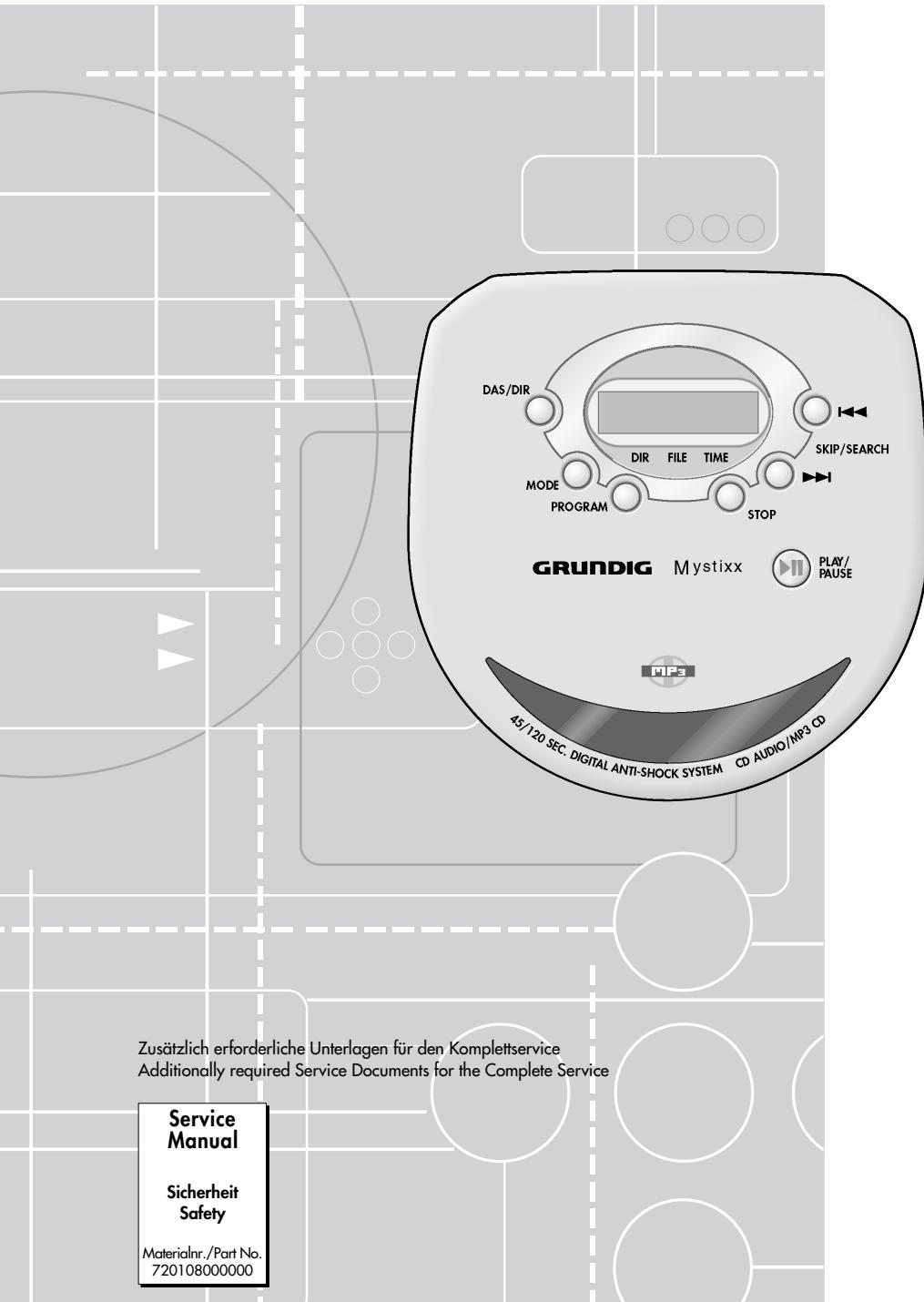


# Audio Service Manual



**MYSTIXX  
CDP 9200 SPCD  
GDN9550**

Zusätzlich erforderliche Unterlagen für den Komplettservice  
Additionally required Service Documents for the Complete Service

**Service Manual**  
**Sicherheit Safety**  
Materialnr./Part No.  
720108000000

Materialnummer/Part Number 720107723000

Änderungen vorbehalten/Subject to alteration • Printed in Germany • WÜ  
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Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000000, sowie zusätzlich die eventuell abweichenden, landespezifischen Vorschriften!



The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations!

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## Allgemeiner Teil

### Technische Daten

#### Spannungsversorgung

AC Netzadapter: ..... DC 4,5V \_\_\_, 500mA Φ-Φ-Φ extern  
 Batteriebetrieb: ..... 2 x 1,5V (LR6, AM3, AA)  
 Maximale Leistungsaufnahme bei Netzbetrieb (Akkuladung) .... <2W

#### Ausgangsleistung

Ohrhörer: ..... 2 x 5mW  
 Line Out: ..... 0,7V ± 0,1V

#### CD Spieler

Frequenzgang: ..... 20Hz ... 20kHz  
 Geräuschspannungsabstand: ..... ≥ 85dB

#### Abmessungen und Gewicht

B x H x T ..... 127 x 30 x 134mm  
 Gewicht (ohne Batterien) ..... ca. 210g

## General Section

### Technical Data

#### Power supply

AC mains adapter: ..... DC 4.5V \_\_\_, 500mA Φ-Φ-Φ extern  
 Battery operation: ..... 2 x 1.5V (LR6, AM3, AA)  
 Max. Power Consumption at mains operation (accu charging) ... <2W

#### Output

Earphones: ..... 2 x 5mW  
 Line Out: ..... 0.7V ± 0.1V

#### CD player

Frequency response: ..... 20Hz ... 20kHz  
 Noise voltage ratio: ..... ≥ 85dB

#### Dimensions and weight

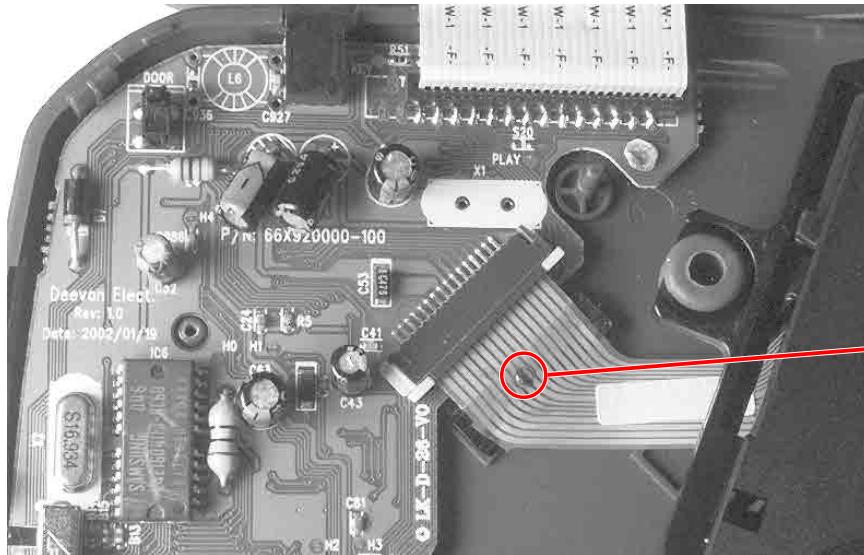
W x H x D ..... 127 x 30 x 134mm  
 Weight (without batteries) ..... approx. 210g

## Servicehinweise

### CD-Teil

Bei Ausbau der CD-Lasereinheit muss vor Abziehen der Steckverbindungen eine Schutzlötstelle auf dem Flexprint der Lasereinheit angebracht werden, um eine Zerstörung der Laserdiode durch statische Aufladung zu vermeiden.

