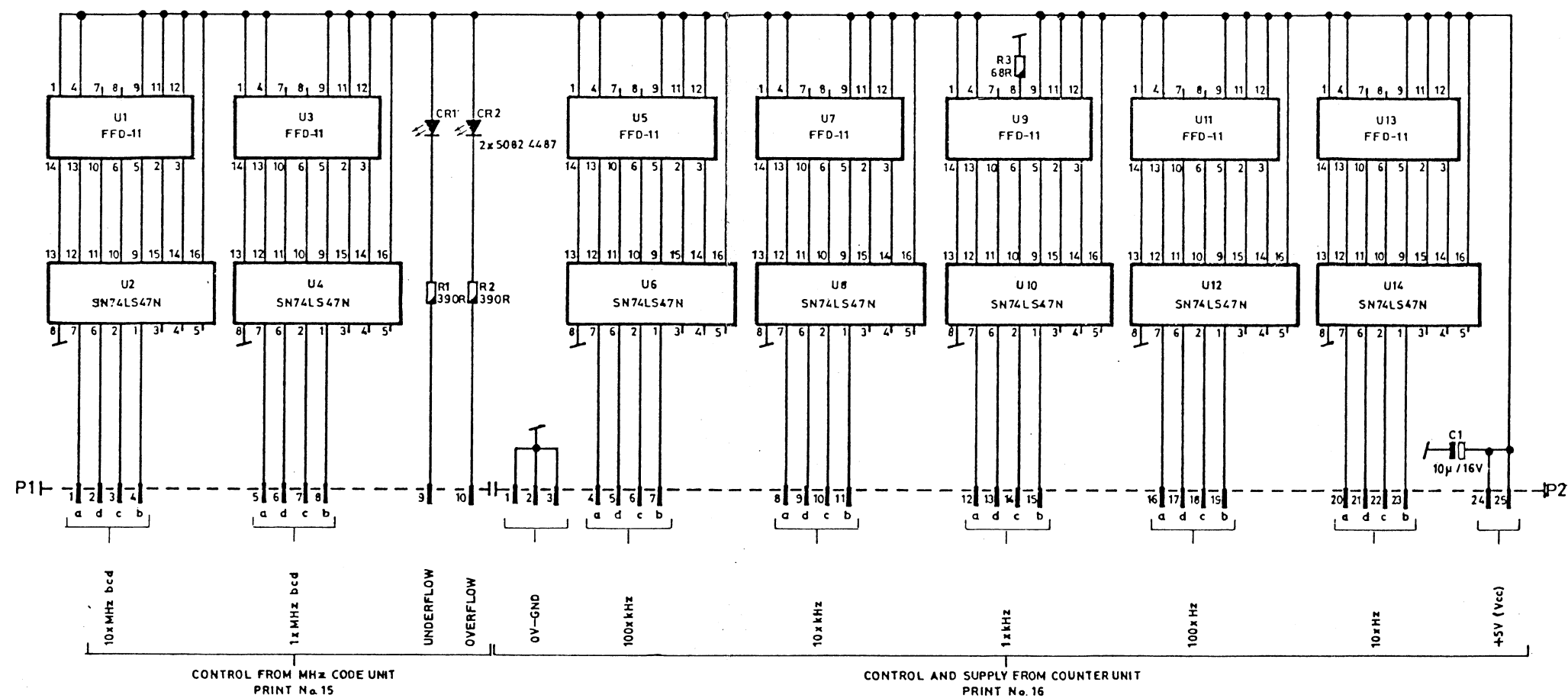
SKALA	Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN. EL 801005
14421	Main Receiver, B 450 MHz loop, 14421/B450-21-04 Diagram and mounting illustration	GODK. <i>CF</i>
		ERST. DI31-0076
		TEGN. NR. 3-14441
		ERST. AF



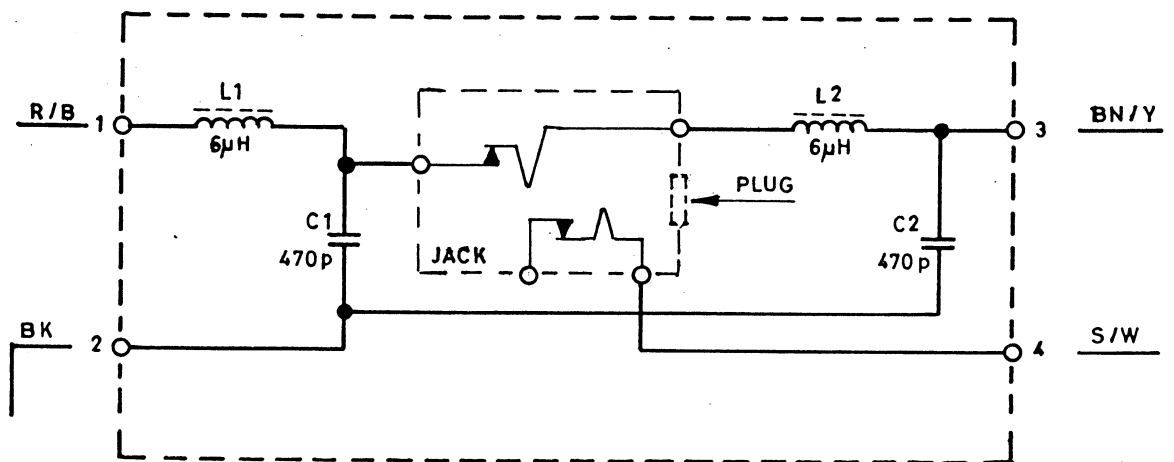
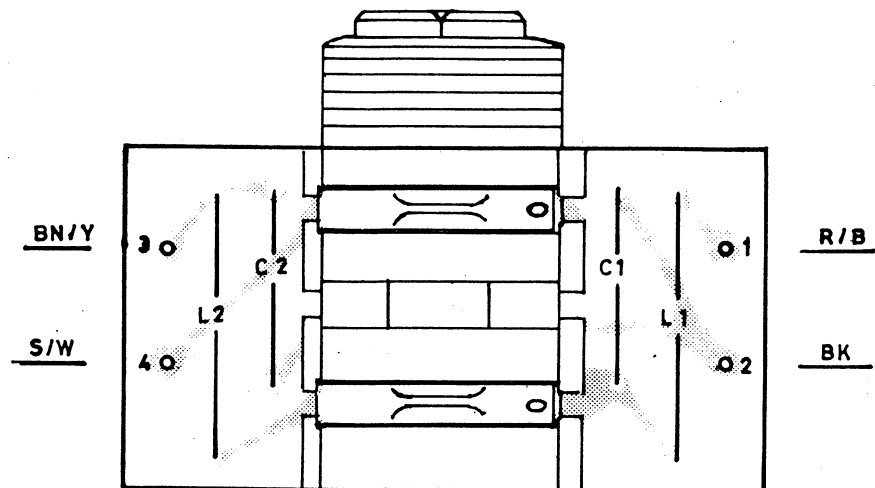
STK.	BENÆVNELSE	POS.	MATERIALE	BEMÆRKNING
SKALA	MPP	Meterbuen 15 2740 Skovlunde (02) *94 22 00		TEGN. JEN/ 80 07 08
	B 450-21-04			GODK.
	MHz LOOP			ERST.
				TEGN. NR.
				DI 31 0076
				ERST. AF



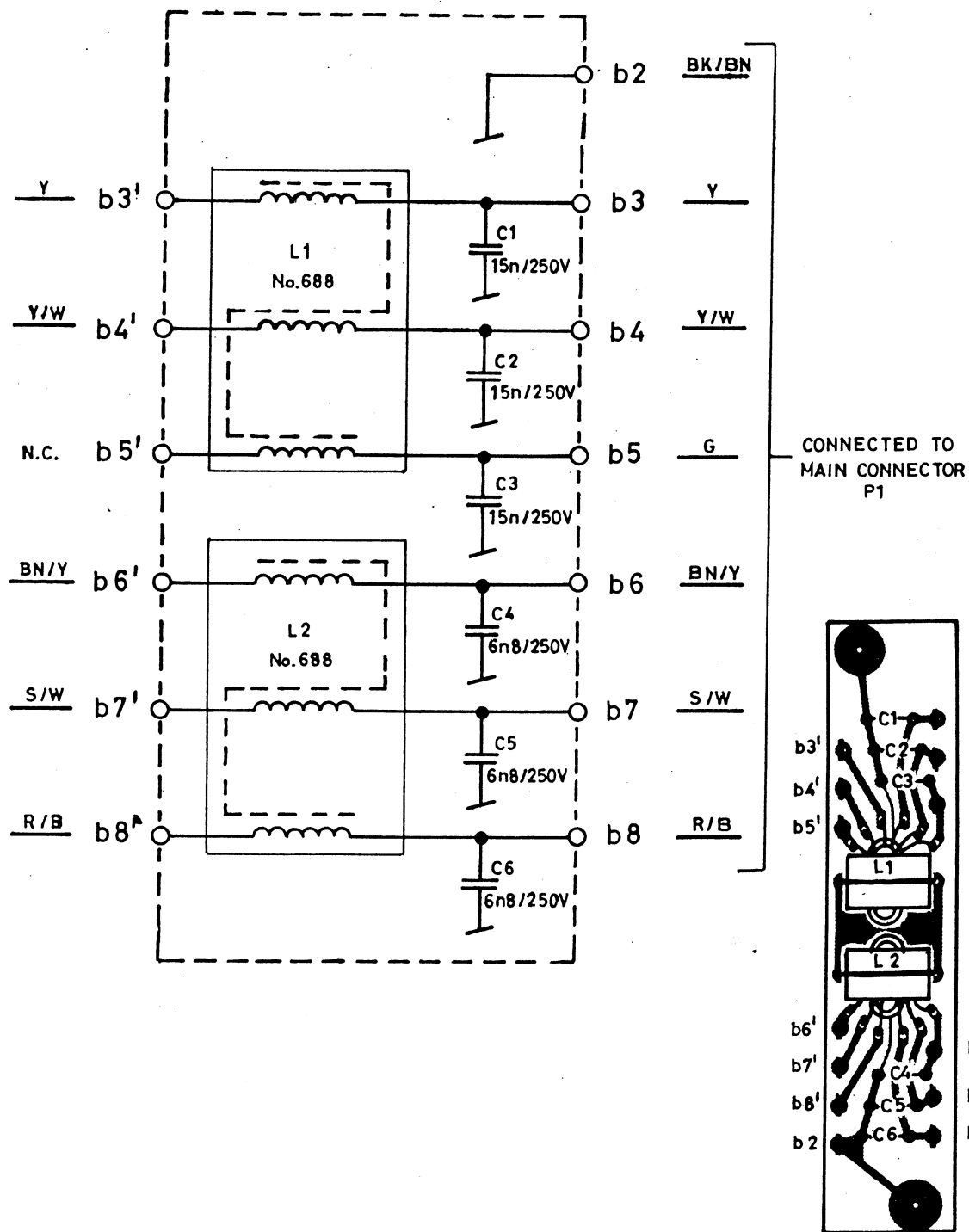
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801005
14415		GODK.	CE	
	Main Receiver, B 450 MHz code unit, 14415/B450-15-01 Diagram and mounting illustration	ERST.	DI31-0057	
		TEGN. NR.	3-14435	
		ERST. AF		



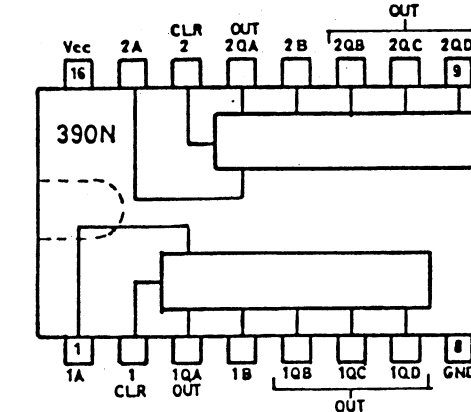
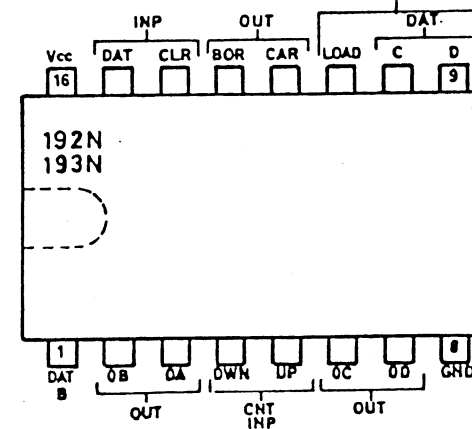
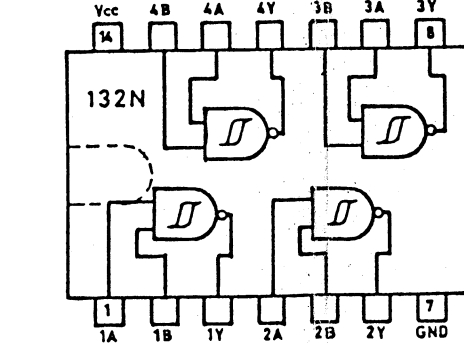
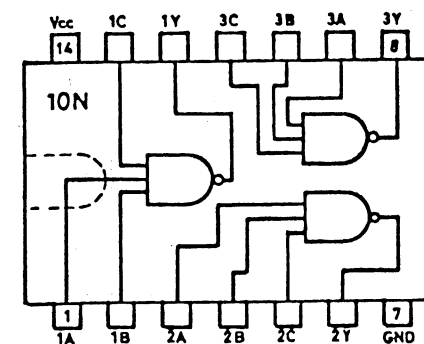
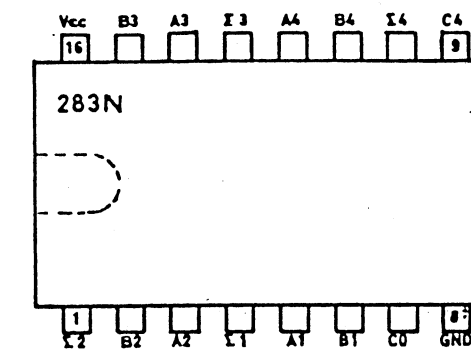
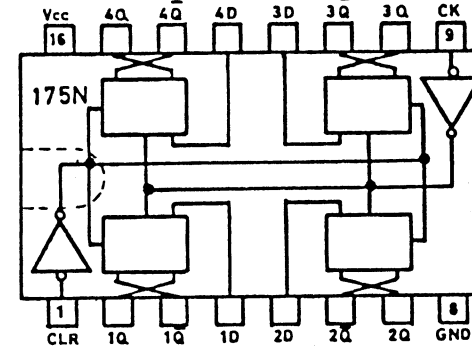
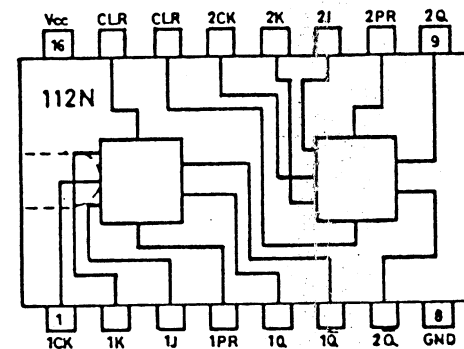
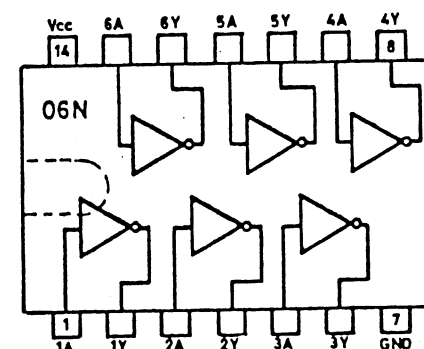
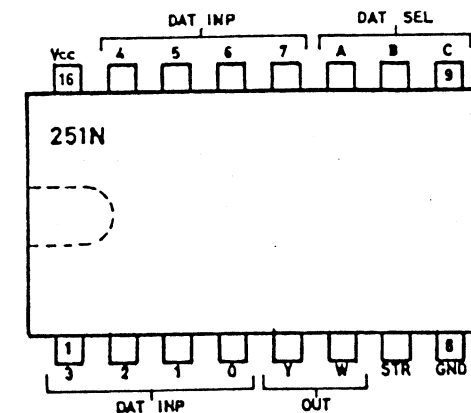
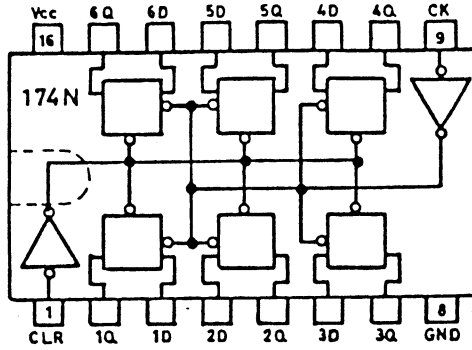
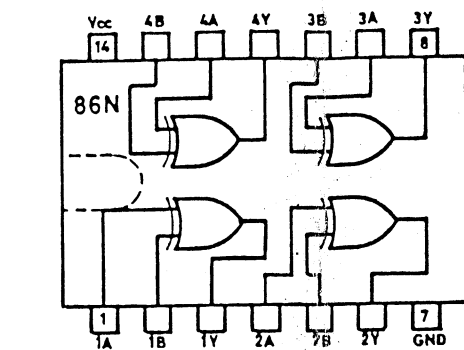
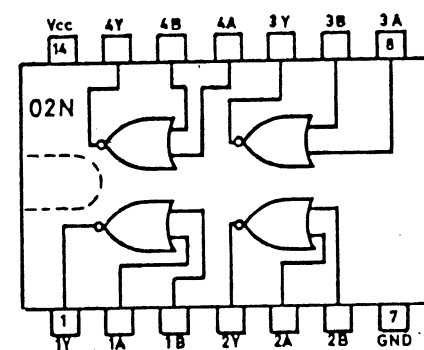
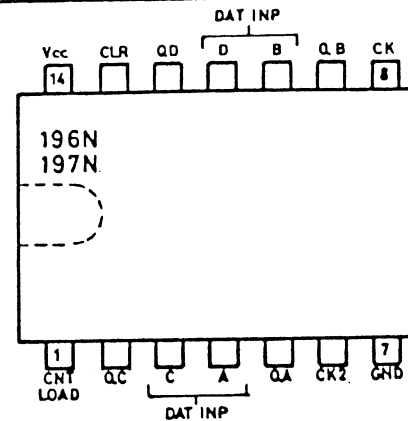
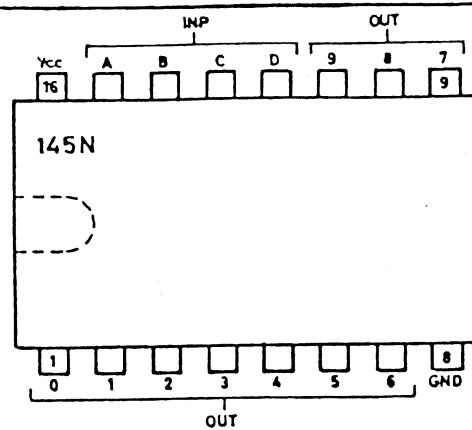
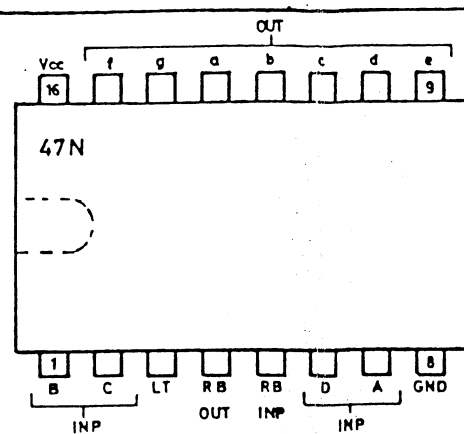
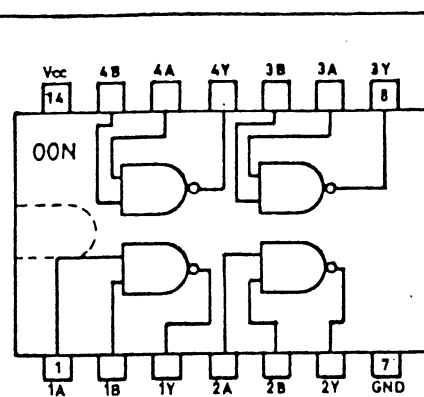
SKALA	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	801003
14414		GODK.	CE	
	Main Receiver, B 450 Display unit, 14414/B450-14-02 Diagram and mounting illustration	ERST.	DI31-0053	
		TEGN. NR.	3-14434	
		ERST. AF		



