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Audio Kits - Overview

Audio Amplifiers

Part No.	Max. Power	Impedance $[\Omega]$	Power Supply	Suitable Transformer	Rransformer Ord.No	Load	IC	Transistor	Note	Page
NE529	1x 0,66W	8	4 ÷ 12V	1x 9V 3,2VA	12879	8 Ω and more	LM386			Р3
NE021	1x 4W	4	3 ÷ 16V	1x 12V 5VA	12891	8Ω and more	TBA820			P2
NE530	2x 4W	4	4 ÷ 11V	1x 9V 10VA	12902	4 Ω and more	KA2206			P4
NE011	1x 7W	4	4 ÷ 20V	1x 15V 16VA	12915	4 Ω and more	TBA810			P2
NS561	4x 12W	2	8 ÷ 18V	2x 12V 50VA	8264	4 Ω and more	TDA8561			P5
NE018	1x 15W	4	12 ÷ 24V	1x 15V 22VA	12934	4 Ω and more	TDA2030			P2
NE019	2x 15W	4	12 ÷ 24V	1x 15V 30VA	12925	4 Ω and more	TDA2030		bridge	P2
NE060	2x 15W	4	12 ÷ 24V	2x 12V 50VA	8264	4 Ω and more	TDA2030		bridge	P3
NE020	1x 20W	4	8 ÷ 18V	2x 12V 50VA	8264	4 Ω and more	TDA2003		only bridge	P2
NS066	2x 20/30W	4	±10 ÷ ±20V	2x 12V 50VA	8264	4 Ω and more	TDA2040			P4
NS067b	2x 30/40W	4	±10 ÷ ±20V	2x 12V 100VA	59955	4 Ω and more	TDA2050			P4
NS074	1x 40W	4	±10 ÷ ±30V	2x 24V 50VA	8265	4 Ω and more	LM3876			P4
NS563	2x 40W	2	6 ÷ 18V	2x 12V 100VA	59955	2 Ω and more	TDA8563Q		for car appl.	P5
NE078	2x 30W		±12 ÷ ±17V	2x 12V 100VA	59955	2 Ω and more	TDA2030	2+2pcs BDX53,54	bridge	P3
NS071	2x 50W	4	±10 ÷ ±25V	2x 12V 100VA	59955	4 Ω and more	TDA7250	2+2pcs BDX33,34		P4
NS562	1x 70W	4	8V ÷ 18V	2x 12V 80VA	8266	4 Ω and more	TDA1562Q		for car appl.	P5
NS072	2x 80W	4	±10 ÷ ±35V	2x 24V 160VA	64732	4 Ω and more	TDA7250	2+2pcs TIP142,147		P4
NE013	1x 70/100W	4	±10 ÷ ±40V	2x 24V 160VA	64732	4 Ω and more	TDA7294			P2
NE013NZR	1x 70/100W	4	±10 ÷ ±40V	2x 24V 160VA	64732	4 Ω and more	TDA7294		rectifier + heatsink	P2
NE022	2x 70/100W	4	±10 ÷ ±40V	2x 24V 200VA	64734	4 Ω and more	2xTDA7294		bridge	P2
NE116a	2x 50/100W		±10 ÷ ±35V	2x 24V 300VA	60313	4 Ω and more	TDA7250	2+2pcs TIP142,147	bridge	Р3
NS073	2x 130W	4	±10 ÷ ±45V	2x 24V 250VA	64739	4 Ω and more	TDA7250	2+2pcs MJ11015,16		P4
NS075	2x 60/150W	4	±10 ÷ ±30V	2x 24V 300VA	60313	4 Ω and more	LM3886			P4
NS077	1x 200W	8	±10 ÷ ±45V	2x 24V 250VA	64739	8 Ω and more	TDA7294		bridge	P4

Pre-Amplifiers F	Page	Amplifier Accessories	Page
NS201 stereo HIFI with corrections (LM1036)	P4	, and the second	i ago
NE025 stereo with corrections NS200 stereo with RIAA characteristic for gramophones (NE5532)	P2) P4	NS005 10 LED VU meter (LM3915) NS053 stereo 2x5 LED VU meter with AN6884	P4 P4
NEO98 stereo with RIAA characteristic for gramophones (TL062) NEO99 mono for mikrophone/quitar	P3 P3	NE012 stereo 2x10 LED VU meter	P2
NE092 active stereo sound controller (TL084)	P3	NE016 mono 10 LED VU meter NE085 deleyed switch-on-speaker system	P2 P3
NE073 mono graphic equalizer with 5+1 potentiometer NE097 mono 8-channel audio mixer (TL0x1, NA741)	P3 P3	NE069 power supply ±35V without transformer NE069A power supply ±45V with transformer	P3 P3
NE125 active subwoofer filter (TL072)	P3	NEOOSA power supply 140V with transformer	FS

Suitable heatsinks - chapter I



AUDIO Kits



NE 011 7W Mono Audio Amplifier with UL1481 (TBA810)

This small amplifier is constructed around the UL148 IC. (TBA810) The IC is fully protected against overheating and short circuits. Music power output: 7W / 4Ohm Frequency response: 40Hz to 20kHz Supply voltage: 4-20V

7W 4Ω

Part No.	Ord.No
S NE 011	45263



NE 012

Stereo VU Meter

It is suitable for all stereo devices as recorders. mixing consoles, stereoamplifiers. 21 LED – one for ON/OFF indication, 2x10 LED for signal – level indication Supply voltage: 10-14V

Dimensions: 80x38x15mm

	Part No.	Ord.No
s	NE 012	9613



NE 013

100W Mono Audio Amplifier with TDA 7294

It is suitable for driving subwofers. The IC is fully protected against overheating and short circuits.

