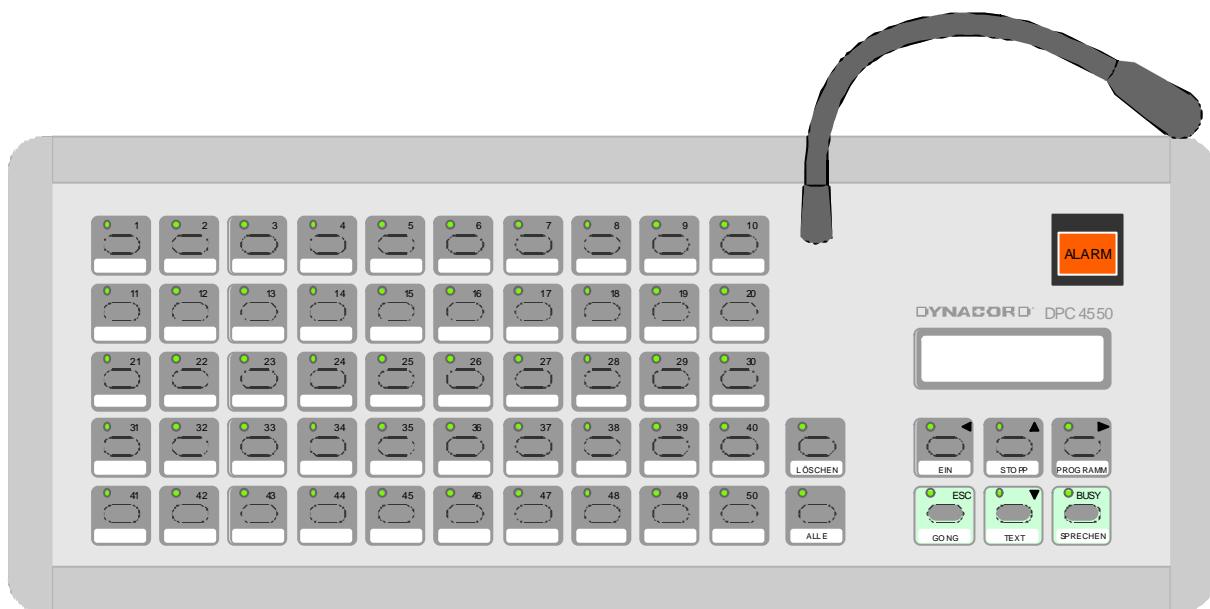




SERVICE MANUAL

PROMATRIX paging stations DPC 4000



**P|R|O|MATRIX®
S Y S T E M**

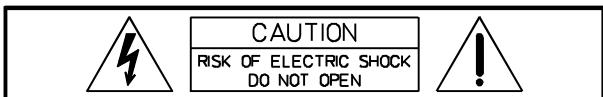
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IMPORTANT SAFETY INSTRUCTIONS



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
AVIS: RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth.
7. Do not block any of the ventilation openings.
Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

For US and CANADA only:

Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

IMPORTANT SERVICE INSTRUCTIONS

CAUTION: These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the Operating Instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

1. Security regulations as stated in the EN 60065 (VDE 0860 / IEC 65) and the CSA E65 - 94 have to be obeyed when servicing the appliance.
2. Use of a mains separator transformer is mandatory during maintenance while the appliance is opened, needs to be operated and is connected to the mains.
3. Switch off the power before retrofitting any extensions, changing the mains voltage or the output voltage.
4. The minimum distance between parts carrying mains voltage and any accessible metal piece (metal enclosure), respectively between the mains poles has to be **3 mm** and needs to be minded at all times.
The minimum distance between parts carrying mains voltage and any switches or breakers that are not connected to the mains (secondary parts) has to be **6 mm** and needs to be minded at all times.
5. Replacing special components that are marked in the circuit diagram using the security symbol (Note) is only permissible when using original parts.
6. Altering the circuitry without prior consent or advice is not legitimate.
7. Any work security regulations that are applicable at the location where the appliance is being serviced have to be strictly obeyed. This applies also to any regulations about the work place itself.
8. All instructions concerning the handling of **MOS** - circuits have to be observed.



Note: **SAFETY COMPONENT (HAS TO BE REPLACED WITH ORIGINAL PART ONLY)**

GARANTIE

Das Werk leistet Garantie für alle nachweisbaren Material- und Fertigungsfehler für die Dauer von 36 Monaten ab Verkauf.

Garantieleistungen werden nur dann anerkannt, wenn gültige, d.h. vollständig ausgefüllte Garantieunterlagen vorliegen.

Von der Garantie ausgenommen sind alle Schäden, die durch falsche oder unsachgemäße Bedienung verursacht werden. Bei Fremdeingriffen oder eigenmächtigen Änderungen erlischt jeder Garantieanspruch.

WARRANTY

The manufacturer's warranty covers all substantial defects in materials and workmanship for a period of 36 months from the date of purchase.

Liability claims are accepted solely, when a valid – correctly and completely filled out – Warranty Registration form is presented by the original owner of the product. The warranty does not cover damage that results from improper or inadequate treatment or maintenance. In case of alteration or unauthorized repairs, the warranty is automatically terminated.

GARANTIE

La garantie constructeur couvre tous les défauts matériels et de main d'œuvre pour une période de 36 mois à compter de la date d'achat. La garantie ne sera reconnue que si la Carte de Garantie, correctement et complètement remplie, est présentée par l'acheteur d'origine du produit. Les dommages dus à un mauvais maniement de l'appareil, à un traitement ou une maintenance incorrects ou inadéquats ne sont pas garantis. Toute modification ou intervention effectuée par une personne non qualifiée entraîne la résiliation automatique de la garantie.



GmbH • Hirschberger Ring 45 • 94315 Straubing • Telefon (09421) 706-0 • Telefax (09421) 706-265
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Internet: <http://www.dynacord.de>

Measured Data

DPC-Series Paging Stations

4510, 4520, 4530, 4550, 4010, 4020, 4106

Printed Boards 80431, 80432, 80455, 80433, 80435, 80436, 80462

1. General

- 1.1 Testing has been performed using the following equipment:
- | | |
|------------------------------|-----------------|
| System One | Audio Precision |
| Digital-Multi-Meter PM 2517x | Philips |
| Level Tester UPM 550 | Sennheiser |

1.2 Notes on the measurement:

Testing has to be performed according to the IEC 268-3 standard.
Unless differently specified, all tests are referenced to nominal output level and are performed with nominal load impedance $R = 10\text{k}$ at the NF-OUTPUT.
Tolerance $\pm 10\%$ (unless otherwise specified)
Environmental temperature for all measuring: $20^\circ\text{C} \pm 2^\circ\text{C}$
Supply voltage: 24 volts

2. Power Supply

Current Carrying Capacity Test (cord length 1m):

Engage the paging station's service mode

All tests are performed with a measuring tolerance of $+/-1.5\%$ (depending on the used measuring equipment)

$18.24\text{V} = 24\text{V} - 24\%$ (minimum voltage of the paging console MT 400)

$31.2\text{V} = 24\text{V} + 30\%$

$15.5\text{V} =$ Voltage value, which is the threshold for the undervoltage recognition to activate the converter.

Voltage testing at pins 1 and 2 of the paging station's RJ45-socket (CN3).

		Current Carrying Capacity in mA with the following functions:				
Paging station	Voltage U _{in} (V)	Idling	All LED's ON	Relay pulled + all LED's ON	Alarm-LED lights	
DPC4010 / DPC4510	15.5	55	80	90	120	
	18.24	50	60	70	100	
	24	40	50	55	80	
	31.2	35	40	45	65	
DPC4020 / DPC4520	15.5	55	90	100	120	
	18.24	50	70	80	100	
	24	40	55	65	80	
	31.2	35	45	55	65	
DPC 4530	15.5	55	95	110	120	
	18.24	50	85	95	100	
	24	40	65	75	80	
	31.2	35	55	60	65	
DPC4550	15.5	55	120	135	120	
	18.24	50	100	110	100	
	24	40	80	85	80	
	31.2	35	65	70	65	
DPC4350	15.5	40	55	-	-	
	18.24	35	50	-	-	
	24	30	45	-	-	
	31.2	30	35	-	-	
DPC 4106	15.5	55	65	75	-	
	18.24	50	55	65	-	
	24	40	45	55	-	
	31.2	35	40	45	-	

All other testing is performed with an operating voltage of 24V

3. Service Mode Description

3.1. Enter service mode. (up to software version V1.04)

Simultaneously press the **STOPP** + **PROGRAMM** keys for approximately one second. The address assignment menu appears. Press the **PROGRAMM** key once. The password menu appears. Enter the service mode by entering the password 09421 using the area keys and acknowledge your entry by hitting the **GONG(ESC)** key. The STOP-LED blinks. The service mode is cancelled through pressing the area selection key **1**, the **GONG(ESC)** key, or the **SPRECHEN(BUSY)** key.

In service mode, the area selection keys function as direct selection keys; i. e. the corresponding test starts immediately after pressing the according area selection key. Blinking of the corresponding area LED indicates the actually selected function. The following table shows the corresponding functions that are assigned to individual area selection keys:

Direct selection keys, area selection keys 1 - 19	UP/DOWN	Display DPC40x0					Display text DPC45x0	Brief description
Test No.		ERASE	ALL	ESC	▼	BUSY		Detailed descriptions follow this table
1	^ (STOP)	○	○	○	○	●	exit	Cancel service mode by pressing ESC
2		○	○	○	●	○	KEY/LED-Test	Keys and LED test
3		○	○	○	●	●	audiotest	Test of the different audio busses
4		○	○	●	○	○	buzzer test	Piezzo buzzer test
5		○	○	●	○	●	ext. watchdog test	MAX 823 test (reset circuit)
6		○	○	●	●	○	rs485 looptest	Send / Reception test of the RS-485 interface
7		○	○	●	●	●	rs485 tx-test	Send test of the RS-485 interface
8		○	●	○	○	○	rom identify	ROM-checksum, software version
9		○	●	○	○	●	initial settings	The paging station's initial settings are being restored
10		○	●	○	●	○	slave test	Tests the key-LED's of a connected extension
11		○	●	○	●	○	spi looptest	Send / Reception test of the SPI interface
12		○	●	○	●	●	spi tx-test	Send test of the SPI interface
13		○	●	●	○	○	vcc-test	Cathode D60 supply voltage test
14		○	●	●	○	●	A/D-test	Hex-Code indication of the actual values of the processor's 8 A/D-converter inputs
15		○	●	●	●	○	rel/mic delay	Talk-button / output relay delay
16		○	●	●	●	●	pagetyp edit	Determines the paging station type
17		●	○	○	○	○	eeprom clear	Erases the processor EEPROM
18		●	○	○	○	●	led test	Tests all LED's and lamps of optional keys
19	v (TEXT)	●	○	○	●	○	reset	Software reset

3.2. Enter service mode. (starting with software version V1.1 and generally for the DPC4106)

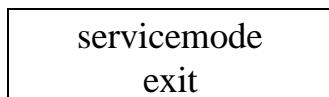
To enter service mode, simultaneously press the keys **ON + PROGRAMM** during power-on. The STOP-LED blinks. While in service mode, using the UP ^ or DOWN v keys selects the desired function and pressing the **SPRECHEN(BUSY)** actually starts the test.

In case the test program (e. g. audio test) provides submenus, the keys < (ON) or > (Programm) can be used to select the desired menu entry.

Pressing the **GONG(ESC)** key cancels the test.

	U P / D O W N	D i s p l a y t e x t D P C 4 5 x 0	K u r z b e s c h r e i b u n g
T e s t			Detaillierte Beschreibung erfolgt anschließend an diese Tabelle
1	^ (STOPP)	exit	Verlassen des Servicemodus durch Drücken der ESC-Taste
2		KEY/L E D -Test	Tasten und LED Test
3		audiotest	Testet die verschiedenen Audioweg e
4		buzzer test	Testet den Piezzo-Summer
5		ext. watchdog test	Test MAX 823 (Resetbaustein)
6		rs485 looptest	Testet RS -485 Schnittstelle, senden und empfangen
7		rs485 tx-test	Testet RS -485 Schnittstelle sendem äßig
8		rom identify	R O M -Prüfsumme, Softwareversion
9		initial settings	Sprechstelle wird in den Auslieferungszustand gebracht
10		slave test	bei einer angeschlossenen Extension werden die Tasten-Leds angesprochen
11		spi looptest	Testet SPI-Schnittstelle, senden und empfangen
12		spi tx-test	Testet SPI-Schnittstelle sendem äßig
13		vcc-test	Versorgungsspannung an Kathode D60 wird gemessen
14		A/D -test	Zeigt die aktuellen Werte der 8 A/D-Wandlereingänge des Prozessors Hexadezimal an
15		rel/m ic delay	Verzögerung zwischen Sprechertaste und Ausgangsrelais
16		pagetype edit	Einstellen des Sprechstellentyps
17		eeprom clear	Löscht Prozessor EEPROM
18		led test	Teste alle LED's und Lampen in den optionalen Tasten
19	v (TEXT)	reset	Softwarereset

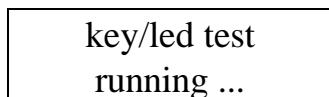
Test #1 Exit service mode



Pressing the area key 1, TALK key or ESC exits service mode.

Test #2 KEY/LED-Test

Pressing the area key 2 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the key and LED test procedure. All LED's and lamps of optional keys and switches is activated and the display shows accordingly:



Description:

Press every single key to dim the corresponding LED.

Caution: This test is automatically cancelled if for 3 seconds no key has been pressed or by pressing the ESC key. The following message appears on the display!

servicemode key/led test

Test #3 AUDIO test

Pressing the area key 2 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the AUDIO test. The display shows the following message:

audiotest int.frc cmp=off

Up to software version V1.04, the following applies:

Pressing area keys configures the audio signal path of a paging station for measurement and testing

	Key pressed (Led lights continuously)	LCD display	Function
1	-	rel. off cmp = off	No LF signal at the output, LF-relay dropped
2	area 1	mute cmp = off	LF signal muted, LF-relay pulls
3	area 1 + area 2 (area 6)	int. frc cmp = off	Internal microphone is being switched through (controlled by the processor), the compressor is off
4	area 1 + area 3 (+area 6)	ext. mic cmp = off	External Mic/Line input via microphone pre-amplifier is switched through, the compressor is ON
5	Kreis 1 + Kreis 4 (+Kreis 6)	ext. inp cmp = off	External Mic/Line input without microphone pre-amplifier is switched through, the compressor is off
6	area 1 + area 5	pilot cmp = off	Pilot tone signal is switched through (400mVss / 500Hz)
7	area 6 cmp = on	Additional compressor is being activated
8	taak	int. tlk	The internal microphone is switched through as long as keeping the corresponding key pressed, LF-relay pulls

The following applies to all consoles with software version V1.1 and higher as well as for the DPC 4106:

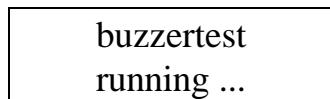
Pressing the keys < (ON) or > (program) allows the user to configure a paging station's audio signal path for measurement and testing.

	Key pressed	LCD display	Function
1	Sprechen (BUSY)	int. frc cmp = off	internal microphone is switched through (controlled by the processor), compressor off
2	^ (STOP)	rel. off cmp = off	no LF-signal at the output, LF-relay dropped
3	^ (STOP)	mute cmp = off	LF-signal muted, LF-relay pulls
4	Sprechen (BUSY)	int. tlk cmp = off	internal microphone is switched through as long as the key is pressed
5	^ (STOP)	pilot cmp = off	Pilot tone is switched through (400mVss / 500Hz)

6	^ (STOP)	int. frc cmp = off	internal microphone is switched through (controlled by the processor), compressor off
7	^ (STOP)	int. frc cmp = on	Compressor ON, additionally
8	^ (STOP)	ext. mic cmp = on	External Mic/Line input via microphone pre-amplifier is switched through, compressor off
9	^ (STOP)	ext. inp cmp = off	External Mic/Line input without microphone pre-amplifier is switched through, compressor off

Test #4 BUZZER test

Pressing the area key 4 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the BUZZER test. The display shows the following message:



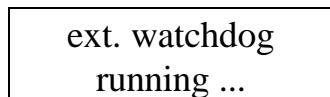
Description:

The internal piezo buzzer is audible with a frequency of 500 Hz.

Pressing ESC cancels the BUZZER test.

Test #5 EXTERNAL WATCHDOG test

Pressing the area key 5 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the EXTERNAL WATCHDOG test. The display shows the following message:



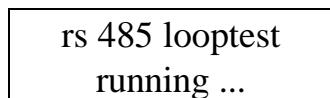
Description:

After 0 .. 2.4 seconds a hardware-reset is ignited via the external watchdog circuit and the paging console restarts in normal operation mode.

Caution: To be able to continue testing, you have to re-enter the paging station's service mode as described in paragraph 3.1.

Test #6 RS-485 LOOP test

Pressing the area key 6 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the RS-485 LOOP test. The display shows the following message:



Description:

During this test the processor generates a test pattern that is sent via the path PROCESSOR TXD-OUT → RS-485 driver circuit. At the same time the test pattern is received via the path RS-485 driver circuit → PROCESSOR RXD LINE.

Caution: Make sure that the RS-485 lines DATA+ and DATA– are open!

In case the test completes successfully, after approximately 1s, the display shows the following:

rs 485 looptest
ok.

If testing failed, the following message appears on the display:

rs 485 looptest
failure !!!

Caution: This error message is also displayed when during testing the paging console is connected to the DPM 4000 using the standard connection cord.

Test #7 **RS-485 TX test**

Pressing the area key 7 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the RS-485 TX test. The display shows the following message:

rs 485 tx test
running ...

Description:

During this test, a test pattern that is generated by the processor is sent via the path PROCESSOR TXD-OUT → RS-485 driver circuit.

Pressing ESC cancels the RS-485 TX test.

Test #8 **ROM IDENTIFY**

Pressing the area key 8 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the ROM IDENTIFY test. The display shows the following message:

rom identify
running ...

