RODEC®

Manufactured by: Transtel Sabima Ltd.
Duboisstraat 50
B-2060 Antwerpen Belgium
Phone: 00 32(0)3/237-36-07
Fax: 00 32(0)3/216-97-62
e-mail: info@rodec.be
URL: http://www.rodec.be

SERVICE MANUAL CX-1100

Version: 1.0

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2.0.0. OPERATING INSTRUCTIONS CX1100

2.1.0. SPECIFICATIONS

Inputs	Input sensitivity	Signal/Noise Ratio	Remarks
PHONO 1-3	2.3mV/50kΩ	< -77dB	RIAA correction
LINE 1-4, 4B, 5	220mV/50kΩ	< -90dB	
MIC 5 symm.	3.5mV/3.3kΩ	< -85dB	
Outputs			
Master 1 symm.	3.3V/600Ω		Subsonic filter
Master 1-2 assymm.	1.55V/10kΩ		Subsonic filter
Aux/FX-send assymm.	775mV/10kΩ		
Recording 1-3	500mV/10kΩ		
Aux	775mV/10kΩ		
Phones	12V/600Ω		Phones 200-600Ω

- Tone controls:	Bass +/-13dB @ 100Hz
	Middle +/-13dB @ 1kHz
	High +/-13dB @ 10kHz
- Subsonic filter:	-25dB @ 10Hz
- Power source:	Panels are leaving the factory on: 230V / 50Hz-60Hz
	on request: 100V-117V / 50Hz-60Hz
- Fuse:	T500mA
- Power consumption:	OFF=2.0VA ON=34.5VA
- Approbation:	CE-approved
- Dimensions:	Front: 482mm x 310mm (19" x 7HE)
	Chassis: 444mm x 295mm x 120mm
- Weight:	6.52kg

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

MODEL CX-1100
SERIAL NUMBER ..... (on the back of the set)

Please give model and serial number when you request info.

Thank you very much for purchasing the **RODEC** mixing panel CX-1100.
This mixing panel is a topline mixing panel, capable of outstanding performance in combination with high grade systems.

2.2.0. SAFETY INSTRUCTIONS

1) Do not expose the set to rain or water. Do not spill liquid or insert (metal) objects inside the set. Rain, water or liquid such as cosmetics as well as metal, may cause electric shocks, which can result in fire or shock hazard. If anything gets inside, unplug the power cord.

2) Frayed cords and broken plugs may cause a fire or shock hazard. Do not damage the power cord. When removing the power cord from wall outlet, be sure to unplug by holding the plug attachment and not pulling the cord.

3) Do not open the set, there are no serviceable parts inside.
Only qualified service technicians can service inside your set.

4) Operate the set only from a power source which is indicated on the rating label at the back of the set.

5) Do not use chemical products to clean the set. Do not use contact spray or other products in the faders. The contact spray can damage the faders.

2.3.0. INSTALLATION OF THE MIXING PANEL

1) The set can be used in every position.

2) Don't place the set into direct sunlight, or in a warm moist or dusty place.

3) To avoid disturbances, do not place the set in the neighbourhood of disturbing apparatuses.

2.4.0. FRONTPANEL, SWITCHES AND CONTROL

1) **Power switch**
Controls the supply of AC power to the set. One push turns the mixing panel on, a second push turns it off. It remains in a stand-by mode.

2) **Power "ON" on indicators**
These indicators light up when the power is on.

3) **VU meters**
The two left meters indicate the PFL signal. The right VU-meter displays the output signals, depending on the position of the VU-2 signal select switch (4).

4) **VU-2 signal select switch**
With this switch is it possible to select the signal displayed on the two right VU-meters. When the switch is on the AUX/FX-SEND position the level of the Aux/Fx-send output will be displayed. On the MIX position the mix-signal will be displayed. On the positions MASTER 1, MASTER 2 the according outputsignals will be displayed.

5) **Phones output**
Output for high level headphones monitoring. With the PFL switches (8) the connected audio sources or the output (in split mode) can be displayed without manipulating the output signal (Headphones 200-600Ω).

6) **Phones control**
This button is used to adjust the volume of the headphones.

7) **Phones-select potentiometer**
With this potentiometer, the signal for the headphones output can be selected. When turned completely to the left, the signal selected with the channel PFL-switches (8) appears on the headphones. When turned completely to the right, the mix-signal appears on the headphones. In between it results in a mix of the PFL-signal and the mix-signal.

8) **PFL switches**
With these switches you can select the different input sources that you will listen to with the headphones.

9) **Input selector**
This switch is used to select the input signal: LINE or PHONO on channel 1,2 and 3, LINE or LINE B on channel 4 and LINE/FX-RETURN or MICRO on channel 5.

10) **Level adjuster**
These controls are used to adjust input levels of the different inputs.

11) **Equalizer controls**
This is used to regulate the degree of treble, middle and bass in the sound.

12) **Aux-send switch**
This switch is used to add the signal of that channel to the Aux-send bus. This can be used to lead the signal to effect-units or monitors via the Aux-send output. It is possible to chose between Pre- or post-fader via jumpers inside the mixer.

13) **Routing selector**
With this selector the signal can be lead: 1) directely to the mix (ouput) or 2) to the left side of the crossfader or 3) to the right side of the crossfader.

14) **Channel faders**
Volume control for every input.

15) **Talk-over control**
Variable stage gain control level music suppression. Works only when the Routing-selector (13) of channel 5 stands on the MIX-position

16) **Aux/FX-send control**
Volume control towards effect-units or monitor amplifers

17) **Crossfader**
With this fader you can easily fade over between the channels with routing-selector (13) on X-position and the channels with routing-selector (13) on Y-position. When the knob stands completely to the left, the signal of the channels with Routing selector (13) on X will appear on the output. When the knob stands completely to the right, the signal of the channels with Routing selector (13) on Y will appear on the output.

18) **Master output faders**
Volume controls final output of mixer towards slave or integrated amplifers.

2.5.0. CONNECTIONS

A) **PHONO input**
Phono input with a sensitivity of 2.3mV and build in RIAA correction.

B) **Ground**
If the recordplayer has a ground wire, connect it to the ground terminal.

C) **LINE/LINE B input**
Input with a sensitivity of 220mV. To connect different apparatuses such as a CD-player, tuner, tape recorder, mini disc, cassette recorder or (HIFI) video recorder.

D) **LINE/FX-RET input**
Return input for effect-units like samplers, flangers, filters, multi-effect units, etc. This input can also be used for other LINE apparatusses.

E) **Microphone input**
Balanced microphone input with a sensitivity of 3.5mV. Combined connector XLR + JACK. The JACK connector can also be used for unbalanced microphones.

F) **Effects IN/OUT**
Input and output to connect effect apparatus to the microphone channel. If there is no plug in the JACK, the microphone channel works normally, if there is a plug inserted in the JACK, the internal link is interrupted. The sensitivity of this IN/OUT connection is 220mV.

G) **Recording outputs**
Outputs to connect cassette recorder, MD-recorder or (HIFI) video recorder to make recordings.

H) **AUX output**
Output for different apparatuses as integrated amplifiers, mixers or recorders.
The output level is 775mV.

I) **Master output 1 Assymetrical**
Assymetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (18) from 0 to maximum (1.55V).

J) **Master output 2 Assymetrical**
Assymetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 2 (18) from 0 to maximum (1.55V).

K) **AUX/FX-SEND output**
Extra output to connect effect appartuses, monitorspeakers or recorders. Can also be used to create a separate mix. The aux output connection can be made before or after the channel faders, this can be changed internally with jumpers.

L) **Master output 1 Symmetrical**
Symmetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (18) from 0 to maximum (3.3V).

M) **Master output 2 Symmetrical**
Optional symmetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 2 (18) from 0 to maximum (3.3V).

Please use signal cables shorter than 1 meter for the inputs and the outputs.

2.6.0. OPERATING INSTRUCTIONS

1) First switch all the connected music-sources on (like CD-players, recordplayers, etc.). Then switch the power button (1) to turn the power supply on. The power indicators (2) will light up and a few seconds later the mixing panel will be in operation, ready state. In this stage you can turn on the power amplifiers.

2) Connect the headphones to phones output (5).

3) Choose with input switch (9) the right source.

4) Switch the PFL button (8) in position ON to listen at the desired source. Turn the phones select button (7) completely to the left and turn the phones volume potentiometer (6) up to the desired position, than you get the stereo signal on the headphones and the two left VU-meters. The PFL circuit works as a sum-system, there is a possibility to listen to more sources at the same time. Al these operations have no influence on the outputsignal! Adjust with the level control (10) the input signal so, that the red indicators of the level meters (3) light up now and then. Adjust if necessary the quality of the sound with the equalizer (11).

   LOOK OUT : - The equalizer at each input is used to adjust the different sound between the sources. To correct the acoustic of the room it is probably best to use an external equalizer.

5) Put the routing switch (13) on MIX position.

6) Slide up the fader (14) of the choosen source.

7) Adjust with the master (18) the volume.

8) If you like, you can mix the PFL signal, selected with the channel PFL switches (8) with the mix signal, by turning the Phones select button (7).

9) To change the source, repeat point 3) to 6).

10) If you want to use the crossfader, you can route the channel to the left (X) side of the crossfader by putting the routing switch (13) on CF-X position. Or to the right (Y) side of the crossfader when you put the routing switch (13) on the CF-Y position.

