



Service Documents

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Vertraulich! Nur für autorisierte Servicetechniker!
Nicht zur Weitergabe an Dritte freigegeben!

Note!

The components used in this product - particularly parts affecting safety as well as speakers and transformers - were developed and manufactured to certain specifications. Please use original spare parts only to ensure the product remains fully functional and safe.

Achtung!

Die in diesem Produkt verwendeten Komponenten, insbesondere sicherheitsrelevante Teile, Lautsprecher und Transformatoren wurden nach spezifischen Vorgaben entwickelt und gefertigt. Bitte benutzen Sie ausschließlich Original-Ersatzteile – nur so ist die volle Funktionalität und Sicherheit gewährleistet.



TECHNICAL SERVICE:

Stamer Musikanlagen GmbH • Magdeburger Str. 8 • 66606 St.Wendel • Germany
Music & Sales P.E. GmbH • Leipziger Str. 3 • 66606 St.Wendel • Germany



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1 L.U.C.A.S PERFORMER System Components

Subwoofer

The L.U.C.A.S PERFORMER subwoofer's housing is split into two chambers. The front chamber serves as the speaker cabinet for the 15" direct-loaded loud-speaker, which has a power-handling capacity of 500 W RMS and a nominal impedance of 8 ohms. The active electronic circuitry, the power unit, controller and Class D power amps are housed in a separate compartment at the rear of the cabinet.

Satellites

Satellites are loaded with a 8" HK Audio Custom speaker and a 1" compression driver with a 60° x 40° CD horn. They are rated for 200 W RMS power-handling capacity and a nominal impedance of 8 ohms.

The newly developed, integrated MonoTilt™ pole mount allows sound energy to be utilized with great efficiency. Troublesome ceiling reflections are minimized; the sound is clearer, tighter, and more focused.

Beyond that, the cabinet is stabilized at its center of gravity - no wobbling, tilting, or unintentional turning.

2 Transport

To transport the system, simply set the subwoofer on its casters and place the satellites onto the subwoofer with the foam-rubber grille side facing down. Secure the satellites, for example, using a locking strap. Use original HK Audio L.U.C.A.S PERFORMER protective covers to gear up your personal system for the rigors of the road. Amply padded and protected against moisture, your L.U.C.A.S PERFORMER is sure to deliver satisfying performance for a long time to come.

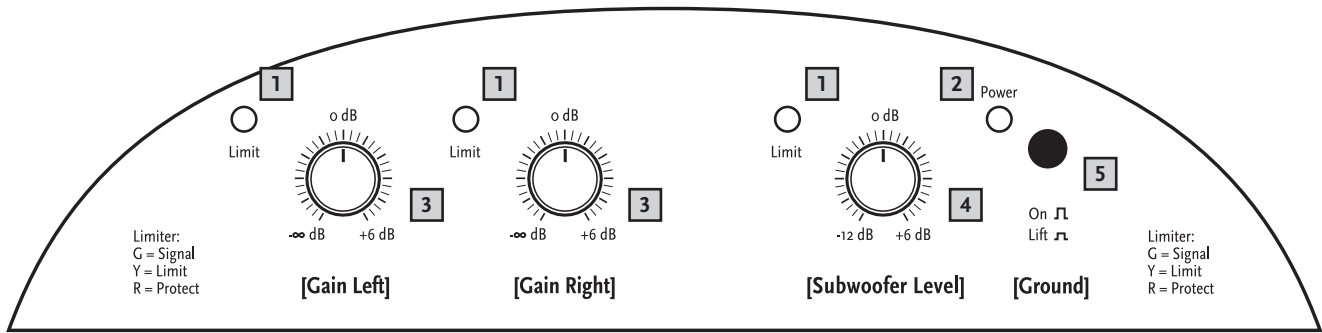
More about Limiter LEDs

Dedicated LEDs, one each for the left and right signal path as well as for the subwoofer, display the limiter status for each of those paths.

What is this display telling me?

The green LED indicates that the input is receiving a signal. As long as the LED lights up green, the system is operating at low-to-medium levels, with plenty of headroom available for the power amps. The yellow LED may flash off and on, but it may not illuminate continuously.

If it does this, back off the volume on your mixer. Red indicates Protect status, that is, a malfunction or overload has occurred and the power amps have been muted as a precaution.



L.U.C.A.S PERFORMER -- user panel

3 Connections and Control Features

L.U.C.A.S PERFORMER Subwoofer

1 Limiter LEDs

Much like rev counters, these LEDs indicate the active system's operating status. For more info, read the sidebar "More about Limiter LEDs."

2 Power On LED

This LED lights up when the power switch (see rear panel) is set to On and the system is connected to a mains power supply.

3 Gain Left/ Right

Operation: Turn the Gain knob all the way down (counterclockwise) before switching the system on. Ensure the system is connected to the satellites and all other connected components are on before powering it up. Be sure to switch on the connected mixer as well as all signal sources connected to it, for example, keyboards, amps, effects, and so forth.

After you power the system up, set the Gain knob to the 0 dBV or 12 o'clock setting. This is the preferred level if you have connected a mixer. (Note: If you connect a CD player or a keyboard directly to the system, you may not be able to achieve peak volume at this setting. If this is the case, twist the Gain knob to the far right.)

If you hear distortion or a saturated signal, first check the signal sources and, if possible, reduce the output signal level there. If you are unable to turn down the level of the signal sent to L.U.C.A.S PERFORMER at the signal source, adjust the input sensitivity using the Gain knobs. (see also Tips and Tricks—section 4).

4 Subwoofer Level

Handling: When this knob is set to the 12 o'clock position, the subwoofer's and the satellite's respective volumes are matched, ensuring the proper balance between the subwoofer's bass output and the satellites' mid/high-range output. If desired, you can twist the Subwoofer Level knob to the left, i.e. counterclockwise, to cut the subwoofer's level by as much as -12 dB and to the right to boost it by as much as 6 dB.

5 Ground

Ground lift button for separating the signal and chassis ground in the event of hum. To rid the system of low-frequency hum, press the Ground switch in. If this doesn't solve the problem, check all power and audio cables connected to L.U.C.A.S PERFORMER for damage, as well as all cables routing signals to the mixing console (see also Tips and Tricks in Section 4).

6 Input Left bzw. Input Right (Combination XLR/1/4" jacks)

L.U.C.A.S PERFORMER is equipped with separate left and right channel inputs for connecting to a mixer. Connections: Connect the audio cables that route the signal coming from your mixer (master left/right, line out, or a similar circuit) to these balanced inputs using microphone cables equipped with XLR connectors. The XLR connectors' pin assignments must be as follows: 1= ground, 2= +, 3= -. You can also use a 1/4" Tip-Ring-Sleeve plug to route signals via balanced circuits. Unbalanced signals can be patched in via a mono plug.

7 Through Left, Trough Right

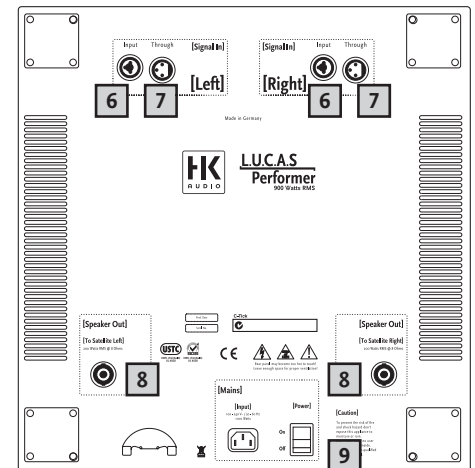
Connections: Parallel outputs for routing the line signal (left or right) to other systems, outboard components, monitor power amps, etc., via XLR cables.

8 To Satellite Left and Right

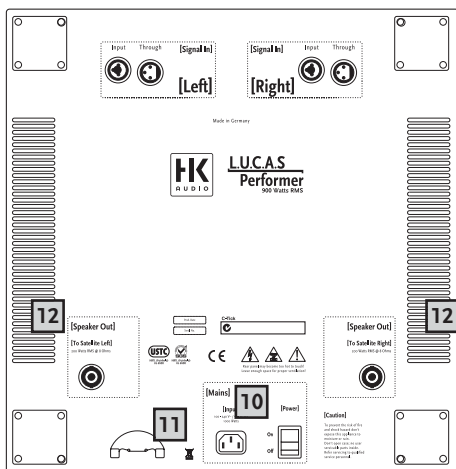
Connections: Connect these Speakon® outputs to the left and right L.U.C.A.S PERFORMER satellites using speaker cables equipped with Speakon® connectors. Note: Be sure to rotate the Speakon® connectors clockwise until they lock in place!

9 Power Switch

Operation: On/off switch for the active system. The red Power On LED in the upper control panel lights up when the system is switched on. The active L.U.C.A.S PERFORMER system should always be switched on last after you power up all equipment connected to it, and should be switched off first before you switch off all the other equipment connected to it.



L.U.C.A.S PERFORMER - user panel rear



L.U.C.A.S PERFORMER - user panel rear

10 Mains Input

Connections: Use the factory-included mains cable (power cord) to connect from this socket to a wall receptacle.

11 Mains Cable Tab

Clamp the power cable into the tab to prevent it from being pulled out inadvertently.

12 Fans

These fans (on the side and back of the housing) keep the power amp modules cool. Always keep the fan and ventilation vents free of dirt and debris, and ensure they remain unobstructed so air can circulate freely.

L.U.C.A.S PERFORMER Satellite

Input

Connections: Connect the Speakon® inputs to the left and right L.U.C.A.S PERFORMER satellite outputs using speaker cables equipped with Speakon® connectors. Note: Be sure to twist the Speakon® connectors clockwise until they lock in place! You must first disengage the safety catch before you can unplug the connector. To do this, pull the bayonet catch towards the cord.

4 Tips and Tricks

- Do not expose electronic circuitry to moisture! When you set the system up outdoors, be sure to protect it against rain. Keep soft drinks, beer or any other liquids well away from the cabinets to protect their electronic components from short circuits.
- To ensure proper ventilation, make sure the subwoofer is placed a sufficient distance away from walls and isn't covered by curtains and the like. This is vital to keep the power amps cool.

- Ensure that the vents on the subwoofer's side panels are free of dirt and that the fan blades can rotate freely. Otherwise, electronic components may overheat and suffer damage.

- L.U.C.A.S PERFORMER takes care of delivering optimum sound—so provide it with optimum input signals! Noise such as hum is generally caused by defective cables, the wrong type of cables, or unbalanced signals being fed to the mixing console. Check all audio cables and mains cables.

- Avoid distortion! Not only is it unpleasant to your audience's ears, it also endangers your equipment. Make sure all components that are connected directly and indirectly to L.U.C.A.S PERFORMER have sufficient power ratings, and that they are not distorting from being driven at their respective limits. Provide a clean, undistorted signal to the system that won't require backing off the Gain knob to clean it up.

- Avoid ground loops! If, for example, you connect the mixer to one mains circuit/wall outlet, and L.U.C.A.S PERFORMER to another, you may encounter a ground loop. To prevent this problem, always connect the L.U.C.A.S PERFORMER system and the mixing console to the same electrical circuit (same phase!). If your equipment hums despite this precaution, the Ground Lift switch can be a great help.

CAUTION: Never tape over the plug's ground terminal – this endangers lives!

5 L.U.C.A.S PERFORMER Accessories

HK AUDIO Speaker Add On Package

This is the complete L.U.C.A.S PERFORMER accessory kit consisting of two aluminum cabinet tripods, one gig bag, and two speaker cables.

HK AUDIO Protective Covers for L.U.C.A.S PERFORMER

This set comprises one cover for the subwoofer and two covers for the satellites. Tear-resistant and water-repellant, these rugged covers are thickly padded to afford lasting protection for the L.U.C.A.S PERFORMER system during transport.

To learn more about Original HK AUDIO Accessories, talk to your HK AUDIO® dealer or visit www.hkaudio.com.

6 Troubleshooting

The Power On LED does not light up red after you switch the system on.

- 1 Check if the power cable is plugged into the Mains Input.
- 2 Check if the mains power supply is providing current.

The Power On LED lights up, but there is no sound coming from the cabinets.

- 1 Check the cables connected to the Left and Right inputs.
- 2 Check if the signal sources (mixer, keyboard, CD player) are on.
- 3 Is the Gain knob turned up?
- 4 Check the speaker cables for damage.
- 5 Check if the "Speakon" connectors are fully engaged in their sockets (rotated to the right). They must be locked in place to establish an electrical connection.