Description:

An additive 16-Bit checksum over the entire flash-ROM is being generated. It is indicated on the display in HEX-Code as „ch xxxx“. In addition, the display shows the actual software revision as „vx.xxx“.

rom identify
ch xxxx vx.XXX

Caution: This checksum depends on the paging station's individual configuration. Therefore, it can vary between consoles of the same type that are differently configured. Prior to comparing checksums of identical consoles you have to perform the INITIAL SETTINGS function (test #9). **During this procedure all user-defined configuration parameters are irreversibly lost.**

Pressing the area key 9 or correspondingly using the UP/DOWN keys followed by the TALK key restores the INITIAL SETTINGS. The display shows the following message:

initial settings
press 'talk'

Description: Initial settings of the paging station are being restored. This includes the following basic settings:

console-type	actual measured type or, with erroneous testing, generally DPC 4510
name	untitled DPC4XXX
address	OFF , 1 .. 32
type extension	extension port OFF , DPC 4350 extension ON, PTT-microphone, Line ON
buzzer	ON
date format	German , English
user access	Protected level (password: 09421) user level (password: 111) setup level (password: 2222)
relay --> Mic delay	15ms
Mic. priority	internal microphone , PTT-microphone
LCD-contrast	0
ALL key	selects all 100 lines
ERASE key	erases all 100 lines
ON key	switches with a delay of 1s
STOP key	local, with priority 50
PRORAM key	
GONG key	gong signal 4 in actual selection, with priority 80
TEXT key	text 1 in actual selection, with priority 20
SPRECHEN key	announcement in actual selection, with priority 50
ALARM key	alarm 1 in all 100 lines, with priority 90, not protected
OPTION 1 key	OFF
OPTION 2 key	OFF
PTT (external) key	announcements in all 100 lines, with priority 50
group keys 1..100	lines 1 .. 100 assigned
group 0	all lines selected
groups 1 .. 30	all lines erased

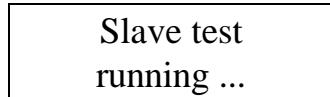
Description of the DPC4106: Initial settings of the paging station are being restored. This includes the following basic settings:

console type	actual measured type or, with erroneous testing, generally DPC 4510
name	untitled DPC4106
address	OFF , 1 .. 32
type extension	extension port OFF , DPC 4350 extension ON, PTT-microphone, Line ON
buzzer	ON
date format	German , English
user access	user level
relay --> Mic delay	15ms
Mic priority	internal microphone , PTT-microphone
LCD-contrast	0
ON key	switches with a delay of 1s
STOP key	local, with priority 50
PRORAM key	disabled
GONG key	gong signal 4 in all 100 lines, with priority 80
TEXT key	text 1 in all 100 lines, with priority 20
SPRECHEN key	announcements in all 100 lines, with priority 50

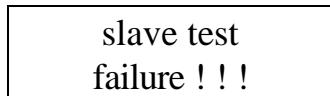
ALARM key	disabled
OPTION 1 key	OFF
OPTION 2 key	OFF
PTT (external) key	announcements in all 100 lines, with priority 50

Test #10 **SLAVE-Test**

Pressing the area key 10 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the **SLAVE** test. The display shows the following message:



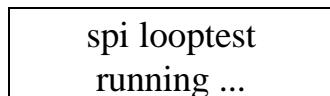
Description: A specific pattern is sent to the connected paging station extension DPC4350, which triggers the sequence in which the extension's key-LED's are switched on and off. If there is no extension connected or in case of faulty transmission, the display shows the following message.



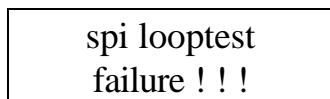
Pressing ESC cancels the SLAVE test.

Test #11 **SPI LOOP test**

Pressing the area key 11 or correspondingly using the UP/DOWN keys followed by the TALK key ignites the **SPI LOOP** test. The display shows the following message:



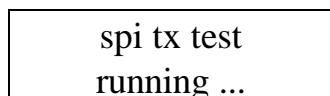
Description: The TX/RX driver electronic is tested by bridging MOSI (CN4.5) and MISO/PTT (CN4.4) at the EXT-socket. For testing the entire functionality of the SPI-interface, it is necessary to monitor the SLAVE SELECT (CN4.6) and SCK (CN4.3) signals via oscilloscope. In case the test is not completed successfully, the display shows the following message:



Pressing ESC cancels the SPI LOOP test.

Test #12 **SPI TX test**

Pressing the area key 12 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key ignites the **SPI TX** test. The display shows the following message:



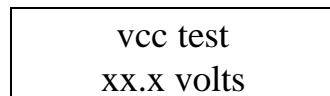
Description:

During this test, a test pattern that is generated by the processor is sent via the path PROCESSOR MOSI-OUT → SPI driver circuit.

Pressing ESC cancels the SPI TX test.

Test #13**VCC test**

Pressing the area key 13 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key ignites the VCC test. The display shows the following message:

**Description:**

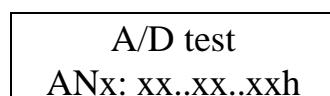
This test measures the supply voltage at the cathode D60. During the test, the ON/OFF, TALK, and ALARM keys allow to set different loads.

ON/OFF key	switches all LED's on
TALK key	switches the audio relay on
ALARM key	switches the alarm lamp on

Pressing ESC cancels the VCC test.

Test #14**A/D test**

Pressing the area key 14 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key ignites the A/D test. The display shows the following message:

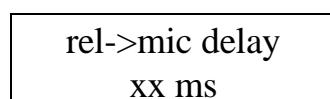
**Description:**

The A/D-converter inputs AN0 .. AN7 are being tested. Using the Die UP/ DOWN keys lets you switch between channels. All values are displayed in HEX-Code. The three different values that are indicated on the display are as follows: left – minimum value, center – the actually measured value, and right – maximum value.

Pressing ESC cancels the A/D test.

Test #15**REL->MIC DELAY**

Pressing the area key 15 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key lets you set the delay between the pulling of the relay and the actual 'opening' of the microphone channel. The display shows the following message:



Description:

The pre-set value is 15 ms. This value can be changed in the range of 0 .. 35 ms using the UP/DOWN keys.

Pressing ESC exits the menu.

Test #16**PAGETYPE EDIT**

Pressing the area key 16 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key lets you change the type of the paging console. The display shows the following message:

A rectangular display frame containing the text "pagetype edit" on top and "DPC4xx0" below it, enclosed in a thin black border.

Description:

In case automatic type-recognition does not function, this menu lets you manually enter the correct console-type-ID.

Pressing ESC exits the menu.

Test #17**EEPROM CLEAR (only for internal testing!)**

Pressing the area key 17 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key lets you erase the processor's internal EEPROM. The display shows the following message:

A rectangular display frame containing the text "eeprom clear" on top and "press 'talk'" below it, enclosed in a thin black border.

Description:

This function erases the processor's internal EEPROM. Upon pressing the SPRECHEN-key, the display shows the following message:

A rectangular display frame containing the text "eeprom clear" on top and "ok." below it, enclosed in a thin black border.

Pressing ESC exits the menu.

When booting next time the following message appears on the display:

A rectangular display frame containing the text "config error" on top and "setup again" below it, enclosed in a thin black border.

You can erase this error message by selecting test #9!

Test #18**LED test**

Pressing the area key 18 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key ignites the LED test. The display shows the following message:

led test
running ...

Description:

All LED's including the lamps of external keys flash in sequence.

Pressing ESC exits the menu.

Test #19

Reset

Pressing the area key 19 (only with paging station models DPC4x20, DPC4550) or correspondingly using the UP/DOWN keys followed by the TALK key ignites a software reset. The following message briefly appears on the display:

reset
running ...

Description:

The processor system re-boots (software reset).

4. Input Characteristics

(Relay switched, output terminated with 10k)

Input:	Input Impedance	Sensitivity for Nominal Output Voltage (+6dB)
internal microphone (1kHz)	4k7	43mV

5. Output Characteristics

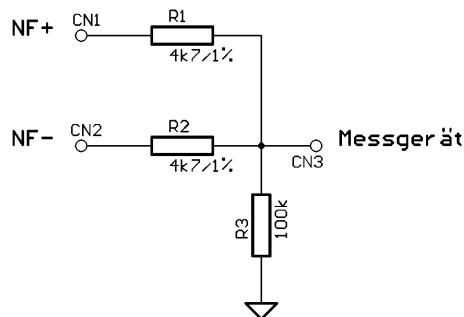
(Output terminated with 10k, relay switched, internal microphone – input selected)

Measured via NF+ and NF- (PIN 7 and PIN 8) of the RJ 45 socket (CN 3)

Output Impedance	Nominal Output Voltage	Maximum Amplitude	Frequency Response
390R	+6dB 0.5 dB	1.65V	110Hz - 20kHz

6. Output Symmetry

(Relay switched, internal microphone – input selected)
Measured via R3 of the following test configuration:



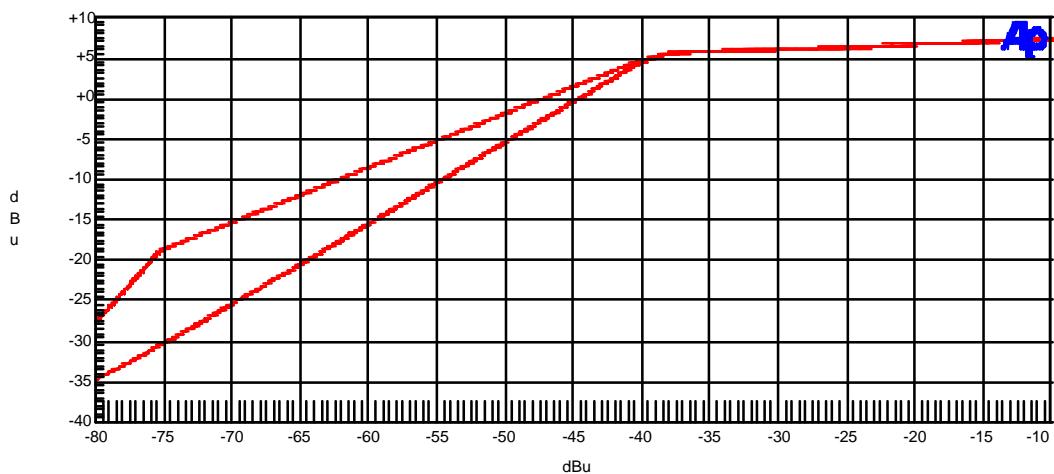
Input Voltage	Output Voltage
30mV	>15dB (<150mV)

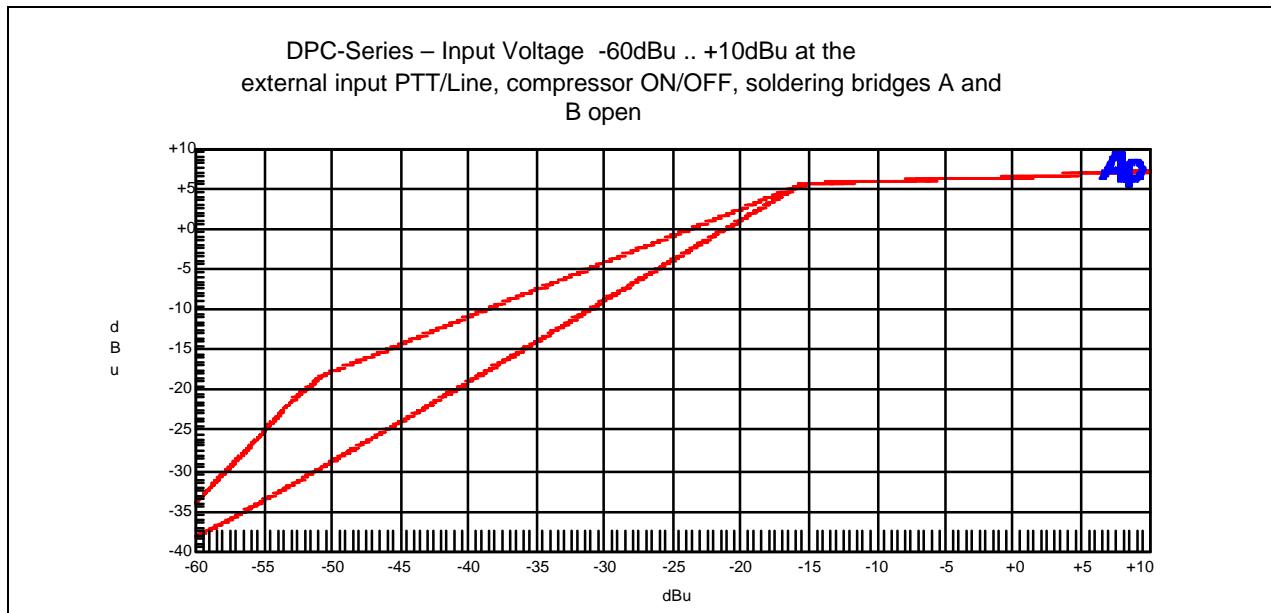
7. Compressor and Limiter Characteristics

(Talk key pressed, internal microphone – input selected, output terminated with 10k)
Measured via NF+ and NF- (PIN 7 and PIN 8) of the RJ 45 socket (CN 3)

Input Voltage	Output Voltage	Distortion
30mV	1.2V +/- 0.5dB	0.20%
30mV + 10dB (100mV)	1.6V +/- 0.5dB (limiter-processed)	0.22%
30mV + 20dB (300mV)	1.6V +/- 0.5dB (limiter-processed)	-

DPC-Series – Input Voltage -80dBu .. -10dBu at the
external input PTT/Line, compressor ON/OFF, soldering bridges A and
B closed





8. Interference Noise (Interference – Output Voltage)

Test Equipment Settings:
Wideband Noise Voltage (Measured via bandpass filter 22.4 Hz .. 22.4 kHz with UPM 550 in PEAK mode, weighting filter set to UNW .)
Noise Voltage (CCIR 468-3) (Measured via noise filter (psophometric) with UPM 550 in PEAK mode, weighting filter set to CCIR .)
Noise Voltage (A-weighted) (Weighting filter with UPM 550 in RMS mode, weighting filter set to dB(A) .)

8.1. Interference Voltages

- Service mode #3 selected
- Internal input terminated with 47k
- External input terminated with 1 k ohm

8.1.1 Internal Microphone Input

- Audio switches 1, 3, 4 → ON, 2, 5, 6 → OFF

S/N Ratio (unweighted)	600 µV
S/N Ratio (A-weighted)	420 µV
S/N Ratio (CCIR 468-3)	1.9 mV

8.1.2.1 External PTT/LINE Input

Microphone Sensitivity (with SSM 2165 pre-amplifier)

- Audio switches 1, 3, 4 → ON, 2, 5, 6 → OFF
- Soldering bridges A & B closed

S/N Ratio (unweighted)	600 µV
S/N Ratio (A-weighted)	420 µV
S/N Ratio (CCIR 468-3)	1.9 mV

8.1.2.2 External PTT/LINE Input

Line Sensitivity (with SSM 2165 pre-amplifier)

- Audio switches 1, 3, 4 → ON, 2, 5, 6 → OFF
- Soldering bridges A & B open

S/N Ratio (unweighted)	230 µV
S/N Ratio (A-weighted)	150 µV
S/N Ratio (CCIR 468-3)	670 µV

8.1.2.3 External PTT/LINE Input

Microphone Sensitivity (without SSM 2165 pre-amplifier)

- Audio switches 1, 4 → ON 2, 3, 5, 6 → OFF
- Soldering bridges A & B closed

S/N Ratio (unweighted)	45 µV
S/N Ratio (A-weighted)	28 µV
S/N Ratio (CCIR 468-3)	120 µV

8.1.2.4 External PTT/LINE Input

Line Sensitivity (without SSM 2165 pre-amplifier)

- Audio switches 1, 4 → ON, 2, 3, 5, 6 → OFF
- Soldering bridges A & B open

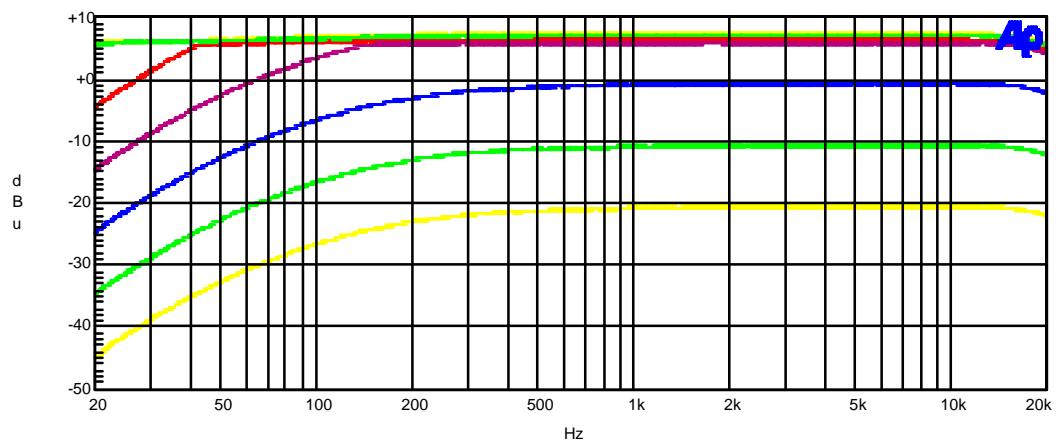
S/N Ratio (unweighted)	30 µV
S/N Ratio (A-weighted)	17 µV
S/N Ratio (CCIR 468-3)	75 µV

8.2. Frequency Response

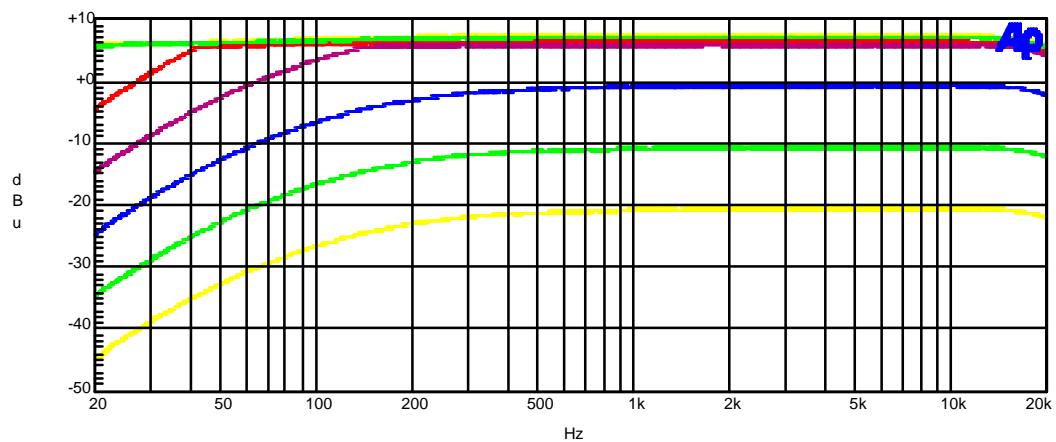
- Service mode #3 selected

8.2.1 Internal Microphone Input

DPC-Series – Input Voltage +3dBu, 0dBu, -10dBu,
-20dBu, -30dBu, -40dBu, -50dBu at the internal Mic Input
Ober 2.2 F capacitor, audio test switches 1, 2 ON; 3, 4,
5, 6 OFF



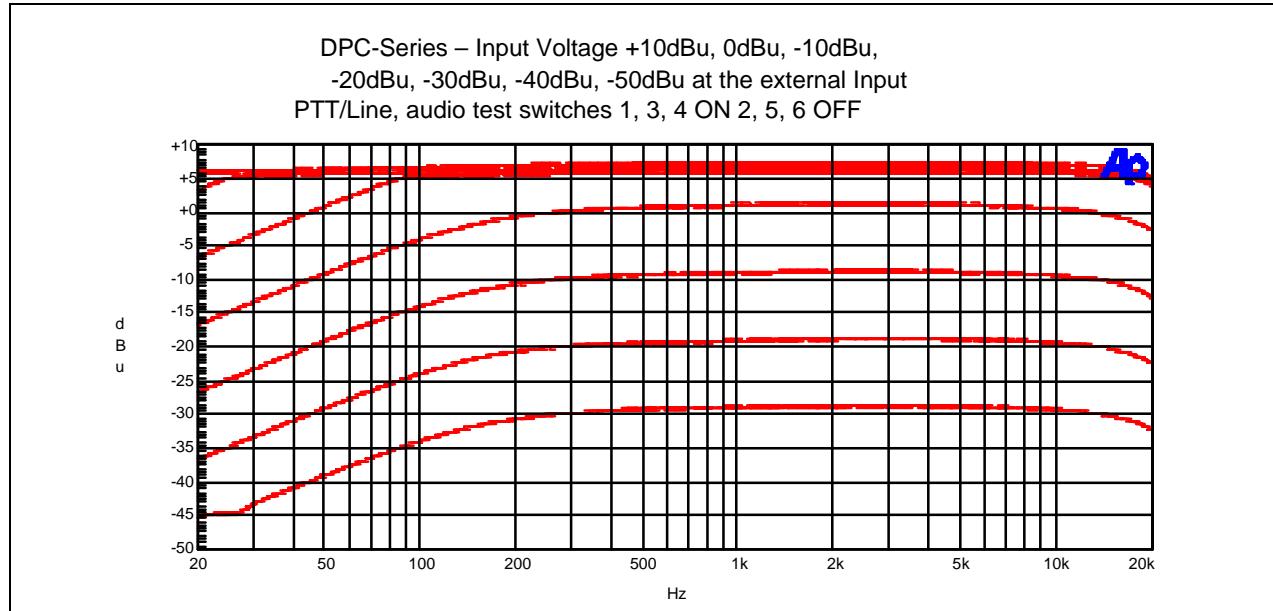
DPC-Series – Input Voltage +3dBu, 0dBu, -10dBu,
-20dBu, -30dBu, -40dBu, -50dBu at the internal Mic Input
Ober 2.2 F capacitor, audio test switches 1, 2 ON; 3, 4,
5, 6 OFF



