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SERVICE MANUAL MX180 MKIII/MX240 MKIII

Version: 1.1

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2.0.0. OPERATING INSTRUCTIONS MX180 MKIII

2.1.0. SPECIFICATIONS

Inputs	**Input sensitivity**	**Signal/Noise Ratio**	**Remarks**
PHONO 1-4	2.3mV/50kΩ	< -80dB	RIAA correction
MD/AUX 1-4	220mV/50kΩ	< -92dB	
CD/DAT 1-4	220mV/50kΩ	< -92dB	
MIC 1-4 symm.	4.0mV/4kΩ	< -83dB	
MIC DJ symm.	0.7mV/1.2kΩ	< -85dB	
assym.	0.5mV/22kΩ	< -89dB	
Outputs			
Master 1 symm.	3.3V/600Ω		Subsonic filter
Master 2 assymm.	1.55V/10kΩ		Subsonic filter
Monitor assym.	775mV/10kΩ		Subsonic filter
Recording 1-4	500mV/10kΩ		Recording out selector
Phones	12V/600Ω		Phones 200-600Ω

- Tone controls: Bass +/-13dB @ 100Hz
  Middle +/-13dB @ 1kHz
  High +/-13dB @ 10kHz
- Subsonic filter: -25dB @ 10Hz
- Power source: Standard: 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 150mm
- Weight: 7.4kg

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

MODEL MX180MKIII
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 MX180MKIII.
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 -or split 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 SUM position the mix-signal will be displayed. On the positions MASTER 1, MASTER 2 and MONITOR the according outputsignals will be displayed.

5) **Mode Switch**
This switch is to be used to set the mixing panel in mono or stereo mode. This does not work on the monitor output

6) **Phones output**
Output for high level headphones monitoring. With the PFL switches (9) the connected audio sources or the output (in split mode) can be displayed without manipulating the output signal (Headphones 200-600Ω).

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

8) **Left ear signal select switch**
With this switch you can listen to the mixed signal in the left loudspeaker of the headphones. On this point the signal also appears on the right VU-meter. On the right headphones speaker and the left PFL VU-meter will the PFL-signal still be displayed.

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

10) **Input selector**
This switch is used to select the input signal: PHONO/AUX/CD/DAT/MD or MICROPHONE.

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

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

13) **Balance-Pan control**
The balance between the amount of sound on the left and on the right is adjusted by using this knob. When it is set to the center position, the gain is the same for the left and the right channel.

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

15) **Remote control switch option**
This switch is used to start and/or stop any connected apparatus from the mixing panel.

16) **DJ micro input**
Microphone input with priority on the input on the back of the set.

17) **Level adjuster**
Mike level for accurate adjustment of different types of microphones.

18) **Equalizer**
Triple tone control for DJ microphone.

19) **Pan Mic**
Panoramic control for the DJ-microphone input. With this button you can place the mike signal somewhere between left and right.

20) **Talk-over control**
Variable stage gain control level music suppression.

21) **DJ mike fader**
Volume control for DJ mike

22) **Master output fader**
Volume controls final output of mixer towards slave or integrated amplifers.

23) **Monitor output fader**
Volume control for the signal level for the monitor output, this output does not contain the DJ-mic signal.

24) **Record Select**
This switch is used to make recordings with or without the DJ microphone.
+ DJ MIC : in this position you add the signal of the DJ mike to the music.
- DJ MIC : in this position you record only the signal from channel 1 - 4 (8).
This switch has no influence on the master outputs.

25) **Crossfader**
With this fader you can easily fade over between the channels 1-2 and 3-4. When the knob stands completely to the left the signal of the channels 1 and 2 will appear on the output. When the knob stands completely to the right the signal of the channels 3 and 4 will appear on the output.

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) **MD/AUX input**
Input with a sensitivity of 220mV. To connect different apparatuses such as a tuner, tape recorder, mini disc, cassette recorder or (HIFI) video recorder.

D) **CD/DAT input**
Input for compact disc players and digital tape recording.

E) **Micro input**
Balanced microphone input. To reduce the interference on the microphone cord, you have to use a microphone with balanced output. The use of a microphone without balanced output is also possible, in this case please get in contact with your RODEC dealer.

F) **Recording outputs**
Outputs to connect cassette recorder or (HIFI) video recorders to make recordings. These outputs can be switched with or without recording the DJ microphone signal. (24)

G) **DJ mike input**
Balanced microphone input with a sensitivity of 0.7mV.
This input is in combination with the input JACK (16) on the front of the set. The JACK (16) has priority on the XLR input (G) on the back of the set.

H) **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 160mV.

I) **Master output 1**
Symmetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (22) from 0 to maximum (3.3V).

J) **Master output 2**
Assymetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (22) from 0 to maximum (1.55V).

K) **Monitor output**
Extra output from where the output voltage can be controlled from 0 to maximum (775mV) with the monitorfader (23). The musiccompressor, the DJ-micro and the mono/stereo switch have no influence on this output.

L) **Remote control terminal option**
The terminal is completely independent of the electronics of this set.
Only for switching low current/low voltage.

M) **Second headphones connector**
On this output appears the same signal as on the headphones-output on the frontpanel (6) on condition that the connection on the frontpanel is not in use. The specifications are the same as the headphones output on the frontpanel.

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 powerbutton (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 power amplifiers.

2) Connect the headphones to phones output (6) or (M).

3) Choose with input switch (10) the right source.

4) Switch the PFL button (8) in position ON to listen at the desired source. Check that the switch (8) stands in the PFL position, than you get the stereo signal on the headphone 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. All these operations have no influence on the outputsignal! Adjust with the level control (11) the input signal so, that the red indicators of the level meters (3) light sometimes. Adjust if necessary the quality of the sound with the equalizer (12).

   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 probaly best to use an external equalizer.

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

6) Adjust with the master (22) the volume.

7) Correct if necessary the panorama/balance with button (13), for monophonic sound set switch (5) in mono position.

8) To change the source, repeat point 3) to 5).

9) To add a microphone signal, connect the mike to the MIC input (16) or (G) input, input (16) has always priority to input (G). Turn the level control (17) and the talk-over (20) to zero, slide up the MIC fader (21) to maximum and adjust with the level button (17) the volume of the microphone. Adjust with the equalizer (18) the sound of the mike. To use the talk over, adjust the talk over button (20) (0= no decrease, 10= total decrease). With the pan MIC (19), the DJ microphone signal can be placed somewhere between left and right.

10) If you like to record the mixed signal, you can simply do this by connecting a recorder to the record-connectors (F). Depending on the position of the record-select switch (24) you can decide if the microphone signal is also recorded or not.

11) On the right VU-meter appears the signal that you've selected with the VU2-signal select switch (4). If you like 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.

12) If the DJ likes to connect monitor-loudspeakers, he can use the monitor-output (K) for this. This output is free of the DJ-microphone signal, to avoid feedback from the speakers to the microphone.

2.7.0. SUBSONIC FILTER

The two master outputs and the monitoroutput 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. REMOTE CONTROL SWITCH OPTION

With the remote control switch, you can control for each channel one apparatus.

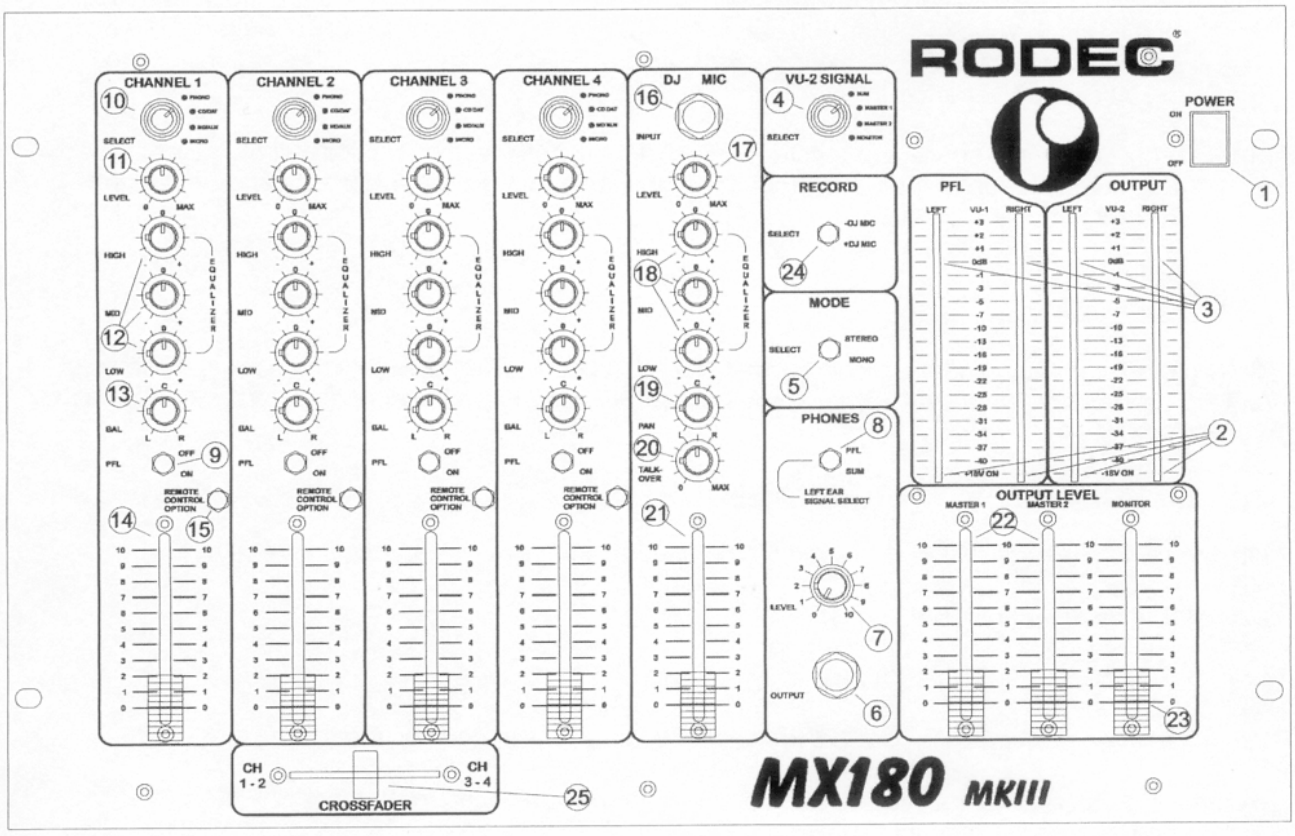
Switch (15) has three positions: 1) rest
2) push up
3) push down

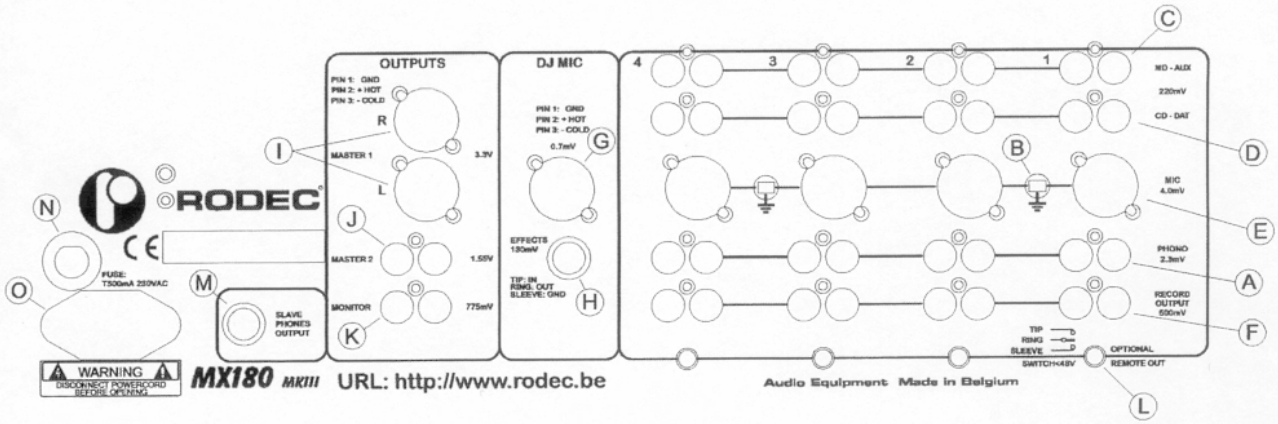
With these three positions it is possible to control two functions in each apparatus.

- A turntable with a combinated start/stop can be started and stopped from one position.
- A cassette recorder with connection for remote control can for example be started by pushing down the switch and stopped by pushing up the switch.

Consult the service manual of each apparatus to find the right way of connection.