The subwoofer's low frequency output is too soft.

- 1 Check the setting of the Subwoofer Level knob.
- 2 Adjust this knob to set the volume of the subwoofer to the desired level.

Sound seems distorted.

- 1 Check the LED displays on your mixer. They should not be constantly in the red. If necessary, reduce the volume at the mixer.
- 2 If the LED displays on your mixer are in the green, turn back L.U.C.A.S PERFORMER's Gain knob.
- 3 Watch the LEDs of the Limit Left, Limit Right and Limit Subwoofer displays on L.U.C.A.S PERFORMER's control panel. These may light up yellow, but only intermittently. Under no circumstances may they continuously illuminate yellow. If this is the case, turn the Gain down (knob counterclockwise).

Annoying hum

- 1 Check the cables connecting the source of the audio signal to L.U.C.A.S PERFORMER. Replace any damaged cords.
- 2 If you cannot pinpoint the cause of the humming, press the Ground switch in. This should remedy the problem in most cases.

7 Technical Specifications

L.U.C.A.S PERFORMER Subwoofer

Inputs/outputs:	
Line In:	XLR female, 1/4" combination jack (pin 1= ground; 2= +, 3= -)
Input:	Electronically balanced & floating
Input impedance:	47 k ohms
Sensitivity:	0 dBV (=1V)
Max. input level:	+ 20 dBu
Parallel out:	XLR male (pin 1= ground; 2=+, 3= -)
Speaker outputs:	Speakon® NL 4 (pin 1+= +, 1=- -)
Amplifiers:	
Subwoofer output:	1x 500 W RMS / Class D power amp
Satellites output:	2x 200 W RMS / Class D power amp
Protective circuits:	MultiBand limiter
Speakers:	
Woofers:	1x 15"
Subwoofer frequency response:	47 Hz -130 Hz, ± 3 dB 38 Hz -130 Hz, - 10 dB
SPL 1W / 1m:	101 dB (half space)
Max. SPL / 1m:	126 dB @ 10% THD (half space)
Weights and measures:	
Weight:	29,5 kg/ 64,9 lbs
Dimensions (WxHxD): without casters	47,5 cm x 47 cm x 58,5 cm 18-3/4" x 18-1/2" x 23"

L.U.C.A.S PERFORMER Satellite

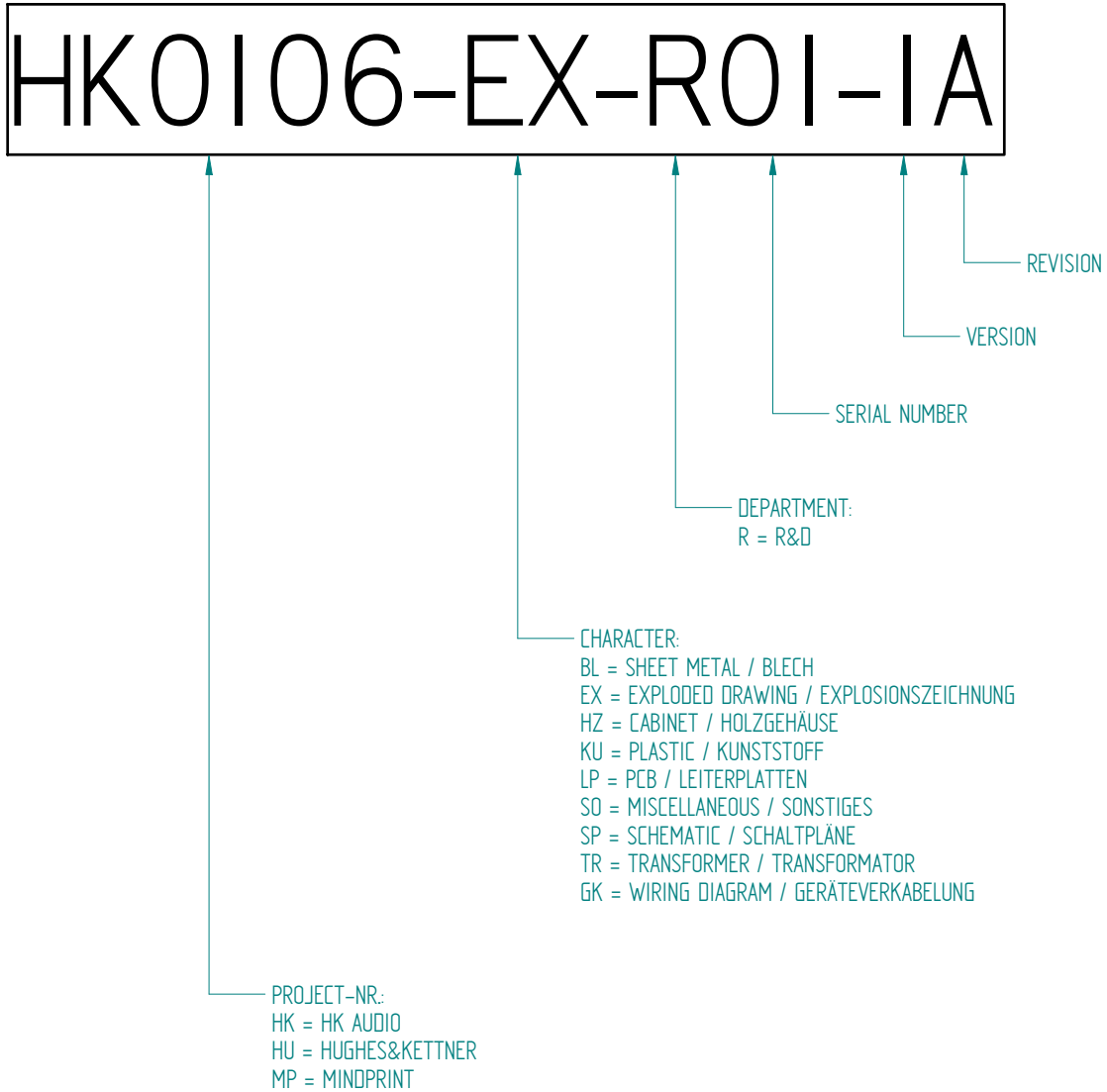
Inputs:	
Speaker input:	Speakon® NL 4 (pin 1+= +, 1=- -)
Speakers:	
Woofers:	1x 8"
Drivers:	1x 1"
Directivity:	60° x 40° CD horn
Overall nominal impedance:	8 ohms
Nominal power handling:	200 W RMS
SPL 1W / 1m:	102 dB (half space)
Max. SPL / 1m:	124 dB @ 10% THD (half space)
Frequency response: (via Controller)	130 Hz - 19 kHz, +/- 3 dB
Crossover frequency (passive):	2.4 kHz/ 12 dB / octave
Driver protection:	Dynamic protective circuit
Pole mount:	HK Audio MonoTilt™ 36 mm, -10°
Weights and measures:	
Weight:	7,2 kg/ 15,8 lbs.
Dimensions (WxHxD):	26 cm x 38,5 cm x 28,5 cm 10-1/8" x 15-1/8" x 11-1/4"

General electrical data:

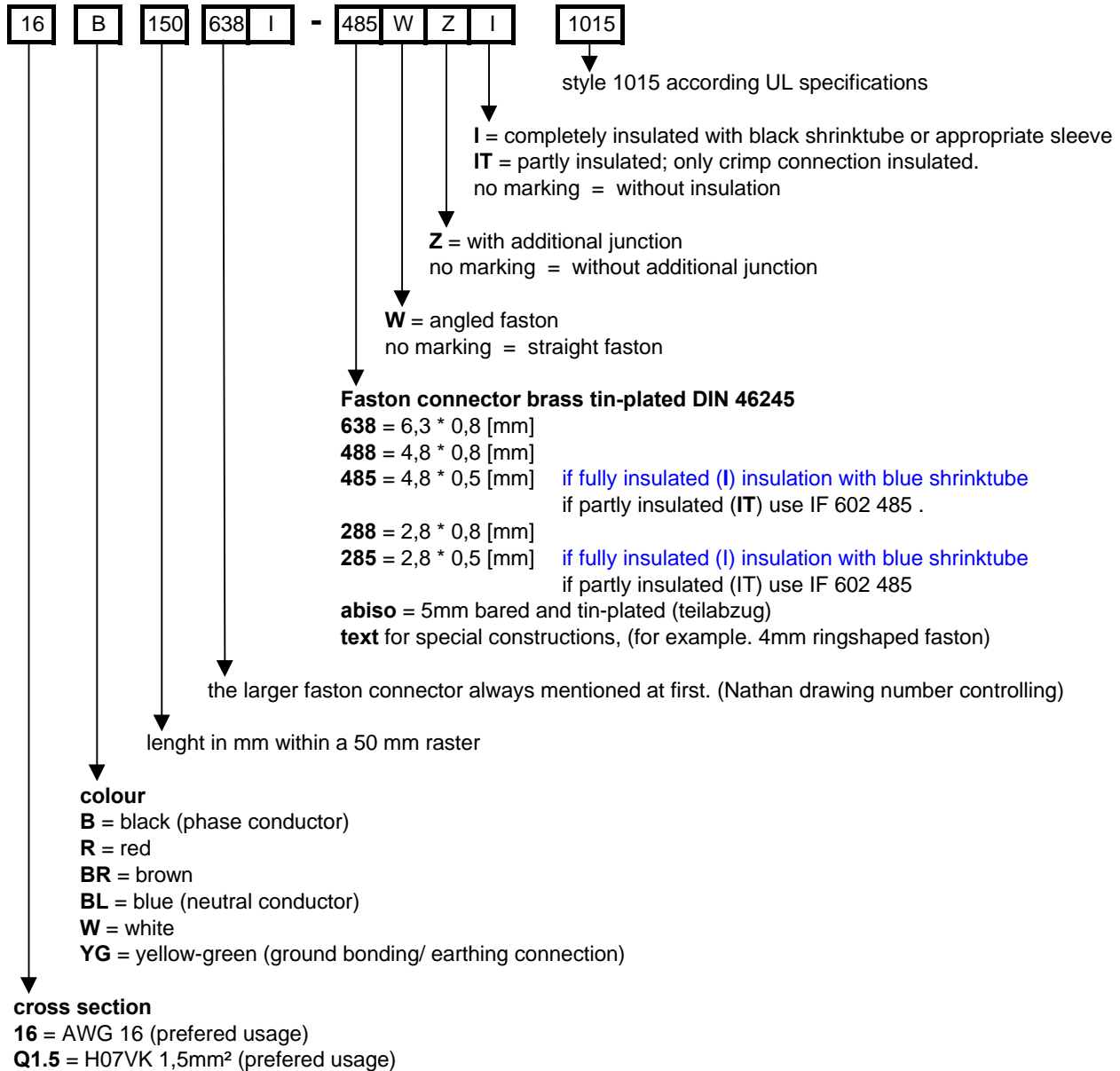
Protection class 1 (protectively earthed)

Max. current consumption:	4.4 A (220 – 240 V) • 8 A (110 – 120 V)
Max. power consumption:	1000 Watts
Mains voltage range:	+/- 10%
Ambient temperature range during operation:	-10° C to +35° C

DRAWING-NUMBERS EXAMPLE



Standard for single wire confection.



wire designation:

P + lfd Nr. = AWG single wire black, red, blue, brown or white

E + lfd Nr. = AWG single wire green- yellow

L + lfd Nr. = twisted AWG double wire, length specification always in twisted condition

FQL + lfd Nr. = crossover wiring H07VK

Regarding special wirings like wiring harness or similar, drawings will be prepared and appropriate drawing numbers will be stored in the article archive.