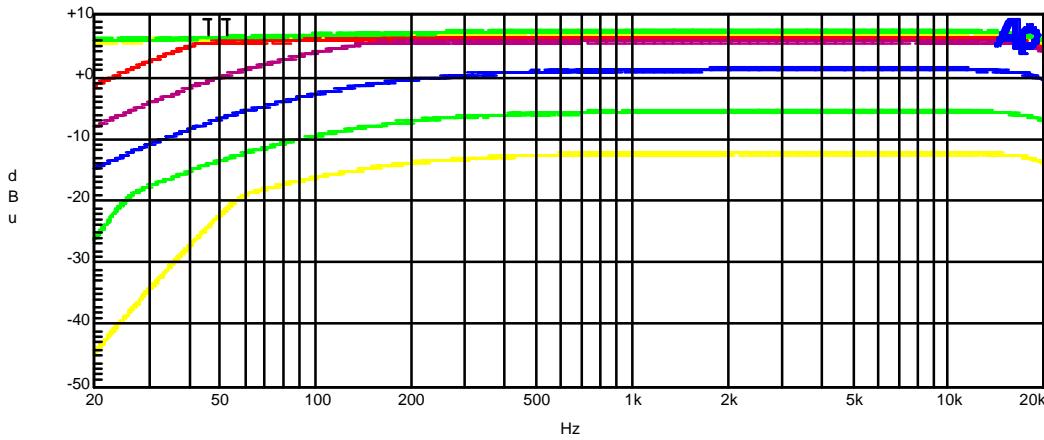
8.2.1 8.2.2 External PTT/LINE Input

Microphone Sensitivity (with SSM 2165 pre-amplifier)

- Soldering bridges A & B closed



DPC-Series – Input Voltage +3dBu, 0dBu, -10dBu, -20dBu, -30dBu, -40dBu, -50dBu at the internal Mic Input
Ober 2.2 F capacitor, audio test switches 1, 2, 5 ON; 3, 4, 6 OFF



8.2.3 External PTT/LINE Input

Line Sensitivity (with SSM 2165 pre-amplifier)

- Audio switches 1, 3, 4 → ON, 2, 5, 6 → OFF
- Soldering bridges A & B open

8.2.4 External PTT/LINE Input

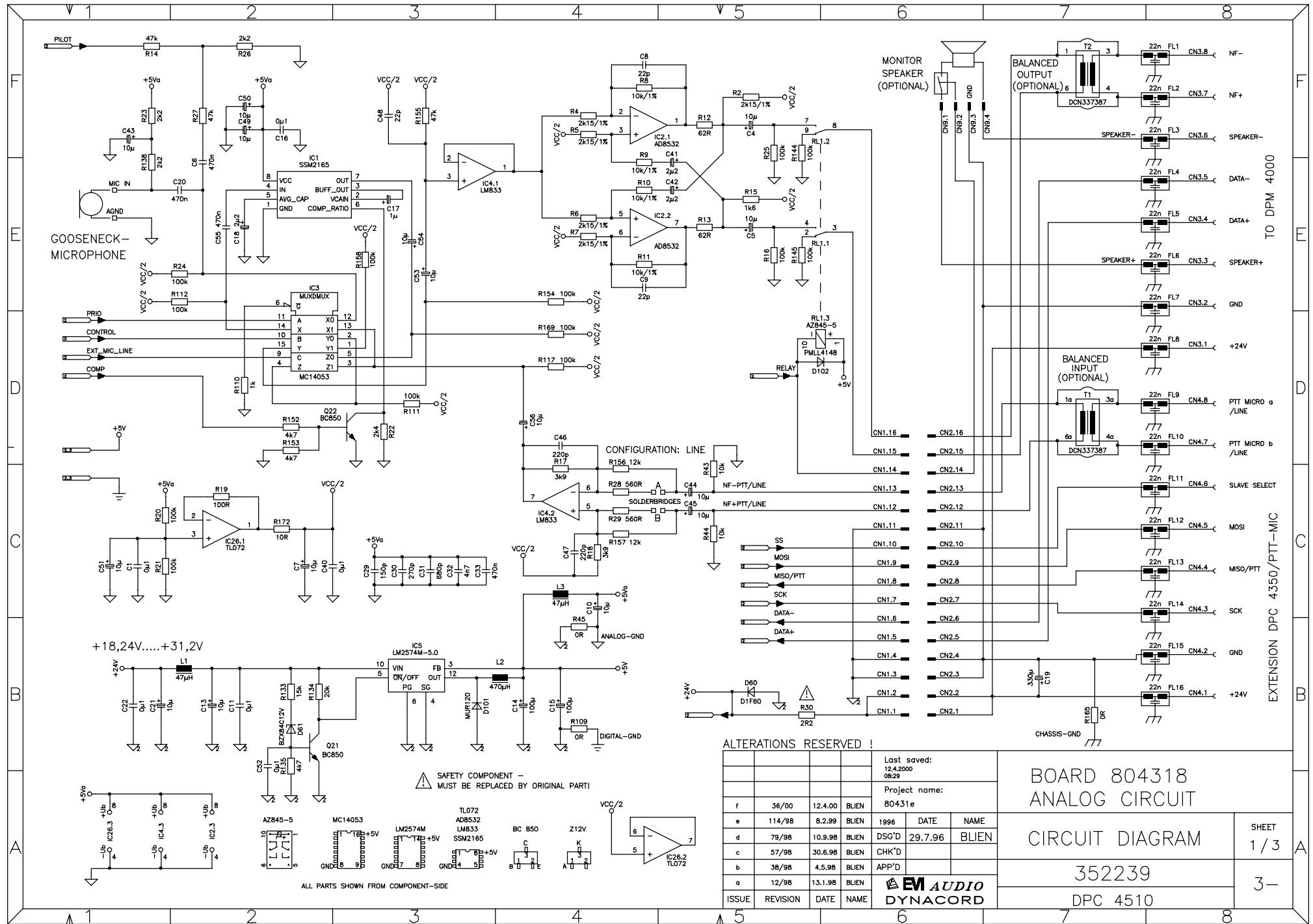
Microphone Sensitivity (without SSM 2165 pre-amplifier)

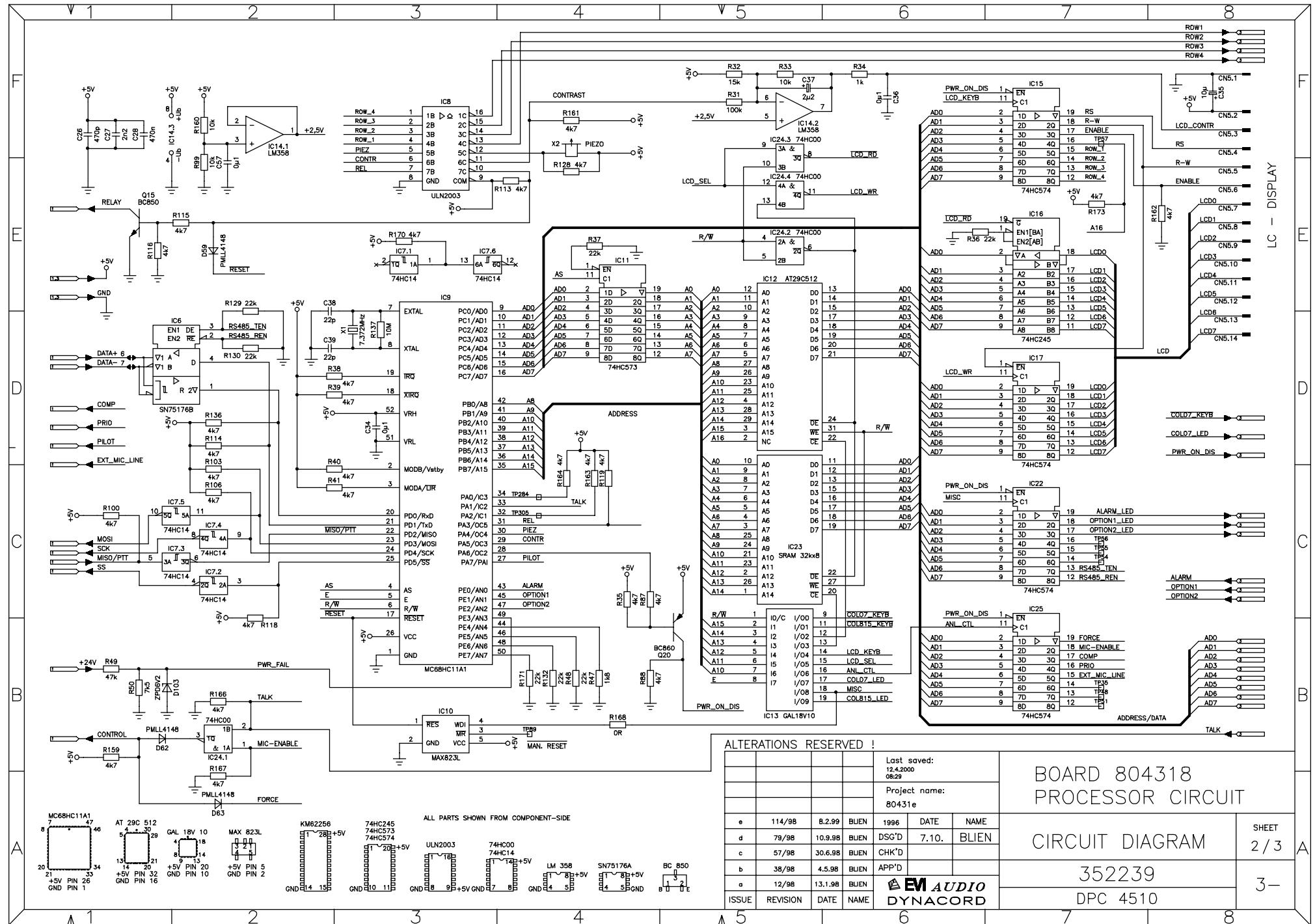
- Audio switches 1, 4 → ON 2, 3, 5, 6 → OFF
- Soldering bridges A & B closed

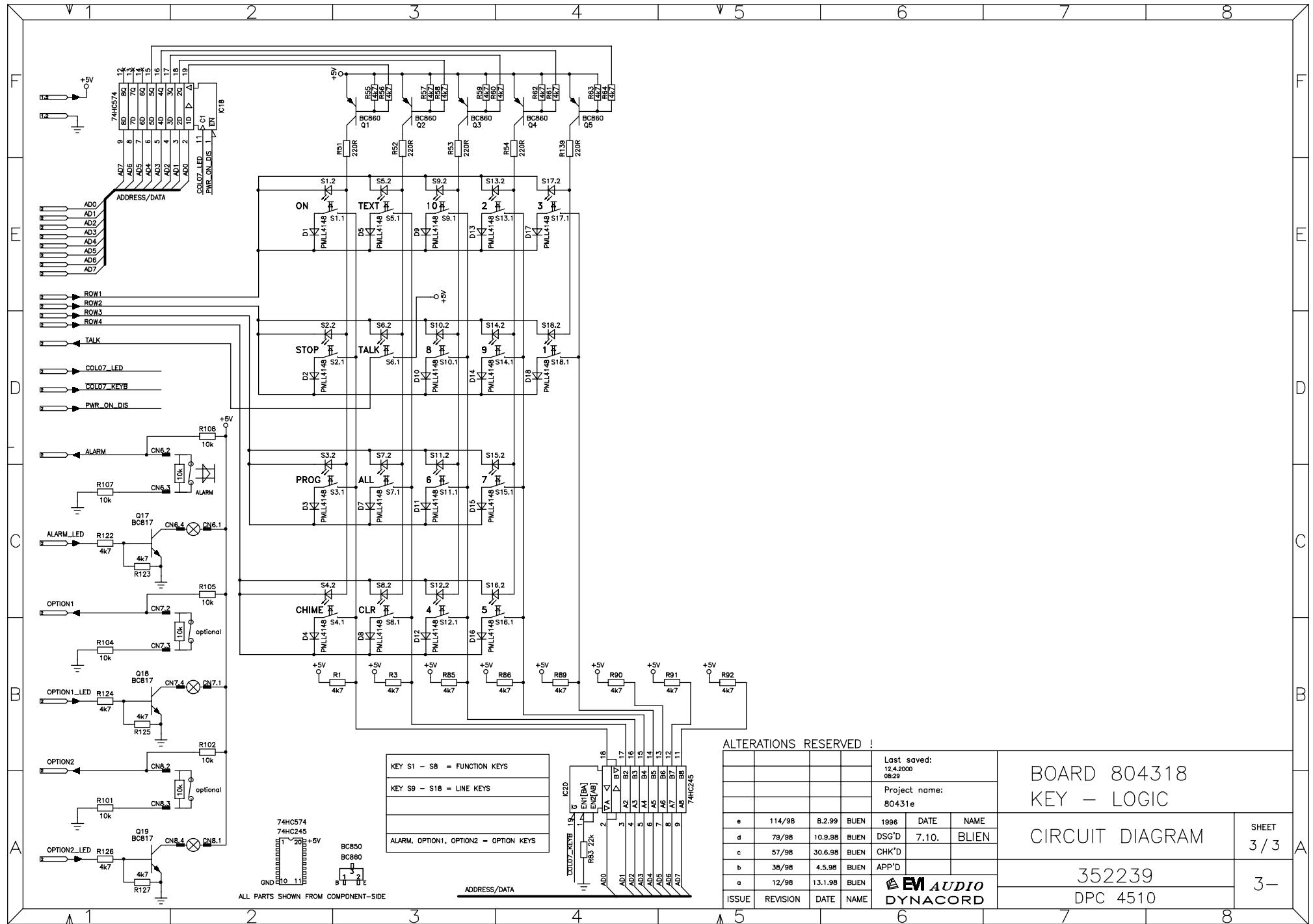
8.2.5 External PTT/LINE Input

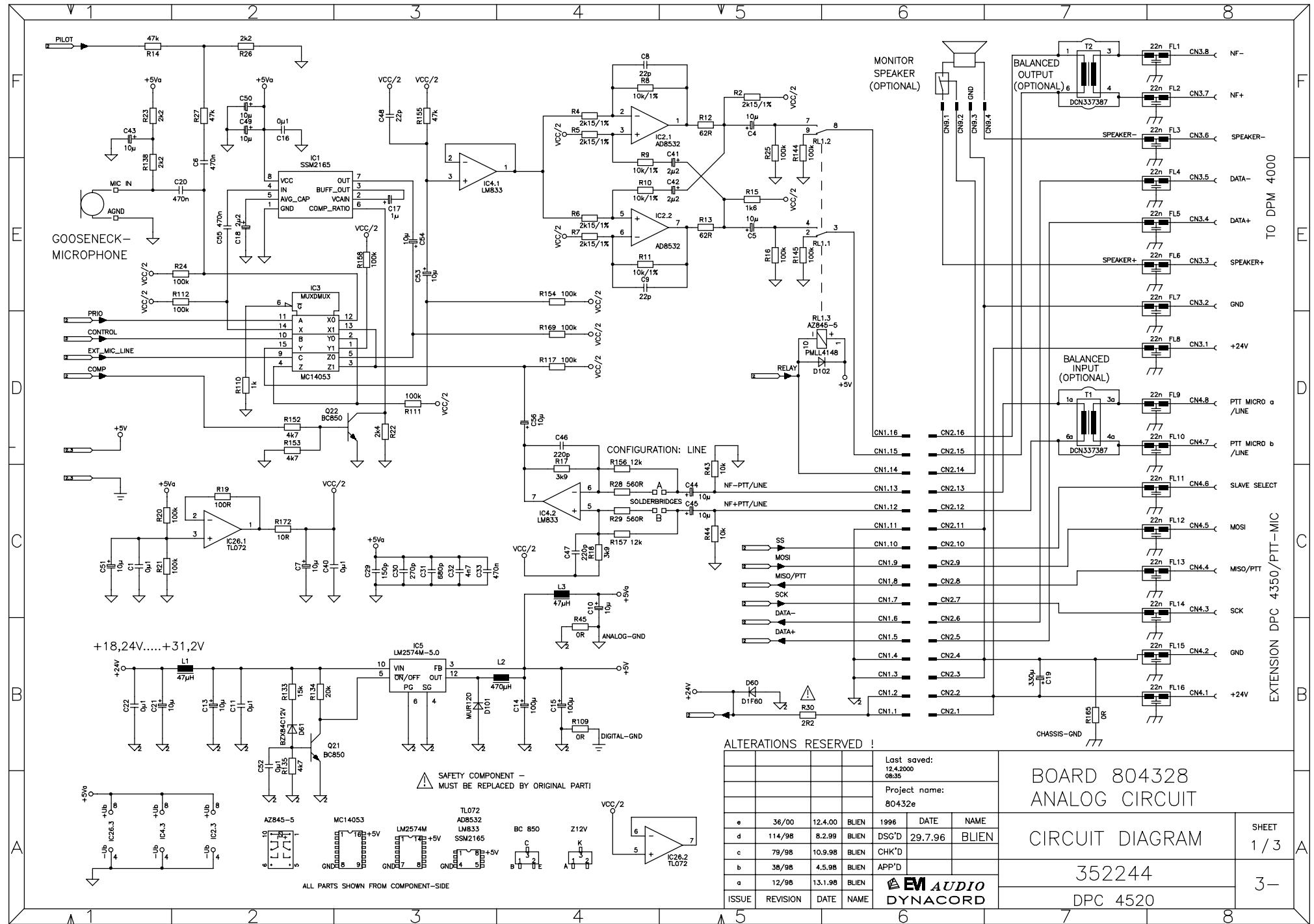
Line Sensitivity (without SSM 2165 pre-amplifier)