11) To add a microphone signal, connect the mike to the MIC input (E) input. Select MICRO with the Input selector switch (9) of channel 5. Turn the level control (10) and the talk-over (15) to zero, slide up the fader (14) of channel 5 to maximum and adjust with the level button (10) the volume of the microphone. Adjust with the equalizer (11) of channel 5 the sound of the mike. To use the talk over, adjust the talk over button (15) (0= no decrease, 10= total decrease). The talk-over only works when the Routing-switch (13) of channel 5 is on MIX position.

12) External sound-effect units must be connected to the AUX/FX-SEND output (K) and the LINE/FX-RET input (D). Push the channel AUX-send switch (12) of the channel you want to connect to the effect-unit and adjust the volume of the AUX/FX-SEND output (K) with the Aux/FX-send control (16). The signal can be mixed in via channel 5, select LINE/FX-RETURN with the Input selector switch (9) of channel 5. Now take steps 4, 5 and 6 like discribed above. You can also use the talk-over switch (15) in a same way as discribed in step 11.

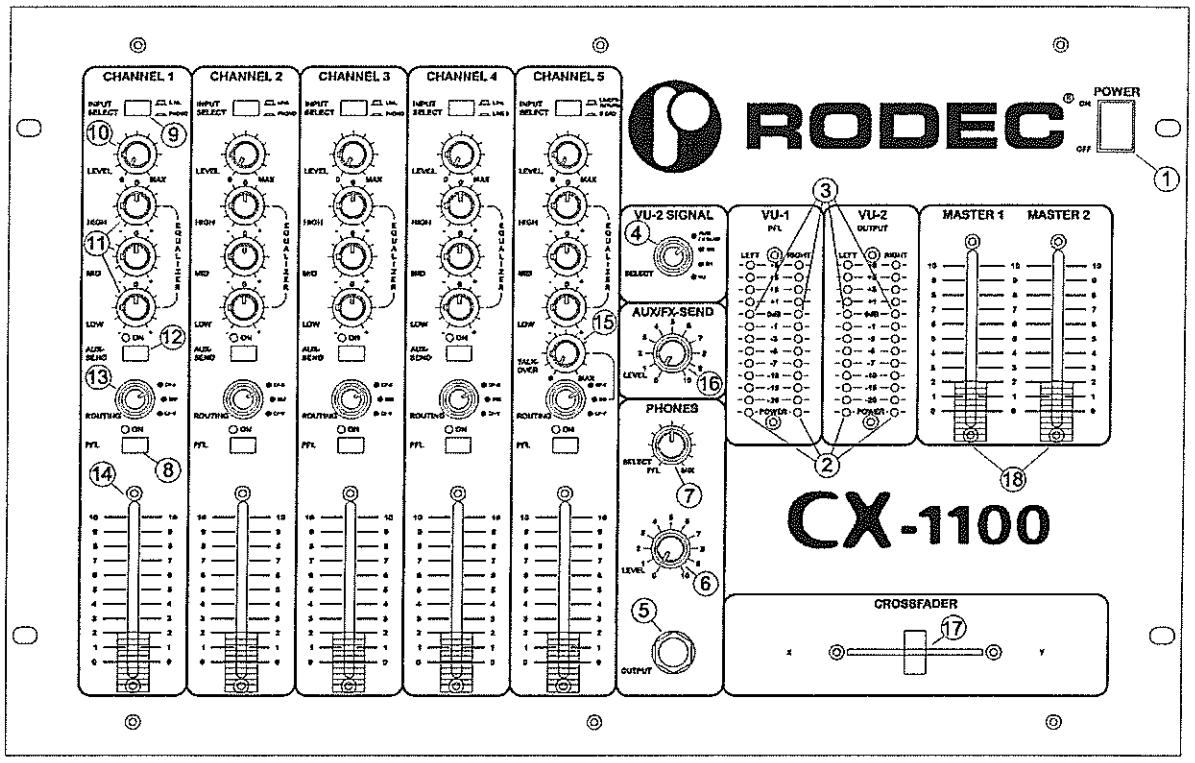
13) If you like to record the mixed signal, you can simply do this by connecting a recorder to the record-connectors (G).

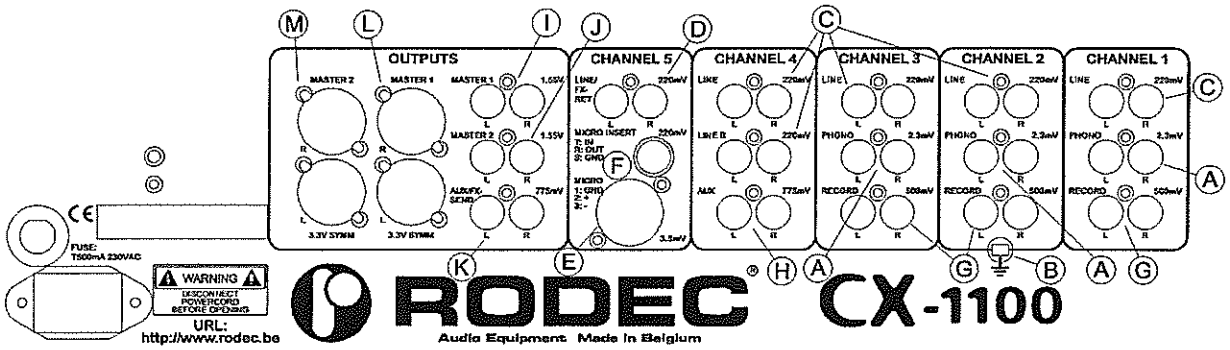
14) On the right VU-meter, the signal that has been selected with the VU2-signal select switch (4), will appear. If you want to compare via the headphones and the left VU-meters the pre-fade signal with the output signal, you can do this by putting the rotative switch (4) on the SUM-position. By this the PFL-signal appears on the two left VU-meters and the output-signal on the other two VU-meters.

2.7.0. SUBSONIC FILTER

The two master outputs have a subsonic filter to protect the bass loudspeakers from DC and subsonic signals. This filter can not be switched off. The filter gives a reduction of 25dB at 10Hz.

