

SP-5T

Common Line Intercom System



Document Scope

This document describes the system features, available equipment, typical configurations, simplified wiring and technical specifications for the SP-5T Common Line Intercom System.

Publication Log

Rev.	Date	Author	Comments
0.0	2002.05.07	SEN	First release Zenitel Marine. main units with new circuit, balanced output. Ver. 01
0.1	2002.08.20	SEN	Documents for Ver. 02 in addition SP-5MT & HT with new PCB. Type VP1207 (Ecas) same function.
1.0	2010.08.25	SEN	New front and back page, new datasheets Doc.no. SP-5T_ut Rev.01 is replaced by document no. A100K10870
1.1	2011.04.11	HKL	Handheld mic type H66-SP5 Headset type SP5-36-PELP Proofread and converted all contents into Indesign format

Related Documentation

Documentation	Doc. no.
Datasheet - SP-5MT	A100K10948
Datasheet - SP-5HT	A100K10947
Datasheet - SP-36-PELP	A100K10949
Datasheet - H66-SP5	A100K10944
Datasheet - Power Amplifier VPA-120	A100K10504
Datasheet - Power Amplifier VPA-240	A100K10505
Datasheet - Power Amplifier VPA-400	A100K10506
Datasheet - Amplifier Rack RS-3C	A100K10711
Cable Connection Diagram - SP-5T	SP-5T_cc_wd
Cable Connection Diagram - SP-5T Ver. 02	SP-5T Ver.02_cc_wd
Wiring Diagram - Amplifier Rack RS-3C	RS-3C_wd rev.02
Installation & User Manual - VPA-120/VPA-240/VPA-400	A100K10875

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1 General Description

The SP-5T Common Line Intercom System provides All-to-All communication between a specified numbers of microphone or headset stations.

The number of stations that can be connected depends on output power and loudspeaker tapping.

① *Note that product versions 01 & 02 have the same functions, except they have different PCBs.*

The system consists of :

- Watertight Microphone station, type SP-5MT
- for handheld microphone, type H66-SP5
- Watertight Microphone station, type SP-5HT
- for headset with boom-microphone, type SP5-36-PELP
- 100V line loudspeaker for each station
- Rack, type RS-3C with VPA-120, VPA-240, or VPA-400 power amplifier



2 Installation Instructions

2.1 General

For proper installation and operation of the SP-5T system, we recommend reading this section thoroughly together with the installation drawings.

Make sure that all mounting and cabling are correct before switching the system on.

The amplifier rack and power supply is for installation indoors while the weatherproof and rugged microphone stations and loudspeakers are for outdoor use.

Amplifier rack RS-3C/VPA

The amplifier rack and power supply should be mounted in a normal and ventilated indoor environment with a temperature of 0 - 55 °C.

It is equipped with screw terminals for cables with a maximum length of 2.5 mm².

Microphone station type SP-5MT & Headset station type SP-5HT

The Microphone/Headset stations and loudspeakers are weatherproof and designed for outdoor use. It is equipped with screw terminals for cables with a maximum length of 2.5 mm².

① ***Caution: Use separate cables for input and output signals.***

2.2 Cable Requirements

All signal cables have to be approved ship cables with twisted pair at a minimum of 2 x 0.75 mm² and outer screen. The screens must be interconnected in junction boxes and grounded in terminal X2-1 in amplifier rack RS-3C only. They are open in SP-5T stations.

① ***Note that proper grounding is essential for reliable operation.***

2.3 Level Adjustment

Adjust the volume control at the rear of the amplifier with a screw driver until you have a suitable power level. This volume is now permanently set.

The power amplifier VPA-120, VPA-240 or VPA-400 must always be in the ON position.

3 User Instructions

To use the system:

- Press the TALK button and speak clearly into the microphone.