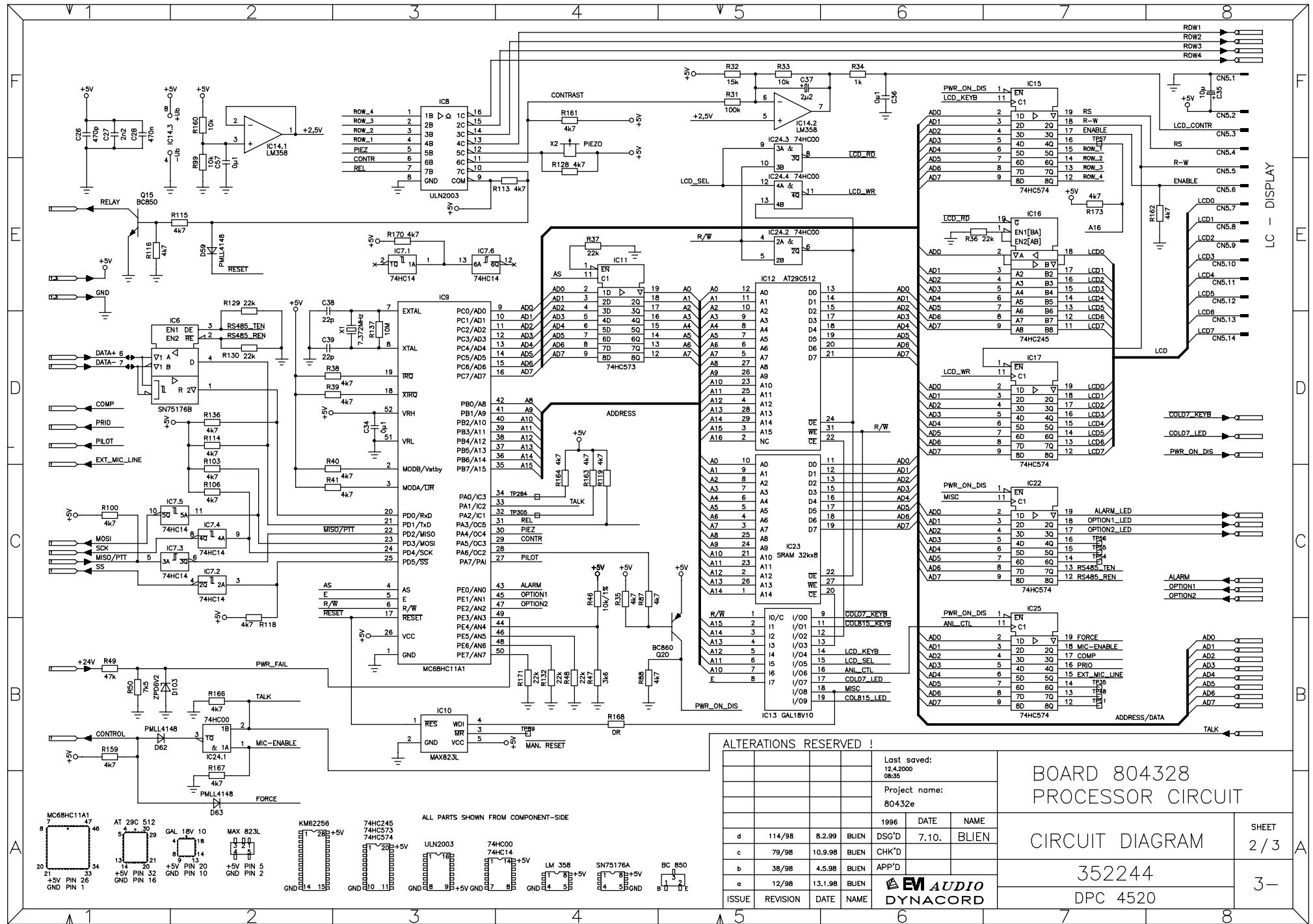
- Audio switches 1, 4 → ON, 2, 3, 5, 6 → OFF
- Soldering bridges A & B open

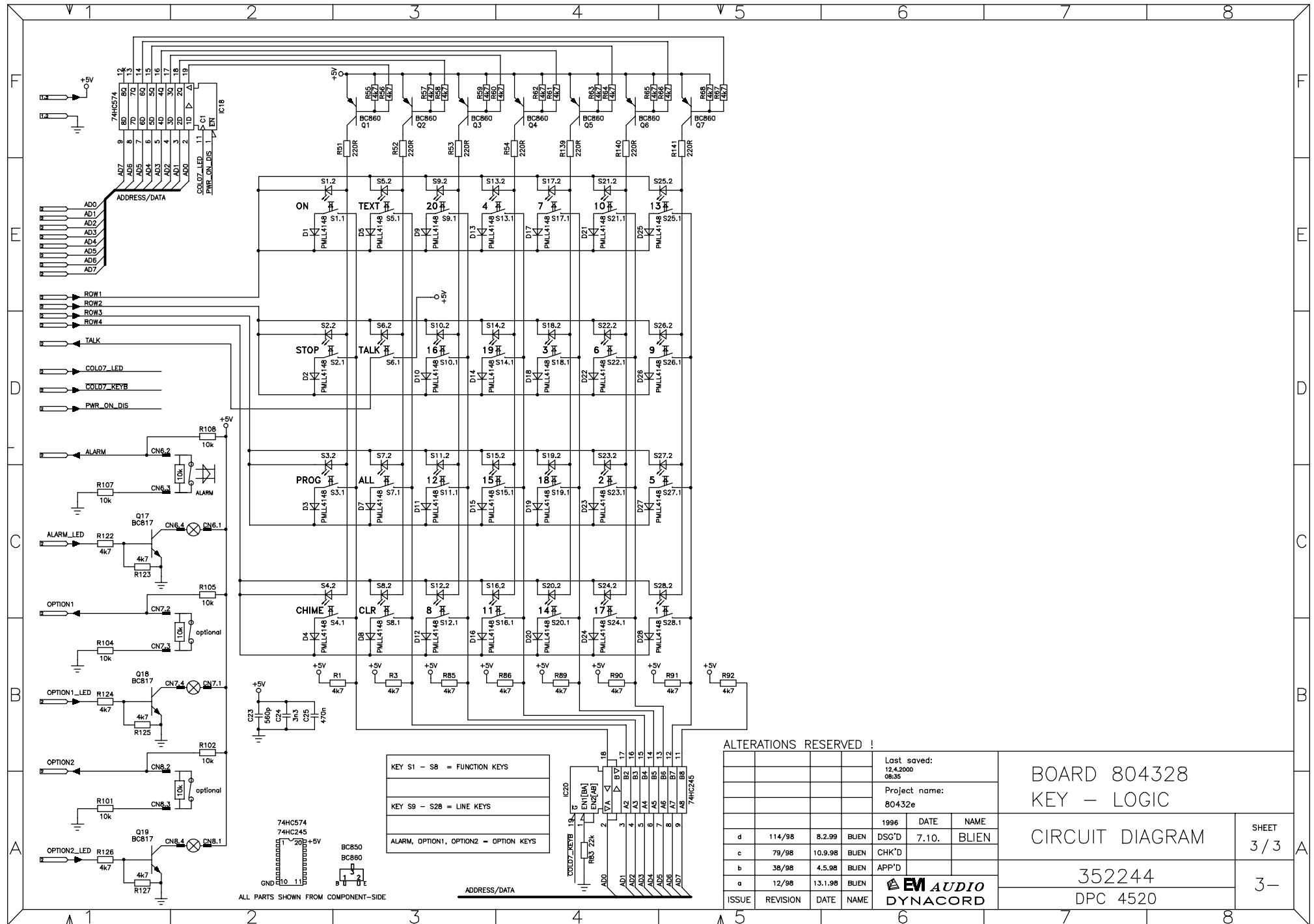


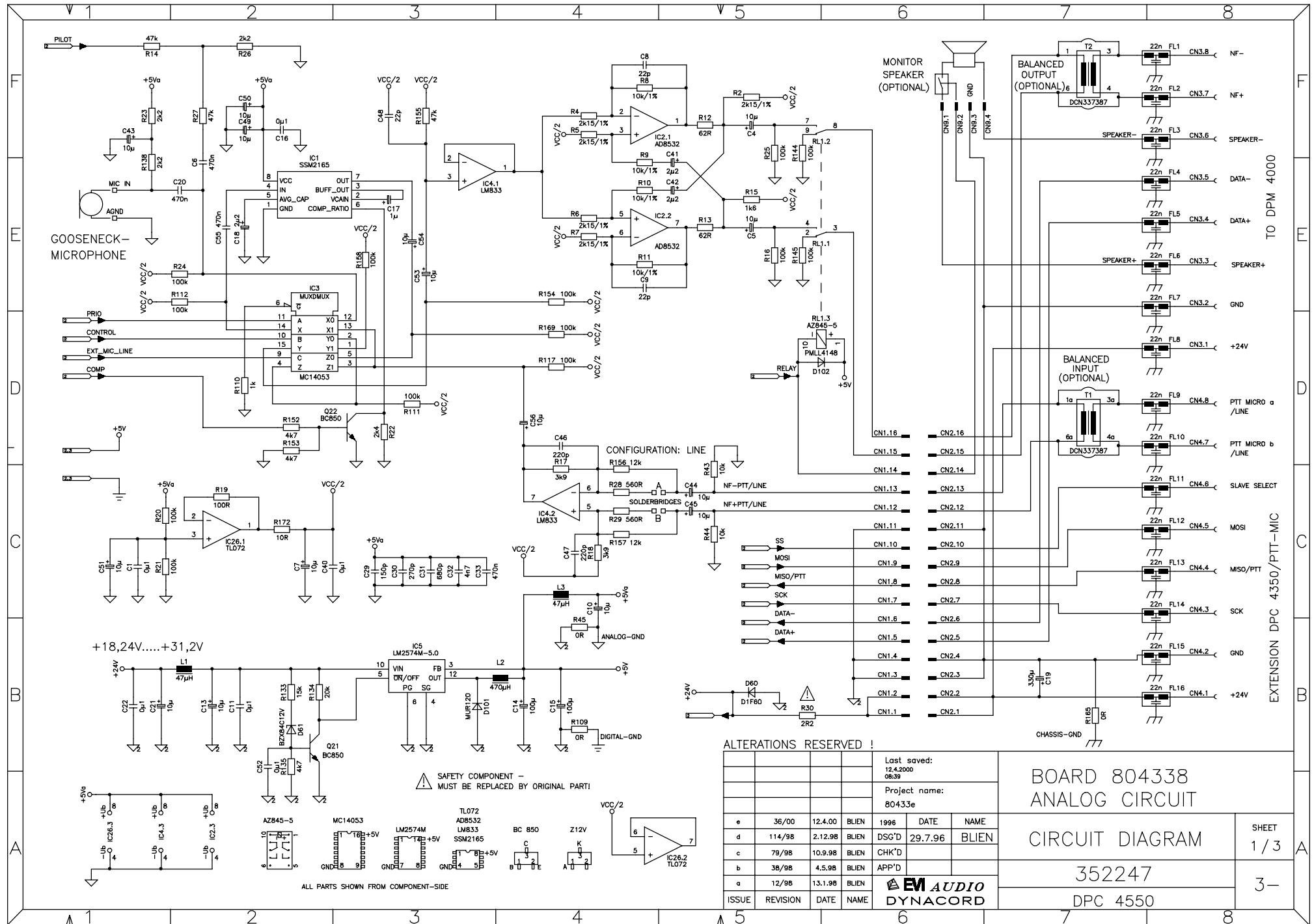


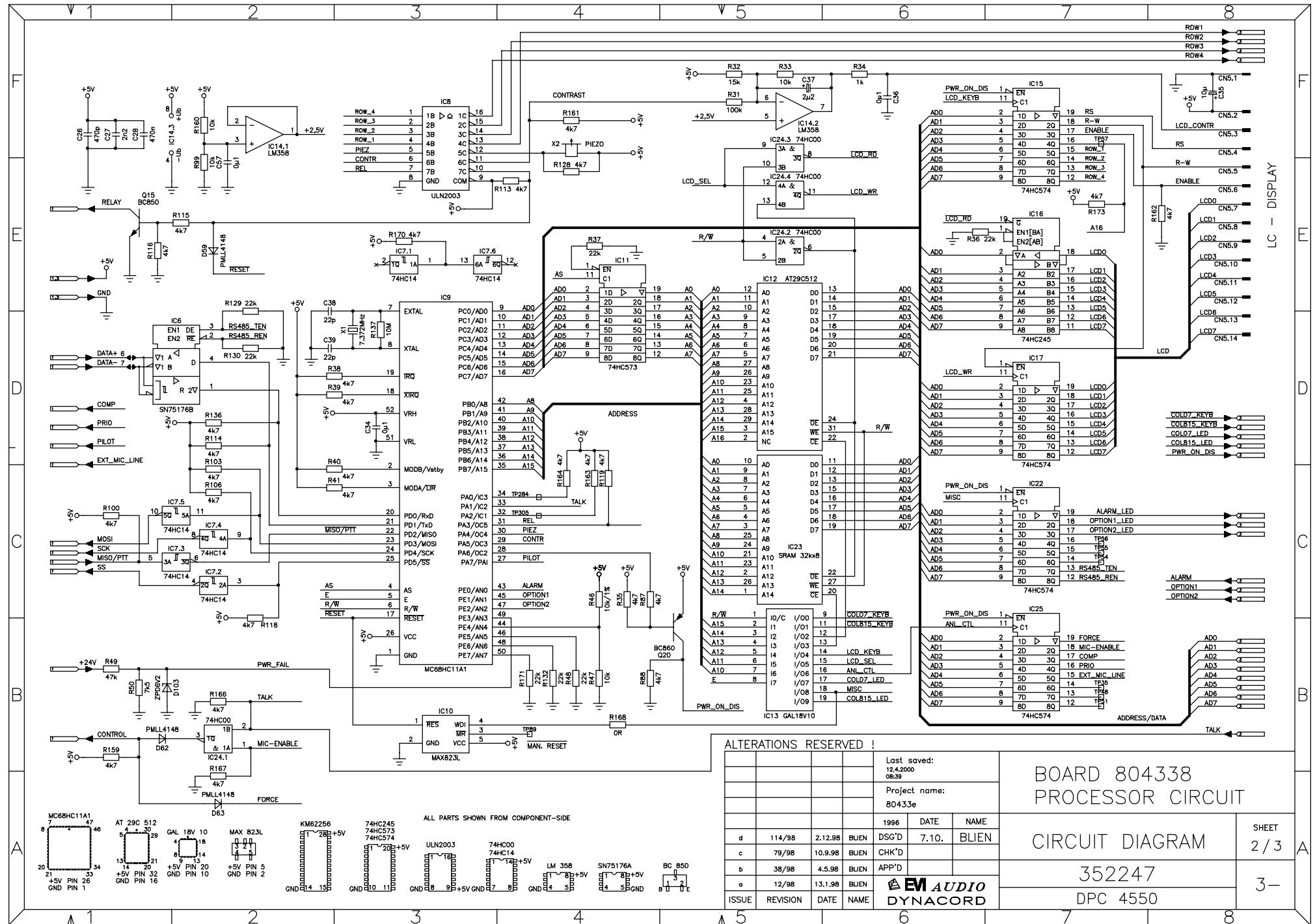


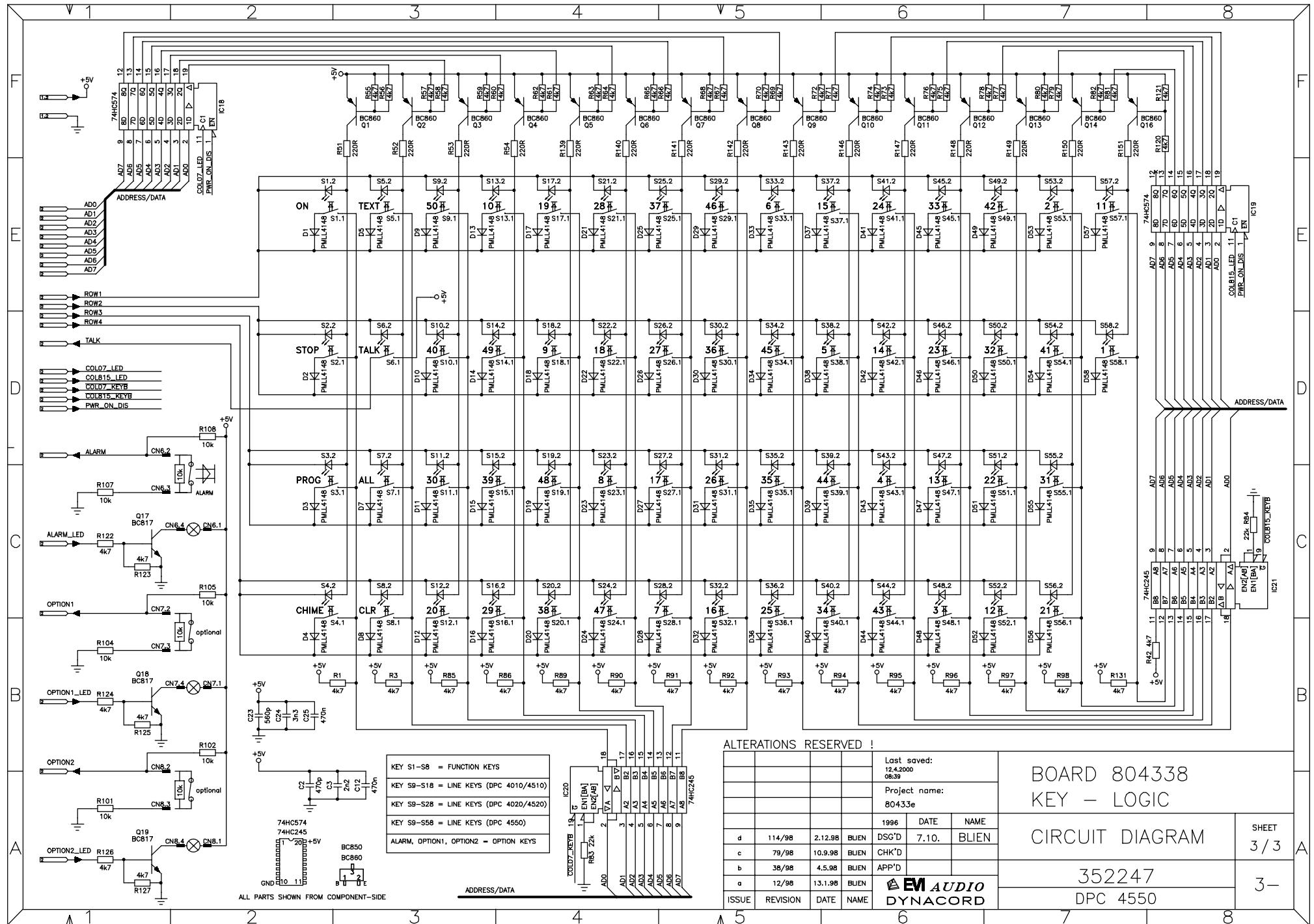




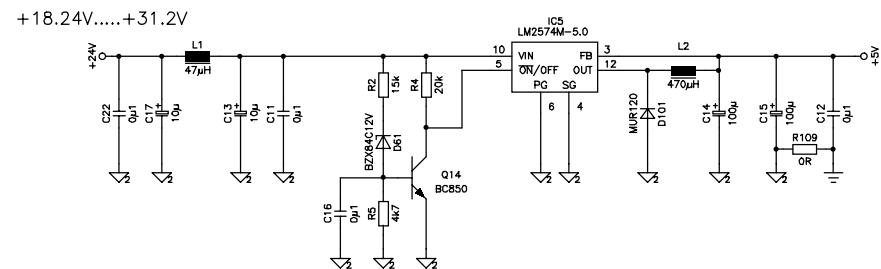




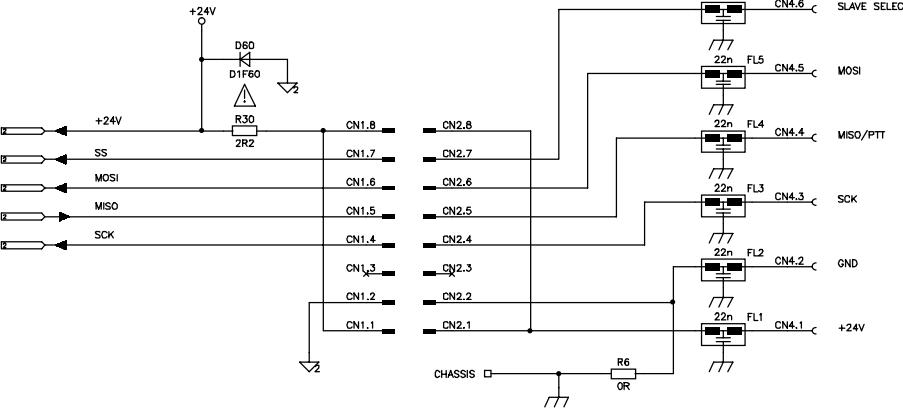




1 2 3 4 5 6 7 8



ALL PARTS SHOWN FROM COMPONENT-SIDE



ALTERATIONS RESERVED !