2.8.0. PICTURES





3.0.0. TECHNICAL INFORMATION

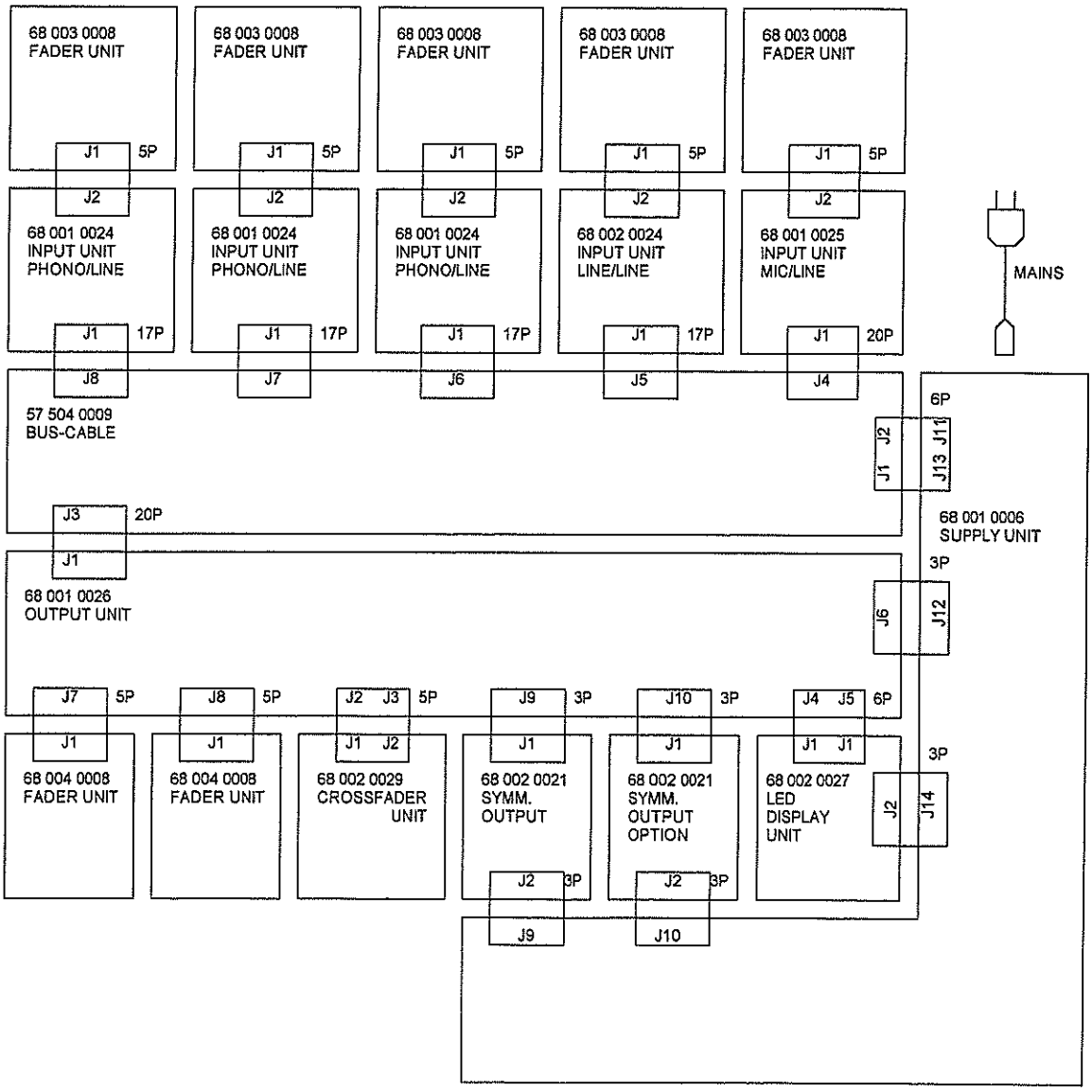
3.1.0. CX-1100

3.1.1. PART LIST

Refdes	Device	Order code	Function
	Switch Rocker 2x2 black body red rocker	11 503 0001	Power switch
	Transfo Toroidal 19.5-0-19.5V/40VA 230/117/100V	42 501 0004	
	Fuse T500mA 5x20mm	48 001 500m	Primary fuse
	Fuse holder	51 503 0002	
	Flat cable Busbar CX-1100	57 504 0009	
	Mains filter 1A	57 508 0001	Mains input
	Earth terminal	57 510 0001	
	Solder lug 3mm	57 510 0002	
	Power cable 3pol	60 002 0001	Mains cable
	Helavia A1bis 20mm	60 002 0003	
	Knob RODEC Soft Black/Red 10mm 180°/12	63 001 0022	
	Knob RODEC Soft Black/Grey 10mm 180°/12	63 001 0023	
	Knob RODEC Soft Black/White 10mm 180°/12	63 001 0025	
	Knob RODEC Soft Black/White 12mm 315°/14	63 001 0026	
	Knob RODEC Soft Black/White 12mm 180°/12	63 001 0027	
	Knob RODEC Soft Black/White 12mm 300°/14	63 001 0030	
	Knob RODEC Soft Black/Blue 12mm 180°/12	63 001 0031	
	Knob Black shaft=1.2x4	63 003 0002	
	Knob Soft touch Black/White T-shaft	63 003 0003	
	Pushknob Rectangle black 5,5x10	63 004 0003	
	Alps fader unit 90° cable=150mm	68 003 0008	Channel faders
	Alps fader unit 90° cable=260mm	68 004 0008	Master faders
	Electronic symmetrical output unit V2	68 002 0021	
	Input unit Phono/Line CX1100	68 001 0024	
	Input unit Line/Line CX1100	68 002 0024	
	Mic line input unit CX1100	68 001 0025	
	Output unit CX1100	68 001 0026	
	Dual LED unit CX1100	68 002 0027	
	Supply unit CX1100	68 002 0028	
	KO-ON CF 45mm unit with cable=150mm	68 002 0029	Crossfader
	Hi-Lo 3.2x8.5	71 001 0004	
	Bold M3x6 CFH black	71 001 0005	
	Thread forming screw M4x16 THP	71 001 0007	
	Bold VK M3x10 black	71 001 0009	
	Bold M3x6 black	71 001 0010	
	Slotted screw M4x70	71 001 0013	
	Nut M3 brass	71 002 0001	
	Nut M4	71 002 0002	
	Hexagon domed cap nut M3	71 002 0003	
	Nut JACK nylon	71 002 0004	
	Washer nylon 3mm	71 003 0001	
	Washer metal D10/7	71 003 0002	
	Washer nylon 4/8	71 003 0003	
	Washer JACK	71 003 0004	
	Lock washer M3	71 004 0001	
	Blocsur JZE 8	71 004 0003	
	Lock washer M4	71 004 0004	
	Blocsur JZ6	71 004 0005	
	Spacer h3/3 nylon	71 005 0005	
	Frontpanel CX1100	74 001 0015	
	Connectionpanel CX1100	74 002 0004	
	Bottombox CX1100	74 003 0003	
	Apparatus foot	74 005 0003	
	Cap ring Natural for M4	74 005 0005	

	Cover cap Black D=10.8mm	74 005 0006	
	Hole plug 24mm black	74 006 0009	
	Tape double sided 15mm	77 002 0002	
	Plastic bag 700mm x 500mm	80 001 0002	
	Plastic bag 180mm x 250mm	80 001 0004	
	Box CX-1100/MX180/240/300 MKIII	80 002 0001	
	Isomo CX-1100	80 003 0005	
	User manual CX-1100	83 002 0007	
	Label Serialnumber RODEC	83 004 0003	
	Warranty card	83 004 0004	
	Pink pack message	83 004 0005	
	Label Box CX-1100	83 004 0016	
	Mains wire MX180 MKIII/MX240 MKIII	94 001 0011	
	Anti dust cloth 35x100	94 001 0013	

3.1.2. WIRING DIAGRAM



3.2.0. OPTIONS.

- 94 001 0012: Fader unit P&G
  This is an upgrading kit for a fader of a CX-1100. This is a Penny & Giles high quality studio fader that replaces the standard Alps faders.
- 94 001 0028: Symmetrical output unit option CX-1100
  With this option there can be placed a second symmetrical output in the CX-1100.

3.3.0. DIFFERENCE BETWEEN 66 xxx xxxx AND 68 xxx xxxx

- 66 xxx xxxx = the order code for the PCB (without the components)
- 68 xxx xxxx = the order code for the assembled PCB
  68 001 xxxx = first type of assembling
  68 002 xxxx = second type of assembling
  etc.

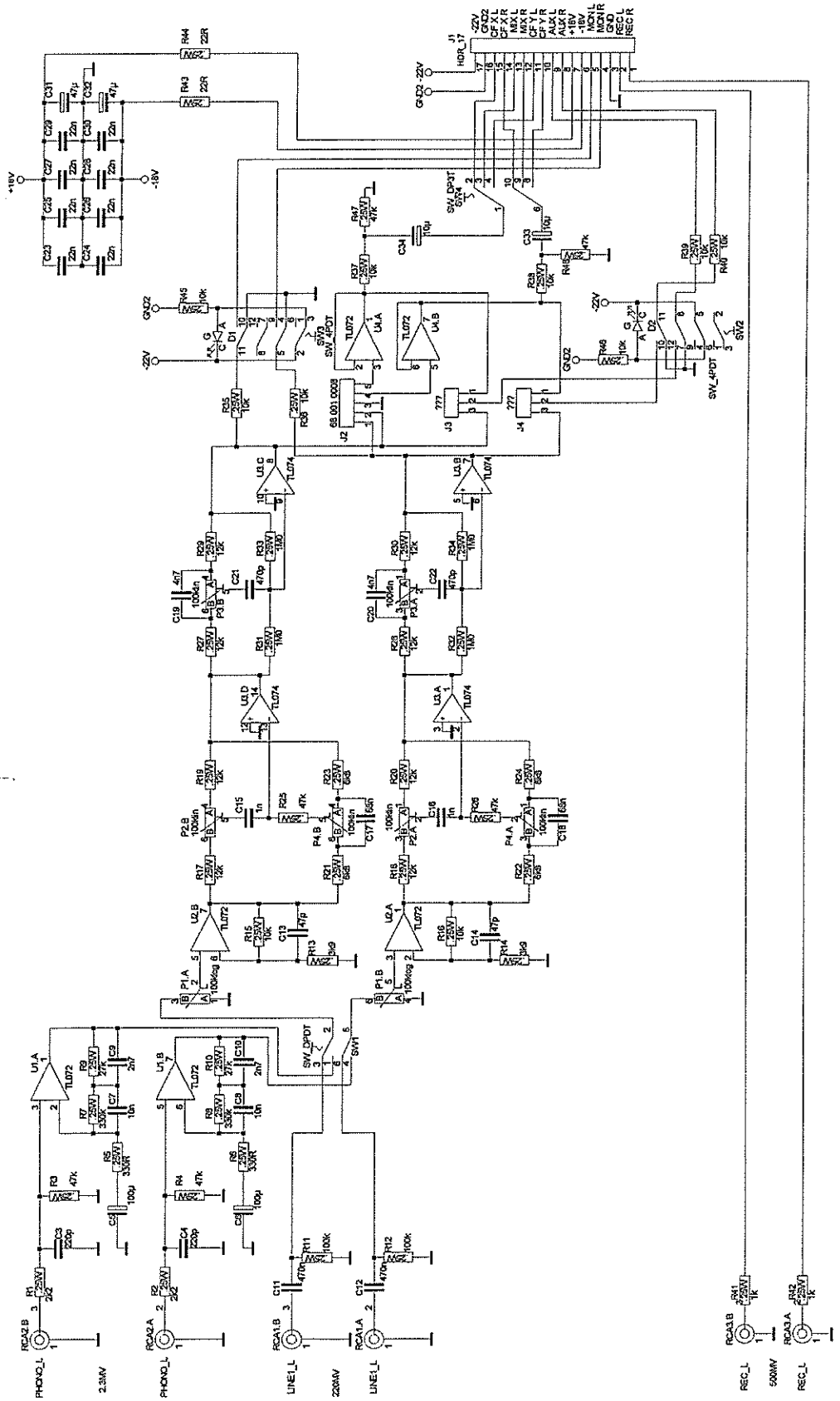
3.4.0. SIGNAL NUMBERS

The following numbers are used for the numbering of the signals in the several connectors, which are connecting the different PCB's.