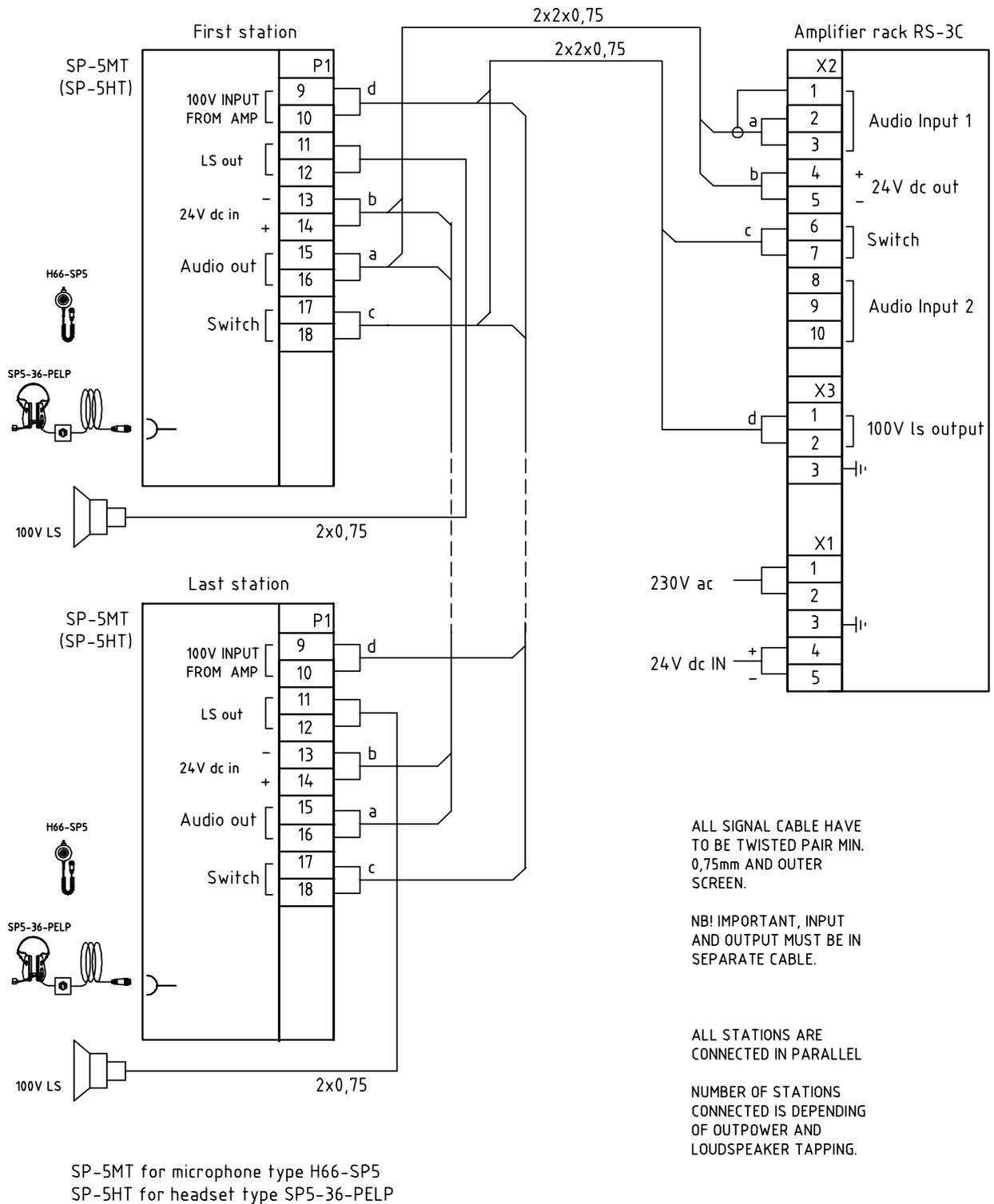
When you press the TALK button and speak into the microphone or headset microphone from any station, you can be heard in all other loudspeakers or headsets.