EMI AUDIO
DYNACORD

BOARD 804348
ANALOG CIRCUIT

CIRCUIT DIAGRAM

SHEET
1 / 3

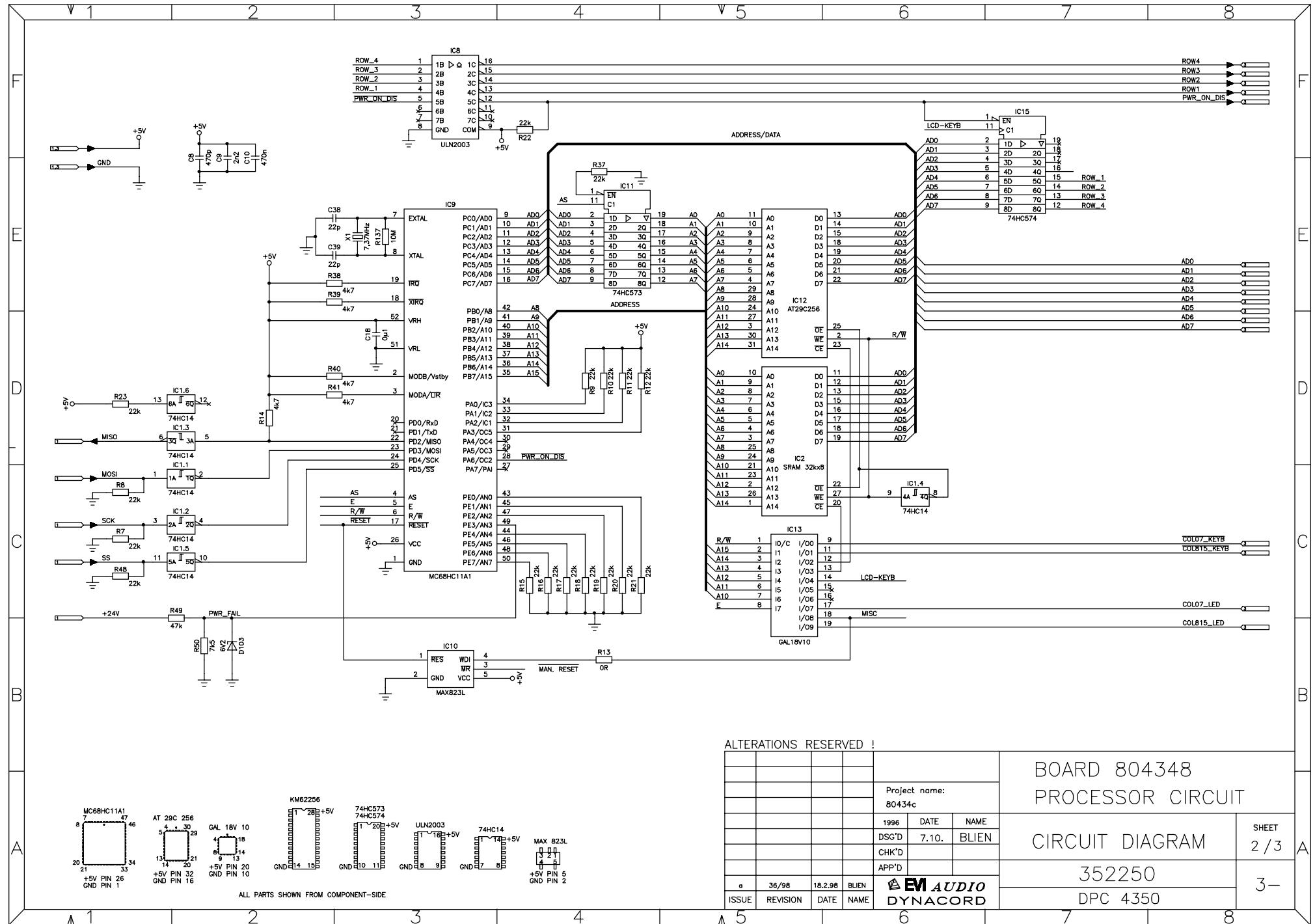
352250

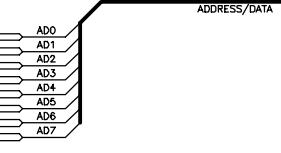
DPC 4350

3-

1 2 3 4 5 6 7 8

TO DPC 4X10...4X50 EXTENSION PORT



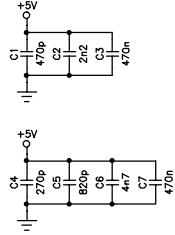


PWR_ON_DIS

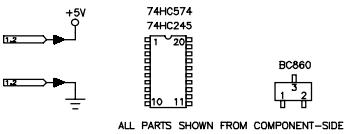
ADDRESS/DATA

COL07_LED
PWR_ON_DIS

COLB15_LED
PWR_ON_DIS



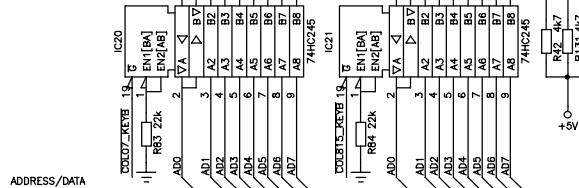
- COL07_LED
- COLB15_LED
- COL07_KEYB
- COLB15_KEYB



ALL PARTS SHOWN FROM COMPONENT-SIDE

BC860

ADDRESS/DATA



ALTERATIONS RESERVED !

Project name: 80434c		
1996	DATE	NAME
DSG'D	7.10.	BLIEN
CHK'D		
APP'D		
a	36/98	18.2.98
ISSUE	REVISION	DATE
		NAME

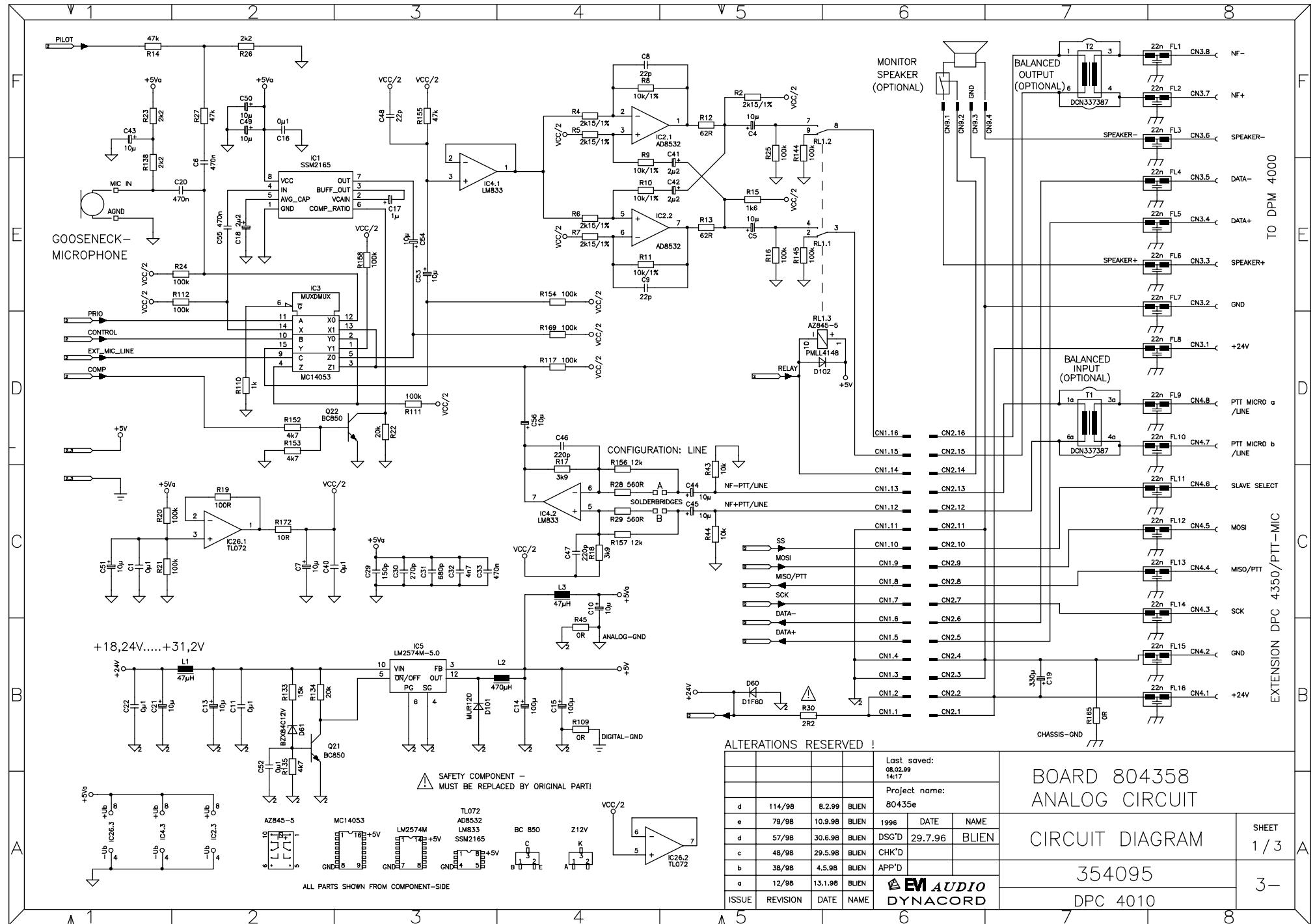
BOARD 804348
KEY - LOGIC

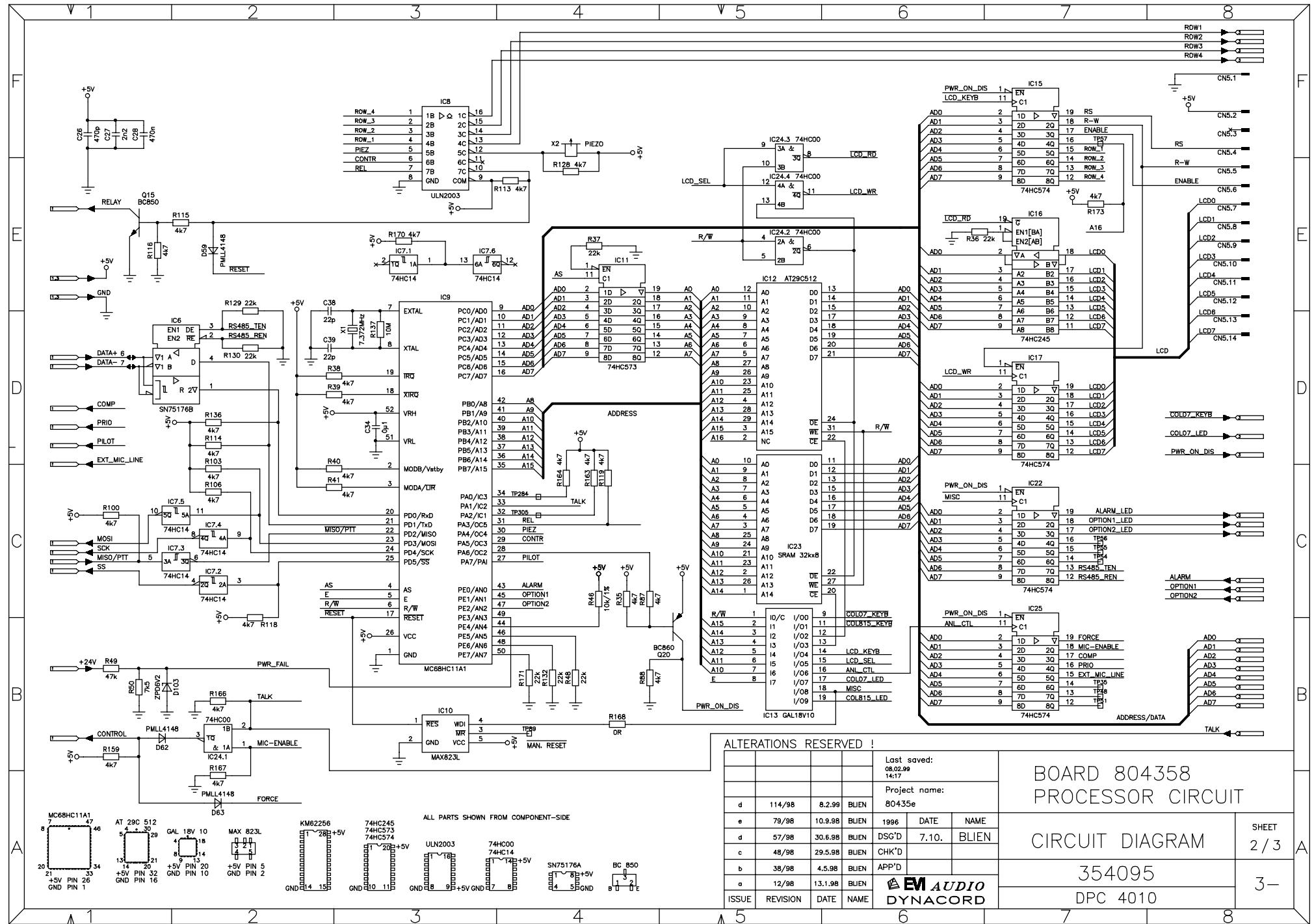
CIRCUIT DIAGRAM

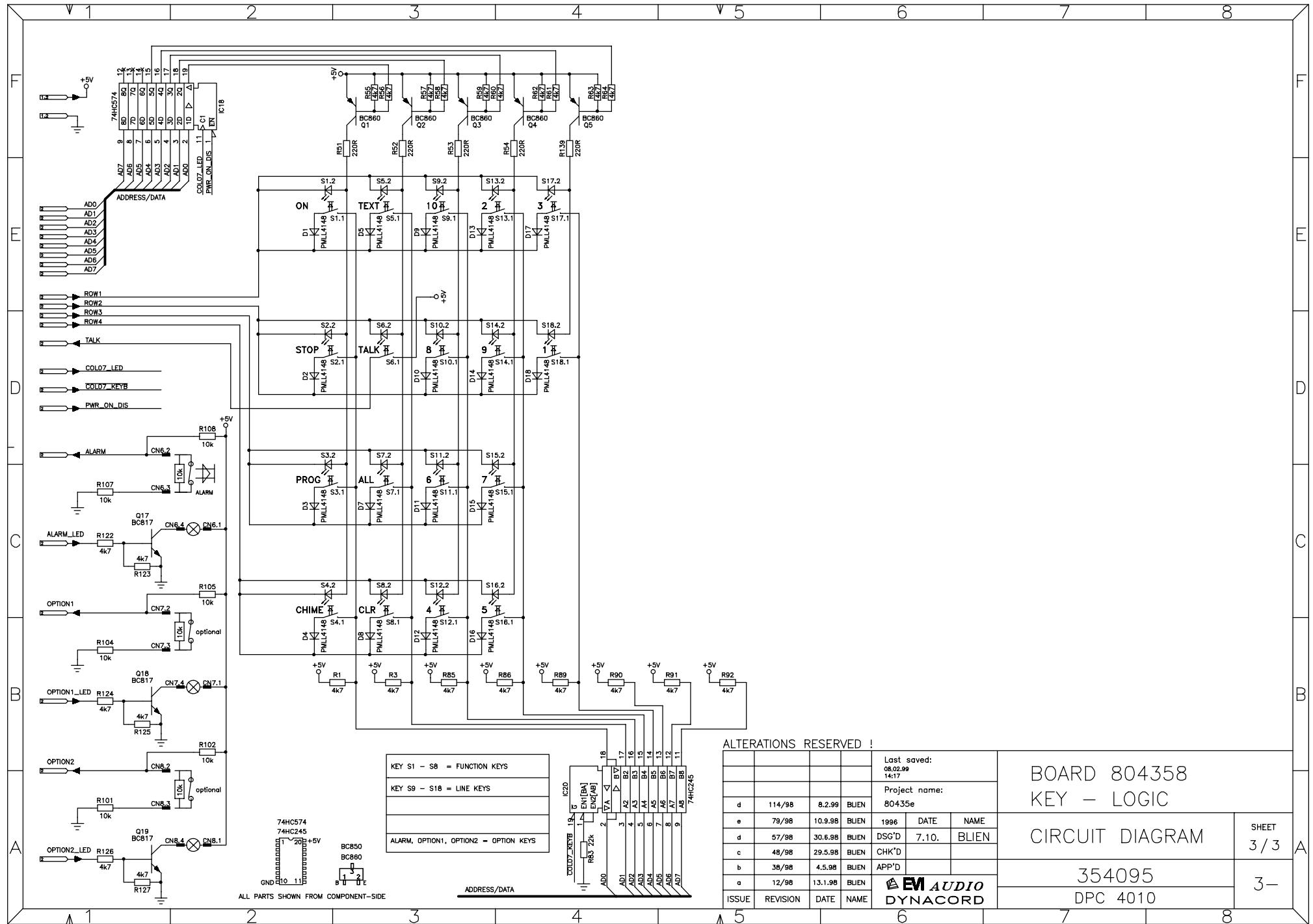
SHEET
3 / 3

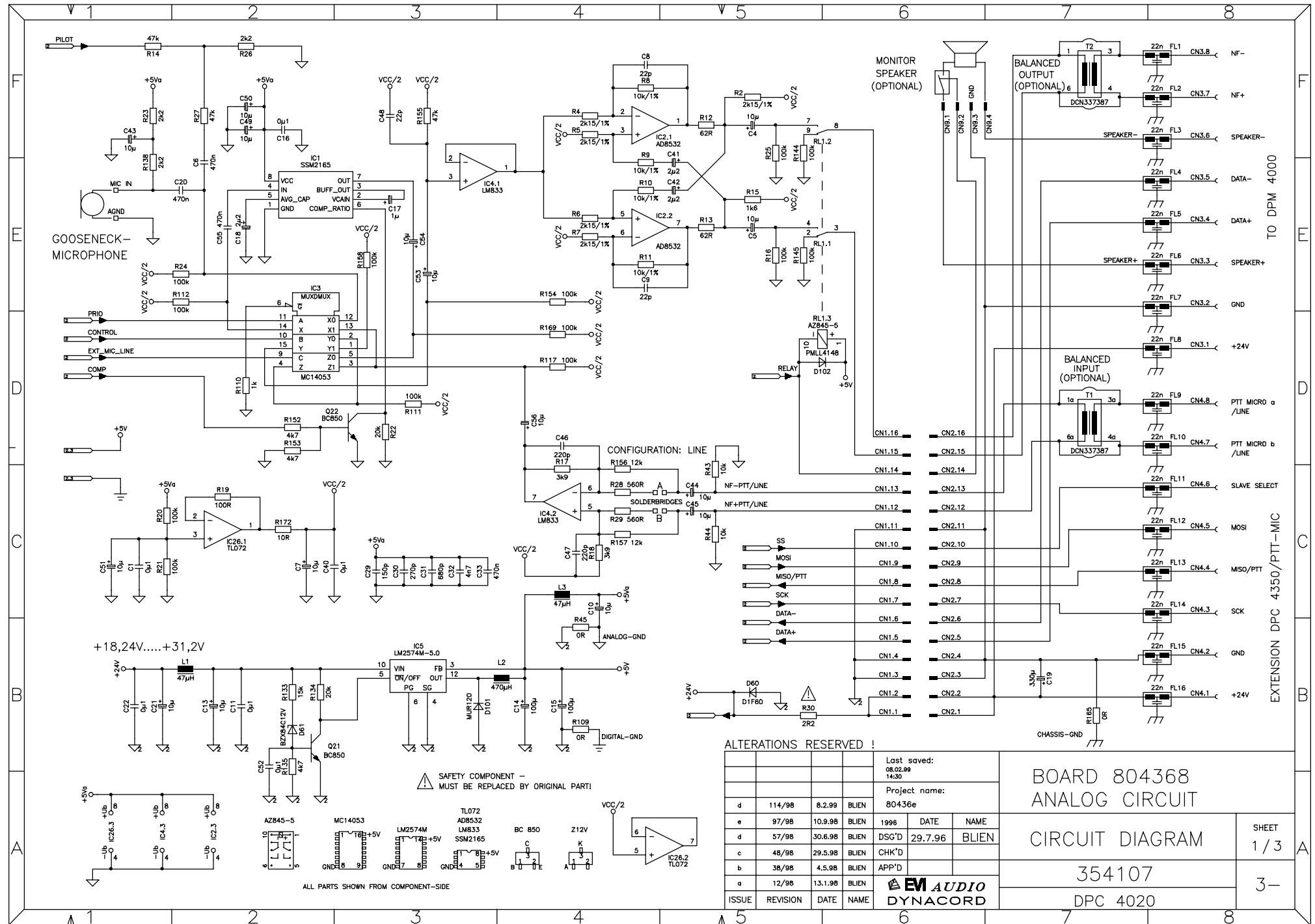
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DPC 4350