Music power output: 70-100W / 40hm Supply voltage: from + and -10V to + an - 40V Recommended pre-amplifier: NE025

	Part No.	Ord.No
3	NE 013	48823



NF 013 NZR

100W Mono Audio Amplifier with TDA 7294, rectifier and heatsink

This kit is suitable for driving subwofers. The IC is fully protected against overheating and short circuits.

Music power output: 70-100W / 40hm Supply voltage: from + and -10V to + and - 40V Recommended pre-amplifier: NE025

70/100W 4Ω

Part No.	Ord.No
S NE 013 NZR	62261



NF 016 Mono VU Meter

VU meter with a scale consisting of 10 LEDs.



15W 4Ω

15W Mono Audio Amplifier with TDA2030

This small AF amplifier is constructed with the TDA2030 IC, with a maximum supply capability of 15Wrms/4 ohm. The IC is protected against overheating and short circuits. Suitable for tuners, CDs, MP3, radios...

Music power output: 15W / 4Ohm Supply voltage: max.30V Dimensions: 55x45mm

	Part No.	Ord.No
s	NE 018	9617



NE 019

15W Stereo Audio Amplifier with TDA2030

This small AF amplifier is constructed with the TDA2030 IC, with a maximum supply capability of 2x15Wrms/4 ohm. The IC is protected against overheating and short circuits. Suitable for tuners, CDs, MP3, radios... Music power output: 2x15W / 4Ohm

Supply voltage: max.30V

	Part No.	Ord.No
S	NE 019	9618



NE 020

20W Mono Audio Amplifier with TDA2003

Simple amplifier constructed with two TDA2003 in bridge connection. The IC is fully protected against overheating and short circuits. Music power output: 20W / 40hm Supply Voltage: 8-18V Easy to install

Part No.	Ord.No
NE 020	9619



NE 021 4W Amplifier with UL1482/ TBA820M

Suitable for portable equipment Music power output: 4W / 4Ohm Supply Voltage: 3-16V

	Part No.	Ord.No
s	NE 021	45264



2x70/100W 4Ω

NF 022

100W Stereo Audio Amplifier with TDA7294

Suitable for driving subwofers. Max. music power output: 2x100W / 4Ohm Supply Voltage: from + and -10V to + and -

Impedance: 4 Ohm

Recommended pre-amplifier: NE025

	Part No.	Ord.No
S	NE 022	48824



NE 025 Universal Low-Noise Stereo Pre-Amplifier

Suitable for NE012 (mono), NE022 (stereo) or 2xNE022

Frequency range: 20Hz - 100kHz Max. input voltage: 775mV Adjustable gain: ±12dB. Input impedance: 220Kohm

Part No.	Ord.No
S NE 025	48825

AUDIO Kits

(continued)



NE 060

15W Stereo Audio Amplifier with TDA2030

This small AF amplifier is constructed with the TDA2030 IC, with a maximum output power of 2x15Wrms/4 ohm. The IC is protected against overheating and short circuits.

Suitable for tape recordes, tuners, radios... Music power output: 2x15W / 4Ohm

Part No. Ord No S NF 060 45270



NF 069

Power Supply for ± 35V Amplifiers NE 069A

Power Supply for ±45V Amplifiers

Univesal power supply for AF amplifiers
NE069 for output current 5A/10A and output

NE069A for output current 10A/50A and output voltage +/- 45V

Suitable for NE078, NE013, NE022, NE116A

	Part No.	Ord.No
S	NE 069	45275
s	NE 069A	45276



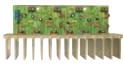
NE 073

Graphic Equalizer with Volume Control

Mono 5 potentiometers 1 volume regulator

Dimensions: 122x58x25mm

	Part No.	Ord.No	
s	NE 073	9640	



2x50W/1x100W Audio Amplifier

This amplifier is constructed with the TDA2030

Max. music power output: 2x30/50W 4Ohm or 1x60/100W 4Ohm

Supply Voltage: ±12V and ±17V

Easy to install

2x30/50W 4Ω 1x60/100W 4Ω

	Part No.	Ord.No
s	NE 078	9641



Deleyed Switch-On-Speaker Sys-

Supply Voltage: 12-24V Current Consumption: 70mA Dimensions: 55x45x22mm

	Part No.	Ord.No
s	NE 085	45281



NE 092

Active Stereo Sound Controller with TI 084

This stereo sound controller must be superposed to the stereo final amplifier. Trebles, basses and volume are adjustable separately Dimensions: 75x70x30mm

Part No.	Ord.No
S NE 092	9644



8-channel Audio Mixer with TL061

The Kit has 8 independet inputs and 1 output. It works with any kind of source of audio signal. The circuits are supplied from integrated regulated power supply 12V or 15V. Because of very low power consuption (30mA) it is possible to use a non-regulated plug-in power supply (adapter).

	Part No.	Ord.No
S	NE 097	45297



NE 098

RIAA Stereo Pre-Amplifier with TL062

RIAA stereo pre-amplifier for MD pick-ups. Low noise.