The station's own loudspeaker will be muted.

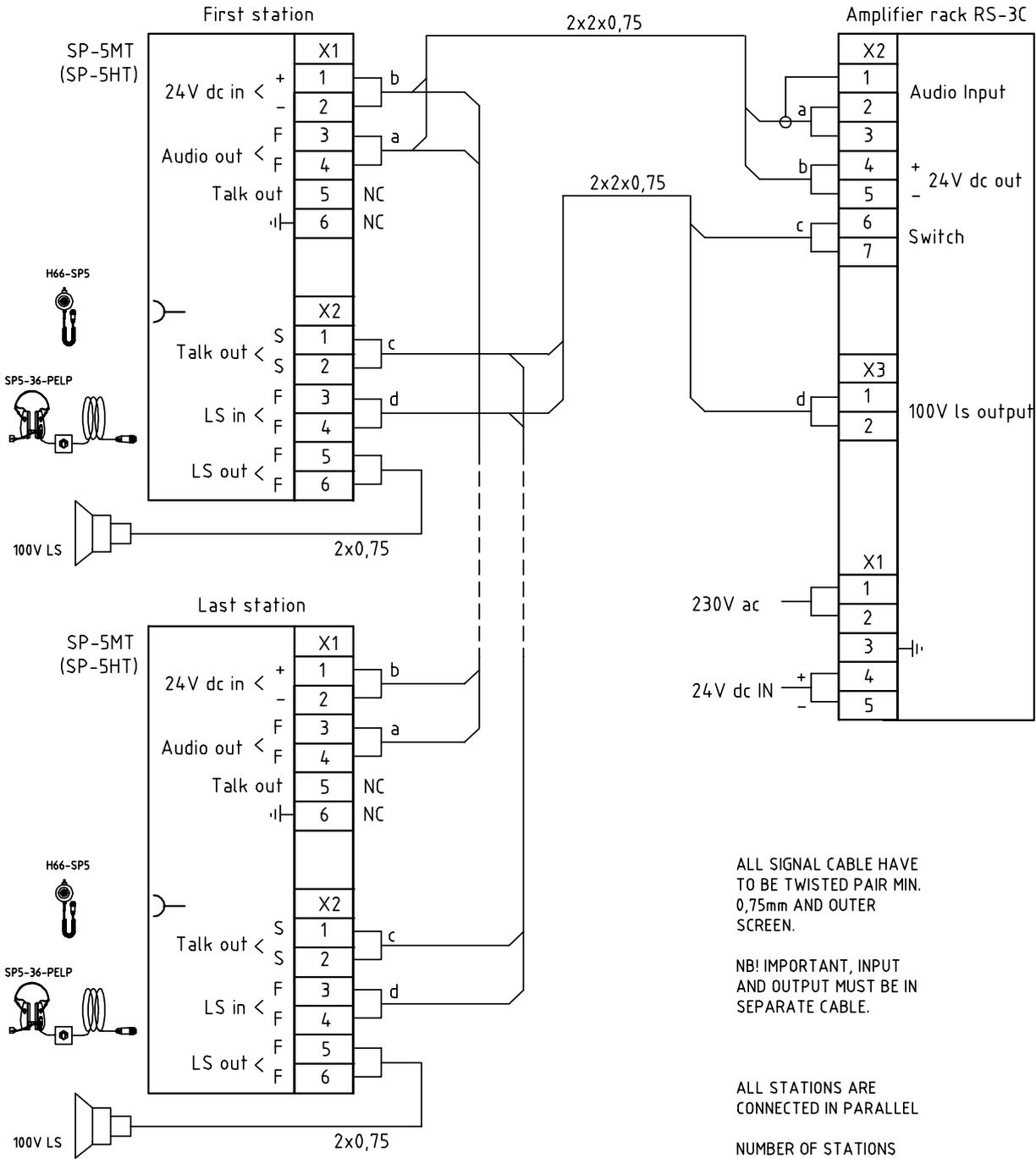


4 Connection Diagrams & Dimension Drawings

4.1 SP-5T Ver. 02 Cable Connection Diagram



4.2 SP-5T Cable Connection Diagram



ALL SIGNAL CABLE HAVE TO BE TWISTED PAIR MIN. 0,75mm AND OUTER SCREEN.

