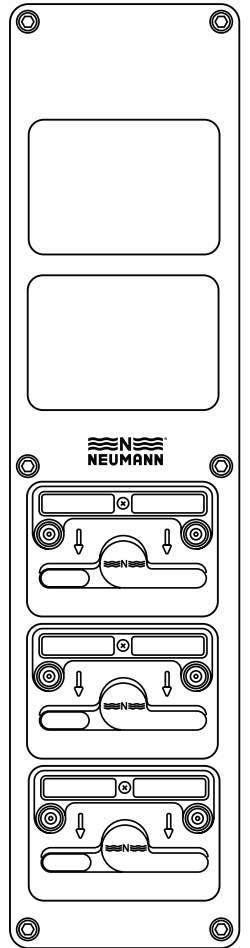
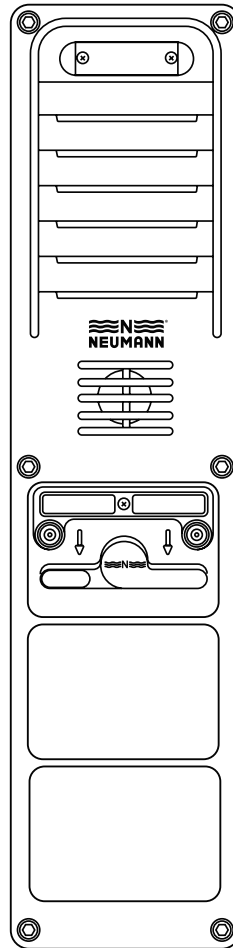
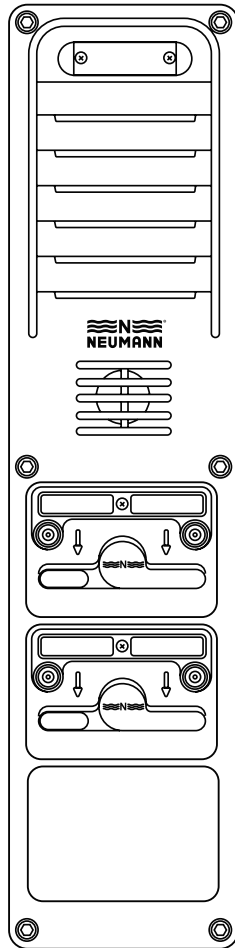
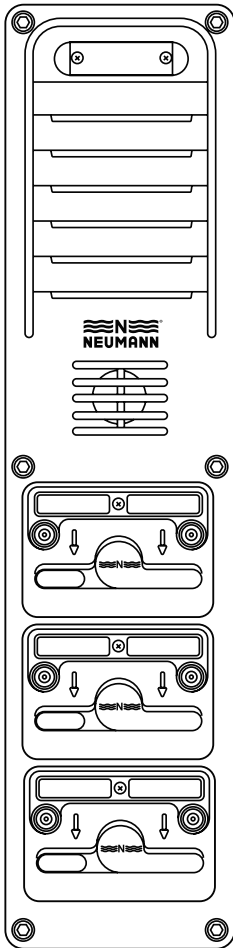
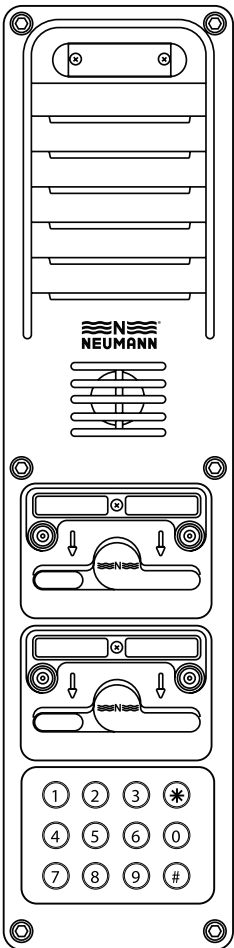
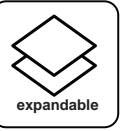
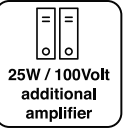


