

VOL 2

Call stations



NEUMANN®

VOL 1



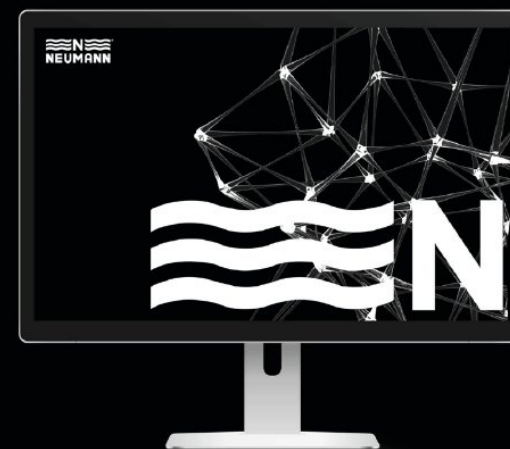
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VOL 2



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VOL 3



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VOL 4



NEUMANN

VOL 5



NEUMANN

VOL 6



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VOL 1

Weatherproof call stations

neumann-elektronik.com/vol-1-en.pdf



VOL 2

Call stations

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VOL 3

Components & Accessories

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VOL 4

Loudspeakers

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VOL 5

SOS pillars

neumann-elektronik.com/vol-5-en.pdf



VOL 6

**Emergency call
and information pillars**

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Call stations

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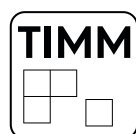
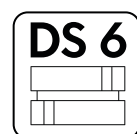
Gate and door call stations

DS-22 TTSD SIP Digital full duplex DS-22 / SIP gate and door call station	47
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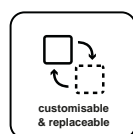
Driver's cab call station

FSS Driver's cab call station	61
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Accessories desk call stations	64
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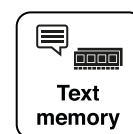
Full compatibility with DS-6 and TIMM system. Remotely configurable and remotely monitorable by DS-6 / TIMM system.



Inserts / Talk buttons interchangeable and expandable.



Service-friendly design - solderless extensions.



Integrated voice memory.



U_{k0} interface. Compatibility with DS-6 and TIMM system via Neumann U_{k0} Adapter.



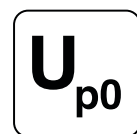
Fully metallised inner casing and fully metallised inserts.



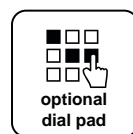
Up to 6km range.



Dust and waterproof, glass-fibre reinforced polyester housing. Use indoors as well as outdoors and in harsh environments.



U_{p0} interface. Compatibility with DS-6 and TIMM system via Neumann U_{p0} Adapter.



Optional dial pad.



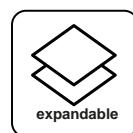
Frequency range.



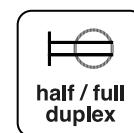
Protection class according to DIN EN 60529, respectively IEC 60529.



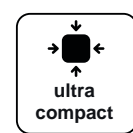
Analogue interface. Compatibility with DS-6 and TIMM system via Neumann Analogue Adapter.



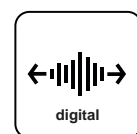
Expandable with additional housing.



Half / full duplex compatibility.



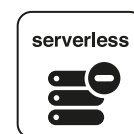
Compact design.



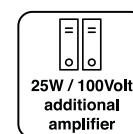
Digital communication interface.



Protected against electromagnetic interference (EMC).



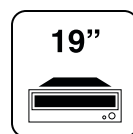
Serverless structure. Just two call stations connected via a network cable function as an independent communication network.



25W / 100 Volt additional amplifier solderless retrofittable on location.



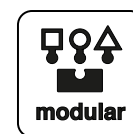
The new Neumann DS-22 system.



Intended for 19" rack built-in installation.



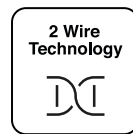
Can be used in a wireless LAN network.



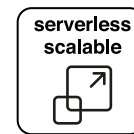
Modular design. Adaptation to customer and project-specific requirements possible.



SIP based communication interface.



Two-wire technology. Allows up to 6km range, depending on the technology used.



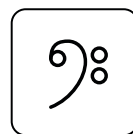
Serverless extension of the communication network. The call stations can be controlled directly among each other.



Intended for use in railcars (locomotives, railway carriages) and driving trailers for local rail traffic.



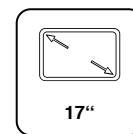
Redundant use possible.



Excellent speech intelligibility.



Low line requirement.



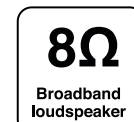
Robust touch monitor 17" with integrated PC.



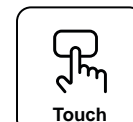
EX-protection through flame-proof enclosure. ATEX certified.



Microphone sensitivity and integrated loudspeaker can be adjusted directly on location.



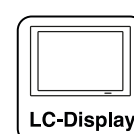
Integrated full range loudspeaker.



Touch call station. Operation is via a touch-sensitive monitor.



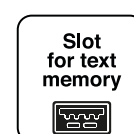
Switchable volume reduction e.g. for night operation.



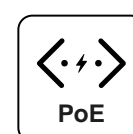
LC display integrated.



Incl. table microphone with pop protection, freely placeable (wired).



Slot for optional USB voice storage device.



Power supply via PoE interface



Largest possible number of keys.



Freely programmable interface pages. Free key assignment as WL target keys or for local functions.

Glossary

Main features.

Optionally expandable with Neumann USB audio module for additional microphone monitoring according to DIN 833-4

- Potential-free interference contact included
- Automatic limiter for optimal speech control
- Expandable with 1W desktop loudspeaker / built-in loudspeaker
- Power failure monitoring
- Headphone / headset operation



Desk call stations

DS-6 PCTS 17 PC Touch DS-6 IP call station 17 inch



<https://neumann-elektronik.com/ds-6-touch-sprechstelle-17>

- Robust touch monitor 17" with integrated PC
- Full compatibility with DS-6 and TIMM system
- Functions configurable by DS-6 / TIMM system
- Direct connection of microphone or headset
- Incl. table microphone with pop protection, freely placeable (wired)
- 2 loudspeakers each 2W integrated
- Pages with background graphics and superimposed targets
- Incl. 40 keys / symbols (optionally expandable to 2000)
- Incl. 3 surface pages (optionally extendable)
- Incl. DS-6 PC call station software licence / hardware dongle
- Free key assignment as WL target keys or for local functions
- 2 Ethernet interfaces with DS-6 redundancy
- User interface (pages) configurable
- Freely programmable buttons / symbols
- Freely programmable interface pages
- Creation of own configuration during operation
- Optional connection to a management system

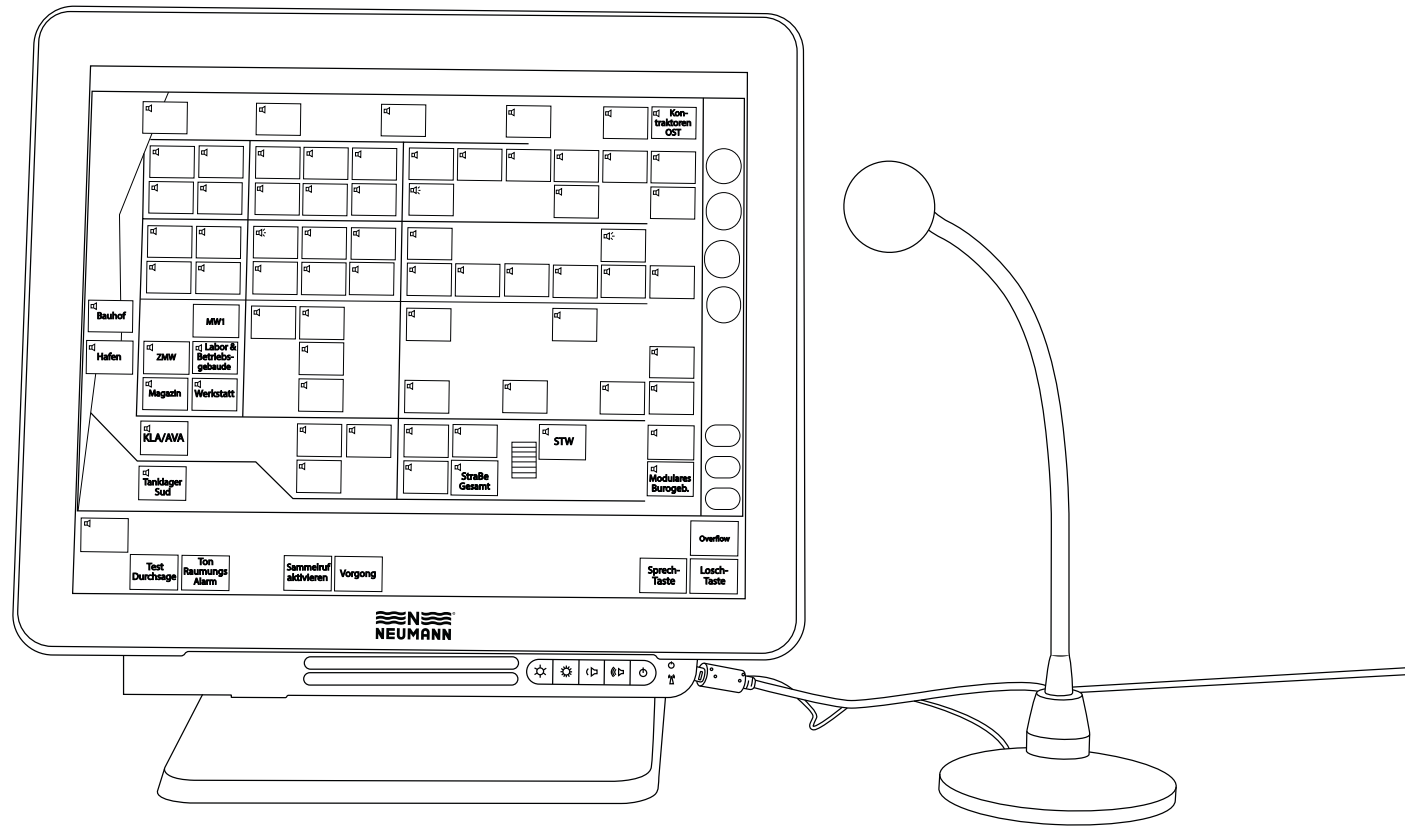
The DS-6 Touch call station is a screen-operated call station that enables operation with supporting visual information. It is used in DS-6 systems when a graphically supported push-button structure is to increase the comfort of operation, as well as to better signal system statuses in colour.

In addition to the WL/EL functions of an MTSD desk call station, the call station can be used as part of an IP SOS operator workstation. SOS calls/alarms and monitor functions are then available in conjunction with our TIMM system and SIP telephones (not included).

