

**HEAVY INDUSTRIAL MASTER STATION****N-8065MS Q-TEE**

Thank you for purchasing TOA's Master Station.

Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

**1. SAFETY PRECAUTIONS**

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.

**WARNING**

Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

**CAUTION**

Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

**During Installation and Operation**** Warning**

- Do not expose the unit to water jets or an environment, where it may dip into water or other liquids, as doing so may result in fire or electric shock.
- Use the unit only with the voltage specified on the unit. Using a voltage higher than the specified one may result in fire or electric shock.
- Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.
- Connection, installation and system set-up require an electrically qualified person.

** Caution**

- Do not stack or staple heavy loads on the unit.
- Keep the unit on a stable and vibration free base. Otherwise the unit could drop down and cause personal injury or a property damage
- Should the following irregularity be found during use, immediately turn off this system's exchange, disconnect and uninstall the unit and contact your nearest TOA dealer. Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.
  - ~If you detect smoke or a strange smell coming from the unit.
  - ~If water or any metallic object gets into the unit
  - ~If the unit falls, or the unit case breaks
  - ~If the power supply cord is damaged (exposure of the core, disconnection, etc.)
  - ~If it is malfunctioning (no tone sounds.)
- To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing such as modification inside the unit to qualified service personnel.
- Do not touch a plug during thunder and lightning, as this may result in electric shock.

## 2. FEATURES

The N-8065MS Q-TEE Industrial Master Station is designed to connect to the IP Intercom Exchange and provide hands-free conversation of high sound quality.

### Warning!

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## 3. NOMENCLATURE AND INSTALLATION

### [Controls and Indicators]

#### Overview

Microphone (vandal proof)

LED (Calling Status + Conversation Indication)

Full Dial Keyboard 0 – 9

4x Speed Dial Keys

Control Volume of ext. speaker

Cancel / Terminating

Push to talk mode



### [INSTALLATION]

#### Open the Station

Tool: 4mm Allen Key®



## Mounting Method

The station can be mounted on a wall.

### Notes

- Use the appropriate screws for the construction of wall.
- No fitting screws installation are supplied with.
- Use commercially available screws.



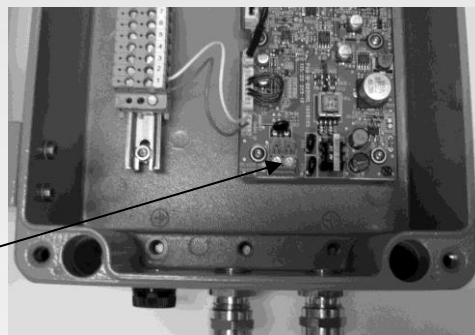
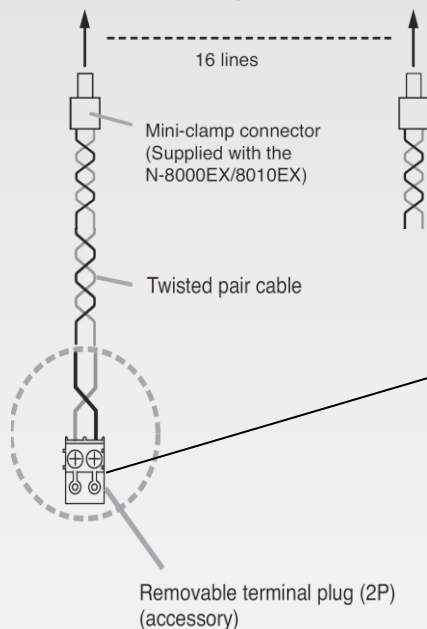
4x Mounting holes

## Connection from N-8065MS Q-TEE to the Exchange (N-8000EX / N-8010EX)

Wiring: Twisted pair cable

Max. Distance from the Exchange to N-8065MS Q-TEE: 1500m by using a cable with diameter: 0.65mm (Loop resistance 170Ohm or less)

N-8000EX/8010EX Exchange



Cable lead-in:  
2 x Cable Glands PG9  
Insert Cables Ø 3-8 mm

To connect the cables from the N-8000EX/8010EX Exchange to the N-8065MS Q-TEE, use the removable terminal plug (2P) supplied with the N-8065MS Q-TEE. The cables have no polarity.