SKALA /	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	800901
15751		GODK.	CE	
	Main Receiver, B 450 Filter unit, 15751/B450-36-01 Diagram and mounting illustration	ERST. DI41-o416		
		TEGN. NR. 4-15762		
		ERST. AF		



SKALA		Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	TEGN.	EL	800813
			60DK.	CE	
15750	Main Receiver, B 450 Filter unit, 15750/B450-35-01 Diagram and mounting illustration		ERST. DI41-o414		
			TEGN. NR. 4-15747		
			ERST. AF		



Skala	 Herlev Hovedgade 201 2730 Herlev (02) *94 35 11	Tegn.	EL	801003
		Godk.		
	Main Receiver, B 450 Integrated circuits.	Erst.		
		Tegn nr.		3-15719
		Erst. af		

SC 1	Pos.	Ordering reference			Pc	SC 2	Sh. 7/9
		Description	/tol. $\pm$ %	Code			Notes
		Frontplate, compl.		014-880	14880/B450	1	Ampl.
		Filter section.		014-410	14410/B450-10	1	Ampl.
		Beat oscillator + AF. gate					
		+ Line amplifier.		014-411	14411/B450-11	1	Ampl.
		1,4MHz mixer and ampl.		014-412	14412/B450-12	1	Ampl.
		AVC.amplifier and detector		014-413	14413/B450-13	1	Ampl.
		MHz code unit		014-415	14415/B450-15	1	Ampl.
		Time base counter/ latch unit.		014-416	14416/B450-16	1	Ampl.
		Ref.freq. and lock unit		014-417	14417/B450-17	1	Ampl.
		Audio amplifier		014-418	14418/B450-18	1	Ampl.
		Mode control unit		014-419	14419/B450-19	1	Ampl.
		73,6 MHz loop		014-420	14420/B450-20	1	Ampl.
		MHz loop		014-421	14421/B450-21	1	Ampl.
		Master loop		014-422	14422/B450-22	1	Ampl.
		VCO. unit 75-105 MHz		014-423	14423/B450-23	1	Ampl.
		Junction panel		014-660	14660/B450-24	1	Ampl.
		Tuner, compl.		014-670	14670/B450-25	1	Ampl.
		Power supply unit, compl.		014-429	14429/B450-26	1	Ampl.
		RF. tuner unit		014-742	14742/B450-27	1	Ampl.
		MHz-switch		014-640	14640/B450-28	2	Ampl.
		RF. input circuit		014-427	14427/B450-29	1	Ampl.
		1. mixer unit		014-428	14428/B450-30	1	Ampl.
		MHz band selector		015-741	15741/B450-31	1	Ampl.
		Protecting lamp unit		015-744	15744/B450-32	1	Ampl.
		Contact segment 33-34		014-743	14743/B450-	2	Ampl.
		Filter unit		015-750	15750/B450-35	1	Ampl.
		Filter unit		015-751	15751/B450-36	1	Ampl.

Rev.

ST 13500

O

MO

SC

Parts list

Main receiver, B450



Herlev Hovedgade 201 B
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 16810 Secom

D 801001 mh

C

D. NO.

4-13500

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 8/9
			/tol. $\pm$ %	Code				Notes
		Coaxial cable,	10-12	015-775	15775/B450	1		Ampl.
		Coaxial cable,	12-30	015-776	15776/B450	1		Ampl.
		Coaxial cable,	12-20	015-777	15777/B450	1		Ampl.
		Coaxial cable,	23-30	015-778	15778/B450	1		Ampl.
		Coaxial cable,	29-30	015-779	15779/B450	1		Ampl.
		Coaxial cable,	22-23	015-780	15780/B450	1		Ampl.
		Coaxial cable,	21-22	015-781	15781/B450	1		Ampl.
		Coaxial cable,	17-20	015-782	15782/B450	1		Ampl.
		Coaxial cable,	22-23	015-783	15783/B450	1		Ampl.
		Coaxial cable,	10-11	015-784	15784/B450	1		Ampl.
		Harness, 2		015-785	15785/B450	1		Ampl.
		Harness, 3		015-786	15786/B450	1		Ampl.
		Harness, 4		015-787	15787/B450	1		Ampl.
		Harness, 5		015-789	15789/B450	1		Ampl.

Rev.

ST 13500

O

MO

SC

Parts list

Main receiver, B450



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.
4-13500

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 9/9
			/tol. ± %	Code				Notes
		<u>Capacitor</u>						
	Co1	10nF 100V cer.		124-539	2222-640-o31o3	1		Philips
	Co2	4,7nF 250V 10		131-004	MKT1822-347/2	1		Ero.
	Co3	1µF 35V tantal		125-005	DTC.	1		Ero.
	Co4	1µF 35V tantal		125-005	DTC.	1		Ero.
	Co5	1µF 35V tantal		125-005	DTC.	1		Ero.
	Co6	1µF 35V tantal		125-005	DTC.	1		Ero.
	J11	Multisocket, 31p. fem.		163-o74	C42334-A56-A1	1		Siemens
	J13	Multisocket, 31p. fem.		163-o74	C42334-A56-A1	1		Siemens
	J15	Multisocket, 31p. fem.		163-o74	C42334-A56-A1	1		Siemens
	J16	Multisocket, 31p. fem.		163-o74	C42334-A56-A1	1		Siemens
	J17	Multisocket, 31p. fem.		163-o74	C42334-A56-A1	1		Siemens
	L01	Coil 500µH		169-006	587415-TP35	1		
	Pol	Multiplug, 16p. male		163-o31	C42334-A42-A3	1		Siemens
	Ro1	56Ω 0,3W 5		101-o22	CR25	1		
	TBo1	Terminal board, 8p.		175-o42	7600/L2-SKKR	1		EFM.
		<u>Integrated circuit:</u>						
	Uo1	Regulator		143-o71	FSH 323 KC	1		Fairchild
	Uo2	Regulator		143-o31	MC 7815 CP.	1		Motorola

Rev.

ST 13500

O

MO

SC

Parts list

Herlev Hovedgade 201
2730 Herlev
Denmark

Main reciever, B450

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.
4-13500

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/6
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co2	1 nF 250V	filmfoil 1	137-o29	2222-426-41oo2	1		Philips
	Co3	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co4	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co5	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co6	1 nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co7	1 nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co8	1 nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co9	1 nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	C10	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C11	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C12	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C13	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C14	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C15	1 nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	C16	0,22 μ F 40V	el-lyt	125-1o3	2222-122-57227	1		Philips
	C17	0,22 μ F 40V	el-lyt	125-1o3	2222-122-57227	1		Philips
	C18	0,22 μ F 40V	el-lyt	125-1o3	2222-122-57227	1		Philips
	C19	0,22 μ F 40V	el-lyt	125-1o3	2222-122-57227	1		Philips
	C20	0,22 μ F 40V	el-lyt	125-1o3	2222-122-57227	1		Philips
	C21	820 pF 125V	filmfoil 1	137-o27	2222-425-482o1	1		Philips
	C22	820 pF 125V	filmfoil 1	137-o27	2222-425-482o1	1		Philips
	C23	820 pF 125V	filmfoil 1	137-o27	2222-425-482o1	1		Philips
	C24	1,6 nF 63V	filmfoil 1	137-o32	2222-424-416o2	1		Philips
	C25	1,6 nF 63V	filmfoil 1	137-o32	2222-424-416o2	1		Philips
	C26	1,6 nF 63V	filmfoil 1	137-o32	2222-424-416o2	1		Philips
	C27	1,6 nF 63V	filmfoil 1	137-o32	2222-424-416o2	1		Philips
	C28	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C29	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C30	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C31	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C32	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C33	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C34	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C35	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips

Rev.

ST 1441o	Parts list	Filter section		D 800929 mh
O		B450-10-o3/o4		C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11		D. NO.
SC		Telegr. Amplidan Telex 35110 Secom		4-1441o

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/6
			/tol. $\pm$ %	Code				Notes
	C36	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C37	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C38	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C39	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C40	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C41	2,2 μ F 40V	el-lyt	125-109	2222-122-57228	1		Philips
	C42	0,1 μ F 250V	5	130-116	B32561-A31o4-J	1		Siemens
	C43	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C44	0,1 μ F 250V	5	130-116	B32561-A31o4-J	1		Siemens
	C45	1,2 nF 125V	filmfoil 5	137-o3o	2222-425-412o2	1		Philips
	C46	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C47	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C48	10 nF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C49	2,2 μ F 40V	el-lyt	125-109	2222-122-57228	1		Philips
	C50	0,1 μ F 250V	5	130-116	B32561-A31o4-J	1		Siemens
	C51	1,2 nF 125V	filmfoil 1	137-o3o	2222-425-412o2	1		Philips
	<u>Diode:</u>							
	CRo1			146-oo6	BA-379	1		
	CRo2			146-oo6	BA-379	1		
	CRo3			146-oo6	BA-379	1		
	CRo4			146-oo6	BA-379	1		
	CRo5			146-oo6	BA-379	1		
	CRo6			146-oo6	BA-379	1		
	CRo7			146-oo6	BA-379	1		
	CRo8			146-oo6	BA-379	1		
	CRo9			146-oo6	BA-379	1		
	CR10			146-oo6	BA-379	1		
	CR11			146-o16	IN4148	1		
	CR12			146-o16	IN4148	1		
	CR13			146-o16	IN4148	1		
	CR14			146-o16	IN4148	1		
	CR15			146-o16	IN4148	1		

Rev.

ST 1441o

O

MO

SC

Parts list

Filter section

B45o-1o-o3/o4

D 8oo929 mh

C

D. NO.

4-1441o



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/6
			/tol. $\pm$ %	Code				Notes
	CR16			146-016	IN4148	1		
	CR17			146-016	IN4148	1		
	CR18			146-016	IN4148	1		
	CR19			146-016	IN4148	1		
	CR20			146-016	IN4148	1		
		<u>Filter:</u>						
	FLo1	X-tal filter		195-036	BP 4705-00	1		Cathodeon
	FLo2	X-tal filter		195-037	BP 4706-00	1		Cathodeon
	FLo3	X-tal filter		195-039	BP 4710-00	1		Cathodeon
	FLo4	X-tal filter		195-038	BP 4709-00	1		Cathodeon
		<u>Connector:</u>						
	Jo1	Receptacle, coax. pcb.		162-015	R114.426	1		
	Jo2	Receptacle, coax. pcb.		162-015	R114.426	1		
		<u>Coil:</u>						
	Lo1	Coil		013-913	199/13913	1		Ampl.
	Lo2	Choke 1mH		169-007	587824-C12	1		RP
	Lo3	Choke 1mH		169-007	587824-C12	1		RP
	Lo4	Choke 1mH		169-007	587824-C12	1		RP
	Lo5	Choke 1mH		169-007	587824-C12	1		RP
	Lo6	Choke 1mH		169-007	587824-C12	1		RP
	Lo7	Choke 1mH		169-007	587824-C12	1		RP
	Lo8	Coil		013-914	200/13914	1		Ampl.
	Lo9	Coil		013-914	200/13914	1		Ampl.
	L10	Coil		013-914	200/13914	1		Ampl.
	L11	Coil		013-914	200/13914	1		Ampl.
	L12	Coil		013-914	200/13914	1		Ampl.
	L13	Coil		013-915	201/13915	1		Ampl.
	L14	Coil		013-916	202/13916	1		Ampl.

Rev.

ST 14410

O

MO

SC

Parts list

Filter section

B450-10-03/04



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800929 mh

C

D. NO.

4-14410

Ordering reference							Sh. 5/6	
SC 1	Pos.	Description	/tol. $\pm$ %	Code	Type	Pc	SC 2	Notes
		<u>Transistor:</u>						
	Qo1	NPN-si		141-o48	BC 1o7B	1		Philips
	Qo2			141-o6o	2N4416	1		Motorola
	Qo3	NPN-si		141-o48	BC1o7B	1		Philips
	Qo4			141-o6o	2N4416	1		Motorola
	Qo5	NPN-si		141-o48	BC1o7B	1		Philips
	Qo6			141-o6o	2N4416	1		Motorola
	Qo7	NPN-si		141-o48	BC1o7B	1		Philips
	Qo8			141-o6o	2N4416	1		Motorola
	Qo9	NPN-si		141-o48	BC1o7B	1		Philips
	Q1o			141-o6o	2N4416	1		Motorola
	Q11	NPN-si		141-o48	BC1o7B	1		Philips
	Q12			141-o6o	2N4416	1		Motorola
		<u>Resistor:</u>						
	Ro1	1K5 Ω o,3W	5	1o1-o39	CR 25	1		
	Ro2	1ooK Ω o,3W	5	1o1-o61	CR 25	1		
	Ro3	15oK Ω o,3W	5	1o1-o27	CR 25	1		
	Ro4	1oK Ω o,3W	5	1o1-o49	CR 25	1		
	Ro5	1K Ω o,3W	5	1o1-o37	CR 25	1		
	Ro6	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro7	1K5 Ω o,3W	5	1o1-o39	CR 25	1		
	Ro8	1K5 Ω o,3W	5	1o1-o39	CR 25	1		
	Ro9	1K5 Ω o,3W	5	1o1-o39	CR 25	1		
	R1o	1K Ω o,3W	5	1o1-o37	CR 25	1		
	R11	1oK Ω o,3W	5	1o1-o49	CR 25	1		
	R12	1K2 Ω o,3W	5	1o1-o38	CR 25	1		
	R13	1K8 Ω o,3W	5	1o1-o4o	CR 25	1		
	R14	1K8 Ω o,3W	5	1o1-o4o	CR 25	1		
	R15	1K8 Ω o,3W	5	1o1-o4o	CR 25	1		
	R16	1K8 Ω o,3W	5	1o1-o4o	CR 25	1		
	R17	1ooK Ω o,3W	5	1o1-o61	CR 25	1		
	R18	1ooK Ω o,3W	5	1o1-o61	CR 25	1		
	R19	1ooK Ω o,3W	5	1o1-o61	CR 25	1		
	R2o	1ooK Ω o,3W	5	1o1-o61	CR 25	1		

Rev. R1o f.5K6 t.1K 81o4o3BS

ST 1441o	Parts list	Filter section B45o-1o-o3/o4	D 8oo929 mh
O			C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO.
SC			4-1441o

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 6/6
			/tol. $\pm$ %	Code				Notes
	R21	100K Ω o, 3W	5	101-061	CR 25	1		
	R22	22 Ω o, 3W	5	101-017	CR 25	1		
	R23	56 Ω o, 3W	5	101-022	CR 25	1		
	R24	22 Ω o, 3W	5	101-017	CR 25	1		
	R25	56 Ω o, 3W	5	101-022	CR 25	1		
	R26	22 Ω o, 3W	5	101-017	CR 25	1		
	R27	56 Ω o, 3W	5	101-022	CR 25	1		
	R28	22 Ω o, 3W	5	101-017	CR 25	1		
	R29	56 Ω o, 3W	5	101-022	CR 25	1		
	R30	22 Ω o, 3W	5	101-017	CR 25	1		
	R31	56 Ω o, 3W	5	101-022	CR 25	1		
	R32	100 Ω o, 3W	5	101-025	CR 25	1		
	R33	33K Ω o, 3W	5	101-055	CR 25	1		
	R34	47K Ω o, 3W	5	101-057	CR 25	1		
	R35	22 Ω o, 3W	5	101-017	CR 25	1		
	R36	100 Ω o, 3W	5	101-025	CR 25	1		
	R37	100 Ω o, 3W	5	101-025	CR 25	1		
	R38	1K Ω o, 3W	5	101-037	CR 25	1		
	R39	5K6 Ω o, 3W	5	101-046	CR 25	1		
	R40	180 Ω o, 3W	5	101-028	CR 25	1		
		<u>Integrated circuit:</u>						
	U01			143-083	MC 1590 G	1		Motorola

Rev.