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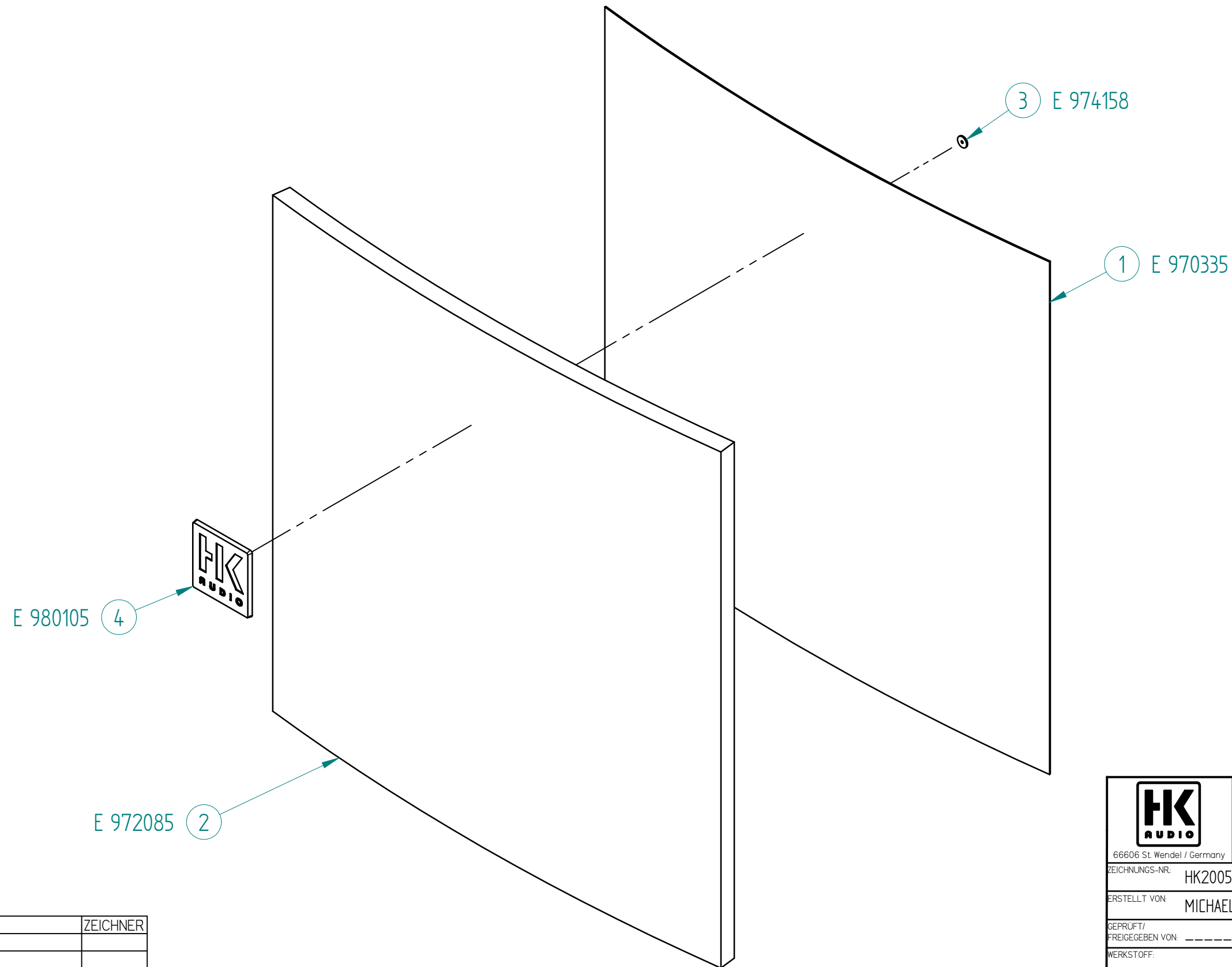
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Pos.	Artikel-Nr. 1	Artikel-Nr. 2	Artikel-Nr. 3	description	Titel	Menge
1	1133			L.U.C.A.S. Performer front grill assembly	Frontgitter Lucas Performer Bass	1
2	400278			LUCAS Performer, Bass wooden cabinet	40 Holzgeh.Lucas Perform.Bass	1
3	502197			L.U.C.A.S. Performer electronics chassis	50 Chass.Luc. Performer 100-240V	1
4	970451			front grill reeinforcement profile 15"	Blech Verstrebungswinkel 15"	1
5	972008			damping wool	Dämmwolle Hochbauschvlies	2
6	972047			PE-foam tube	PE-Schaumstoff-Röhrchen	8
7	974011			hexagon socket head cap screw, M6x25, black	Inbusschraube M6*25 sw	4
8	974017			hexagon socket countersunk head screw, M6x25, black	Inbussensschraube M6x25 sw	4
9	974108			plastic PCB spacer, 6.2x10x15, Polyamid black	Dist.Hülse PE 6,2*10*15 [mm]	2
10	974322			ABC-Spax-S screws for backwall, 4x20, black	Rückwandschraube, 4*20 sw	2
11	974355			cross recessed panhead tapping screw with collar, 3.9x30, black	Blechschr. KFR-Kopf 3,9* 30 sw	14
12	974454			plastic PCB spacer, 6.2x10x10, Polyamid black	Dist.Hülse PE 6,2*10*10[mm]	4
13	974455			ABC-Spax-S chipboard screw, panhead Z, 5x16, black	Pan Head-Z ABC-Spax sw 5*16	4
14	974475			hexagon socket head cap screw, M6x50, black	Inbusschraube M6*50 sw	2
15	974509			hexagon socket low head cap screw, M6x30, black	Inbusschr. Flachkopf M6*30 sw	2
16	976001			rubber foot square, self-adhesive, black	Gummifuss quadr. selbstkleb. sw	2
17	976009			rubber foot D38*H11 [mm]	Gummifuss D38*H11 [mm]	4
18	976094			plastic dish 3403 HKBS! DART !	Griffschale 3403 HKBS! DART !	2
19	976115			connector plate	Befestigungsplatte M20	1
20*	982037			sealing tape 2x6mm	Iso-Zell-Band fadenvers. 2*6mm	1,10 lfdm
21*	982044			sealing tape 2x15mm	Iso-Zell-Band fadenvers. 2*15mm	0,30 lfdm
22*	988165			1k polyurethane glue, 310mltrs. tube	Polyurethan 1-K Kleber, 310ml Kartusche	xxx
23	994235			SICA LP 390.75/N360 WT 8 Ohms	SICA LP 390.75/N360 WT 8 Ohms	1


INDEX	ÄNDERUNG	ZEICHNER

 66606 St. Wendel / Germany	TITEL:	
	HK2005 - L.U.C.A.S. PERFORMER EXPLOSIONSZEICHNUNG GESAMT	
ZEICHNUNGS-NR:	HK2005-EX-R03-1B	VERSION: 1 REVISION: B
ERSTELLT VON:	MICHEAL BOHLENDER	AM: 05.04.2006 BLATT: 2
GEPRÜFT/ FREIGEgeben VON:		AM: 2 BLÄTTER
WERKSTOFF:		OBERFLÄCHE: n/a
DATEINAME:	HK2005-EX-R03-1B-GESAMT-BASS	

Pos.	Artikel-Nr. 1	Artikel-Nr. 2	Artikel-Nr. 3	description	Titel	Menge
1	970335			front grille stretched metal	Streckgitter	1
2	972085			acoustic grille foam, black 15mm	Akustikschaum Anthrazit 15mm	1
3	974158			snapon retaining ring (for Logo)	Schnellbefestiger f. Logo	1
4*	980105			logo 'HK Audio' 55x55 mm	Logo 'HK Audio' 55x55 mm	1
5*	986016			foam glue, Alfa D 4572	Klebstoff Alfa D 4572	xxx




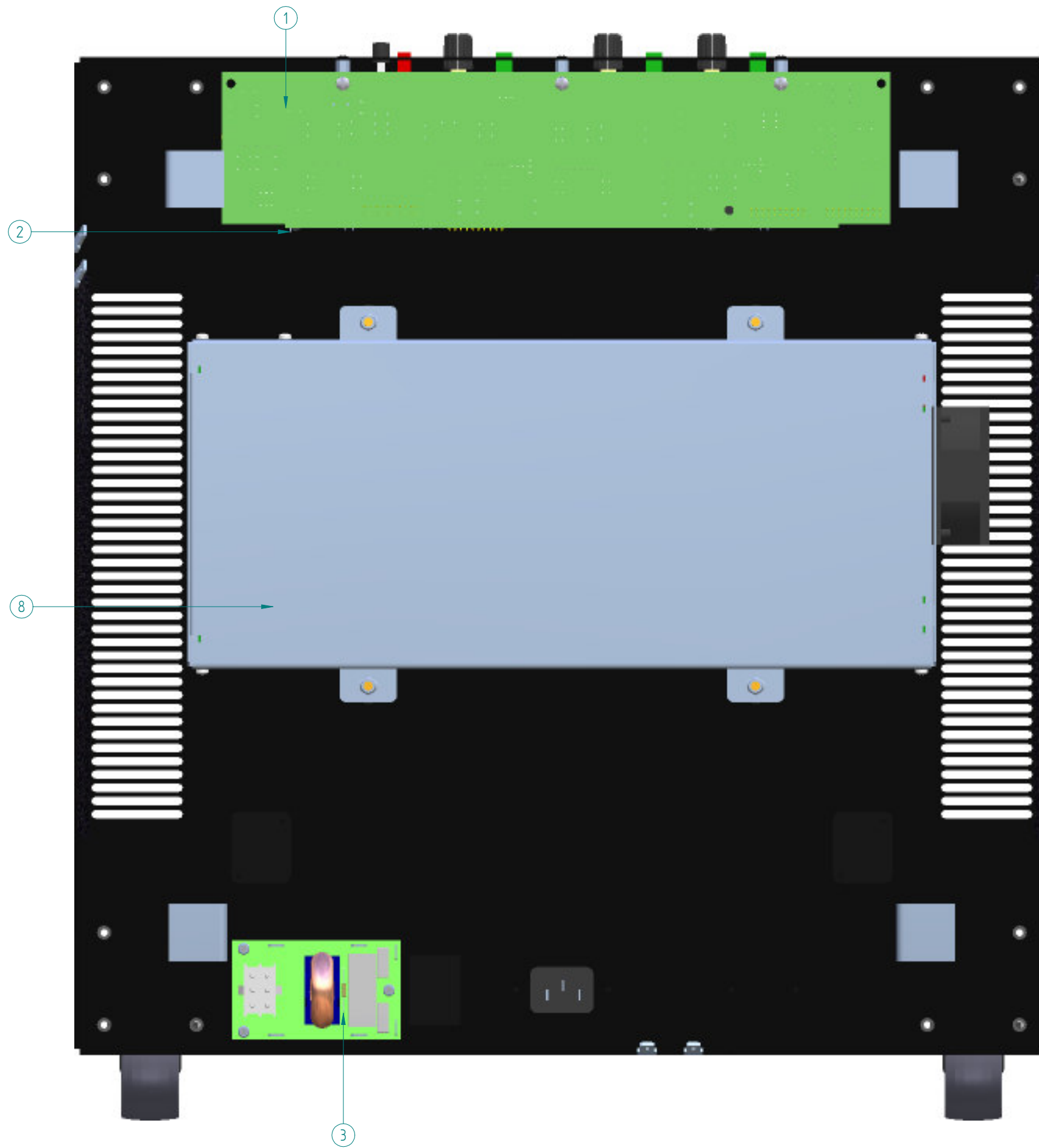
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		TITEL:	
		HK2005 - L.U.C.A.S. Performer Explosion Frontgitter Bass	
66606 St. Wendel / Germany			
ZEICHNUNGS-NR:	HK2005-EX-R02-1A	VERSION:	1
ERSTELLT VON:	MICHAEL BOHLENDER	AM:	01.02.2006
GEPRÜFT/ FREIGEgeben VON:	_____	AM:	01.02.2006
WERKSTOFF:		OBERFLÄCHE:	n/a
DATEINAME:	HK2005-EX-R02-1A-FRONTGITTER-BASS		
		BLATT:	1
		BLÄTTER:	1