The call station offers a very good overview due to the division into freely definable function levels. For example, the destination buttons can be programmed according to their function, their local assignment or other assignments on different, individually selectable pages. The individual screen pages can each be divided into several windows. Each window can be provided with any graphic to support the visual information.

Bitmaps can be displayed on the key surfaces depending on the key status, e.g. to signal busy, alarm or fault messages. Operation is by finger via a touch panel. The monitor with touch panel has an integrated PC and is designed as a desktop device.

The interface to the DS-6 system is via one or two Ethernet interfaces. The version with two interfaces fulfils the DS-6 redundancy function of all decentralised DS-6 components.



DS-6 PCTS 17
Art. no. 1 296 8

DS-6 PCTS 17

PC Touch DS-6 IP call station 17 inch

Art. no.	1 296 8
Mechanical data	
Weight	Approx. 8kg
Enclosure dimensions Display (HxWxD)	398mm x 391mm x 252mm
Length Electret gooseneck microphone	350mm
Enclosure colour	Black
Material	Plastic, Glass
Interface	
Display resolution	1280 x 1024 at 60Hz
Number of keys / buttons	40 Included (optionally expandable up to 2000)
Number of screen pages	3 Included (optionally extendable)
Graphics	Any
Electrical data	
Nominal operating voltage	AC 230V
Operating voltage range (External power supply)	AC 100V ... AC 230V
Frequency range	200 Hz ... 12 kHz
Connectivity	
Line interface	2x Ethernet
Audio interface	Microphone / Headphones / Headset
Transmission protocol	Neumann DS-6 IP protocol
Ethernet protocol	IEEE 802.3u
Environmental conditions	
Temperature range	0°C to +35°C
Protection class according to DIN EN 60529 or IEC 60529	IP20

Accessories	
919 1130 798 8	SIP IP telephone for operating station extension
279 1001 285 5	Configuration per additional button / symbol by the manufacturer
279 1101 285 6	Configuration per additional side on gridded surface by the manufacturer
969 1130 906 6	Headphones with jack plug 3.5mm
989 1130 903 3	Headset
1 299 1	Audio module PC call station (USB)
1 260 9	Stand version gooseneck electret microphone 450mm
1 267 6	Stand version gooseneck electret microphone 350mm
1 214 8	Built-in loudspeaker 8Ω 1 Watt
4 760 7	Desktop loudspeaker 8Ω
3 374 7	NECOM server for connection to a management system



Desk call stations

DS-6 MDES IP

Multifunctional digital DS-6 IP panel-mount call station



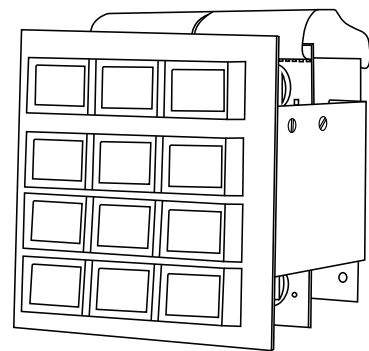
<https://neumann-elektronik.com/ds-6-einbausprechstelle>

- Full compatibility with DS-6 and TIMM system
- Remotely configurable and remotely monitorable by DS-6 / TIMM system
- Up to 48 push buttons
- Dynamic built-in speaker, 1W / 8Ω
- Gooseneck electret microphone (420mm or 550mm)
- High speech intelligibility (12kHz bandwidth)
- Free key assignment as WL target keys or for local functions
- Low and high volume control (12dB level reduction)
- Direct speech connections via key-controlled line selection
- Microphone monitoring
- Slot for text memory
- Low line costs
- USB stick as voice memory optionally available

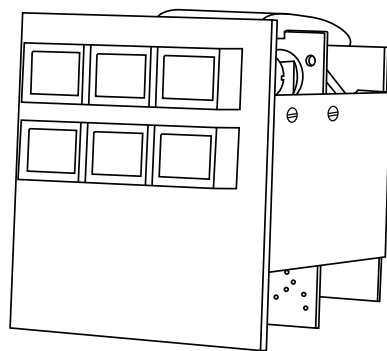
The DS-6 MDES IP panel-mount call station enables direct speech connections with other call stations, loudspeaker announcements and also programmable local functions. The panel-mount call station is used for the harmonious built-in of call stations in control panels, switchboards and control desks.

The DS-6 MDES IP panel-mount call station corresponds technically to the DS-6 MTSD desk call station, but is broken down into individual modules. These include a switch plate with the push buttons, built-in loudspeaker, gooseneck microphone and a housing with the electronic and connection elements. Switch plate and built-in loudspeaker are accommodated in standard housings of 96 mm x 96 mm. They fit installation openings according to IEC 61554.

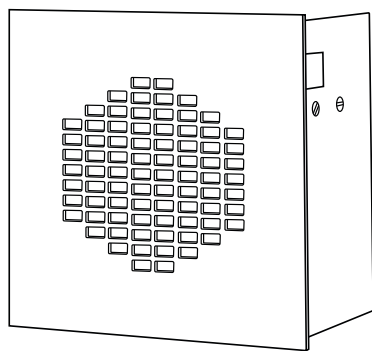
The DS-6 MDES IP panel-mount call station has - in addition to the destination buttons for WL / EL - a volume control and a voice memory. The voice memory is a USB stick which is located inside the electronics housing on a printed circuit board. This USB stick contains standard tones and texts and can additionally be loaded with customer-specific announcement texts, tone sequences or audio files and thus be played back at the touch of a button.



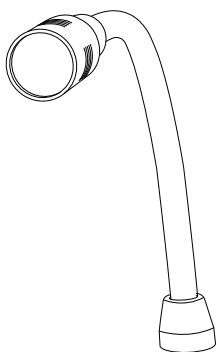
Button plate
with 12 push-buttons
Art. no. 1 287 8



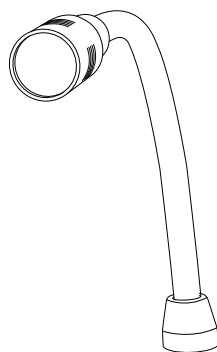
Button plate
with 6 push-buttons
Art. no. 1 286 7



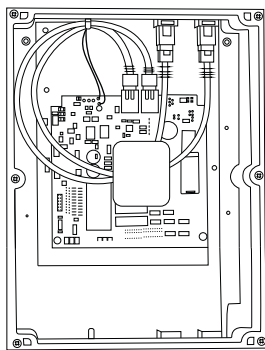
Built-in loudspeaker
1W / 8Ω
Art. no. 1 214 8



Gooseneck microphone
(approx. 420mm)
Art. no. 1 288 9



Gooseneck microphone
(approx. 550mm)
Art. no. 1 289 0



Electronics and connection housing
(up to 12 keys) Art. no. 1 282 3
(up to 48 keys) Art. no. 1 283 4

DS-6 MDES IP
Multifunctional digital DS-6 IP panel-mount call station

Art. no.	1 2xx x
Mechanical data	
Weight	Approx. 3.5kg
Enclosure dimensions Electronics housing (HxWxD)	110mm x 230mm x 300mm
Enclosure dimensions Modul	96mm x 96mm Installation cut-outs in accordance with IEC 61554
Length Electret gooseneck microphone	420mm / 550mm
Enclosure colour	
Material	
Number of push buttons	Depending on version 6-12-18-24-36-48
Electrical data	
Nominal power consumption	5W
Maximum power consumption	10W
Frequency range	100Hz to 12kHz
Connectivity	
Call station power supply	Via network connection 1: Power over Ethernet according to IEEE 802.3af Plug-in power supply: DC 24V -10/+ 15% Central power supply: 48V - 10/+15%
Ethernet interfaces	2
Transmission protocol	Neumann DS-6 IP protocol
Ethernet protocol	IEEE 802.3u
Environmental conditions	
Temperature range	0°C to +50°C
Protection class according to DIN EN 60529 or IEC 60529	IP20

Module	
1 286 7	Button plate with 6 push-buttons
1 287 8	Button plate with 12 push-buttons
1 214 8	Built-in loudspeaker
1 288 9	Gooseneck microphone (approx. 420mm)
1 289 0	Gooseneck microphone (approx. 550mm)
1 282 3	Electronics and connection housing (up to 12 keys)
1 283 4	Electronics and connection housing (up to 48 keys)
21 4 1143 001 7	USB stick. Contains standard tones and texts. It can additionally be loaded with customised announcement texts, tone sequences or audio files, which can be played back at the push of a button.



Detailed installation dimensions



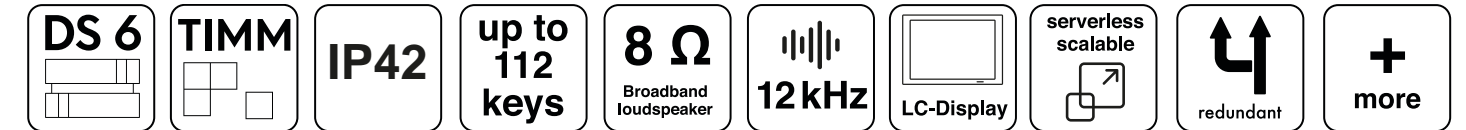
<https://neumann-elektronik.com/installation/ds-6-einbausprechstelle.pdf>



Desk call stations

DS-6 MTSD F+

Multifunctional DS-6 IP desk call station with membrane keypad (IP42)



<https://neumann-elektronik.com/mtsd-ds-6-ip42-sprechstelle>

- Full compatibility with DS-6 and TIMM system
- Remotely configurable and remotely monitored by DS-6 / TIMM system
- Direct speech connections via key-controlled line selection
- High speech intelligibility (12 kHz bandwidth)
- Free key assignment as WL target keys or for local functions
- Flexible gooseneck electret microphone (300 mm)
- Low and high volume control (12dB level reduction)
- Low line input
- Integrated full range loudspeaker, 8Ω
- Up to 112 line key panels with LED signalling
- Shock- and break-proof ABS plastic housing
- Backlit two-line LC display
- Microphone monitoring
- Two Ethernet ports for redundant network setup

The DS-6 MTSD F+ call station is used in the DS-6 decentralised communication system.