Supply voltage: 12V / regulated Active filter: 100Hz

Part No.		Ord.No
S	NF 098	45298



NE 099

Guitar and Microphone Pre-Ampli-

An electric guitar or microphone cannot be connected to just any amplifier or audio instal-This pre-amplifier has been designed exactly for this purpose

Input sensitivity: 4mV Output: 775mV

Impedance: 5kOhm standard/max.50 kOhm Power supply: 12V

Dimensions: 80x50mm

	Part No.	Ord.No
s	NE 099	9645



NE 116A

2x100W Audio Amplifier with TDA 7250

This small AF amplifier is constructed with the TDA 7250 IC, with a maximum output power of 2x100Wrms/4 Ohm. The IC is protected against overheating and short circuits.

2x50/100W 4Ω

Part No.	Ord.No
NE 116A	9648



NE 125

Active Subwoofer Filter

Universal active subwoofer filter Adjustable frequency: 80-250Hz Dimensions: 80x50mm

	Part No.	Ord.No
		o.ao
S	NE 125	45314



NE 529

Mini Audio Amplifier with LM386

Mini audio amplifier suitable for portable equipments, toys, loudspeakers or headsets Output power: 0,66W/8 Ohm Power supply: 4-12V Low current consumption Dimensions: 38x38mm

Part No.	Ord.No
NE 529	45339



2x4W Mini Audio Amplifier (KA2206, TEA2025B)

Mini audio amplifier suitable for portable equipments as well as at reparation of old car radios and tape players

Power supply: 4-12V

Part No.	Ord.No
S NE 530	45340



LED VU Meter with LM3915-mono This LED VU Meter is capable of monitoring and displaying power levels present at the speaker outputs of an audio power amplifier. The level is displayed in ten discrete steps using 10 LEDs for each channel. This projection is designed to give an approximate visual indication of the audio power output of each channel. Supply voltage: +12V

	Part No.	Ord.No
S	NS 005	11626



NS 053

LED VU Meter-stereo with AN6884

This LED VU Meter is capable of monitoring and displaying power levels present at the speaker outputs of a stereo audio power amplifier. The level is displayed in ten discrete steps using 2x5 LEDs for each channel. (-10dB...+6dB) 2x1 LED On/Off indication Supply voltage: 3,5-18V

	Part No.	Ord.No
0	NS 052	11645



2x20/30W 4Ω 2x30/40W 4Ω

NS 066

2x30W Audio Amplifier (TDA 2040) NS 067b

2x40W Audio Amplifier (TDA2050) Simple amplifier using TDA2040 or TDA2030 IC Power output: 2x30W/40hm or 2x40W/40hm

Supply Voltage: ±20V Gain: 30dB Quiescent Current: 30-100mA

	Part No.	Ord.No
S	NS 066 (TDA2040)	11649
s	NS 067b (TDA2050)	11650



NS 071

2x50W Audio Amplifier with TDA 7250 Mute and Stand-By mode

Power output: 2x50W/4Ohm Supply Voltage: ±10V... ±25V Quiescent Current: 20mA Constant or adjustable gain Max. distortion: 0.06%



NS 072

2x80W Audio Amplifier with TDA 7250

Mute and Stand-By mode Power output: 2x80W/40hm Supply Voltage: ±10V... ±35V Quiescent Current: 20mA Constant or adjustable gain Max. distortion: 0,06%

2x80W 4Ω

Part No.	Ord.No	
S NS 071 2x50W	11653	
s NS 072 2x80W	11654	



2x130W Audio Amplifier with TDA

Mute and Stand-By mode Power output: 2x130W/40hm Supply Voltage: ±10V... ±45V Quiescent Current: 20mA Constant or adjustable gain Max. distortion: 0,06%

2x130W 4Ω

	Part No.	Ord.No.
S	NS 073	11655



NS 074

40W High-End Amplifier with LM3876

Max. distortion: 0,006% Signal-to-noise ratio: 110dB
SPiKE-Protection - overload and short-circuit protection, protection against incorrect power

supply polarity and thermal protection Quiescent Current: 60-100mA

Power Supply: ±30V

NS 075

	Part No.	Ord.No
S	NS 074	11656



2x60/150W 4Ω

2x60/2x150W High-End Amplifier

with LM3886 Distortion at 60W: 0,006%

Signal-to-noise ratio: 110dB SPiKE-Protection - overload and short-circuit protection, protection against incorrect power supply polarity and thermal protection Quiescent Current: 60-100mA

Power supply: ±30V

	Part No.	Ord.No
S	NS 075	11657



NS 077

2000W DMOS Audio Amplifier with TDA7294

Amplifier constructed with two TDA7294 in bridge connection Short-circuit and thermal protection

Mute and Stand-By mode Impedance: 8-16 Ohm

Power supply: ±10VDC ... ± 45VDC max.

Part No.	Ord.No
NS 077	11658



NS 200

RIAA Pre-Amplifier for Gramophone with NE5532

Phono preamplifier with the RIAA characteristic.