2.9.0. PICTURES





3.0.0. OPERATING INSTRUCTIONS MX240 MKIII

3.1.0. SPECIFICATIONS

Inputs	Input sensitivity	Signal/Noise Ratio	Remarks
PHONO 1-6	2.3mV/50kΩ	< -80dB	RIAA correction
MD/AUX 1-6	220mV/50kΩ	< -93dB	
CD/DAT 1-6	220mV/50kΩ	< -93dB	
MIC 1-6 symm.	4.0mV/4kΩ	< -83dB	
Outputs			
Master 1 symm.	3.3V/600Ω		Subsonic filter
Master 2 assymm.	1.55V/10kΩ		Subsonic filter
Monitor assym.	775mV/10kΩ		Subsonic filter
Recording 1-6	500mV/10kΩ		Recording out selector
Phones	12V/600Ω		Phones 200-600Ω

- Tone controls: Bass +/-13dB @ 100Hz
  Middle +/-13dB @ 1kHz
  High +/-13dB @ 10kHz
- Subsonic filter: -25dB @ 10Hz
- Power source: Standard: 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 150mm
- Weight: 7.7kg

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MODEL MX240MKIII
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 MX240MKIII.
This mixing panel is a topline mixing panel, capable of outstanding performance in combination with high grade systems.

3.2.0. 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.

3.3.0. 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.

3.4.0. 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 -or split 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 SUM position the mix-signal will be displayed. On the positions MASTER 1, MASTER 2 and MONITOR the according outputsignals will be displayed.

5) **Mode Switch**
This switch is to be used to set the mixing panel in mono or stereo mode. This does not work on the monitor output

6) **Phones output**
Output for high level headphones monitoring. With the PFL switches (9) the connected audio sources or the output (in split mode) can be displayed without manipulating the output signal (Headphones 200-600Ω).

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

9) **Left ear signal select switch**
With this switch you can listen to the mixed signal in the left loudspeaker of the headphones. On this point the signal also appears on the right VU-meter. On the right headphones speaker and the left PFL VU-meter will the PFL-signal still be displayed.

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

10) **Input selector**
This switch is used to select the input signal: PHONO/AUX/CD/DAT/MD or MICROPHONE.

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

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

13) **Balance-Pan control**
The balance between the amount of sound on the left and on the right is adjusted by using this knob. When it is set to the center position, the gain is the same for the left and the right channel.

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

15) **Remote control switch option**
This switch is used to start and/or stop any connected apparatus from the mixing panel.

16) **Master output fader**
Volume controls final output of mixer towards slave or integrated amplifers.

17) **Monitor output fader**
Volume control for the signal level for the monitor output.

18) **Crossfader**
With this fader you can easily fade over between the channels 1-2 and 3-4. When the knob stands completely to the left the signal of the channels 1 and 2 will appear on the output. When the knob stands completely to the right the signal of the channels 3 and 4 will appear on the output.

3.5.0. 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) **MD/AUX input**
Input with a sensitivity of 220mV. To connect different apparatuses such as a tuner, tape recorder, mini disc, cassette recorder or (HIFI) video recorder.

D) **CD/DAT input**
Input for compact disc players and digital tape recording.

E) **Micro input**
Balanced microphone input. To reduce the interference on the microphone cord, you have to use a microphone with balanced output. The use of a microphone without balanced output is also possible, in this case please get in contact with your RODEC dealer.

F) **Recording outputs**
Outputs to connect cassette recorder or (HIFI) video recorders to make recordings.

G) **Master output 1**
Symmetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (16) from 0 to maximum (3.3V).

H) **Master output 2**
Assymetrical output to connect a power-amplifier. The output level can be manipulated with the master fader 1 (16) from 0 to maximum (1.55V).

I) **Monitor output**
Extra output from where the output voltage can be controlled from 0 to maximum (775mV) with the monitorfader (17).The mono/stereo switch has no influence on this output.

J) **Remote control terminal option**
The terminal is completely independent of the electronics of this set.
Only for switching low current/low voltage.

K) **Second headphones connector**
On this output appears the same signal as on the headphones-output on the frontpanel (6) on condition that the connection on the frontpanel is not in use. The specifications are the same as the headphones output on the frontpanel.

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

3.6.0. 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 (6) or (K).

3) Choose with input switch (10) the right source.

4) Switch the PFL button (8) in position ON to listen at the desired source. Check that the switch (8) stands in the PFL position, than you get the the stereo signal on the headphone and the two left VU-meters. The PFL circuit works as a sum-system, there is the possibility to listen to more sources at the same time. Allthese operations have no influence on the outputsignal! Adjust with the level control (11) the input signal so, that the red indicators of the level meters (3) light sometimes. Adjust if necessary the quality of the sound with the equalizer (12).

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

6) Adjust with the master (16) the volume.

7) Correct if necessary the panorama/balance with button (13), for monophonic sound set switch (5) in mono position.

8) To change the source, repeat point 3) to 5).

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

10) On the right VU-meter appears the signal that you've selected with the VU2-signal select switch (4). If you like 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.

11) If the DJ likes to connect monitor-loudspeakers, he can use the monitor output (I) for this.

3.7.0. SUBSONIC FILTER

The two master outputs and the monitoroutput 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.

3.8.0. REMOTE CONTROL SWITCH OPTION

With the remote control switch, you can control for each channel one apparatus.

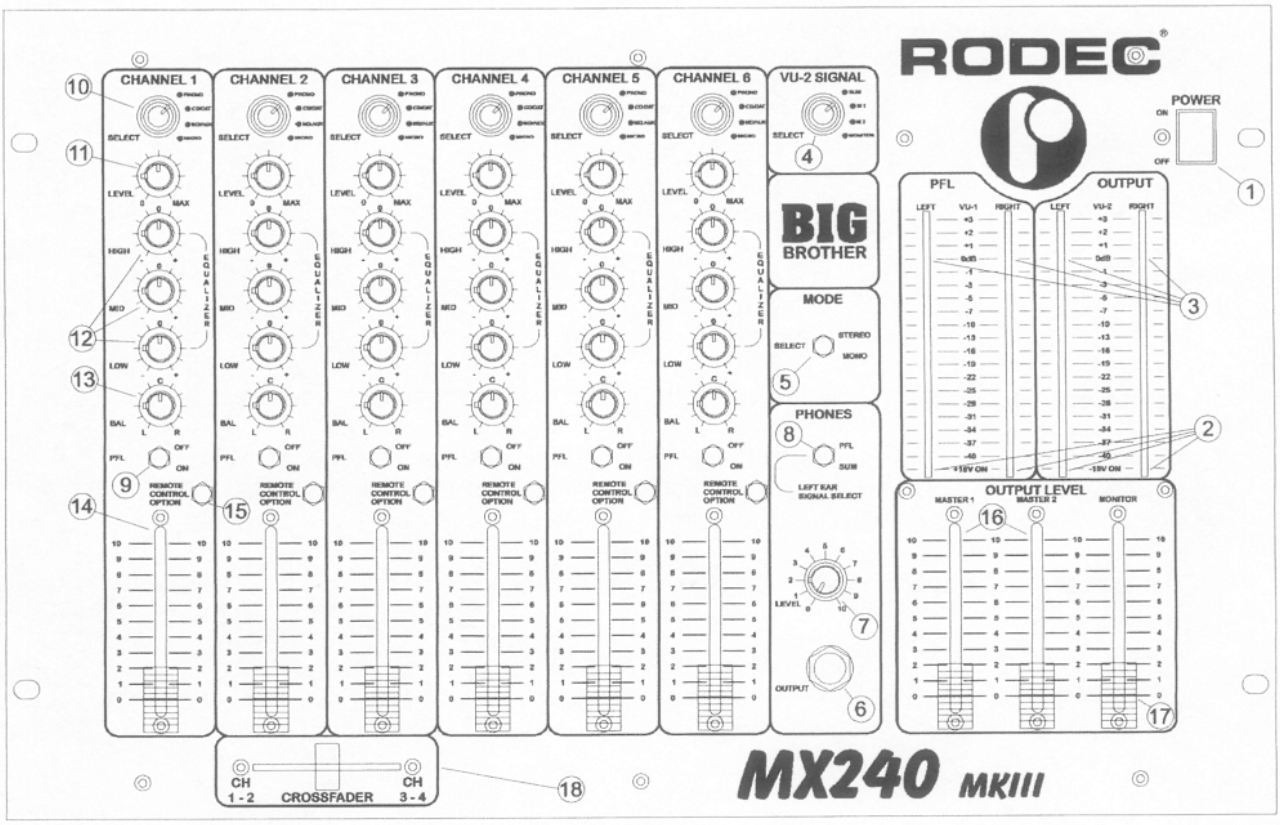
Switch (15) has three positions: 1) rest
2) push up
3) push down

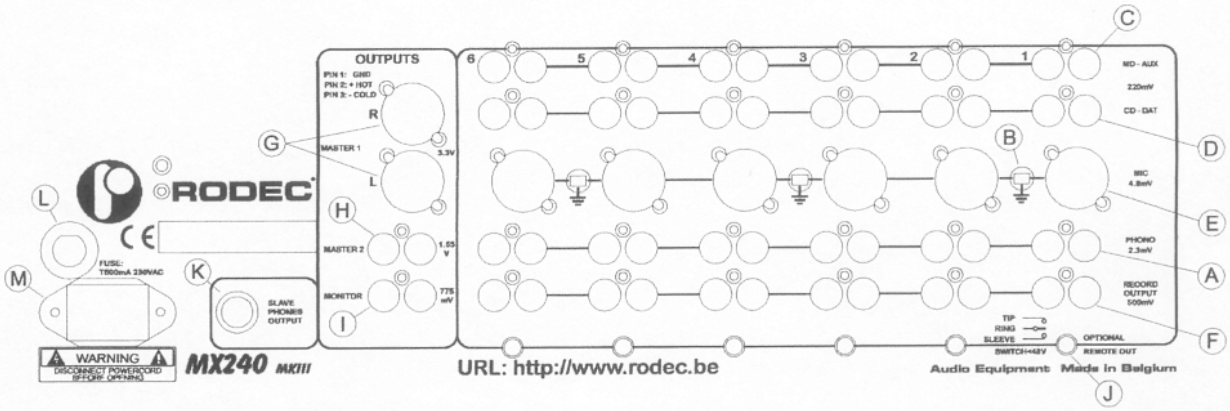
With these three positions it is possible to control two functions in each apparatus.

- A turntable with a combinated start/stop can be started and stopped from one position.
- A cassette recorder with connection for remote control can for example be started by pushing down the switch and stopped by pushing up the switch.

Consult the service manual of each apparatus to find the right way of connection.

3.9.0. PICTURES





4.0.0. TECHNICAL INFORMATION

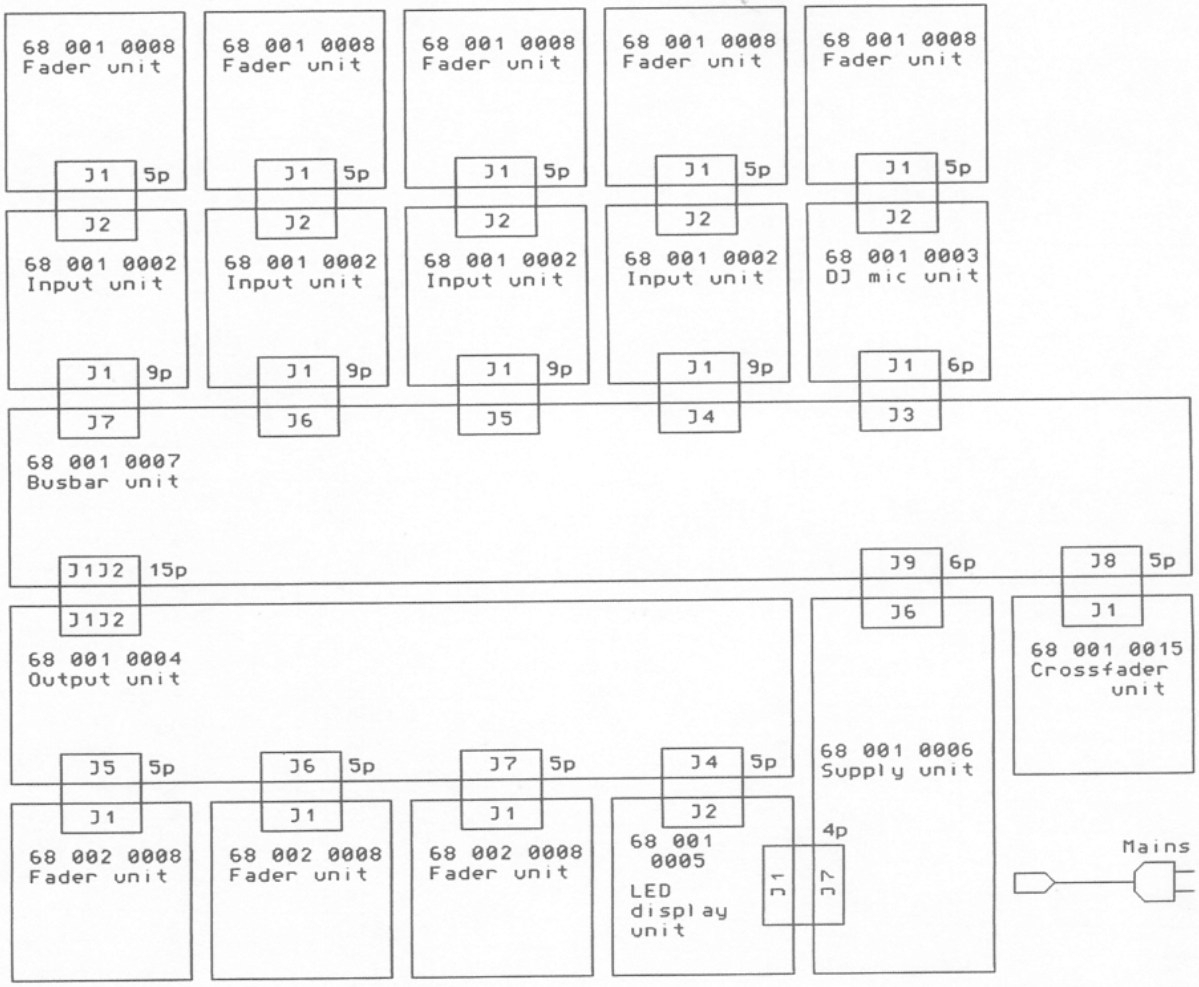
4.1.0. MX180 MKIII

4.1.1. PART LIST

Refdes	Device	Order code	Function
	Transfo Toroidal 22-0-22V/40VA	42 501 0001	
	Fuse T500mA 5x20mm	48 001 500m	
	Fuse holder	51 503 0002	
	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	
	Knob Push-on Soft Black/Red 10mm 180°	63 001 0001	
	Knob Push-on Soft Black/Grey 10mm 180°	63 001 0002	
	Knob Push-on Soft Black/Yell. 10mm 180°	63 001 0003	
	Knob Push-on Soft Black/Wh. 10mm 180°	63 001 0004	