ST 14410	Parts list	Filter section B450-10-03/04	Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D 800929 mh
O					C
MO					D. NO.
SC					4-14410

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/6
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co2	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co3	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co4	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co5	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co6	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co7	27pF 100V	cer.2	124-521	2222-638-10279	1		Philips
	Co8	27 pF 100V	cer.2	124-521	2222-638-10279	1		Philips
	Co9	27pF 100V	cer.2	124-521	2222-638-10279	1		Philips
	C10	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	C11	0,22 μ F 40V	el-lyt	125-103	2222-122-57227	1		Philips
	C12	2-22pF	trim	140-o15	2222-808-11229	1		Philips
	C13	2-22pF	trim	140-o15	2222-808-11229	1		Philips
	C14	2-22pF	trim	140-o15	2222-808-11229	1		Philips
	C15	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	C16	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	C17	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	C18	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	C19	4,7nF 100V	cer.	124-538	2222-640-o3472	1		Philips
	C20	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	C21	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	C22	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	C23	10nF 100V	cer.	125-539	2222-640-o3103	1		Philips
	C24	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	C25	0,22 μ F 40V	el-lyt	125-103	2222-122-57227	1		Philips
	C26	180pF 100V	cer.	124-531	2222-638-46181	1		Philips
	C27	180pF 100V	cer.	124-531	2222-638-46181	1		Philips
	C28	1nF 100V	cer.	124-537	2222-640-o3102	1		Philips
	C29	1nF 100V	cer.	124-537	2222-640-o3102	1		Philips
	C30	4,7nF 100V	cer.	124-538	2222-640-o3472	1		Philips
	C31	22nF 250V	5	130-106	B32561-B3223-J	1		Siemens
	C32	4,7nF 100V	cer.	124-538	2222-640-o3472	1		Philips
	C33	4,7 μ F 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C34	4,7 μ F 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C35	4,7nF 100V	cer.	124-538	2222-640-o3472	1		Philips

Rev.

Rev.					
ST 14411	Parts list	Beat osc. + AF gate + line ampl.		D 800929 mh	
O		B450-11-o2		C	
MO			Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO. 4-14411
SC			2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/6
			/tol. ± %	Code				Notes
	C36	0,1µF 250V	5	130-116	B32561-83104-J	1		Siemens
	C37	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C38	47pF 100V	cer.	124-524	2222-638-10479	1		Philips
	C39	10µF 25V	el-lyt	125-113	2222-122-56109	1		Philips
	C40	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C41	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C42	47pF 100V	cer.	124-524	2222-638-10479	1		Philips
	C43	47pF 100V	cer.	124-524	2222-638-10479	1		Philips
	C44	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C45	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C46	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C47	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C48	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C49	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C50	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C51	10µF 25V	el-lyt	125-113	2222-122-56109	1		Philips
	<u>Diode:</u>							
	CRo1			146-006	BA-379	1		
	CRo2			146-006	BA-379	1		
	CRo3			146-006	BA-379	1		
	CRo4	Zener-diode 6,8V.		147-037	BZX79C 6V8	1		
	<u>Connector:</u>							
	Pol	Multiplug, 3lp	male	163-073	C42334-A55-A8	1		Siemens
	<u>Transistor:</u>							
	Qo1			141-049	BF 115	1		Philips
	Qo2			141-049	BF 115	1		Philips

Rev.

ST 14411

O

MO

SC

Parts list

Beat osc. + AF gate + Line ampl.

B450-11-02



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800929 mh

C

D. NO.

4-14411

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/6
			/tol. $\pm$ %	Code				Notes
		Resistor:						
	Ro1	56 Ω o,3W	5	101-o22	CR25	1		
	Ro2	10K Ω o,3W	5	101-o49	CR25	1		
	Ro3	10K Ω o,3W	5	101-o49	CR25	1		
	Ro4	10K Ω o,3W	5	101-o49	CR25	1		
	Ro5	10K Ω o,3W	5	101-o49	CR25	1		
	Ro6	10K Ω o,3W	5	101-o49	CR25	1		
	Ro7	10K Ω o,3W	5	101-o49	CR25	1		
	Ro8	10K Ω o,3W	5	101-o49	CR25	1		
	Ro9	470 Ω o,3W	5	101-o33	CR25	1		
	R10	33 Ω o,3W	5	101-o19	CR25	1		
	R11	1K Ω o,3W	5	101-o37	CR25	1		
	R12	1K Ω o,3W	5	101-o37	CR25	1		
	R13	2K2 Ω o,3W	5	101-o41	CR25	1		
	R14	2K2 Ω o,3W	5	101-o41	CR25	1		
	R15	2K2 Ω o,3W	5	101-o41	CR25	1		
	R16	1K Ω o,3W	5	101-o37	CR25	1		
	R17	1K Ω o,3W	5	101-o37	CR25	1		
	R18	3K3 Ω o,3W	5	101-o43	CR25	1		
	R19	820 Ω o,3W	5	101-o36	CR25	1		
	R20	3K3 Ω o,3W	5	101-o43	CR25	1		
	R21	56 Ω o,3W	5	101-o22	CR25	1		
	R22	10K Ω o,3W	5	101-o49	CR25	1		
	R23	2K2 Ω o,3W	5	101-o41	CR25	1		
	R24	1K2 Ω o,3W	5	101-o38	CR25	1		
	R25	18K Ω o,3W	5	101-o52	CR25	1		
	R26	10K Ω o,3W	5	101-o49	CR25	1		
	R27	47 Ω o,3W	5	101-o21	CR25	1		
	R28	47 Ω o,3W	5	101-o21	CR25	1		
	R29	10K Ω o,3W	5	101-o49	CR25	1		
	R30	10 Ω o,3W	5	101-o13	CR25	1		
	R31	2K2 Ω o,3W	5	101-o41	CR25	1		
	R32	68 Ω o,3W	5	101-o23	CR25	1		
	R33	330 Ω o,3W	5	101-o31	CR25	1		
	R34	120 Ω o,3W	5	101-o26	CR25	1		
	R35	2K2 Ω o,3W	5	101-o41	CR25	1		

Rev.

ST 14411	Parts list	Beat osc. + AF gate + Line ampl.		D 800929 mh	
O		B 450-11-o2		C	
MO			Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO. 4-14411
SC			2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	

SC 1	Pos.	Description	Ordering reference			Pc	SC 2	Sh. 5/6
			/tol. $\pm$ %	Code	Type			Notes
	R36	3K3 Ω o, 3W	5	101-043	CR25	1		
	R37	10K Ω o, 3W	5	101-049	CR25	1		
	R38	3K3 Ω o, 3W	5	101-043	CR25	1		
	R39	1K Ω o, 3W	5	101-037	CR25	1		
	R40	47 Ω o, 3W	5	101-021	CR25	1		
	R41	1K Ω o, 3W	5	101-037	CR25	1		
	R42	4K7 Ω o, 3W	5	101-045	CR25	1		
	R43	47K Ω o, 3W	5	101-057	CR25	1		
	R44	1K Ω o, 3W	5	101-037	CR25	1		
	R45	47K Ω o, 3W	5	101-057	CR25	1		
	R46	560 Ω o, 3W	5	101-034	CR25	1		
	R47	47K Ω o, 3W	5	101-057	CR25	1		
	R48	560 Ω o, 3W	5	101-034	CR25	1		
	R49	10K Ω Trimpotm.		114-100	3006P-1-103	1		
	R50	10K Ω trimpotm.		114-100	3006P-1-103	1		
	R51	47K Ω o, 3W	5	101-057	CR25	1		
	R52	3K9 Ω o, 3W	5	101-044	CR25	1		
	R53	47K Ω o, 3W	5	101-057	CR25	1		
	R54	3K9 Ω o, 3W	5	101-044	CR25	1		
	R55	3K9 Ω o, 3W	5	101-044	CR25	1		
	R56	3K9 Ω o, 3W	5	101-044	CR25	1		
	R57	47 Ω o, 3W	5	101-021	CR25	1		
	R58	82K Ω o, 3W	5	101-060	CR25	1		
	R59	82K Ω o, 3W	5	101-060	CR25	1		
	R60	560 Ω o, 3W	5	101-034	CR25	1		
	R61	560 Ω o, 3W	5	101-034	CR25	1		
	R62	1K Ω o, 3W	5	101-037	CR25	1		
	R63	1K Ω o, 3W	5	101-037	CR25	1		
	R64	1K Ω o, 3W	5	101-037	CR25	1		

Rev.

ST 14411	Parts list	Beat osc. + AF gate + Line ampl. B450-11-02	D 800929 mh
O			
MO		Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom
SC			
			D. NO. 4-14411

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 6/6
			/tol. ± %	Code				Notes
		<u>Transformer:</u>						
	To1	Line transformer		168-o36	EI 19 AP 55o2	1		Scan elctr.
	To2	Line transformer		168-o36	EI 19 AP 55o2	1		Scan electr.
		<u>Integrated circuit</u>						
	Uo1			143-o85	MC 1496 G	1		Motorola
	Uo2			143-o84	TBA 75o C	1		Philips
	Uo3			143-o8o	SN 74 LS 197N	1		TI.
	Uo4			143-o17	CD 4o66 BE	1		RCA.
	Uo5			143-o65	TAA 865 A	1		Siemens
	Uo6			143-o65	TAA 865 A	1		Siemens
	Uo7			143-o65	TAA 865 A	1		Siemens
		<u>Crystal</u>						
	Yo1	X-tal 11.2o6 kHz		195-o42	XS 61o6 A	1		Kristall-V
	Yo2	X-tal 11.212 kHz		195-o43	XS 61o6 A	1		Kristall-V
	Yo3	X-tal 11.2oo kHz		195-o44	XS 61o6 A	1		Kristall-V

Rev.

ST 14411

O

MO

SC

Parts list

Beat osc. + AF gate + Line ampl.

B45o-11-o2

Herlev Hovedgade 201

2730 Herlev

Denmark

Teleph. (02) *94 35 11

Telegr. Amplidan

Telex 35110 Secom

D 8oo929 mh

C

D. NO.

4-14411

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	18 pF 100V	cer.	124-519	2222-638-10189	1		Philips
	Co2	18pF 100V	cer.	124-519	2222-638-10189	1		Philips
	Co3	220PF 100V	cer.	124-532	2222-638-58221	1		Philips
	Co4	56pF 100V	cer.	124-525	2222-638-10569	1		Philips
	Co5	100pF 100V	cer.	124-528	2222-638-34101	1		Philips
	Co6	470pF 100V	cer.	124-535	2222-638-70471	1		Philips
	Co7	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co8	1,2nF 125V	filmfoil 1	137-030	2222-425-41202	1		Philips
	Co9	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Cl0	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	Cl1	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	Cl2	0,1 μ F 250V	5	130-116	B32561-B3104-J	1		Siemens
	Cl3	1,2nF 125V	filmfoil 1	137-030	2222-425-41202	1		Philips
	Cl4	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	Cl5	18pF 100V	cer.	124-519	2222-638-10189	1		Philips
		<u>Feed through filter:</u>						
	FL01	Filter 2x1,5nF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL02	Filter 2x1,5nF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
		<u>Connector:</u>						
	Jo1	Receptacle, coax.		162-020	R 114.554	1		
	Jo2	Receptacle, coax.		162-020	R 114.554	1		
	Jo3	Receptacle, coax.		162-020	R 114.554	1		
		<u>Coil:</u>						
	Lo1	Coil		013-917	203/13917	1		Ampl.
	Lo2	Coil		013-910	196/13910	1		Ampl.
	Lo3	Coil		013-911	197/13911	1		Ampl.
	Lo4	Coil		013-912	198/13912	1		Ampl.
	Lo5	Coil 14 μ H 0,7A		169-101	B82111-A-A5	1		Siemens

Rev.

ST 14412

O

MO

SC

Parts list1,4 MHz mixer and ampl.
B450-12-04Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800929 mh

C

D. NO.

4-14412

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/3
			/tol. $\pm$ %	Code				Notes
		<u>Resistor:</u>						
	Ro1	1K5 Ω o,3W	5	101-o39	CR25	1		
	Ro2	5K6 Ω o,3W	5	101-o46	CR25	1		
	Ro3	100 Ω o,3W	5	101-o25	CR25	1		
	Ro4	1K Ω o,3W	5	101-o37	CR25	1		
	Ro5	100 Ω o,3W	5	101-o25	CR25	1		
		<u>Integrated circuit:</u>						
	Uo1	Mixer, balanced		194-003	SRA-1	1		
	Uo2			143-o83	MC 159o G	1		Motorola
		<u>Crystal:</u>						
	Yo1	X-tal filter 3 kHz x)		195-o67	BP 4701-00	1		Cathodeon
		x) in unit with						
		X-tal filter 4 kHz		195-o41				Cathodeon

Rev.