Output is suitable for any kind of audio power amplifiers. As a power supply is used simple 12 or 36V

	Part No.	Ord.No
s	NS 200	11666



NS 201

Hi-Fi Pre-Amlifier with LM1036 Adjustable gain: +/-15dB

Input gain: 20dB Power supply: +9....+12V Consumption: 40-50mA

Part No.	Ord.No
S NS 201	11667

AUDIO Kits

(continued)



NS 561 4x12W Quadro Amplifier (TDA 8561)

Overload and short-circuit protection, protection against incorrect power supply polarity and thermal protection Stand-By mode 4 AF inputs and outputs Power supply: +8....+18V Max. distortion: 0,3%

Gain: 20dB



1x70W 4Ω

NS 562

70W Audio Amplifier (TDA 1562Q)

Overload and short-circuit protection, thermal protection Stand-By mode Stand-By Current: 20uA



NS 563

2x40W Amplifier (TDA 8563Q)

Clean tonality and powerful sound Output Impedance 2-4 Ohm Max. Output power 2x40W/2R and 2x25W/4R Stand-By Current < 100uA Operating voltage: 6-18V Gain> 26dB

Overload, overheating and short-circuit protec-

S NS 561 11678	
. 110 500	
S NS 562 11677	
S NS 563 11679	

Light Effect Kits



NE 002 Flashing Heart With NE555

10 LEDs

Adjustable flashing speed with potentiometer. Power supply: 9V battery (not incl.) Dimensions: 30x25mm

	Part No.	Ord.No
s	NF 002	9606



NE 007 Light Effect Module

With 7400 IC

Suited for different applications, f.e. as eye catcher in stores, at exhibitions, in toys, etc... Power supply: +5V or 4,5V battery

	Part No.	Ord.No
9	NE 007	9609



NE 010 Flashing Star

Fading animation
Adjustable fading speed with potentiometer Power supply: 15V Dimensions: 125x75x30mm

Part No. Ord.No

9612



S NE 010

NE 017

6-Channel Running Light
This impressive bulb running light can be used for many applications, such as: modelling, ad-

vertising and decoration.
Power supply: 24 VAC
Consumption: 3A per channel Dimensions: 90x47x25mm



Flashing LED Star

Based on NE555 IC

Adjustable flashing speed with potentiometer Dimensions: 100x85x20mm

Pa	rt No.	Ord.No
s NE	053	9635



NE 108 Pulsating Heart

Show your sweetheart in an original way that your heart still beats for him or her. 40 LEDs

form 3 blinking hearts. Adjustable light-up speed Power supply: 12V Consumption: 50mA Dimensions: 80x80mm

Part No.	Ord.No
NE 108	45304



NE 111 Color Organ

3-channel color organ, each channel can drive up to 360W bulb. It's input is equipped with an automatic gain amlifier.

Part No.	Ord.No
NE 111	9646



NF 204 Christmas Bulb Driver with NE555 Power supply: 8-18V Consumption: 4mA at 9V

Dimensions: 25x35x10mm

	Part No.	Ord.No
S	NE 204	45320



Animated Rell

Animated Bell with 68 LEDs. Based on popular

Power supply: 12V (possible for use in cars,

lorries, trucks)

Part No.	Ord.No
S NE 209	46744



NE 503 Blinking Arrow (4049)

This blinking arrow can be used for many applications, such as advertising, decoration, in games or as indicator of direction in dark places 8 LEDs

Power supply: 6-12V Dimensions: 55x42x15mm

Part No	. Ord.No	
S NE 503	9649	



Part No. Ord.No NE 017 9616



Economic Flashing LED Light

Very low current consumption Very powerful flash effect (short, bright pulses) For emergencies, warning signs, as eye-catcher, 'alarm-active' - simulation, etc ... Power supply: 3,3-10V Dimensions: 40x30x15mm

	Part No.	Ord.No
s	NE 515	9656



NE 528

Mini-Color Organ (LM324)

The circuit is based on an Integrated Circuit LM324, which provides three sharp active filters for each channel. Three independent controls vary the brightness for low, midrange and high frequencies. Three high-intensity LEDs light up and react simultaneously to every sound. For different funny and practical applications e.g. sound indicator, simple sound-to-light unit for music, tuners or CD-player

Power supply: 15-24 V Dimensions: 95x80mm

	Part No.	Ord.No
s	NE 528	45338



Two-Colour Blinking Flower (555)

Based on NE555 7 two-colour LEDs Adjustable speed of blinking Power supply: 9-12V Dimensions: 39x39mm

	Part No.	Ord.No
s	NE 533	45343



Two-colour LED Bar (4017) This 5-channel LED chaser can be used any-

where requiring LED light effects. The circuit is based on Integrated Circuit which drives all 5 two-colour LEDs

LEDs light up and fade Supply voltage: 9-12V Dimensions: 43x34mm

	Part No.	Ord.No
S	NE 534	45345



NS 018 Light Snake (4001,4017,4011)

This kit can be operated in a wide range of supply voltage 3-30V and can drive up to 48

	Part No.	Ord.No
S	NS 018	11633



Light Snake with 18 LEDs (NE555) Based on NE555 which drives 3x6LEDs

LEDs light up and fade Possibility of connection 10x10LEDs Supply voltage: 9V

	Part No.	Ord.No	
S	NS 059	11648	

Sound Effect Kits



Sound Effect Generator (Acoustic Signalization) (NE555)

Great for model railroads, radio controlled toys, stage or as a gadget. Based on NE555 Low power consumption Dimensions: 25x25x10

	Part No.	Ord.No
S	NF 004	9607



NE 006 4-Sound Effect Generator (UM3561)

Ambulance, Fire, Police, and Machine Gun

Sounds Kit Based on UM 3561 (DIL8)

Supply voltage: 1,5-3V Dimensions: 51x20x46mm Suitable speaker: ARO 3618

	Part No.	Ord.No
S	NE 006	9608



NF 008 9V Electronic Siren (555)

A simple siren circuit and a surprisingly loud output. Good as a sound module to attach to an

alarm system, etc. 9 volt DC operation. Output Power: 5W/4Ohm Frequency: 300-1000Hz Dimensions: 46x50x30mm