	Knob Push-on Soft Black/Wh. 12mm 315°	63 001 0005	
	Knob Push-on Soft Black/Wh. 12mm 180°	63 001 0006	
	Knob Push-on Soft Black/Gr. 10mm 180°	63 001 0007	
	Knob Push-on Soft Black/Blue 10mm 180°	63 001 0008	
	Knob Soft touch Black/White	63 003 0001	
	Knob Black shaft=1.2x4	63 003 0002	
	Input unit MX180 MKIII/MX240 MKIII	68 001 0002	
	DJ mic input unit MX180 MKIII	68 001 0003	
	Output unit MX180 MKIII	68 001 0004	
	LED unit MX180 MKIII/MX240 MKIII	68 001 0005	
	Supply unit MX180 MKIII/MX240 MKIII	68 001 0006	
	Busbar unit MX180 MKIII	68 001 0007	
	Alps fader unit cable=150mm	68 001 0008	Channel faders
	Alps crossfader unit	68 001 0015	Crossfader
	Alps fader unit cable=260mm	68 002 0008	Master faders
	Hi-Lo 3.2x8.5	71 001 0004	
	Bold M3x6 CFH black	71 001 0005	
	Bold M3x25 CFH black	71 001 0006	
	Thread forming screw M4x16 THP	71 001 0007	
	Slotted screw M4x60	71 001 0008	
	Bold VK M3x10 black	71 001 0009	
	Bold M3x6 black	71 001 0010	
	Nut M3 brass	71 002 0001	
	Nut M4	71 002 0002	
	Washer nylon 3mm	71 003 0001	
	Washer metal D10/7	71 003 0002	
	Lock washer M3	71 004 0001	
	Blocsur JZE 8	71 004 0003	
	Lock washer M4	71 004 0004	
	Blocsur JZ6	71 004 0005	
	Spacer h15/3 nylon	71 005 0003	
	Washer nylon 4/12	71 005 0004	
	Frontplate MX180 MKIII	74 001 0001	
	Connectionpanel MX180 MKIII	74 002 0001	
	Bottombox MX180 MKIII/MX240 MKIII	74 003 0001	
	Apparatus foot	74 005 0003	
	Hole plug 6.5mm black	74 005 0004	
	Tape double sided 38mm	77 002 0001	
	Tape double sided 15mm	77 002 0002	
	Plastic bag 700mm x 500mm	80 001 0002	
	Box MX180/240 MKIII	80 002 0001	
	Isomo MX180/MX34	80 003 0002	
	User manual MX180 MKIII	83 002 0001	
	Label Serialnumber RODEC	83 004 0003	
	Warranty card	83 004 0004	
	Pink pack message	83 004 0005	
	Label Box MX180 MKIII	83 004 0006	
	Anti dust cloth 90x100	94 001 0007	
	Anti dust cloth 240x105	94 001 0008	
	Module powerswitch MX180/240 MKIII	94 001 0009	
	Module rear JACK MX180/240 MKIII	94 001 0010	
	Mains wire MX180 MKIII/MX240 MKIII	94 001 0011	

4.1.2. WIRING DIAGRAM



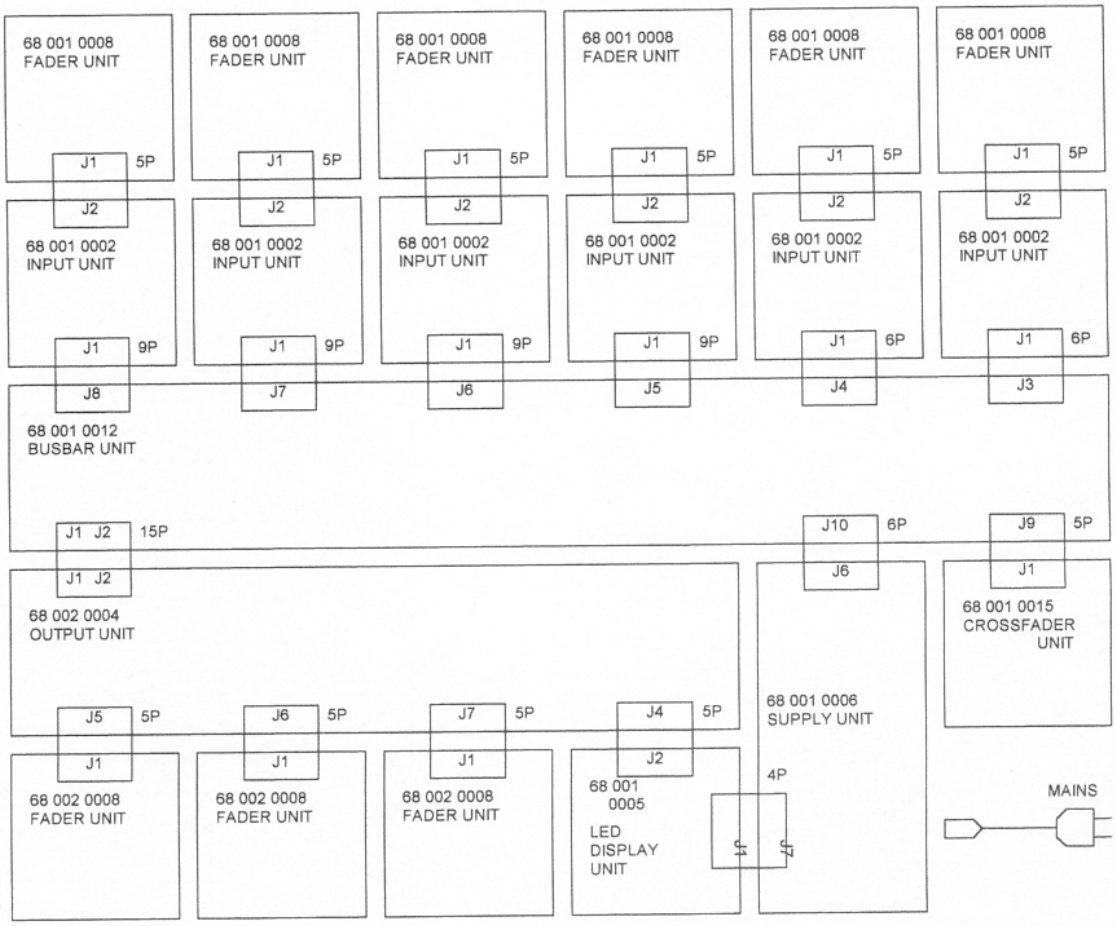
4.2.0. MX240 MKIII

4.2.1. PART LIST

Refdes	Device	Order code	Function
	Transfo Toroidal 22-0-22V/40VA	42 501 0001	
	Fuse T500mA 5x20mm	48 001 500m	
	Fuse holder	51 503 0002	
	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	
	Knob Push-on Soft Black/Red 10mm 180°	63 001 0001	
	Knob Push-on Soft Black/Grey 10mm 180°	63 001 0002	
	Knob Push-on Soft Black/Yell. 10mm 180°	63 001 0003	
	Knob Push-on Soft Black/Wh. 12mm 315°	63 001 0005	
	Knob Push-on Soft Black/Wh. 12mm 180°	63 001 0006	
	Knob Push-on Soft Black/Gr. 10mm 180°	63 001 0007	
	Knob Push-on Soft Black/Blue 10mm 180°	63 001 0008	
	Knob Soft touch Black/White	63 003 0001	
	Knob Black shaft=1.2x4	63 003 0002	
	Input unit MX180 MKIII/MX240 MKIII	68 001 0002	
	LED unit MX180 MKIII/MX240 MKIII	68 001 0005	
	Supply unit MX180 MKIII/MX240 MKIII	68 001 0006	
	Alps fader unit cable=150mm	68 001 0008	Channel faders
	Busbar unit MX240 MKIII	68 001 0012	
	Alps crossfader unit	68 001 0015	Cross fader
	Output unit MX240 MKIII	68 002 0004	

	Alps fader unit cable=260mm	68 002 0008	Master faders
	Hi-Lo 3.2x8.5	71 001 0004	
	Bold M3x6 CFH black	71 001 0005	
	Bold M3x25 CFH black	71 001 0006	
	Thread forming screw M4x16 THP	71 001 0007	
	Slotted screw M4x60	71 001 0008	
	Bold VK M3x10 black	71 001 0009	
	Bold M3x6 black	71 001 0010	
	Nut M3 brass	71 002 0001	
	Nut M4	71 002 0002	
	Washer nylon 3mm	71 003 0001	
	Washer metal D10/7	71 003 0002	
	Lock washer M3	71 004 0001	
	Blocsur JZE 8	71 004 0003	
	Lock washer M4	71 004 0004	
	Blocsur JZ6	71 004 0005	
	Spacer h15/3 nylon	71 005 0003	
	Washer nylon 4/12	71 005 0004	
	Frontpanel MX240 MKIII	74 001 0006	
	Connectionpanel MX240 MKIII	74 002 0002	
	Bottombox MX180 MKIII/MX240 MKIII	74 003 0001	
	Apparatus foot	74 005 0003	
	Hole plug 6.5mm black	74 005 0004	
	Tape double sided 38mm	77 002 0001	
	Tape double sided 15mm	77 002 0002	
	Plastic bag 700mm x 500mm	80 001 0002	
	Box MX180/240 MKIII	80 002 0001	
	Isomo MX180/MX34	80 003 0002	
	User manual MX240 MKIII	83 002 0002	
	Label Serialnumber RODEC	83 004 0003	
	Warranty card	83 004 0004	
	Pink pack message	83 004 0005	
	Label Box MX240 MKIII	83 004 0007	
	Anti dust cloth 90x100	94 001 0007	
	Anti dust cloth 240x105	94 001 0008	
	Module powerswitch MX180/240 MKIII	94 001 0009	
	Module rear JACK MX180/240 MKIII	94 001 0010	
	Mains wire MX180 MKIII/MX240 MKIII	94 001 0011	

4.2.2. WIRING DIAGRAM



4.3.0. OPTIONS.

- 94 001 0012: Fader unit P&G
  This is an upgrading kit for a fader of an MX180 MKIII or an MX24O MKIII. This is a Penny & Giles high quality studio fader that replaces the standard Alps faders.

- 94 001 0009: Mini JACK + switch
  This is a remote switch option to put on the MX180 MKIII or MX240 MKIII, to start or stop apparatus from the frontpanel with a switch.

4.4.0. 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.