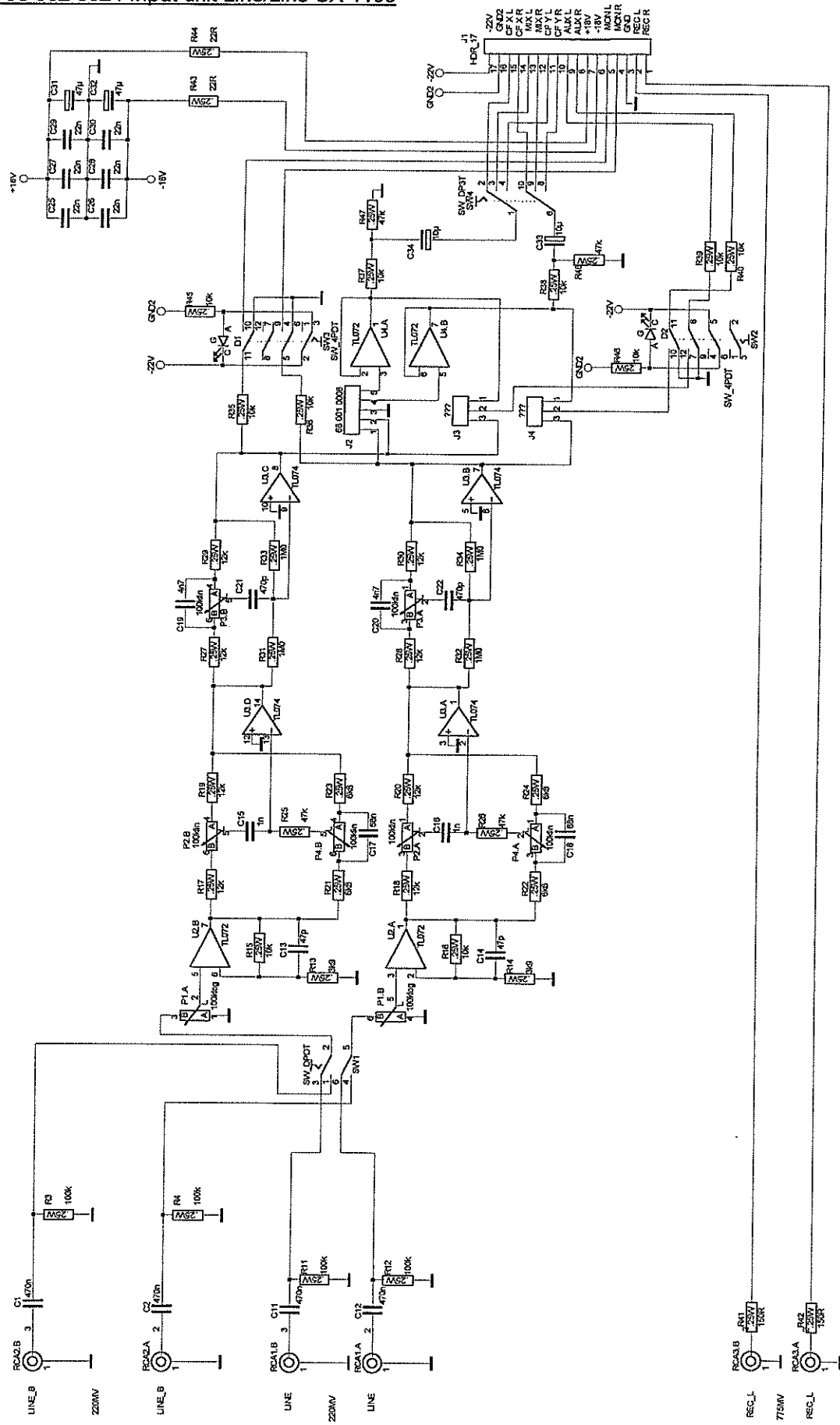
NR 1 → AGC: The (automatic gain control) compressor signal, depending on the position of the Talk-over knob
NR 2 → MIC R: The right DJ mic signal
NR 3 → MIC L: The left DJ mic signal
NR 4 → REC R: The right record signal
NR 5 → REC L: The left record signal
NR 6 → GND: The ground inside the table
NR 7 → MON R: The right signal, selected with the PFL switches
NR 8 → MON L: The left signal, selected with the PFL switches
NR 9 → -18V: -18V Power supply
NR 10 → +18V: +18V Power supply
NR 11 → AUX R: Right Aux-send signal
NR 12 → AUX L: Left Aux-send signal
NR 13 → CF Y R: The right crossfader signal
NR 14 → CF Y L: The left crossfader signal
NR 15 → MIX R: The right mix signal
NR 16 → MIX L: The left mix signal
NR 17 → CF X R: The right crossfader signal
NR 18 → CF X L: The left crossfader signal
NR 19 → GND: The ground inside the table
NR 20 → -22V Power supply

4.0.0 SCHEMATIC DIAGRAMS.

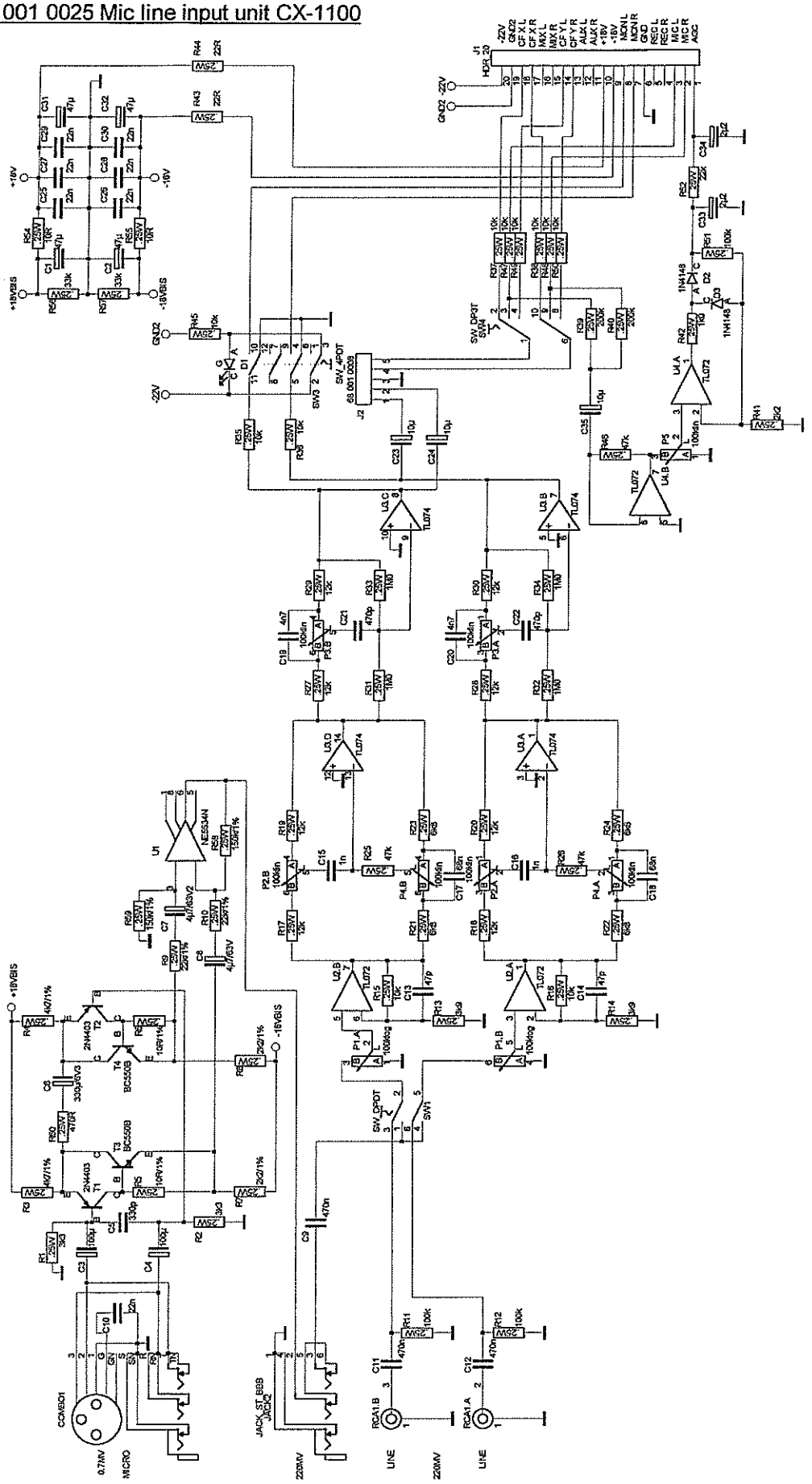
4.1.0. 68 001 0024 Input unit Phono/Line CX-1100