**Beim Einbau einer neuen Lasereinheit (CD-Laufwerk) muss nach Einsticken der Steckverbinder die werkseitig angebrachte Schutzlötstelle entfernt werden!**

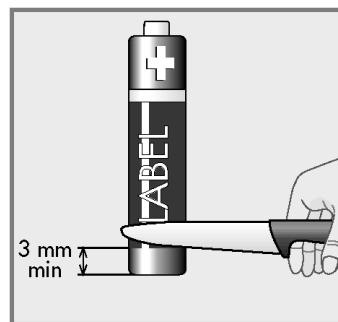


Schutzlötstelle  
protective soldered joint

### Betrieb mit Nickel-Cadmium-Akkus

Bei Betrieb mit Nickel-Cadmium-Akkus (NiCd, Größe AA 1,2V/600mAh) können Sie den mitgelieferten Netzadapter als Ladegerät verwenden.

Bei den Akkus muss das Metallende am Minuspol ca. 3mm sichtbar sein (siehe Abbildung). Gegebenenfalls die Isolierung mit einem Messer entfernen. Über diese Kontaktfläche erkennt das Gerät, dass Akkus eingelegt sind. Damit wird verhindert, dass versehentlich Batterien aufgeladen werden.



### Using Nickel-Cadmium Accus

When using Nickel-Cadmium accus (NiCd, size AA 1.2 V/600 mAh) use the mains adapter included as a charger.

The metal end at the negative pole of the accus must be visible for approximately 3mm (see illustration). If necessary, use a knife to remove the insulation. Via this contact the unit detects inserted accus. This prevents a charging of normal batteries by mistake.

### Neue Pick-Up-Einheit

Bei Geräten ab Seriennummern 14289 wurde eine neue Pick-Up-Einheit (DA23Z an Stelle von DA23L) eingebaut. Dadurch ändern sich 4 Widerstandswerte (siehe Schaltbild Seite 2 - 1).

Bitte beachten Sie auch die unterschiedlichen Materialnummern in der Ersatzteilliste!

Wird als Ersatz für DA23L ein DA23Z eingebaut, müssen die Widerstandswerte von R20 - R23 entsprechend geändert werden!

	DA23L
R20	180kΩ
R21	3,9kΩ
R22	82kΩ
R23	220kΩ

	DA23Z
R20	150kΩ
R21	5,6kΩ
R22	39kΩ
R23	180kΩ

	DA23L	DA23Z
R20	180kΩ	150kΩ
R21	3,9kΩ	5,6kΩ
R22	82kΩ	39kΩ
R23	220kΩ	180kΩ

### New Pick Up Unit

In the sets from serial number 14289 on, a new pick up unit (DA23Z instead of DA23L) is used. Therefore the values of 4 resistors change (see circuit diagram page 2 - 1).

Please observe also the different parts numbers in the spare parts list! If DA23L will be replaced by DA23Z the resistors R20 - R23 must also be changed to the corresponding values.

## Ausbauhinweise

### 1. Gehäuseoberteil

- CD-Fach öffnen.
- 3 Schrauben **A** herausschrauben (Fig. 1).
- 7 Rastungen **B** ausrasten (Fig. 2).
- Achtung:**  
Kurze Flexprintleitung von der Hauptplatte zum Bedienteil.  
Gehäuseoberteil vorsichtig nach hinten klappen und Flexprintleitung von der Hauptplatte abziehen.
- Geäuseoberteil abnehmen.

### 2. CD-Laufwerk, Hauptplatte, Lautstärkereglerplatte

- Gehäuseoberteil abnehmen (Punkt 1).
- Fixierung **C** (Fig. 3) vorsichtig mit Schraubendreher abtrennen.
- Die beiden Leiterplatten und das Laufwerk können aus dem Gehäuseunterteil genommen werden. Achtung! Die Flexprintleitung ist am Gehäuseboden festgeklebt.

#### Hinweise:

- Vor Abziehen der Flexprintleitung, Sicherheitslötstelle **D** (Fig. 3) kurzschließen.
- Flexprinthalter öffnen **E** (Fig. 3) und Flexprint abziehen.
- Nach dem Anschließen eines neuen Laufwerks werkseitig angebrachte Sicherheitslötstelle auflöten.

### 3. Bedienplatte

- Achtung:** Kurze Flexprintleitung bei Bedarf auf der Hauptplatte abziehen. Zum Abziehen der Flexprintleitung Gehäuseoberteil abnehmen (Punkt 1).
- 15 Schrauben **F** (Fig. 4) herauslösen.
- Bedienplatte abnehmen.

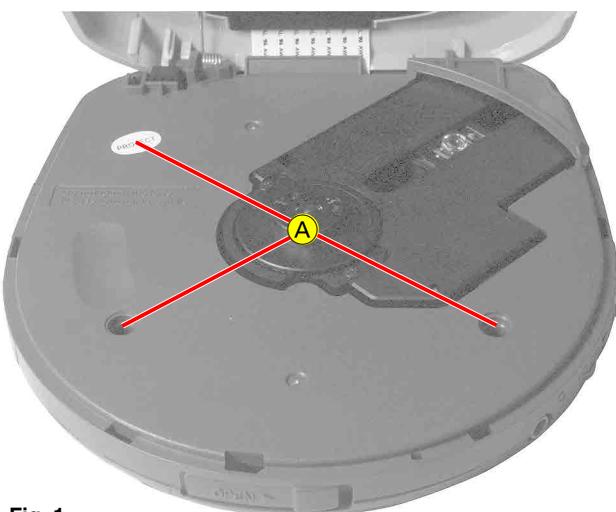


Fig. 1

## Disassembly Instructions

### 1. Top of the Case

- Open the CD compartment.
- Undo 3 screws **A** (Fig. 1).
- Disengage 7 hooks **B** (Fig. 2).
- Attention:**  
Short flexprint between main PCB and operating PCB.  
Carefully tip the top of the case back and pull off the flexprint from the main PCB.
- Remove the top of the case.

### 2. CD Mechanism, Main PCB, Volume Control PCB

- Remove the top of the case (point 1).
- Carefully cut off the fixing point **C** (Fig. 3) by a screw driver.
- Both PCBs and the mechanism now are able to remove. Attention! The flexprint is glued at the bottom.

#### Hints:

- before unplugging the flexprint, short circuit the safety soldered joint **D** (Fig. 3).
- Open the flexprint connector **E** (Fig. 3) and pull off the flexprint.
- After a new mechanism is connected the safety soldered joint fitted at the factory must be removed.

### 3. Operating PCB

- Attention:** When necessary pull off the short flexprint at the main PCB. Therefore remove the top of the case (point 1).
- Undo 15 screws **F** (Fig. 4).
- Remove the operating PCB.