	Part No.	Ord.No
S	NE 008	9610



NE 009G Music Box - 3 Melodies(M948) Based on M948

Supply voltage: 4-9V Dimensions: 30x45x20mm

	Part No.	Ord.No
s	NE 009G	9611



NE 024 3-Tone Siren

Ambulance, Fire and Police Sounds Supply voltage:9V Dimensions: 45x55x25mm

	Part No.	Ord.No
S	NE 024	9621



NS 006

Bird Song Sound Generator
This unit create a realistic "Bird Song" sound.
It is a useful unit having many applications such as door bells, alarms, telephone ring, clocks, timers, shop entrance bell, etc. Min. Impedance: 500hm Supply voltage: +5...+12V/12mA

	Part No.	Ord.No
s	NS 006	11627

Sound Effect Kits

(continued)



NS 017 SMD Police Siren

Based on 555 IC A realistic "American style" police siren imitating device.

Supply voltage: 9V

	Part No.	Ord.No
S	NS 017	11670

Car Kits



NF 104

Digital Tachometer

For cars or motorcycles with a petrol engine. May be used as a general purpose rounds

Range: 100 - 7000 rounds/minute 3 digit LED display Power supply: +11... +16V Dimensions: 83x55x30mm

	Part No.	Ord.No
s	NE 104	45301



Electronic burglar alarm for Cars
This electronic circuit can be used in cars as a simple engine blocking device. The car can be started only by using a unique electronic key.

	Part No.	Ord.No
S	NE 120	45310



Windshield Wiper Interval Timer

Different time intervals can be selected for the windshield wipers of your car. It can also be used for driving a slide projector. power supply: 12 V

PCB dimensions: 30x60x25mm

Part No.	Ord.No
NE 521	45334



Car Alarm Simulator Kit

Want to deter your local thief without spending hundreds on a car security alarm? LED with 'realistic-appearing' flash sequence simulates active car alarm system.

Activates automatically when the engine is turned off.

Easy to install Power supply: + 12V Dimensions: 35x20x15mm

	Part No.	Ord.No
S	NE 523	9659



NE 524N, NE524N SMD

Car-Battery Indicator

The alarm detects sudden voltage drops of the 5xI FD

Dimensions: 57x28x10mm



SN

NE 524N SMD

Part No.	Ord.No
NE 524N	61429

61430

NE 525 Acoustic Signalization of Reverse Driving (555)

This electronic circuit generates an acoustic warning signal for pedestrians when gearbox is switched to reverse.

Power supply: 12V or 24V Dimensions: 70x30x25

Part No.	Ord.No
S NE 525	9661



NE 526 Interior Light Driver

The interior light driver delays bulbs switch OFF,

for comfortable leaving of the car Power supply: 12V

Dimensions: 58x26mm

Ord.No

45336

S.		
The same	,86	

NE 526

Converter 12V/22V/2A

Converter from 12VDC to 22VDC at maximum rated output power 2A

Efficiency: 90% Transformerless

Part No.	Ord.No	
S NS 027	11637	



SMD Car-Battery Indicator

The alarm detects sudden voltage drops of the battery

Three LEDs indication (over 13,6V; from 13,6V to 10,6V; under 10,6V)

Part No.	Ord.No
s NS 100	11674



SMD

HWK1

Headlight Warning Kit

The alarm detects sudden voltage drops of the battery when the car lights are switched on. Continuously repeated alarm tone indicate that the lights are activated, so that you will not forget to switch them off.

Only 3 wires are required for hook-up

Supply voltage: 12V DC

Part No.	Ord.No
s HWK1	41362

Measurement and Test Kits



Power Supply 2-12V/0,5A Based on UA723 IC

Suitable for motors, bulbs...not suitable for audio equipment.

Continuosly adjustable voltage Input Voltage: 15-17V Dimensions: 30x55x85mm

	Part No.	Ord.No
s	NE 005	43138



Power Supply 5/12V 1A;

,2-24V/3A Universal power supply for regulated voltage 5V and 12V/1A

Adjustable power supply with voltage regulation

1,2-24V/3A Input voltage: 12V/1A and 24V/3A

Output voltage: +/-5V, +/-12V or 5V,12V Dimensions: 125x90x75mm

Part No.	Ord.No
S NE 023	9620



NF 028

Regulated Adjustable Power Supply 1,V-17V/3A

Based on LM317

Adjustable power supply for all common kits based on a stabilized DC voltage between 1,3 and 17V at max. power 3A. Of course this power supply unit can also be used for other purposes

Output voltage: adjustable from 1 to 17V, stabilized

Output current: max. 3A Transformer not supplied Dimensions: 132 x 67x 25mm

	Part No.	Ora.No
S	NE 028	45265



NE 041

Servo-Motor Driver RS232

Kit uses pre-programmed micro-controller to drive up to 8 model/hobby servo motors simultaneously

	Part No.	Ord.No
9	NE 041	54637



NE 046A

Digital Ammemeter

This high-brightness digital panel meter is based on 12-bit converter ICL 7107 Supply voltage: 8-15V 4-Digit display Range: 200uA to 20A Dimensions: 84x53x36mm



NE 046V

Digital Voltmeter

This high-brightness digital panel meter is based on 12-bit converter ICL 7107 Supply voltage: 7-15V (regulated 5V± 5%)

4-Digit display Range: 200mV to 20V Dimensions: 91x65x35

	Part No.	Ord.No
S	NE 046A	58622
s	NE 046V	45269



ISP Programmer
For AT89Sxx, AT AVR, EEPROM with I2C and some PIC processor programming

	Part No.	Ord.No
S	NE 049	56478



NE 054

Adjustable Power Supply 1,2-24V

Based on LM317

Adjustable output voltage from 1,2V to 37V Dimensions: 92x42mm

Part No.	Ord.No
NE 054	0636



NE 100 Professional Power Supply 13,8V/10A

Regulated power supply for 13,8V and 10A With short-circuit and thermal protection Suitable for radio transceviers and more demanding applications.