ST 14412	Parts list	1,4 MHz mixer and ampl. B45o-12-o4	D 800929 mh
O			C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO.
SC			4-14412

SC 1	Pos.	Description	Ordering reference			Pc	SC 2	Sh. 2/5
			/tol. ± %	Code	Type			Notes
		<u>Capacitor:</u>						
	Co1	1onF	100V	cer.	124-539	2222-640-o31o3	1	Philips
	Co2	o,1µF	100V	5	13o-o11	B3256o-B11o4-J	1	Siemens
	Co3	2,2µF	25V	el-lyt	125-1o9	2222-122-56228	1	Philips
	Co4	1onF	100V	cer.	124-539	2222-640-o31o3	1	Philips
	Co5	82opF	125V	filmfoil 1	137-o27	2222-425-482o1	1	Philips
	Co6	22opF	100V	cer.	124-532	2222-638-58221	1	Philips
	Co7	1onF	100V	cer.	124-539	2222-640-o31o3	1	Philips
	Co8	1µF	4oV	el-lyt	125-1o7	2222-122-571o8	1	Philips
	Co9	4,7µF	25V	el-lyt	125-111	2222-122-56478	1	Philips
	C1o	22opF	100V	cer.	124-532	2222-638-58221	1	Philips
	C11	1µF	35V	tantal	125-oo5	DTC	1	Ero.
	C12	1onF	100V	cer.	124-539	2222-640-o31o3	1	Philips
	C13	47µF	4oV	el-lyt	12o-o14	47/4o KE	1	Frako.
	C14	33µF	25V	el-lyt	12o-oo3	2222-1o8-16339	1	Philips
	C15	1oµF	25V	el-lyt	125-113	2222-122-561o9	1	Philips
	C16	22oµF	16V	el-lyt	12o-o17	22o/16 KE	1	Frako
	C17	1oµF	25V	el-lyt	125-113	2222-122-561o9	1	Philips
	C18	1oµF	25V	el-lyt	125-113	2222-122-561o9	1	Philips
	C19	1oµF	25V	el-lyt	125-113	2222-122-561o9	1	Philips
	C2o	o,47µF	100V	5	13o-1o3	B32561-B1474-J	1	Siemens
	C21	47opF	100V	cer.	124-535	2222-638-7o471	1	Philips
	C22	4,7µF	25V	el-lyt	125-111	2222-122-56478	1	Philips
	C23	39pF	100V	cer.	124-523	2222-638-1o399	1	Philips
	C24	1onF	100V	cer.	124-539	2222-640-o31o3	1	Philips
		<u>Diode:</u>						
	CRo1	Bridge-rectifies			145-o15	By 164	1	
	CRo2				146-oo8	AA-144	1	
	CRo3				146-oo8	AA-144	1	
	CRo4				146-oo8	AA-144	1	
	CRo5				146-oo8	AA-144	1	
	CRo6				146-oo8	AA-144	1	
	CRo7				146-oo8	AA-144	1	
	CRo8				146-oo8	AA-144	1	
	CRo9	Reference diode 2,1V			147-o45	BZY 87 C2V1	1	
	CR1o					BA 182	1	

Rev. +CR1o 81o4o3BS

Rev. 4CR10 810403B3					
ST 14413	Parts list	AVC-ampl. and detector		D 800929 mh	
O		B450-13-03		C	
MO			Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO. 4-14413
SC			2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/5
			/tol. $\pm$ %	Code				Notes
		<u>Coil:</u>						
	L01	Coil		013-914	200/13914	1		Ampl.
		<u>Connector:</u>						
	P01	Multiplug, 3lp male		163-073	C42334-A55-A8	1		Siemens
		<u>Transistor:</u>						
	Q01	NPN-si			BC 107 B	1		
	Q02	NPN-si		,	BF 115	1		
	Q03	NPN-si			BC 107 B	1		
	Q04	NPN-si			BC 107 B	1		
	Q05	NPN-si			BC 107-B	1		
	Q06	NPN-si			BC 107 B	1		
	Q07	NPN-si			BC 107 B	1		
	Q08	NPN-si			BC 107 B	1		
	Q09	NPN-si			BC 107 B	1		
		<u>Resistor:</u>						
	R01	10K Ω 0,3W	5	101-049	CR25	1		
	R02	1K Ω trimpotm.		114-203	VA 05 H	1		Ohmic
	R03	56K Ω 0,3W	5	101-058	CR25	1		
	R04	47K Ω 0,3W	5	101-057	CR25	1		
	R05	56K Ω 0,3W	5	101-058	CR25	1		
	R06	10K Ω 0,3W	5	101-049	CR25	1		
	R07	3K9 Ω 0,3W	5	101-044	CR25	1		
	R08	1K2 Ω 0,3W	5	101-038	CR25	1		
	R09	33 Ω 0,3W	5	101-019	CR25	1		
	R10	3K3 Ω 0,5W	5	102-043	CR37	1		
	R11	10K Ω 0,3W	5	101-049	CR25	1		
	R12	330K Ω 0,3W	5	101-067	CR25	1		
	R13	330K Ω 0,3W	5	101-067	CR25	1		
	R14	15K Ω 0,3W	5	101-051	CR25	1		
	R15	10K Ω 0,3W	5	101-049	CR25	1		

Rev.

ST 14413

O

MO

SC

Parts list

AVC-ampl. and detector
B450-13-03



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800929 mh

C

D. NO.
4-14413

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/5
			/tol. $\pm$ %	Code				Notes
	R16	3K9 Ω o, 3W	5	101-044	CR25	1		
	R17	10K Ω o, 3W	5	101-049	CR25	1		
	R18	10K Ω o, 3W	5	101-049	CR25	1		
	R19	10K Ω o, 3W	5	101-049	CR25	1		
	R20	10K Ω o, 3W	5	101-049	CR25	1		
	R21	10K Ω o, 3W	5	101-049	CR25	1		
	R22	10K Ω o, 3W	5	101-049	CR25	1		
	R23	10K Ω o, 3W	5	101-049	CR25	1		
	R24	47K Ω o, 3W	5	101-057	CR25	1		
	R25	4M7 Ω o, 3W	5	101-081	CR25	1		
	R26	10K Ω o, 3W	5	101-049	CR25	1		
	R27	18K Ω o, 3W	5	101-052	CR25	1		
	R28							
	R29	4K7 Ω o, 3W	5	101-045	CR25	1		
	R30	1K Ω o, 3W	5	101-037	CR25	1		
	R31	15K Ω o, 3W	5	101-051	CR25	1		
	R32	3K9 Ω o, 3W	5	101-044	CR25	1		
	R33	10K Ω o, 3W	5	101-049	CR25	1		
	R34	3K9 Ω o, 3W	5	101-044	CR25	1		
	R35	68K Ω o, 3W	5	101-059	CR25	1		
	R36	12K Ω o, 3W	5	101-050	CR25	1		
	R37	56K Ω o, 3W	5	101-058	CR25	1		
	R38	1K5 Ω o, 3W	5	101-039	CR25	1		
	R39	100 Ω o, 3W	5	101-025	CR25	1		
	R40	4K7 Ω o, 3W	5	101-045	CR25	1		
	R41	10K Ω o trimpotm.		114-206	VA o5 H	1		Ohmic
	R42	33K Ω o, 3W	5	101-055	CR25	1		
	R43	33K Ω o, 3W	5	101-055	CR25	1		
	R44	330k Ω o, 3W	5	101-067	CR25	1		
	R45	1K Ω o, 3W	5	101-037	CR25	1		
	R46	5K6 Ω o, 3W	5	101-046	CR25	1		
	R47	1K Ω trimpotm.		114-203	VA o5 H	1		Ohmic
	R48	1K Ω o, 3W	5	101-037	CR25	1		
	R49	68K Ω o, 3W	5	101-059	CR25	1		

Rev. R30 f.15K t.1K 810403BS

ST 14413	Parts list	AVC-ampl. and detector		D 801001 mh
O		B450-13-03		C
MO		Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO. 4-14413
SC				

Ordering reference							Sh. 5/5	
SC 1	Pos.	Description	/tol. $\pm$ %	Code	Type	Pc	SC 2	Notes
		<u>Integrated circuit:</u>						
	Uo1	Voltage regulator		143-o89	LM78Lo6 ACH	1		EFM.
	Uo2	Opto-coupler		144-oo3	CLI-2	1		to.
	Uo3	AGC-Generator		143-o88	SL 621 C	1		Plessey
	Uo4	Op. amp.		143-o61	CA 313o T	1		RCA.
	Uo5	Op. amp.		143-o65	TAA 865A	1		Siemens

SC 1	Pos	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Col	10µF 25V	e1-1yt	125-113	2222-122-56109	1		Philips
		<u>Diode:</u>						
	CR01	LED-diode,		148-011	HP-5082-4487	1		
	CR02	LED-diode,		148-011	HP-5082-4487	1		
		<u>Connector:</u>						
	Pol	Multiplug, 10	4030-10	163-096	AG22-10-2101	1		Molex
	Po2	Multiplug, 25	4030-25	163-099	AG22-10-2251	1		Molex
		<u>Resistor:</u>						
	Ro1	390Ω 0,3W	5	101-032	CR25	1		
	Ro2	390Ω 0,3W	5	101-032	CR25	1		
	Ro3	68Ω 0,3W	5	101-023	CR25	1		
		<u>Integrated circuit:</u>						
	Uo1	Display		142-003	FFD 11	1		Transcan.
	Uo2			143-044	SN 74 LS 47 N	1		TI.
	Uo3	Display		142-003	FFD 11	1		Transcan.
	Uo4			143-044	SN 74 LS 47 N	1		TI.
	Uo5	Display		142-003	FFD 11	1		Transcan.
	Uo6			143-044	SN 74 LS 47 N	1		TI.
	Uo7	Display		142-003	FFD 11	1		Transcan.
	Uo8			143-044	SN 74 LS 47 N	1		TI.
	Uo9	Display		142-003	FFD 11	1		Transcan.
	U10			143-044	SN 74 LS 47 N	1		TI.
	U11	Display		142-003	FFD 11	1		Transcan.
	U12			143-044	SN 74 LS 47 N	1		TI.
	U13	Display		142-003	FFD 11	1		Transcan.
	U14			143-044	SN 74 LS 47 N	1		TI.

Rev.

ST 14414

O

MO

SC

Parts list

Display unit

B450-14-02



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14414

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	1 µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co2	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co3	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co4	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co5	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co6	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co7	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co8	4,7nF 100V	cer.	124-538	2222-640-03472	1		Philips
	Co9	4,7nF 100V	cer.	124-538	2222-640-03472	1		Philips
	C10	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	C11	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	C12	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C13	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
		<u>Diode:</u>						
	CR01			146-016	IN 4148	1		
		<u>Connector:</u>						
	Pol	Multiplug, 15 4030-15		163-097	AG 22-10-2151	1		Molex
	Po2	Multiplug, 15 4030-15		163-097	AG 22-10-2151	1		Molex
	Po3	Multiplug, 3lp. male.		163-073	C42334-A55-A8	1		Siemens
		<u>Transistor:</u>						
	Qo1	NPN-si		141-048	BC 107 B	1		
	Qo2	NPN-si		141-048	BC 107 B	1		
	Qo3	NPN-si		141-048	BC 107 B	1		
	Qo4	NPN-si		141-048	BC 107 B	1		

Rev.

ST 14415

O

MO

SC

Parts list

MHz code unit

B450-15-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 300930 mh

C

D. NO.
4-14415

SC 1	Pos.	Ordering reference				Pc	SC 2	Sh. 3/3
		Description	/tol. $\pm$ %	Code	Type			Notes
		<u>Resistor:</u>						
	Ro1	8 x 4K7 Ω net.		101-245	4310R101-472	1		Bourns
	Ro2	8 x 4K7 Ω net.		101-245	4310R101-472	1		Bourns
	Ro3	8 x 4K7 Ω net.		101-245	4310R101-472	1		Bourns
	Ro4	8 x 4K7 Ω net.		101-245	4310R101-472	1		Bourns
	Ro5	4K7 Ω o,3W	5	101-045	CR25	1		
	Ro6	4K7 Ω o,3W	5	101-045	CR25	1		
	Ro7	4K7 Ω o,3W	5	101-045	CR25	1		
	Ro8	4K7 Ω o,3W	5	101-045	CR25	1		
	Ro9	4K7 Ω o,3W	5	101-045	CR25	1		
	R10	4K7 Ω o,3W	5	101-045	CR25	1		
	R11	47K Ω o,3W	5	101-057	CR25	1		
	R12	4K7 Ω o,3W	5	101-045	CR25	1		
	R13	4K7 Ω o,3W	5	101-045	CR25	1		
	R14	10K Ω o,3W	5	101-049	CR25	1		
	R15	4K7 Ω o,3W	5	101-045	CR25	1		
	R16	10K Ω o,3W	5	101-049	CR25	1		
	R17	4K7 Ω o,3W	5	101-045	CR25	1		
	R18	47K Ω o,3W	5	101-057	CR25	1		
		<u>Integrated circuit:</u>						
	Uo1			143-086	SN 74 LS 251N	1		TI.
	Uo2			143-086	SN 74 LS 251N	1		TI.
	Uo3			143-086	SN 74 LS 251N	1		TI.
	Uo4			143-086	SN 74 LS 251N	1		TI.
	Uo5			143-033	SN 74 LS 00N	1		TI.
	Uo6			143-077	SN 74 LS 193N	1		TI.
	Uo7			143-076	SN 74 LS 112N	1		TI.
	Uo8			143-035	SN 74 LS 02 N	1		TI.
	Uo9			143-033	SN 74 LS 00 N	1		TI.
	U10			143-057	SN 74 LS 197N	1		TI.
	U11			143-057	SN 74 LS 197N	1		TI.
	U12			143-057	SN 74 LS 197N	1		TI.
	U13			143-057	SN 74 LS 197N	1		TI.
	U14			143-087	SN 74 LS 174N	1		TI.
	U15			143-087	SN 74 LS 174N	1		TI.
	U16			143-087	SN 74 LS 174N	1		TI.

Rev.

ST 14415

O

MO

SC

Parts list

MHz code unit

B450-15-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14415

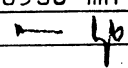
SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	1nF 100V	cer.	124-537	2222-640-o3102	1		Philips
	Co2	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co3	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co4	10nF 100V	cer.	124-537	2222-640-o3102	1		Philips
	Co5	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co6	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co7	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co8	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co9	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C10	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	C11	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C12	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C13	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C14	1nF 100V	cer	124-537	2222-640-o3102	1		Philips
	C15	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C16	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	C17	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
		<u>Diode:</u>						
	CR01			146-016	IN 4148	1		
		<u>Connector:</u>						
	Pol	Multiplug, 3lp. male.		163-073	C42334-A55-A8	1		Siemens
	Po2	Multiplug, 15 4030-15		163-097	AG 22-10-2151	1		Molex
	Po3	Multiplug, 10 4030-10		163-096	AG 22-10-2101	1		Molex
		<u>Transistor:</u>						
	Qo1	NPN-si		141-048	BC 107 B	1		
	Qo2	NPN-si		1e1-048	BC 107 B	1		

Rev.

ST 14416	Parts list	Time base and counter/Latch unit		D 800930 mh
O		B450-16-o2		C
MO		Herlev Hovedgade 201		D. NO.
SC		2730 Herlev Denmark		4-14416
		Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom		

Bestillings reference							Side 1/3
LK 1	Pos.	Benævnelse / data	Type	Tegn.	Stk.	LK 2	Notater
		Diagram		3-14436			DI 31-0071 CL 41-0068
		Trykt kredsløb	B450-16-03	3-14456	1		
		Borettegning		4-14476			MA 41-1138
		Skrue M2,5	9033 2,5x6CH3	202-110	2		HFC
		Transistor spacer	56246	150-013	2		

Rev.

ST 14416	Stykliste	B450-16-03	T 800930 mh
O			K 
MO			T. NR.
LK			4-14416



Herlev Hovedgade 201
2730 Herlev
(02) *94 35 11

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/5
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	0,1 µF 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	Co2	0,1µF 100V	2o	131-oo7	MKT 1822-41o/o	1		Ero.
	Co3	0,1µF 100V	2o	131-oo7	MKT 1822-41o/o	1		Ero.
	Co4	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	Co5	0,1µF 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	Co6	1nF 100V	cer.	124-537	2222-64o-o31o2	1		Philips
	Co7	0,1µF 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	Co8	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	Co9	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
	C1o	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C11	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
	C12	15pF 100V	cer.2	124-518	2222-638-1o159	1		Philips
	C13	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C14	6,8pF 100V	cer.2	124-514	2222-638-o9688	1		Philips
	C15	2,2µF 100V	1o	131-o21	MKT 1822-522/o	1		Ero.
	C16	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C17	22opF 100V	cer.	124-532	2222-638-58221	1		Philips
	C18	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C19	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
	C2o	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C21	12opF 100V	cer.2	124-529	2222-638-34121	1		Philips
	C22	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C23	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
	C24	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
	C25	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C26	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C27	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C28	1µF 4oV	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C29	1onF 100V	cer.	124-539	2222-64o-o31o3	1		Philips
		<u>Diode:</u>						
	CRo1			146-o16	IN 4148	1		
	CRo2			146-o16	IN 4148	1		
	CRo3	Zener-diode 6,8V		147-o36	BZX 79 C6V8	1		
	CRo4			146-o26	IN 4oo4	1		

Rev.

ST 14417

O

MO

SC

Parts listRef. freq. and lock unit
B45o-17-o1Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8oo93o mh

C

D. NO.
4-14417

SC 1	Pos	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/5
			/tol. $\pm$ %	Code				Notes
		<u>Relay:</u>						
	Ko1	Relay		155-o77	RSD-12V	1		National
		<u>Coil:</u>						
	Lo1	Coil		o13-918	2o4/13918	1		Ampl.
		<u>Connector:</u>						
	Po1	Multiplug, 3lp. male		163-o73	C42334-A55-A8	1		Siemens
		<u>Transistor:</u>						
	Qo1	NPN-si		141-o48	BC 1o7 B	1		
	Qo2	NPN-si		141-o56	BFW 3o	1		
	Qo3	NPN-si		141-o56	BFW 3o	1		
		<u>Resistor:</u>						
	Ro1	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro2	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro3	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro4	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro5	1oo Ω o,3W	5	1o1-o25	CR25	1		
	Ro6	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro7	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro8	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	Ro9	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	R1o	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	R11	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	R12	22K Ω o,3W	5	1o1-o53	CR25	1		
	R13	22K Ω o,3W	5	1o1-o53	CR25	1		
	R14	3K9 Ω o,3W	5	1o1-o44	CR25	1		
	R15	22o Ω o,3W	5	1o1-o29	CR25	1		
	R16	47oK Ω o,3W	5	1o1-o69	CR25	1		
	R17	1K5 Ω o,3W	5	1o1-o39	CR25	1		
	R18	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R19	2M2 Ω o,3W	5	1o1-o77	CR25	1		
	R2o	1K5 Ω o,3W	5	1o1-o39	CR25	1		

Rev.