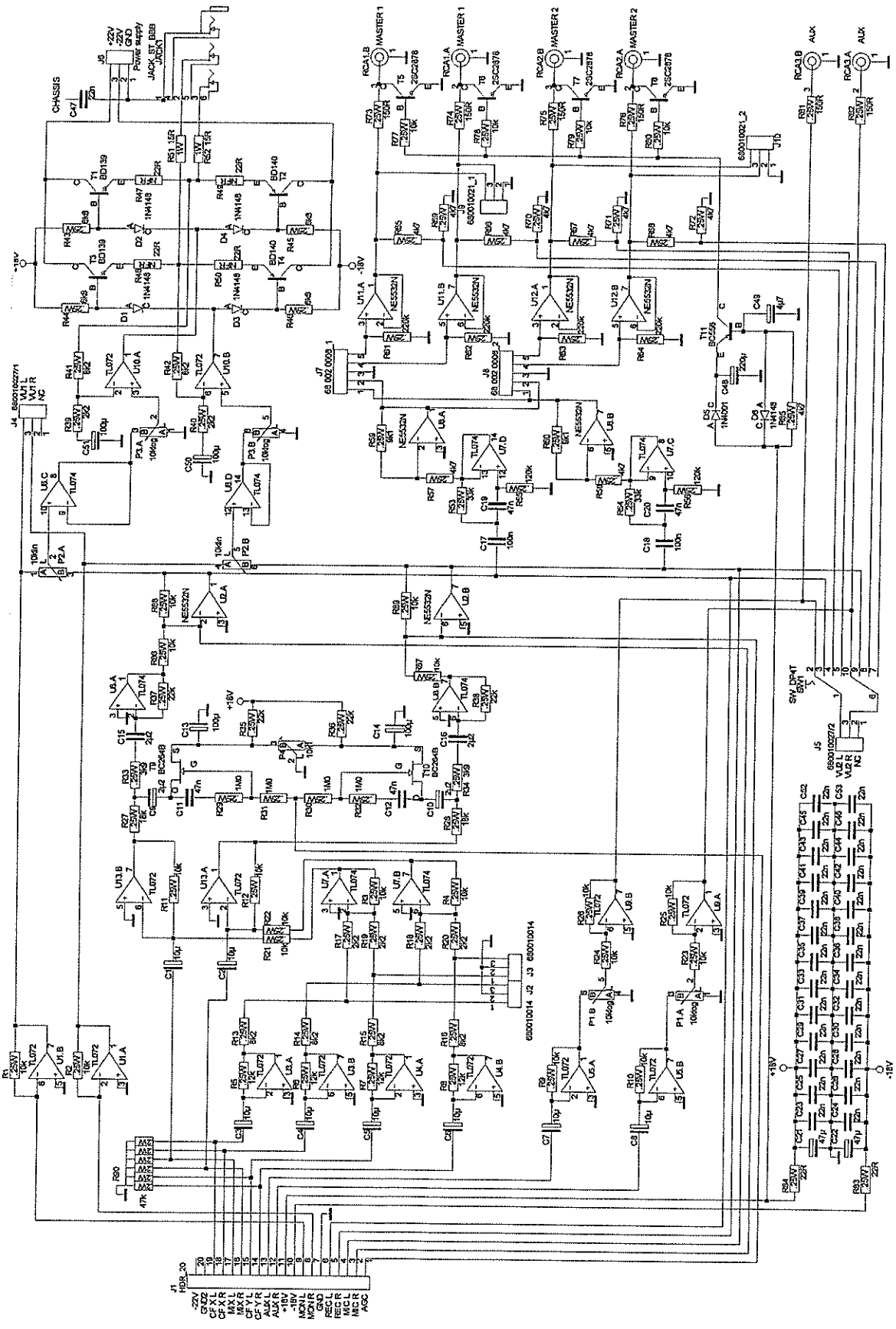
4.2.0. 68 002 0024 Input unit Line/Line CX-1100



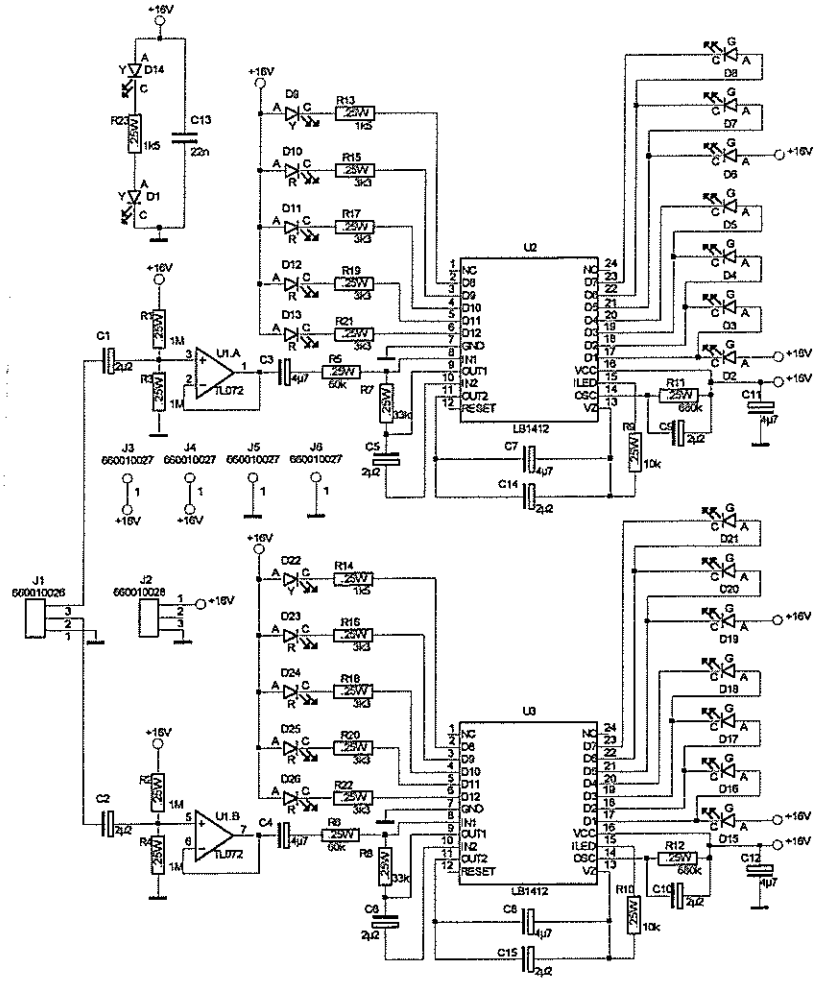
4.3.0. 68 001 0025 Mic line input unit CX-1100



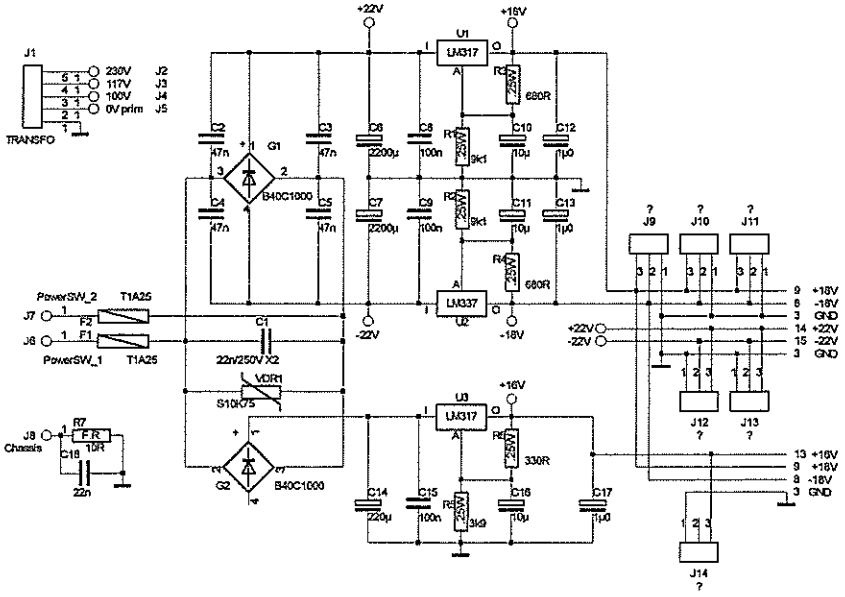
4.4.0. 68 001 0026 Output unit CX-1100



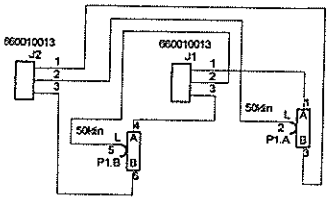
4.5.0. 68 002 0027 Dual LED unit CX-1100



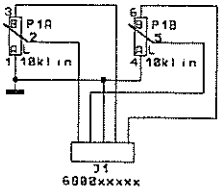
4.6.0. 68 002 0028 Supply unit CX-1100



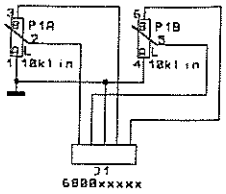
4.7.0. 68 002 0029 KO-ON CF 45mm unit with cable=300mm



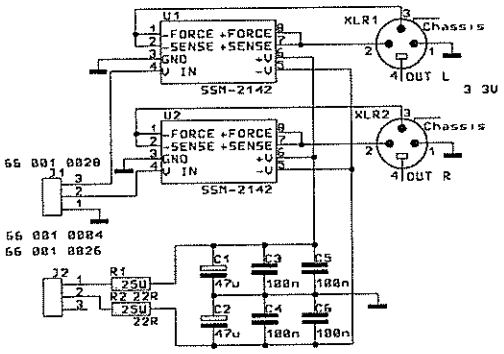
4.8.0. 68 003 0008 Alps fader unit 90° cable=150mm