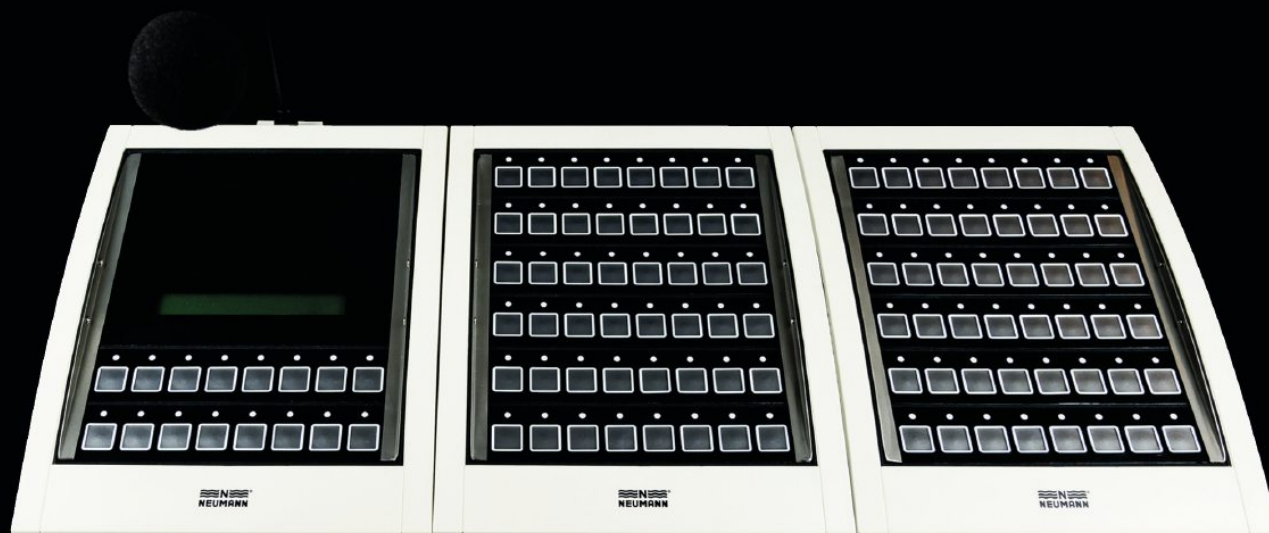
It enables direct voice connections with other call stations, loudspeaker announcements and also programmable local functions.

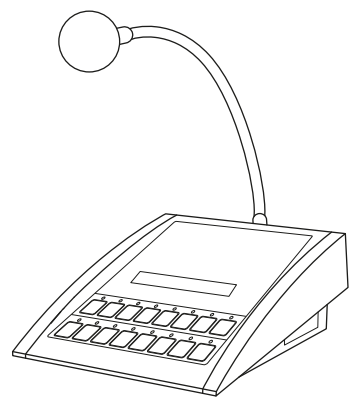
A built-in display provides additional display options for status and fault indications in plain text. The call station has 16 line keys. With suitable add-on housing, an extension to 64 or 112 line keys is possible.

In addition to the destination buttons for WL/EL, the call station has volume control and an optional voice memory. It fulfils the requirements of an intercom station.

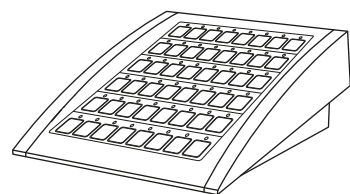
As an optional voice memory, a USB stick is available as an accessory, which is located inside the call station on the printed circuit board. This USB stick contains standard tones and texts and can additionally be loaded with customer-specific announcement texts, tone sequences or audio files and thus be played back at the touch of a button.

By default, the call station is powered via Power over Ethernet. If a local power supply is desired, various optional plug-in / table power supplies are available (see accessories).

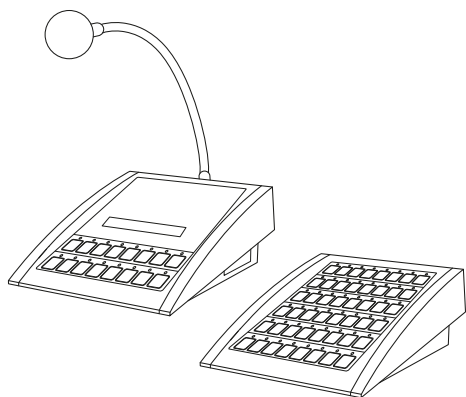




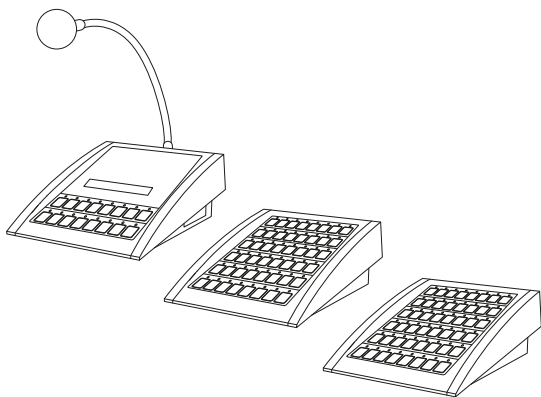
MTSD DS-6 F+, 16 keys
Art. no. 1 085 4



MTSD DS-6 F+ Add-on housing, 48 keys
Art. no. 1 087 6



MTSD DS-6 F+, 64 keys
Art. no. 1 085 4 with one 1087 6



MTSD DS-6 F+, 112 keys
Art. no. 1 085 4 with two 1087 6

DS-6 MTSD F+
Multifunctional DS-6 IP desk call station
with membrane keypad (IP42)

Art. no.	1 085 4 Call station	1 087 6 Add-on housing
Mechanical data		
Weight	Approx. 1.1kg	Approx. 0.8kg
Enclosure dimensions (HxWxD)	88mm x 183mm x 260mm	88mm x 183mm x 235mm
Enclosure colour	Pearl white (RAL 1013) / Graphite black (RAL 9011)	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	16	48
Electrical data		
Nominal power consumption	5W	
Maximum power consumption	10W	
Frequency range	100Hz to 12kHz	
Connectivity		
Call station power supply	Via network connection 1: Power over Ethernet according to IEEE 802.3af Plug-in power supply: DC 24V -10/+ 15% Central power supply: 48V - 10/+15%	
Ethernet interfaces	2	
Ethernet protocol	IEEE 802.3u	
Transmission protocol	Neumann DS-6 IP protocol	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP42	

Accessories	
21 4 1143 001 7	USB voice memory stick with standard tones and texts
21 4 1516 024 6	Labelling sheet DIN A4
22 9 9901 085 5	Labelling sheet for PC with laser printer
22 3 0101 045 8	Plug-in power supply Euro
22 9 0301 045 6	International plug-in power supply with additional plug adapters for England, USA and Australia
22 3 0401 045 1	Table power supply for international applications, equipped with an IEC320-C14 plug, for adapting country-specific connection cables
91 3 1116 838 7	Power over Ethernet Injector for PoE supply when PoE is not available
99 9 1980 002 7	Connection cable for table power supply. IEC320 connection cable with C14 socket for the European market.



Desk call stations

DS-6 MTSD

Multifunctional DS-6 IP desk call station



<https://neumann-elektronik.com/mtds-ds-6-ip>

- Full compatibility with DS-6 and TIMM system
- Remotely configurable and remotely monitored by DS-6 / TIMM system
- Direct speech connections via key-controlled line selection
- High speech intelligibility (12 kHz bandwidth)
- Free key assignment as WL target keys or for local functions
- Microphone monitoring
- Slot for text memory
- Low line expenditure
- Integrated full range loudspeaker, 8Ω
- Backlit two-line LC display
- Replaceable illuminated line key / push-buttons with LED signalling
- Flexible gooseneck electret microphone (300mm)
- Shock- and break-proof ABS plastic housing
- USB stick optional

The MTSD DS-6 call station is used in the DS-6 decentralised communication system.

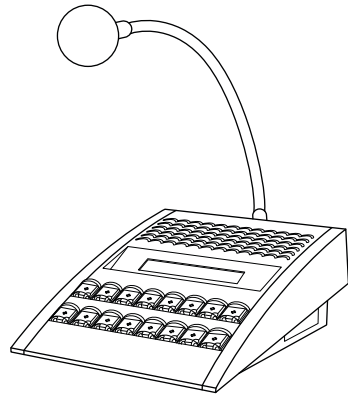
It enables direct voice connections with other call stations, loudspeaker announcements and also programmable local functions. A built-in display provides additional display options for status and fault indications in plain text.

The call station has 16 line keys. An extension to 64 or 112 line keys is possible by means of suitable supplementary housings.

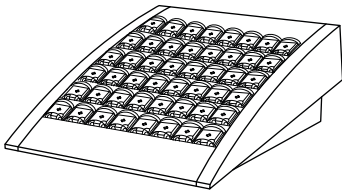
In addition to the destination buttons for WL/EL, the call station has volume control and a voice memory. It fulfils the requirements of an intercom station.

A USB stick is available as a voice memory, which is located inside the call station on the printed circuit board. This USB stick contains standard tones and texts and can additionally be loaded with customer-specific announcement texts, tone sequences or audio files and thus be played back at the touch of a button.

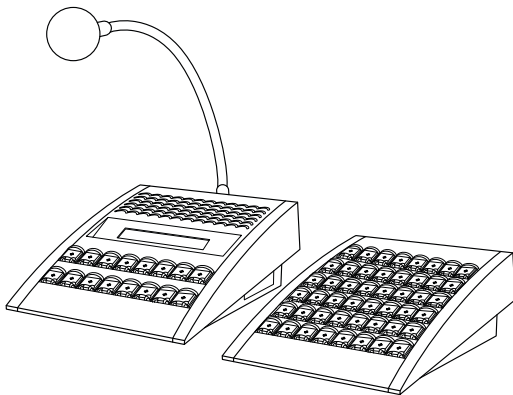
By default, the call station is powered via Power over Ethernet. If a local power supply is desired, various plug / desktop power supplies are available (see accessories).