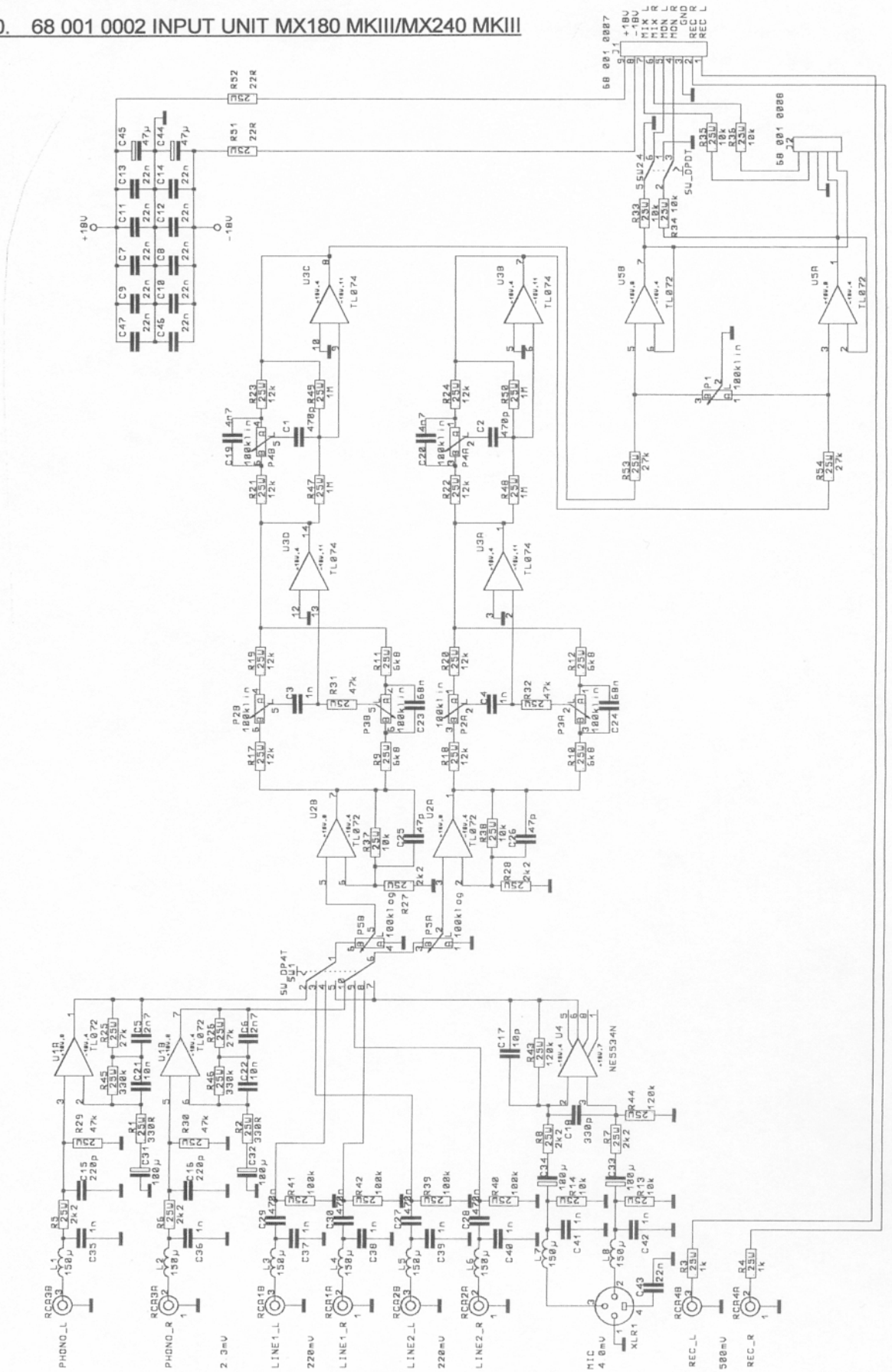
4.5.0. SIGNAL NUMBERS

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

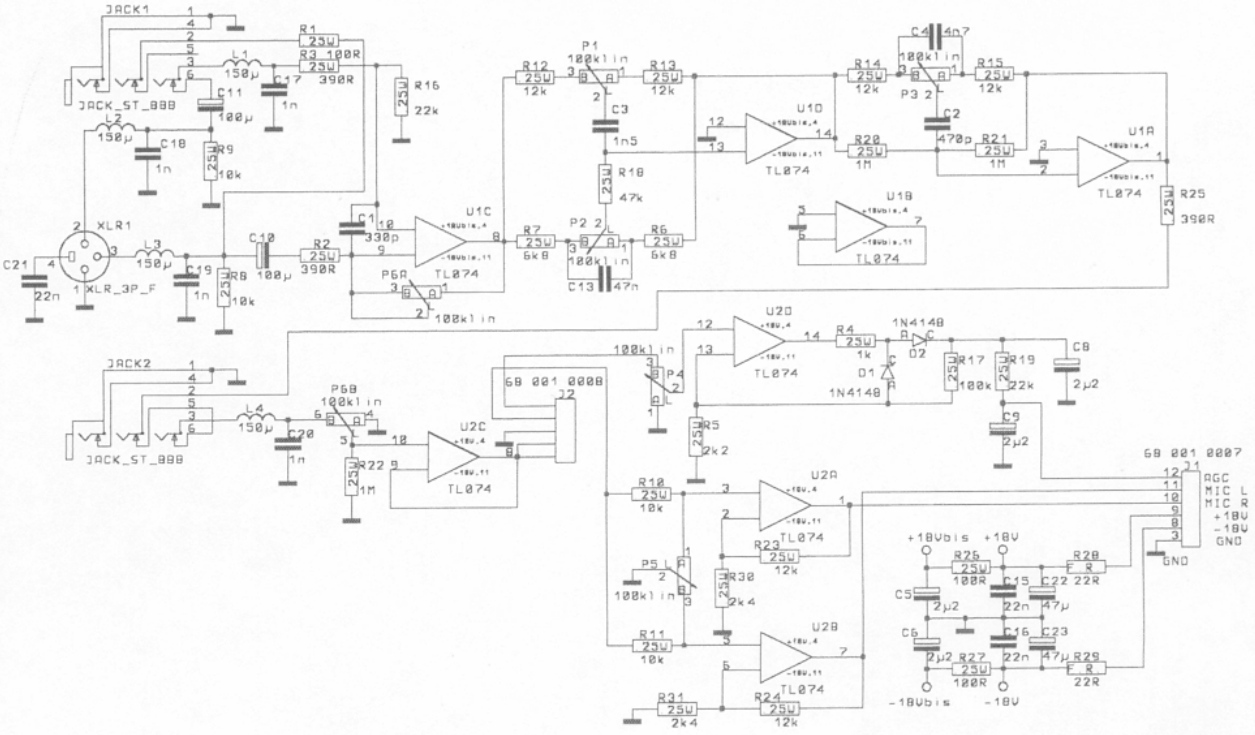
NR 1 → REC L: The left record signal
NR 2 → REC R: The right record signal
NR 3 → GND: The ground inside the table
NR 4 → MON R: The right signal, selected with the PFL switches of PCB RC 27 150
NR 5 → MON L: The left signal, selected with the PFL switches of PCB RC 27 150
NR 6 → MIX R: The right mix signal
NR 7 → MIX L: The left mix signal
NR 8 → -18V: -18V Power supply
NR 9 → +18V: +18V Power supply
NR 10 → MIC R: The right DJ mic signal
NR 11 → MIC L: The left DJ mic signal
NR 12 → AGC: The (automatic gain control) compressor signal, depending on the position of the Talk-over knob
NR 13 → +24V: The +24V power supply for the LED meters
NR 14 → +27V: The +27V power supply for the headphone amplifier
NR 15 → -27V: The -27V power supply for the headphone amplifier
NR 16 → LED L: The left LED signal VU-1
NR 17 → LED R: The right LED signal VU-1
NR 18 → LED L: The left LED signal VU-2
NR 19 → LED R: The right LED signal VU-2
NR 20 → PHO R: The right PHONES signal
NR 21 → PHO L: The left PHONES signal

5.0.0 SCHEMATIC DIAGRAMS.

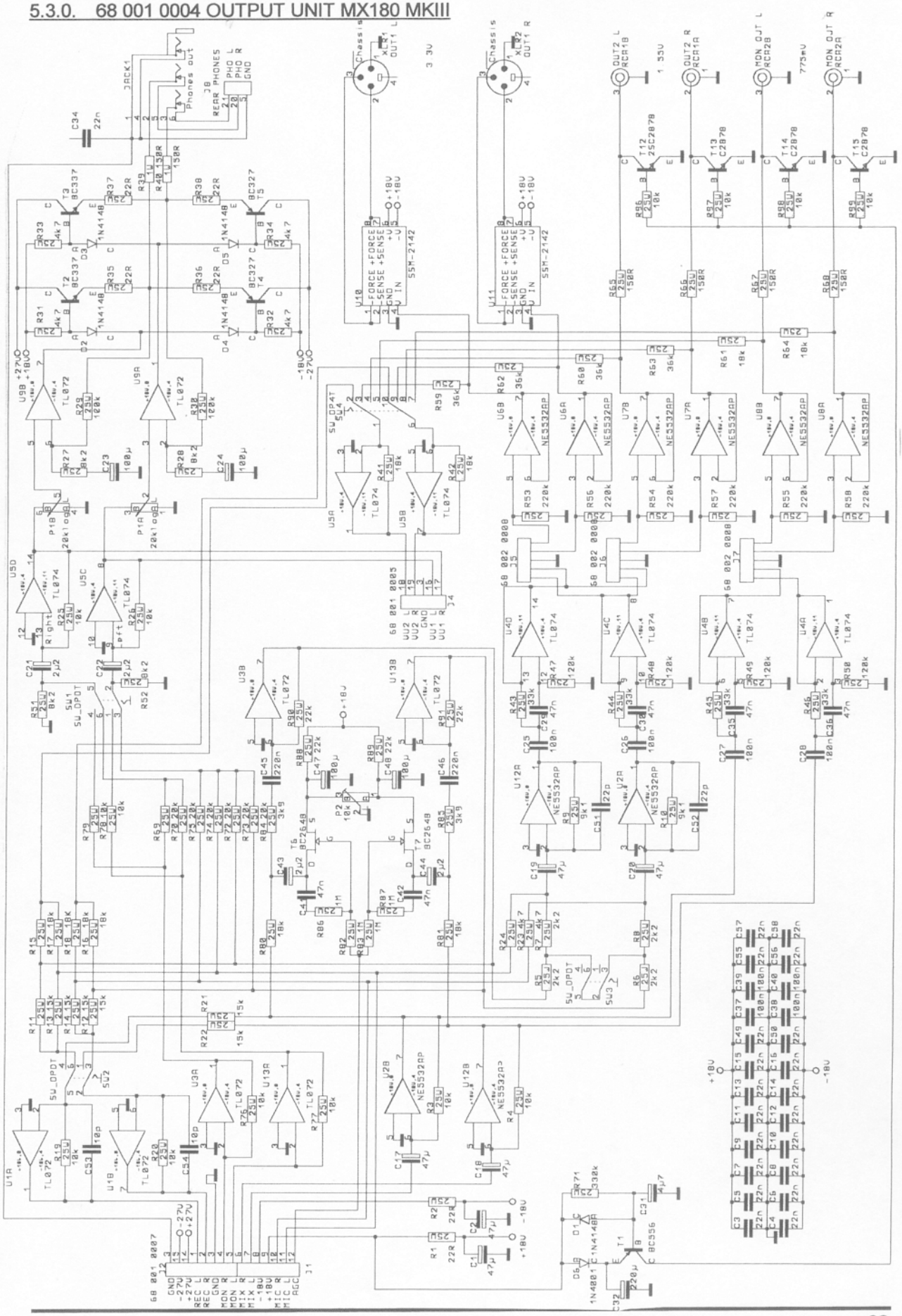
5.1.0. 68 001 0002 INPUT UNIT MX180 MKIII/MX240 MKIII