Pos.	Artikel-Nr. 1	Artikel-Nr. 2	Artikel-Nr. 3	description	Titel	Menge
1	547057			54 Lucas Performer Preamp Assembly	54 Lucas Performer Vorstufe	1
2	600088			60 Inputboard Lucas Max	60 Inputboard Lucas Max	1
3	600089			60 Mains Filter Lucas Impact 100-240V	60 Netzfilt.Lucas Imp 100-240V	1
4	943239			dust protection, acoustic foam, black, PPI15, 5mm	Staubschutz Lucas Max "07"	2
5	950060			hi-inrush, mains rocker switch, C13150VB	Netzschalter gross C1350VB	1
6	952260			power inlet, type 6100.3300, Schurter	Netzbuchse Typ 6100.3300	1
7	952305			speakon chassis connector, NL4MP-3	Speakonbuchse 4pol eckig, NL4MP-3	2
8	959068			QuadAMP, 4ch PWM unit, RD0303	QuadAMP, 4ch PWM Modul, RD0303	1
9	966075			Push-Bottom-Trio	Knopf-Swtich TRIO	1
10	966076			softtouch poti knob, REAN, flexifit, F313	Knopf-Poti 13mm sw/sw/ws	3
11	970769			Lucas Max castor stabilizer	Blech Lucas Max Stützwinkel	4
12	970791			Subwoofer Sheet Metal Chassis, Lucas Performer	Blech Lucas Perfor.Bass Chass.	1
13	974103			toothed lock washer, D=4.3, AZ, zinc plated	Fächer-Scheibe az, 4,3 vz	2
14	974110			self locking hexagon nut with plastic insert, M3, zinc plated	Stopmutter M3 vz	3
15	974197			hexagon PCB spacer, type B, M3x8, zinc plated	Dist. Bol Innen/Außengew. M3*8 vz	3
16	974201			cross recessed raised countersunk screw, M3x5, stainless steel, black	Linsensenkschraube A2 M3*5 sw	3
17	974271			cross recessed raised countersunk screw, M3x8, black	Linsensenkschraube M3*8 sw	2
18	974290			self locking hexagon nut with plastic insert, M4, zinc plated	Stopmutter M4 vz	4
19	974356			blind rivet steel standard, 6x10, black	Blindniete Stahl schw. 6*10	16
20	974392			hexagon socket oval head screw, M3x8, black	Linsenschr.m.Innens. M3*8 sw	2
21	974521			cross rec. raised counters. tap. screw w. cutting slot, 2.9x9.5, black	Senkschr. f. Kunststoff 2,9*9,5, sw	12
22	976125			mains cable strain relief, HKAudio custom made	Kabelhalter HK Audio	1
23	976141			rubberbuffer 15x15 B	Gummipuffer GM-Puffer 15x15 B	4
24	976169			Swivel castor LPA-TPA 75K-FK, black	Lenkrolle 75mm RAL2005 schwarz	4
25*	988011			silicon glue, 310mltrs tube	Silicon transparent, 310ml Kartusche	xxx

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		TITEL:	
		HK2005 - L.U.C.A.S. PERFORMER EXPLOSIONS CHASSIS BASS	
66606 St. Wendel / Germany		ZEICHNUNGS-NR. HK2005-EX-R01-1B	VERSION 1
ERSTELLT VON: MICHAEL BOHLENDER		AM 04.04.2006	REVISION A
GEPRÜFT/ FREIGEgeben VON:		AM	BLATT 2
WERKSTOFF:		3 BLÄTTER	
WERKSTOFF:		OBERFLÄCHE: N/A	
DATEINAME: HK2005-EX-R01-1B-CHASSIS-BASS			



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	HK2005 - L.U.C.A.S. PERFORMER EXPLOSIONS CHASSIS BASS		
66606 St. Wendel / Germany	ZEICHNUNGS-NR:	VERSION:	REVISION:
	HK2005-EX-R01-1B	1	A
ERSTELLT VON:	MICHAEL BOHLENDER	AM:	BLATT:
		04.04.2006	3
GEPRÜFT/ FREIGEgeben VON:		AM:	3 BLÄTTER
WERKSTOFF:	OBERFLÄCHE: N/A		
DATEINAME:	HK2005-EX-R01-1B-CHASSIS-BASS		

E 962030
stranded wire, green-yellow
AWG16, UL, CSA
16-YG-200-638-638

E 962314
stranded wire, green-yellow
AWG16, UL, CSA
16-YG-200-638-eyelet

965617 flat ribbon cable
20-2-150MM TYP 5
HK0802-KA-R03-1A

965617 flat ribbon cable
20-2-150MM TYP 5
HK0802-KA-R03-1A

connection preamp to input
965617 flat ribbon cable
20-2-150MM TYP 5
HK0802-KA-R03-1A

E 962293
stranded wire, red
AWG16, UL, CSA
16-R-350-4881-4851

E 962261
stranded wire, black
AWG16, UL, CSA
16-B-300-4881-4851

E 962291
stranded wire, red
H07VK, UL, CSA
Q15-R-1000-6381-4881

E 962292
stranded wire, black
H07VK, UL, CSA
Q15-B-1000-6381-4881

E964050 Mainscable
HK1005-KA-R01-1B

E 962081
stranded wire, black
AWG16, UL, CSA
16-B-120-6381-6381


E 962255
stranded wire, blue
AWG16, UL, CSA
16-BL-120-6381-6381

E 962255
stranded wire, blue
AWG16, UL, CSA
16-BL-120-6381-6381

E 962038
stranded wire, green-yellow
AWG16, UL, CSA
16-YG-120-638-638


E 962081
stranded wire, black
AWG16, UL, CSA
16-B-120-6381-6381

INDEX	ÄNDERUNG	ZEICHNER
1B 040406	Litze E18 für QuadAMP ergänzt, blau und schwarz am Netzfilter getauscht, Verlegung Netzkabel	M. Bohlender
1C 010606	Lange Litze E18 auf 200MM korrigiert (Nathan)	M. Bohlender

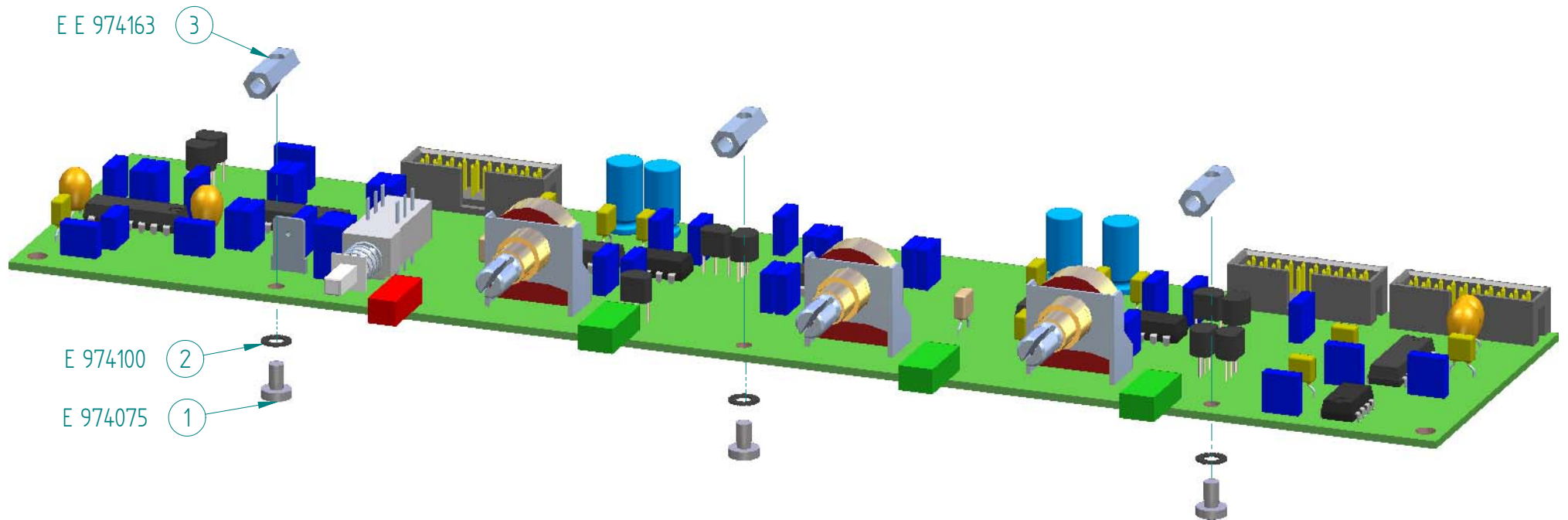
 66606 St. Wendel / Germany	TITEL: HK2005 - L.U.C.A.S. PERFORMER VERKABELUNG CHASSIS BASS		
	ZEICHNUNGS-NR: HK2005-GK-R01-1C	VERSION: 1	REVISION: C
ERSTELLT VON: MICHAEL BOHLENDER	AM: 01.06.2006	BLATT: 1	
GEPRÜFT/ FREIGEgeben VON: MICHAEL BOHLENDER	AM: 01.06.2006	2	BLÄTTER
WERKSTOFF:	OBERFLÄCHE: N/A		
DATEI-NAMEN: HK2005-GK-R01-1C-VERKABELUNG-BASS			


Pos.	Artikel-Nr. 1	Artikel-Nr. 2	Artikel-Nr. 3	description	Titel	Menge
1	962030			stranded wire I6-YG-200-638-638 AWG, UL, CSA	Litze I6-YG-200-638-638 AWG, UL, CSA	1
2	962038			stranded wire I6-YG-120-638-638 AWG, UL, CSA	Litze I6-YG-120-638-638 AWG, UL, CSA	1
3	962081			stranded wire I6-B-110-638I-638I AWG, UL, CSA	Litze I6-B-110-638I-638I AWG, UL, CSA	2
4	962255			stranded wire I6-BL-120-638I-638I AWG, UL, CSA	Litze I6-BL-120-638I-638I AWG, UL, CSA	2
5	962261			stranded wire I6-B-300-488I-485I AWG, UL, CSA	Litze I6-B-300-488I-485I AWG, UL, CSA	2
6	962293			stranded wire I6-R-350-488I-485I AWG, UL, CSA	Litze I6-R-350-488I-485I AWG, UL, CSA	2
7	962314			stranded wire I6-YG-200-638-eyelet AWG, UL, CSA	Litze I6-YG-200-638-eyelet AWG, UL, CSA	1
8	964050			Mainscable Lucas Impact	Powerkabel Lucas Impact	1
9	965617			flat ribbon cable 20-2-150 Typ 5, RMI,26	Flachband 20-2-150 Typ 5, RMI,27	3

INDEX	ÄNDERUNG	ZEICHNER

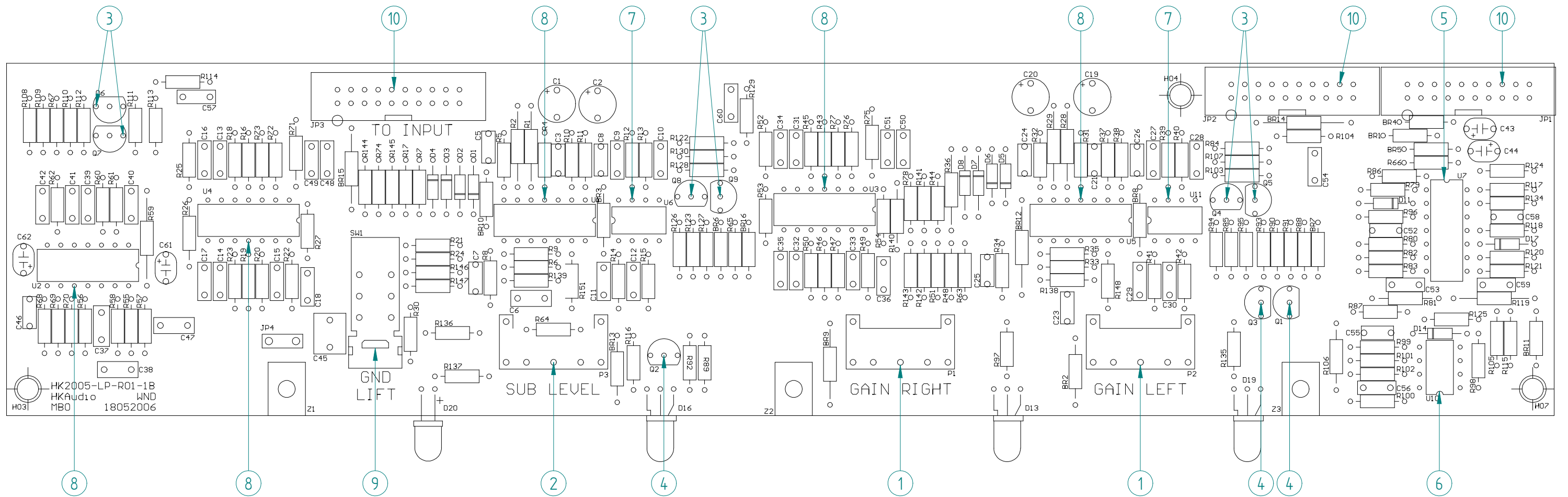
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		HK2005 - L.U.C.A.S. PERFORMER VERKABELUNG CHASSIS BASS	
ZEICHNUNGS-NR:	HK2005-GK-R01-1C	VERSION:	1
ERSTELLT VON:	MICHAEL BOHLENDER	AM:	01.06.2006
GEPRÜFT/ FREIGEgeben VON:	MICHAEL BOHLENDER	AM:	01.06.2006
WERKSTOFF:		OBERFLÄCHE:	N/A
DATEINAME:	HK2005-GK-R01-1C-VERKABELUNG-BASS		