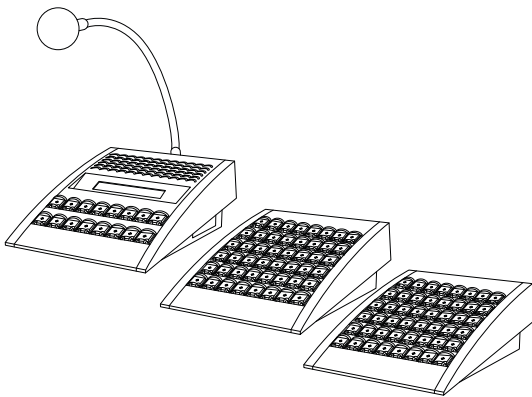
MTSD DS-6, 16 keys
Art. no. 1 045 0



MTSD Add-on housing, 48 keys
Art. no. 1 047 2



MTSD DS-6, 64 keys
Art. no. 1 045 0 with one 1 047 2



MTSD DS-6, 112 keys
Art. no. 1 045 0 with two 1 047 2

MTSD

Multifunctional DS-6 IP desk call station

Art. no.	1 045 0	1 047 2 Add-on housing
Mechanical data		
Weight	Approx. 1.1kg	Approx. 0.8kg
Enclosure dimensions (HxWxD)	88mm x 183mm x 260mm	88mm x 183mm x 235mm
Enclosure colour	Pearl white (RAL 1013) / Graphite black (RAL 9011)	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	16	48
Electrical data		
Nominal power consumption	5W	
Maximum power consumption	10W	
Frequency range	100Hz to 12kHz	
Connectivity		
Power supply	Via network connection 1: Power over Ethernet according to IEEE 802.3u Plug-in power supply: DC 24 V -10/+ 15% Central power supply: 48 V - 10/+15%	
Ethernet interfaces	2	
Ethernet interfaces	IEEE 802.3u	
Transmission protocol	Neumann DS-6 IP protocol	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP20	

Accessories	
22 9 0601 850 3	Key cover with fixing screws (5 pieces)
22 9 0701 850 4	Mounting kit for key cover incl. drilling template, drill and mounting instructions
21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
21 2 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
22 3 0101 045 8	Plug-in power supply Euro
22 9 0301 045 6	International plug-in power supply with additional plug adapters for England, USA and Australia
22 3 0401 045 1	Table power supply for international applications, equipped with an IEC320-C14 plug, for the adaptation of country-specific connection cables
99 9 1980 002 7	Connection cable for table power supply, IEC320 connection cable with socket C14 for the European market
91 3 1116 838 7	Power over Ethernet Injector for PoE supply when PoE is not available





Desk call stations

MTSA

Multifunctional analogue desk call station



<https://neumann-elektronik.com/mtsa-analoge-tischsprechstelle>

- Full compatibility with DS-6 and TIMM system via Neumann Analogue Adapter or Neumann analogue plug-in unit
- Direct speech connections via key-controlled line selection
- Free key assignment as WL target keys or for local functions
- Adjustable microphone sensitivity with automatic level limiting
- Low line expenditure
- Integrated full range loudspeaker, 8Ω
- Exchangeable illuminated push-buttons with LED signalling
- Flexible gooseneck electret microphone (300mm)
- Shock- and break-proof ABS plastic housing

The MTSA analogue call stations can be used in all analogue intercom systems.

They enable direct speech connections with other call stations and loudspeaker announcements via loudspeaker circuits of EL systems.

The basic version of the analogue call station has 8 to 32 line keys for proven direct line selection of the desired voice connections.

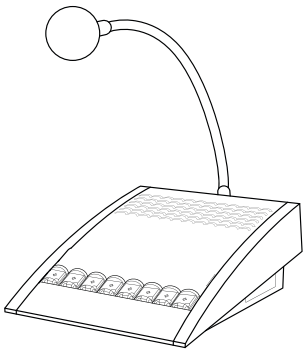
Extended call station versions with up to 80 line keys are available with suitable add-on housings.

MTSA

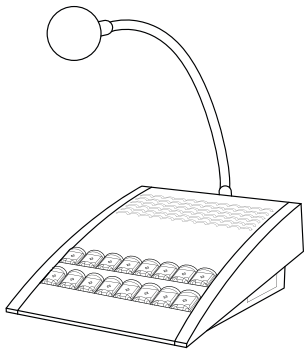
Multifunctional analogue desk call station

Art. no.	1 75x x	1 75x x Add-on housing
Mechanical data		
Weight	Approx. 1.1kg	Approx. 1.1kg
Enclosure dimensions (HxWxD)	88mm x 183mm x 260mm	88mm x 183mm x 235mm
Enclosure colour	Pearl white (RAL 1013) / Graphite black (RAL 9011)	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	Depending on version 8-16-24-32	Depending on version 16-32-48
Electrical data		
Nominal operating voltage	DC 24V, DC 48V, DC60V	
Max. Quiescent current	38mA (DC 48V / DC 60V), 30mA (DC 24V)	
Max. Operating current	82mA (DC 48V / DC 60V), 135mA (DC 24V)	
Frequency range	300Hz to 10kHz	
Connectivity		
Call station power supply	Phantom power supply DC 48V	
Transmission protocol	Analogue	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP20	

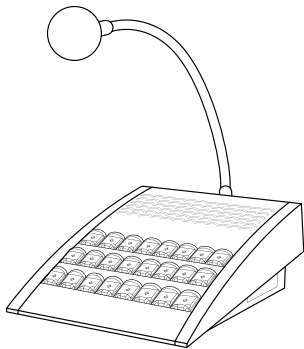
Accessories	
22 9 0601 850 3	Key cover with fixing screws (5 pieces)
22 9 0701 850 4	Mounting kit for key cover incl. drilling template, drill and mounting instructions
21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
21 2 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
1 777 2	Wall-mounted plenum box
1 794 1	Connection cable 3m, call station to connection box
1 795 2	Connection cable 5m, call station to connection box
1 796 3	Connection cable 10m, call station to connection box
2 390 4	DS-6 plug-in unit, analogue. The DS-6 plug-in unit is used as an adapter/interface for connecting an analogue of an analogue call station.
3 331 0	DS-6 Analogue Adapter. 8-fold. The DS-6 Analogue Adapter serves as an adapter or interface for connecting of up to eight analogue call stations to the DS-6 decentralised communication system.



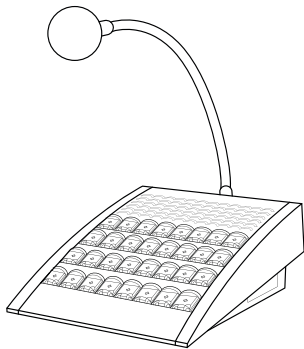
MTSA
Desk call station,
8 keys
Art. no. 1 750 3



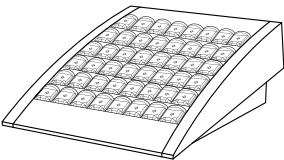
MTSA
Desk call station,
16 keys
Art. no. 1 751 4



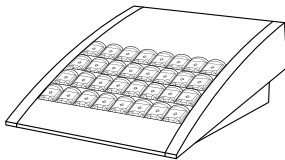
MTSA
Desk call station,
24 keys
Art. no. 1 752 5



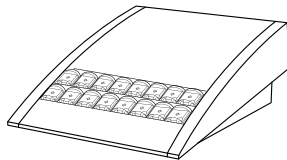
MTSA
Desk call station,
32 keys
Art. no. 1 753 6



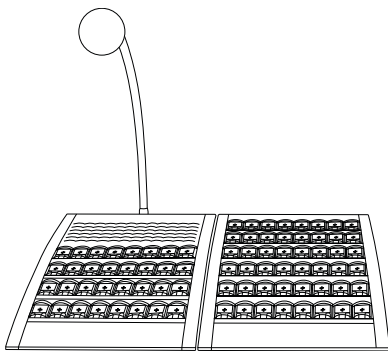
MTSA
Add-on housing, 48 keys
Art. no. 1 756 9



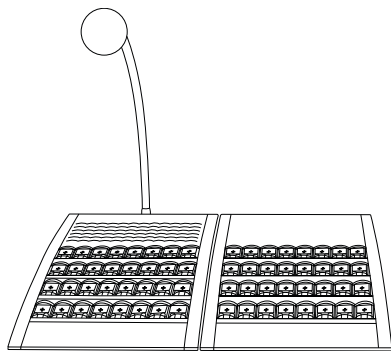
MTSA
Add-on housing, 32 keys
Art. no. 1 755 8



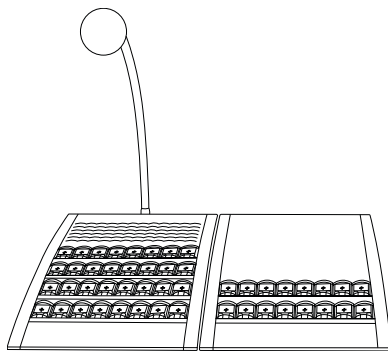
MTSA
Add-on housing, 16 keys
Art. no. 1 754 7



MTSA with add-on housing,
80 keys
Art. no. 1 759 2



MTSA with add-on housing,
64 keys
Art. no. 1 758 1



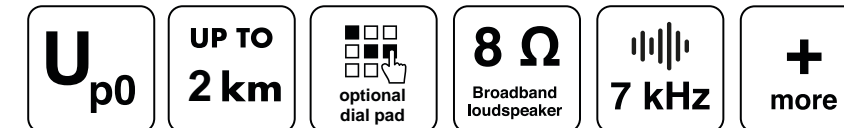
MTSA with add-on housing,
48 keys
Art. no. 1 757 0





Desk call stations

MTSD U_{p0} Multifunctional digital U_{p0} desk call station



- Full compatibility with DS-6 and TIMM system via Neumann U_{p0} Adapter
- Direct speech connections via key-controlled line selection
- Functions configurable via DS-6
- High speech intelligibility (7 kHz bandwidth)
- Free key assignment as WL target keys or for local functions
- Low line expenditure
- Low and high volume control (12dB level reduction)
- Integrated full range loudspeaker, 8Ω
- Exchangeable illuminated push-buttons with LED signalling
- Flexible gooseneck electret microphone (300mm)
- Shock- and break-proof ABS plastic housing

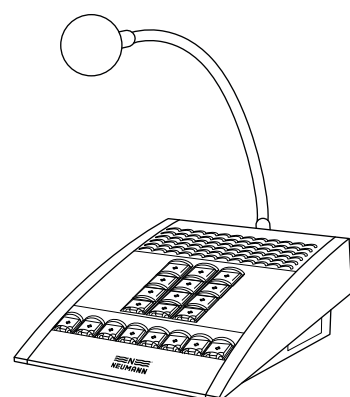
The MTSD U_{p0} multifunctional desk call stations are used in conjunction with an U_{p0} Adapter in the DS-6 decentralised communication system as well as in the higher-level TIMM system.

They enable direct speech connections with other call stations, loudspeaker announcements and also programmable local functions.

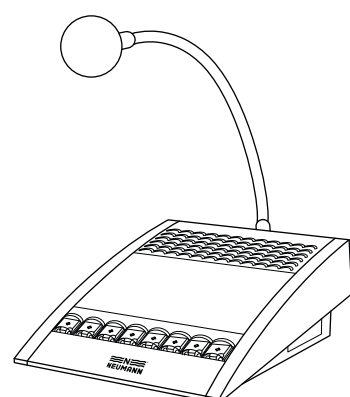
The call stations with part no. 1 826 7, 1 827 8 and 1 843 6 can directly reach up to 32 subscribers via the up to 32 destination buttons with signalling. If it is necessary to reach more than 32 subscribers, the call station with art. no. 1 825 6 enables reaching a large number of subscribers by means of the additional keypad. In this case, however, the number of destination buttons with signalling is limited to six, as one button each must be set up as a „Speak“ and „Clear Dial“ button.