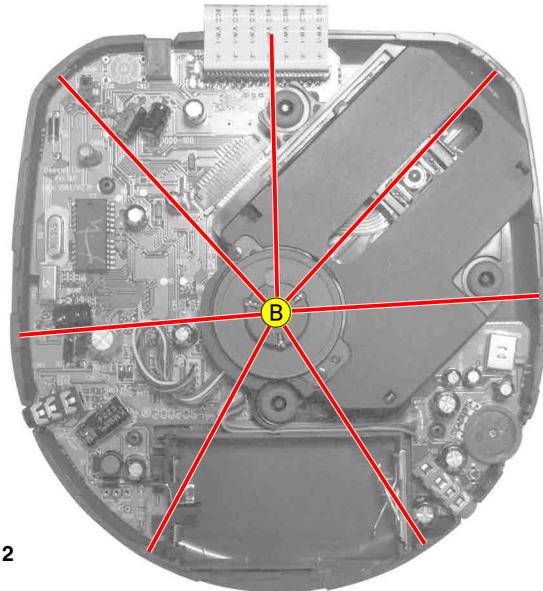


Fig. 2

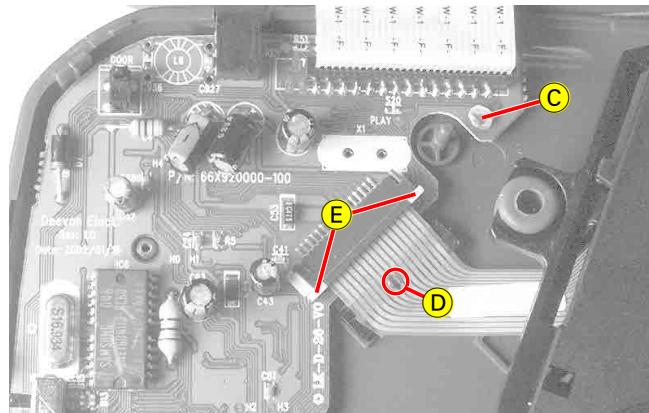


Fig. 3

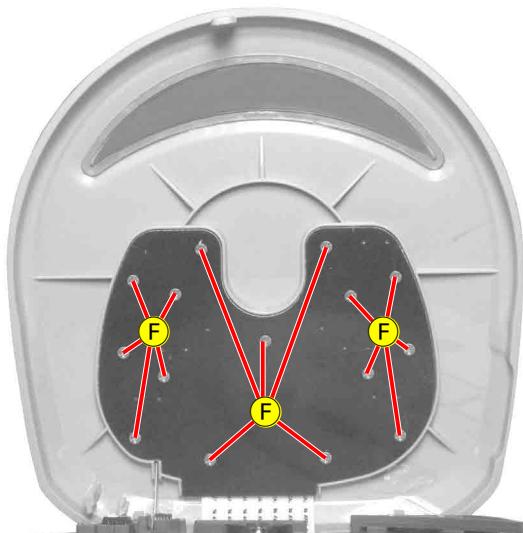


Fig. 4







## PREPARATION



### Connecting the earphones and the remote control

- 1 Connect the earphones to the »Ω« socket on the remote control (3.5 mm).
- 2 Connect the remote control to the »Ω« socket on the CD player.

**Note:**

You can also connect the earphones directly to the device. If you do this, however, the remote control will not work.

Excessive volume can be hazardous to yourself and other road users. Listen at a volume which still allows you to hear outside noises clearly, for instance horns, emergency vehicles and police cars.

This portable CD player with headphones meets the requirements set out in Articles L44.5 and 6 of the German safety regulations.

The output of the device guarantees the best possible sound at medium volume. Prolonged listening at loud volumes can damage your hearing.

### Adjusting the volume

- 1 Adjust the volume with »VOLUME «/» VOL« on the unit or » VOL« on the remote control.

**Note:**

The volume control on the unit limits the maximum playback volume. The volume control on the remote control enables you to fine-tune the volume selected on the device.

### Ultra Bass System

- 1 Slide the »OFF BASS ON« switch on the side of the device to turn the Ultra Bass System on or off.

### Locking the buttons

You can lock the buttons on the device and/or remote control to prevent them from being accidentally pressed.

- 1 To lock the buttons, slide the »HOLD« switch on the device to the »ON« position.
- 2 To lock the buttons, push the »HOLD ▶ « switch on the remote control in the direction »▶ «.
- 3 To unlock the buttons, slide the »HOLD« switch on the device to the »OFF« position.
- 4 To unlock the buttons, push the »HOLD ▶ « switch on the remote control to the OFF position.

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## BASIC FUNCTIONS

In MP3 mode, the terms "directory" and "file" are very important. In the display, »ALBUM« also appears instead of "Directory". "Directory" corresponds to a folder on a PC, "File" to a file on a PC or a CD-DA track.

Many functions are identical in the MP3 and CD-DA modes. However, different information is displayed. The following sections apply primarily to the MP3 mode. The CD-DA mode is of secondary importance.

### CD playback

The device automatically recognises the type of CD inserted (CD-DA, CD-R, CD-RW).

- 1 Press »PLAY/PAUSE ▶ II« to switch on the device.  
– Display: »C« appears briefly, »P3« flashes.  
– Display in MP3 mode: After a short time you will see the number of directories, the number of files, »P3« and »MP3«.  
– If no CD has been inserted, »D DISC« appears in the display.  
– Display in CD-DA mode: »C«, total number of songs.
- 2 Press »PLAY/PAUSE ▶ II« to start playback.  
– Playback always starts with the first file of the first directory or with the first track.  
– Display in MP3 mode: directory, file, playing time of the file.
- 3 To pause playback, press »PLAY/PAUSE ▶ II«.  
– Display in MP3 or CD-DA mode: the playing time of the file or track flashes.  
Press »PLAY/PAUSE ▶ II« to resume playback.
- 4 Press »STOP ■« to end playback.  
**Note:**  
Playback stops automatically when the end of the CD is reached, if the CD compartment is opened, or if the batteries run out.
- 5 To switch off the device, press »STOP ■« again.  
**Note:**  
The device switches off automatically if no button is pressed for 60 seconds when it is in STOP position or the CD compartment is open.

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## BASIC FUNCTIONS

### Inserting a CD

The device is suitable for music CDs displaying the logo shown here (CD-DA) and for CD-Rs and CD-RWs with audio data or MP3 formats. As well as standard 12 cm CDs, it can also play 8 cm CDs without an adapter.

Do not attach adhesive labels to CDs. Keep the surfaces of CDs clean.

- 1 Push the »OPEN ▶ « slider to the right and open the CD compartment.
- 2 Insert the CD with the label facing upwards and gently push the centre of the CD to latch it into place.
- 3 Close the CD compartment.

### Removing the CD

**Note:**  
Press »STOP ■« before you open the CD compartment.

- 1 Push the »OPEN ▶ « slider to the right and open the CD compartment.
- Display: »OPEN«.
- 2 Remove the CD.
- 3 Close the CD compartment.

### Digital anti-shock system (DAS)

When you are playing back MP3s, the digital anti-shock system is activated automatically. It reads the files up to 120 seconds in advance. This prevents interruptions due to shocks and vibrations.

For CD-DAs, the anti-shock system reads the data up to 45 seconds in advance. If you switch on the device with »PLAY/PAUSE ▶ II« to begin the playback of a CD-DA, the digital anti-shock system is activated automatically. The anti-shock system can be switched on and off during the playback of a CD-DA.

- 1 Press »DAS/DIR« on the device to switch off the anti-shock system.  
– Display: »DAS« disappears.

**Note:**  
When you switch the anti-shock system on or off, playback is delayed or briefly interrupted.  
Since the anti-shock system requires more power, it is advisable to switch off the function as long as there are no problems with playback, in order to prolong the life of the batteries.

- 2 Press »DAS/DIR« on the device to switch off the anti-shock system.  
– Display: »Ed 45 SEC« appears briefly, »DAS« flashes constantly.