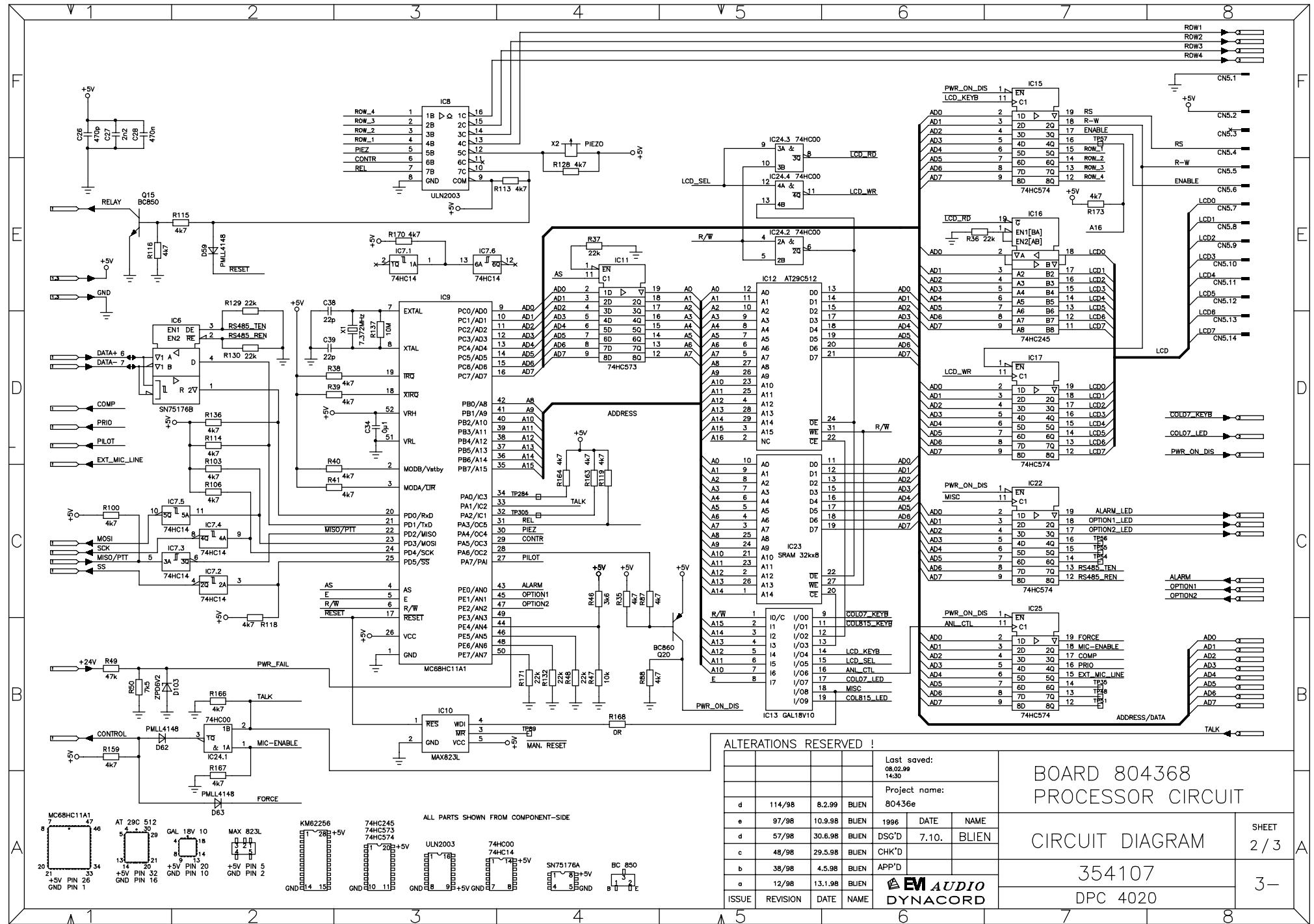
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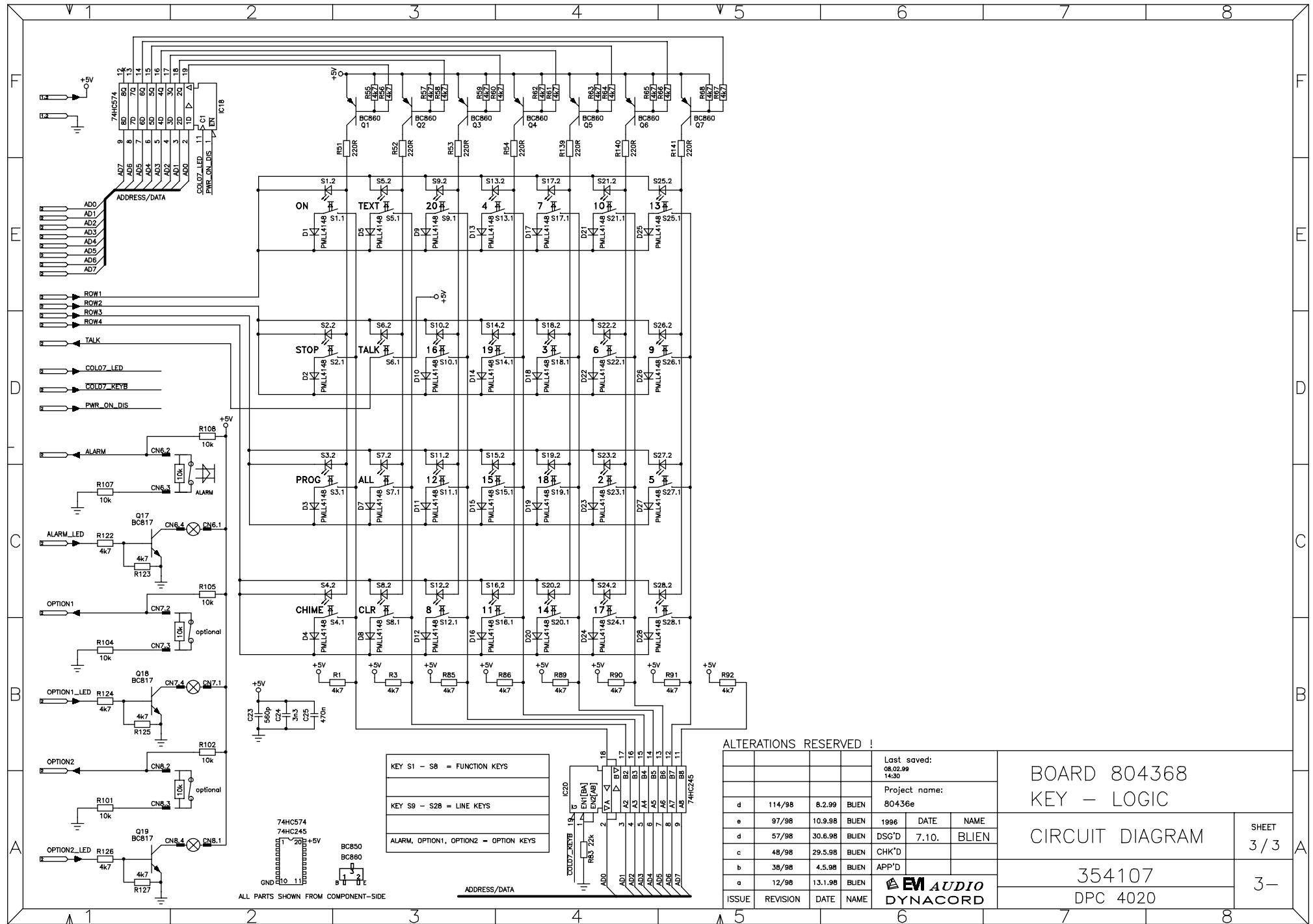