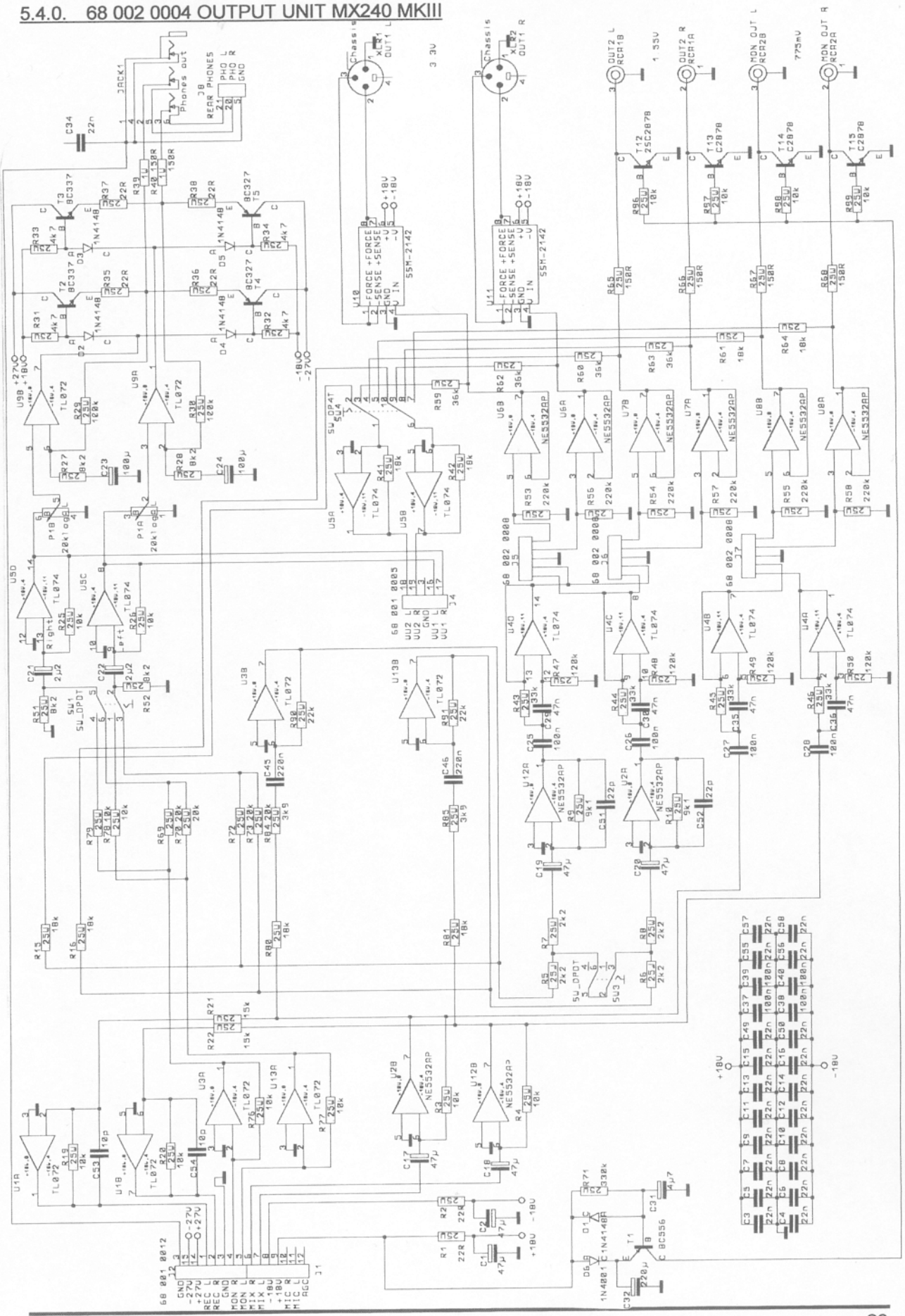
5.2.0. 68 001 0003 DJ INPUT UNIT MX180 MKIII



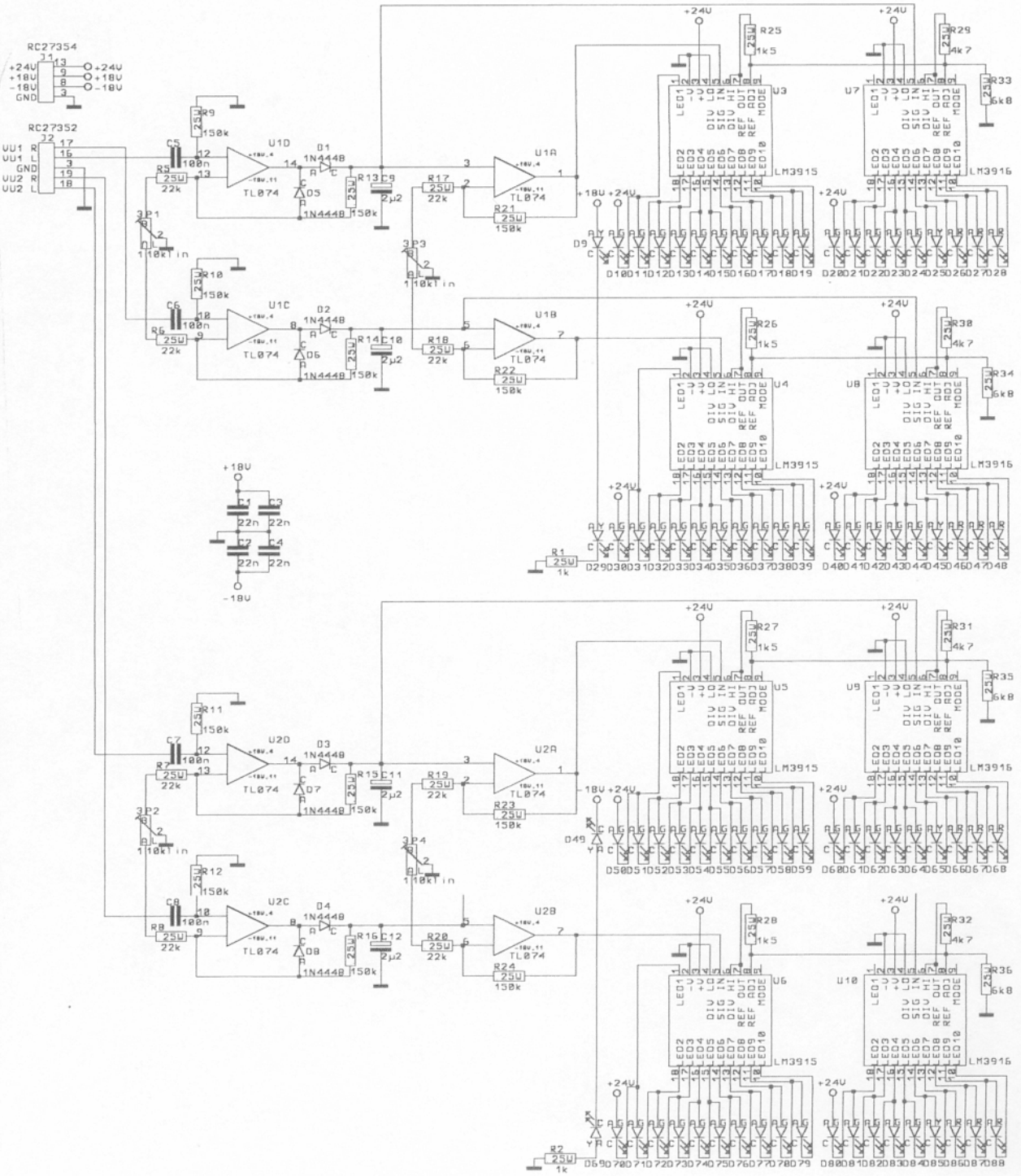
5.3.0. 68 001 0004 OUTPUT UNIT MX180 MKIII



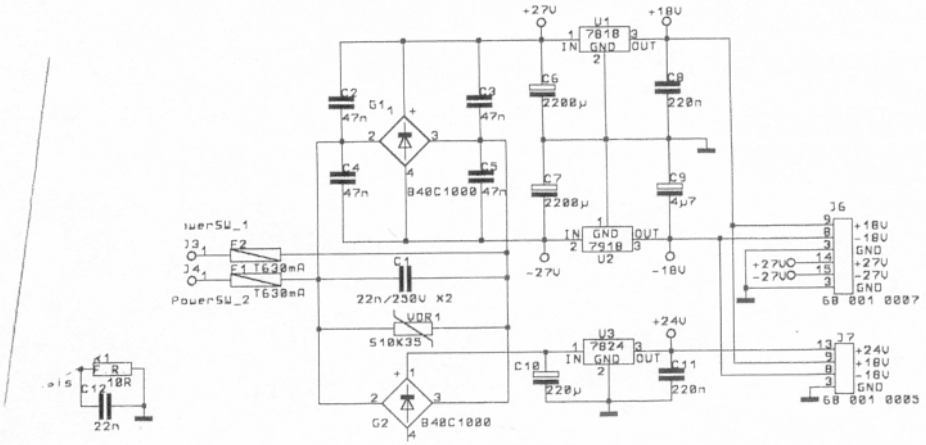
5.4.0. 68 002 0004 OUTPUT UNIT MX240 MKIII



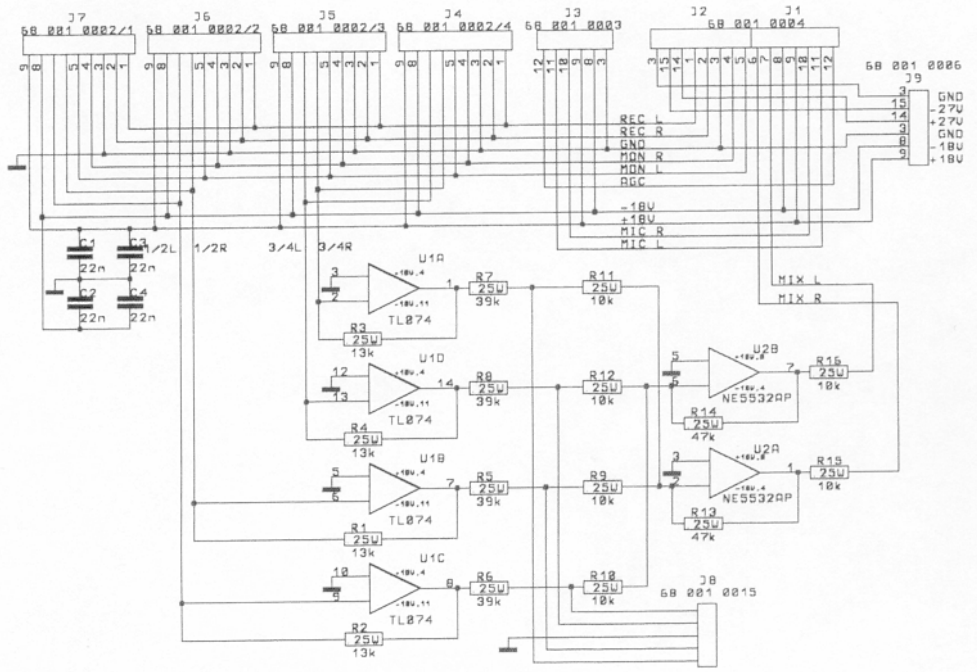
5.5.0. 68 001 0005 LED DISPLAY UNIT MX180 MKIII/MX240 MKIII



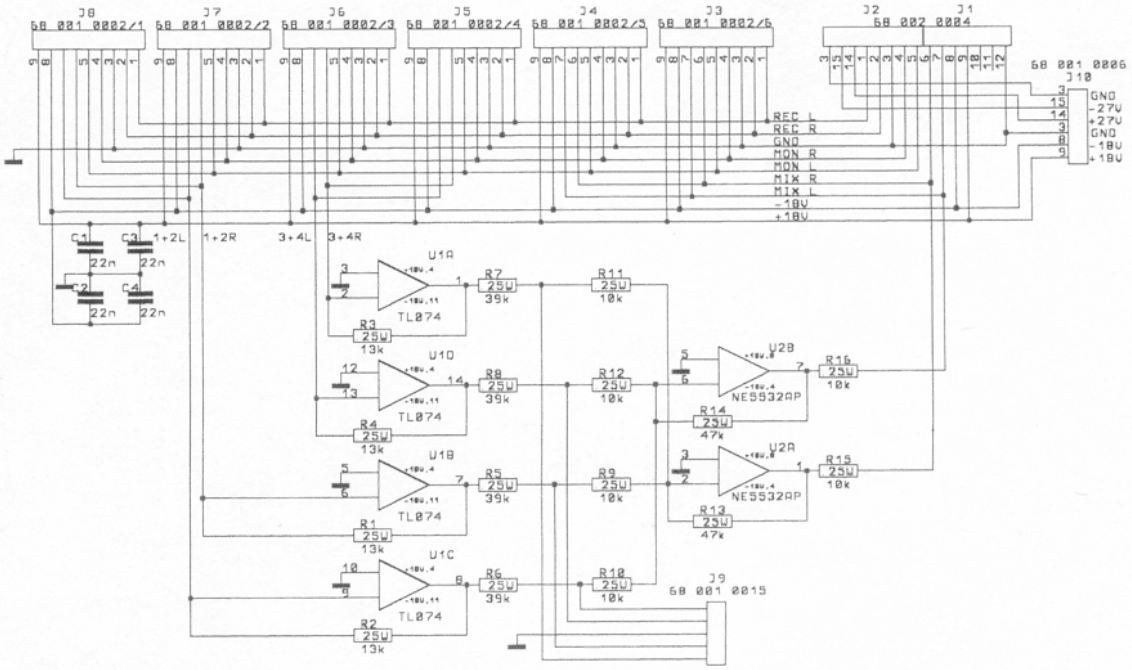
5.6.0. 68 001 0006 SUPPLY UNIT MX180 MKIII/MX240 MKIII



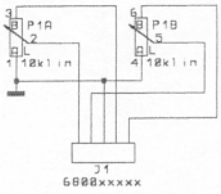
5.7.0. 68 001 0007 BUSBAR UNIT MX180 MKIII



5.8.0. 68 001 0012 BUSBAR UNIT MX240 MKIII



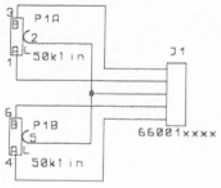
5.9.0. 68 001 0008 FADER UNIT MX180 MKIII/MX240 MKIII 150mm



5.10.0. 68 002 0008 FADER UNIT MX180 MKIII/MX240 MKIII 260mm

Look at 5.9.0.