The MTSD U_{p0} multifunctional desk call station is connected directly via one of the eight U_{p0} interfaces of the DS-6 U_{p0} Adapter. The call station can also be powered via this connection line, so no additional power supply is required. A phantom power supply (two-wire operation) for shorter distances is also provided. In case of adverse cabling on location, additional plug-in or desktop power supplies for local power supply are available as accessories, see accessories.

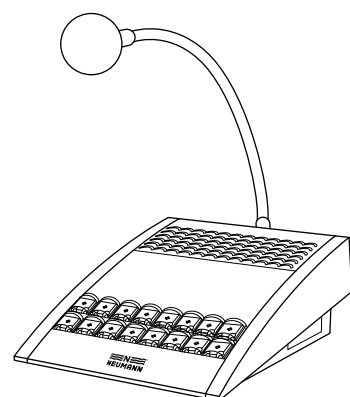
For the call station with dialling keypad, the keys of the dialling keypad can also be configured as fixed line keys. A call station with a dialling keypad would thus be able to establish a direct speech connection with 20 destinations. No LED signalling is possible for the additional line keys of the keypad. The function of the dialling keypad is then no longer available.



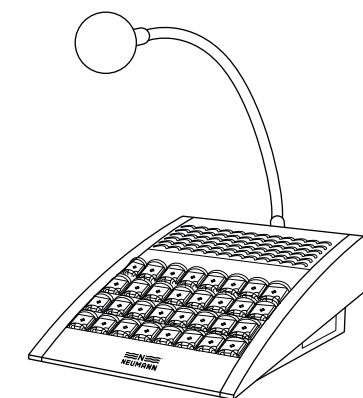
MTSD U_{p0}, 8 keys + dial keypad
Art. no. 1 825 6



MTSD U_{p0}, 8 keys
Art. no. 1 826 7



MTSD U_{p0}, 16 keys
Art. no. 1 827 8

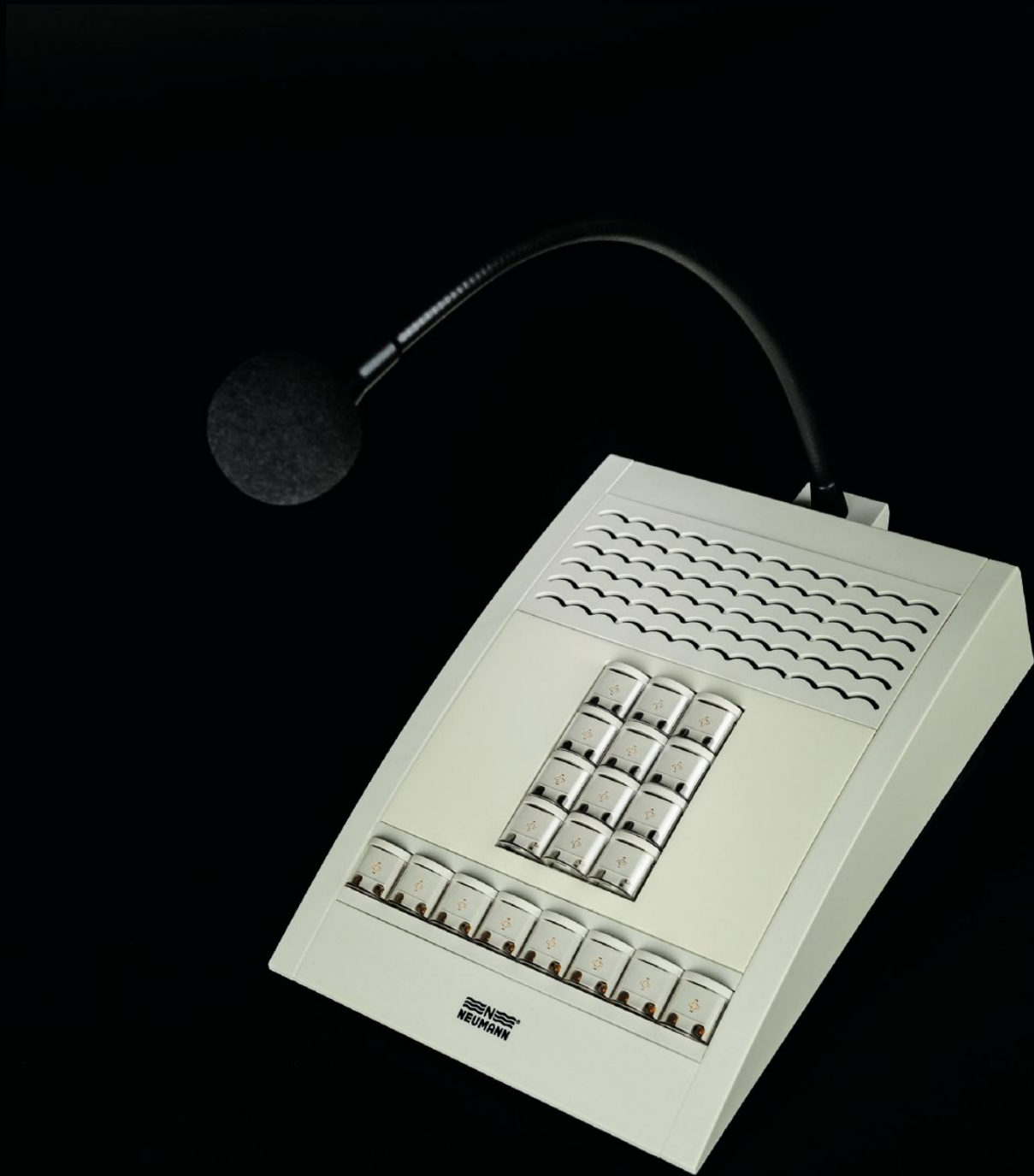


MTSD U_{p0}, 32 keys
Art. no. 1 843 6

MTSD U_{p0} Multifunctional digital U_{p0} desk call station

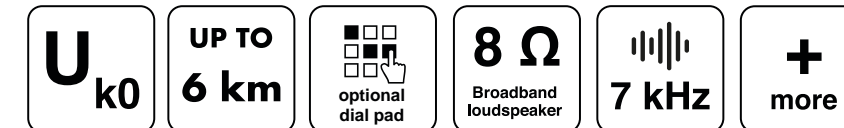
Art. no.	1 825 6	1 8xx x
Mechanical data		
Weight	Approx. 1.5kg	Approx. 1.5 - 1.84kg
Enclosure dimensions (HxWxD)	88mm x 183mm x 260mm	
Enclosure colour	Pearl white (RAL 1013) / Graphite black (RAL 9011)	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	8 (2 assigned as „Speak“ and „Dial / Delete“ key) + dial keypad	8-16-32
Electrical data		
Nominal power consumption	5W	
Maximum power consumption	10W	
Frequency range	300Hz to 7kHz	
Max. Line length of the U _{p0} interface	2km	
Permissible line resistance: for power supply	150 Ohm at 48V / 1W 80 Ohm at 48V / max. modulation	
for U _{p0} interface	400 Ohm	
Connectivity		
Call station power supply	Via DS-6 U _{p0} Adapter: DC 48V -10/+15%. Via plug-in power supply: DC 24V -10/+15%	
Transmission protocol	Neumann U _{p0} protocol	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP20	

Accessories	
22 9 0601 850 3	Key cover with fixing screws (5 pieces)
22 9 0701 850 4	Mounting kit for key cover incl. drilling template, drill and mounting instructions
21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
21 2 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
22 3 0101 045 8	Plug-in power supply Euro
22 9 0301 045 6	International plug-in power supply with additional plug adapters for England, USA and Australia
22 3 0401 045 1	Table power supply for international applications, equipped with an IEC320-C14 plug, for the adaptation of country-specific connection cables
99 9 1980 002 7	Connection cable for table power supply, IEC320 connection cable with socket C14 for the European market



Desk call stations

MTSD U_{k0} Multifunctional U_{k0} desk call station



- Direct speech connections via key-controlled line selection
- Full compatibility with DS-6 and TIMM system via Neumann U_{k0} Adapter
- Functions configurable through DS-6
- High speech intelligibility (7 kHz bandwidth)
- Free key assignment as WL target keys or for local functions
- Low line costs
- Low and high volume control (12dB level reduction)
- Integrated full range loudspeaker, 8Ω
- Exchangeable illuminated push-buttons with LED signalling
- Flexible gooseneck electret microphone (300mm)
- Shock- and break-proof ABS plastic housing

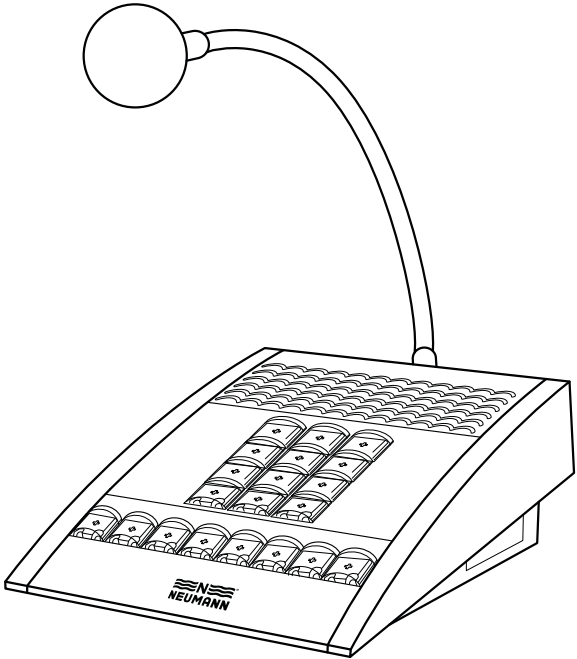
The MTSD U_{k0} multifunctional desk call stations are used in conjunction with a U_{k0} Adapter in the DS-6 decentralised communication system as well as in the higher-level TIMM system.

They enable direct voice connections with other call stations, loudspeaker announcements and also programmable local functions.

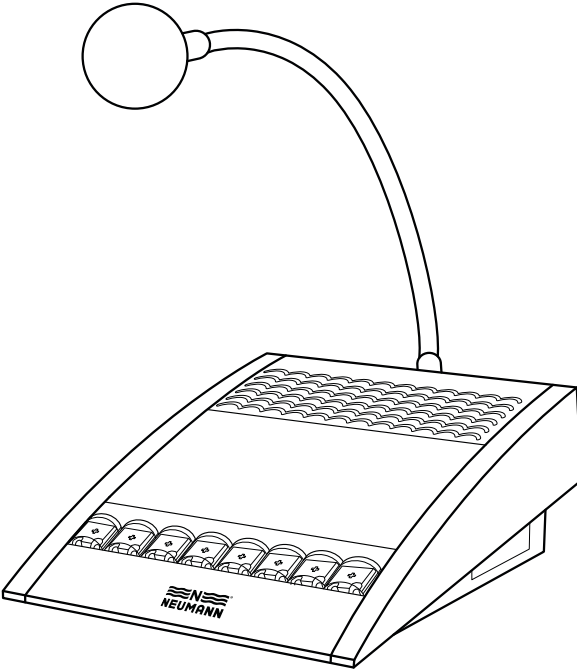
The call station can directly reach up to eight subscribers via the eight destination buttons with signalling. If it is necessary to reach more than eight subscribers, the call station with the art. no. 1 845 8 can reach a large number of subscribers via the additional keypad. In this case, however, the number of destination buttons with signalling is limited to six, as one button each must be set up as a „Speak“ and „Clear Dial“ button.