Overview

WFD M+

Weatherproof Digital U_{k0} Call Stations

With optional 25W additional amplifier
With optional WFD additional housing



1 5XX X
1 6XX X

WFD M+ Weatherproof Digital U_{k0} Call Stations
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Established Neumann Elektronik quality

Fully metallised inner housing prevents electromagnetic incompatibility (EMC)

Service-friendly modular design

Dialling function with dialling keypad, optionally usable as destination keys without illumination

Integrated loudspeaker and electret microphone

Simple upgrade / extension of the speech keys

Dust and waterproof,
glass-fibre reinforced polyester housing

Double toggle talk buttons with opto-coupler, 2 lines each

EL operation with own additional loudspeaker as standard

Line keys can be freely assigned as destination keys

Indication of busy and call signalling
through light emitting diodes

Potential-free contact for controlling
of a flash lamp or alarm siren

Secondary priority circuit as standard

Switchable volume reduction, e. g. for night-time operation

Adjustable microphone sensitivity
(noise compensated microphone)

Additional loudspeaker switched off after
the first intercom response as a standard feature

Low power requirement

1 5XX X
1 6XX X

WFD M+ Weatherproof Digital U_{k0} Call Stations
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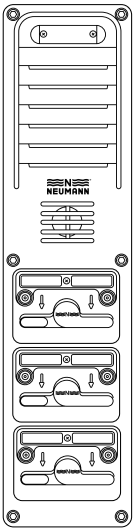
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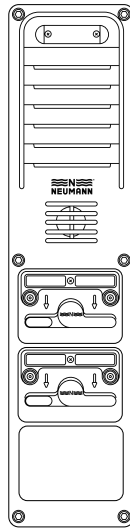
WFD M+

Weatherproof Digital U_{k0} Call Stations



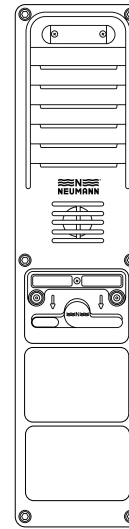
WFD M+
Weatherproof Digital U_{k0}
Call Stations,
3 Double Toggle
Art.-No. 1 596 1

With 25W additional amplifier
Art.-No. 1 558 9



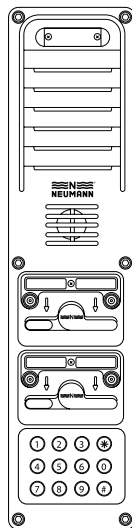
WFD M+
Weatherproof Digital U_{k0}
Call Stations,
2 Double Toggle
Art.-No. 1 587 1

With 25W additional amplifier
Art.-No. 1 557 8



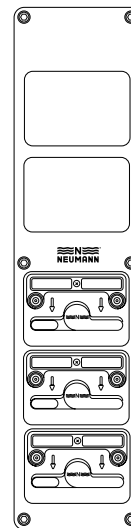
WFD M+
Weatherproof Digital U_{k0}
Call Stations,
1 Double Toggle
Art.-No. 1 586 0

With 25W additional amplifier
Art.-No. 1 556 7



WFD M+
Weatherproof Digital U_{k0}
Call Stations,
2 Double Toggle + Dial Pad
Art.-No. 1 682 7