4.9.0. 68 004 0008 Alps fader unit 90° cable=260mm



4.10.0. 68 002 0021 Electronic symmetrical output unit V2



5.0.0. PARTS LISTS

5.1.0. 68 001 0024 Input unit Phono/Line CX-1100

Refdes	Device	Order code	Function
R5, R6	Resistor 330R 0.4W 5%	02 501 0k33	
R41, R42	Resistor 1k0 0.4W 5%	02 501 01k0	
R1, R2	Resistor 2k2 0.4W 5%	02 501 02k2	
R13, R14	Resistor 3k9 0.4W 5%	02 501 03k9	
R21...R24	Resistor 6k8 0.4W 5%	02 501 06k8	
R15, R16, R35...R40, R45, R46	Resistor 10k 0.4W 5%	02 501 010k	
R17...R20, R27...R30	Resistor 12k 0.4W 5%	02 501 012k	
R9, R10	Resistor 27k 0.4W 5%	02 501 027k	
R3, R4, R25, R26, R47, R48	Resistor 47k 0.4W 5%	02 501 047k	
R11, R12	Resistor 100k 0.4W 5%	02 501 0M10	
R7, R8	Resistor 330k 0.4W 5%	02 501 0M33	
R31...R34	Resistor 1M0 0.4W 5%	02 501 01M0	
R43, R44	Resistor Fuse 22R 0.5W 5%	02 502 022R	
C3, C4	Capacitor ceramic 220p 10%	04 501 0n22	
C21, C22	Capacitor ceramic 470p 10%	04 501 0n47	
C15, C16	Capacitor ceramic 1n0 10%	04 501 01n0	
C9, C10	Capacitor ceramic 2n7 10%	04 501 02n7	
C19, C20	Capacitor ceramic 4n7 10%	04 501 04n7	
C7, C8	Capacitor film 10n/63V 10%	04 502 010n	
C17, C18	Capacitor film 68n/63V 10%	04 502 068n	
C11, C12	Capacitor film 470n/63V 10%	04 502 0µ47	
C5, C6	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C31, C32	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C33, C34	Capacitor electrolytic 10µ/50V radial	04 508 10µ0	
C23...C30	Capacitor multilayer 22n	04 513 022n	
P1	Potmeter Rotative 2x100klog D-shaft 6mm 90°	09 502 0001	Input level
P2...P4	Potmeter Rotative 2x100klin D-shaft 6mm 90°	09 502 0002	Low/Mid/High equalizer
SW4	Switch Rotative 2x3pos D-shaft 6mm	11 501 0002	Routing
SW2, SW3	Switch Push 2x4/90°	11 504 0003	Aux-send/PFL
SW1	Switch Push 2x2/90°	11 504 0004	Input select
U1, U2, U4	IC Dual opamp TL072CP	24 501 0001	
U3	IC Quad opamp TL074CN	24 501 0002	
D1, D2	LED green D=3mm 90°	36 501 0007	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
	Wirejumper 5mm	51 504 0002	
	Wirejumper 10mm	51 504 0003	
	Wirejumper 15mm	51 504 0004	
RCA1, RCA3	RCA 2pol/90° Ni white/red	57 501 0005	Line input, Record output
RCA2	RCA 2pol/90° Au white/red	57 501 0006	Phono input
J2	Connector lock 5p/0° M	57 505 0001	
J3, J4	Connector 3p/0° M	57 505 0004	
J1	Connector 17p/90° M	57 505 0005	
	Shunt 2.54mm open top	57 510 0009	Aux-send pre- or post-fader
PCB1	Print input CX1100	66 001 0024	

5.2.0. 68 002 0024 Input unit Line/Line CX-1100

Refdes	Device	Order code	Function
R41, R42	Resistor 150R 0.4W 5%	02 501 0k15	
R13, R14	Resistor 3k9 0.4W 5%	02 501 03k9	
R21...R24	Resistor 6k8 0.4W 5%	02 501 06k8	
R15, R16, R35...R40,	Resistor 10k 0.4W 5%	02 501 010k	

R45, R46			
R17...R20, R27...R30	Resistor 12k 0.4W 5%	02 501 012k	
R25, R26, R47, R48	Resistor 47k 0.4W 5%	02 501 047k	
R3, R4, R11, R12	Resistor 100k 0.4W 5%	02 501 0M10	
R31...R34	Resistor 1M0 0.4W 5%	02 501 01M0	
R43, R44	Resistor Fuse 22R 0.5W 5%	02 502 022R	
C21, C22	Capacitor ceramic 470p 10%	04 501 0n47	
C15, C16	Capacitor ceramic 1n0 10%	04 501 01n0	
C19, C20	Capacitor ceramic 4n7 10%	04 501 04n7	
C17, C18	Capacitor film 68n/63V 10%	04 502 068n	
C1, C2, C11, C12	Capacitor film 470n/63V 10%	04 502 0µ47	
C31, C32	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C33, C34	Capacitor electrolytic 10µ/50V radial	04 508 10µ0	
C25...C30	Capacitor multilayer 22n	04 513 022n	
P1	Potmeter Rotative 2x100klog D-shaft 6mm 90°	09 502 0001	Input level
P2...P4	Potmeter Rotative 2x100klin D-shaft 6mm 90°	09 502 0002	Low/Mid/High equalizer
SW4	Switch Rotative 2x3pos D-shaft 6mm	11 501 0002	Routing
SW2, SW3	Switch Push 2x4/90°	11 504 0003	Aux-send/PFL
SW1	Switch Push 2x2/90°	11 504 0004	Input select
U2, U4	IC Dual opamp TL072CP	24 501 0001	
U3	IC Quad opamp TL074CN	24 501 0002	
D1, D2	LED green D=3mm 90°	36 501 0007	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
	Wirejumper 5mm	51 504 0002	
	Wirejumper 10mm	51 504 0003	
	Wirejumper 15mm	51 504 0004	
RCA1...RCA3	RCA 2pol/90° Ni white/red	57 501 0005	2xLine input, Aux output
J2	Connector lock 5p/0° M	57 505 0001	
J3, J4	Connector 3p/0° M	57 505 0004	
J1	Connector 17p/90° M	57 505 0005	
	Shunt 2.54mm open top	57 510 0009	Aux-send pre- or post-fader
PCB1	Print input CX1100	66 001 0024	

5.3.0. 68 001 0025 Mic line input unit CX-1100

Refdes	Device	Order code	Function
R60	Resistor 470R 0.4W 5%	02 501 0k47	
R42	Resistor 1k0 0.4W 5%	02 501 01k0	
R41	Resistor 2k2 0.4W 5%	02 501 02k2	
R1, R2	Resistor 3k3 0.4W 5%	02 501 03k3	
R13, R14	Resistor 3k9 0.4W 5%	02 501 03k9	
R21...R24	Resistor 6k8 0.4W 5%	02 501 06k8	
R15, R16, R35...R38, R45, R47...R50	Resistor 10k 0.4W 5%	02 501 010k	
R17...R20	Resistor 12k 0.4W 5%	02 501 012k	
R62	Resistor 22k 0.4W 5%	02 501 022k	
R56, R57	Resistor 33k 0.4W 5%	02 501 033k	
R25, R26, R46	Resistor 47k 0.4W 5%	02 501 047k	
R11, R12, R51	Resistor 100k 0.4W 5%	02 501 0M10	
R39, R40	Resistor 200k 0.4W 5%	02 501 0M20	
R31...R34	Resistor 1M0 0.4W 5%	02 501 01M0	
R54, R55	Resistor Fuse 10R 0.5W 5%	02 502 010R	
R43, R44	Resistor Fuse 22R 0.5W 5%	02 502 022R	
R5, R6	Resistor 10R0 0.6W 1%	02 503 10R0	
R7, R8	Resistor 2k20 0.6W 1%	02 503 2k20	
R3, R4	Resistor 4k70 0.6W 1%	02 503 4k70	
R9, R10	Resistor 22k0 0.6W 1%	02 503 22k0	
R58, R59	Resistor 150k 0.6W 1%	02 503 0M15	
C5	Capacitor ceramic 330p 10%	04 501 0n33	

C21, C22	Capacitor ceramic 470p 10%	04 501 0n47	
C15, C16	Capacitor ceramic 1n0 10%	04 501 01n0	
C19, C20	Capacitor ceramic 4n7 10%	04 501 04n7	
C17, C18	Capacitor film 68n/63V 10%	04 502 068n	
C9, C11, C12	Capacitor film 470n/63V 10%	04 502 0µ47	
C3, C4	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C1, C2, C31, C32	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C23, C24, C35	Capacitor electrolytic 10µ/50V radial	04 508 10µ0	
C33, C34	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C7, C8	Capacitor electrolytic 4µ7/63V radial	04 509 4µ70	
C25...C30	Capacitor multilayer 22n	04 513 022n	
C6	Capacitor electrolytic 330µ/6.3V radial	04 518 0m33	
P1	Potmeter Rotative 2x100klog D-shaft 6mm 90°	09 502 0001	Input level
P2...P4	Potmeter Rotative 2x100klin D-shaft 6mm 90°	09 502 0002	Low/Mid/High equalizer
P5	Potmeter Rotative 1x100klin D-shaft 6mm 90°	09 502 0004	Talk-over
SW4	Switch Rotative 2x3pos D-shaft 6mm	11 501 0002	Routing
SW3	Switch Push 2x4/90°	11 504 0003	PFL
SW1	Switch Push 2x2/90°	11 504 0004	Input select
D2, D3	Diode 1N4148	16 501 0002	
T3, T4	Transistor BC550B	19 501 0004	
T1, T2	Transistor 2N4403	19 502 0005	
U2, U4	IC Dual opamp TL072CP	24 501 0001	
U3	IC Quad opamp TL074CN	24 501 0002	
U1	IC Opamp NE5534N	24 501 0004	
D1	LED green D=3mm 90°	36 501 0007	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
	Wirejumper 5mm	51 504 0002	
	Wirejumper 10mm	51 504 0003	
	Wirejumper 15mm	51 504 0004	
RCA1	RCA 2pol/90° Ni white/red	57 501 0005	Line input
COMBO1	COMBO XLR-JACK 6p??? 90°	57 502 0006	Microphone input
JACK2	JACK STEREO 90°/6.35mm small	57 503 0002	Insert
J2	Connector lock 5p/0° M	57 505 0001	
J1	Connector 20p/90° M	57 505 0006	
PCB1	Print mic line input CX1100	66 001 0025	