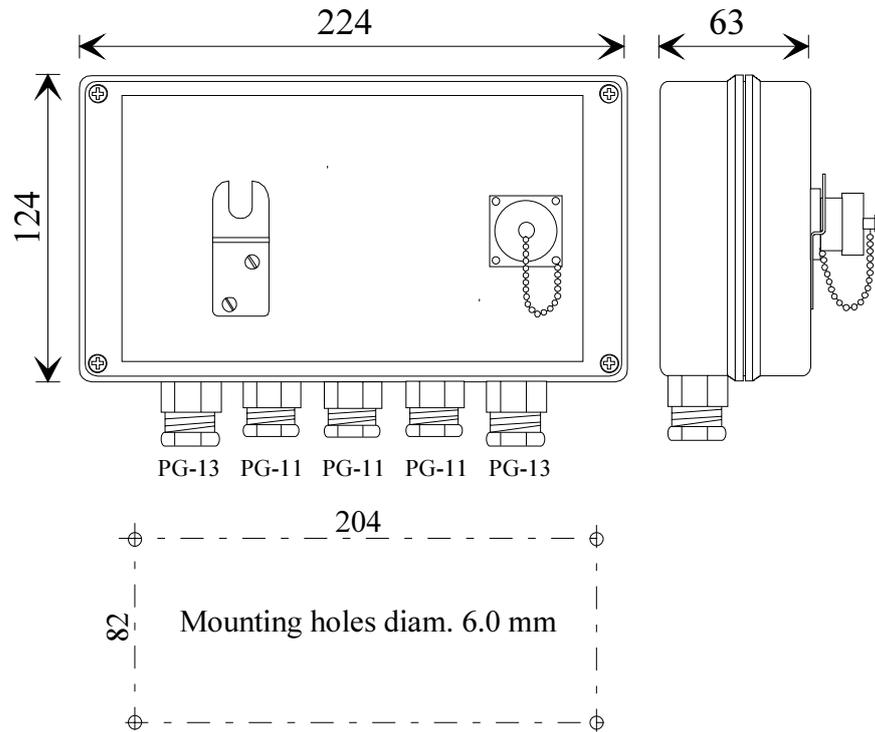
NB! IMPORTANT, INPUT AND OUTPUT MUST BE IN SEPARATE CABLE.

ALL STATIONS ARE CONNECTED IN PARALLEL

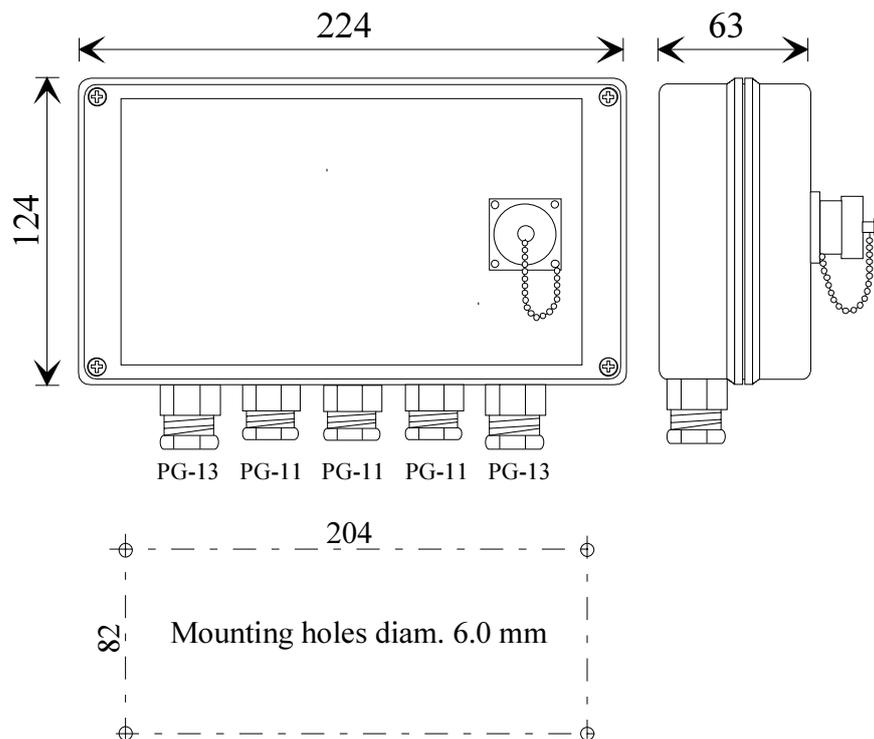
NUMBER OF STATIONS CONNECTED IS DEPENDING OF OUTPOWER AND LOUDSPEAKER TAPPING.