## The Type of Cables

The types of cables are to be determined according to the following conditions.

- Twisted pair wires (such as those used for electronic pushbutton telephone) are to be used for wiring between the Exchange and the stations in principle.
- The number of cables pairs laid should be determined considering the possibility of future expansion of the system.
- Outdoor wires should be used where wiring passes through inaccessible areas such as ceilings or under floors where the maintenance is not performed. Indoor wires may also be used, however, in case where there is no risk of deterioration due to exposure to heat, etc.

### Note

Specifications related to each junction are as follows. Mini-clamp connector (N-8000EX line terminal) Conductor diameter:  $\varnothing$  0.4 – 0.65 mm (AWG22 – 26), Solid wire Outside diameter:  $\varnothing$  1.05 mm or below Clip terminal (E-7000TB) Conductor diameter:  $\varnothing$  0.4 – 0.8 mm (AWG20 – 26), Solid wire Outside diameter:  $\varnothing$  1.5 mm or below

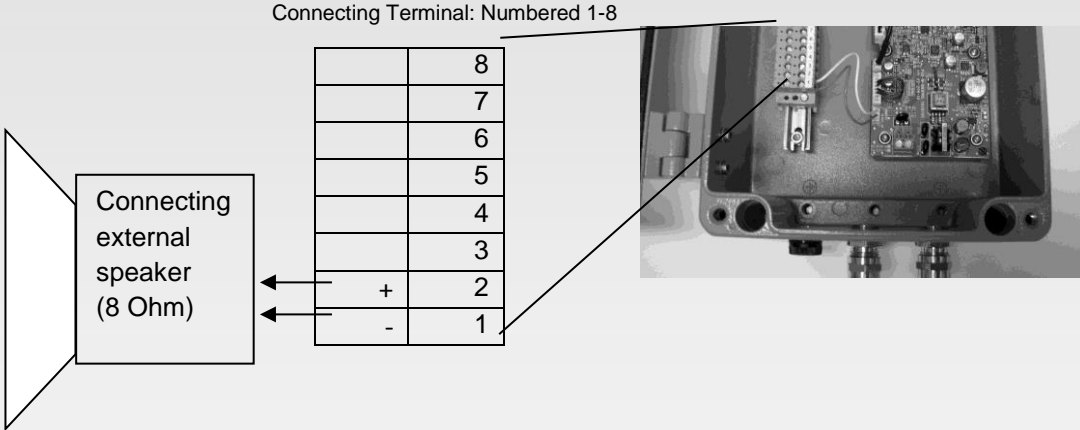
## Relations between Core Diameter of Cable and Maximum Cable Length

Referring to the following chart as a guideline, design the distance between the exchange and stations so that loop resistance value becomes 170  $\Omega$  or less.

Conductor diameter (mm)	Loop resistance ( $\Omega$ /km)	Maximum cable length between the Exchange and station (Assuming that the loop resistance is 170 $\Omega$ .)
$\varnothing$ 0.4	295	570 m
$\varnothing$ 0.5	187	900 m
$\varnothing$ 0.65	113	1.5 km
$\varnothing$ 0.9	58	2.9 km