The MTSD U_{k0} multifunctional desk call station is connected directly via one of the eight U_{k0} interfaces of the DS-6 U_{k0} Adapter. The call station can also be powered via this connection line, so no additional power supply is required. A phantom power supply (two-wire operation) for shorter distances is also provided. In case of adverse cabling on location, additional plug-in or desktop power supplies for local power supply are available as accessories, see accessories.

For the call station with dialling keypad, the keys of the dialling keypad can also be configured as fixed line keys. A call station with a dialling keypad would thus be able to establish a direct speech connection with 20 destinations. No LED signalling is possible for the additional line keys of the keypad. The function of the dialling keypad is then no longer available.



MTSD U_{k0}, 8 keys + dialling keypad
Art. no. 1 845 8



MTSD U_{k0}, 8 keys
Art. no. 1 846 9

MTSD U_{k0}
Multifunctional U_{k0} desk call station

Art. no.	1 845 8	1 846 9
Mechanical data		
Weight	Approx. 1.5kg	Approx. 1.2kg
Enclosure dimensions (HxWxD)	88mm x 183mm x 260mm	
Enclosure colour	Pearl white (RAL 1013) / Graphite black (RAL 9011)	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	8 (2 assigned as „Speak“ and „Dial / Delete“ key) + dialling keypad	8
Electrical data		
Nominal power consumption	5W	
Maximum power consumption	10W	
Frequency range	300Hz to 7kHz	
Max. Cable length of the U _{k0} interface	6km	
Permissible line resistance: for power supply	150 Ohm at 48V / 1W	
for U _{k0} interface	80 Ohm at 48V / max. modulation 400 Ohm	
Connectivity		
Call station power supply	Via DS-6 U _{k0} Adapter: DC 48V -10/+15%. Via plug-in power supply: DC 24V -10/+15%	
Transmission protocol	Neumann U _{k0} protocol	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP20	

Accessories	
22 9 0601 850 3	Key cover with fixing screws (5 pieces)
22 9 0701 850 4	Mounting kit for key cover incl. drilling template, drill and mounting instructions
21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
21 2 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
22 3 0101 045 8	Plug-in power supply Euro
22 9 0301 045 6	International plug-in power supply with additional plug adapters for England, USA and Australia
22 3 0401 045 1	Table power supply for international applications, equipped with an IEC320-C14 plug, for the adaptation of country-specific connection cables
99 9 1980 002 7	Connection cable for table power supply, IEC320 connection cable with socket C14 for the European market
91 3 1116 838 7	Power over Ethernet Injector for PoE supply when PoE is not available



19" Rackmount call stations

DS-6 MRS IP

Multifunctional DS-6 IP rackmount station 19 inch



<https://neumann-elektronik.com/en/ds-6-einbausprechstelle-19-zoll>

- Direct voice connections via key-controlled line selection
- Full compatibility with DS-6 and TIMM system
- Remotely configurable and remotely monitorable by DS-6 / TIMM system
- High speech intelligibility (12 kHz bandwidth)
- Free key assignment as WL destination keys or for local functions
- Low line expenditure
- Low and high volume control (12dB level reduction)
- Integrated full range loudspeaker, 8Ω
- Exchangeable illuminated push-buttons with LED signalling
- Flexible gooseneck electret microphone (300mm)
- Shock- and break-proof ABS plastic housing

The DS-6 rackmount call station allows direct voice connections with other call stations, loudspeaker announcements and also programming of local functions.

It signals call and busy states on the buttons. A built-in display offers additional display options in plain text, e.g. date, time, own name, call destinations according to the keystroke.

It is designed for built-in installation in 19" frames or cabinets according to DIN EN 60297-3-101, or IEC 60297-3.

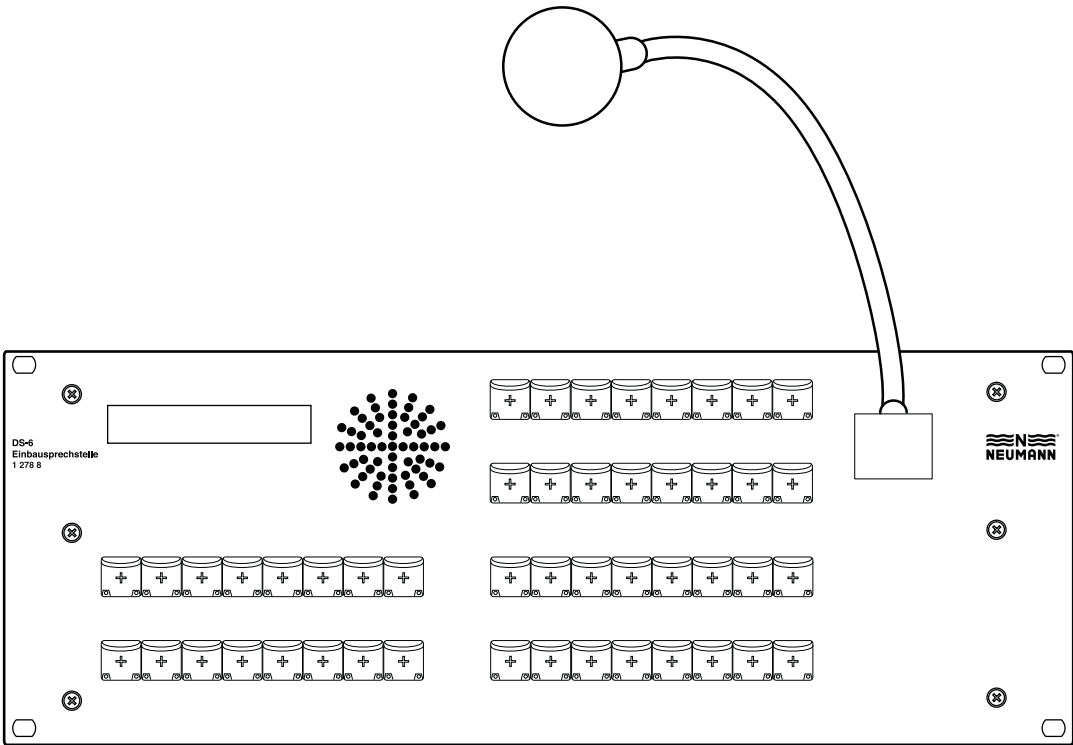
Of course, it can also be built-in into control panels.

Depending on the version, the call station has 16 or 48 line keys.

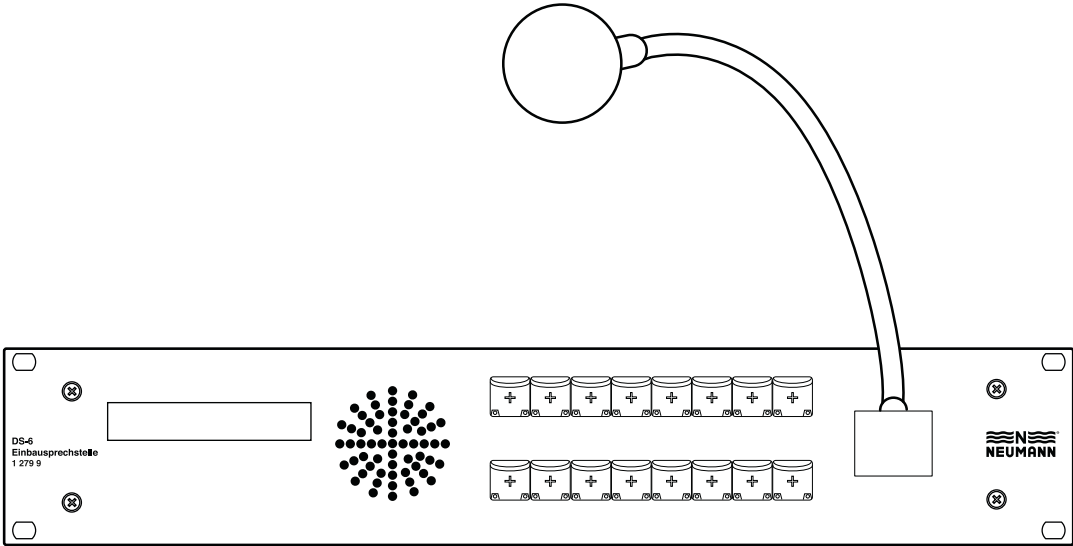
It corresponds technically to the MTSD DS-6 desk call station (art. no. 1 045 0).

As an optional voice memory, a USB memory stick is available, which can be plugged into the circuit board inside the rackmount station.

This USB memory stick is available from Neumann Elektronik under part no. 21 4 1143 001 7 and contains standard tones and texts. It can additionally be loaded with customised announcement texts, tone sequences or audio files, which can be played back at the touch of a button.



