



U9100-Series

Digital Intercom System

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Typical System Layout





Master Station

Dante™ digital voice and data networking architecture

Modular design up to three (3) additional modules (see switch cards and radio/aux cards below)

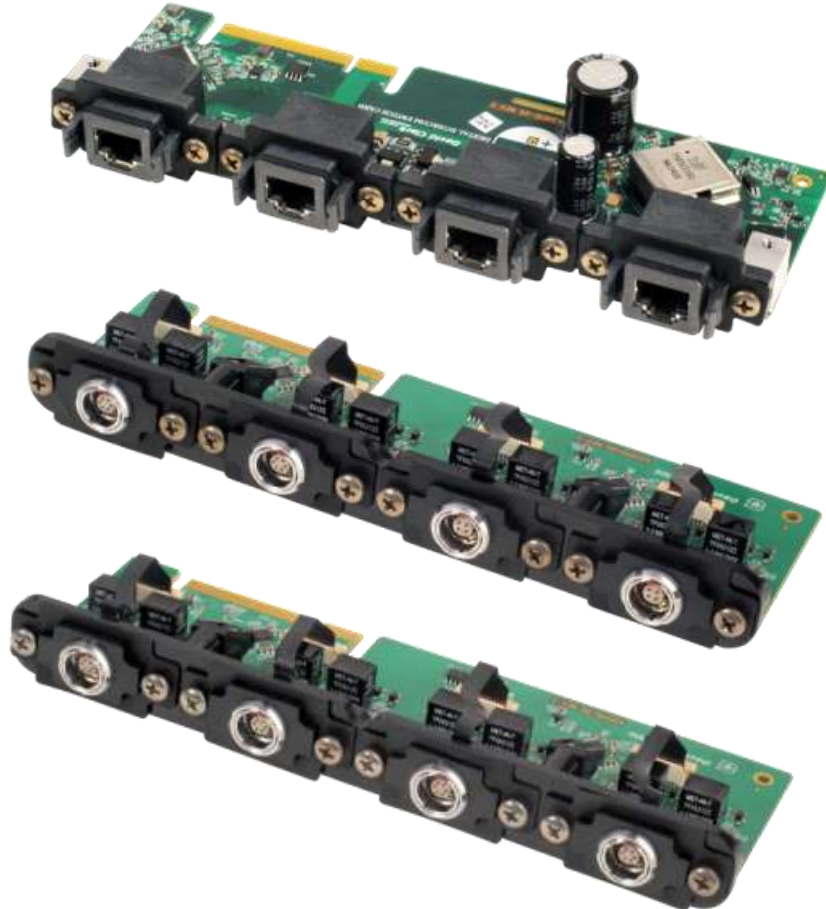
IP67 marine-grade design provides ingress protection, salt-fog corrosion resistance and shock/vibration absorption (MIL-STD-810)

Rugged and reliable performance in harsh environments

Flexible installation with surface or rack mount options available

Power supply 11-30VDC, external 5A T fuse

Master stations are able to chain in large systems



U9101 Switch Card

Connectivity with four IP-68 sealed Ethernet sockets to Headset Stations U9110, U9111 or Wireless Gateways U9120-W4

U9102 Dual Radio/AUX Card

Connectivity to up to two mobile radios and one each auxiliary input and output, galvanically isolated ports

e.g. music/sound sources, recording devices, PA/loudhailers, Bluetooth vehicle/vessel adapters

U9104 Quad Radio Card

Galvanically isolated interface to up to four mobile radio connections

Cross-talk < -70dB (isolation between ports)



Headset Station

IP-68 sealed Ethernet jack provides connectivity to the U9100 Master Station

IP67 marine-grade design provides salt-fog/corrosion resistance, wide ranging temperature tolerance and shock/vibration absorption (MIL-STD-810)

Simple control array features software-enabled talkgroup selection switches with LED indicators and centrally located PTT

Automatic VOX technology that adapts to background noise in realtime, while applying unique DSP algorithms to discern between noise and speech

Surface or panel mount options, Flush-mount kit



Headset Station with Remote PTT (Throttle-PTT)