Pos.	Artikel-Nr. 1	description	Titel	Menge
1	974075	cross recessed panhead screw, M3x5, zinc plated	Linsenschraube M3x5 vz	3
2	974100	toothed lock washer, D=3,2, AZ, black zinc plated	Fächer-Scheibe az, 3,2 sw vz	3
3	974163	PCB holder, 90°, nickel plated	Befestigungselement M3x15 NI	3



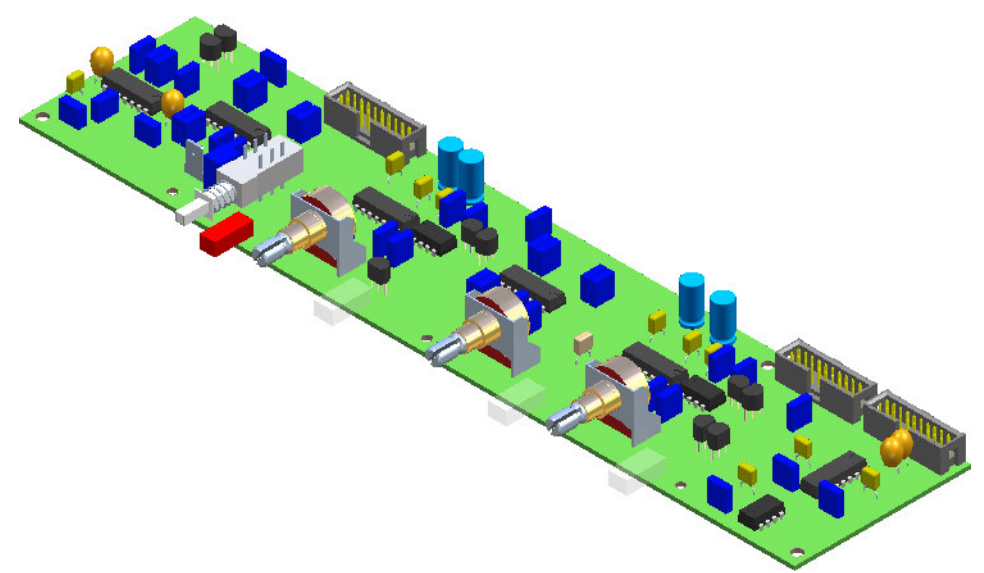
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	HK2005 -- L.U.C.A.S. PERFORMER PREAMP ASSEMBLY		
ZEICHNUNGS-NR:	HK2005-EX-R06-1A	VERSION:	1
ERSTELLT VON:	MICHAEL BOHLENDER	AM:	09.03.2006
GEPRÜFT/ FREIGEgeben VON:		AM:	
WERKSTOFF:		OBERFLÄCHE:	
DATEINAME:	HK2005-EX-R06-1A-VORSTUFE		


INDEX	ÄNDERUNG	ZEICHNER



HK2005-LP-R01-1B
 HK Audio WND
 MBO 18052006

INDEX	ÄNDERUNG	ZEICHNER



	TITEL: HK2005 -- L.U.C.A.S. PERFORMER SILKSCREEN PREAMP		
	<small>66606 St. Wendel / Germany</small>		
ZEICHNUNGS-NR: HK2005-LP-R01-1B	VERSION: 1	REVISION: B	
ERSTELLT VON: MICHAEL BOHLENDER	AM: 19.05.2006	BLATT: 1	
GEPRÜFT/ FREIGEgeben VON: MICHAEL BOHLENDER	AM: 27.06.2006	2 BLÄTTER	
WERKSTOFF: FR4, single layer, 1,55mm	OBERFLÄCHE: HAL, 35µm CU, bottom solder mask		
DATEINAME: HK2005-LP-R01-1B-Bestueckung			


Spare Parts List for:

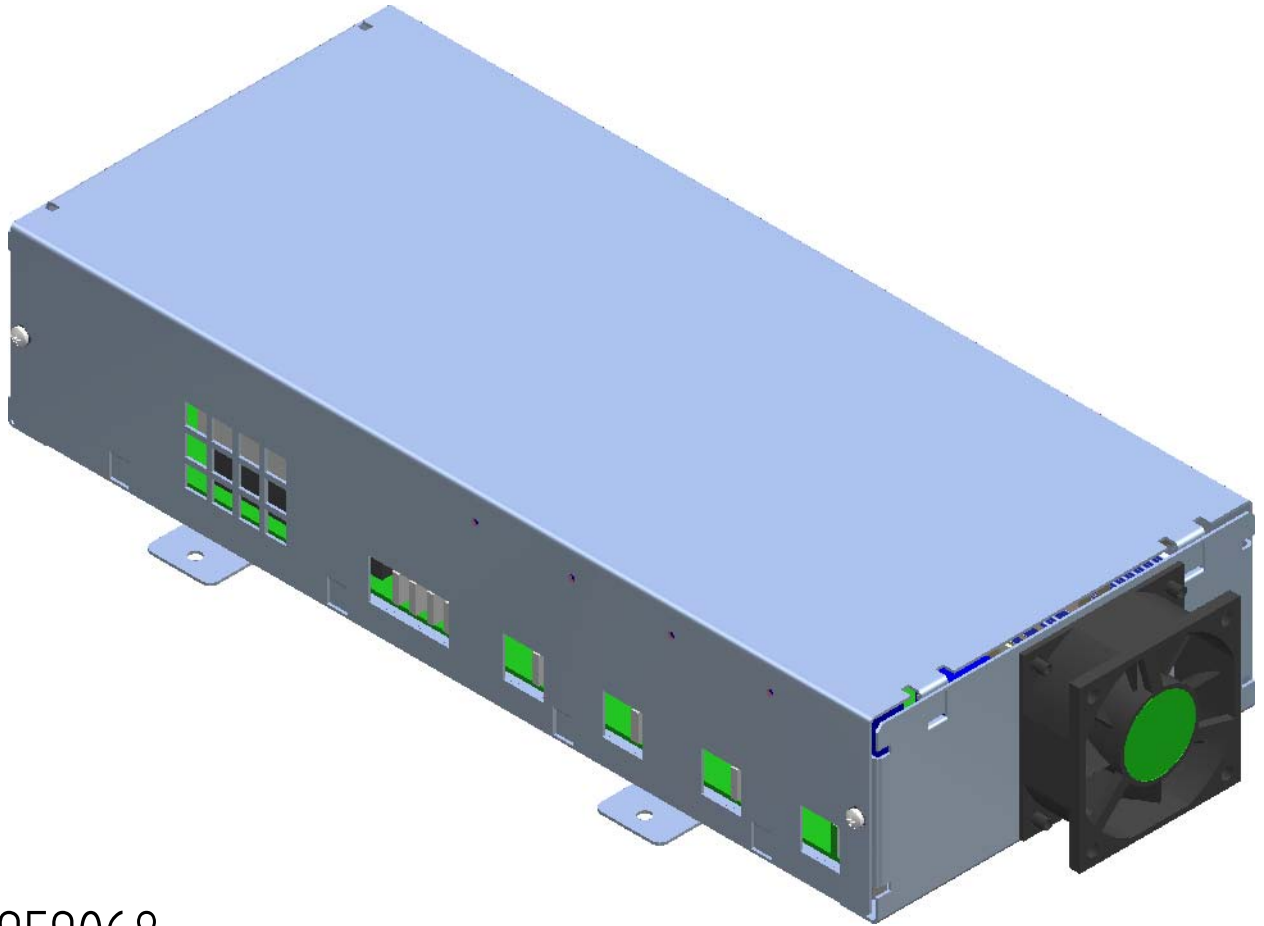
HK2005-LP-R01-1B

Project: L.U.C.A.S. Performer
 Project Number: HK2005
 Assembly: Preamp Board

Pos.	Article No.	Description	Bezeichnung	Reference Designators	Quantity
1	914033	Poti B10K lin mono RK16	Poti B10K lin mono RK16	P1, P2	2
2	914049	Poti B10K lin mono CC RK16	Poti B10K lin mono CC RK16	P3	1
3	938009	Transistor BC 546B NPN TO92	Transistor BC 546B NPN TO92	Q9, Q8, Q7, Q6, Q5, Q4	6
4	938012	Transistor BC 556B PNP TO92	Transistor BC 556B PNP TO92	Q1, Q2, Q3	3
5	940019	IC TL 074CN 4*FET OP	IC TL 074CN 4*FET OP	U7	1
6	940021	IC TL 082CN/CP 2*FET OP	IC TL 082CN/CP 2*FET OP	U10	1
7	940032	IC MC 33078P 2*lo-noice ON	IC MC 33078P 2*lo-noice ON	U11, U6	2
8	940036	IC MC 33079P 4*lo-noice ON	IC MC 33079P 4*lo-noice ON	U1, U2, U3, U4, U5	5
9	950001	push button sw itch,2x ON-NONE-ON	Druckschalter Push Button Sw . 2x UM	SW1	1
10	952150	shrouded pin header 20pins, double row	Wannenstecker 2*10pol Gprint	JP1, JP2, JP3	3

INDEX	ÄNDERUNG	ZEICHNER

 <small>66606 St. Wendel / Germany</small>	TITEL: HK2005 -- L.U.C.A.S. PERFORMER SILKSCREEN PREAMP		
	ZEICHNUNGS-NR: HK2005-LP-R01-1B	VERSION: 1	REVISION: B
ERSTELLT VON: MICHAEL BOHLENDER	AM: 19.05.2006	BLATT: 2	
GEPRÜFT/ FREIGEgeben VON: MICHAEL BOHLENDER	AM: 27.06.2006	2 BLÄTTER	
WERKSTOFF: FR4, single layer, 1,55mm	OBERFLÄCHE: HAL, 35µm CU, bottom solder mask		
DATEINAME: HK2005-LP-R01-1B-Bestueckung			



E 959068
QuadAMP, 4ch PWM unit

To ensure the procedure of our quality assurance (burn-in-test, quality-test,...) please send the complete module to our technical service for replacement.

For customer inquiry please contact our service-team.

HK2005-EX-R03-1B-SUB-COMPLETE

Article No. 1 (230V)	Article No. 2 (117V)	Article No. 3 (100V)	Description	Bezeichnung	Quantity
E1133			L.U.C.A.S. Performer front grill assembly	Frontgitter Lucas Performer Bass	1
400278			LUCAS Performer, Bass wooden cabinet	40 Holzgeh.Lucas Perform.Bass	1
502197			L.U.C.A.S. Performer electronics chassis	50 Chass.Luc. Performer 100-240V	1
970451			front grill reinforcement profile 15"	Blech Verstrebungswinkel 15"	1
972008			damping wool	Dämmwolle Hochbauschvlies	2
972047			PE-foam tube	PE-Schaumstoff-Röhrchen	8
974011			hexagon socket head cap screw, M6x25, black	Inbusschraube M6*25 sw	4
974017			hexagon socket countersunk head screw, M6x25, black	Inbussenkschraube M6x25 sw	4
974108			plastic PCB spacer, 6.2x10x15, Polyamid black	Dist.Hülse PE 6,2*10*15 [mm]	2
974322			ABC-Spax-S screws for backwall, 4x20, black	Rückwandschraube, 4*20 sw	2
974355			cross recessed panhead tapping screw with collar, 3.9x30, black	Blechschr. KFR-Kopf 3,9* 30 sw	14
974454			plastic PCB spacer, 6.2x10x10, Polyamid black	Dist.Hülse PE 6,2*10*10[mm]	4
974455			ABC-Spax-S chipboard screw, panhead Z, 5x16, black	Pan Head-Z ABC-Spax sw 5*16	4
974475			hexagon socket head cap screw, M6x50, black	Inbusschraube M6*50 sw	2
974509			hexagon socket low head cap screw, M6x30, black	Inbusschr. Flachkopf M6*30 sw	2
976001			rubber foot square, self-adhesive, black	Gummifuss quadr. selbstkleb. sw	2
976009			rubber foot D38*H11 [mm]	Gummifuss D38*H11 [mm]	4
976094			plastic dish 3403 HKBS! DART !	Griffschale 3403 HKBS! DART !	2
976115			connector plate	Befestigungsplatte M20	1
982037			sealing tape 2x6mm	Iso-Zell-Band fadenvers. 2*6mm	1,10 lfdm
982044			sealing tape 2x15mm	Iso-Zell-Band fadenvers. 2*15mm	0,30 lfdm
988165			1k polyurethane glue, 310mltrs. tube	Polyurethan 1-K Kleber, 310ml Kartusche	xxx
994235			SICA LP 390.75/N360 WT 8 Ohms	SICA LP 390.75/N360 WT 8 Ohms	1