Part No.		Ord.No
s	NF 100	45299



NE 122

For standard or low current LEDs. For testing function, brightness and polarity. Ideal for goods received, goods testing, the laboratory, in production and hobby use. Voltage supply: 9V

Dimensions: 51x49mm

	Part No.	Ord.No
3	NE 122	45312



Battery Tester (with LM3914) Suitable for 1,5V AAA (LR3), AA (LR6), C (LR14), D (LR20), and 9Vblock batteries Battery status indicated on 10 LED indicator Not suitable for rechargeable batteries Voltage supply: 12V

	Part No.	Ord.No
S	NE 123	45313



NE 504 Adjustable Mini-Drill Supply

Suitable for all Typees of minidrills which are supplied with DC voltage up to +17V and with maximum current consumption 5A Easy mounting

	Part No.	Ord.No
S	NE 504	9650



Measurment and Test Kits

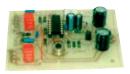
(continued)



NS 012 Digital LED Voltmeter Module 0-199mV

3,5 digit LED display Character height: 14mm Based on 7107 IC Voltage range: 0-199,9mV Voltage supply: +5V

Part No.		Ord.No
s	NS 012	11629



NS 013 C/U Meter 1pF-10uF

Digital capacitance meter, output frequency determines measured capacitance. Capacitance range: 1pF-10uF

Part No.	Ord.No
S NS 013	11630



NS 015 L/U Meter 0uH-500uH

This electronic kit acts like simple L to U converter. The output voltage can be measured by a standard voltmeter. Based on 74HC132 IC Inductance range: 0-500uH Voltage supply: 5V

Part No.		Ord.No
S	NS 015	11632



NS 045 Power Supply 2-36V/2A with possible limitation of output current Based on L200 IC

Max. input volatage: 40V

P	art No.	Ord.No
s N	IS 045	11640



NS 089 Power Supply 0-30V with possible limitation of output current and transformer Based on LM317 IC Incl. 130VA toroidal transformer



Temperature Controlled Digital Thermometer -50°C ...+150°

This thermometer with its red LED indicator can be placed anywhere you wish to measure temperatures from -50 to +150 $^{\circ}\text{C}.$

Temperature stabilization from 15°C to 30°C 4 Digit LED display / 1% accuracy Thermostat adjustable with potentiometer

Part No.	Ord.No
S NE 001	45262



NE 031

12 LED Thermometer

Temperature counting by 1°C in range from 17°C to 28°C 12 LEDs Dimensions: 90x42x20mm

Part No.	Ord.No
NE 031	9625



NE 035

Digital Thermometer -20°C...+99°C

Electronic thermometer
Temperature range: from -20 to +99 °C. Temperature regulation from 15°C to 30°C 7 Digit LED display Supply Voltage: 12V Dimensions: 80x40x90mm

	Part No.	Ord.No
S	NE 035	9628



NE 044

Thermometer -50°C ...+125°C

Two - output thermometer for displaying f.e indoor and outdoor temperature Measuring range: from - 50 to +125°C/ 0,5% accuracy

With temperature sensor DS18B20 Two LED displays with 14mm characters Power supply: 9V battery

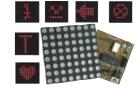
	Part No.	Ord.No
S	NE 044	54638



NE 045 Digital Thermometer -50°C +150°C

Based on ICL7107 IC 3,5 Digit LED display Temperature range: from -50 to +150°C Power supply: 7,5-10V Current consumption: 250mA
Operating temperature: 0-70°C Dimensions: 91x65x35mm

Part No.	Ord.No
S NE 045	45268



NE 047 Digital Thermometer with DS18B20 and Dot Matrix

8x8 LED Matrix with displaying temperature or other patterns (heart, arrow...) Power supply: 9-12V Dimensions: 60x60x17mm

Part No.	Ord.No	
S NE 047	56477	





Thermostat (MA741)

For keeping constant temperature e.g. in aquar-

Indication with two LEDs Dimensions: 25x40x80mm

	Part No.	Ord.No
S	NE 052	9634



Thermometer 2-channel LCD

·20°C...120°C

For displaying e.g. indoor and outdoor temperature Measuring range: from -20 to +120°C

Power supply: 9V Dimensions: 77x85x17mm

	Part No.	Ord.No
0	NE 088	45295



NE 107

Universal Start/Stop Timer

Start/Stop push button switches.

LED indication

Time adjustable from 10 seconds to 500 seconds With electromagnetic relay

	Part No.	Ord.No
s	NE 107	45303



NS 010

Digital LED Thermometer

Measuring range: from -99°C to +150°C

With ICL7107

Power supply: 5-15V

	Part No.	Ord.No
s	NS 010	11628



Timer 1minute-20hours

With NE555 timer

Basic time range: 100min. - 20 hours Possible range: 1min. – 20 hours Power supply: 12V

Part No.	Ord.No
S NS 085	11660



TEMP1

Thermometer

Max. measuring range: up to 150°C

Resolution: 0,1°C Suitable for all digital multimeters with input resistance 10MOhm

Part No.	Ord.No
S TEMP1	41363

Kits for Home Application



NE 029

Dimmer (MA741)

By separately adjusting the threshold levels for light and dark, numerous applications are made possible. For automatic switching of alarm systems in the night, for controlling window shutters and awnings, general use as a light dependent switch, when differences in brightness should be recognised and used for control purposes

Output relay 24V/3A Dimensions: 20x45x55mm

	Part No.	Ord.No
S	NE 029	9624



NE 034N

Mini Central Alarm Kit(4538, 4093)

This affordable kit offers you a comprehensive security system.