5.4.0. 68 001 0026 Output unit CX-1100

Refdes	Device	Order code	Function
R47...R50	Resistor 22R 0.4W 5%	02 501 022R	
R73...R76, R81, R82	Resistor 150R 0.4W 5%	02 501 0k15	
R17...R20, R39, R40	Resistor 2k2 0.4W 5%	02 501 02k2	
R33, R34	Resistor 3k9 0.4W 5%	02 501 03k9	
R57, R58, R65...R72, R85	Resistor 4k7 0.4W 5%	02 501 04k7	
R43...R46	Resistor 6k8 0.4W 5%	02 501 06k8	
R13...R16, R41, R42	Resistor 8k2 0.4W 5%	02 501 08k2	
R59, R60	Resistor 9k1 0.4W 5%	02 501 09k1	
R1...R4, R9...R12, R21...R26, R77...R80, R86...R89	Resistor 10k 0.4W 5%	02 501 010k	
R5...R8	Resistor 12k 0.4W 5%	02 501 012k	
R27, R28	Resistor 18k 0.4W 5%	02 501 018k	
R35...R38	Resistor 22k 0.4W 5%	02 501 022k	
R53, R54	Resistor 33k 0.4W 5%	02 501 033k	
R55, R56	Resistor 120k 0.4W 5%	02 501 0M12	
R61...R64	Resistor 220k 0.4W 5%	02 501 0M22	
R29...R32	Resistor 1M0 0.4W 5%	02 501 01M0	

R83, R84	Resistor Fuse 22R 0.5W 5%	02 502 022R	
R51, R52	Resistor 15R 1W 5%	02 505 15R0	
R90	Resistor network bussed 6 x 47k	02 506 0001	
C11, C12, C19, C20	Capacitor film 47n/63V 10%	04 502 047n	
C17, C18	Capacitor film 100n/63V 10%	04 502 0µ10	
C13, C14, C50, C51	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C21, C22	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C48	Capacitor electrolytic 220µ/35V radial	04 507 220µ	
C1...C8	Capacitor electrolytic 10µ/50V radial	04 508 10µ0	
C9, C10	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C49	Capacitor electrolytic 4µ7/63V radial	04 509 4µ70	
C23...C47, C52...C53	Capacitor multilayer 22n	04 513 022n	
C15, C16	Capacitor film 2µ2/50V 10%	04 516 2µ20	
P4	Trimmer vertical 10k	09 501 0002	Talk-over adjust
P1, P3	Potmeter Rotative 2x20klog D-shaft 6mm 90°	09 502 0003	Aux-send level/Phones level
P2	Potmeter Rotative 2x10klin D-shaft 6mm 90°	09 502 0010	Phones select
SW1	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU2 signal select
D1...D4, D6	Diode 1N4148	16 501 0002	
D5	Diode 1N4001	16 501 0003	
T5...T8	Transistor 2SC2878	19 501 0003	
T1, T3	Transistor BD139	19 501 0005	
T2, T4	Transistor BD140	19 502 0002	
T11	Transistor BC556A (of BC556B)	19 502 0004	
T9, T10	JFET BF245A (of BC264B of BC264A)	19 504 0001	
U1, U3...U5, U9, U10, U13	IC Dual opamp TL072CP	24 501 0001	
U6, U7	IC Quad opamp TL074CN	24 501 0002	
U2, U8, U11, U12	IC Dual opamp NE5532AP	24 501 0003	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
RCA1...RCA3	RCA 2pol/90° Ni white/red	57 501 0005	Master 1 output, Master 2 output, Aux-send output
JACK1	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output
J6	Flatcable 3p 220mm 2,54mm 26AWG 1con	57 504 0010	
J7, J8	Connector lock 5p/0° M	57 505 0001	
J2...J5	Connector lock 3p/0° M	57 505 0002	
J1	Connector 20p/90° M	57 505 0006	
PCB1	Print output CX1100	66 001 0026	

5.5.0. 68 002 0027 Dual LED unit CX-1100

Refdes	Device	Order code	Function
R13, R14, R23	Resistor 1k50 0.125W 1%	02 001 1k50	
R15...R22	Resistor 3k30 0.125W 1%	02 001 3k30	
R9, R10	Resistor 10k0 0.125W 1%	02 001 10k0	
R7, R8	Resistor 33k0 0.125W 1%	02 001 33k0	
R5, R6	Resistor 62k0 0.125W 1%	02 001 62k0	
R11, R12	Resistor 680k 0.125W 1%	02 001 680k	
R1...R4	Resistor 1M00 0.125W 1%	02 001 1M00	
C1, C2, C5, C6, C9, C10, C14, C15	Capacitor electrolytic 2µ2/50V	04 002 2µ20	
C3, C4, C7, C8, C11, C12	Capacitor electrolytic 4µ7/35V	04 003 4µ70	
C13	Capacitor 22n 50V 10%	04 004 22n0	
U1	IC Dual opamp TL072CD	36915	
U2, U3	IC LB1412	36974	
D10...D13, D23...D26	LED red D=3mm	36 501 0004	
D2...D8, D15...D21	LED green D=3mm	36 501 0005	
D1, D9, D14, D22	LED yellow D=3mm	36 501 0006	
	Wirejumper 5mm	51 504 0002	

J2	Flatcable 3p 150mm 2,54mm 26AWG 1con	57 504 0006	
J1	Flatcable 3p 220mm 2,54mm 26AWG 1con	57 504 0010	
PCB1	Print LED CX1100	66 001 0027	

5.6.0. 68 002 0028 Supply unit CX-1100

Refdes	Device	Order code	Function
R7	Resistor Fuse 10R 0.5W 5%	02 502 010R	
R6	Resistor 330R 0.6W 1%	02 503 330R	
R3, R4	Resistor 680R 0.6W 1%	02 503 680R	
R5	Resistor 3k90 0.6W 1%	02 503 3k90	
R1, R2	Resistor 9k10 0.6W 1%	02 503 9k10	
VDR1	Varistor SIOV S10K75	02 504 0003	
C2...C5	Capacitor film 47n/63V 10%	04 502 047n	
C14	Capacitor electrolytic 220µ/35V radial	04 507 220µ	
C6, C7	Capacitor electrolytic 2200µ/35V radial	04 511 2m20	
C1	Capacitor polyester 22n 275V MKT X2	04 512 22n0	
C18	Capacitor multilayer 22n	04 513 022n	
C8, C9, C15	Capacitor multilayer 100n	04 513 0m10	
C12, C13, C17	Capacitor tantaal 1µ0/35V 20%	04 517 1µ00	
C10, C11, C16	Capacitor tantaal 10µ/35V 20%	04 517 10µ0	
G1	Bridge rect. 1A	16 502 0002	
U1, U3	PVR adjustable LM317T	24 502 0004	
U2	NVR adjustable LM337T	24 502 0006	
F1, F2	Fuse T1A25 5x20mm	48 001 1A25	
	Fuseholder print 5x20	51 503 0001	
	Heatsink 27x38	19727	
J9...J14	Connector lock 3p/0° M	57 505 0002	
J1	Connector PCB Transfo 5p	57 510 0010	
J6, J7	Power switch cable 80mm with Faston 4.8mm	57 510 0012	
PCB1	Print supply CX1100 / MX180/240/300 MKIII	66 001 0028	
	Bold M3x8	71 001 0012	
	Nut M3 brass	71 002 0001	
	Lock washer M3	71 004 0001	

5.7.0. 68 002 0029 KO-ON CF 45mm unit with cable=300mm

Refdes	Device	Order code	Function
P1	Fader 45mm 2x10klin without center ???	09 503 0006	
J1, J2	Flatcable 3p 300mm 2,54mm 26AWG 1con	57 504 0005	
PCB1	Print KO-ON CF 45mm	66 001 0029	

5.8.0. 68 003 0008 ALPS fader unit 90° cable=150mm

Refdes	Device	Order code	Function
P1	Fader 60mm 2x10klog 90° T-shaft	09 503 0005	
J1	Flatcable 5p 150mm 2,54mm 26AWG 1con	57 504 0003	
PCB1	Print Alps fader 60mm	66 002 0008	