Connector to support two external PTT switch

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U9120-W4



Wireless Gateway

One gateway supports four (4) wireless users

One system may include several Wireless Gateways

DECT protocol, wireless range 150m (line-of-sight)

SMA connector for external antenna or RF-cable

Compatible with Wireless Belt Station U9110-BSW

IP-68 sealed Ethernet jack provides connectivity to the U9100 Master Station

P67 marine-graded design provides salt-fog/corrosion resistance, wide ranging temperature tolerance and superior shock/vibration absorption (MIL-STD-810)

Surface or panel mount options, Flush-mount kit



Wireless Belt Station

Support wireless intercom features; PTT/VOX intercom, PTT to control long-range mobile radios in the system, four speech channel selections

DECT protocol, wireless range 100m (line-of-sight)

Range on water surface (rescue) appr. 50m

P67 marine-graded design provides salt-fog/corrosion resistance, wide ranging temperature tolerance and superior shock/vibration absorption (MIL-STD-810)

Automatic VOX technology that adapts to background noise in realtime, while applying unique DSP algorithms to discern between noise and speech

Battery lifetime 16h, rechargeable battery



A99-14CRG

Battery Charging Unit, 4-slot



230VAC

5-15VDC

Rechargeable Li-ION 3.7V 2200mAh (8.1Wh)





Accessories



Accessories

Antenna, permanent mount or magnet mount. Antenna cable RG58 with SMA/f connector.

AUX cable with 3.5mm jack (3-pole) and RCA adapter.

Radio cable, open-lead. Balanced audio in/out, PTT.

Corrosion resistant Throttle-PTT for U9111 Headset Station.

IP68 RJ45 connectors on CAT5/6 cable. Also standard cable assemblies; 2m, 3m ja 5m.

High-Visibility Wireless Belt Station covers. Also to separate visually different talk groups.



Mounting accessories



M9100RM Rack Mount Kit

To install U9100 Master Station on 19" EIA-310 standard rack frames and cabinets

6061 Black anodized aluminum, thickness 0.125"

M9110FM Flush Mount Kit

Front plate to install U9110 and U9111 Headset Stations and U9120-W4 Wireless Gateway

Watertight, self-adhesive sealing

Stainless steel, Marine grade



U9100 Configuration

System Configuration

Dante™ system configuration interface

Speech groups, individual audio routing

VOX, PTT, Hot-MIC or Monitor (listen only)

Left and right, or both ears audio configuration

Duck function to emphasize prioritized channel

DSP Notch filtering, low pass and high pass filtering to block any background noise

Compatible with all *Dante*™ system components



IP55 rated flush mount Bluetooth Adapter

Two-way Bluetooth connection to for example

- Smart Phone or media-player

AVIO AES3 I/O Adapter

Audio input/output XLR-connectors for

- Audio Recorder, external microphone
- PA-system, audio amplifier, active loudspeaker

Plug and Play PoE

- Dante compatible Microphones
- Dante compatible Speakers



MIDLAND – Engineering & System integrations



- 19" Rack installations
- Dante™ network integrations
- Audio network integrations
- Radio system integrations
- PA-system integrations
- RF-design, ATEX and EMC consultation
- Hardware engineering
- Embedded software engineering



H91xx Headsets

Digital Intercom Headsets



H9130

Over-the-Head

Noise cancellation microphone, focus on speech frequencies

PTT switch is located at the microphone bracket

Dual volume controls with split audio for wired users

Undercut silicone memory foam ear seals

Coil cord with Quick-Release connector

IP-68 connector assures connection integrity

NRR 32dB @ 1kHz





H9140

Behind-the-Head

Noise cancellation microphone

PTT switch is located at the microphone bracket

Adjustable nylon overhead strap permits wearing of protective headgear with headset

Undercut silicone memory foam ear seals

Coil cord with Quick-Release connector

IP-68 connector assures connection integrity

NRR 32dB @ 1kHz





H9140-HT

Behind-the-Head, Hear-Through

Noise cancellation microphone

Dual hear-through microphones provide adjustable amplification of ambient noise levels, independent of communication volume, and instantly clamp down to 82dB upon impact noise