5.11.0. 68 001 0015 CROSSFADER UNIT MX180 MKIII/MX240 MKIII



6.0.0. PARTS LISTS

6.1.0. 68 001 0002 INPUT UNIT MX180 MKIII/MX240 MKIII

Refdes	Device	Order code	Function
R1, R2	Resistor 330R 0.4W 5%	02 501 0k33	
R3, R4	Resistor 1k0 0.4W 5%	02 501 01k0	
R5...R8, R27, R28	Resistor 2k2 0.4W 5%	02 501 02k2	
R9...R12	Resistor 6k8 0.4W 5%	02 501 06k8	
R13, R14, R33...R38	Resistor 10k 0.4W 5%	02 501 010k	
R17...R24	Resistor 12k 0.4W 5%	02 501 012k	
R25, R26, R53, R54	Resistor 27k 0.4W 5%	02 501 027k	
R29...R32	Resistor 47k 0.4W 5%	02 501 047k	
R39...R42	Resistor 100k 0.4W 5%	02 501 0M10	
R43, R44	Resistor 120k 0.4W 5%	02 501 0M12	
R45, R46	Resistor 330k 0.4W 5%	02 501 0M33	
R47...R50	Resistor 1M0 0.4W 5%	02 501 01M0	
R51, R52	Resistor Fuse 22R 0.5W 5%	02 502 022R	
C17	Capacitor ceramic 10p 10%	04 501 010p	
C15, C16	Capacitor ceramic 220p 10%	04 501 0n22	
C18	Capacitor ceramic 330p 10%	04 501 0n33	
C1, C2	Capacitor ceramic 470p 10%	04 501 0n47	
C3, C4	Capacitor ceramic 1n0 10%	04 501 01n0	
C5, C6	Capacitor ceramic 2n7 10%	04 501 02n7	
C19, C20	Capacitor ceramic 4n7 10%	04 501 04n7	
C21, C22	Capacitor film 10n/63V 10%	04 502 010n	
C23, C24	Capacitor film 68n/63V 10%	04 502 068n	
C27...C30	Capacitor film 470n/63V 10%	04 502 0µ47	
C35...C42	Capacitor multilayer 1n0	04 503 01n0	
C31...C34	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C44, C45	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C7...C14, C43, C47, C48	Capacitor multilayer 22n	04 513 022n	
L1...L8	Coil 150µH axial	06 501 0m15	
P5	Potmeter Rotative 2x100klog D-shaft 6mm	09 502 0001	Input level
P2, P3, P4	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	Low/Mid/High equalizer
P1	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Panoramic/Balance
SW1	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	Input select switch
SW2	Switch Tumbler 2x2/90°	11 502 0001	PFL on/off
U1, U2, U5	IC Dual opamp TL072CP	24 501 0001	
U3	IC Quad opamp TL074CN	24 501 0002	
U4	IC Opamp NE5534N	24 501 0004	
	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, RCA2, RCA4	RCA 2pol/90° Ni white/red	57 501 0005	2xLine input, Record output
RCA3	RCA 2pol/90° Au white/red	57 501 0006	Phono input
XLR1	XLR 3pol/90°right F	57 502 0002	Microphone input
J2	Connector lock 5p/0° M	57 505 0001	
J1	Connector 9p/90° F	57 507 0002	
PCB1	Print input MX180 MKIII/MX240 MKIII	66 001 0002	

6.2.0. 68 001 0003 DJ INPUT UNIT MX180 MKIII

Refdes	Device	Order code	Function
R1, R26, R27	Resistor 100R 0.4W 5%	02 501 0k10	
R2, R3, R25	Resistor 390R 0.4W 5%	02 501 0k39	
R4	Resistor 1k0 0.4W 5%	02 501 01k0	
R5	Resistor 2k2 0.4W 5%	02 501 02k2	

R30, R31	Resistor 2k4 0.4W 5%	02 501 02k4	
R6, R7	Resistor 6k8 0.4W 5%	02 501 06k8	
R8...R11	Resistor 10k 0.4W 5%	02 501 010k	
R12...R15, R23, R24	Resistor 12k 0.4W 5%	02 501 012k	
R16, R19	Resistor 22k 0.4W 5%	02 501 022k	
R18	Resistor 47k 0.4W 5%	02 501 047k	
R17	Resistor 100k 0.4W 5%	02 501 0M10	
R20...R22	Resistor 1M0 0.4W 5%	02 501 01M0	
R28, R29	Resistor Fuse 22R 0.5W 5%	02 502 022R	
C1	Capacitor ceramic 330p 10%	04 501 0n33	
C2	Capacitor ceramic 470p 10%	04 501 0n47	
C3	Capacitor ceramic 1n5 10%	04 501 01n5	
C4	Capacitor ceramic 4n7 10%	04 501 04n7	
C13	Capacitor film 47n/63V 10%	04 502 047n	
C17...C20	Capacitor multilayer 1n0	04 503 01n0	
C10, C11	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C22, C23	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C5, C6, C8, C9	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C15, C16, C21	Capacitor multilayer 22n	04 513 022n	
L1...L4	Coil 150µH axial	06 501 0m15	
P6	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	Input level
P1...P5	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Low/Mid/High/Pan/Talk over
D1, D2	Diode 1N4148	16 501 0002	
U1, U2	IC Quad opamp TL074CN	24 501 0002	
	IC socket DIL 14p	51 501 0003	
	Wirejumper 10mm	51 504 0003	
XLR1	XLR 3pol/90°right F	57 502 0002	DJ-Mic input
JACK1, JACK2	JACK STEREO 90°/6.35mm metal	57 503 0001	DJ-Mic input/Insert
J2	Connector lock 5p/0° M	57 505 0001	
J1	Connector 6p/90° F	57 507 0004	
PCB1	Print DJ mic MX180 MKIII	66 001 0003	

6.3.0. 68 001 0004 OUTPUT UNIT MX180 MKIII

Refdes	Device	Order code	Function
R35...R38	Resistor 22R 0.4W 5%	02 501 022R	
R65...R68	Resistor 150R 0.4W 5%	02 501 0k15	
R5...R8	Resistor 2k2 0.4W 5%	02 501 02k2	
R84, R85	Resistor 3k9 0.4W 5%	02 501 03k9	
R23, R24, R31...R34	Resistor 4k7 0.4W 5%	02 501 04k7	
R27, R28, R51, R52	Resistor 8k2 0.4W 5%	02 501 08k2	
R9, R10	Resistor 9k1 0.4W 5%	02 501 09k1	
R3, R4, R19, R20, R25, R26, R76...R79, R96...R99	Resistor 10k 0.4W 5%	02 501 010k	
R11...R14, R21, R22	Resistor 15k 0.4W 5%	02 501 015k	
R15...R18, R41, R42, R61, R64, R80, R81	Resistor 18k 0.4W 5%	02 501 018k	
R69...R75	Resistor 20k 0.4W 5%	02 501 020k	
R88...R91	Resistor 22k 0.4W 5%	02 501 022k	
R43...R46	Resistor 33k 0.4W 5%	02 501 033k	
R59, R60, R62, R63	Resistor 36k 0.4W 5%	02 501 036k	
R29, R30	Resistor 100k 0.4W 5%	02 501 100k	
R47...R50	Resistor 120k 0.4W 5%	02 501 0M12	
R53...R58	Resistor 220k 0.4W 5%	02 501 0M22	
R71	Resistor 330k 0.4W 5%	02 501 0M33	
R82, R83, R86, R87	Resistor 1M0 0.4W 5%	02 501 01M0	
R1, R2	Resistor Fuse 22R 0.5W 5%	02 502 022R	
R39, R40	Resistor 150R 1W 5%	02 505 0k15	
C51, C52	Capacitor ceramic 22p	04 501 022p	
C29, C30, C35, C36, C41, C42	Capacitor film 47n/63V 10%	04 502 047n	

C25...C28	Capacitor film 100n/63V 10%	04 502 0µ10	
C45, C46	Capacitor film 220n/63V 10%	04 502 0µ22	
C23, C24, C47, C48	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C1, C2, C17...C20	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C32	Capacitor electrolytic 220µ/35V radial	04 507 220µ	
C21, C22, C43, C44	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C31	Capacitor electrolytic 4µ7/63V radial	04 509 4µ70	
C3...C16, C34, C49, C50, C55...C58	Capacitor multilayer 22n	04 513 022n	
C37...C40	Capacitor multilayer 100n	04 513 0m10	
P2	Trimmer vertical 10k	09 501 0002	Compressor adjust
P1	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	Phones volume
SW4	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU-2 select
SW1, SW2, SW3	Switch Tumbler 2x2/90°	11 502 0001	Left ear signal select/Record select/Mode select
D1...D5	Diode 1N4148	16 501 0002	
D6	Diode 1N4001	16 501 0003	
T2, T3	Transistor BC337	19 501 0002	
T12...T15	Transistor 2SC2878	19 501 0003	
T4, T5	Transistor BC327	19 502 0003	
T1	Transistor BC556A	19 502 0004	
T6, T7	JFET BC264B	19 504 0001	
U1, U3, U9, U13	IC Dual opamp TL072CP	24 501 0001	
U4, U5	IC Quad opamp TL074CN	24 501 0002	
U2, U6...U8, U12	IC Dual opamp NE5532AP	24 501 0003	
U10, U11	IC Balanced line driver SSM-2142	24 503 0003	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
RCA1, RCA2	RCA 2pol/90° Ni white/red	57 501 0005	Master 2 output/Monitor output
XLR1, XLR2	XLR 3pol/90°right M	57 502 0003	Master 1 output
JACK1	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output
J4...J7	Connector lock 5p/0° M	57 505 0001	
J8	Connector lock 3p/0° M	57 505 0002	
J1+J2	Connector 5p/90° F	57 507 0001	
PCB1	Print output MX180 MKIII/MX240 MKIII	66 001 0004	

6.4.0. 68 002 0004 OUTPUT UNIT MX240 MKIII

Refdes	Device	Order code	Function
R35...R38	Resistor 22R 0.4W 5%	02 501 022R	
R65...R68	Resistor 150R 0.4W 5%	02 501 0k15	
R5...R8	Resistor 2k2 0.4W 5%	02 501 02k2	
R84, R85	Resistor 3k9 0.4W 5%	02 501 03k9	
R31...R34	Resistor 4k7 0.4W 5%	02 501 04k7	
R27, R28, R51, R52	Resistor 8k2 0.4W 5%	02 501 08k2	
R9, R10	Resistor 9k1 0.4W 5%	02 501 09k1	
R3, R4, R19, R20, R25, R26, R76...R79, R96...R99	Resistor 10k 0.4W 5%	02 501 010k	
R21, R22	Resistor 15k 0.4W 5%	02 501 015k	
R15, R16, R41, R42, R61, R64, R80, R81	Resistor 18k 0.4W 5%	02 501 018k	
R69, R70, R72, R73	Resistor 20k 0.4W 5%	02 501 020k	
R90, R91	Resistor 22k 0.4W 5%	02 501 022k	
R43...R46	Resistor 33k 0.4W 5%	02 501 033k	
R59, R60, R62, R63	Resistor 36k 0.4W 5%	02 501 036k	
R29, R30	Resistor 100k 0.4W 5%	02 501 100k	
R47...R50	Resistor 120k 0.4W 5%	02 501 0M12	
R53...R58	Resistor 220k 0.4W 5%	02 501 0M22	
R71	Resistor 330k 0.4W 5%	02 501 0M33	
R1, R2	Resistor Fuse 22R 0.5W 5%	02 502 022R	
R39, R40	Resistor 150R 1W 5%	02 505 0k15	

C51, C52	Capacitor ceramic 22p	04 501 022p	
C29, C30, C35, C36	Capacitor film 47n/63V 10%	04 502 047n	
C25...C28	Capacitor film 100n/63V 10%	04 502 0µ10	
C45, C46	Capacitor film 220n/63V 10%	04 502 0µ22	
C23, C24	Capacitor electrolytic 100µ/10V radial	04 504 100µ	
C1, C2, C17...C20	Capacitor electrolytic 47µ/25V radial	04 506 47µ0	
C32	Capacitor electrolytic 220µ/35V radial	04 507 220µ	
C21, C22	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C31	Capacitor electrolytic 4µ7/63V radial	04 509 4µ70	
C3...C16, C34, C49, C50, C55...C58	Capacitor multilayer 22n	04 513 022n	
C37...C40	Capacitor multilayer 100n	04 513 0m10	
P1	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	
SW4	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU-2 select
SW1, SW3	Switch Tumbler 2x2/90°	11 502 0001	Left ear signal select/Mode select
D1...D5	Diode 1N4148	16 501 0002	
D6	Diode 1N4001	16 501 0003	
T2, T3	Transistor BC337	19 501 0002	
T12...T15	Transistor 2SC2878	19 501 0003	
T4, T5	Transistor BC327	19 502 0003	
T1	Transistor BC556A	19 502 0004	
U1, U3, U9, U13	IC Dual opamp TL072CP	24 501 0001	
U4, U5	IC Quad opamp TL074CN	24 501 0002	
U2, U6...U8, U12	IC Dual opamp NE5532AP	24 501 0003	
U10, U11	IC Balanced line driver SSM-2142	24 503 0003	
	IC socket DIL 8p	51 501 0002	
	IC socket DIL 14p	51 501 0003	
	Wirejumper 5mm	51 504 0002	
RCA1, RCA2	RCA 2pol/90° Ni white/red	57 501 0005	Master 2 output/Monitor output
XLR1, XLR2	XLR 3pol/90°right M	57 502 0003	Master 1 output
JACK1	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output
J4...J7	Connector lock 5p/0° M	57 505 0001	
J8	Connector lock 3p/0° M	57 505 0002	
J1+J2	Connector 5p/90° F	57 507 0001	
PCB1	Print output MX180 MKIII/MX240 MKIII	66 001 0004	