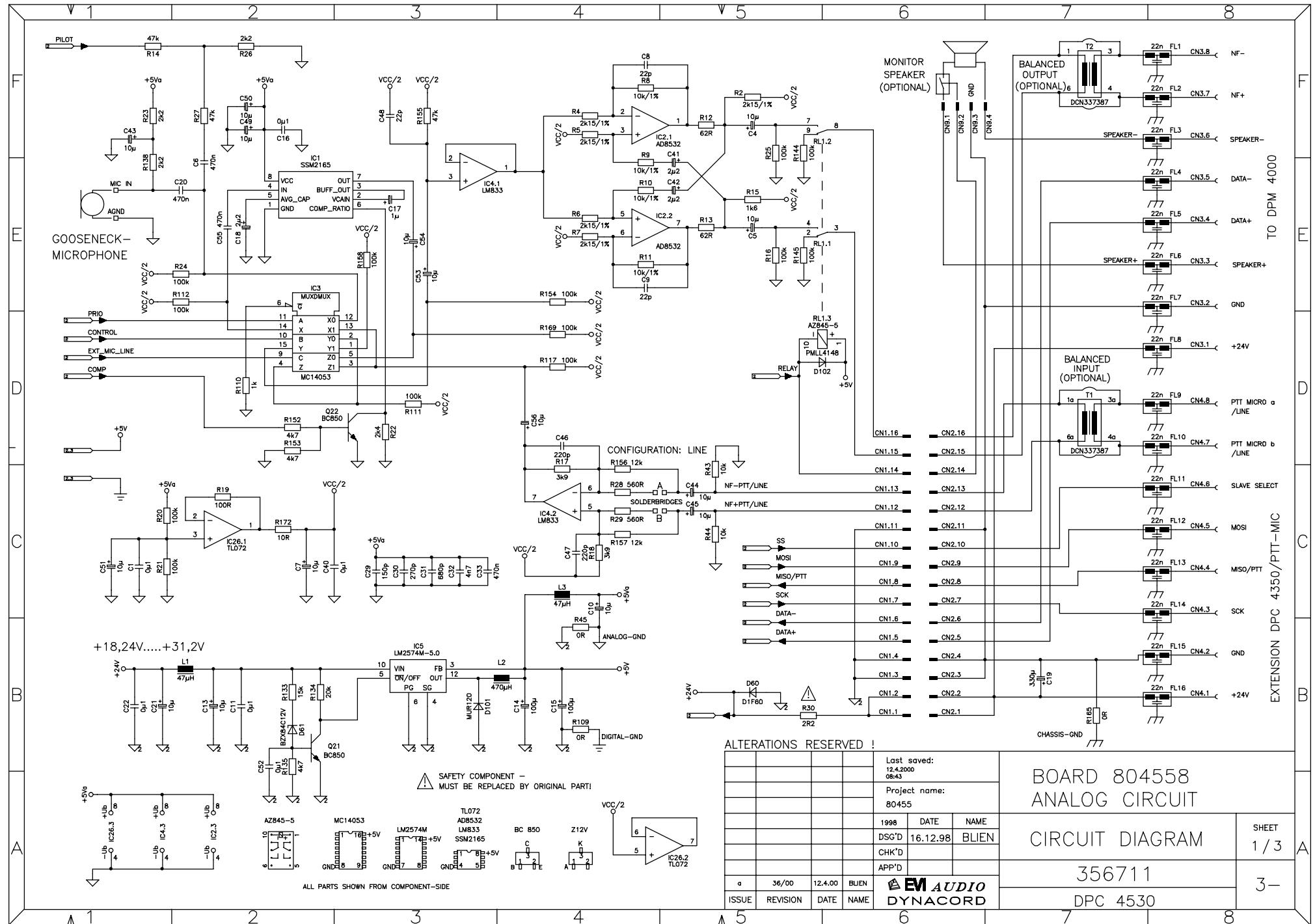


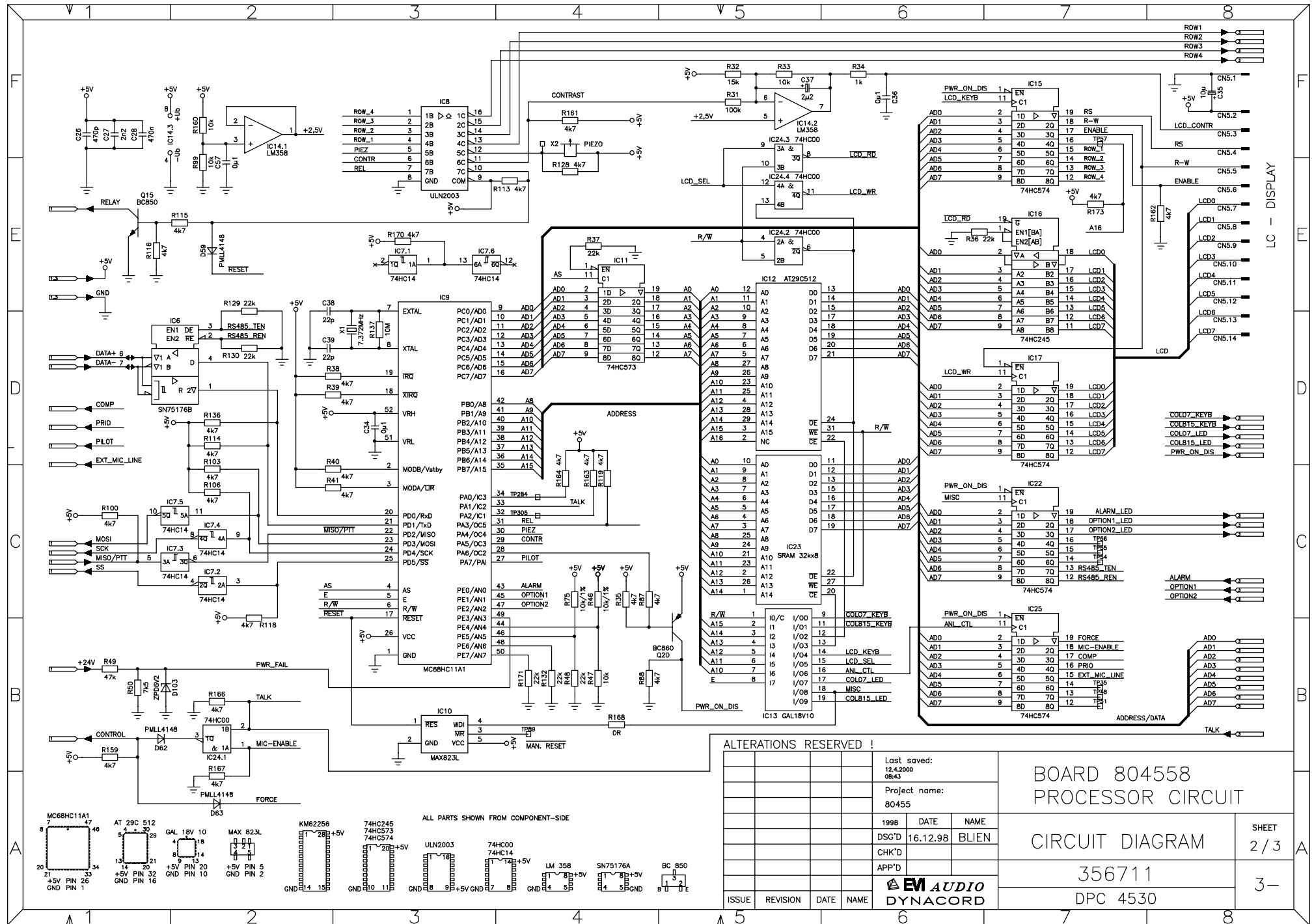


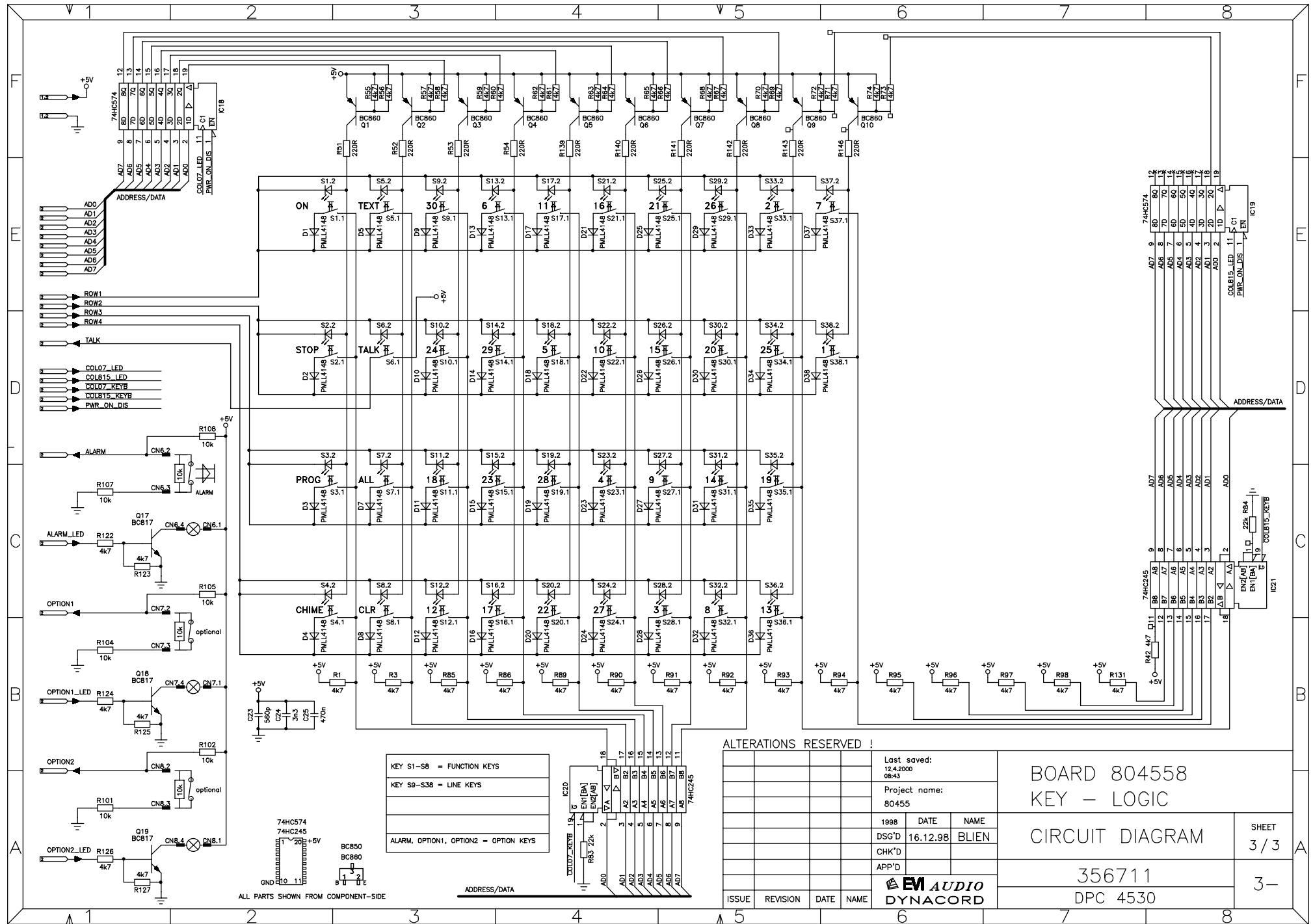


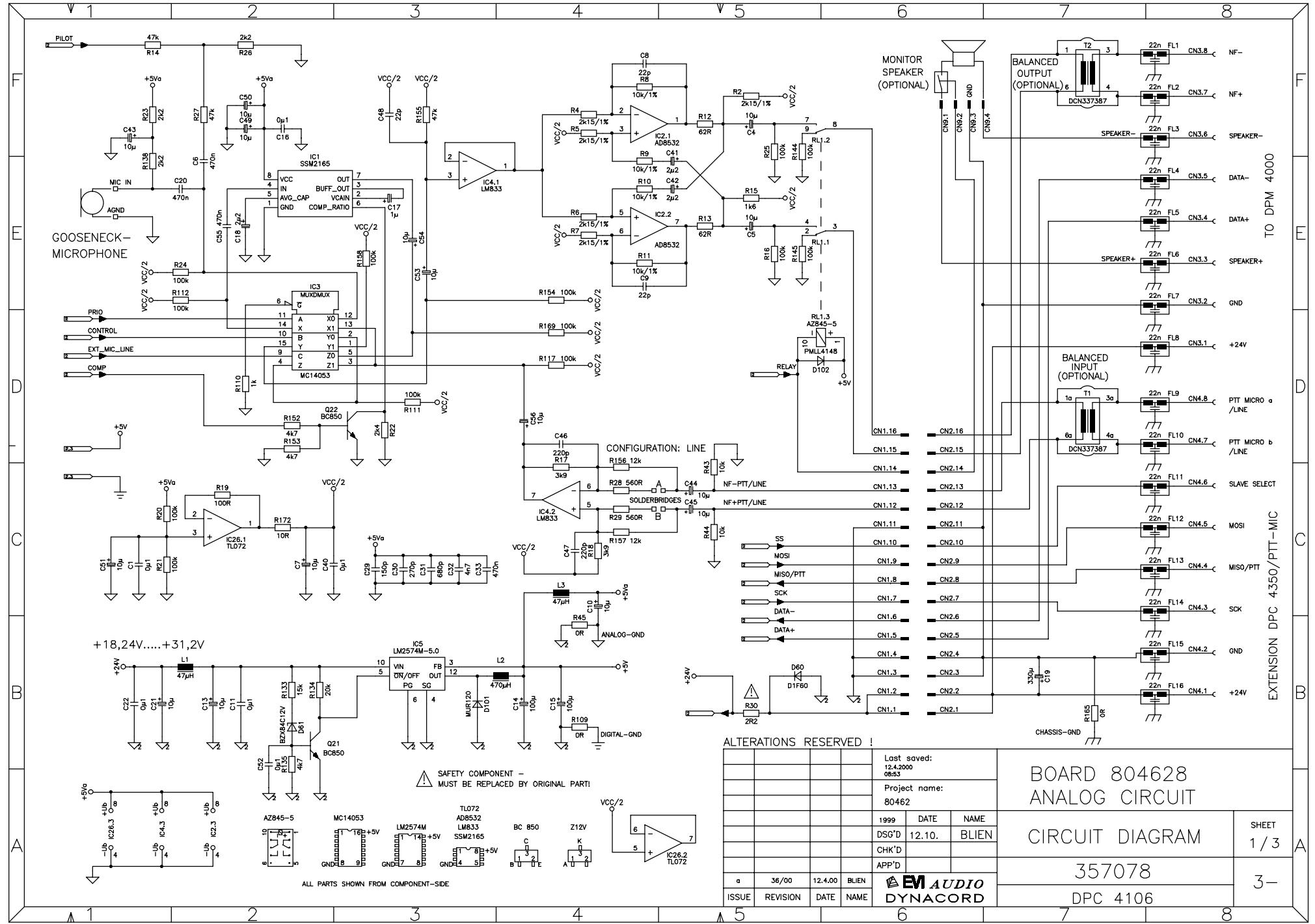


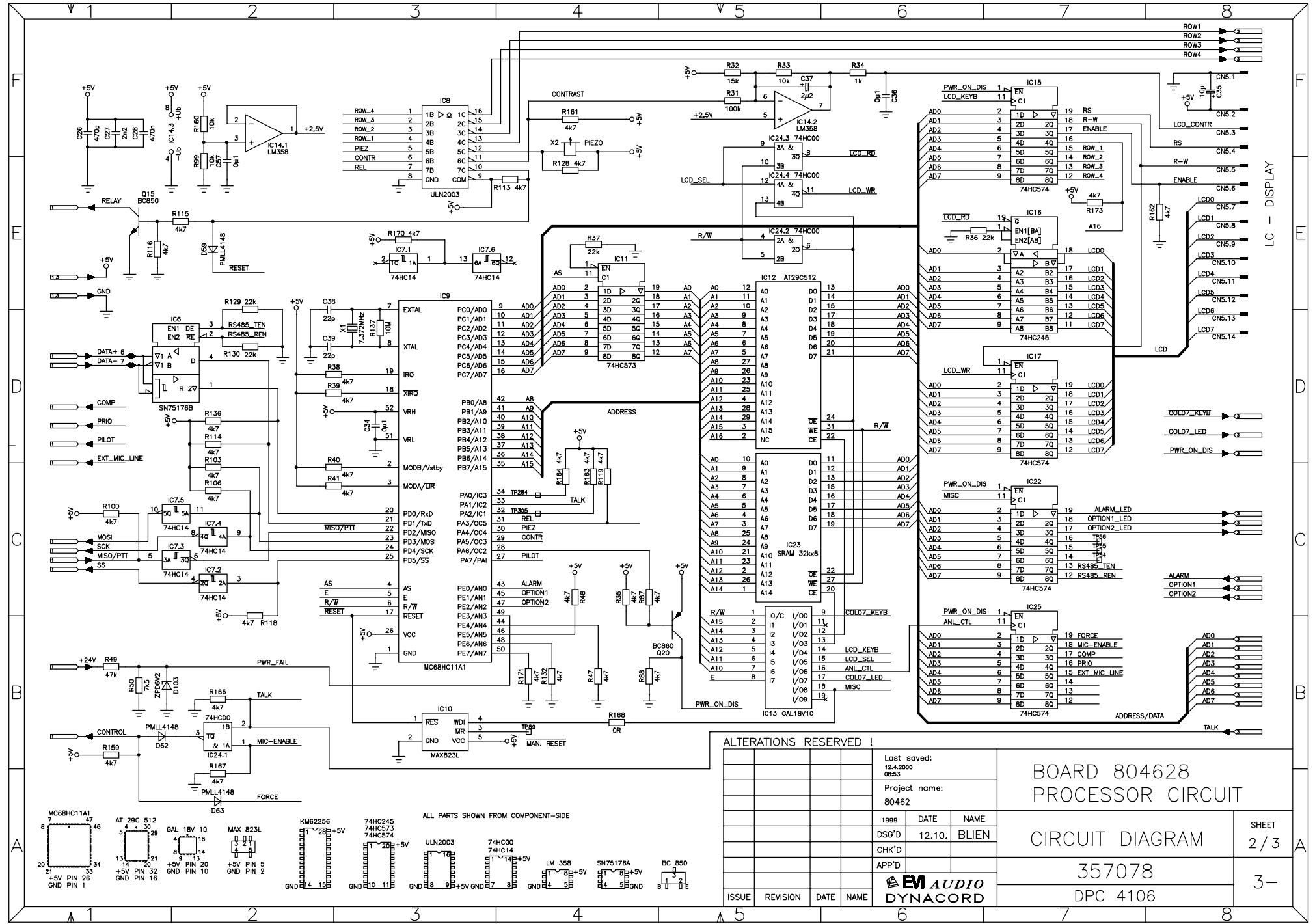


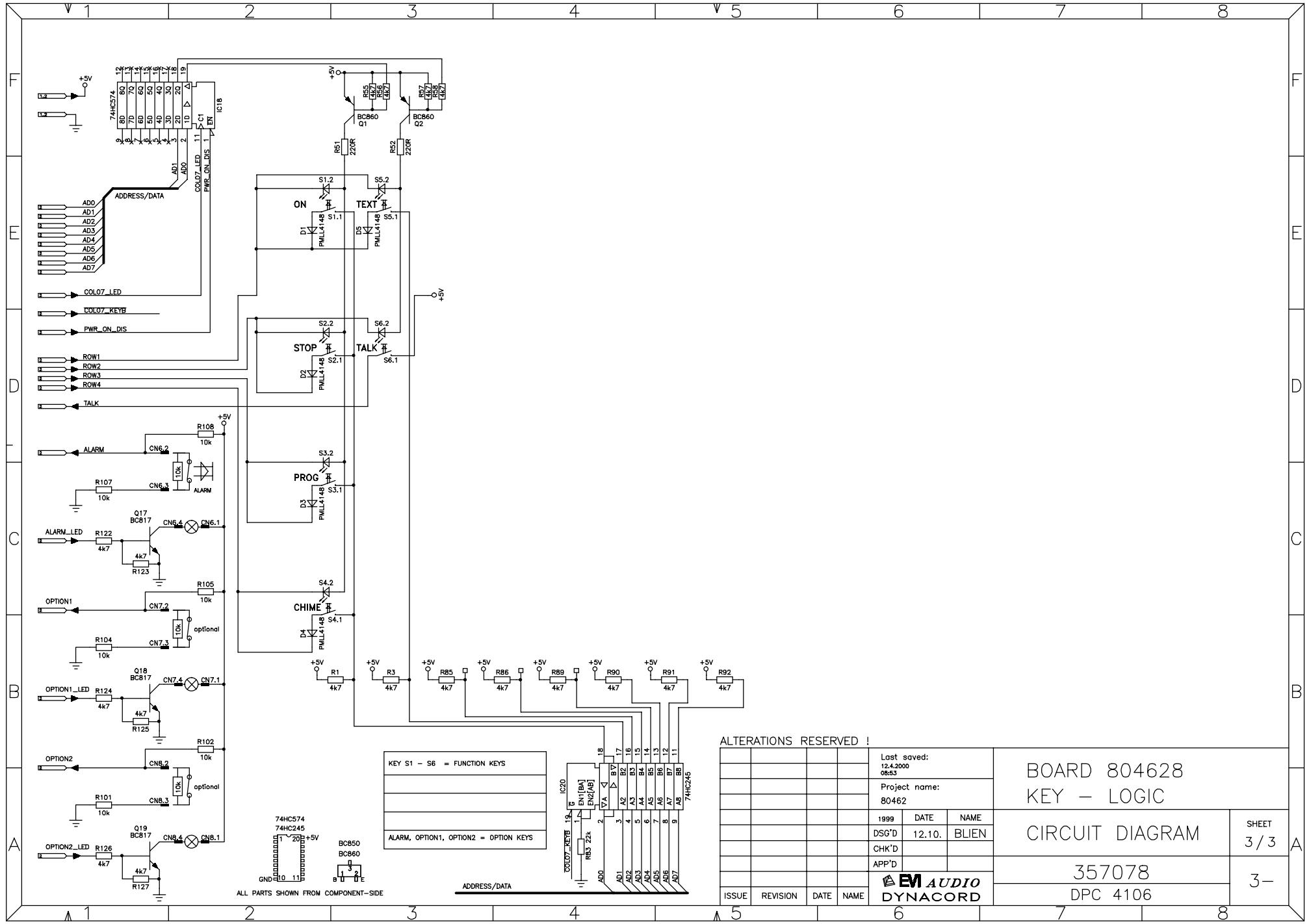


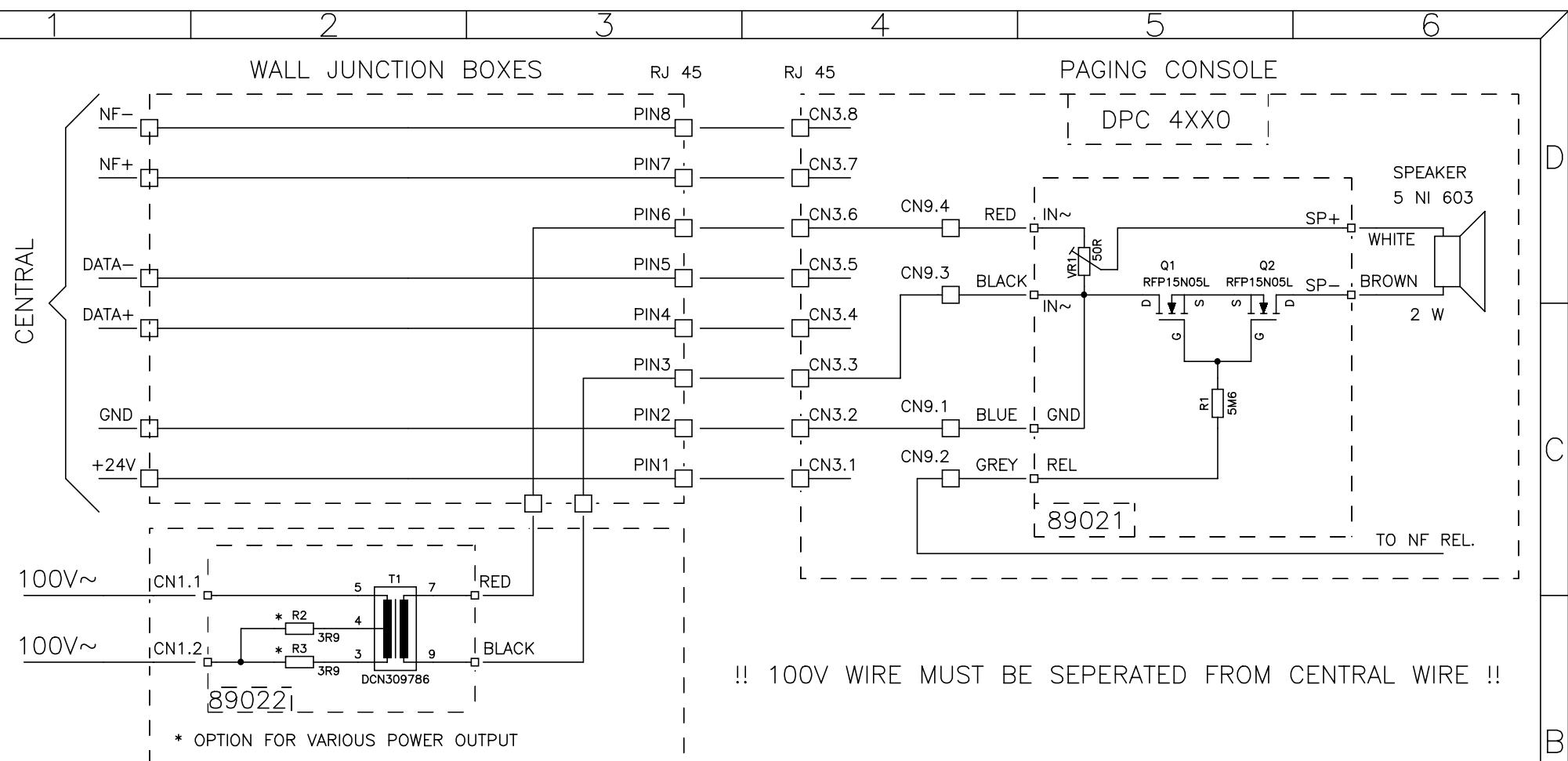




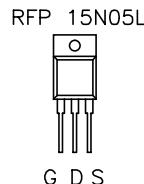








ALTERATIONS RESERVED !