PTT switch is located at the microphone bracket

Adjustable nylon overhead strap permits wearing of protective headgear with headset

Undercut silicone memory foam ear seals

Coil cord with Quick-Release connector

IP-68 connector assures connection integrity

NRR 32dB @ 1kHz





H9180

Under Helmet

Low-profile headband

Dual-Volume control on domes for preferred listening level, water-tight

Noise cancellation microphone

PTT switch is located at the microphone bracket

Undercut, comfort-gel ear seals for superior comfort also indoor use





H9185

Gecko Headset

Marine-grade construction for corrosion resistance from salt and spray in harsh marine applications

Simple and quick installation in Gecko™ open-face or full-face type Marine Safety Helmets

Noise cancellation microphone

PTT switch is located at the microphone bracket

Dual dynamic earphones hermetically encapsulated in custom Gecko ear modules

Dual volume controls, water-tight, provide left/right gain setting capability





H9190

Over-the-Head, Single-Ear

Noise cancellation microphone

PTT switch is located at the microphone bracket

Single ear dome with isolated earphone and volume control

Outstanding comfort designed for all-weather, all-day use with soft, air-flow head pad and undercut silicone/memory foam ear seal

Coil cord with Quick-Release connector

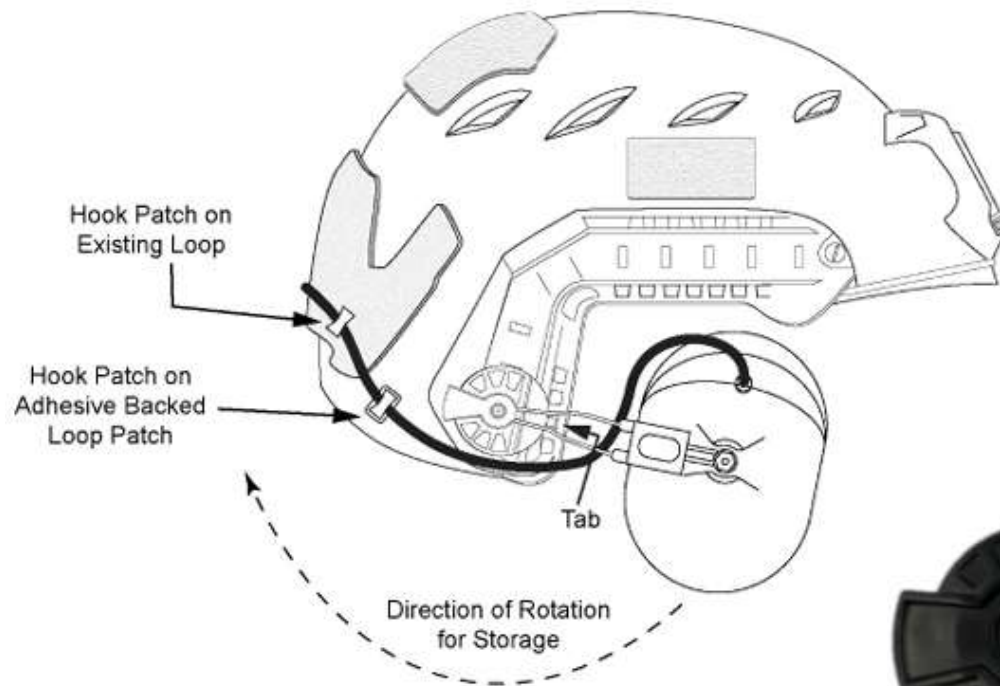
IP-68 connector assures connection integrity





BTH Conversion Kit

H9140 BTH Conversion Kit for Tactical Helmet RAIL





Digital Intercom

System benefits

Free movement from platform to engine control room

Simple to use – user friendly

Robust and reliable

Wireless access to all radio communication

Designed exact for Marine environment

Wide range of headsets

Dante™ audio system integration and configuration

Marine DSC VHF, UHF and TETRA radio integration

MIDLAND Communications

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