SP-5MT for microphone type H66-SP5
 SP-5HT for headset type SP5-36-PELP

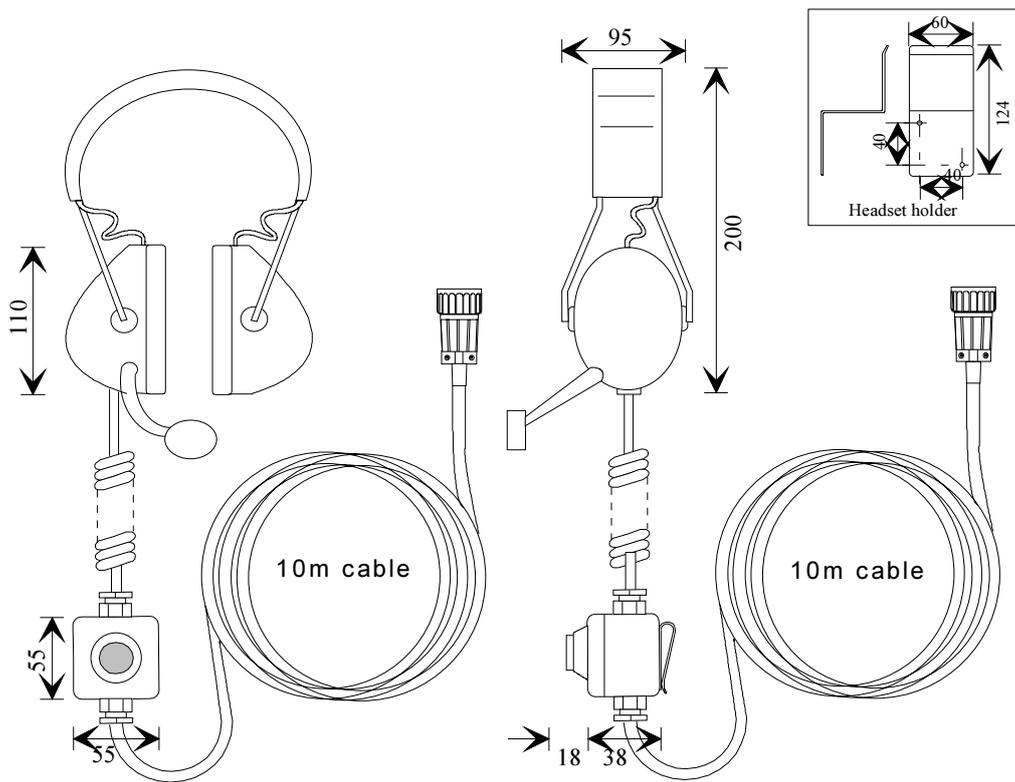
4.3 SP-5MT Microphone Station



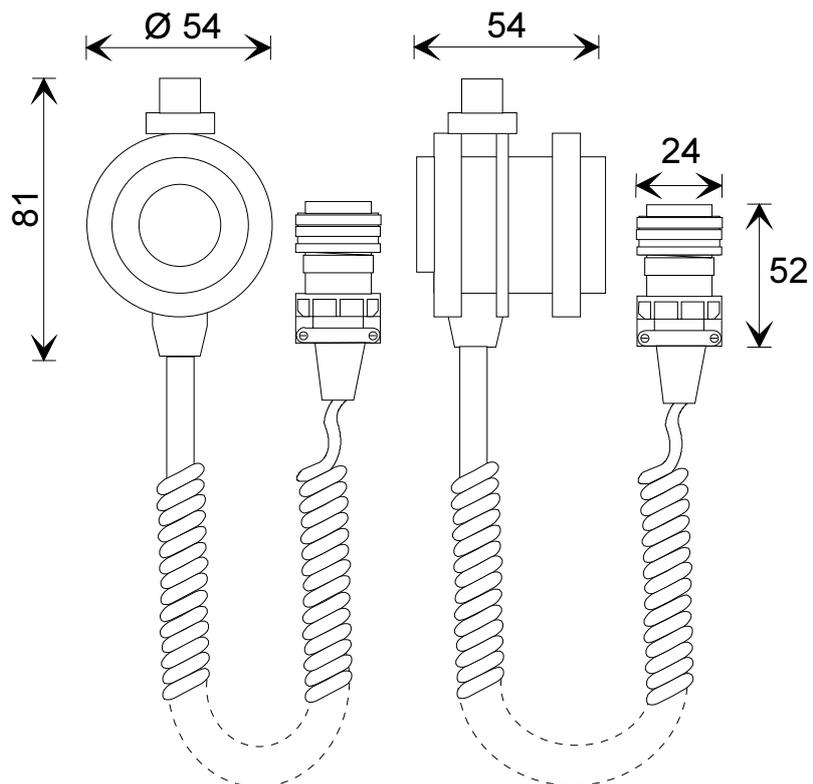
4.4 SP-5HT Microphone Station



4.5 SP5-36-PELP Headset



4.6 H66-SP5 Handheld Microphone



5 Specifications

5.1 SP-5MT Microphone Station

Material	Bayblend plastic housing
Color	Grey
IP rating	IP-65
Dimensions (WxHxD)	224 x 124 x 63 mm
Weight	0.9 kg
Operating voltage	24V DC
Loudspeaker output	100V, balanced
Cable requirements	Twisted pair with outer screen, input and output must be in separate cables
Connections	Screw terminals for cable max. 2.5 mm ²
Accessories	Handheld microphone H66-SP5

5.2 SP-5HT Microphone Station

Material	Bayblend plastic housing
Color	Grey
IP rating	IP-65
Dimensions (WxHxD)	224 x 124 x 63 mm
Weight	0.9 kg
Operating voltage	24V DC
Loudspeaker output	100V, balanced
Cable requirements	Twisted pair with outer screen, input and output must be in separate cables
Connections	Screw terminals for cable max. 2.5 mm ²
Accessories	Headset SP5-36-PELP

5.3 SP5-36-PELP Headset

Connections	7-pin plug
Headset	Peltor MT 7H7A
Color	Black
IP rating	IP-54
Weight	1.2 kg

5.4 H66-SP5 Handheld Microphone

Type/article no.	Holmco 66 / 84-15-06980
DC resistance	200 ohm
Microphone sensitivity	0.5 mV/dyne/sq.cm at 1 kHz
Power capacity	0.2 W (0.5 W peak)
LS sensitivity	57 dB/mW at 1 kHz and 50 cm distance, i.e. 80 dB at 0.2W audio-frequency power
Working temperature	-30 to +60 °C
IP rating	IP-66
Color	Black
Weight	0.3 kg