With 25W additional amplifier
Art.-No. 1 684 9



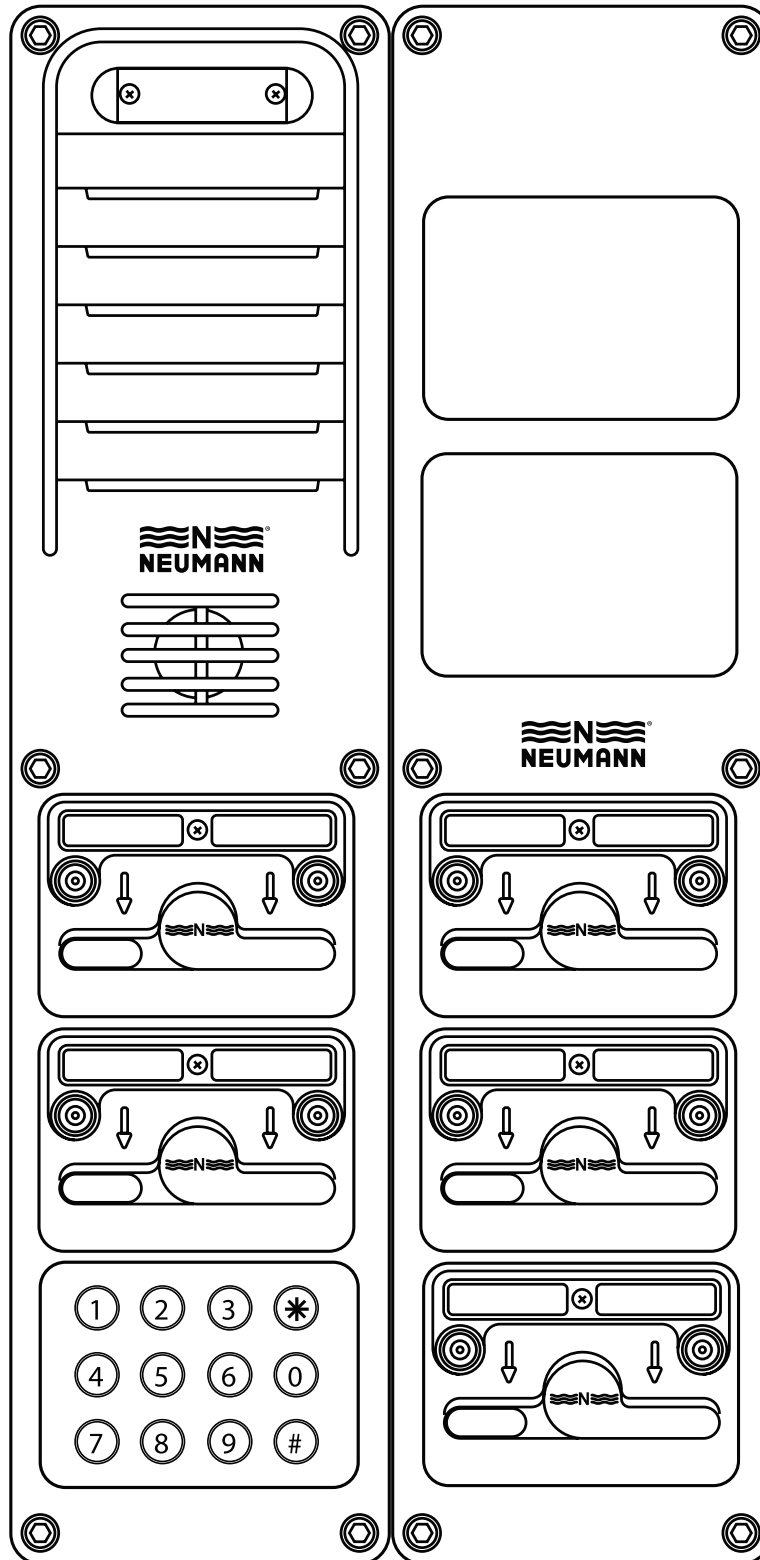
WFD
Weatherproof
Additional housing,
3 Double Toggle
Art.-No. 1 630 0

1 5XX X
1 6XX X

Layout example

WFD M+

Weatherproof Digital U_{k0} Call Stations



1 5XX X
1 6XX X

WFD M+ Weatherproof Digital U_{k0} Call Stations
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The weather-proof digital WFD Call Stations enable direct connections to other call stations. They can also be used for outdoor as well as indoor loudspeaker announcements in harsh environments, e.g. in factories of heavy industry.

Light barriers (optoelectronic coupler) are activated contactless by pressing the robust double toggle keys. This allows durable using in abrasive and damp environments.

The call stations are designed for wall mounting and must be earthed. The WFD Additional Housing allows extending the WFD Call Station by additional 3 double toggle keys.