DS-6 MRS IP Multifunctional DS-6 IP rackmount station 19“ / 4 U,
48 Illuminated push-buttons (line keys)
Art. no. 1 278 8



DS-6 MRS IP Multifunctional DS-6 IP rackmount station 19“ / 2 U,
16 Illuminated push-buttons (line keys)
Art. no. 1 279 9

DS-6 MRS IP Multifunctional DS-6 IP rackmount station 19 inch

Art. no.	1 278 8	1 279 9
Mechanical data		
Weight	Approx. 1.1kg	Approx. 0.8kg
Enclosure dimensions (HxWxD)	Width 19“, height 4 U, installation depth 220mm (without connectors and terminals)	Width 19“, height 2 U, installation depth 220mm (without connectors and terminals)
Enclosure colour	Front panel Aluminium, grey	
Material	Impact and break-proof ABS plastic housing	
Number of line keys	48	16
Electrical data		
Nominal power consumption	5W	
Maximum power consumption	10W	
Frequency range	100Hz to 12kHz	
Connectivity		
Call station power supply	Via network connection 1: Power over Ethernet according to IEEE 802.3u Plug-in power supply: DC 24V -10/+ 15% Central power supply: DC 48V - 10/+15%	
Ethernet interfaces	2	
Ethernet interfaces	IEEE 802.3u	
Transmission protocol	Neumann DS-6 IP protocol	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN EN 60529 or IEC 60529	IP20	

Accessories	
22 9 0601 850 3	Key cover with fixing screws (5 pieces)
22 9 0701 850 4	Mounting kit for key cover incl. drilling template, drill and mounting instructions
21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
21 2 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
22 3 0101 045 8	Plug-in power supply Euro
22 9 0301 045 6	International plug-in power supply with additional plug adapters for England, USA and Australia
22 3 0401 045 1	Table power supply for international applications, equipped with an IEC320-C14 plug, for the adaptation of country-specific connection cables
99 9 1980 002 7	Connection cable for table power supply, IEC320 connection cable with socket C14 for the European market
91 3 1116 838 7	Power over Ethernet Injector for PoE supply when PoE is not available

Gate and door call stations

DS-22 TTSD SIP

Digital full duplex DS-22 / SIP gate and door call stations

Optionally as aluminium or V2A version



- Full compatibility with the DS-22 system
- Remotely configurable and remotely monitorable via DS-22 network
- Half / full duplex compatibility
- Internal voice memory Status signalling via illuminated push-buttons
- Power supply via PoE+ or DC 9V ... DC 28V
- Mounting in surface-mounted and flush-mounted housings
- Can be equipped with 2, 3 or 4 module units
- Subordinate circuit as standard
- Switchable volume reduction
- Microphone sensitivity adjustable
- IP54 according to DIN EN 60529

The DS-22 TTSD SIP gate and door call station in IP version can be used in digital SIP-based IP networks, as well as for direct interconnection with other SIP call stations. It enables voice connections with other call stations and loudspeaker announcements outdoors and in rooms with a harsh environment, e.g. in heavy industry plants.

The buttons can be freely assigned as destination buttons. The call station is connected via a network cable.

The modular housing and the inserts for loudspeaker, buttons and microphone are made of brushed aluminium or optionally in V2A design.

The built-in front forms a weatherproof unit with protection class IP54.

The installation of the call station is possible in both surface-mounted and flush-mounted housings. The housing cover is also the support element for illuminated push-buttons, microphone and loudspeaker.

The printed circuit board electronics are located in the lower part of the housing. Pressing a button establishes a speech connection to the target subscriber. The connection status can be signalled via the illuminated ring on the button.

DS-22 TTSD SIP

Digital full duplex DS-22 / SIP gate and door call stations

Optionally as aluminium or V2A version

Variation	Surface mounted	Flush mounted
Mechanical data		
Weight Front panel with components	Approx. 1.8kg (depending on component)	
Weight housing with electronics	Depending on component	
Enclosure dimensions (HxWxD) 2 Module units 3 Module units 4 Module units	226.5mm x 157mm x 96mm 316.5mm x 157mm x 96mm 406.5mm x 157mm x 96mm	180mm x 105mm x 87mm 272mm x 105mm x 87mm 360mm x 105mm x 87mm
Front panel dimensions (HxWxD) 2 Module units 3 Module units 4 Module units	210mm x 120mm x 74mm 300mm x 120mm x 74mm 390mm x 120mm x 74mm	
Enclosure colour	Aluminium / Stainless steel (V2A)	
Number of line keys	Depending on version 1-4	
Electrical data		
Quiescent current consumption	Approx. 90mA	
Max. Power consumption	Approx. 15W	
Frequency range	100Hz to 12kHz	
Connectivity		
Call station power supply	PoE according to IEEE802.3at or DC 48V	
Transmission protocol	Neumann DS-22 IP / SIP protocol	
Ethernet interfaces	2	
Environmental conditions		
Temperature range	-40°C ... +55°C	
Protection class according to DIN EN 60529 or IEC 60529	IP54	
Flammability of the enclosure	UL94 V-0	

DS-22 TTSD SIP

Digital full duplex DS-22 / SIP gate and door call stations

Optionally as aluminium or V2A version

Modular components gate and door call stations IP version, aluminium	
64 9010 436 03	Electronics base module IP surface mounted
64 9010 436 14	Electronics base module IP flush mounted
On request	Flush mounted housing for PCB mounting at 2 module units
On request	Flush mounted housing for PCB mounting at 3 module units
On request	Flush mounted housing for PCB mounting at 4 module units
On request	Surface mounted housing aluminium for 2 module units
98 9310 640 22	Surface mounted housing aluminium for 3 module units
98 9310 640 44	Surface mounted housing aluminium for 4 module units
On request	Aluminium frame for 2 module units
98 9310 641 01	Aluminium frame for 3 module units
98 9310 641 23	Aluminium frame for 4 module units
98 9310 642 02	Aluminium loudspeaker module
98 9310 644 04	Aluminium microphone module
98 9310 645 05	Aluminium combi module microphone and two illuminated buttons
98 9310 645 16	Aluminium module module with two illuminated buttons
98 9310 645 38	Aluminium module with one iilluminated button
98 9310 649 10	Aluminium blind cover for an unused module

Modular components gate and door call stations IP version, in V2A design	
64 9010 436 03	Electronics base module IP surface mounted
64 9010 436 14	Electronics base module IP flush mounted
On request	Flush mounted housing for PCB mounting at 2 module units
On request	Flush mounted housing for PCB mounting at 3 module units
On request	Flush mounted housing for PCB mounting at 4 module units
On request	Surface mounted housing for 2 module units in V2A design
98 9310 640 33	Surface mounted housing for 3 module units in V2A design
98 9310 640 44	Surface mounted housing for 4 module units in V2A design
On request	Front panel frame for 2 module units in V2A design
98 9310 641 01	Front panel frame for 3 module units in V2A design
On request	Front panel frame for 4 module units in V2A design
98 9310 642 13	Loudspeaker module in V2A design
98 9310 644 15	Microphone module in V2A design
98 9310 645 50	Combi module microphone and two illuminated buttons in V2A design
98 9310 645 27	Module with three illuminated buttons in V2A design
On request	Module with two illuminated buttons in V2A design
98 9310 645 49	Module with one illuminated button in V2A design
On request	Blind cover for an unused module in V2A design
98 9310 649 09	Labelling field



Gate and door call stations

TTSD U_{p0}
 Digital U_{p0} gate and door call station
 Optionally as aluminium or V2A version



- Full compatibility with DS-6 and TIMM system via Neumann U_{p0} Adapter
- Direct speech connections via key-controlled line selection
- Functions configurable via DS-6
- Mounting in surface-mounted and flush-mounted housings
- Can be equipped with 2, 3 or 4 modular units
- Status signalling via illuminated push-buttons
- High speech intelligibility (7 kHz bandwidth)
- Subordinate circuit as standard
- Switchable volume reduction
- Microphone sensitivity adjustable
- IP54 according to DIN EN 60529
- Low cable costs

The digital U_{p0} gate and door call station can be used in digital U_{p0}-based networks, as well as for direct interconnection with other U_{p0} call stations. It enables voice connections with other call stations and loudspeaker announcements outdoors and in rooms with a harsh environment, e.g. in heavy industry plants.

The buttons can be freely assigned as destination buttons. The call station is connected via a network cable.

The modular housing and the inserts for loudspeaker, buttons and microphone are made of brushed aluminium or optionally in V2A design.

The built-in front forms a weatherproof unit with protection class IP54.

The built-in call station can be installed in surface-mounted or flush-mounted housings. The housing cover is also the support element for illuminated push-buttons, microphone and loudspeaker.

Pressing a button establishes a speech connection to the target subscriber. The connection status can be signalled via the illuminated ring of the button.

TTSD U_{p0}
Digital U_{p0} gate and door call station
Optionally as aluminium or V2A version

Variation	Surface mounted		Flush mounted
Mechanical data			
Weight Front panel with components	Approx. 1.8kg (depending on component)		
Weight housing with electronics	Depending on component		
Enclosure dimensions (HxWxD) 2 Module units 3 Module units 4 Module units	226.5mm x 157mm x 96mm 316.5mm x 157mm x 96mm 406.5mm x 157mm x 96mm	180mm x 105mm x 87mm 272mm x 105mm x 87mm 360mm x 105mm x 87mm	
Front panel dimensions (HxWxD) 2 Module units 3 Module units 4 Module units	210mm x 120mm x 74mm 300mm x 120mm x 74mm 390mm x 120mm x 74mm		
Enclosure colour	Aluminium / Stainless steel (V2A)		
Number of line keys	Depending on version 1-4		
Electrical data			
Nominal power consumption	5W		
Maximum power consumption	10W		
Frequency range	300Hz to 7kHz		
Max. Line length of the U _{p0} interface	2km		
Permissible line resistance: for Power supply for U _{p0} interface	150 Ohm at 48V / 1W 80 Ohm at 48V / max. modulation 400 Ohm		
Connectivity			
Call station power supply	Via DS-6 U _{p0} Adapter: DC 48V -10/+15%. Via plug-in power supply: DC 24V -10/+15%		
Transmission protocol	Neumann U _{p0} protocol		
Ethernet interfaces			
Environmental conditions			
Temperature range	-40°C ... +65°C		
Protection class according to DIN EN 60529 or IEC 60529	IP54		
Flammability of the enclosure	UL94 V-0		

TTSD U_{p0}
Digital U_{p0} gate and door call station
Optionally as aluminium or V2A version

Modular components gate and door call stations IP version, aluminium	
On request	Electronics base module U _{p0} surface mounted
On request	Electronics base module U _{p0} flush mounted
On request	Flush mounted housing for PCB mounting at 2 module units
On request	Flush mounted housing for PCB mounting at 3 module units
On request	Flush mounted housing for PCB mounting at 4 module units
On request	Surface mounted housing aluminium for 2 module units
On request	Surface mounted housing aluminium for 3 module units
On request	Surface mounted housing aluminium for 4 module units
On request	Aluminium frame for 2 module units
On request	Aluminium frame for 3 module units
On request	Aluminium frame for 4 module units
On request	Aluminium loudspeaker module
On request	Aluminium microphone module
On request	Aluminium combi module microphone and two illuminated buttons
On request	Aluminium combi module with two illuminated buttons
On request	Aluminium module with one illuminated button
On request	Aluminium blind cover for an unused module

Modular components gate and door call stations IP version, V2A design	
On request	Electronics base module U _{p0} surface mounted
On request	Electronics base module U _{p0} flush mounted
On request	Flush mounted housing for PCB mounting at 2 module units
On request	Flush mounted housing for PCB mounting at 3 module units
On request	Flush mounted housing for PCB mounting at 4 module units
On request	Surface mounted housing for 2 module units in V2A design
On request	Surface mounted housing for 3 module units in V2A design
On request	Surface mounted housing for 4 module units in V2A design
On request	Front panel frame for 2 module units in V2A design
On request	Front panel frame for 3 module units in V2A design
On request	Front panel frame for 4 module units in V2A design
On request	Loudspeaker module in V2A design
On request	Microphone module in V2A design
On request	Combi module microphone and two illuminated buttons in V2A design
On request	Module with three illuminated buttons in V2A design
On request	Module with two illuminated buttons in V2A design
On request	Module with one illuminated button in V2A design
On request	Blind cover for an unused module in V2A design
On request	Labelling field



Gate and door call stations

TTSA

Analogue gate and door call station

Optionally as aluminium or V2A version



- Status signalling via illuminated push-buttons
- Extended operating voltage range
- Mounting in surface-mounted and flush-mounted housings
- Can be equipped with 3 or 4 module units
- Subordinate circuit as standard
- Switchable volume reduction
- Noise-compensated microphone
- Microphone sensitivity adjustable
- IP54 according to DIN EN 60529

The gate and door call station in analogue version can be used in intercom systems with analogue and digital communication centres as well as in direct interconnection with other analogue call stations.