ST 14417

O

MO

SC

Parts list

Ref. freq. and lock unit
B45o-17-o1



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8oo93o mh

C

D. NO.
4-14417

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/5
			/tol. $\pm$ %	Code				Notes
	R21	1K5 Ω o, 3W	5	101-o39	CR25	1		
	R22	8K2 Ω o, 3W	5	101-o48	CR25	1		
	R23	22K Ω o, 3W	5	101-o53	CR25	1		
	R24	39o Ω o, 3W	5	101-o31	CR25	1		
	R25	12K Ω o, 3W	5	101-o5o	CR25	1		
	R26	5oK Ω trimpotm.	5	114-2o8	VA o51-1	1		Ohmic
	R27	1K Ω o, 3W	5	101-o37	CR25	1		
	R28	68o Ω o, 3W	5	101-o35	CR25	1		
	R29	12K Ω o, 3W	5	101-o5o	CR25	1		
	R3o	8K2 Ω o, 3W	5	101-o48	CR25	1		
	R31	4K7 Ω o, 3W	5	101-o45	CR25	1		
	R32	22K Ω o, 3W	5	101-o53	CR25	1		
	R33	12K Ω o, 3W	5	101-o5o	CR25	1		
	R34	22o Ω o, 3W	5	101-o29	CR25	1		
	R35	1oo Ω o, 3W	5	101-o25	CR25	1		
	R36	1oo Ω o, 3W	5	101-o25	CR25	1		
	R37	39 Ω o, 3W	5	101-o2o	CR25	1		
	R38	12o Ω o, 5W	5	1o2-o26	CR37	1		
	R39	18o Ω o, 3W	5	101-o28	CR25	1		
	R4o	1oo Ω o, 3W	5	101-o25	CR25	1		
	R41	56 Ω o, 3W	5	101-o22	CR25	1		
<u>Integrated circuit:</u>								
	Uo1			143-o33	SN74LS ooN	1		TI.
	Uo2			143-o8o	SN74LS197N	1		TI.
	Uo3			143-o39	SN74LS 1oN	1		TI.
	Uo4			143-o81	SN74LS175N	1		TI.
	Uo5			143-o53	SN74LS145N	1		TI.
	Uo6			143-o33	SN74LS ooN	1		TI.
	Uo7			143-o81	SN74LS175N	1		TI.
	Uo8			143-o82	SN74LS283N	1		TI.
	Uo9			143-o6o	SN74LS o5N	1		TI.
	U1o			143-o61	CA 313o T	1		RCA.
	U11			143-o47	SN74LS 86N	1		TI.
Rev.								
ST	14417	Parts list				Ref. freq. and lock unit		
O						B45o-17-o1		
MO						D 8oo93o mh		
SC						C		
		Herlev Hovedgade 201 2730 Herlev Denmark				Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom		
						D. NO.		
						4-14417		

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 5/5
			/tol. $\pm$ %	Code				Notes
	Yol	Crystal oscillator		195-019	TCXO-A31-10MHz	1		Kristall Ver.
		<u>Alternative 1:</u>						
	Yol'	Crystal oscillator			TCXO -10MHz			ITT.
		2K Ω trimpotm.		114-103	3006P-1-202			
		<u>Alternative 2:</u>						
	Yol''	Crystal oscillator			TCXO-C32-10MHz			KristallVer.
	RX	10K Ω trimpotm.		114-100	3006P-1-103			

Rev.

ST 14417

O

MO

SC

Parts list



Ref. freq. and lock unit
B450-17-01

Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14417

SC 1	Pos	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	1nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co2	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	Co3	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co4	1nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co5	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	Co6	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co7	1µF 40V	el-lyt	125-1o7	2222-122-571o8	1		Philips
	Co8	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	Co9	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	C1o	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	C11	1µf 40V	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C12	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	C13	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	C14	1nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	C15	1µF 40V	el-lyt	125-1o7	2222-122-571o8	1		Philips
	C16	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
	C17	o,1µF 250V	5	130-116	B32561-B31o4-J	1		Siemens
		<u>Diode:</u>						
	CRo1			146-o16	IN 4148	1		
		<u>Connector:</u>						
	Po1	Multiplug, 31	male	163-o73	C42334-A55-A8	1		Siemens
	Po2	Multiplug, 15	4o3o-15	163-o97	AG 22-1o-2151	1		Molex
	Po3	Multiplug, 1o	4o3o-1o	163-o96	AG 22-1o-21o1	1		Molex
		<u>Transistor:</u>						
	Qo1	NPN-si		141-o48	BC 1o7 B	1		
	Qo2	NPN-si		141-o48	BC 1o7 B	1		

Rev.

ST 14416

O

MO

SC

Parts listTime base and counter/latch unit
B-45o-16-o3Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8oo93o mh

C

D. NO.

4-14416

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/3
			/tol. $\pm$ %	Code				Notes
		<u>Resistor:</u>						
	Ro1	100 Ω 0,3W	5	101-025	CR25	1		
	Ro2	100 Ω 0,3W	5	101-025	CR25	1		
	Ro3	15K Ω 0,3W	5	101-051	CR25	1		
	Ro4	10K Ω 0,3W	5	101-049	CR25	1		
	Ro5	1K Ω 0,3W	5	101-037	CR25	1		
	Ro6	1K2 Ω 0,3W	5	101-038	CR25	1		
	Ro7	22K Ω 0,3W	5	101-053	CR25	1		
	Ro8	1K2 Ω 0,3W	5	101-038	CR25	1		
	Ro9	3K9 Ω 0,3W	5	101-044	CR25	1		
	R10	3K9 Ω 0,3W	5	101-044	CR25	1		
	R11	3K9 Ω 0,3W	5	101-044	CR25	1		
	R12	3K9 Ω 0,3W	5	101-044	CR25	1		
		<u>Integrated circuit:</u>						
	Uo1			143-081	SN74LS175N	1		
	Uo2			143-078	SN74LS196N	1		
	Uo3			143-079	SN74LS390N	1		
	Uo4			143-055	SN74LS192N	1		
	Uo5			143-079	SN74LS390N	1		
	Uo6			143-035	SN74LS 02N	1		
	Uo7			143-087	SN74LS174N	1		
	Uo8			143-055	SN74LS192N	1		
	Uo9			143-079	SN74LS390N	1		
	U10			143-087	SN74LS174N	1		
	U11			143-055	SN74LS192N	1		
	U12			143-076	SN74LS112N	1		
	U13			143-033	SN74LS 00N	1		
	U14			143-055	SN74LS192N	1		
	U15			143-076	SN74LS112N	1		
	U16			143-033	SN74LS 00N	1		
	U17			143-087	SN74LS174N	1		
	U18			143-055	SN74LS192N	1		
	U19			143-033	SN74LS 00N	1		

Rev.

ST 14416

O

MO

SC

Parts list

Time base and counter/latch unit
B450-16-02/03



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14416

LK 1	Pos.	Bestillings reference			Stk.	LK 2	Side 1/3
		Benævnelse / data	Type	Tegn.			Notater
		Diagram		3-14438			DI 41-o399 CL 41-oo7o
		Trykt kredsløb	B45o-18-o3	3-14458	1		
		Borettegning		4-14478			MA 41-114o
		Loddeflig	4o38	218-oo4	2		FRP.
		Kølerfinne	LB66B2CB-IERC	15o-o21	2		Sabroe
		Afstandsbøsning		4-13371	4		MA 41-o547
		Skrue M3	9o33 3x1oCHJ	2o3-1o9	4		HFC.
		Trykskive	1248 M3	2o3-8o8	4		HFC.
		Møtrik M3	M3	2o3-7o1	8		HFC.
		Transistor spacer	56246	15o-o13	2		
		Transistor spacer	56245	15o-o14	1		

Rev.

ST 14418

O

MO

LK

Stykliste

B45o-18-o3



Herlev Hovedgade 201
2730 Herlev
(02) *94 35 11

T 8oo93o mh

K

T. NR.

4-14418

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	Co2	10µF 25V	el-lyt	125-113	2222-122-56109	1		Philips
	Co3	0,47µF 100V	5	130-103	B32561-B1474-J	1		Siemens
	Co4	68µF 16V	tantal	125-011	DTC.	1		Ero.
	Co5	22nF 250V	5	130-106	B32561-B3223-J	1		Siemens
	Co6	0,22nF 250V	5	130-112	B32561-B3224-J	1		Siemens
	Co7	68µF 16V	tantal	125-011	DTC.	1		Ero.
	Co8	2200µF 25V	el-lyt	120-023	2200/25 EF	1		Frako
	Co9	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	C10	470µF 63V	el-lyt	120-035	470/63 EF	1		Frako
	C11	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C12	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
	C13	10nF 100V	cer.	124-539	2222-640-o3103	1		Philips
		<u>Connector:</u>						
	Pol	Multiplug, 10	4030-10	163-096	AG22-10-2101	1		Molex
		<u>Transistor:</u>						
	Qo1	NPN-si		141-048	BC 107 B	1		
	Qo2	NPN-si		141-010	BC 161	1		
	Qo3	NPN-si		141-048	BC 107 B	1		
	Qo4	NPN-si		141-061	2N 3766	1		Motorola
	Qo5	NPN-si		141-062	2N 3740	1		Motorola
		<u>Resistor:</u>						
	Ro1	47KΩ 0,3W	5	101-057	CR25	1		
	Ro2	82KΩ 0,3W	5	101-060	CR25	1		
	Ro3	22Ω 0,3W	5	101-017	CR25	1		
	Ro4	12KΩ 0,3W	5	101-050	CR25	1		
	Ro5	1K8Ω 0,3W	5	101-040	CR25	1		
	Ro6	1K8Ω 0,3W	5	101-040	CR25	1		
	Ro7	680Ω 0,3W	5	101-035	CR25	1		
	Ro8	1KΩ trimpotm.		114-102		1		
	Ro9	6,8Ω 0,3W	5	101-011	CR25	1		
	Ro10	56Ω 0,3W	5	101-022	CR25	1		

Rev.

ST 14418

O

MO

SC

Parts list

Audio amplifier

B450-18-02/o3



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14418

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/3
			/tol. $\pm$ %	Code				Notes
	R11	100 Ω 0,3W	5	101-025	CR25	1		
	R12	82 Ω 4,2W		106-093	2322-329-34827	1		Philips
	R13	82 Ω 4,2W		106-093	2322-329-34827	1		Philips
	R14	5,6 Ω 4,2W		106-010	2322-330-22568	1		Philips
	R15	22 Ω 0,3W	5	101-017	CR25	1		
	R16	100 Ω 0,3W	5	101-025	CR25	1		

Rev.

ST 14418	Parts list	Audio amplifier B450-18-02/03	D 801001 mh
O			C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO. 4-14418
SC			

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		<u>Diode:</u>						
	CRo1			146-016	IN4148	1		
	CRo2			146-016	IN4148	1		
	CRo3			146-016	IN4148	1		
	CRo4			146-016	IN4148	1		
	CRo5			146-016	IN4148	1		
	CRo6			146-016	IN4148	1		
	CRo7			146-016	IN4148	1		
	CRo8			146-016	IN4148	1		
	CRo9			146-016	IN4148	1		
	CR10			146-016	IN4148	1		
	CR11			146-016	IN4148	1		
	CR12			146-016	IN4148	1		
	CR13			146-016	IN4148	1		
	CR14			146-016	IN4148	1		
	CR15			146-016	IN4148	1		
	CR16			146-016	IN4148	1		
	CR17			146-016	IN4148	1		
	CR18			146-016	IN4148	1		
	CR19			146-016	IN4148	1		
		<u>Connector:</u>						
	Pol	Multiplug, 10	4094-10	163-125	AG 22-12-2101	1		Molex
	Po2	Multiplug, 15	4094-15	163-101	AG 22-12-2151	1		Molex
		<u>Transistor:</u>						
	Qo1	NPN-si		141-048	BC 107 B	1		
		<u>Resistor:</u>						
	Ro1	10KΩ o, 3W	5	101-049	CR25	1		
	Ro2	10KΩ o, 3W	5	101-049	CR25	1		

Rev.

ST 14419

O

MO

SC

Parts list

Mode control unit

B450-19-02

Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.
4-14419

SC 1	Pos.	Description	Ordering reference			Pc	SC 2	Sh. 2/4
			/tol. $\pm$ %	Code	Type			Notes
		<u>Capacitor:</u>						
	Co1	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	Co2	1nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co3	0,1 μ F 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	Co4	0,1 μ F 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	Co5	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	Co6	1nF 100V	cer.	124-537	2222-640-o31o2	1		Philips
	Co7	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	Co8	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	Co9	33opF 100V	cer.	2 124-534	2222-638-58331	1		Philips
	C10	47opF 250V	filmfoil	1 137-o24	2222-427-447o1	1		Philips
	C11	4,7nF 63V	filmfoil	1 137-112	2222-424-447o2	1		Philips
	C12	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C13	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C14	0,1 μ F 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	C15	22pF 500V	mica.	5 135-102	DM 15	1		Rifa
	C16	51pF 500V	mica.	5 135-104	DM 15	1		Rifa
	C17	0,1 μ F 16V	cer.	123-o2o	9/o145.9	1		Ferroperm.
	C18	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	C19	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C20	51pF 500V	mica.	5 135-104	DM 15	1		Rifa
	C21	68pF 500V	mica.	5 135-118	DM 15	1		Rifa
	C22	68pF 500V	mica.	5 135-118	DM 15	1		Rifa
	C23	18pF 100V	cer.	2 124-519	2222-638-10189	1		Philips
	C24	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C25	15pF 100V	cer.	2 124-518	2222-638-10159	1		Philips
	C26	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C27	10opF 100V	cer.	2 124-528	2222-638-341o1	1		Philips
	C28	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C29	1onF 100V	cer.	124-539	2222-640-o31o3	1		Philips
	C30	56pF 100V	cer.	2 124-525	2222-638-10569	1		Philips
	C31	22opF 100V	cer.	2 124-532	2222-638-52221	1		Philips
	C32	2,2 μ F 25V	el-lyt	125-109	2222-122 56228	1		Philips
	C33	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips

Rev.

ST 1442o	Parts list	73,6 MHz loop B450-20-o2	D 800930 mh
O			
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO.
SC			
			4-1442o

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/4
			/tol. $\pm$ %	Code				Notes
		<u>Diode:</u>						
	CRo1			146-016	IN4148	1		
	CRo2			146-016	IN4148	1		
	CRo3			146-016	IN4148	1		
	CRo4			146-016	IN4148	1		
	CRo5			146-016	IN4148	1		
	CRo6			146-016	IN4148	1		
	CRo7	Varicap		146-030	BB 109 G	1		Siemens
		<u>Filter:</u>						
	FLo1	Filter 1500pF - VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FLo2	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FLo3	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
		<u>Connector:</u>						
	Jo1	Receptacle, coax.		162-020	R 114-554	1		
	Jo2	Receptacle, coax.		162-020	R 114-554	1		
		<u>Coil:</u>						
	Lo1	Coil		013-927	213/13927	1		Ampl.
	Lo2	Coil		013-920	206/13920	1		Ampl.
		<u>Transistor:</u>						
	Qo1			141-049	BF 115	1		
	Qo2			141-049	BF 115	1		
	Qo3			141-041	BFX 89	1		
	Qo4			141-041	BFX 89	1		
	Qo5			141-056	BFW 30	1		
		<u>Resistor:</u>						
	Ro1	1K2 Ω 0,3W	5	101-038	CR25	1		
	Ro2	15K Ω 0,3W	5	101-051	CR25	1		
	Ro3	10K Ω 0,3W	5	101-049	CR25	1		
	Ro4	1K Ω 0,3W	5	101-037	CR25	1		
	Ro5	1K2 Ω 0,3W	5	101-038	CR25	1		

Rev.

ST 14420	Parts list	73,6 MHz loop B450-20-02	D 800930 mh
O			
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D. NO. 4-14420
SC			

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/4
			/tol. $\pm$ %	Code				Notes
	Ro6	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	Ro7	1oo Ω o,3W	5	1o1-o25	CR25	1		
	Ro8	22K Ω o,3W	5	1o1-o53	CR25	1		
	Ro9	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R1o	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R11	3K3 Ω o,3W	5	1o1-o43	CR25	1		
	R12	3K3 Ω o,3W	5	1o1-o43	CR25	1		
	R13	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R14	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R15	1ooK Ω o,3W	5	1o1-o61	CR25	1		
	R16	1K Ω o,3W	5	1o1-o37	CR25	1		
	R17	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R18	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R19	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R2o	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R21	1K2 Ω o,3W	5	1o1-o38	CR25	1		
	R22	22o Ω o,3W	5	1o1-o29	CR25	1		
	R23	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R24	1oK Ω o,3W	5	1o1-o49	CR25	1		
	R25	82o Ω o,3W	5	1o1-o36	CR25	1		
	R26	8K2 Ω o,3W	5	1o1-o48	CR25	1		
	R27	4K7 Ω o,3W	5	1o1-o45	CR25	1		
	R28	18o Ω o,3W	5	1o1-o28	CR25	1		
	R29	1K8 Ω o,3W	5	1o1-o4o	CR25	1		
	R3o	22o Ω o,3W	5	1o1-o29	CR25	1		
	R31	27o Ω o,3W	5	1o1-o3o	CR25	1		
	<u>Integrated circuit:</u>							
	Uo1			143-o76	SN74LS112N	1		TI.
	Uo2			143-o33	SN74LS ooN	1		TI.
	Uo3			143-o79	SN74LS39oN	1		TI.
	Uo4			143-o61	CA 313o T	1		RCA.
	Uo5			143-o55	SN74LS192N	1		TI.
	Uo6			143-o55	SN74LS192N	1		TI.
	Uo7			143-o57	SN74LS197N	1		TI.