# [Speaker Connection]

## Connecting an external speaker

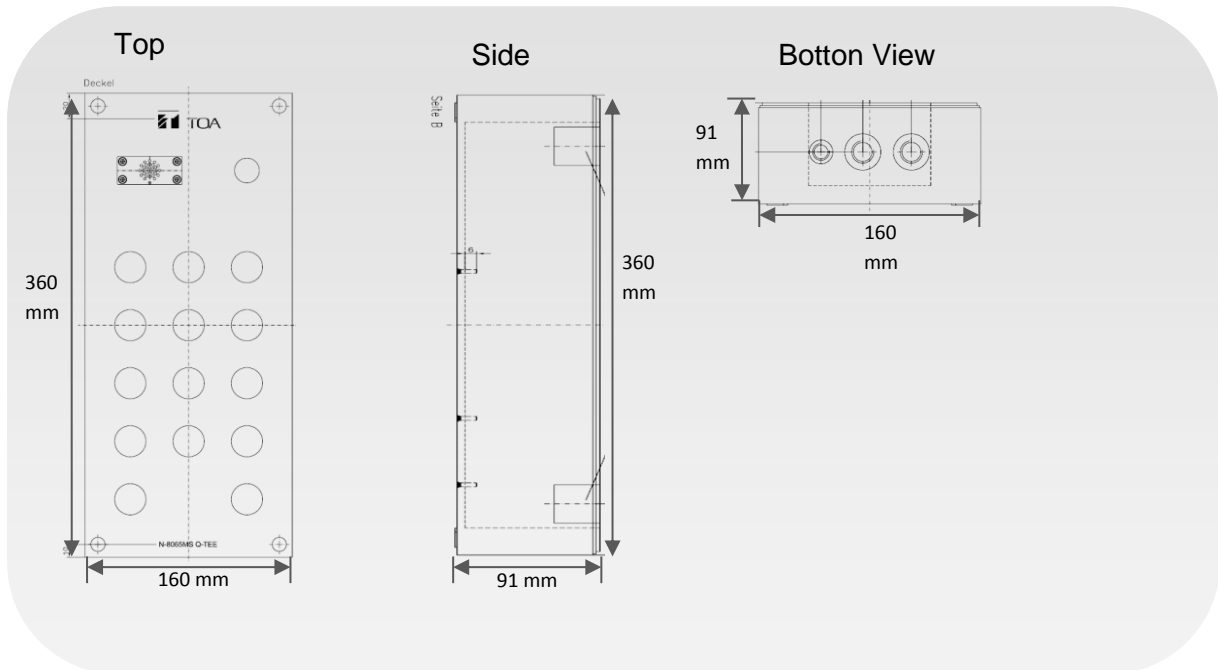


**Note**

- Take care that the directivity of the external speaker is not targeted to the microphone of the N-8065MS Q-TEE to avoid feedback.

## 4. DIMENSIONS

[Installation Completion Drawing]



## 5. SPECIFICATIONS

<b>Power Source</b>	48 V DC (supplied from the IP Intercom exchange)
<b>Power Consumption</b>	1.8 W (at rated), 2.4 W (max.)
<b>Wiring Method</b>	1 set of twisted pair cable
<b>Transmission System</b>	2 wire 160 kbps echo canceller transmission system
<b>Signal Level</b>	Under 0 dB*
<b>Speech Method</b>	Hands-free conversation
<b>Audio Frequency Range</b>	300 Hz – 7 kHz
<b>Transmission Range</b>	Max. 1500 m (ø0.65 mm, Loop resistance 170 Ω)
<b>Hands-Free</b>	Speaker: External Speaker 0.6 W, 8 Ω (not supplied) Microphone: Omni-directional electret condenser microphone
<b>Indication</b>	Status indicator
<b>Line Connecting Terminal</b>	Pin header (2 pins)
<b>Installation Method</b>	Surface-mount
<b>Operating Temperature</b>	-20°C to + 60°C
<b>Operating Humidity</b>	Under 90 % RH (no condensation)
<b>Finish</b>	Enclosure: Aluminum (IP66) Colour: Orange (RAL2011) Push button: Stainless Steel (IP65)
<b>Dimensions</b>	160 (w) x 360 (h) x 91 (d) mm (without cable glands)
<b>Weight</b>	3750g
<b>IP-Code</b>	IP65

**Traceability Information for Europe (EMC directive 2004/108/EC)**

**Manufacturer:**

TOA Electronics Europe GmbH  
Suederstrasse 282, 20537 Hamburg,  
Germany

**Authorized representative:**

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