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## BASIC FUNCTIONS

### Selecting another file or track

- 1 During playback, keep pressing »|◀| « or »|▶| « until the number of the file or track you want to hear appears in the display.  
– Playback of the selected file or track starts automatically.

### Searching for a passage within a file or track

- 1 During playback, press »|◀| « or »|▶| « and hold it down until you find the desired passage.  
– Display in MP3 mode: the file playing time in a rapid run-through.  
– Display in CD-DA mode: the track playing time in rapid run-through.  
– During the search the volume is reduced.

**Note:**  
The rapid search functions in all playback modes, such as Program, Random, Repeat, etc.  
Intro and »|◀| « or »|▶| « do not function at the same time.

### Selecting directories (MP3 only)

In MP3 mode, you can play back CDs with up to 8 directory levels. There is a limited number of directories and files that can be played back. If, for example, there are 128 directories, a maximum of 448 files can be identified.

- 1 During playback, keep pressing »DAS/DIR« until the number of the track you want to hear appears in the display.  
– Playback begins with the first file of the selected directory.

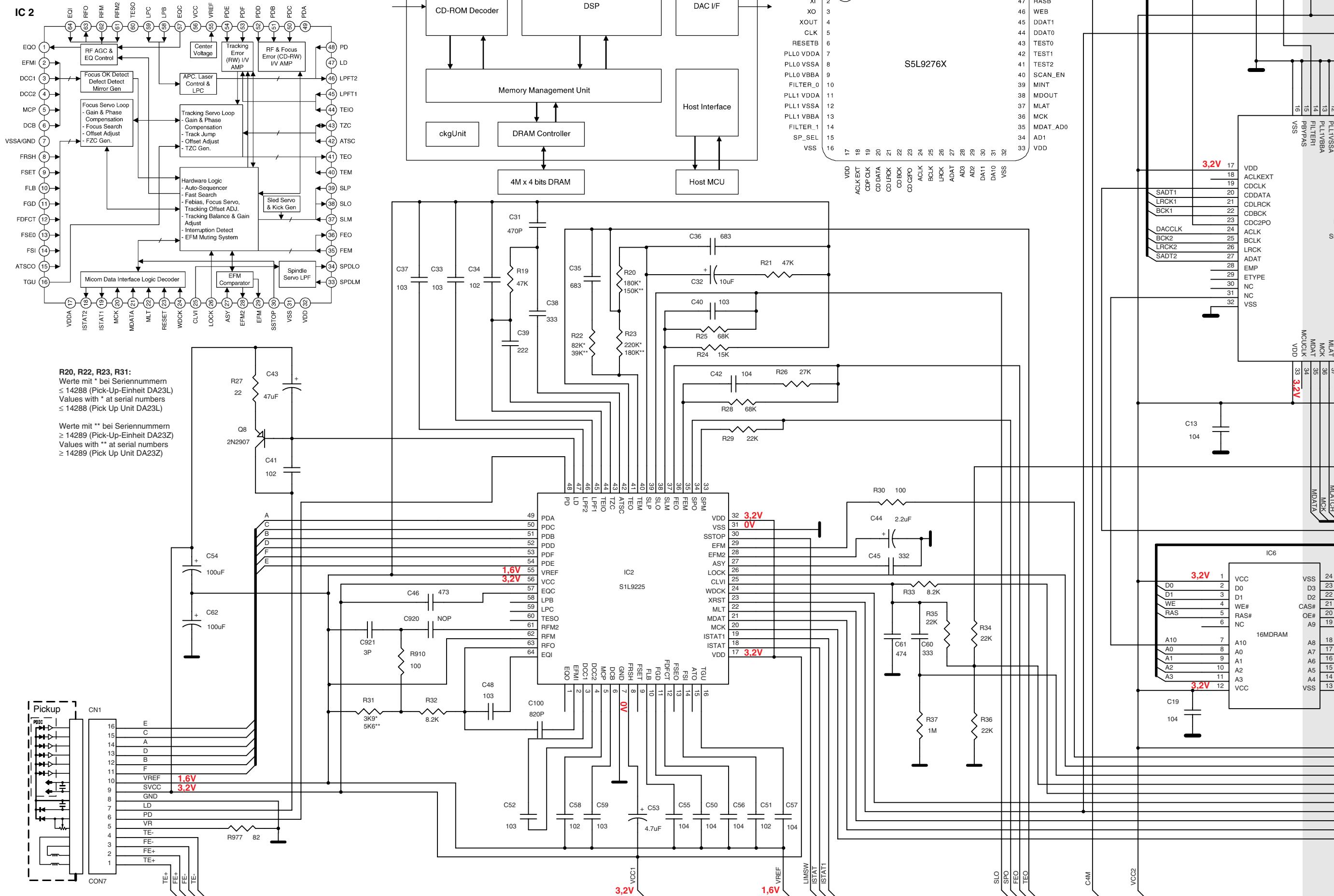


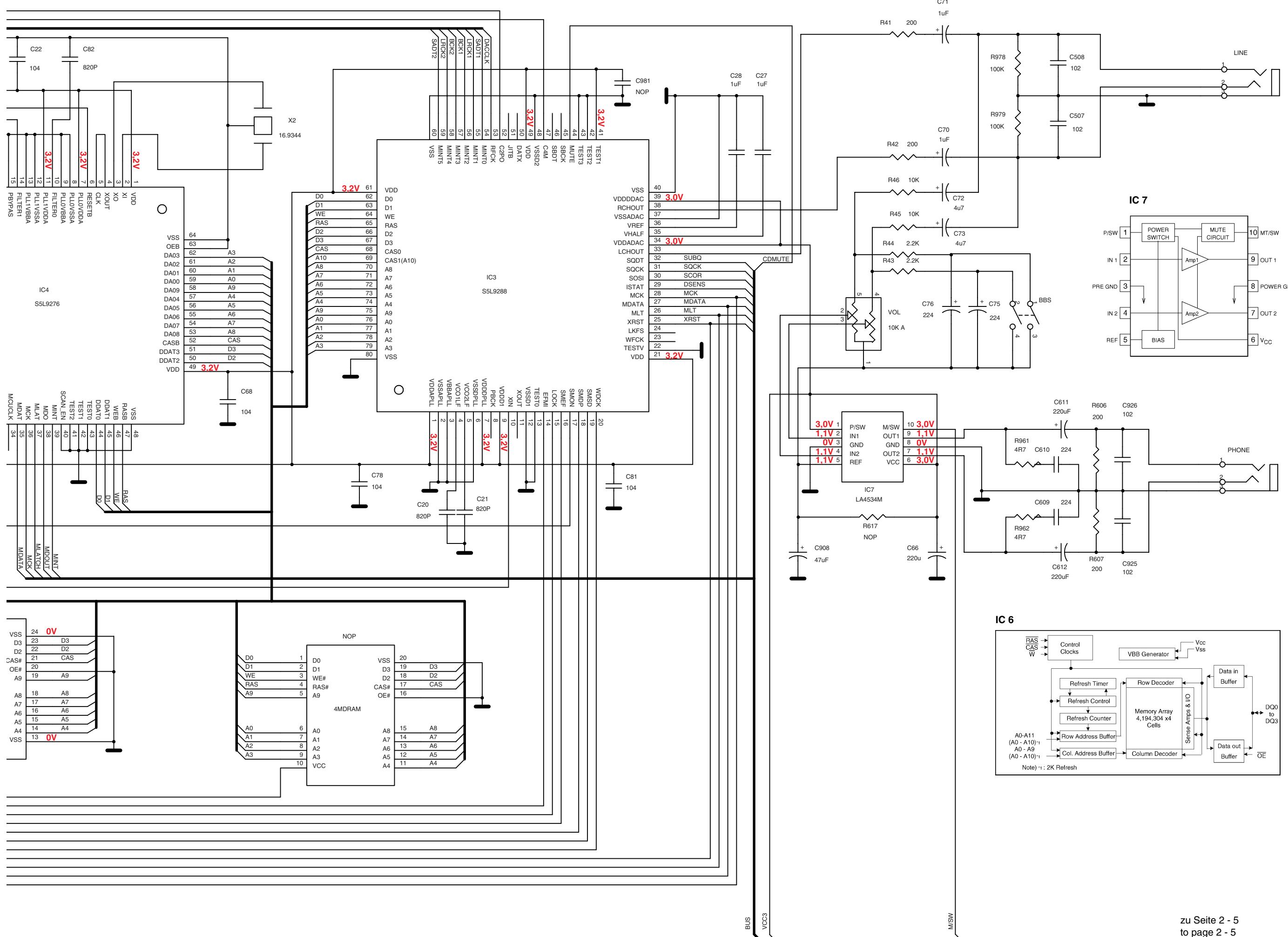
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## Platinenabbildungen und Schaltpläne / Layout of PCBs and Circuit Diagrams