				Last saved: 16.04.99 11:00			BOARD 89021/89022 MONITOR MUTE CIRCUIT		
				Project name: 89021b					
1999	DATE	NAME					CIRCUIT DIAGRAM		
DSG'D	26.1.	BLIEN					356821		
CHK'D							NRS 90209		
APP'D									
ISSUE	REVISION	DATE	NAME	EVI AUDIO DYNACORD			4-		

Ersatzteilliste - Bill of Materials

121620 DPC 4010 10LINIENTASTEN			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör			Accessories & packing material
353702	BEDIENUNGSANL. DPC-SERIE		owner's manual
352279	KABEL-PATCH 3.0 M CAT5-K		cable patch 3.0m
355178	KRT. MT 2005 290X215X148		carton
355261	FALTEINLAGE LINKS MT 2005		carton filler left
355262	FALTEINLAGE RECHTS MT 2005		carton filler right
355264	FALTEINLAGE DPC 4510		carton filler
345973	SCHUTZHÜLLE 250X400X0,05		plastic bag
Mechanische Teile			Cabinet material
349640	KABEL-KONFEKT 16POL 0.180M		ribbon cable 16-way
354344	KABEL-KONFEKT 4POL 0.110M		ribbon cable 4-way
355007	EINLEGEFOLIE DPC 4010		front panel mylar
349104	MIKRO ME 151/8X200		microphone ME 151
351534	WINDSCHUTZ MIKRO FÜR MIKRO		wind screen
354341	SCHALTER-TAST 500 100		switch assy
354342	SCHUTZKAPPE 461 412 F.TASTE		cap switch
354343	LAMPE 590 000 F. TASTE		lamp switch
342904	SCHUTZKAPPE F. LUMOTAST		cap switch
353624	SEITENTEIL LINKS DPC 4550		side wing left
353625	SEITENTEIL RECHTS DPC 4550		side wing right
355653	BEZ.STREIFEN NEUTRAL		name stripe blank
355502	BEZ.STREIFEN "LÖSCHEN"		name stripe "löschen"
355503	BEZ.STREIFEN "ALLE"		name stripe "alle"
353703	FUSS-GUMMI D=12,5 SCHWARZ		foot rubber
352144	KNOPF-TASTE GRAU 827		knob switch gray
804358 PCB--*DPC4010			pcb assy 80435
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V

121620 DPC 4010 10LINIENTASTEN				
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description	
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35	
C041	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C042	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C043	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129	DIODE MUR 120 RL	diode mur 120 rl	
D103	301276	DIODZ BZX 55C 6V2 0.50W	zener diode 6V2	
L001	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
L003	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
RL001	352141	RELAIS TQ 2-5V	relay	
S001	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S002	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S003	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S004	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S005	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S006	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S007	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S008	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S009	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S010	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S011	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S012	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S013	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S014	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S015	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S016	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S017	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S018	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ	
X002	352286	LA PIEZO-SCHALLWANDLER	piezo transducer	

Ersatzteilliste - Bill of Materials

121621 DPC 4020 20LINIENTASTEN			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355178	KRT. MT 2005 290X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	349640	KABEL-KONFEKT 16POL 0.180M	ribbon cable 16-way
	354344	KABEL-KONFEKT 4POL 0.110M	ribbon cable 4-way
	355008	EINLEGEFOLIE DPC 4020	front panel mylar
	349104	MIKRO ME 151/8X200	microphone ME 151
	351534	WINDSCHUTZ MIKRO FÜR MIKRO	wind screen
	354341	SCHALTER-TAST 500 100	switch assy
	354342	SCHUTZKAPPE 461 412 F.TASTE	cap switch
	354343	LAMPE 590 000 F. TASTE	lamp switch
	342904	SCHUTZKAPPE F. LUMOTAST	cap switch
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	355654	BEZ.STREIFEN NEUTRAL	name stripe blank
	355502	BEZ.STREIFEN "LÖSCHEN"	name stripe "löschen"
	355503	BEZ.STREIFEN "ALLE"	name stripe "alle"
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
	352144	KNOPF-TASTE GRAU 827	knob switch gray
804368 PCB--*DPC4020		pcb assy 80436	
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35

121621 DPC 4020 20LINIENTASTEN				
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description	
C041	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C042	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C043	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129	DIODE MUR 120 RL	diode mur 120 rl	
D103	301276	DIODZ BZX 55C 6V2 0.50W	zener diode 6V2	
L001	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
L003	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
RL001	352141	RELAIS TQ 2-5V	relay	
S001	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S002	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S003	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S004	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S005	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S006	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S007	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S008	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S009	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S010	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S011	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S012	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S013	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S014	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S015	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S016	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S017	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S018	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S019	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S020	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S021	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S022	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S023	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S024	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S025	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S026	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S027	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S028	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ	
X002	352286	LA PIEZO-SCHALLWANDLER	piezo transducer	

Ersatzteilliste - Bill of Materials

121762 DPC 4106 6KONTROLLTASTEN			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355178	KRT. MT 2005 290X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	355264	FALTEINLAGE DPC 4510	carton filler
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	349640	KABEL-KONFEKT 16POL 0.180M	ribbon cable 16-way
	352361	DISPLAY LCD BEARB. AUS	lcd display
	358107	EINLEGEFOLIE DPC 4106	front panel mylar
	349104	MIKRO ME 151/8X200	microphone ME 151
	351534	WINDSCHUTZ MIKRO FÜR MIKRO	wind screen
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	355502	BEZ.STREIFEN "LÖSCHEN"	name stripe "löschen"
	355503	BEZ.STREIFEN "ALLE"	name stripe "alle"
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
804628 PCB--*DPC4106		pcb assy 80462	
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN005	352308	BUCHSENLEISTE 14POL	connector female 14-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C035	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C037	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C041	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C042	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V

121762 DPC 4106 6KONTROLLTASTEN					
Pos. Nr.	Best. Nr.				
Ref. No.	Part No.	Bezeichnung		Description	
C043	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129	DIODE MUR 120 RL		diode mur 120 rl	
D103	301276	DIODZ BZX 55C 6V2 0.50W		zener diode 6V2	
L001	335966	DROSSEL 47.00UH/0.45A		coil 47 uH	
L003	335966	DROSSEL 47.00UH/0.45A		coil 47 uH	
RL001	352141	RELAIS TQ 2-5V		relay	
S001	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
S002	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
S003	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
S004	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
S005	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
S006	352143	SCHALTER-TAST 1XEIN		switch 1p momentary	
X001	352285	QUARZ 7.3728MHZ HC-49-US		crystal 7.3728MHZ	
X002	352286	LA PIEZO-SCHALLWANDLER		piezo transducer	
0020	352144	KNOPF-TASTE GRAU 827		knob switch gray	

Ersatzteilliste - Bill of Materials

121626 DPC 4350 50LINIENT.ERWEIT.			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0040	352280	KABEL-PATCH 0.5 M CAT5-K	cable patch 0.5m
	355260	KRT. DPC 4550 427X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	355265	FALTEINLAGE MT 2005	carton filler
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	346164	KABEL-KONFEKT 8POL 0.105M	ribbon cable 8-way
	353706	EINLEGEFOLIE DPC 4350	front panel mylar
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	355655	BEZ.STREIFEN NEUTRAL	name stripe blank
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
804348 PCB--*DPC4350		pcb assy 80434	
CN001	344862	MESSERLST. 8POL	connector male 8-pin
CN002	344862	MESSERLST. 8POL	connector male 8-pin
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
D101	352129	DIODE MUR 120 RL	diode mur 120 rl
D103	301276	DIODZ BZX 55C 6V2 0.50W	zener diode 6V2
L001	335966	DROSSEL 47.00UH/0.45A	coil 47 uH
S001	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S002	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S003	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S004	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S005	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S006	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S007	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S008	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S009	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S010	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S011	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S012	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S013	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S014	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S015	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S016	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S017	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S018	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S019	352143	SCHALTER-TAST 1XEIN	switch 1p momentary

121626 DPC 4350 50LINIENT.ERWEIT.			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
S020	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S021	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S022	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S023	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S024	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S025	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S026	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S027	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S028	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S029	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S030	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S031	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S032	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S033	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S034	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S035	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S036	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S037	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S038	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S039	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S040	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S041	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S042	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S043	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S044	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S045	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S046	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S047	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S048	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S049	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S050	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ
0020	352144	KNOPF-TASTE GRAU 827	knob switch gray

Ersatzteilliste - Bill of Materials

121623 DPC 4510 10LINIENT.+LCD			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355178	KRT. MT 2005 290X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	355264	FALTEINLAGE DPC 4510	carton filler
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	349640	KABEL-KONFEKT 16POL 0.180M	ribbon cable 16-way
	354344	KABEL-KONFEKT 4POL 0.110M	ribbon cable 4-way
	352361	DISPLAY LCD BEARB. AUS	lcd display
	353623	EINLEGEFOLIE DPC 4510	front panel mylar
	349104	MIKRO ME 151/8X200	microphone ME 151
	351534	WINDSCHUTZ MIKRO FÜR MIKRO	wind screen
	354341	SCHALTER-TAST 500 100	switch assy
	354342	SCHUTZKAPPE 461 412 F.TASTE	cap switch
	354343	LAMPE 590 000 F. TASTE	lamp switch
	342904	SCHUTZKAPPE F. LUMOTAST	cap switch
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	355653	BEZ.STREIFEN NEUTRAL	name stripe blank
	355502	BEZ.STREIFEN "LÖSCHEN"	name stripe "löschen"
	355503	BEZ.STREIFEN "ALLE"	name stripe "alle"
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
	352144	KNOPF-TASTE GRAU 827	knob switch gray
804318 PCB--*DPC4510		pcb assy 80431	
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN005	352308	BUCHSENLEISTE 14POL	connector female 14-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V

121623 DPC 4510 10LINIENT.+LCD				
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description	
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V	
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35	
C035	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C037	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C041	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C042	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C043	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129	DIODE MUR 120 RL	diode mur 120 rl	
D103	301276	DIODZ BZX 55C 6V2 0.50W	zener diode 6V2	
L001	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
L003	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
RL001	352141	RELAIS TQ 2-5V	relay	
S001	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S002	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S003	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S004	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S005	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S006	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S007	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S008	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S009	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S010	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S011	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S012	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S013	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S014	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S015	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S016	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S017	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S018	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ	
X002	352286	LA PIEZO-SCHALLWANDLER	piezo transducer	

Ersatzteilliste - Bill of Materials

121624 DPC 4520 20LINIENT.+LCD			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355178	KRT. MT 2005 290X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	349640	KABEL-KONFEKT 16POL 0.180M	ribbon cable 16-way
	354344	KABEL-KONFEKT 4POL 0.110M	ribbon cable 4-way
	352361	DISPLAY LCD BEARB. AUS	lcd display
	353622	EINLEGEOFOLIE DPC 4520	front panel mylar dpc4520
	349104	MIKRO ME 151/8X200	microphone ME 151
	351534	WINDSCHUTZ MIKRO FÜR MIKRO	wind screen
	354341	SCHALTER-TAST 500 100	switch assy
	354342	SCHUTZKAPPE 461 412 F.TASTE	cap switch
	354343	LAMPE 590 000 F. TASTE	lamp switch
	342904	SCHUTZKAPPE F. LUMOTAST	cap switch
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	355654	BEZ.STREIFEN NEUTRAL	name stripe blank
	355502	BEZ.STREIFEN "LÖSCHEN"	name stripe "löschen"
	355503	BEZ.STREIFEN "ALLE"	name stripe "alle"
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
	352144	KNOPF-TASTE GRAU 827	knob switch gray
804328	PCB--*DPC4520		pcb assy 80432
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN005	352308	BUCHSENLEISTE 14POL	connector female 14-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V

121624 DPC 4520 20LINIENT.+LCD					
Pos. Nr.	Best. Nr.	Ref. No.	Part No.	Bezeichnung	Description
C019	344077	KO-EL	330.000MF 35V	cap electrolytic 330uF/35V	
C021	340522	KO-EL	10.000MF 35V	cap electrolytic 10uF/35	
C035	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C037	340521	KO-EL	2.200MF 50V	cap electrolytic 2.2uF/50V	
C041	352306	KO-EL	2.200MF 50V	cap electrolytic 2.2uF/50V	
C042	352306	KO-EL	2.200MF 50V	cap electrolytic 2.2uF/50V	
C043	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL	10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129		DIODE MUR 120 RL	diode mur 120 rl	
D103	301276		DIODZ BZX 55C 6V2 0.50W	zener diode 6V2	
L001	335966		DROSSEL 47.00UH/0.45A	coil 47 uH	
L003	335966		DROSSEL 47.00UH/0.45A	coil 47 uH	
RL001	352141		RELAIS TQ 2-5V	relay	
S001	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S002	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S003	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S004	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S005	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S006	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S007	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S008	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S009	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S010	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S011	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S012	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S013	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S014	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S015	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S016	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S017	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S018	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S019	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S020	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S021	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S022	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S023	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S024	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S025	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S026	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S027	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
S028	352143		SCHALTER-TAST 1XEIN	switch 1p momentary	
X001	352285		QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ	
X002	352286		LA PIEZO-SCHALLWANDLER	piezo transducer	

Ersatzteilliste - Bill of Materials

121622 DPC 4530 30LINIENT.+LCD			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
Zubehör		Accessories & packing material	
Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355260	KRT. DPC 4550 427X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	355264	FALTEINLAGE DPC 4510	carton filler
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag
Mechanische Teile		Cabinet material	
	349640	KABEL-KONFEKT 16POL 0.180M	ribbon cable 16-way
	354344	KABEL-KONFEKT 4POL 0.110M	ribbon cable 4-way
	352361	DISPLAY LCD BEARB. AUS	lcd display
	349104	MIKRO ME 151/8X200	microphone ME 151
	351534	WINDSCHUTZ MIKRO FÜR MIKRO	wind screen
	354341	SCHALTER-TAST 500 100	switch assy
	354342	SCHUTZKAPPE 461 412 F.TASTE	cap switch
	354343	LAMPE 590 000 F. TASTE	lamp switch
	342904	SCHUTZKAPPE F. LUMOTAST	cap switch
	353624	SEITENTEIL LINKS DPC 4550	side wing left
	353625	SEITENTEIL RECHTS DPC 4550	side wing right
	356324	BEZ.STREIFEN NEUTRAL	name stripe blank
	355502	BEZ.STREIFEN "LÖSCHEN"	name stripe "löschen"
	355503	BEZ.STREIFEN "ALLE"	name stripe "alle"
	353703	FUSS-GUMMI D=12,5 SCHWARZ	foot rubber
	352144	KNOPF-TASTE GRAU 827	knob switch gray
804558 PCB--*DPC4530		pcb assy 80455	
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN005	352308	BUCHSENLEISTE 14POL	connector female 14-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V

121622 DPC 4530 30LINIENT.+LCD				
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description	
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V	
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35	
C035	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C037	340521	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C041	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C042	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V	
C043	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C044	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C045	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C049	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C050	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C051	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C053	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C054	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
C056	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V	
D101	352129	DIODE MUR 120 RL	diode mur 120 rl	
D103	301276	DIODZ BZX 55C 6V2 0.50W	zener diode 6V2	
L001	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
L003	335966	DROSSEL 47.00UH/0.45A	coil 47 uH	
RL001	352141	RELAIS TQ 2-5V	relay	
S001	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S002	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S003	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S004	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S005	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S006	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S007	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S008	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S009	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S010	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S011	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S012	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S013	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S014	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S015	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S016	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S017	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S018	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S019	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S020	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S021	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S022	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S023	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S024	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S025	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S026	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S027	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S028	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S029	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S030	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S031	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	
S032	352143	SCHALTER-TAST 1XEIN	switch 1p momentary	

121622 DPC 4530 30LINIENT.+LCD			
Pos. Nr.	Best. Nr.	Bezeichnung	Description
Ref. No.	Part No.		
S033	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S034	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S035	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S036	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S037	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S038	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ
X002	352286	LA PIEZO-SCHALLWANDLER	piezo transducer

Ersatzteilliste - Bill of Materials

121625 DPC 4550 50LINIENT.+LCD			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description

Z0020	353702	BEDIENUNGSANL. DPC-SERIE	owner's manual
Z0040	352279	KABEL-PATCH 3.0 M CAT5-K	cable patch 3.0m
	355260	KRT. DPC 4550 427X215X148	carton
	355261	FALTEINLAGE LINKS MT 2005	carton filler left
	355262	FALTEINLAGE RECHTS MT 2005	carton filler right
	345973	SCHUTZHÜLLE 250X400X0,05	plastic bag

Mechanische Teile			Cabinet material
349640	KABEL-KONFEKT 16POL 0.180M		ribbon cable 16-way
354344	KABEL-KONFEKT 4POL 0.110M		ribbon cable 4-way
352361	DISPLAY LCD BEARB. AUS		lcd display
353621	EINLEGEFOLIE DPC 4550		front panel mylar dpc4550
349104	MIKRO ME 151/8X200		microphone ME 151
351534	WINDSCHUTZ MIKRO FÜR MIKRO		wind screen
354341	SCHALTER-TAST 500 100		switch assy
354342	SCHUTZKAPPE 461 412 F.TASTE		cap switch
354343	LAMPE 590 000 F. TASTE		lamp switch
342904	SCHUTZKAPPE F. LUMOTAST		cap switch
353624	SEITENTEIL LINKS DPC 4550		side wing left
353625	SEITENTEIL RECHTS DPC 4550		side wing right
355655	BEZ.STREIFEN NEUTRAL		name stripe blank
355502	BEZ.STREIFEN "LÖSCHEN"		name stripe "löschen"
355503	BEZ.STREIFEN "ALLE"		name stripe "alle"
353703	FUSS-GUMMI D=12,5 SCHWARZ		foot rubber
352144	KNOPF-TASTE GRAU 827		knob switch gray

804338 PCB--*DPC4550			pcb assy 80433
CN001	344863	MESSERLST. 16POL	connector male 16-pin
CN002	344863	MESSERLST. 16POL	connector male 16-pin
CN003	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN004	354599	BUCHSE-MODULAR 8POL	connector female 8-pole
CN005	352308	BUCHSENLEISTE 14POL	connector female 14-pole
CN006	341937	MESSERLST. 4POL	connector male 4-pin
CN007	341937	MESSERLST. 4POL	connector male 4-pin
CN008	341937	MESSERLST. 4POL	connector male 4-pin
CN009	337394	STIFTLEISTE 4POL STL11-S-	connector male 4-pin
C004	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C005	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C007	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C010	352307	KO-EL 10.000MF 16V	cap electrolytic 10uF/16V
C013	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35
C014	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C015	340524	KO-EL 100.000MF 16V	cap electrolytic 100uF/16V
C017	352305	KO-EL 1.000MF 50V	cap electrolytic 1uF/50V
C018	352306	KO-EL 2.200MF 50V	cap electrolytic 2.2uF/50V
C019	344077	KO-EL 330.000MF 35V	cap electrolytic 330uF/35V
C021	340522	KO-EL 10.000MF 35V	cap electrolytic 10uF/35

121625 DPC 4550 50LINIENT.+LCD					
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description		
C035	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C037	340521	KO-EL	2.200MF	50V	cap electrolytic 2.2uF/50V
C041	352306	KO-EL	2.200MF	50V	cap electrolytic 2.2uF/50V
C042	352306	KO-EL	2.200MF	50V	cap electrolytic 2.2uF/50V
C043	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C044	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C045	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C049	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C050	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C051	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C053	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C054	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
C056	352307	KO-EL	10.000MF	16V	cap electrolytic 10uF/16V
D101	352129	DIODE MUR 120 RL			diode mur 120 rl
D103	301276	DIODZ BZX 55C	6V2	0.50W	zener diode 6V2
L001	335966	DROSSEL	47.00UH	0.45A	coil 47 uH
L003	335966	DROSSEL	47.00UH	0.45A	coil 47 uH
RL001	352141	RELAIS TQ 2-5V			relay
S001	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S002	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S003	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S004	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S005	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S006	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S007	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S008	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S009	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S010	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S011	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S012	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S013	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S014	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S015	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S016	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S017	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S018	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S019	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S020	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S021	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S022	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S023	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S024	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S025	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S026	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S027	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S028	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S029	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S030	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S031	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S032	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S033	352143	SCHALTER-TAST	1XEIN		switch 1p momentary
S034	352143	SCHALTER-TAST	1XEIN		switch 1p momentary

121625 DPC 4550 50LINIENT.+LCD			
Pos. Nr. Ref. No.	Best. Nr. Part No.	Bezeichnung	Description
S035	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S036	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S037	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S038	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S039	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S040	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S041	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S042	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S043	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S044	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S045	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S046	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S047	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S048	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S049	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S050	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S051	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S052	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S053	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S054	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S055	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S056	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S057	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
S058	352143	SCHALTER-TAST 1XEIN	switch 1p momentary
X001	352285	QUARZ 7.3728MHZ HC-49-US	crystal 7.3728MHZ
X002	352286	LA PIEZO-SCHALLWANDLER	piezo transducer

MEMO