Mechanical data Call station

Dimensions (H x W x D)	500 x 120 x 180 mm
Weight (without auxiliary amplifier)	approx. 6,5 kg
Colour	pure orange (RAL 2004)
Housing flammability	UL94 V-0 (3,2)

Mechanical data Additional housing

Dimensions (H x W x D)	500 x 120 x 180 mm
Weight (without auxiliary amplifier)	approx. 5 kg
Colour	pure orange (RAL 2004)
Housing flammability	UL94 V-0 (3,2)
Cable entries	2 x M25; 1 x M20
Cable length to the WFD M+ Call Station	approx. 1m

Electrical data

Nominal operating voltage	DC 48 V
Max. quiescent current	≤ 25mA
Max. operating current	≤ 100mA
Frequency range	300 Hz to 7 kHz
Transmission protocol	Neumann WL protocol
Potential-free two-way contact	DC30V, 500mA

Environmental conditions

Ambient temperature range	-30°C bis +70°C
Protection class	IP66 according to DIN EN 60529

1 5XX X
1 6XX X

WFD M+ Weatherproof Digital U_{k0} Call Stations
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Accessories

Art.-No.	Article	Description
1 570 3	25 W auxiliary amplifier	25 W / 100 V
1 950 5	Stand	For using the call station as a pillar
64 9 0109 031 3	Outdoor acoustic hood	For using in outdoor areas
64 9 0109 004 3	Indoor acoustic hood	For using in indoor areas
22 9 0501 560 0	Mounting kit	Adapter for drill holes of older call stations, incl. 2 angle brackets and 4 steel hexagon socket screws M6 x 18
61 3 1831 007 0	Blank panel	Instead of double toggle
22 2 1601 560 5	Double toggle	Instead of blank panel
22 3 0101 681 4	Dial keypad	Instead of blank panel
97 9 4413 561 9	Hexagon socket screw wrench SW5	For hexagon socket screws on housing panel
3 334 3	DS-6 U _{k0} II Adapter	8-fold. The DS-6 U _{k0} - Adapter II serves as an adapter or interface for connecting digital U _{k0} microphone units to the DS-6 decentralised communication system.

1 5XX X
1 6XX X

WFD M+ Weatherproof Digital U_{k0} Call Stations
Edition 01-2021 / Page 6

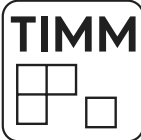
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The logo consists of three wavy horizontal lines above the letter 'N', which is also flanked by two wavy horizontal lines. Below this graphic, the word 'NEUMANN' is written in a bold, sans-serif font.

NEUMANN



Control centre

Industrial control

Video

Telephone

Process control

Access control

Evacuation

emergency call

Personal radio

Fire alarm system

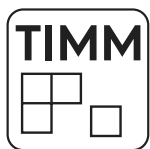
Intercom

Emergency exit control

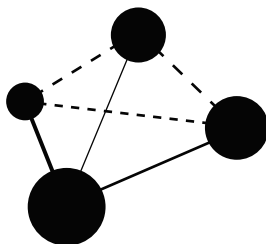
Public address system

Radio

Building services engineering



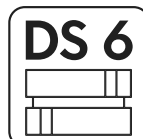
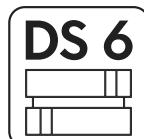
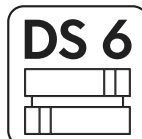
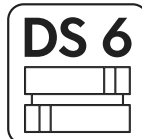
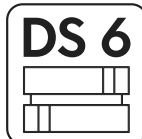
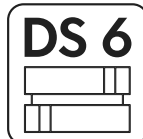
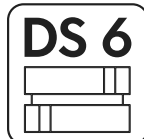
TIMM ComServer



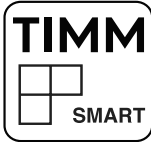
IP network



1-n



1-n



↓↑



↓↑



↓↑



↓↑



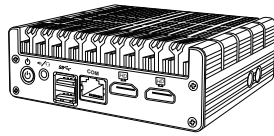
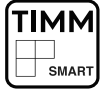
I/O Modul
NE 4 475 0