Rev. +R1o/R1o t.R3o flyttet 81o4o3BS.

Rev. 4R10/R10 C.R.S. 11/7/88 01032207				
ST 1442o	Parts list	73,6 MHz loop	D 81o4o3 BS	
O		B45o-2o-o2	C	
MO		Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO. 4-1442o
SC		2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	

SC 1	Pos.	Description	Ordering reference		Code	Type	Pc	SC 2	Sh. 2/4
			/tol. ± %						Notes
		<u>Capacitor:</u>							
	Co1	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	Co2	1n	100V	cer.	124-537	2222-640-03102	1		Philips
	Co3	2μ2	25V	el-lyt	125-109	2222-122-56228	1		Philips
	Co4	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	Co5	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	Co6	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	Co7	1n	100V	cer.	124-537	2222-640-03102	1		Philips
	Co8	2μ2	25V	el-lyt	125-109	2222-122-56228	1		Philips
	Co9	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C10	2μ2	25V	el-lyt	125-109	2222-122-56228	1		Philips
	C11	56p	100V	cer.	2 124-525	2222-638-10569	1		Philips
	C12	470p	250V	film f	137-024	2222-427-44701	1		Philips
	C13	4n7	63V	film f	1 137-112	2222-427-44702	1		Philips
	C14	1n	100V	cer.	124-537	2222-640-03102	1		Philips
	C15	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	C16	22p	500V	mica	5 135-102	DM 15	1		Rifa
	C17	51p	500V	mica	5 135-104	DM 15	1		Rifa
	C18	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	C19	2μ2	25V	el-lyt	125-109	2222-122-56228	1		Philips
	C20	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C21	51p	500V	mica	5 135-104	DM 15	1		Rifa
	C22	68p	500V	mica	5 135-118	DM 15	1		Rifa
	C23	68p	500V	mica	5 135-118	DM 15	1		Rifa
	C24	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	C25	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C26	18p	100V	cer.	2 124-519	2222-638-10189	1		Philips
	C27	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C28	15p	100V	cer	2 124-518	2222-638-10159	1		Philips
	C29	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C30	1n	100V	cer.	124-537	2222-640-03102	1		Philips
	C31	100p	100V	cer.	124-528	2222-638-34101	1		Philips
	C32	0μ1	16V	cer.	123-020	9/0145.9	1		Ferroperm
	C33	56p	100V	cer	2 124-525	2222-638-10569	1		Philips
	C34	220p	100V	cer.	124-532	2222-638-52221	1		Philips
	C35	10n	100V	cer.	124-539	2222-640-03103	1		Philips
	C36	1n	100V	cer.	124-537	2222-640-03102	1		Philips

Rev.

ST 14420

O

MO

SC

Parts list

73,6 MHz loop
B450-20-03



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 810406 BS

C

D. NO.

4-14420

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/4
			/tol. ± %	Code				Notes
		<u>Diode:</u>						
	CRo1			146-016	1N4148	1		
	CRo2			146-016	1N4148	1		
	CRo3			146-016	1N4148	1		
	CRo4	Ref.diode 2,1V		147-045	BZY 87-2,1V	1		Siemens
	CRo5	Varicap.		146-030	BB 109 G	1		Siemens
		<u>Filter:</u>						
	FLo1	Filter 1500p-VHF-pi		138-002	9/0168.5	1		Ferroperm
	FLo2	Filter 1500p-VHF-pi		138-002	9/0168.5	1		Ferroperm
	FLo3	Filter 1500p-VHF-pi		138-002	9/0168.5	1		Ferroperm
		<u>Connector:</u>						
	Jo1	Receptacle, coax		162-020	R114-554	1		
	Jo2	Receptacle, coax		162-020	R114-554	1		
		<u>Coil:</u>						
	Lo1			013-927	213/13927	1		Ampl.
	Lo2			013-920	206/13920	1		Ampl.
		<u>Transistor:</u>						
	Qo1			141-049	BF 115	1		
	Qo2			141-049	BF 115	1		
	Qo3			141-041	BFX 89	1		
	Qo4			141-041	BFX 89	1		
	Qo5			141-056	BFW 30	1		
		<u>Resistor:</u>						
	Ro1	10KΩ o,3W	5	101-049	CR25	1		
	Ro2	10KΩ o,3W	5	101-049	CR25	1		
	Ro3	470 Ω o,3W	5	101-033	CR25	1		
	Ro4	560 Ω o,3W	5	101-034	CR25	1		
	Ro5	1K2Ω o,3W	5	101-038	CR25	1		
	Ro6	180 Ω o,3W	5	101-028	CR25	1		
	Ro7	22KΩ o,3W	5	101-053	CR25	1		

Rev.

ST 14420

O

MO

SC

Parts list

73,6 MHz loop

B450-20-03



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 810406 BS

C

D. NO.

4-14420

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/4
			/tol. $\pm$ %	Code				Notes
	R08	1K5 Ω o,3W	5	101-039	CR25	1		
	R09	560 Ω o,3W	5	101-034	CR25	1		
	R10	3K3 Ω o,3W	5	101-043	CR25	1		
	R11	3K3 Ω o,3W	5	101-043	CR25	1		
	R12	4K7 Ω o,3W	5	101-045	CR25	1		
	R13	1K2 Ω o,3W	5	101-038	CR25	1		
	R14	100K Ω o,3W	5	101-061	CR25	1		
	R15	47K Ω o,3W	5	101-057	CR25	1		
	R16	1K2 Ω o,3W	5	101-038	CR25	1		
	R17	220 Ω o,3W	5	101-029	CR25	1		
	R18	10K Ω o,3W	5	101-049	CR25	1		
	R19	10K Ω o,3W	5	101-049	CR25	1		
	R20	820 Ω o,3W	5	101-036	CR25	1		
	R21	8K2 Ω o,3W	5	101-048	CR25	1		
	R22	100 Ω o,3W	5	101-025	CR25	1		
	R23	4K7 Ω o,3W	5	101-045	CR25	1		
	R24	180 Ω o,3W	5	101-028	CR25	1		
	R25	33 Ω o,3W	5	101-019	CR25	1		
	R26	1K8 Ω o,3W	5	101-040	CR25	1		
	R27	220 Ω o,3W	5	101-029	CR25	1		
	R28	470 Ω o,3W	5	101-033	CR25	1		
	R29	100 Ω o,3W	5	101-025	CR25	1		
	<u>Integrated circuit:</u>							
	U01			143-076	SN74LS112N	1		TI.
	U02			143-033	SN74LS 00N	1		TI.
	U03			143-079	SN74LS390N	1		TI.
	U04			143-061	CA 3130 T	1		RCA.
	U05			143-055	SN74LS192N	1		TI.
	U06			143-055	SN74LS192N	1		TI.
	U07			143-057	SN74LS197N	1		TI.

Rev.

ST 14420

O

MO

SC

Parts list

73,6 MHz loop
B450-20-03



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 810406 BS

C

D. NO.

4-14420

SC 1	Pos	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/4
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co2	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co3	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co4	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co5	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	Co6	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	Co7	2-22pF trim.cap.		140-015	2222-808-11229	1		Philips
	Co8	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co9	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C10	10µF 25V	el-lyt	125-113	2222-122-56109	1		Philips
	C11	1nF 250V	filmfoil.1	137-029	2222-426-41002	1		Philips
	C12	1nF 100V	mica. 5	135-119	VDM 15	1		Rifa
	C13	56pF 100V	cer. 2	124-525	2222-638-10569	1		Philips
	C14	47nF 250V	20	131-004	MKT 1822-347/2	1		Ero.
	C15	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C16	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C17	1µF 40V	el-lyt	125-107	2222-122-57108	1		Philips
	C18	22pF 500V	mica. 5	135-102	DM 15			Rifa
	C19	51pF 500V	mica. 5	135-104	DM 15	1		Rifa
	C20	68pF 500V	mica. 5	135-118	DM 15	1		Rifa
	C21	22pF 100V	cer.	124-520	2222-638-10229	1		Philips
	C22	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	C23	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C24	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm
	C25	15pF 100V	cer.	124-518	2222-638-10159	1		Philips
	C26	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C27	0,1µF 16V	cer.	123-020	9/0145.9	1		Ferroperm
	C28	10pF 100V	cer.	124-516	2222-638-10109	1		Philips
		<u>Diode:</u>						
	CRo1			146-016	IN4148	1		
	CRo2			146-016	IN4148	1		
	CRo3	Ref. diode 2,1V		147-045	BZY 87 2V1	1		Siemens
	CRo4	Varicap.		146-030	BB 109 G	1		Siemens
	CRo5	Varicap.		146-030	BB 109 G	1		Siemens

Rev.

ST 14421

O

MO

SC

Parts list

MHz loop

B450-21-04



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14421

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/4
			/tol. $\pm$ %	Code				Notes
		<u>Filter:</u>						
	FL01	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL02	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL03	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL04	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL05	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL06	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL07	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL08	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL09	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
	FL10	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm.
		<u>Connector:</u>						
	J01	Receptacle, coax		162-020	R 114-554	1		
		<u>Coil:</u>						
	L01	Coil		013-919	205/13919	1		Ampl.
		<u>Transistor:</u>						
	Q01			141-041	BFX 89	1		
	Q02			141-056	BFW 30	1		
	Q03			141-041	BFX 89	1		
		<u>Resistor:</u>						
	Ro1	1K Ω 0,3W	5	101-037	CR25	1		
	Ro2	22K Ω 0,3W	5	101-053	CR25	1		
	Ro3	3K3 Ω 0,3W	5	101-043	CR25	1		
	Ro4	3K3 Ω 0,3W	5	101-043	CR25	1		
	Ro5	1K Ω 0,3W	5	101-037	CR25	1		
	Ro6	4K7 Ω 0,3W	5	101-045	CR25	1		
	Ro7	15K Ω 0,3W	5	101-051	CR25	1		
	Ro8	470 Ω 0,3W	5	101-033	CR25	1		
	Ro9	47K Ω 0,3W	5	101-057	CR25	1		
	R10	270 Ω 0,3W	5	101-030	CR25	1		

Rev.

ST 14421

O

MO

SC

Parts listMHz loop
B450-21-04Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14421

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/4
			/tol. $\pm$ %	Code				Notes
	R11	10K Ω 0,3W	5	101-049	CR25	1		
	R12	10K Ω 0,3W	5	101-049	CR25	1		
	R13	1K Ω 0,3W	5	101-037	CR25	1		
	R14	5K6 Ω 0,3W	5	101-046	CR25	1		
	R15	100 Ω 0,3W	5	101-025	CR25	1		
	R16	4K7 Ω 0,3W	5	101-045	CR25	1		
	R17	220 Ω 0,3W	5	101-029	CR25	1		
	R18	22 Ω 0,3W	5	101-017	CR25	1		
	R19	180 Ω 0,3W	5	101-028	CR25	1		
	R20	270 Ω 0,3W	5	101-030	CR25	1		
	R21	1K8 Ω 0,3W	5	101-040	CR25	1		
	R22	100 Ω 0,3W	5	101-025	CR25	1		
	T01	Transformer		015-720	687/15720	1		Ampl.
		<u>Integrated circuit:</u>						
	U01			143-077	SN74LS193N	1		TI.
	U02			143-077	SN74LS193N	1		TI.
	U03			143-033	SN74LS 00N	1		TI.
	U04			143-076	SN74LS112N	1		TI.
	U05			143-076	SN74LS112N	1		TI.
	U06			143-061	CA 3130 T	1		RCA.
	U07			143-056	SN74LS196N	1		TI.

Rev.

ST 14421

O

MO

SC

Parts list

MHz loop

B450-21-04



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800930 mh

C

D. NO.

4-14421

SC 1	Pos.	Description	Ordering reference		Code	Type	Pc	SC 2	Sh. 2/2
			/tol. ± %						Notes
		<u>Capacitor:</u>							
	Co1	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	Co2	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	Co3	18pF 100V	cer. 2		124-519	2222-638-1o189	1		Philips
	Co4	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	Co5	1nF 100V	cer.		124-537	2222-640-o31o2	1		Philips
	Co6	1µF 40V	el-lyt		125-1o7	2222-122-571o8	1		Philips
	Co7	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	Co8	o,1µF 25oV		5	13o-116	B32561-B31o4-J	1		Siemens
	Co9	2,2µF 25V	el-lyt		125-1o9	2222-122-56228	1		Philips
	C1o	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	C11	o,1µF 16V	cer.		123-o2o	9/o145.9	1		Ferroperm.
	C12	18pF 100V	cer.		124-519	2222-638-1o189	1		Philips
	C13	2,2µF 25V	el-lyt		125-1o9	2222-122-56228	1		Philips
	C14	o,1µF 25oV		5	13o-116	B32561-B31o4-J	1		Siemens
	C15	18pF 100V	cer.		124-519	2222-638-1o189	1		Philips
	C16	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	C17	2,2µF 63V		1o	131-o26	MKT1822-522/o6	1		Ero.
	C18	27opF 100V	cer.2		124-533	2222-638-58271	1		Philips
	C19	10nF 100V	cer.		124-539	2222-640-o31o3	1		Philips
	C2o	4,7µF 25V	el-lyt		125-111	2222-122-56478	1		Philips
	C21	o,22µF 4oV	el-lyt		125-1o3	2222-122-57227	1		Philips
		<u>Diode:</u>							
	CRo1				146-o16	IN4148	1		
	CRo2				146-o16	IN4148	1		
	CRo3				146-o16	IN4148	1		
	CRo4				146-o16	IN4148	1		
	CRo5				146-o16	IN4148	1		
		<u>Filter:</u>							
	FLo1	Filter 15ooF-VHF-pi			138-oo2	9/o168.5	1		Ferroperm.
	FLo2	Filter 15ooF-VHF-pi			138-oo2	9/o168.5	1		Ferroperm.

Rev.

ST 14422

O

MO

SC

Parts listMaster loop
B45o-22-o1Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8oo93o mh

C

D. NO.

4-14422

SC 1	Pos.	Ordering reference			Type	Pc	SC 2	Sh. 3/4
		Description	/tol. ± %	Code				Notes
		<u>Connector:</u>						
	Jo1	Receptacle, coax.		162-o2o	R 114-554	1		
	Jo2	Receptacle, coax.		162-o2o	R 114-554	1		
	Jo3	Receptacle, coax.		162-o2o	R 114-554	1		
	Jo4	Receptacle, coax.		162-o2o	R 114-554	1		
		<u>Coil:</u>						
	Lo1	Choke 14μH		169-1o1	B82111-A-A5	1		Siemens
	Lo2	Choke 14μH		169-1o1	B82111-A.A5	1		Siemens
		<u>Transistor:</u>						
	Qo1			141-o41	BFX 89	1		
	Qo2			141-o41	BFX 89	1		
	Qo3			141-o41	BFX 89	1		
		<u>Resistor:</u>						
	Ro1	56Ω o,3W	5	1o1-o22	CR25	1		
	Ro2	1ooΩ o,3W	5	1o1-o25	CR25	1		
	Ro3	8K2Ω o,3W	5	1o1-o48	CR25	1		
	Ro4	5K6Ω o,3W	5	1o1-o46	CR25	1		
	Ro5	3K9Ω o,3W	5	1o1-o44	CR25	1		
	Ro6	12oΩ o,3W	5	1o1-o26	CR25	1		
	Ro7	1KΩ o,3W	5	1o1-o37	CR25	1		
	Ro8	56μ o,3W	5	1o1-o22	CR25	1		
	Ro9	56oΩ o,3W	5	1o1-o34	CR25	1		
	R1o	3K9Ω o,3W	5	1o1-o44	CR25	1		
	R11	56oΩ o,3W	5	1o1-o34	CR25	1		
	R12	1K5Ω o,3W	5	1o1-o39	CR25	1		
	R13	1K5Ω o,3W	5	1o1-o39	CR25	1		
	R14	3K3Ω o,3W	5	1o1-o43	CR25	1		
	R15	1ooΩ o,3W	5	1o1-o25	CR25	1		
	R16	3K3Ω o,3W	5	1o1-o43	CR25	1		
	R17	1K5Ω o,3W	5	1o1-o39	CR25	1		
	R18	1KΩ o,3W	5	1o1-o37	CR25	1		
	R19	1okΩ o,3W	5	1o1-o49	CR25	1		
	R2o	1KΩ o,3W	5	1o1-o37	CR25	1		

Rev. +R17/R18,19 rykket 810403BS

Rev. +R17/R18,19 Rykket 81840383					
ST	14422	Parts list	Master loop		D 800930 mh
O			B450-22-01		C
MO			Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO. 4-14422
SC			2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	

Ordering reference							Sh. 4/4	
SC 1	Pos.	Description	/tol. $\pm$ %	Code	Type	Pc	SC 2	Notes
		<u>Integrated circuit:</u>						
	Uo1	Mixer, balanced		194-003	SRA-1	1		
	Uo2			143-052	SN74LS132N	1		TI.
	Uo3			143-076	SN74LS112N	1		TI.
	Uo4			143-061	CA 3130 T	1		RCA.

Rev.