HK2005-EX-R02-1A-SUB-FRONTGRILLE-ASSEMBLY

Article No. 1 (230V)	Article No. 2 (117V)	Article No. 3 (100V)	Description	Bezeichnung	Quantity
970335			front grille stretched metal	Streckgitter	1
972085			acoustic grille foam, black 15mm	Akustikschaum Anthrazit 15mm	1
974158			snapon retaining ring (for logo)	Schnellbefestiger f. Logo	1
980105			logo 'HK Audio' 55x55 mm	Logo 'HK Audio' 55x55 mm	1
986016			foam glue, Alfa D 4572	Klebstoff Alfa D 4572	xxx

HK2005-EX-R01-1B-SUB-CHASSIS

Article No. 1 (230V)	Article No. 2 (117V)	Article No. 3 (100V)	Description	Bezeichnung	Quantity
547057			54 Lucas Performer Preamp Assembly	54 Lucas Performer Vorstufe	1
600088			60 Inputboard Lucas Max	60 Inputboard Lucas Max	1
600089			60 Mains Filter Lucas Impact 100-240V	60 Netzfilt.Lucas Imp 100-240V	1
943239			dust protection, acoustic foam, black, PPI15, 5mm	Staubschutz Lucas Max "07"	2
950060			hi-inrush, mains rocker switch, C13150VB	Netzschalter gross C1350VB	1
952260			power inlet, type 6100.3300, Schurter	Netzbuchse Typ 6100.3300	1
952305			speakon chassis connector, NL4MP-3	Speakonbuchse 4pol eckig, NL4MP-3	2
959068			QuadAMP, 4ch PWM unit, RD0303	QuadAMP, 4ch PWM Modul, RD0303	1
966075			Push-Bottom-Trio	Knopf-Swtich TRIO	1
966076			softtouch poti knob, REAN, flexifit, F313	Knopf-Poti 13mm sw/sw/ws	3
970769			Lucas Max castor stabilizer	Blech Lucas Max Stützwinkel	4
970791			Subwoofer Sheet Metal Chassis, Lucas Performer	Blech Lucas Perfor.Bass Chass.	1
974103			toothed lock washer, D=4.3, AZ, zinc plated	Fächer-Scheibe az, 4,3 vz	2
974110			self locking hexagon nut with plastic insert, M3, zinc plated	Stopmutter M3 vz	3
974197			hexagon PCB spacer, type B, M3x8, zinc plated	Dist. Bol Innen/Außengew. M3*8 vz	3

974201	cross recessed raised countersunk screw, M3x5, stainless steel, black	Linsensenkschraube A2 M3*5 sw	3
974271	cross recessed raised countersunk screw, M3x8, black	Linsensenkschraube M3*8 sw	2
974290	self locking hexagon nut with plastic insert, M4, zinc plated	Stopmutter M4 vz	4
974356	blind rivet steel standard, 6x10, black	Blindniete Stahl schw. 6*10	16
974392	hexagon socket oval head screw, M3x8, black	Linsenschr.m.Innens. M3*8 sw	2
974521	cross rec. raised counters. tap. screw w. cutting slot, 2.9x9.5, black	Senkschr. f. Kunststoff 2,9*9,5, sw	12
976125	mains cable strain relief, HKAudio custom made	Kabelhalter HK Audio	1
976141	rubberbuffer 15x15 B	Gummipuffer GM-Puffer 15x15 B	4
976169	Swivel castor LPA-TPA 75K-FK, black	Lenkrolle 75mm RAL2005 schwarz	4
988011	silicon glue, 310mltrs tube	Silicon transparent, 310ml Kartusche	xxx

HK2005-GK-R01-1C-SUB-CABLING

Article No. 1 (230V)	Article No. 2 (117V)	Article No. 3 (100V)	Description	Bezeichnung	Quantity
962030			stranded wire 16-YG-200-638-638 AWG, UL, CSA	Litze 16-YG-200-638-638 AWG, UL, CSA	1
962038			stranded wire 16-YG-120-638-638 AWG, UL, CSA	Litze 16-YG-120-638-638 AWG, UL, CSA	1
962081			stranded wire 16-B-110-638I-638I AWG, UL, CSA	Litze 16-B-110-638I-638I AWG, UL, CSA	2
962255			stranded wire 16-BL-120-638I-638I AWG, UL, CSA	Litze 16-BL-120-638I-638I AWG, UL, CSA	2
962261			stranded wire 16-B-300-488I-485I AWG, UL, CSA	Litze 16-B-300-488I-485I AWG, UL, CSA	2
962293			stranded wire 16-R-350-488I-485I AWG, UL, CSA	Litze 16-R-350-488I-485I AWG, UL, CSA	2
962314			stranded wire 16-YG-200-638-eyelet AWG, UL, CSA	Litze 16-YG-200-638-eyelet AWG, UL, CSA	1
964050			Mainscable Lucas Impact	Powerkabel Lucas Impact	1
965617			flat ribbon cable 20-2-150 Typ 5, RM1,26	Flachband 20-2-150 Typ 5, RM1,27	3

HK2005-EX-R06-1A-PREAMP

Article No. 1 (230V)	Article No. 2 (117V)	Article No. 3 (100V)	Description	Bezeichnung	Quantity
974075			cross recessed panhead screw, M3x5, zinc plated	Linsenschraube M3x5 vz	3
974100			toothed lock washer, D=3,2, AZ, black zinc plated	Fächer-Scheibe az, 3,2 sw vz	3
974163			PCB holder, 90°, nickel plated	Befestigungselement M3x15 NI	3

HK2005-LP-R01-1B-PREAMP

Article No.	Ref.Destricption	Description	Bezeichnung	Quantity
914033	P1, P2	Poti B10K lin mono RK16	Poti B10K lin mono RK16	2
914049	P3	Poti B10K lin mono CC RK16	Poti B10K lin mono CC RK16	1
938009	Q9, Q8, Q7, Q6, Q5, Q4	Transistor BC 546B NPN TO92	Transistor BC 546B NPN TO92	6
938012	Q1, Q2, Q3	Transistor BC 556B PNP TO92	Transistor BC 556B PNP TO92	3
940019	U7	IC TL 074CN 4*FET OP	IC TL 074CN 4*FET OP	1
940021	U10	IC TL 082CN/CP 2*FET OP	IC TL 082CN/CP 2*FET OP	1
940032	U11, U6	IC MC 33078P 2*lo-noice ON	IC MC 33078P 2*lo-noice ON	2
940036	U1, U2, U3, U4, U5	IC MC 33079P 4*lo-noice ON	IC MC 33079P 4*lo-noice ON	5
950001	SW1	push button switch,2x ON-NONE-ON	Druckschalter Push Button Sw. 2x UM	1
952150	JP1, JP2, JP3	shrouded pin header 20pins, double row	Wannenstecker 2*10pol Gprint	3

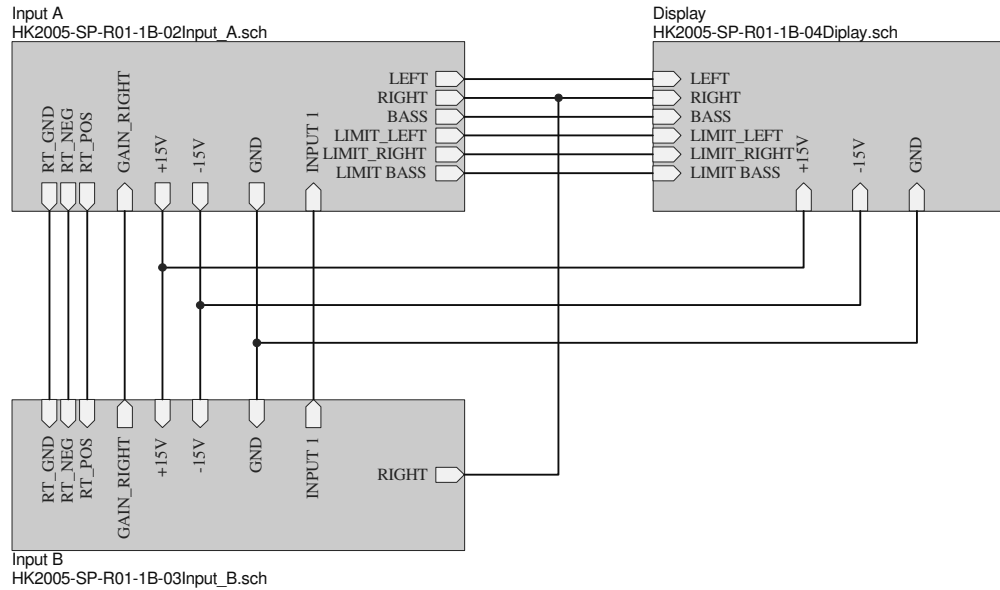
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2


3

4

Date	Modification	Revision	Name
08-Mar-06	1st draft released	1A	M. Bohlender
07-Apr-06	filter setups changed for EQ4 and Subsonic	1B	M. Bohlender
	(see revision logfile for details), sensitivity		
	reduced, R114 and C57 set to NA		