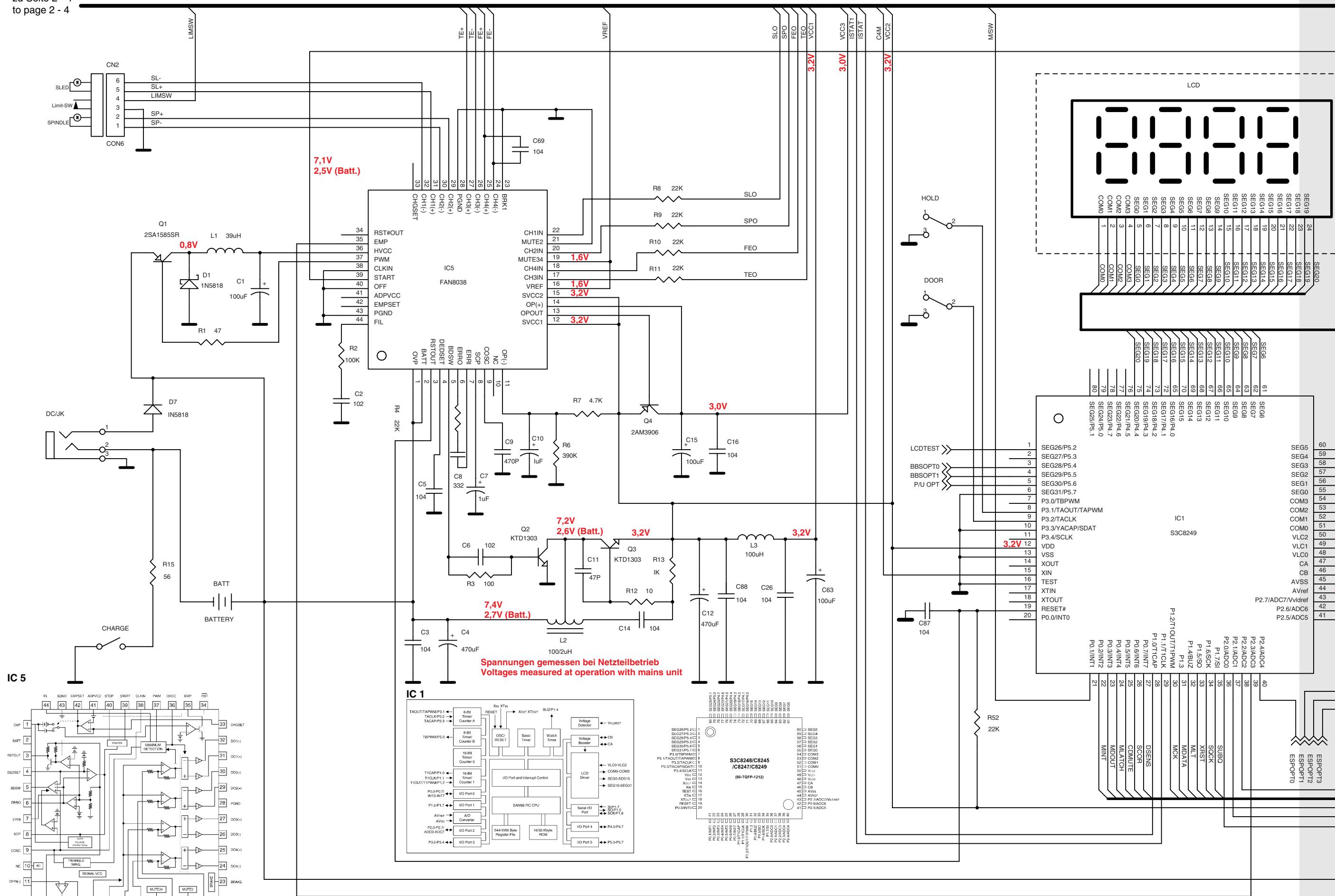
### Schaltplan / Circuit Diagram

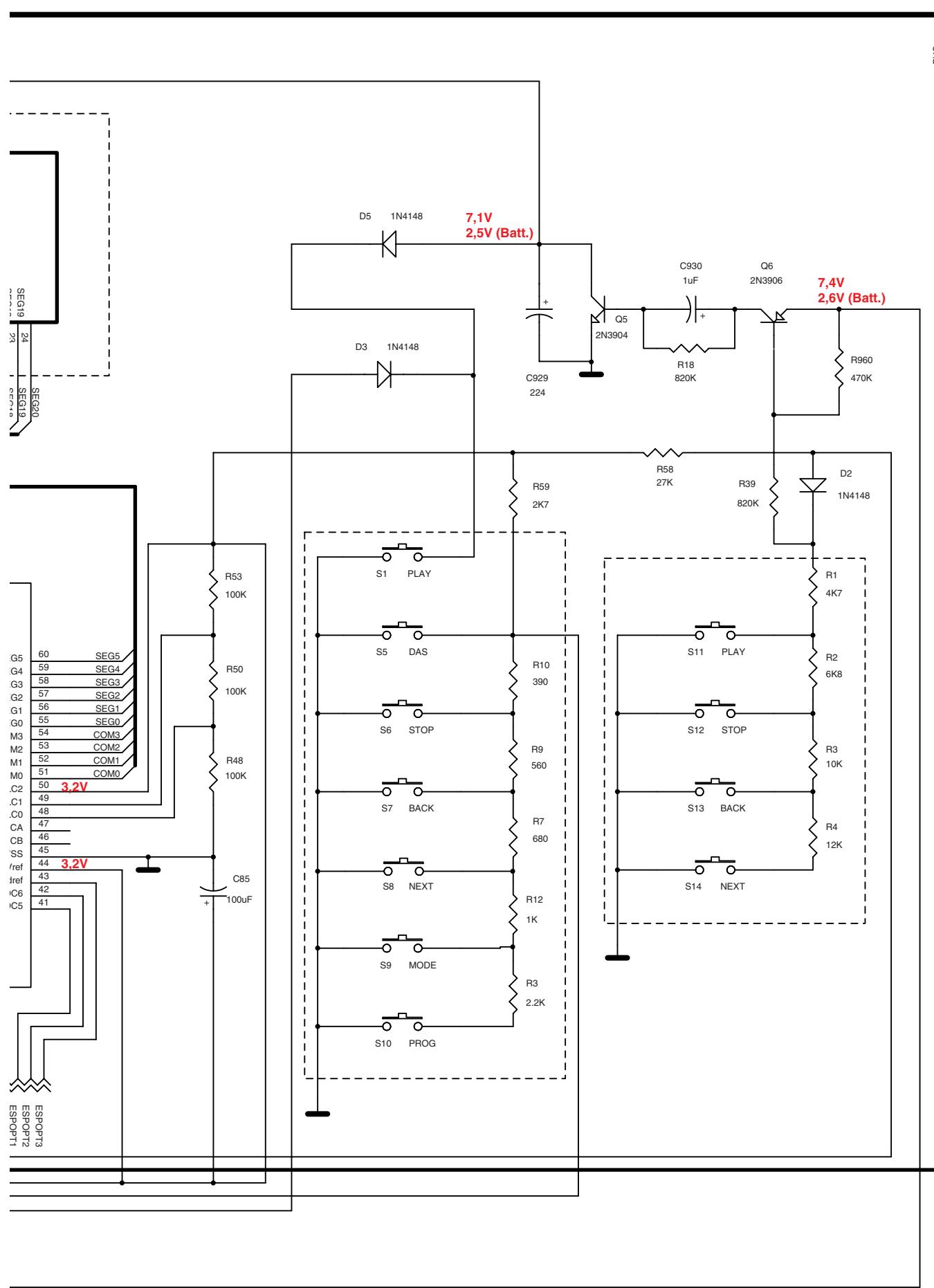