5.9.0. 68 004 0008 ALPS fader unit 90° cable=260mm

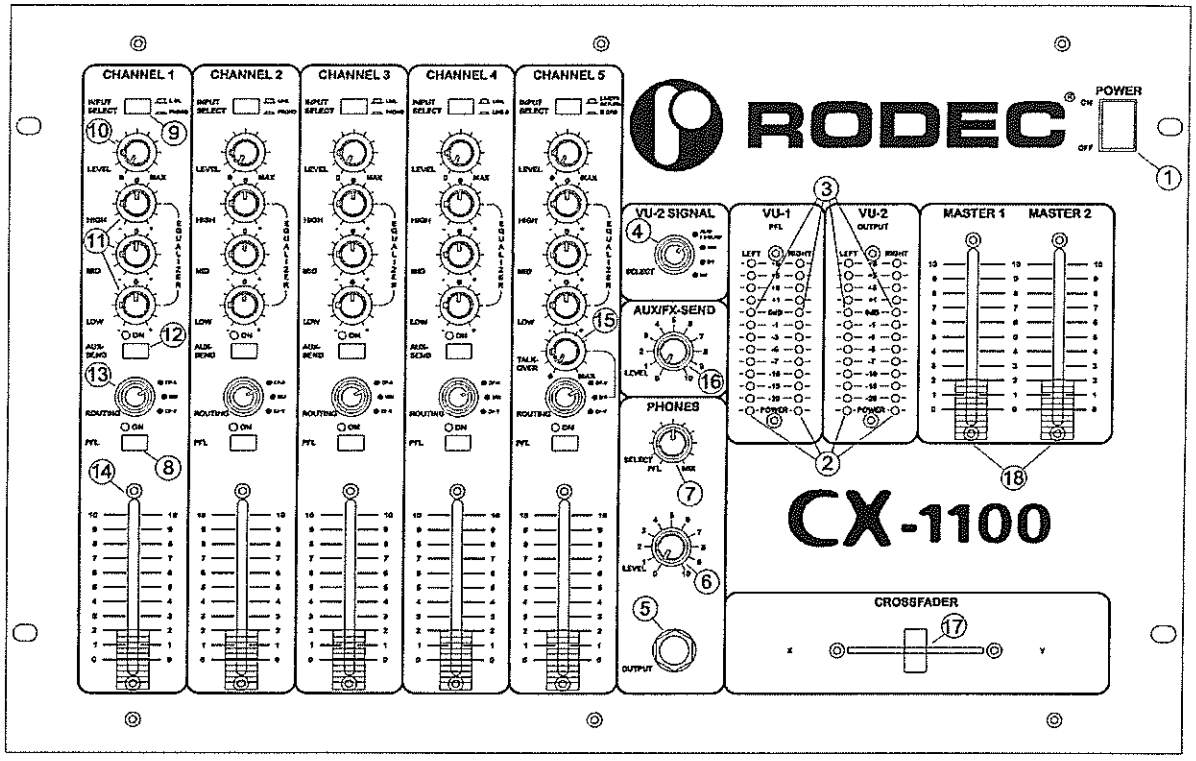
Refdes	Device	Order code	Function
P1	Fader 60mm 2x10klog 90° T-shaft	09 503 0005	
J1	Flatcable 5p 260mm 2,54mm 26AWG 1con	57 504 0004	
PCB1	Print Alps fader 60mm	66 002 0008	

5.10.0. 68 002 0021 Electronic symmetrical output unit V2

Refdes	Device	Order code	Function
R1, R2	Resistor Fuse 22R 0.5W 5%	02 502 022R	
C1, C2	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C3...C6	Capacitor multilayer 100n	04 513 0m10	
U1, U2	IC Balanced line driver	24 503 0003	
	IC socket DIL 8p	51 501 0002	
	Wirejumper 5mm	51 504 0002	
XLR1, XLR2	XLR 3pol/90°right M	57 502 0003	
J1, J2	Flatcable 3p 150mm 2,54mm 26AWG 1con	57 504 0006	
PCB1	Print Electronic symmetrical output V2	66 002 0021	

6.0.0. Parts discription

6.1.0. Front view CX-1100

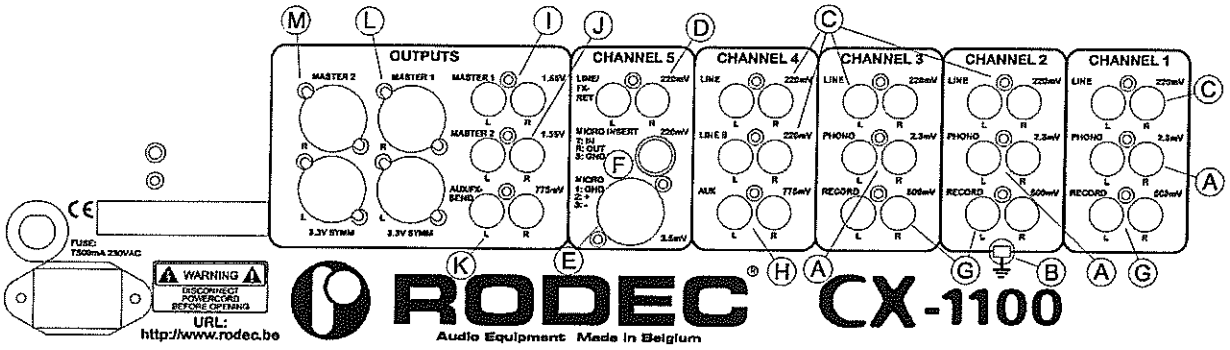


6.2.0. Front part order numbers CX-1100

Number	Device	Order code	Function
1	Switch Rocker 2x2 black body red rocker	11 503 0001	Powerknob red
2+3	LED red D=3mm	36 501 0004	LED red
2+3	LED green D=3mm	36 501 0005	LED yellow
2+3	LED yellow D=3mm	36 501 0006	LED green
4	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU-2 select switch
4	Knob RODEC Soft Black/White 12mm 315°/14	63 001 0026	Knob black-white
5	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output connector
6	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	Phones level potentiometer
6	Knob RODEC Soft Black/White 12mm 180°/12	63 001 0027	Knob black-white
7	Potmeter Rotative 2x10klin D-shaft 6mm 90°	09 502 0010	Phones select potentiometer
7	Knob RODEC Soft Black/White 12mm 180°/12	63 001 0027	Knob black-white
8	Switch Push 2x4/90°	11 504 0003	Channel PFL switch
8	Pushknob Rectangle black 5,5x10	63 004 0003	
9	Switch Push 2x2/90°	11 504 0004	Input select switch
9	Pushknob Rectangle black 5,5x10	63 004 0003	
10	Potmeter Rotative 2x100klog D-shaft 6mm	09 502 0001	Channel input level potentiom.
10	Knob RODEC Soft Black/Red 10mm 180°/12	63 001 0022	Knob black-red
11	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	Equalizer potentiometer
11	Knob RODEC Soft Black/Grey 10mm 180°/12	63 001 0023	Knob black-grey
12	Switch Push 2x4/90°	11 504 0003	Aux-send switch
12	Pushknob Rectangle black 5,5x10	63 004 0003	
13	Switch Rotative 2x3pos D-shaft 6mm	11 501 0002	Routing-switch
13	Knob RODEC Soft Black/White 12mm 300°/14	63 001 0030	Knob black-white
14	Alps fader unit 90° cable=150mm	68 003 0008	Channel fader

14	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
15	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Talk-over potentiometer
15	Knob RODEC Soft Black/White 10mm 180°/12	63 001 0025	Knob black-white
16	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	Aux/FX-send level potentiometer
16	Knob RODEC Soft Black/Blue 12mm 180°/12	63 001 0031	Knob black-blue
17	KO-ON CF 45mm unit with cable=300mm	68 002 0029	Crossfader
17	Knob Black shaft=1.2x4	63 003 0002	Crossfader knob black
18	Alps fader unit 90° cable=260mm	68 004 0008	Master faders
18	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
CX-1100	Frontplate CX-1100		Frontplate

6.3.0. Back view CX-1100



6.4.0. Back part order numbers CX-1100

Number	Device	Order code	Function
A	RCA 2pol/90° Au white/red	57 501 0006	RCA phono input
B	Earth terminal	57 510 0001	Earth connector
C + D	RCA 2pol/90° Ni white/red	57 501 0005	RCA line inputs
E	COMBO XLR-JACK 6p 90°	57 502 0006	XLR-JACK mic input
F	JACK STEREO 90°/6.35mm small	57 503 0002	JACK DJ mic insert
G	RCA 2pol/90° Ni white/red	57 501 0005	RCA record output
H	RCA 2pol/90° Ni white/red	57 501 0005	RCA aux output
I + J	RCA 2pol/90° Ni white/red	57 501 0005	RCA outp. master 1 + 2
K	RCA 2pol/90° Ni white/red	57 501 0005	RCA output Aux/FX send
L	XLR 3pol/90°right M	57 502 0003	XLR output master 1
M	Hole plug 24mm black	74 006 0009	Hole plug
N	Fuse holder	51 503 0002	Fuse holder
N	Fuse T500mA 5x20mm	48 001 500m	Fuse T500mA
O	Mains filter 1A	57 508 0001	Power inlet
CX-1100	Connectionpanel CX-1100	74 002 0004	Backpanel