NA = not assembled part ----- EX = exclusive part, no alternative allowed

 66606 St. Wendel / Germany	Title: HK2005 L.U.C.A.S. Performer Preamp and Filter		
	Number: HK2005-SP-R01-1B	Version: 1	Revision: B
Drawn by: Michael Bohlender	Date: 08.03.2006	Page: 1	
Checked by: Michael Bohlender	Date: 13.04.2006	4 Pages	
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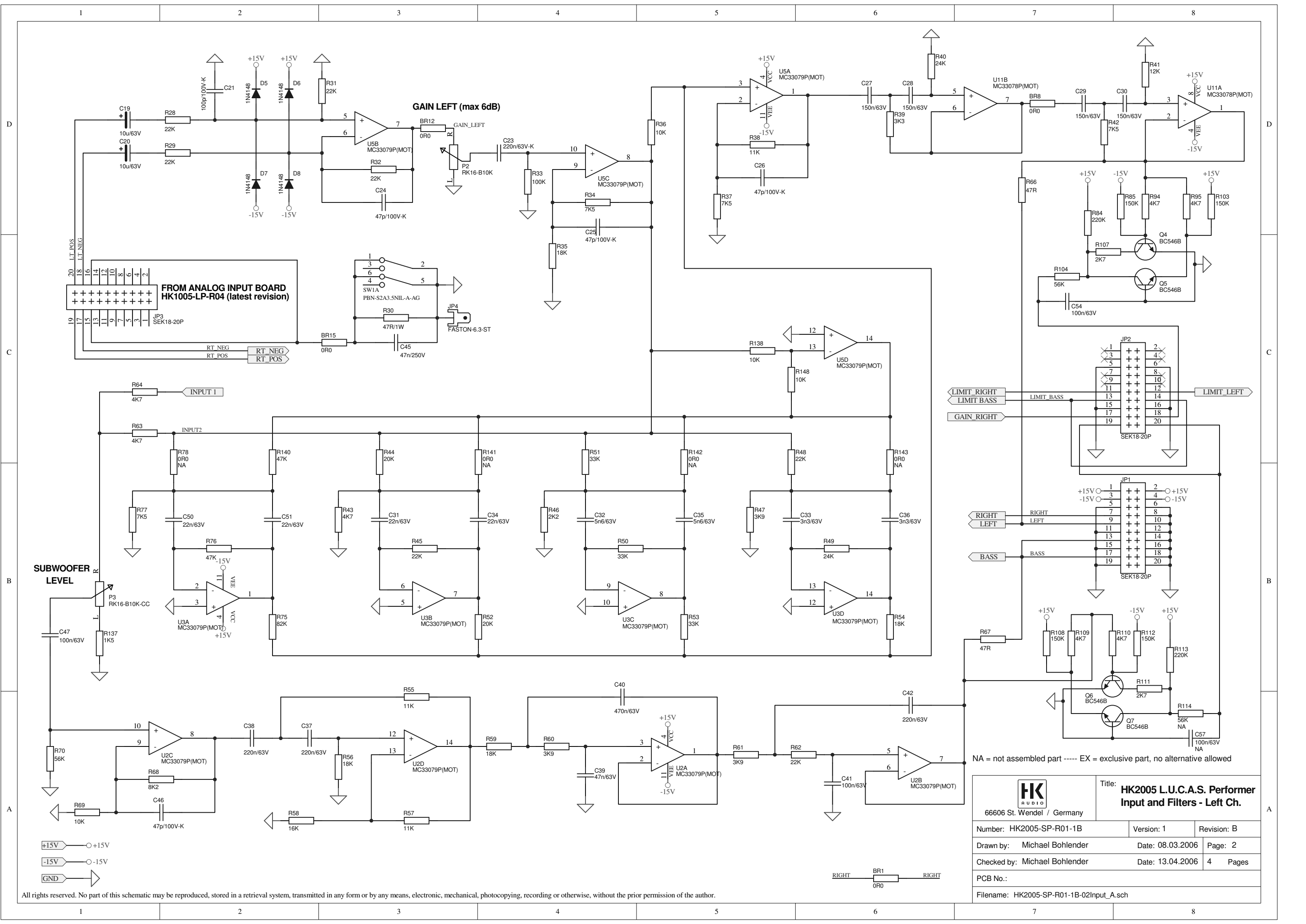
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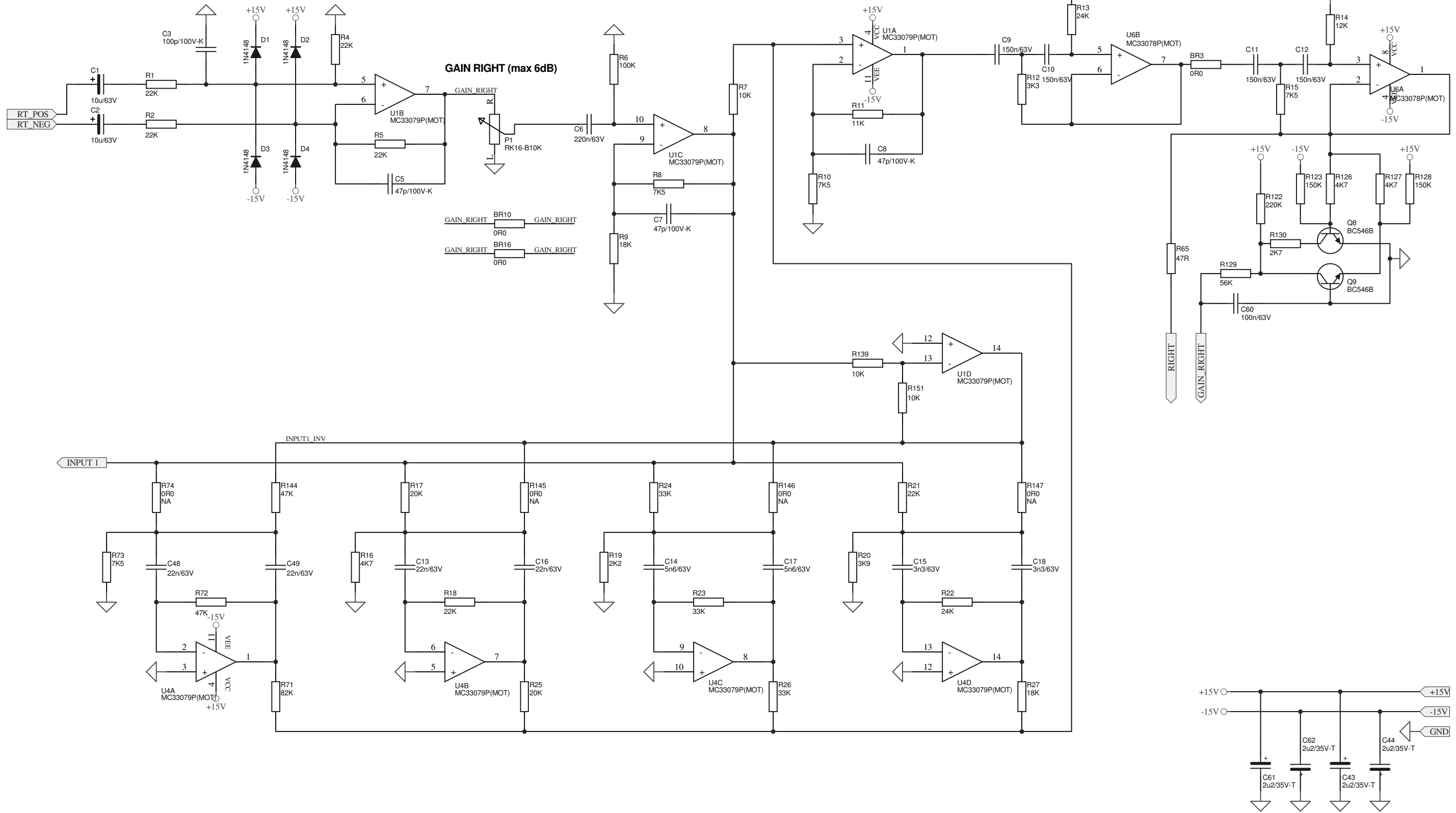
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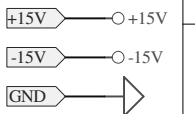
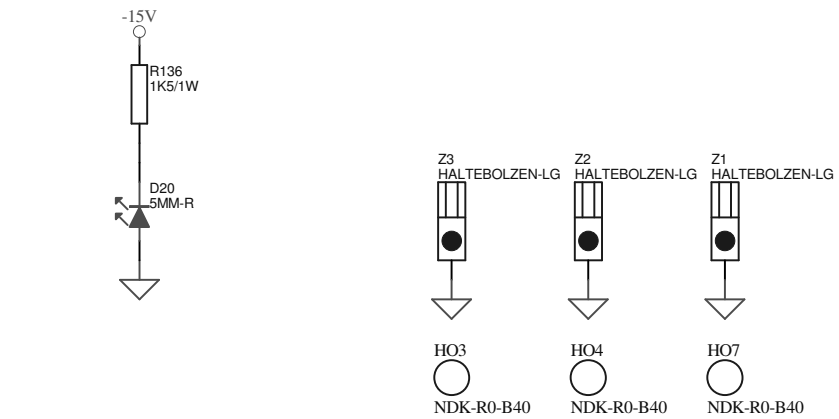
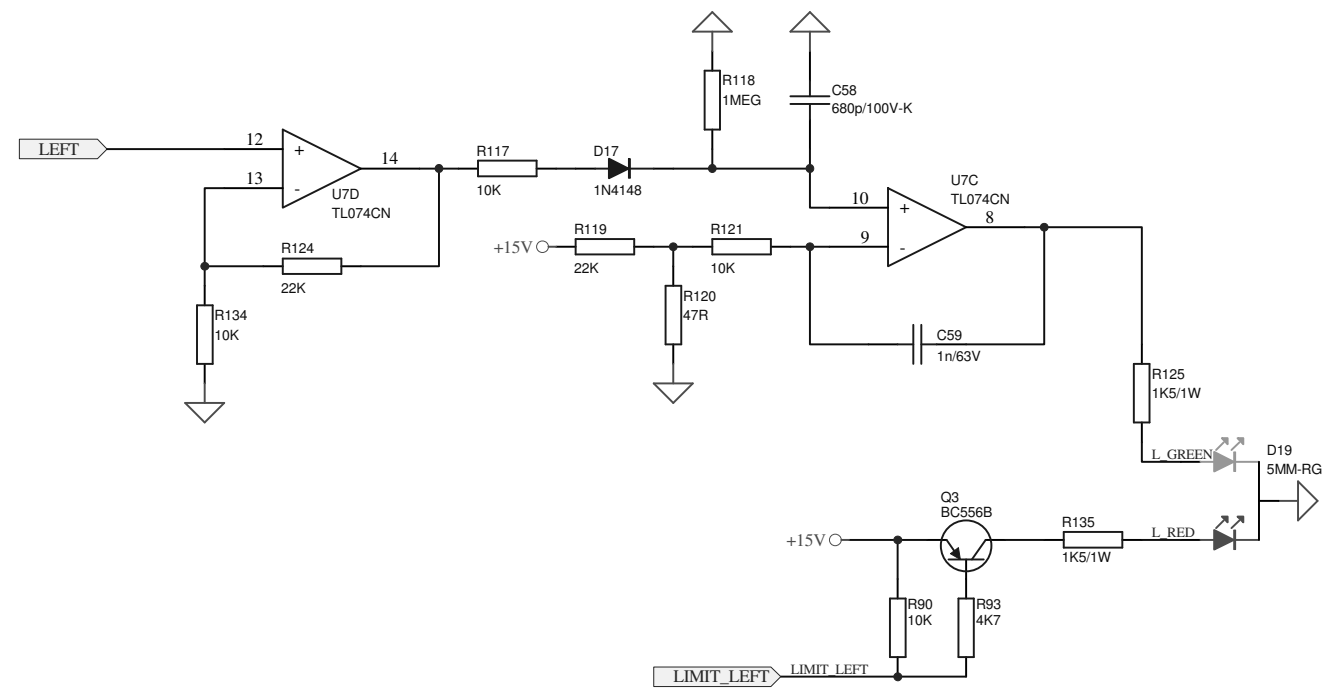
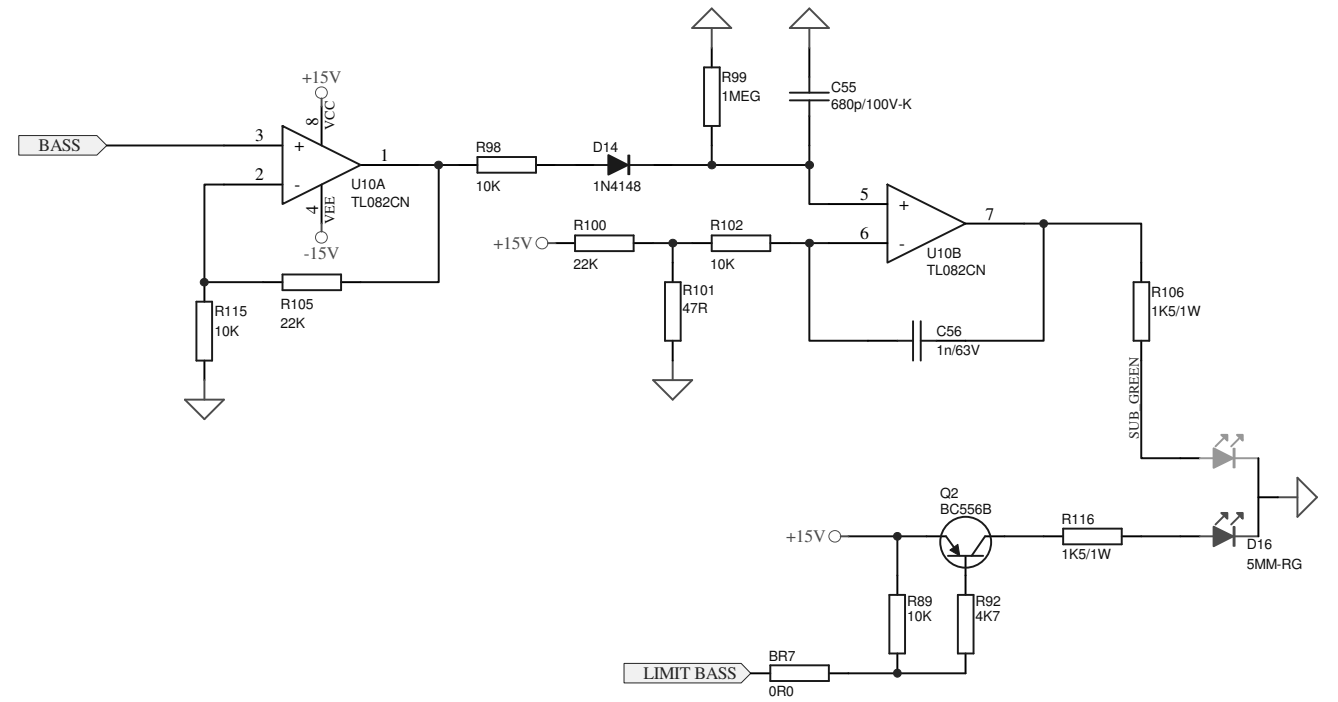
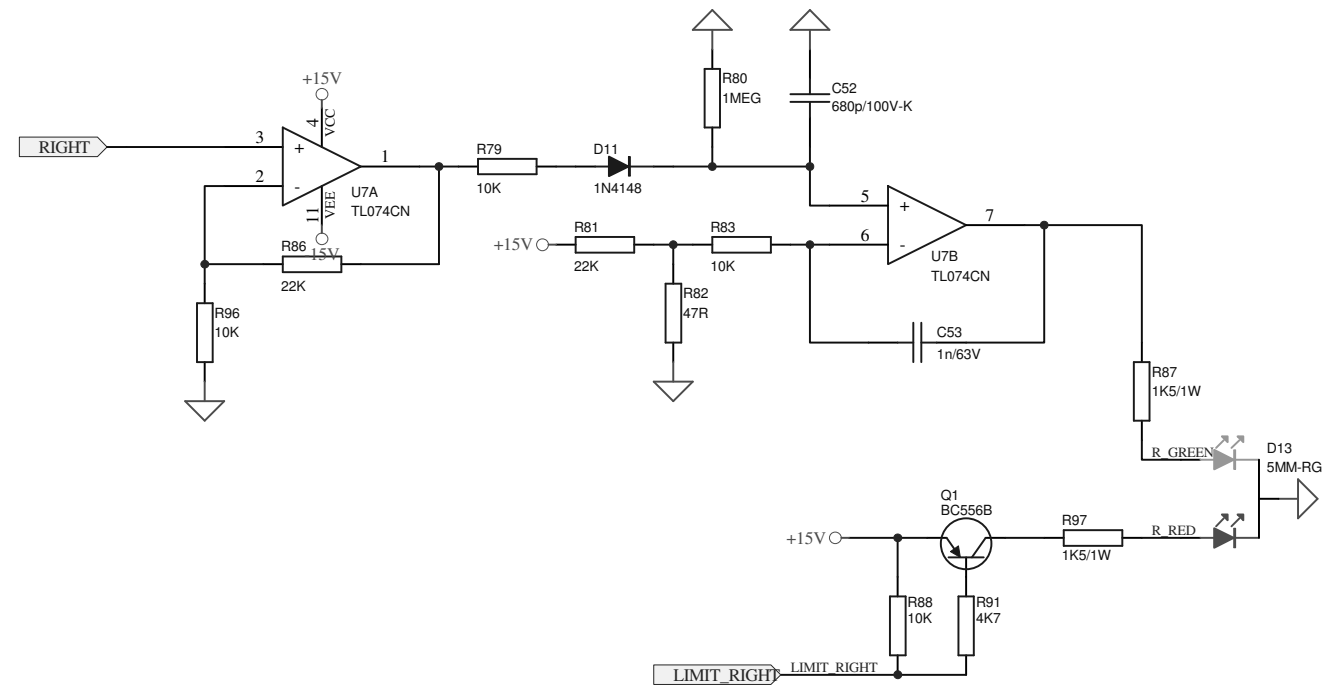
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		66606 St. Wendel / Germany	
Number: HK2005-SP-R01-1B	Version: 1	Revision: B	
Drawn by: Michael Bohlender	Date: 08.03.2006	Page: 2	
Checked by: Michael Bohlender	Date: 13.04.2006	4 Pages	
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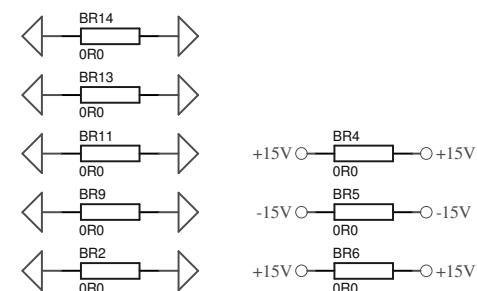
GAIN RIGHT (max 6dB)