6.5.0. 68 001 0005 LED DISPLAY MX180 MKIII/MX240 MKIII

Refdes	Device	Order code	Function
R1, R2	Resistor 1k0 0.4W 5%	02 501 01k0	
R25...R28	Resistor 1k5 0.4W 5%	02 501 01k5	
R29...R32	Resistor 4k7 0.4W 5%	02 501 04k7	
R33...R36	Resistor 6k8 0.4W 5%	02 501 06k8	
R5...R8, R17...R20	Resistor 22k 0.4W 5%	02 501 022k	
R9...R16, R21...R24	Resistor 150k 0.4W 5%	02 501 0M15	
C5...C8	Capacitor film 100n/63V 10%	04 502 0µ10	
C9...C12	Capacitor electrolytic 2µ2/63V radial	04 509 2µ20	
C1...C4	Capacitor multilayer 22n	04 513 022n	
P1...P4	Trimmer horizontal 10k	09 501 0001	LED adjust
D1...D8	Diode 1N4148	16 501 0002	
U1, U2	IC Quad opamp TL074CN	24 501 0002	
U3...U6	IC LM3915N (lin)	24 503 0001	
U7...U10	IC LM3916N (log)	24 503 0002	
D26...D28, D46...D48, D66...D68, D86...D88	LED red 5x2	36 501 0001	
D9, D25, D29, D45, D49, D65, D69, D85	LED yellow 5x2	36 501 0002	
D10...D24, D30...D44, D50...D64, D70...D84	LED green 5x2	36 501 0003	
	IC socket DIL 14p	51 501 0003	
	IC socket DIL 18p	51 501 0004	

	Wirejumper 10mm	51 504 0003	
	LED holder 20 LED's	51 505 0001	
J1	Flatcable 4p 120mm 3,96mm 22AWG 1con	57 504 0001	
J2	Flatcable 5p 150mm 2,54mm 26AWG 1con	57 504 0003	
PCB1	Print LED MX180 MKIII/MX240 MKIII	66 001 0005	

6.6.0. 68 001 0006 SUPPLY UNIT MX180 MKIII/MX240 MKIII

Refdes	Device	Order code	Function
R1	Resistor Fuse 10R 0.5W 5%	02 502 010R	
VDR1	Varistor SIOV S10K75	02 504 0003	
C2...C5	Capacitor film 47n/63V 10%	04 502 047n	
C8, C11	Capacitor film 220n/63V 10%	04 502 0µ22	
C10	Capacitor electrolytic 220µ/35V radial	04 507 220µ	
C9	Capacitor electrolytic 4µ7/63V radial	04 509 4µ70	
C6, C7	Capacitor electrolytic 2200µ/35V radial	04 511 2m20	
C1	Capacitor polyester 22n 250V MKT X2	04 512 22n0	
C12	Capacitor multilayer 22n	04 513 022n	
G1, G2	Bridge rect. 1A	16 502 0002	
U2	NVR -18V	24 502 0001	
U1	PVR +18V	24 502 0002	
U3	PVR +24V	24 502 0003	
F1, F2	Fuse T1A25 5x20mm	48 001 1A25	
	Fuseholder print 5x20	51 503 0001	
	Wirejumper 5mm	51 504 0002	
	Heatsink 27x38	54 001 0003	
J7	Connector long 4p/0°/23,80mm M	57 506 0001	
J6	Connector long 6p/0°/23,80mm M	57 506 0005	
PCB1	Print supply MX180 MKIII/MX240 MKIII	66 001 0006	
	Bold M3x10	71 001 0002	
	Nut M3 brass	71 002 0001	
	Lock washer M3	71 004 0001	

6.7.0. 68 001 0007 BUSBAR UNIT MX180 MKIII

Refdes	Device	Order code	Function
R9...R12, R15, R16	Resistor 10k 0.4W 5%	02 501 010k	
R1...R4	Resistor 13k 0.4W 5%	02 501 013k	
R5...R8	Resistor 39k 0.4W 5%	02 501 039k	
R13, R14	Resistor 47k 0.4W 5%	02 501 047k	
C1...C4	Capacitor multilayer 22n	04 513 022n	
U1	IC Quad opamp TL074CN	24 501 0002	
U2	IC Dual opamp NE5532AP	24 501 0003	
	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 25mm	51 504 0005	
J9	Flatcable 6p 150mm 3,96mm 22AWG 1con	57 504 0002	
J8	Connector lock 5p/0° M	57 505 0001	
J1+J2	Connector 5p/0° square pins M	57 506 0002	
J4...J7	Connector 9p/0° square pins M	57 506 0003	
J3	Connector 6p/0° square pins M	57 506 0006	
PCB1	Print busbar MX180 MKIII	66 001 0007	

6.8.0. 68 001 0012 BUSBAR UNIT MX240 MKIII

Refdes	Device	Order code	Function
R9...R12, R15, R16	Resistor 10k 0.4W 5%	02 501 010k	
R1...R4	Resistor 13k 0.4W 5%	02 501 013k	
R5...R8	Resistor 39k 0.4W 5%	02 501 039k	
R13, R14	Resistor 47k 0.4W 5%	02 501 047k	
C1...C4	Capacitor multilayer 22n	04 513 022n	
U1	IC Quad opamp TL074CN	24 501 0002	
U2	IC Dual opamp NE5532AP	24 501 0003	
	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 25mm	51 504 0005	
J10	Flatcable 6p 150mm 3,96mm 22AWG 1con	57 504 0002	
J9	Connector lock 5p/0° M	57 505 0001	
J1+J2	Connector 5p/0° square pins M	57 506 0002	
J3...J8	Connector 9p/0° square pins M	57 506 0003	
PCB1	Print busbar MX240 MKIII	66 001 0012	

6.9.0. 68 001 0008 FADER UNIT MX180MKIII/MX240 MKIII 150mm

Refdes	Device	Order code	Function
P1	Fader 60mm 2x10klog shaft 8x1x12	09 503 0001	
J1	Flatcable 5p 150mm 2,54mm 26AWG 1con	57 504 0003	
PCB1	Print Alps fader 60mm	66 001 0008	

6.10.0. 68 002 0008 FADER UNIT MX180MKIII/MX240 MKIII 260mm

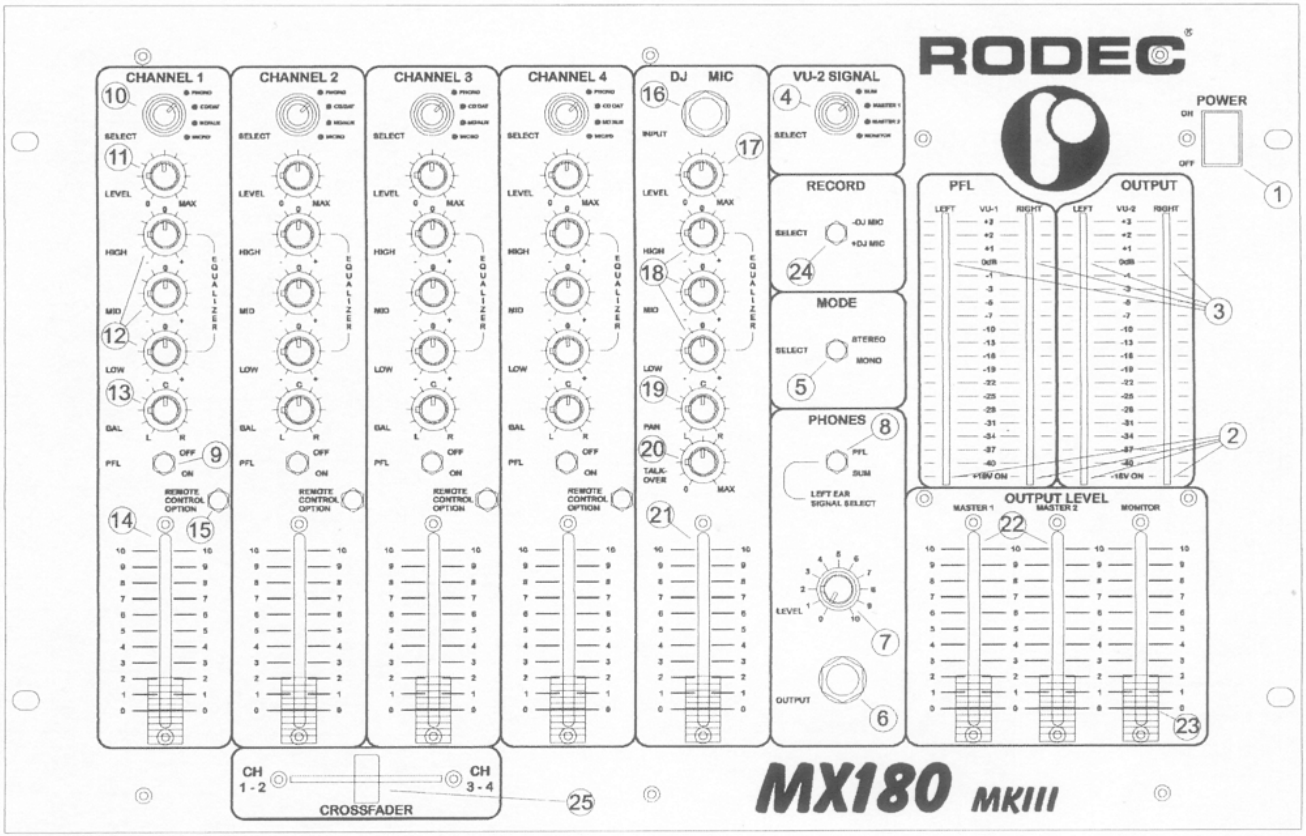
Refdes	Device	Order code	Function
P1	Fader 60mm 2x10klog shaft 8x1x12	09 503 0001	
J1	Flatcable 5p 260mm 2,54mm 26AWG 1con	57 504 0004	
PCB1	Print Alps fader 60mm	66 001 0008	

6.11.0. 68 001 0015 CROSSFADER UNIT MX180 MKIII/MX240 MKIII

Refdes	Device	Order code	Function
P1	Fader 45mm 2x50klin with center dentent	09 503 0002	
J1	Flatcable 5p 260mm 2,54mm 26AWG 1con	57 504 0004	
PCB1	Print Alps CF 45mm	66 001 0015	