ST 14422

O

MO

SC

Parts list

Master loop

B450-22-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

&-14422

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	5nF 500V	feed-through	138-001	B37020-B5502-s	1		Siemens
	Co2	5nF 500V	feed-through	138-001	B37020-B5502-s	1		Siemens
	Co3	5nF 500V	feed-through	138-001	B37020-B5502-s	1		Siemens
	Co4	5nF 500V	feed-through	138-001	B37020-B5502-s	1		Siemens
	Co5	1 μ F 40V	el-lyt	125-107	2222-122-57108	1		Philips
	Co6	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	Co7	22PF 500V	mica. 5	135-102	DM 15	1		Rifa.
	Co8	4,7 nF 100V	cer.	124-538	2222-640-03472	1		Philips
	Co9	1,5nF 500V	mica. 5	135-117	DM 19	1		Rifa.
	C10	1 μ F 40V	el-lyt	125-107	2222-122-57108	1		Philips
	C11	10pF	trimmecap.	140-016	5750/VPC/10			Jackson/OP.
	C12	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C13	22pF 500V	mica. 5	135-102	DM 15	1		Rifa.
	C14	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C15	2,2 μ F 25V	el-lyt	125-109	2222-122-56228	1		Philips
	C16	68pF 500V	mica. 5	135-118	DM 15	1		Rifa.
	C17	68pF 500V	mica. 5	135-118	DM 15	1		Rifa.
	C18	10pF 100V	cer. 2	124-516	2222-638-10109	1		Philips
	C19	1 μ F 40V	el-lyt	125-107	2222-122-57108	1		Philips
	C20	0,1 μ F 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	C21	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C22	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C23	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	C24	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C25	0,1 μ F 16V	cer.	123-020	9/0145.9	1		Ferroperm.
	C26	0,47 μ F 400V	cer.	124-701	RUA 606	1		
		<u>Diode:</u>						
	CRo1	Varicap.		146-031	BB 105	1		Siemens
	CRo2	Varicap.		146-030	BB 109	1		Siemens
	CRo3	Varicap.		146-030	BB 109	1		Siemens

Rev.

ST 14423

O

MO

SC

Parts list

V.C.O. unit 75-105 MHz
B450-23-02

Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14423

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/3
			/tol. $\pm$ %	Code				Notes
		<u>Coil:</u>						
	Lo1	Choke HF 14 μ H 500V		169-101	B82111-AA5	1		Siemens
	Lo2	Choke HF 14 μ H 500V		169-101	B82111-AA5	1		Siemens
	Lo3	Choke HF 14 μ H 500V		169-101	B82111-AA5	1		Siemens
	Lo4	Coil		015-726	334/15726	1		Ampl.
	Lo5	Choke HF 14 μ H 500V		169-101	B82111-AA5	1		Siemens
	Lo6	Coil		013-945	681/13945	1		Ampl.
		<u>Connector:</u>						
	Pol	Receptacle, coax		162-020	R114-554	1		
	Po2	Receptacle, coax		162-020	R114-554	1		
		<u>Transistor:</u>						
	Qo1			141-063	BFR 91	1		
	Qo2			141-041	BFX 89	1		
	Qo3			141-038	BFW 16 A	1		
		<u>Resistor:</u>						
	Ro1	10K Ω 0,3W	5	101-049	CR25	1		
	Ro2	100 Ω 0,3W	5	101-025	CR25	1		
	Ro3	100 Ω 0,3W	5	101-025	CR25	1		
	Ro4	150 Ω 0,3W	5	101-027	CR25	1		
	Ro5	10K Ω 0,3W	5	101-049	CR25	1		
	Ro6	4K7 Ω 0,3W	5	101-045	CR25	1		
	Ro7	560 Ω 0,3W	5	101-034	CR25	1		
	Ro8	680 Ω 0,3W	5	101-035	CR25	1		
	Ro9	18K Ω 0,3W	5	101-052	CR25	1		
	R10	10K Ω 0,3W	5	101-049	CR25	1		
	R11	1K Ω 0,3W	5	101-037	CR25	1		
	R12	1K Ω 0,3W	5	101-037	CR25	1		
	R13	1K5 Ω 0,3W	5	101-039	CR25	1		
	R14	1K Ω 0,3W	5	101-037	CR25	1		
	R15	470 Ω 0,3W	5	101-033	CR25	1		
	R16	120 Ω 0,3W	5	101-026	CR25	1		
	To1	Transformer		013-946	682/13946	1		Ampl.

Rev.

ST 14423

O

MO

SC

Parts list



V.C.O. unit 75 - 105 MHz

B450-23-02

Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14423

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co2	10nF 250V	5	130-115	B32561-B6103-J	1		Siemens
	Co3	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co4	4,7nF 100V	cer.	124-538	2222-640-03472	1		Philips
	Co5	270pF 630V	filmfoil 1	137-018	2222-427-42701	1		Philips
	Co6	27pF 100V	cer. 2	124-521	2222-638-10279	1		Philips
	Co7	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	Co8	270pF 630V	filmfoil 1	137-018	2222-427-42701	1		Philips
	C10	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C11	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
	C12	4,7µF 25V	el-lyt	125-111	2222-122-56478	1		Philips
	C13	0,1µF 250V	5	130-116	B32561-B3104-J	1		Siemens
		<u>Diode:</u>						
	CR01			146-026	IN4004	1		
	CR02			146-026	IN4004	1		
	CR03			146-016	IN4148	1		
	CR04			146-016	IN4148	1		
	CR05			146-016	IN4148	1		
		<u>Connector:</u>						
	J01	Receptacle, coax.		162-020	R114-554	1		
		<u>Relay:</u>						
	K01			155-077	RSD-12V	1		National
	Ko2			155-077	RSD-12V	1		National
	Ko3			155-077	RSD-12V	1		National

Rev.

ST 14427

O

MO

SC

Parts list

RF input circuit

B450-29-02



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14427

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/3
			/tol. ± %	Code				Notes
		<u>Coil:</u>						
	Lo1	Coil		o13-921	2o7/13921	1		Ampl.
	Lo2	Coil		o13-922	2o8/13922	1		Ampl.
	Lo3	Coil		o13-923	2o9/13923	1		Ampl.
	Lo4	Choke 1 mH		169-oo7	587824-C12	1		
	Lo5	Coil		o13-921	2o7/13921	1		Ampl.
		<u>Transistor:</u>						
	Qo1			141-o38	BFW 16 A	1		
		<u>Resistor:</u>						
	Ro1	1KΩ 1,15W	5	1o6-o94	CR68	1		
	Ro2	22oΩ o,3W	5	1o1-o29	CR25	1		
	Ro3	1ooΩ o,3W	5	1o1-o25	CR25	1		
	Ro4	1ooΩ o,3W	5	1o1-o25	CR25	1		
	Ro5	33oΩ o,67W	5	1o3-o31	CR52	1		
	Ro6	1KΩ o,3W	5	1o1-o37	CR25	1		
	Ro7	47oΩ o,3W	5	1o1-o33	CR25	1		
	Ro8	1oΩ o,3W	5	1o1-o13	CR25	1		
	Ro9	1oΩ o,3W	5	1o1-o13	CR25	1		
	R1o	1ooΩ o,3W	5	1o1-o25	CR25	1		
	R11	33Ω o,3W	5	1o1-o19	CR25	1		
	R12	33Ω o,3W	5	1o1-o19	CR25	1		
	To1	Transformer		o15-76o	686/1576o	1		Ampl.
	To2	Transformer		o13-948	684/13948	1		Ampl.
	To3	Transformer		o13-947	683/13947	1		Ampl.
	To4	Transformer		o13-949	685/13949	1		Ampl.
	To5	Transformer		o13-948	684/13948	1		Ampl.

Rev.

ST 14427

O

MO

SC

Parts list

RF. input circuit

B45o-29-o2



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8o1oo1 mh

C

D. NO.

4-14427

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/4
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	39pF 100V	cer. 2	124-523	2222-638-10399	1		Philips
	Co2	82pF 100V	cer. 2	124-527	2222-638-10829	1		Philips
	Co3	150pF 100V	cer. 2	124-530	2222-638-34151	1		Philips
	Co4	33pF 100V	cer. 2	124-522	2222-638-10339	1		Philips
	Co5	10pF 100V	cer. 2	124-516	2222-638-10109	1		Philips
	Co6	150pF 100V	cer. 2	124-530	2222-638-34151	1		Philips
	Co7	33pF 100V	cer. 2	124-522	2222-638-10339	1		Philips
	Co8	39pF 100V	cer. 2	124-523	2222-638-10399	1		Philips
	Co9	82pF 100V	cer. 2	124-527	2222-638-10829	1		Philips
	C10	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C11	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C12	100pF 100V	cer. 2	124-528	2222-638-34101	1		Philips
	C13	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C14	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C15	56pF 100V	cer. 2	124-525	2222-638-10569	1		Philips
	C16	100pF 100V	cer. 2	124-528	2222-638-34101	1		Philips
	C17	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	C18	2-18pF trimcap.		140-010	107.2901.018	1		DAU.
	C19	2-18pF trimcap.		140-010	107.2901.018	1		DAU.
	C20	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C21	15pF 100V	cer. 2	124-518	2222-638-10159	1		Philips
	C22	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C23	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	C24	1nF 100V	cer.	124-537	2222-640-03102	1		Philips
	C25	56pF 100V	cer. 2	124-525	2222-638-10569	1		Philips
	C26	100pF 100V	cer. 2	124-528	2222-638-34101	1		Philips
	C27	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C28	220pF 100V	cer. 2	124-532	2222-638-58221	1		Philips
	C29	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C30	18pF 100V	cer. 2	124-519	2222-638-10189	1		Philips
	C31	18pF 100V	cer. 2	124-519	2222-638-10189	1		Philips
	C32	10nF 100V	cer.	124-539	2222-640-03103	1		Philips
	C33	27pF 400V feed-through		138-005	B37810-A3270-K2	1		Siemens
	C34	18pF 100V	cer. 2	124-519	2222-638-10189	1		Philips

Rev.

ST 14428	Parts list	1. mixer unit	D 801001 mh
O		B450-30-03	C
MO		Herlev Hovedgade 201	Teleph. (02) *94 35 11
SC		2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom
			D. NO. 4-14428

SC 1	Pos.	Description	Ordering reference		Code	Type	Pc	SC 2	Sh. 2/4
			/tol. ± %						Notes
		<u>Capacitor:</u>							
	Co1	39pF 100V	cer.	2	124-523	2222-638-10399	1		Philips
	Co2	82pF 100V	cer.	2	124-527	2222-638-10829	1		Philips
	Co3	150pF 100V	cer.	2	124-530	2222-638-34151	1		Philips
	Co4	33pF 100V	cer.	2	124-522	2222-638-10339	1		Philips
	Co5	10pF 100V	cer.	2	124-516	2222-638-10109	1		Philips
	Co6	150pF 100V	cer.	2	124-530	2222-638-34151	1		Philips
	Co7	33pF 100V	cer.	2	124-522	2222-638-10339	1		Philips
	Co8	39pF 100V	cer.	2	124-523	2222-638-10399	1		Philips
	Co9	82pF 100V	cer.	2	124-527	2222-638-10829	1		Philips
	C10	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C11	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C12	100pF 100V	cer.	2	124-528	2222-638-34101	1		Philips
	C13	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C14	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C15	56pF 100V	cer.	2	124-525	2222-638-10569	1		Philips
	C16	100pF 100V	cer.	2	124-528	2222-638-34101	1		Philips
	C17	1nF 100V	cer.		124-537	2222-640-03102	1		Philips
	C18	10pF 100V	cer.	2	124-516	2222-638-10109	1		Philips
	C19	2-18pF trimcap.			140-010	107.2901.018	1		DAU.
	C20	2-18pF trimcap.			140-010	107.2901.018	1		DAU.
	C21	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C22	10pF 100V	cer.	2	124-516	2222-638-10109	1		Philips
	C23	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C24	1nF 100V	cer.		124-537	2222-640-03102	1		Philips
	C25	1nF 100V	cer.		124-537	2222-640-03102	1		Philips
	C26	56pF 100V	cer.	2	124-525	2222-638-10569	1		Philips
	C27	100pF 100V	cer.	2	124-528	2222-638-34101	1		Philips
	C28	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C29	220pF 100V	cer.	2	124-532	2222-638-58221	1		Philips
	C30	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C31	18pF 100V	cer.	2	124-519	2222-638-10189	1		Philips
	C32	18pF 100V	cer.	2	124-519	2222-638-10189	1		Philips
	C33	10nF 100V	cer.		124-539	2222-640-03103	1		Philips
	C34	27pF 400V feed-through			138-005	B37810-A3270-K2	1		Siemens
	C35	18pF 100V	cer.	2	124-519	2222-638-10189	1		Philips

Rev.

ST 14428

O

MO

SC

Parts list1. Mixer unit
B450-30-04Herlev Hovedgade 201
2730 Herlev
DenmarkTeleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14428

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 3/4
			/tol. $\pm$ %	Code				Notes
		<u>Diode:</u>						
	CRo1			146-006	BA 379	1		
	CRo2			146-006	BA 379	1		
		<u>Filter:</u>						
	FLo1	Filter 1500pF-VHF-pi		138-002	9/0168.5	1		Ferroperm
	FLo2	Filter 1500pF-VHF-pi		138-002	)30168.5	1		Ferroperm
		<u>Connector:</u>						
	Jo1	Receptacle, coax.		162-020	R 114-554	1		
	Jo2	Receptacle, coax.		162-020	R 114-554	1		
	Jo3	Receptacle, coax.		162-020	R 114-554	1		
		<u>Coil:</u>						
	Lo1	Coil		013-924	210/13924	1		Ampl.
	Lo2	Coil		013-925	211/13925	1		Ampl.
	Lo3	Coil		013-924	210/13924	1		Ampl.
	Lo4	Coil		013-926	212/13926	1		Ampl.
	Lo5	Coil		013-925	211/13925	1		Ampl.
	Lo6	Coil		013-924	210/13924	1		Ampl.
	Lo7	Coil		013-926	212/13926	1		Ampl.
	Lo8	Choke 1mH		169-007	587824-C12	1		
	Lo9	Choke 1mH		169-007	587824-C12	1		
	L10	Coil		013-926	212/13926	1		Ampl.
	L11	Choke 14 μ H		169-101	B 82111-A-A5	1		Siemens
	L12	Coil		013-944	412/13944	1		Ampl.
	L13	Coil		013-944	412/13944			Ampl.
		<u>Transistor:</u>						
	Qo1	NPN-si		141-048	BC 107 B	1		
	Qo2			141-056	BFW 30	1		
	Qo3	NPN-si		141-048	BC 107 B	1		
	Qo4			141-056	BFW 30	1		

Rev.

ST 14428	Parts list	1. Mixer unit	D 801001 mh
O		B450-30-03/04	C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11	D. NO.
SC		Telegr. Amplidan Telex 35110 Secom	4-14428

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/4
			/tol. $\pm$ %	Code				Notes
		<u>Resistor:</u>						
	Ro1	10K Ω o,3W	5	101-o49	CR25	1		
	Ro2	1K Ω o,3W	5	101-o37	CR25	1		
	Ro3	1K Ω o,3W	5	101-o37	CR25	1		
	Ro4	1K5 Ω o,3W	5	101-o39	CR25	1		
	Ro5	100 Ω o,3W	5	101-o25	CR25	1		
	Ro6	1K2 Ω o,3W	5	101-o38	CR25	1		
	Ro7	47 Ω o,3W	5	101-o21	CR25	1		
	Ro8	820 Ω o,3W	5	101-o36	CR25	1		
	Ro9	180 Ω o,3W	5	101-o28	CR25	1		
	R10	150 Ω o,3W	5	101-o27	CR25	1		
	R11	10K Ω o,3W	5	101-o49	CR25	1		
	R12	1K Ω o,3W	5	101-o37	CR25	1		
	R13	1K Ω o,3W	5	101-o37	CR25	1		
	R14	56 Ω o,3W	5	101-o22	CR25	1		
	R15	47 Ω o,3W	5	101-o21	CR25	1		
	R16	1K2 Ω o,3W	5	101-o38	CR25	1		
	R17	820 Ω o,3W	5	101-o36	CR25	1		
	R18	1K5 Ω o,3W	5	101-o39	CR25	1		
	R19	47 Ω o,3W	5	101-o21	CR25	1		
	R20	220 Ω o,3W	5	101-o29	CR25	1		
	R21	270 Ω o,3W	5	101-o30	CR25	1		
	R22	47 Ω o,3W	5	101-o21	CR25	1		
		<u>Integrated circuit:</u>						
	U01	Mixer, balanced		194-002	SRA-1H			
		<u>Crystal filter:</u>						
	X01	X-tal filter		195-o40	BP 4791-00	1		Cathodeon

Rev.