↓↑



CANopen

↓↑



NE 3 358 9
TIMM SMART



WEB Server



Config / state



SNMP / MIB

Com Server Application

Gateway Application

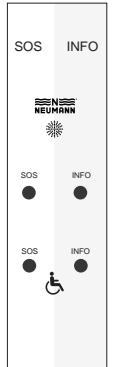
Speechbox* NE 5 067 8

SIP-Trunk* NE 5 065 6

Phone Server* NE 5 034 2

MODBUS / TCP-IP* NE 5 068 9

CANopen* NE 3 373 6



←
→
NIS

↓↑

DS 6 U_{k0} II Adapter NE 3 334 3

and / or

DS 6 PA Control I NE 3 342 2

and / or

DS 6 PA Control II NE 3 343 3

and / or

DS 6 Analogue Adapter 8 Fold NE 3 331 0

and / or

DS 6 Plug-in unit analog NE 2 390 4

and / or

DS 6 PACE EN 54-16 NE 3 344 4

↔

DS 6 PC Call Station „all-in-one“ NE 1 296 8

DS 6 MTSD Desktop Call Station NE 1 045 0

DS 6 MTSD IP42 Desktop Call Station NE 1 0854

DS 6 Call Station 19 Zoll (rack mounting) NE 1 278 8
NE 1 279 9

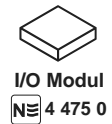
DS 6 Built-in Call Station (panel assemblies) NE 1 28X X¹

DS 6 Crane Call Station NE 1 156 3

DS 6 WFD IP Weatherproof Call Station NE 1 5XX X¹

DS 6 WFD IP Weatherproof Call Station Compact NE 1 87X X¹

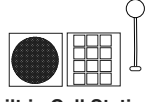
¹⁾: various models; product numbers depending on individual requirements.



I/O Modul
NE 4 475 0



PC Call Station
„all-in-one“
NE 1 296 8



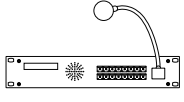
Built-in Call Station
(panel assemblies)
NE 1 29X X¹



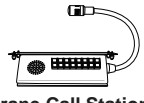
MTSD IP42
Desktop Call Station
NE 1 085 4



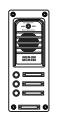
MTSD
Desktop Call Station
NE 1 045 0



Call Station 19 Zoll
(rack mounting)
NE 1 27X X¹



Crane Call Station
NE 1 156 3



WFD IP
Weatherproof
Call Station Compact
NE 1 87X X¹



WFD IP Weatherproof
Call Station
NE 1 573 6



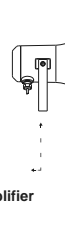
MTSD
Desktop Call Station U_{ko}
NE 1 84X X¹



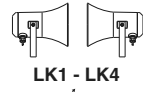
U_{ko} II Adapter 8 fold
NE 3 334 3



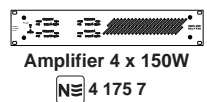
WFD EXPROOF
Call Station U_{ko}
NE 1 5XX X¹



WFD Weatherproof Call Station U_{ko}
with additional housing
NE 1 59X X¹
NE 1 6XX X¹



LK1 - LK4



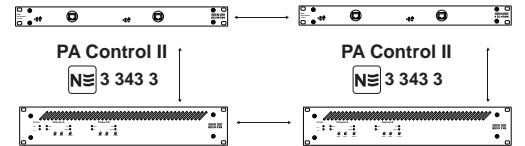
Amplifier 4 x 150W
NE 4 175 7



Third-Part
Hardware

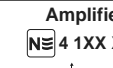


UHF (Ultra High Frequency)