7.0.0. Parts discription

7.1.0. Front view MX180 MKIII

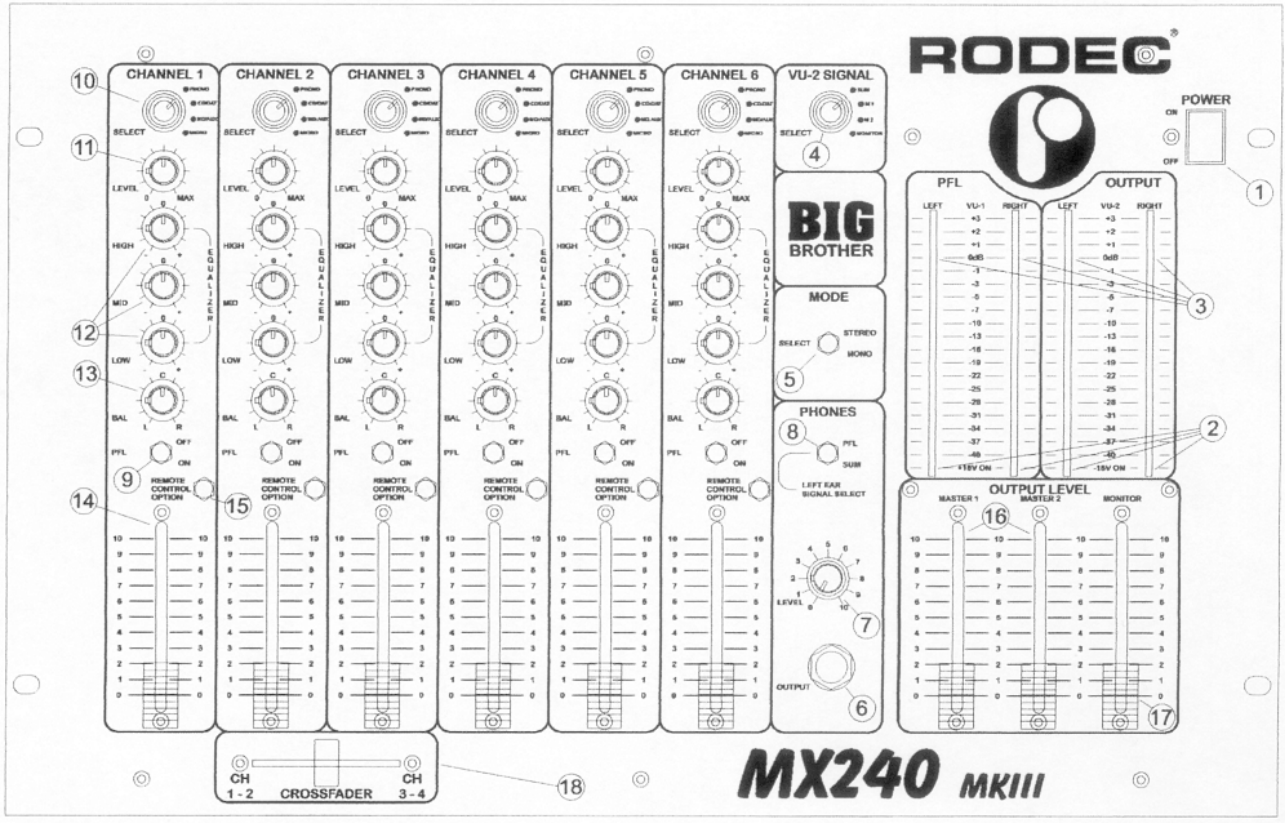


7.2.0. Front part order numbers MX180 MKIII

Number	Device	Order code	Function
1	Switch Rocker 2x2 black body red rocker	11 503 0001	Powerknob red
2+3	LED red 5x2	36 501 0001	LED red
2+3	LED yellow 5x2	36 501 0002	LED yellow
2+3	LED green 5x2	36 501 0003	LED green
4	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU-2 select switch
4	Knob Push-on Soft Black/White 12mm 315°	63 001 0005	Knob black-white
5	Switch Tumbler 2x2/90°	11 502 0001	Mode select switch
6	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output connector
7	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	Phones level potentiometer
7	Knob Push-on Soft Black/White 12mm 180°	63 001 0006	Knob black-white
8	Switch Tumbler 2x2/90°	11 502 0001	Left ear signal select switch
9	Switch Tumbler 2x2/90°	11 502 0001	Channel PFL switch
10	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	Input select switch
10	Knob Push-on Soft Black/White 12mm 315°	63 001 0005	Knob black-white
11	Potmeter Rotative 2x100klog D-shaft 6mm	09 502 0001	Channel input level potentiom.
11	Knob Push-on Soft Black/Grey 10mm 180°	63 001 0002	Knob black-grey
12	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	Equalizer potentiometer
12	Knob Push-on Soft Black/Blue 10mm 180°	63 001 0008	Knob black-blue High equalizer
12	Knob Push-on Soft Black/Green 10mm 180°	63 001 0007	Knob black-green Mid eq.
12	Knob Push-on Soft Black/Red 10mm 180°	63 001 0001	Knob black-red Low equalizer
13	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Balance potentiometer
13	Knob Push-on Soft Black/Yellow 10mm 180°	63 001 0003	Knob black-yellow
14	Alps fader unit cable=150mm	68 001 0008	Channel fader
14	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
15	Hole plug 6.5mm black	74 005 0004	Hole plug
16	JACK STEREO 90°/6.35mm metal	57 503 0001	DJ mic input connector

17	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	DJ mic input level potentiom.
17	Knob Push-on Soft Black/Grey 10mm 180°	63 001 0002	Knob black-grey
18	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Equalizer potentiometer
18	Knob Push-on Soft Black/Blue 10mm 180°	63 001 0008	Knob black-blue High equalizer
18	Knob Push-on Soft Black/Green 10mm 180°	63 001 0007	Knob black-green Mid eq.
18	Knob Push-on Soft Black/Red 10mm 180°	63 001 0001	Knob black-red Low equalizer
19	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Panorama potentiometer
19	Knob Push-on Soft Black/Yellow 10mm 180°	63 001 0003	Knob black-yellow
20	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Talk-over potentiometer
20	Knob Push-on Soft Black/White 10mm 180°	63 001 0004	Knob black-white
21	Alps fader unit cable=150mm	68 001 0008	DJ mic fader
21	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
22	Alps fader unit cable=260mm	68 002 0008	Master fader
22	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
23	Alps fader unit cable=260mm	68 002 0008	Monitor fader
23	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
24	Switch Tumbler 2x2/90°	11 502 0001	Record select switch
25	Alps crossfader unit	68 001 0015	Cross fader
25	Knob Black shaft=1.2x4	63 003 0002	Crossfader knob black
MX180 MKIII	Frontplate MX180 MKIII	74 001 0001	Frontplate

7.3.0. Front view MX240 MKIII

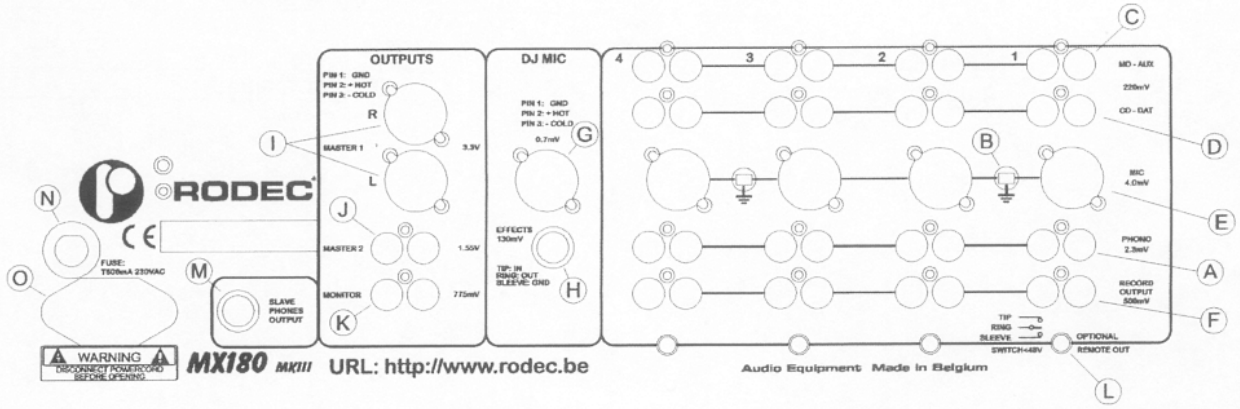


7.4.0. Front part order numbers MX240 MKIII

Number	Device	Order code	Function
1	Switch Rocker 2x2 black body red rocker	11 503 0001	Powerknob red
2+3	LED red 5x2	36 501 0001	LED red
2+3	LED yellow 5x2	36 501 0002	LED yellow
2+3	LED green 5x2	36 501 0003	LED green
4	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	VU-2 select switch
4	Knob Push-on Soft Black/White 12mm 315°	63 001 0005	Knob black-white

5	Switch Tumbler 2x2/90°	11 502 0001	Mode select switch
6	JACK STEREO 90°/6.35mm metal	57 503 0001	Phones output connector
7	Potmeter Rotative 2x20klog D-shaft 6mm	09 502 0003	Phones level potentiometer
7	Knob Push-on Soft Black/White 12mm 180°	63 001 0006	Knob black-white
8	Switch Tumbler 2x2/90°	11 502 0001	Left ear signal select switch
9	Switch Tumbler 2x2/90°	11 502 0001	Channel PFL switch
10	Switch Rotative 2x4pos D-shaft 6mm	11 501 0001	Input select switch
10	Knob Push-on Soft Black/White 12mm 315°	63 001 0005	Knob black-white
11	Potmeter Rotative 2x100klog D-shaft 6mm	09 502 0001	Channel input level potentiom.
11	Knob Push-on Soft Black/Grey 10mm 180°	63 001 0002	Knob black-grey
12	Potmeter Rotative 2x100klin D-shaft 6mm	09 502 0002	Equalizer potentiometer
12	Knob Push-on Soft Black/Blue 10mm 180°	63 001 0008	Knob black-blue High equalizer
12	Knob Push-on Soft Black/Green 10mm 180°	63 001 0007	Knob black-green Mid eq.
12	Knob Push-on Soft Black/Red 10mm 180°	63 001 0001	Knob black-red Low equalizer
13	Potmeter Rotative 1x100klin D-shaft 6mm	09 502 0004	Balance potentiometer
13	Knob Push-on Soft Black/Yellow 10mm 180°	63 001 0003	Knob black-yellow
14	Alps fader unit cable=150mm	68 001 0008	Channel fader
14	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
15	Hole plug 6.5mm black	74 005 0004	Hole plug
16	Alps fader unit cable=260mm	68 002 0008	Master fader
16	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
17	Alps fader unit cable=260mm	68 002 0008	Monitor fader
17	Knob Soft touch Black/White	63 003 0001	Fader knob black-white
18	Alps crossfader unit	68 001 0015	Cross fader
18	Knob Black shaft=1.2x4	63 003 0002	Crossfader knob black
MX240 MKIII	Frontplate MX240 MKIII	74 001 0006	Frontplate

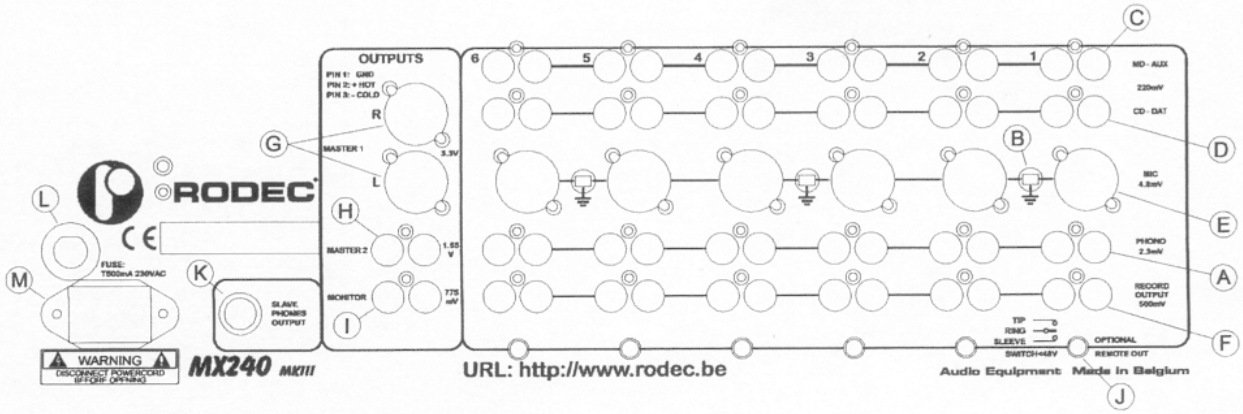
7.5.0. Back view MX180 MKIII



7.6.0. Back part order numbers MX180 MKIII

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	XLR 3pol/90°right F	57 502 0002	XLR mic input
F	RCA 2pol/90° Ni white/red	57 501 0005	RCA record output
G	XLR 3pol/90°right F	57 502 0002	XLR DJ mic input
H	JACK STEREO 90°/6.35mm metal	57 503 0001	JACK DJ mic insert
I	XLR 3pol/90°right M	57 502 0003	XLR output master 1
J + K	RCA 2pol/90° Ni white/red	57 501 0005	RCA outp. master 2 + monitor
L	Hole plug 6.5mm black	74 005 0004	Hole plug
M	Module rear JACK MX180/240 MKIII	94 001 0010	Rear phones output connector
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
MX180 MKIII	Connectionpanel MX180 MKIII	74 002 0001	Backpanel

7.7.0. Back view MX240 MKIII



7.8.0. Back part order numbers MX240 MKIII

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	XLR 3pol/90°right F	57 502 0002	XLR mic input
F	RCA 2pol/90° Ni white/red	57 501 0005	RCA record output
G	XLR 3pol/90°right M	57 502 0003	XLR output master 1
H + I	RCA 2pol/90° Ni white/red	57 501 0005	RCA outp. master 2 + monitor
J	Hole plug 6.5mm black	74 005 0004	Hole plug
K	Module rear JACK MX180/240 MKIII	94 001 0010	Rear phones output connector
L	Fuse holder	51 503 0002	Fuse holder
L	Fuse T500mA 5x20mm	48 001 500m	Fuse T500mA
M	Mains filter 1A	57 508 0001	Power inlet
MX240 MKIII	Connectionpanel MX240 MKIII	74 002 0002	Backpanel