ST 14428

O

MO

SC

Parts list

1 Mixer unit

B450-30-o3/o4



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14428

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	10nF 400V	cer.	123-035	9/0138.9	1		Ferroperm
	Co2	10nF 400V	cer.	123-035	9/0138.9	1		Ferroperm
	Co3	10000µF 40V	el-lyt	120-032	10000/40 EBB	1		Frako
	Co4	4700µF 50V	el-lyt	120-027	4700/50 EBB	1		Frako
	Co5	1µF 35V	tantal	125-005	DTC.	1		Ero.
	Co6	1µF 35V	tantal	125-005	DTC.	1		Ero.
	Co7	1µF 35V	tantal	125-005	DTC.	1		Ero.
	Co8	1µF 35V	tantal	125-005	DTC.	1		Ero.
	CR01	Rectifier-bridge		145-013	VS-247	1		
	CR02	Rectifier-bridge		145-013	VS-247	1		
	T01	Transformer, mains		167-049	DK 4265 B	1		Transduktor
	TB01	Terminal board see parts list for mounted chassis						
		<u>Integrated circuit:</u>						
	U01	Voltage regulator		143-073	MLM 309 K	1		Motorola
	U02	Voltage regulator		143-070	FUA 7815 KC	1		Fairchild

Rev.

ST	14429	Parts list	Power supply B450-26-01	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D	801001 mh
O					C	
MO			Herlev Hovedgade 201 2730 Herlev Denmark		D. NO.	
SC					4-14429	

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/3
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	180opF 125V	filmfoil 1	137-o37	2222-425-418o2	1		Philips
	Co2	110opF 125V	filmfoil 1	137-o4o	2222-425-411o2	1		Philips
	Co3	75opF 25oV	filmfoil 1	137-o39	2222-426-475o1	1		Philips
	Co4	62opF 25oV	folmfoil 1	137-o38	2222-426-462o1	1		Philips
	Co5	51opF 25oV	filmfoil 1	137-o25	2222-426-451o1	1		Philips
	Co6	43opF 25oV	filmfoil 1	137-o23	2222-426-443o1	1		Philips
	Co7	36opF 63oV	filmfoil 1	137-o21	2222-427-436o1	1		Philips
	Co8	33opF 63oV	filmfoil 1	137-o2o	2222-427-433o1	1		Philips
	Co9	27opF 63oV	Filmfoil 1	137-o18	2222-427-427o1	1		Philips
	C1o	24opF 63oV	filmfoil 1	137-o17	2222-427-424o1	1		Philips
	C11	24opF 63oV	filmfoil 1	137-o17	2222-427-424o1	1		Philips
	C12	22opF 63oV	filmfoil 1	137-o16	2222-427-422o1	1		Philips
	C13	2oopF 63oV	filmfoil 1	137-o15	2222-427-42oo1	1		Philips
	C14	18opF 63oV	filmfoil 1	137-o14	2222-427-418o1	1		Philips
	C15	18opF 63oV	filmfoil 1	137-o14	2222-427-418o1	1		Philips
	C16	16opF 63oV	filmfoil 1	137-o13	2222-427-416o1	1		Philips
	C17	15opF 63oV	filmfoil 1	137-o12	2222-427-415o1	1		Philips
	C18	15opF 63oV	filmfoil 1	137-o12	2222-427-415o1	1		Philips
	C19	13opF 63oV	filmfoil 1	137-o11	2222-427-413o1	1		Philips
	C2o	13opF 63oV	filmfoil 1	137-o11	2222-427-413o1	1		Philips
	C21	13opF 63oV	filmfoil 1	137-o11	2222-427-413o1	1		Philips
	C22	12opF 63oV	filmfoil 1	137-o1o	2222-427-412o1	1		Philips
	C23	11opF 63oV	filmfoil 1	137-oo9	2222-427-411o1	1		Philips
	C24	11opF 63oV	filmfoil 1	137-oo9	2222-427-411o1	1		Philips
	C25	11opF 63oV	filmfoil 1	137-oo9	2222-427-411o1	1		Philips
	C26	11opF 63oV	filmfoil 1	137-oo8	2222-427-41oo1	1		Philips
	C27	1oopF 63oV	filmfoil 1	137-oo8	2222-427-41oo1	1		Philips
	C28	91pF 63oV	filmfoil 1	137-oo7	2222-427-491o9	1		Philips
	C29	91pF 63oV	filmfoil 1	137-oo7	2222-427-491o9	1		Philips

Rev.

ST 14640	Parts list	MHz-switch	D 801001 mh
O		B450-28-01	C
MO	 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11	D. NO.
SC		Telegr. Amplidan Telex 35110 Secom	4-14640

SC 1	Pos.	Description	Ordering reference		Pc	SC 2	Sh. 3/3
			/tol. $\pm$ %	Code			Notes
		<u>Coil:</u>					
	Lo1			o13-929	335/13929	1	Ampl.
	Lo2			o13-930	336/13930	1	Ampl.
	Lo3			o13-931	337/13931	1	Ampl.
	Lo4			o13-932	338/13932	1	Ampl.
	Lo5			o13-933	339/13933	1	Ampl.
	Lo6			o13-934	340/13934	1	Ampl.
	Lo7			o13-935	341/13935	1	Ampl.
	Lo8			o13-936	342/13936	1	Ampl.
	Lo9			o13-937	343/13937	1	Ampl.
	L10			o13-938	344/13938	1	Ampl.
	L11			o13-939	345/13939	1	Ampl.
	L12			o13-940	346/13940	1	Ampl.
	L13			o13-941	347/13941	1	Ampl.
	L14			o13-941	347/13941	1	Ampl.
	L15			o13-941	347/13941	1	Ampl.
	L16			o13-941	347/13941	1	Ampl.
	L17			o13-941	347/13941	1	Ampl.
	L18			o13-942	348/13942	1	Ampl.
	L19			o13-942	348/13942	1	Ampl.
	L20			o13-942	348/13942	1	Ampl.
	L21			o13-942	348/13942	1	Ampl.
	L22			o13-943	349/13943	1	Ampl.
	L23			o13-943	349/13943	1	Ampl.
	L24			o13-943	349/13943	1	Ampl.
	L25			o13-943	349/13943	1	Ampl.
	L26			o13-943	349/13943	1	Ampl.
	L27			o13-943	349/13943	1	Ampl.
	L28			o13-943	349/13943	1	Ampl.

Rev.

ST 14640

O

MO

SC

Parts list



MHz-switch
B450-28-01

Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14640

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		<u>Connector:</u>						
	Pol	Multiplug, 15	4o3o-15	163-o97	AG22-1o-2151	1		Molex
	Po2	Multiplug, 15	4o3o-15	163-o97	AG22-1o-2151	1		Molex
		<u>Switch:</u>						
	Sol	Key-switch with..		171-o26	RSM 62/AL	1		DKI.
	DSol	Pilotlamp, Bi-pin		17o-o5o	AL/12V	1		DKI.

Rev.

ST 1466o

O

MO

SC

Parts list

Junction panel

B45o-24-o1



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 8o1oo1 mh

C

D. NO.

4-1466o

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 4/5
			/tol. ± %	Code				Notes
		<u>Capacitor:</u>						
	Co1	1,8pF	100V	cer.	124-507	2222-638-o9188	1	Philips
	Co2	3,3pF	100V	cer.	124-510	2222-638-o9338	1	Philips
	Co3	150pF	500V	mica 5	135-108	DM 15	1	Rifa
	Co4	33pF	100V	cer. 2	124-522	2222-638-10339	1	Philips
	Co5	27pF	100V	cer. 2	124-521	2222-638-10279	1	Philips
	Co6	22nF	63V	filmfoil 1	137-o64	2222-424-42203	1	Philips
	Co7	10nF	100V	cer.	124-539	2222-640-o3103	1	Philips
	Co8	10nF	100V	cer.	124-539	2222-640-o3103	1	Philips
	Co9	10nF	100V	cer.	124-539	2222-640-o3103	1	Philips
	Co10	18pF	100V	cer. 2	124-519	2222-638-10189	1	Philips
	Co11	10nF	100V	cer.	124-539	2222-640-o3103	1	Philips
	Co12	10nF	100V	cer.	124-539	2222-640-o3103	1	Philips
	Co13	220pF	100V	cer. 2	124-532	2222-638-58221	1	Philips
	Co14	220pF	100V	cer. 2	124-532	2222-638-58221	1	Philips
	Co15	0,1µF	16V	cer.	123-o20	9/o145.9	1	Ferroperm
	Co16	10nF	500V feed-through		138-003	DWZ 500-R4000	1	RIG
	Co17	10nF	500V feed-through		138-003	DWZ 500-R4000	1	RIG
	Co18	10nF	500V feed-through		138-003	DWZ 500-R4000	1	RIG
		<u>Diode:</u>						
	CRo1	Varicap.			146-o28	BA 102	1	
	CRo2	Varicap.			146-o28	BA 102	1	
	CRo3	Zener-diode 5,1V			147-o34	BZX79-C5V1	1	
	CRo4	Zener-diode 6,2V			147-o36	BZX79-C6V2	1	
		<u>Coil:</u>						
	Lo1	Coil, RF			015-728	411/15728	1	Ampl.
	Lo2	Coil, RF			015-729	350/15729	1	Ampl.
		<u>Transistor:</u>						
	Qo1				141-o51	2 N 2905	1	
	Qo2				141-o49	BF 115	1	

Rev.

ST 14670

O

MO

SC

Parts list

Tuner

B450-25-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14670

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 5/5
			/tol. ± %	Code				Notes
		<u>Resistor:</u>						
	Ro1	100KΩ	0,3W	5	101-061	CR25	1	
	Ro2	100KΩ	0,3W	5	101-061	CR25	1	
	Ro3	220Ω	0,3W	5	101-029	CR25	1	
	Ro4	1KΩ	0,3W	5	101-037	CR25	1	
	Ro5	4K7Ω	0,3W	5	101-045	CR25	1	
	Ro6	27KΩ	0,3W	5	101-054	CR25	1	
	Ro7	39KΩ	0,3W	5	101-056	CR25	1	
	Ro8	100Ω	0,3W	5	101-025	CR25	1	
	Ro9	100Ω	0,3W	5	101-025	CR25	1	
	R10	220Ω	0,3W	5	101-029	CR25	1	
	R11	47Ω	0,3W	5	101-021	CR25	1	
	R12	47Ω	0,3W	5	101-021	CR25	1	
	R13	12KΩ	0,3W	5	101-050	CR25	1	
	Wo1	Coaxial cable		015-739	15739	1		KA 41-0066
	Wo2	Coaxial cable		015-740	15740	1		KA 41-0067

Rev.

ST 14670

O

MO

SC

Parts list

Tuner

B450-25-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14670

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
	Lo1	coil		o14-756	333/14756	1		Ampl.
	Lo2	Coil		o14-756	333/14756	1		Ampl.

Rev.

ST 14742	Parts list 	RF tuner unit B450-27-01 Herlev Hovedgade 201 2730 Herlev Denmark	Teleph. (02) *94 35 11 Telegr. Amplidan Telex 35110 Secom	D 801001 mh
O				C
MO				D. NO.
SC				4-14742

SC 1	Pos.	Ordering reference			Pc	SC 2	Sh. 1/1
		Description	/tol. $\pm$ %	Code			Notes
		Service tools		015-692	15692/8450	1	Ampl.
		Spare parts box		909-100		1	
		Display, 7 segments		142-003	FFD 11	2	
		Pilotlamp, Bi-pin		170-050	AL/12 V	1	DKI
		Protecting lamp, 60V-10W		170-048	E14-1.90020.111	1	Rafi
		Loudspeaker		160-025	2422-257-23701	1	Philips
		50K Ω lin.potmeter.RF-a		115-003	0503-089-M/0	1	Ruwido
		50K Ω lin.potmeter.AF-a		115-004	0502-000	1	Ruwido
		Relay		155-077	RSD-12 V	1	National
		Coaxial Cable, SMB-SMB		015-775	15775/B450	1	Ampl.
		Screw M2,5		202-112	9033 2,5 x4CHJ	10	HFC
		Screw M2,5		202-110	9033 2,5x8 CHJ	10	HFC
		Screw M3		203-004	9035 3 x 8 PHJ	10	HFC
		Spring washer 2,5		202-804	1261 2,5	10	HFC
		Spring washer 3		203-804	3	10	HFC
		Nut M3		203-701	M3	10	HFC

Rev.

ST 14771

O

MO

SC

Parts list

Main receiver, B450
spare parts.



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-14771

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		Display unit		014-414	14414/B450-14	1		Ampl.
		Harness,		015-809	15809/B450	1		Ampl.
	I01	Meter 100µA DC		158-019	EW 40	1		Kyoritsu
	J01	Jack-socket, mini		164-078	R326.400.05	1		Rendar
	LS01	Loudspeaker		16 -025	2422-257-23721	1		Philips
		<u>Potentiometer:</u>						
	Ro1	50KΩ lin. w./switch		115-003	0 503-089 M/0	1		Ruwido
	Ro2	10KΩ log.		115-005	0 502-000	1		Ruwido
	Ro3	50KΩ lin.		115-004	0 502-000	1		Ruwido
		<u>Resistor:</u>						
	Ro4	6K8Ω 0,3W	5	101-047	CR25	1		
		<u>Switch:</u>						
	So1	Rotary switch. 1x8 pos.		182-019	M 120	1		MEC.
	So2	Toggle switch.		182-119	8C 1011	1		Micro.
	So3	Toggle switch.		182-120	8C 2021	1		Micro.

Rev.

ST 14880

O

MO

SC

Parts list

Frontplate, complete
B450

D 800929 mh

C

D. NO.

4-14880



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

SC 1	Pos	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. ± %	Code				Notes
		Filter unit		015-755	15755/C570	1		Ampl.
		Interconn. cable		015-642	15642/C570	1		Ampl.

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 1/1
			/tol. $\pm$ %	Code				Notes
		Extension board		p15-73o	1573o/B45o-o1	1		Ampl.
		Extension board		p15-735	15735/B45o-o2	1		Ampl.
		Extraction tool		815-8o4	4-15804/C497	1		MA 41-o776

Rev.

Rev.						
ST	15692	Parts list	Main receiver, B45o			D 800929 mh
O			Service tools			C
MO			Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO.	
SC			2730 Herlev	Telegr. Amplidan	4-15692	
			Denmark	Telex 35110 Secom		

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. $\pm$ %	Code				Notes
	J01	Multisocket, 3l p. fem.		163-o74	C42334-A56-A1	1		Siemens
	P01	Multiplug, 3lp. male.		163-o73	C42334-A55-A8	1		Siemens

Rev.

Rev.					
ST 1573o	Parts list	Extension board		D 8oo929 mh	
O		B45o-vol		C	
MO		 Herlev Hovedgade 201 2730 Herlev Denmark		D. NO.	
SC				4-1573o	
		Teleph. (02) *94 35 11			
		Telegr. Amplidan			
		Telex 35110 Secom			

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. $\pm$ %	Code				Notes
	Jol	Multisocket, 3lp. fem.		163-o74	C42334-A56-A1	1		Siemens
	Pol	Multiplug, 3lp. male.		163-o73	C42334-A55-A8	1		Siemens

Rev.

ST 15735

O

MO

SC

Parts list

Extension board
B450-o2



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 800929 mh

C

D. NO.

4-15735

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. $\pm$ %	Code				Notes
	DSol	Protecting lamp, 60V-10W		170-048	E14- 1.90020.111	1		Rafi
		<u>Connector:</u>						
	Jol	Receptacle, coax UHF,			22UHF-0-0-1/	1		Crimp.

Rev.				
ST 15744	Parts list 	Protecting lamp unit	D 801001 mh	
O		B450-32-01	C	
MO		Herlev Hovedgade 201	Teleph. (02) *94 35 11	D. NO.
SC		2730 Herlev Denmark	Telegr. Amplidan Telex 35110 Secom	4-15744

SC 1	Pos.	Description	Ordering reference		Type	Pc	SC 2	Sh. 2/2
			/tol. $\pm$ %	Code				Notes
		<u>Capacitor:</u>						
	Co1	15nF 250V	5	130-006	B32560-B3153-J	1		Siemens
	Co2	15nF 250V	5	130-006	B32560-B3153-J	1		Siemens
	Co3	15nF 250V	5	130-006	B32560-B3153-J	1		Siemens
	Co4	6,8nF 250V	10	130-004	B32560-B3682-K	1		Siemens
	Co5	6,8nF 250V	10	130-004	B32560-B3682-K	1		Siemens
	Co6	6,8nF 250V	10	130-004	B32560-B3682-K	1		Siemens
		<u>Coil:</u>						
	Lo1	Coil		015-761	688/15761	1		Ampl.
	Lo2	Coil		015-761	688/15761	1		Ampl.

Rev.

ST 15750

O

MO

SC

Parts list

Filter unit

B450-35-01



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.
4-15750

Ordering reference								Sh. 2/2
SC 1	Pos.	Description	/tol. $\pm$ %	Code	Type	Pc	SC 2	Notes
		<u>Capacitor:</u>						
	Co1	47opF 25oV	filmfoil 1	137-o24	2222-427-447o1	1		Philips
	Co2	47opF 25oV	filmfoil 1	137-o24	2222-427-447o1	1		Philips
		<u>Coil:</u>						
	Lo1	Choke 6 μ H-1,5A		169-100	B 82111-A-A4	1		Siemens
	Lo2	Choke 6 μ H-1,5A		169-100	B 82111-A-A4	1		Siemens

Rev.

ST 15751

O

MO

SC

Parts list

Filter unit

B45o-36-o1



Herlev Hovedgade 201
2730 Herlev
Denmark

Teleph. (02) *94 35 11
Telegr. Amplidan
Telex 35110 Secom

D 801001 mh

C

D. NO.

4-15751