It enables speech connections with other call stations and loudspeaker announcements outdoors and in rooms with a harsh environment, e.g. in factories in heavy industry.

The buttons can be freely assigned as WL destination buttons. The call station is connected via a connecting cable.

The modular housing and the inserts for loudspeaker, buttons and microphone are made of brushed aluminium or optionally in V2A design.

The built-in front forms a weatherproof unit with protection class IP54. The built-in call station can be installed in surface-mounted or flush-mounted housings.

The housing cover is also the support element for illuminated push-buttons, microphone and loudspeaker. The printed circuit board is located inside. The electronics are located in the lower part of the housing.

Pressing a button establishes a speech connection to the target subscriber. The connection status can be signalled via the illuminated ring on the button.

Analogue gate and door call station
Optionally as aluminium or V2A version

Variation	Surface mounted		Flush mounted
Mechanical data			
Weight Front panel with components	Approx. 1.8kg (depending on component)		
Weight housing with electronics	Depending on component		
Enclosure dimensions (HxWxD) 3 Module units 4 Module units	316.5mm x 157mm x 96mm 406.5mm x 157mm x 96mm	272mm x 105mm x 87mm 360mm x 105mm x 87mm	
Front panel dimensions (HxWxD) 3 Module units 4 Module units	300mm x 120mm x 74mm 390mm x 120mm x 74mm		
Enclosure colour	Aluminium / Stainless steel (V2A)		
Number of line keys	Depending on version 1-4		
Electrical data			
Operating voltages	DC 24V, DC 48V, DC 60V		
Quiescent current consumption	≤ 30mA		
Max. Power consumption	≤ 100mA		
Frequency range			
Connectivity			
Call station power supply	Phantom power supply DC 24V...60V		
Transmission protocol	Analogue		
Permissible line resistance for power supply	200Ω (at 3km cable length with a wire diameter of 0.8mm)		
Loudspeaker amplifier			
Frequency range	150Hz ... 10kHz		
Nominal power	1W		
Load resistance	50Ω		
Input voltage	100mV		
Input resistance	≥ 10kΩ		
Distortion factor	≤ 5%		
Microphone amplifier			
Frequency range	150Hz ... 10kHz		
Input voltage	1.5mV		
Internal resistance	600Ω		
Output voltage	775mV an 600Ω		
Distortion factor	≤ 5%		
Environmental conditions			
Temperature range	-20°C ... +70°C		
Protection class according to DIN EN 60529 or IEC 60529	IP54		
Flammability of the enclosure	UL94 V-0		

Analogue gate and door call station
Optionally as aluminium or V2A version

Modular components Gate and door call stations analogue version, aluminium	
64 9010 435 91	Electronics base module analogue
61 2310 403 88	Flush mounted housing for PCB mounting for 3 module units
On request	Flush mounted housing for PCB mounting for 4 module units
98 9310 640 22	Surface mounted housing aluminium for 3 module units
98 9310 640 44	Surface mounted housing aluminium for 4 module units
98 9310 641 01	Front panel frame in aluminium for 3 module units
98 9310 641 23	Front panel frame in aluminium for 4 module units
98 9310 642 02	Aluminium loudspeaker module
98 9310 644 04	Aluminium microphone module
98 9310 645 05	Aluminium combi module microphone and two illuminated buttons
98 9310 645 16	Aluminium combi module with two illuminated buttons
98 93106 45 38	Aluminium module with one illuminated button
98 9310 649 10	Aluminium blind cover for an unused module
On request	Aluminium labelling field

Modular components gate and door call stations analogue version, V2A design	
64 9010 435 91	Electronics base module analogue
61 2310 403 88	Flush mounted housing for PCB mounting for 3 module units
On request	Flush mounted housing for PCB mounting for 4 module units
98 9310 640 33	Surface mounted housing V2A design for 3 module units
On request	Surface mounted housing V2A design for 4 module units
98 9310 641 12	Front panel frame in V2A design for 3 module units
On request	Front panel frame in V2A design for 4 module units
98 9310 642 13	Loudspeaker module in V2A design
98 9310 644 15	Microphone module in V2A design
98 9310 645 50	Combi module microphone and two illuminated buttons in V2A design
On request	Module with two illuminated buttons in V2A design
98 9310 645 49	Module with one illuminated button in V2A design
On request	Blind cover for an unused module in V2A design
98 9310 649 09	Labelling field in V2A design





Driver's cab call station

FSS

Driver's cab call station



<https://neumann-elektronik.com/fuehrerstands-sprechstelle>

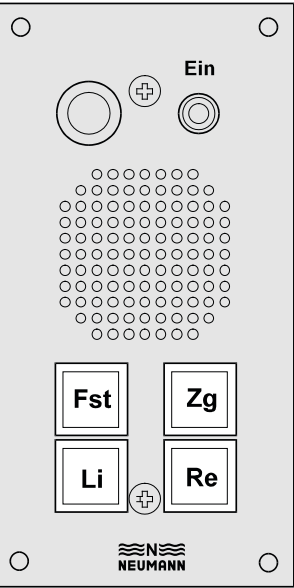
- Complies with UIC 568 standard
- Four direct talk buttons
- For horizontal or vertical installation
- Listening to compulsory announcements
- Loudspeaker announcements from the driver to the passengers
- Internal voice connections with a second driver's cab call station
- Possibility of listening to radio calls and announcements from a voice memory
- Connection of two S-Bahn hand-held microphones (Art. no. 04 689 7) or similar.
- Automatic loudspeaker switch-off
- Maintenance-free
- Call station is prepared for use by DB AG
- Call station versions for ÖBB available
- 40-pole LAR connector, separate earth connection
- Controls for microphone sensitivity and loudspeaker volume
- The electrical connections are realised by means of the 40-pole connector known from the LAR78 system
- Directly connectable to the UIC through line
- Fire protection tested according to DIN EN 60695-2

The driver's cab call station is intended for built-in installation in traction units (locomotives, railcars) and control cars of local railway traffic.

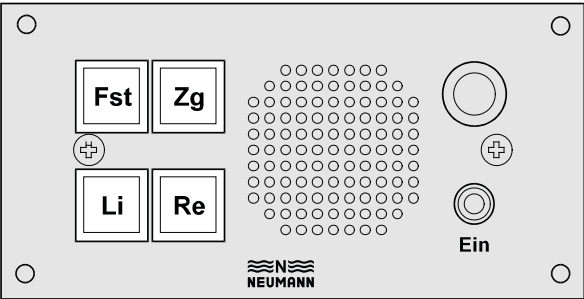
The call station is designed in chassis construction for built-in into control desks or consoles.

A gooseneck microphone, a loudspeaker, four speech keys and a green signal light are mounted on the front panel. The required electronics are housed on three circuit boards inside.

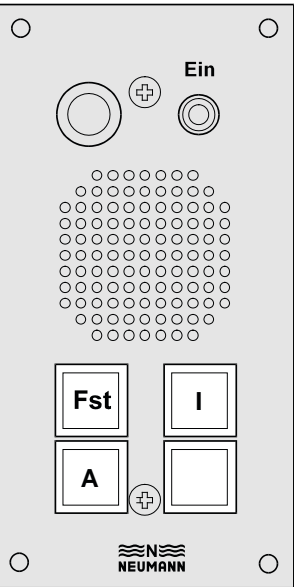
The rear panel contains a 40-pin LAR connector, a separate earth connection, controls for microphone sensitivity and loudspeaker volume and a fuse holder with fuse.



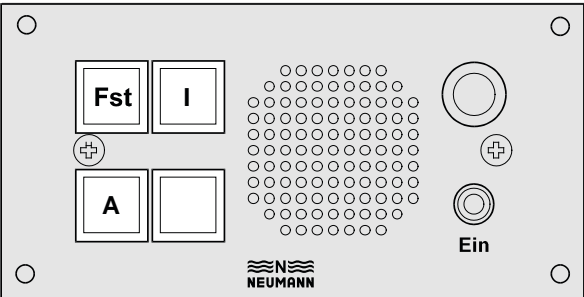
4 600 0



4 601 1



4 616 7



4 615 6

FSS
Driver's cab call station

Variation	4 600 0 / 4 615 6 Horizontal installation DB / ÖBB	4 601 1 / 4 616 7 Vertical installation DB / ÖBB
Mechanical data		
Weight	1.250kg	
Enclosure dimensions (HxWxD)	146mm x 74mm x 110mm	
Enclosure colour	Black silk matt (RAL 9005)	
Number of line keys	4	
Electrical data		
Operating voltages	DC 24V	
Quiescent current consumption	45 mA ± 5% (Standby)	
Max. Power consumption	Approx. 250 mA (Operation at medium speech level)	
Permissible Operating voltage range	DC 18V ... DC 33V	
Connectivity		
Connection	40-pin LAR connector	
Transmission protocol	-	
Loudspeaker amplifier		
Frequency range	fu: 150Hz - 1.5dB fo: 7kHz - 1.5dB	
Output power	2W	
AF output voltage	1.55V	
Distortion factor	k: ≤ 2%	
Microphone amplifier		
Frequency range	fu: 400Hz - 3dB fo: 5kHz - 3dB	
AF output voltage	1.55V	
Distortion factor	k: ≤ 2%	

Accessories

All Neumann Elektronik solutions are easy to configure and include a whole range of add-ons. Thanks to our many years of expertise, we are also able to manufacture customised solutions and components according to your requirements.



Available in



21 3 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
21 3 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
21 3 1831 157 2	Key cap, ABS plastic, colour: flame red (RAL 3000)
21 3 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
21 3 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
21 3 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)



22 9 0601 850 3

Key cover with fixing screws (5 pieces)

22 9 0701 850 4

Mounting kit for key cover incl. drilling template, drill and mounting instructions



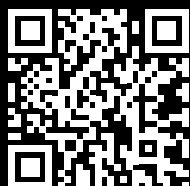
**Further accessories
and components can
be found in Vol 3**



<https://neumann-elektronik.com/vol-3-en.pdf>

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