NA = not assembled part ----- EX = exclusive part, no alternative allowed

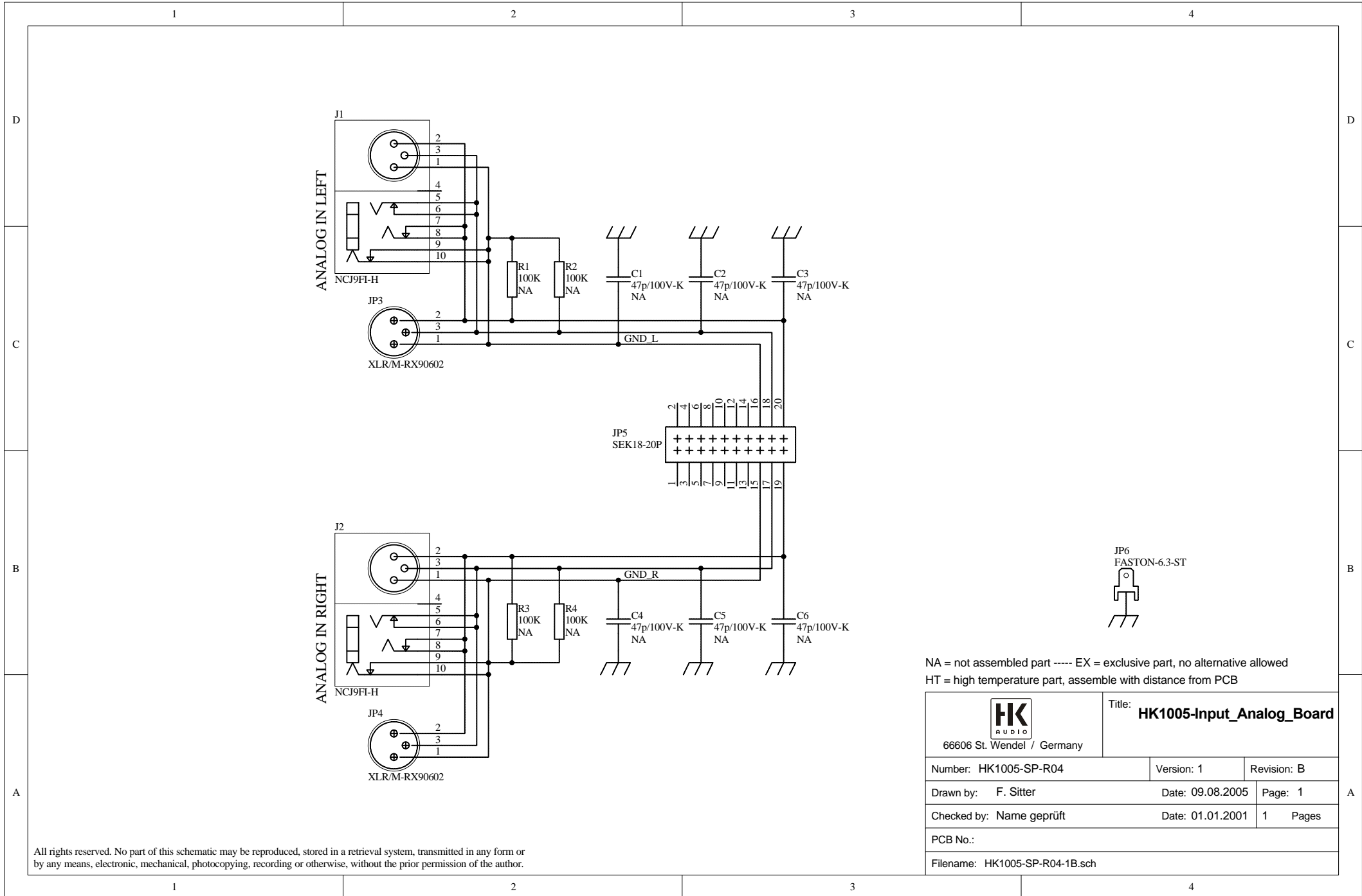
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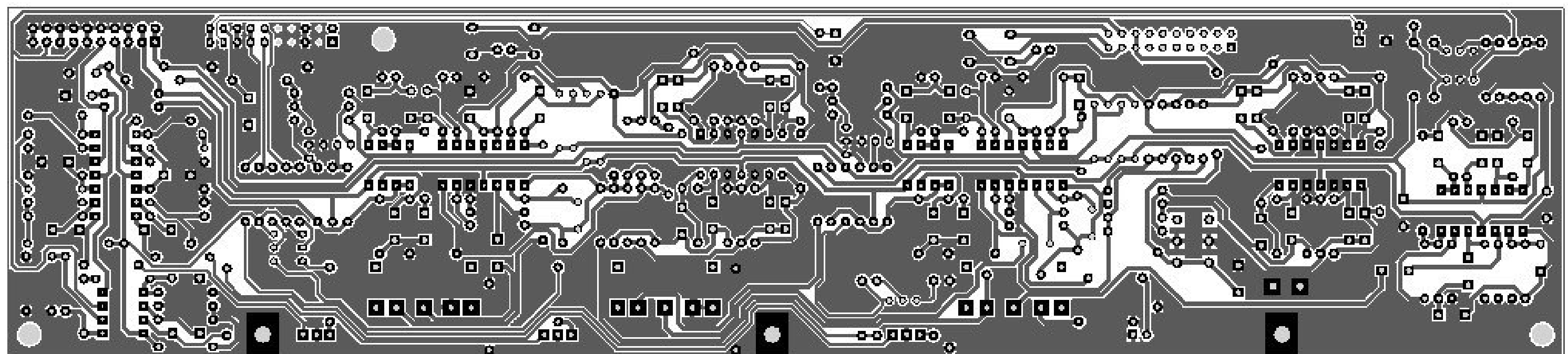
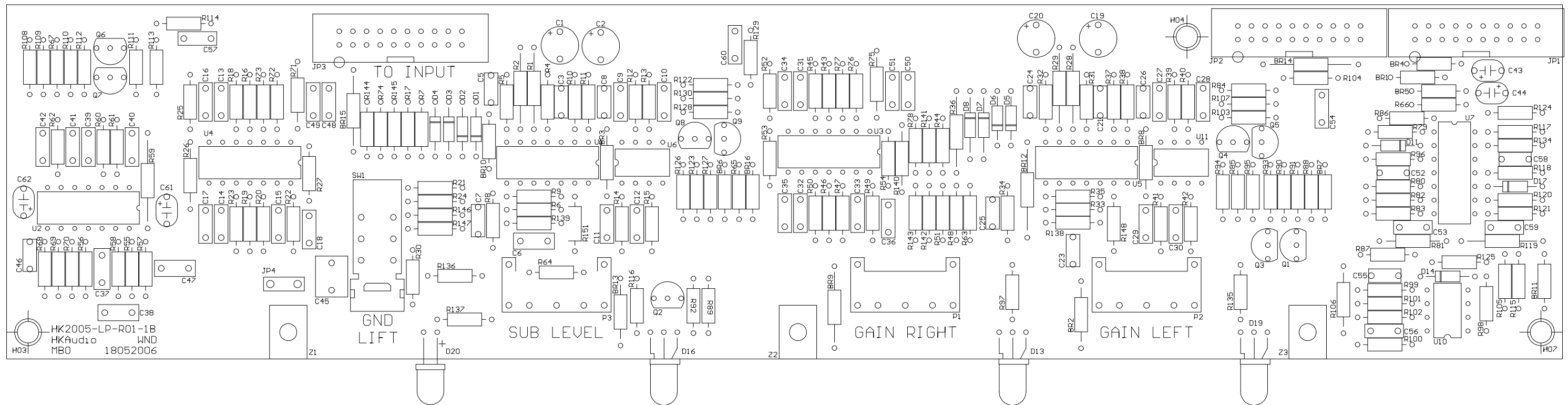


NA = not assembled part ----- EX = exclusive part, no alternative allowed




 66606 St. Wendel / Germany		Title: HK2005 L.U.C.A.S. Performer LIMIT INDICATORS	
		Number: HK2005-SP-R01-1B	Version: 1
Drawn by: Michael Bohlender		Date: 08.03.2006	Page: 4
Checked by: Michael Bohlender		Date: 13.04.2006	4 Pages
PCB No.:			
Filename: HK2005-SP-R01-1B-04Diplay.sch			





INDEX	ÄNDERUNG	ZEICHNER

	TITEL: HK2005 -- L.U.C.A.S. PERFORMER SILKSCREEN PREAMP		
	66606 St. Wendel / Germany		
ZEICHNUNGS-NR.: HK2005-LP-R01-1B	VERSION: 1	REVISION: B	
ERSTELLT VON: MICHAEL BOHLENDER	AM: 19.05.2006	BLATT: 1	
GEPRÜFT/ FREIGEgeben VON:	AM:	2 BLÄTTER	
WERKSTOFF: FR4, single layer, 155mm	OBERFLÄCHE: HAL, 35µm CU, bottom solder mask		
DATEINAME: HK2005-LP-R01-1B-Bestueckung			