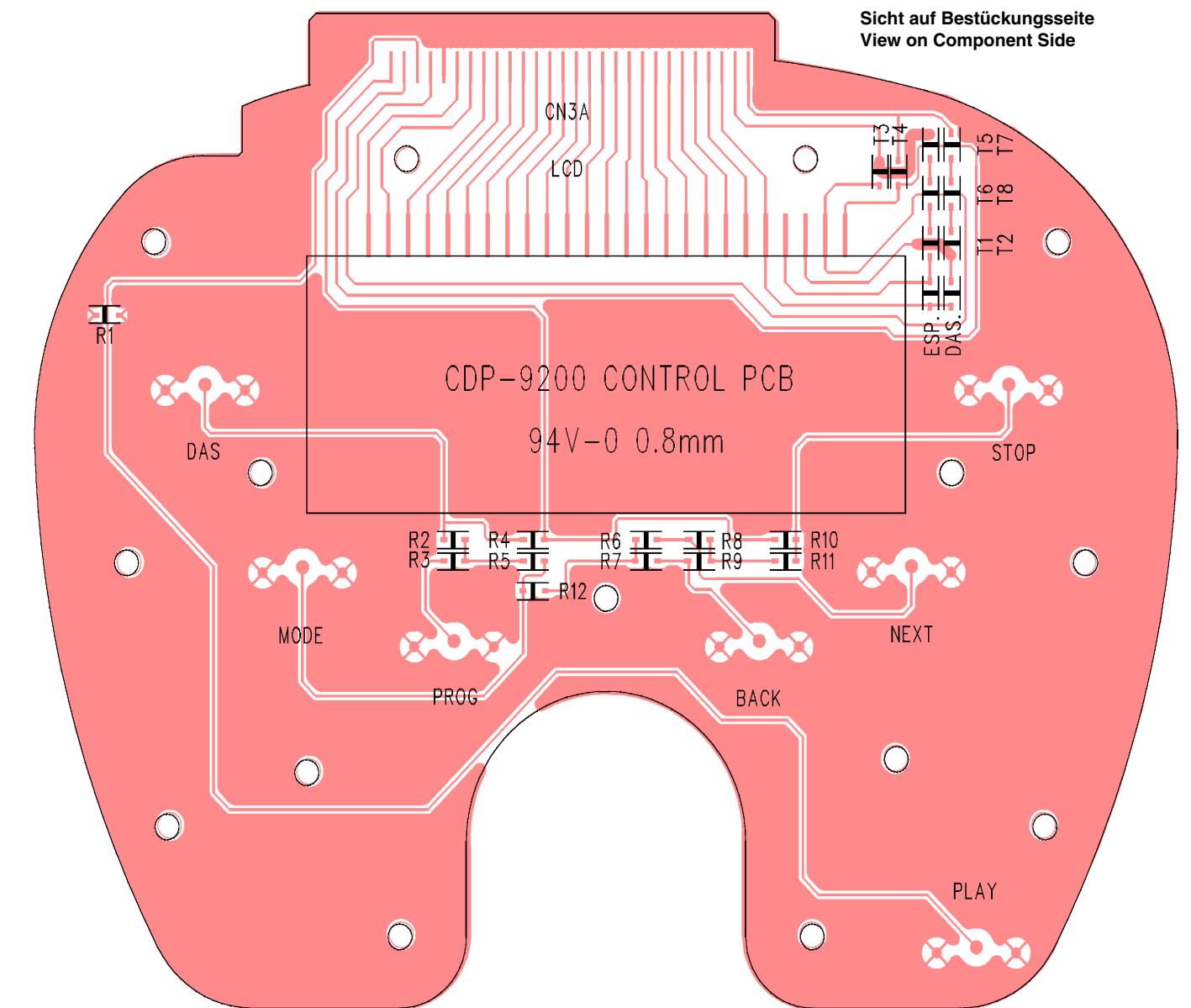
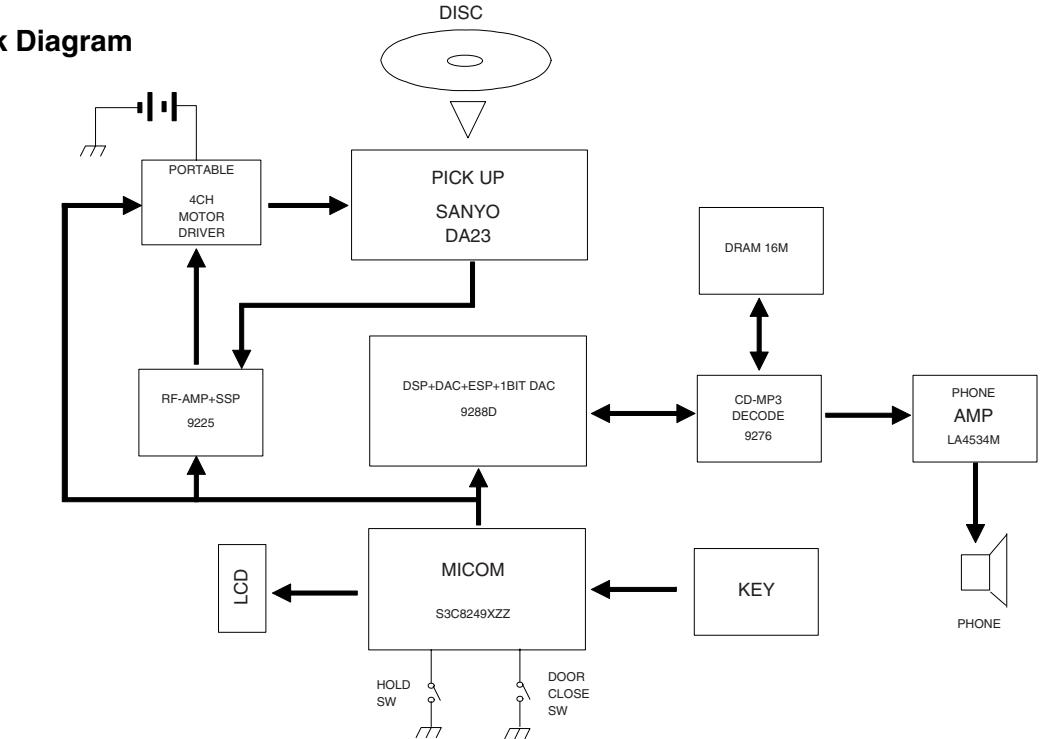


