

The **MESHnet User Control Device (UCD)** enables users to access communications services within their own vehicle, or in vehicles to which they are networked. The UCD supports one to two users (UCD 1-7 supports one user with a second monitor, UCD 1-5 supports two independent users) with control of intercom, telephony, and radio functions. An override capability is provided. The UCD is designed for hard mounting in vehicles, but can also be dismantled for user access to services at distances of up to 25 metres using a UCD Extension Cable (UCD-XC), or up to 700 metres using a fibre-optic UCD Remote Kit (UCD-RK).

Users configure the UCD to select and monitor radio nets, intercom networks, and telephony services. The digital audio encoding/decoding scheme is automatically configured according to the selected service and destination. Each user has pressel control, either via a headset cable or a footswitch. The intercom service is selectable as either live microphone or pressel activated.

Using a binaural headset, the microphone and left earpiece is associated with the active audio service (radio, telephony). The right earpiece is associated with the other monitored audio services. Intercom is superimposed in both earpieces to provide a “center” channel. Volume controls are provided for left, right, and center audio channels.



Features:

- UCD 1-5 enables the user to monitor two radio nets simultaneously
- UCD 1-7 enables the user to monitor up to four radio nets simultaneously
- 29-button backlit keypad and a 2 x 24 alphanumeric character display allows users to control and configure the available communications resources
- Display and keypad brightness controls
- Display is compatible with night vision goggles
- Control menus enable the user to initiate Built In Test (BIT), monitor the network status and remotely control radio and network equipment

Technical Specifications:

Technical specifications are the same for the 1-5 and the 1-7.

Interfaces:

- 2 x audio port for connection to Vehicular Headset, Active Noise Reduction (ANR) Headset, Handset, Loudspeaker, Computer Audio
- 1 x data port with a configurable RS232/RS422 serial interface (asynchronous or synchronous) for connection to data terminal equipment and GPS receivers. This interface is also used for UCD maintenance and firmware loading
- 1 x port for MESHnet LAN and power connections

Physical Characteristics:

- Height 153 mm (6.02 inches)
- Width 179 mm (7.05 inches)
- Depth 90 mm (3.2 inches)
- Weight 1.6 kg (3.52 pounds)

Input Power Requirements:

- Regulated 24 VDC power, normally provided from the MESHnet Network Access Unit (NAU)
- The UCD can also be powered by battery for dismounted operation.

Reliability:

- Mean Time Between Failure (MTBF): Greater than 13,000 hours
- Mean Time To Repair (MTTR): Less than 30 minutes

Environmental Characteristics (MIL-STD 810E):

- -40°C to +63°C (-40°F to 145°F) operating
- -51°C to +71°C (-60°F to 160°F) storage
- Altitude, vibration (tracked and wheeled), shock, salt fog, sand and dust, rain, fluid contamination, immersion, NBC decontamination, fungus

Electromagnetic Effects:

MIL-STD-461E, ESD, TREE, TEMPEST

Related Products:

- MESHnet User Selector Box
- MESHnet Audio Interface Unit
- MESHnet Network Access Unit
- MESHnet UCD Distribution Box
- MESHnet Combat Vehicle Crewman Headset (CVCH)
- MESHnet UCD Remote Kit (UCD-RK)
- MESHnet UCD Extension Cable (UCD-XC)

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