The loops can be used independent of each other in a self-learning way as break contact, closed-circuit contact or with monitored loop resistance. A lapsed alarm continues to be displayed via an LED.

Current consumption: 20mA/60mA Power supply: 12-15VDC Dimensions: 90x60x25mm

	Part No.	Ord.No
S	NF 034N	9627



Clap ON/OFF Switch

Control your lamps simply by clapping your

Good immunity against surrounding noises Microprocessor-controlled Output relay with LED indicator Current Consumption: 9,5mA/50mA Dimensions: 80x50x15mm

	Part No.	Ord.No.
S	NE 037	9630



1-chanell IR Reciever

LED indication Range: 10m

Current consumption cca 50mA Dimensions: 81x52x20mm



NE 056A IR Transmitter

Power supply: 12V battery (incl.) Dimensions: 23x53x10mm

	Part No.	Ord.No
S	NE 056	9637
s	NE 056A	9638



NE 086 IR Light Barrier

Applications: announce visitors, warn against burglars, set boundaries, scientific projects,... Specifications

Range: 3,5m Dimensions: transmitter: 35x45mm receiver: 50x80mm

Part No.	Ord.No
S NE 086	9643

Kits for Home Application (continued)



1-Channel Remote Control

Reciever and transmitter

Suitable for all kinds of applications such as light control, cars, garages.

Reciever Ultra compact Indication through LED Dimensions: 30x35mm Transmitter:

310MHz operation LED indication

Dimensions: 82x52mm Input power: 12Vac / 500mA

	Part No.	Ord.No
S	NE 114	45305



NF 508

Code Lock (4022)

This code lock may be used to switch an alarm on and off, or to open a door lock. The code is easy to define.

7 digits Relay output

Power supply: 9 - 14V DC Dimensions: 90x50x15mm

	Part No.	Ord.No
s	NE 508	9652



NiCd Battery Charger Suitable for charging 1,2,3 or 4pcs same kind 1,25V NiCd Batteries

Charging current 90/250mA LED indication

Power supply: 12V/1A (AC) or 13-15V/1A (DC) Dimensions: 70x57x20mm

	Part No.	Ord.No
S	NE 509	9653



NE 511 Optical/Acustical Switch (MA741, NE567)

Relay output

For different funny and practical applications e.g. sound indicator, simple sound-to-light unit for music. The unit can also be used to indicate when the doorbell or the telephone is ringing, which is particluarly interesting for the hearingimpaired.

Dimensions: 70x40x20mm

	Part No.	Ord.No
s	NE 511	45328



NE 512

Water Alarm (4011)

Gives alarm sound when water is detected Optical or acoustical signalization is possible Water sensor can be placed at a distance by cutting the board and using wires to connect

Power supply: +12VDC Dimensions: 60x30x20mm

Part No.	Ord.No
S NE 512	9655



Liquid Level Controller (4093)

You forget to turn off the tap, the washing machine leaks, the water level in your aquarium drops, the water tank is empty or suddenly overflows, there's water in your cellar, etc. Prevention is still better than cure and that's where this kit comes in. This multifunctional device is easy to use in a variety of applications : 1) LED control of set fluid level : LOW, MIDDLE, HIGH ; 2) Controller: the relay automatically switches a pump and/or valve to keep the fluid level between the LOW and HIGH marks; 3) Alarm : if the sensor detects a level which is too high or too low (selectable), the relay will operate an alarm device. Dimensions: 50x45x15mm

Ord.No



Stroboscope (555) Based on NE555 Flashing light effects Power supply: 12V Bulb 12V/20W

	Part No.	Ord.No
s	NE 531	45341

SUPERGATE "A"

GSM Supergate"A"

Main features:

Sending up to 8 SMS/calling up to 16 numbers on the state change of the 4 contact inputs Programmable through SMS

Control of relay with phone call

Remote interception of the locality from author-

ised number Technical data:

Working frequency: GSM 900/1800/1900

MHz

Supply voltage: 12-14 VDC Current consumption: Nominal: 40mA

Maximum: 2000mA (during registration to net-

work and calls)

Operating temperature: -20°C - +70°C Dimensions: 100 x 54 x 20mm

Weight: 60g

SUPERGATE "B"

SUPERGATE "C"

GSM Supergate "B" Main features:

Sending up to 8 SMS/calling up to 16 numbers on the state change of the 4 contact inputs Programmable through USB, SMS Control of 2 relays with SMS LCD display, aluminium enclosure

Technical data:

Working frequency: GSM 900/1800/1900

MHz

Supply voltage: 12-14 VDC Current consumption: Nominal: 60mA

Maximum: 2000mA (during registration to net-

work and calls)

Operating temperature: -20°C - +70°C

Dimensions: 100 x 54 x 20mm

Weight: 120g

GSM Supergate"C"

Main features: Sending up to 8 SMS/calling up to 16 numbers on the state change of the 4 contact inputs Programmable through SMS