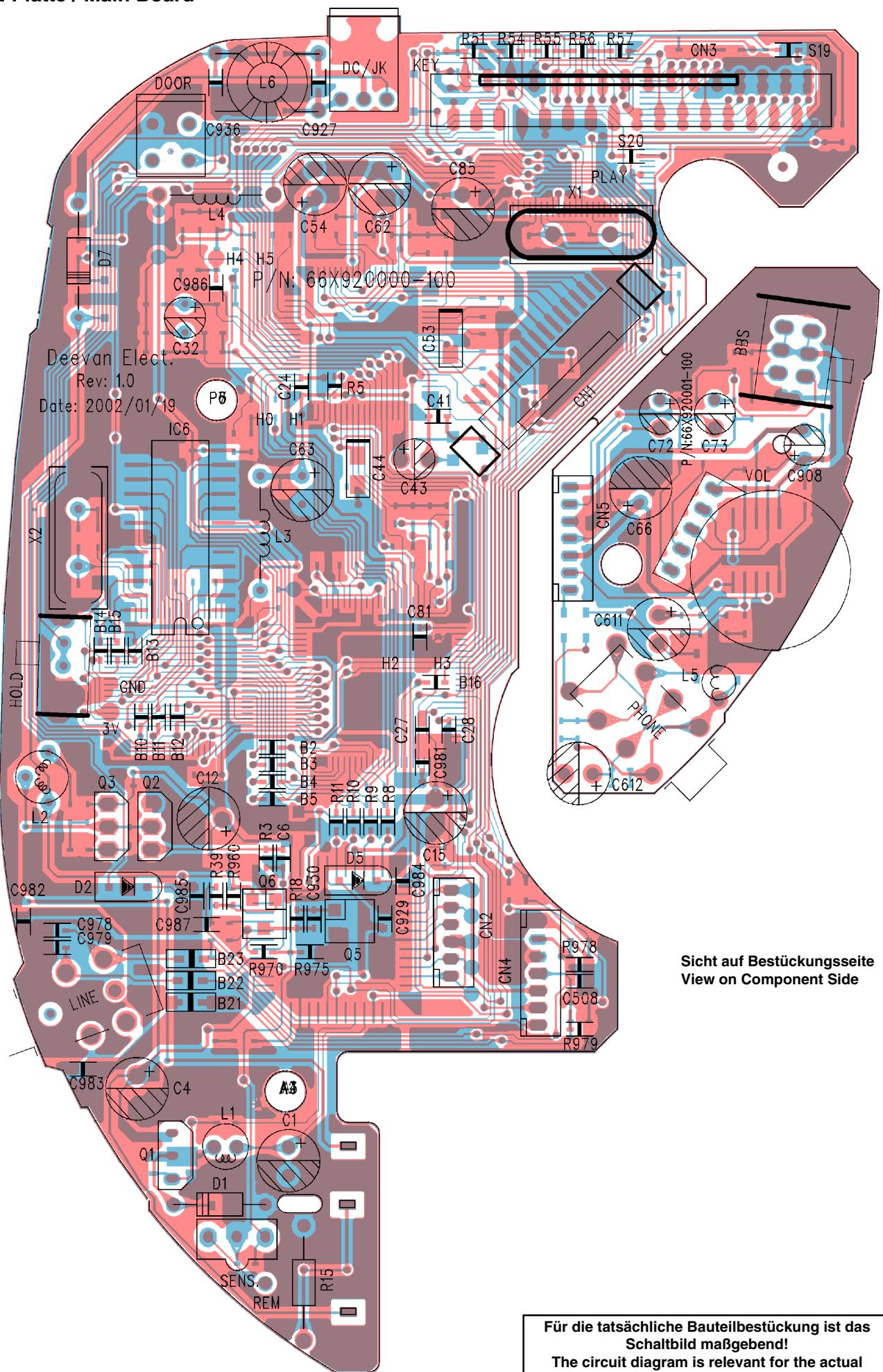


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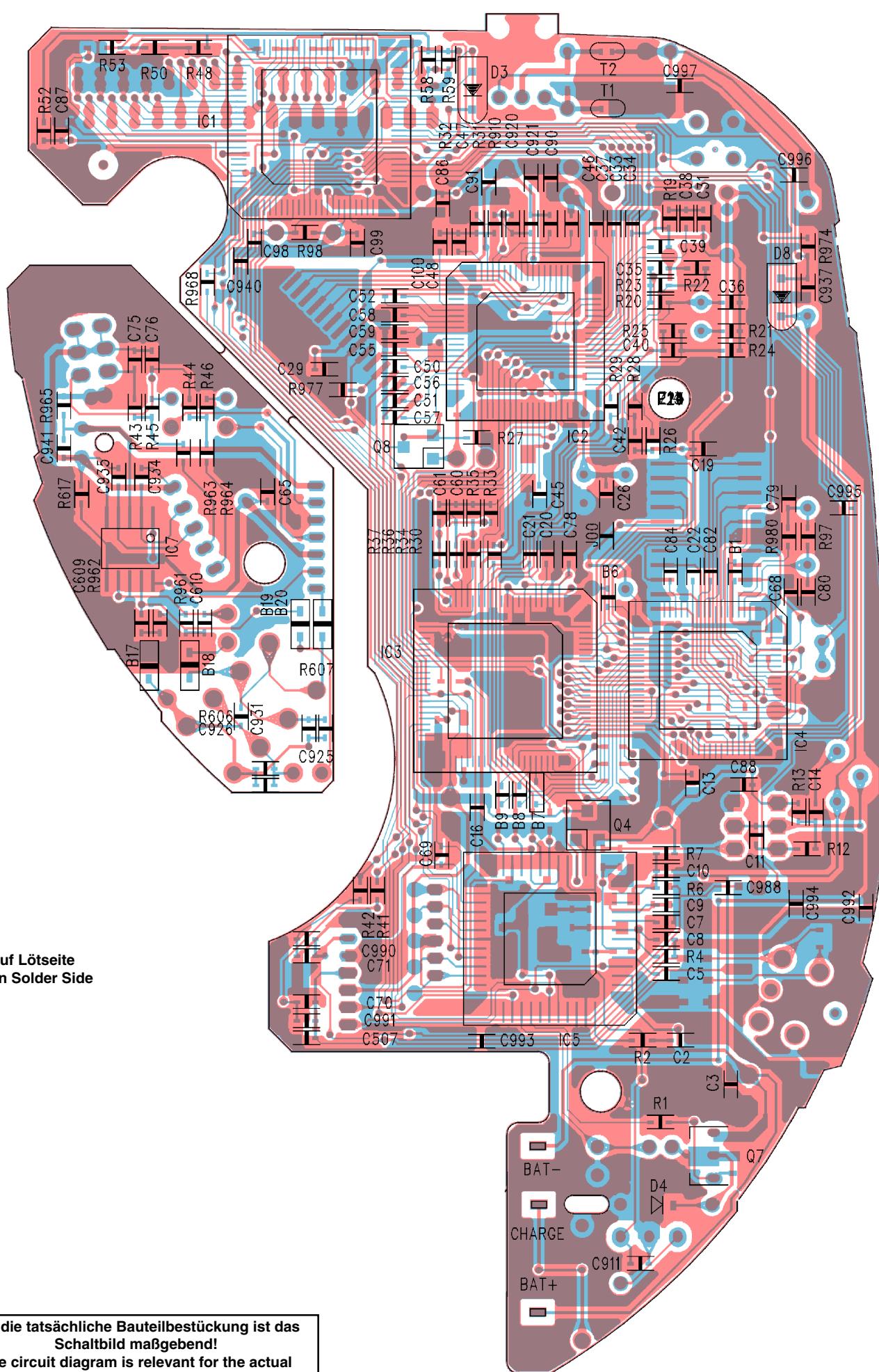
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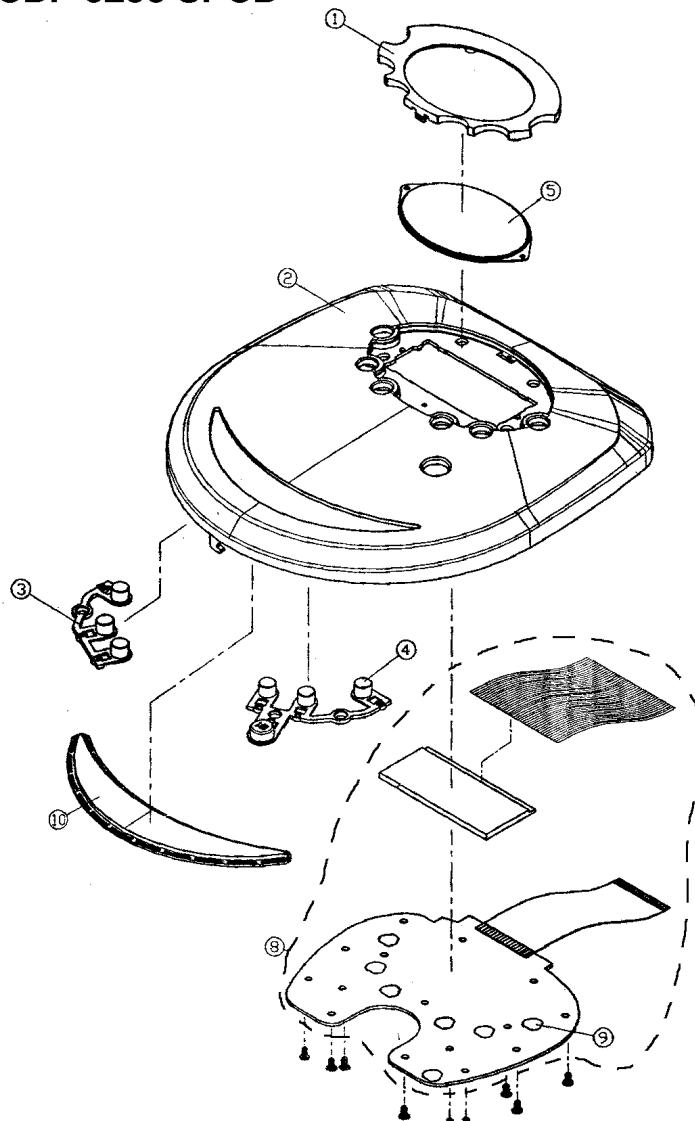
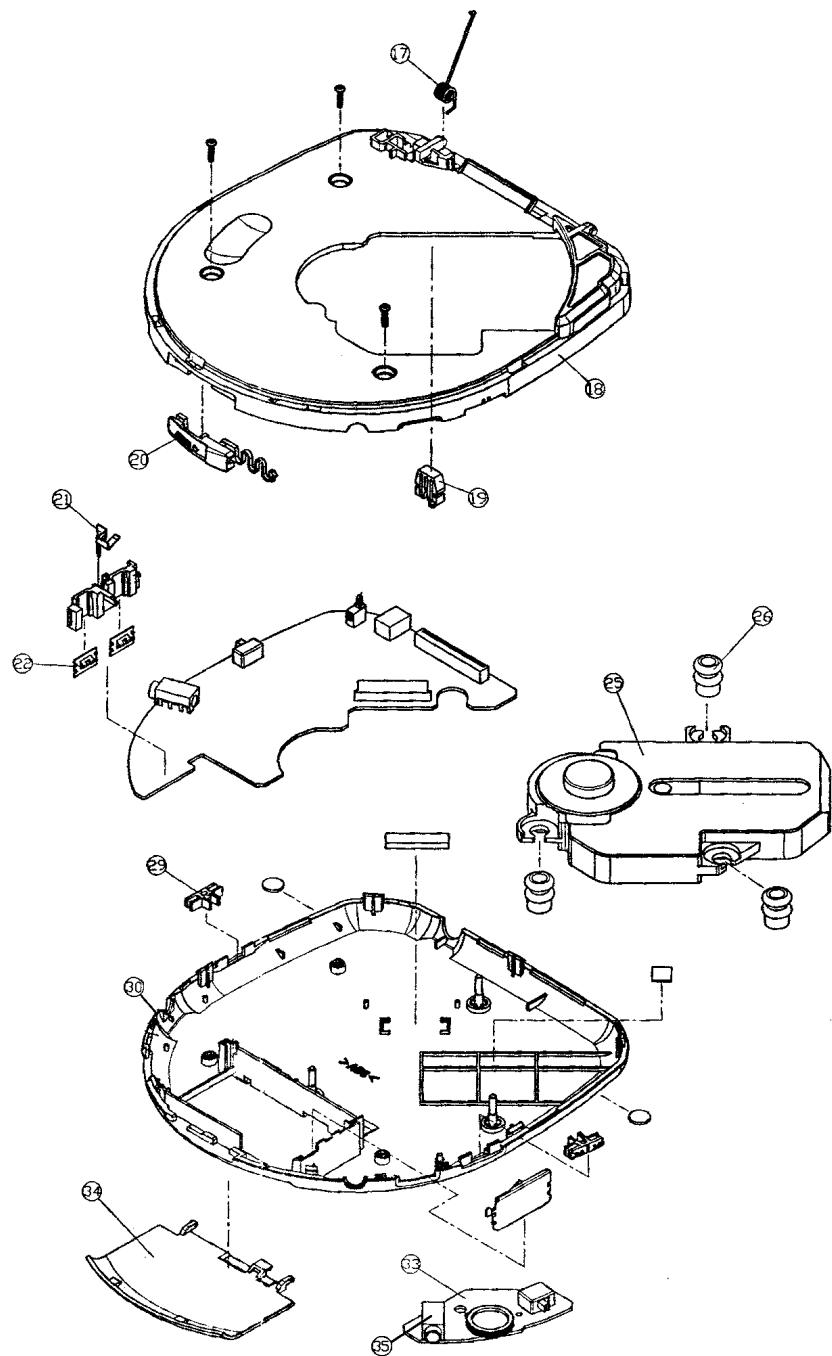


**Display- und Bedien-Platte****Display and Operating Board****Blockschatzplan / Block Diagram**

**Haupt-Platte / Main Board**

## Haupt-Platte / Main Board



**MYSTIXX  
CDP 9200 SPCD****1****Explosionszeichnung und Ersatzteilliste / Exploded View and Spare Parts List**