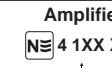


PA Control II
NE 3 343 3

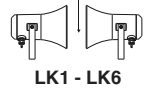
PA Control II
NE 3 343 3



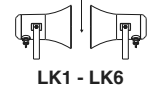
Amplifier
NE 4 1XX X¹



Amplifier
NE 4 1XX X¹



LK1 - LK6



LK1 - LK6



Amplifier
50Watt
NE 4 150 0



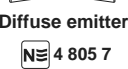
Amplifier
100 Watt
NE 4 160 1

LK1 - LK4²⁾

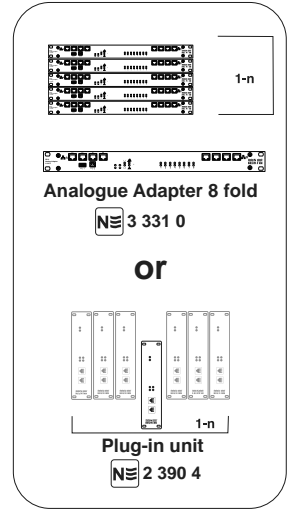
LK1 - LK4²⁾



Diffuse emitter
NE 4 805 7



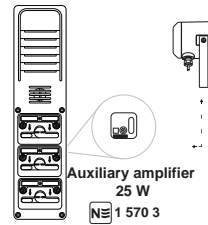
Diffuse emitter
NE 4 805 7



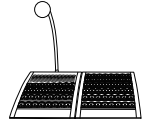
Analogue Adapter 8 fold
NE 3 331 0

Plug-in unit
NE 2 390 4

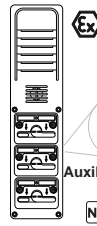
WFAK Analogue
Call Station Compact
with
WFAK additional housing
NE 1 9XX X¹



WFA Weatherproof
Analogue Call Station
NE 1 5XX X¹



MTSA Analogue
Multifunctional
Desktop Call Station
NE 1 75X X¹



Auxiliary amplifier
25 W
NE 1 570 3



WFA EXPROOF
Weatherproof Analogue Call Station
NE 1 5XX X¹

WL 1 Watt
Universal amplifier
NE 1 841 4

Auxiliary amplifier
25 W
NE 1 570 3

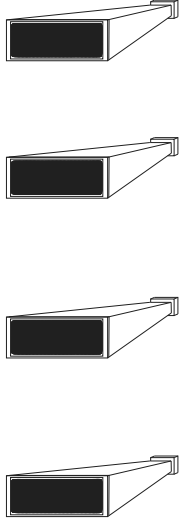


Auxiliary amplifier
25 W
NE 1 570 3

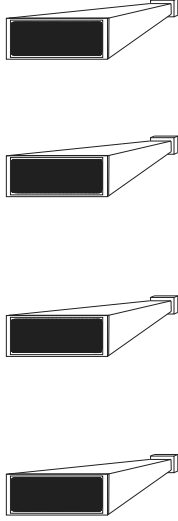
1) different models;
product numbers according to
individual requirements
2) optional



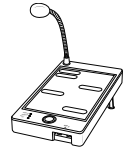
Tunnel horn / boundary horn speaker
NE 4 76X X



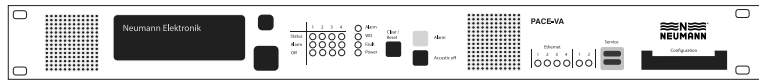
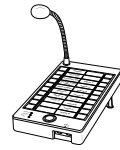
Tunnel horn / boundary horn speaker
NE 4 76X X



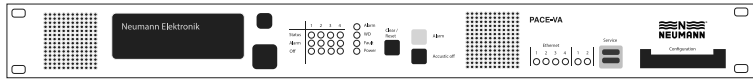
Desktop Call Station PACE-CSTP
DIN EN 54-16, Touch screen
NE 1 357 6



Desktop Call Station PACE-CS20
DIN EN 54-16, 20 Keys
NE 1 355 4



Voice alarm center unit
PACE-VA, EN54-16
NE 3 344 4

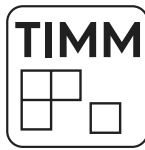


1-n

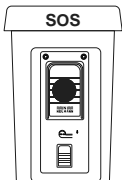
Emergency call and
information pillar
NE 8 0XX X¹⁾



I/O Modul
NE 4 475 0



Emergency Call Station
NE 8 0XX X¹⁾

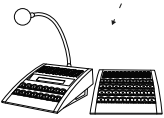


MODBUS
TCP-IP

CANopen

Control center
(OMC)
1-n

MTSD
Desktop Call Station
NE 1 045 0



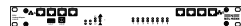
PC Call Station
„all-in-one“
NE 1 296 8



I/O Modul
NE 4 475 0



Analogue Adapter 8 fold
NE 3 331 0



1-n

¹⁾ different models; product numbers according to individual requirements



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45478 Mülheim an der Ruhr
Germany**

**info@neumann-elektronik.com
www.neumann-elektronik.com**

**1 5XX X
1 6XX X**

WFD M+ Weatherproof Digital U_{k0} Call Stations
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