Control of inputs (armed/disarmed) with phone call from up to 4 authorised numbers

Output relay can controll directly alarm siren Aluminium enclosure

Technical data:

Working frequency: GSM 900/1800/1900 MHz

Supply voltage: 12-14 VDC

Current consumption:

Nominal: 40mA

Maximum: 2000mA (during registration to net-

work and calls)

Operating temperature: -20°C - +70°C Dimensions: 100 x 54 x 20mm

Weight: 110g

	Part No.	Ord.No
S	SUPERGATE "A"	64509
S	SUPERGATE "B"	64506
s	SUPERGATE "C"	64507

Miscellaneous Kits



NE 026 **Electronic Dice** (7493, 7406)

Electronic dice with LED indication. Slowly rolls to a stop when the push button is released. Dimensions:55x45x20mm

Part No.	Ord.No
S NE 026	9622





NF027

Electronic Roulette (7493, 74154) 16 LEDs.

Push-button operation. Microprocessor technology. Low power consumption Dimensions: 75x75x20mm

 Part No.
 Ord.No

 S NE 027
 9623



NE 081N Mini FM Transmitter

This FM transmitter runs on four "AA" size batteries and has good frequency stability. The transmitting frequency is adjustable. A sensitive microphone and an LED indicator are also incorporated right on the board.

incorporated right on the board. Supply voltage: 12V DC ("AA" size battery) Frequency adjustable: 88 to 108MHz Power consumption: 10mA Dimensions: 60x10mm

 Part No.
 Ord.No

 S NE 081N
 61437



NE 510

Ultrasonic Insect Repellent (4093)

Working at 20kHz frequency Current consumption: 4mA Power supply: 9V Dimensions: 55x50x25mm

 Part No.
 Ord.No

 S NE 510
 9654



NE 517 Electronic Fuse 2 LED Indication Working voltage up to 24V Max. current: 0,3A Dimensions: 40x30x15mm

 Part No.
 Ord.No

 S NE 517
 9657



NE 518 Thermal Fuse (MA741)

Adjustable temperature range: 80-150°C Power supply: 12-24VDC Dimensions: 45x55x20mm

 Part No.
 Ord.No

 S NE 518
 9658



NS 101 Mini FM Transmitter with autotuning (TDA7088T) Based on TDA7088T SMD

This transmitter is an exciting product that will broadcast a quality signal in the 0,5 - 110MHz FM band.
Power supply: 3V (max.5V)

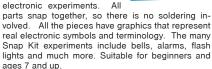
Power supply: 3V (max. RESET button RUN function

Part No.	Ord.No
s NS 101	11675

VOLTIK I

Experimental/Educational Kit

This series of Snap Circuit educational labs is perfect for learning about electronics. More than 35 different electronic experiments. All





VOLTIK II Experimental/Educational Kit

Experimental/Educational Kit This series of Snap Circuit educational labs is perfect for learning about electronics. More than 50 different electronic experiments. All parts

snap together, so there is no soldering involved. All the pieces have graphics that represent real electronic symbols and terminology. The many Snap Kit experiments include radio, telephone, alarms, flash lights and much more. Ages 10 and up.



VOLTIK III Experiment/Educational

This series of Snap Circuit educational labs is perfect for learning about electronics. More than 50 different electronic experiments. All parts snap together, so there is no solder-

ing involved. All the pieces have graphics that represent real electronic symbols and terminology. With Logic IC, SRAM and readers

The many Snap Kit experiments include buzzers, alarms, flash lights, roulettes, LED messages and much more. Ages 12 and up.

Part No.	Ord.No
s VOLTIK I	. 44535
S VOLTIK I	I. 44536
s VOLTIK II	II. 44537



rolling

EDU 1 Electronicl Kit Based on Magnetic

EDU 1 kit enables connecting electronic components based on magnetic forces Every single component is mounted on PCB in ABS plastic constructional base stands with magnets. Electronic components are then connected with galvanic coated steel spheres (27pcs) and contacting copper terminals in two lengths (15pcs of short, 5pcs of long ones).

EDU1 kit is equipped with basic components as: resistor, capacitor, diode, LED diode, transistor, photoresistor, switch and buzzer (19 components altogether) + two additional, empty segments enable the more advanced users to use any double-terminal electronic element. There is also power supply with a switch (short circuit resistant) made from four AA 1,5V batteries + supply wires.

In this way the number of possible electronic circuits is almost unlimited.

Part No. Ord.No S EDU 1 73889			
S EDU 1 73889		Part No.	Ord.No
	S	EDU 1	73889

Miscellaneous Kits (continued)



MERKUR 2.1
Experimental Electronic Kit – Electric Motors
Learn about meters and simple machines

Learn about motors and simple machines 17 parts - includes electromotor, battery-holder and set of gear-wheels



MERKUR 2.2 Experimental Electronic Kit – Electric Motors

Learn about motors and simple machines 106 parts - includes electromotor, batteryholder and set of gear-wheels



MERKUR E1 Experimental Electronic Kit – Electricity and Magnetism

88 various experiment Ages 10 and up



MERKUR E2 Experimental Electronic Kit – Electronic

60 various electronic experiments Ages 10 and up

	Part No.	Ord.No.
S	MERKUR 2.1	63786
S	MERKUR 2.2	63787
s	MERKUR E1	63781
s	MERKUR E2	63782



MERKUR Steam Engine Standard

Create your own steam engine! Alcohol-fueled engine

	Part No.	Ord.No
S	Merkur Steam Engine Standard	63785

