USB Radio Operations Cable (U-ROC™)

VMF/MIL-STD-188-220 B/C/D Change 1, AFAPD, TACFIRE

U-ROC™ Summary

The USB Radio Operations Cable (U-ROC™) provides a standard USB interface to existing voice and data radios. Via the U-ROC, military ground kits can transmit and receive digital data over the air. **Designed to allow ruggedized laptops, personal computers, and personal digital assistants (PDAs) to interface to any radio in the field today**, the U-ROC™ combines the radio interface capability of the Improved Data Modem (IDM) with the accessibility of the USB standard. The U-ROC™ provides an ideal low-cost, low-power solution for easy integration into any system with a USB port.

The **U-ROC™ supports two fully-independent radio channels**, so only one cable is required to provide multiple data link solutions. The U-ROC™ is offered with a modular connector for each channel, which allows it to adapt to any radio in the field. The Modular Radio Connectors provide the flexibility needed to allow the soldier to bring exactly what is needed for the radios at hand. The modular interface also reduces cost for depot repair and spares.

Need to have a test asset for your protocol? Due to its design, integrating the U-ROC is a fast and inexpensive test solution. Need to show interoperability? Combine the U-ROC with WinIDM™ and you're all set.

U-ROC™ Technical Notes

Portability and Usability

- Adds data communications to Man-Pack platforms, or any USB-capable platform.
- Supports both Analog and Digital radios.
- Low Power < 1W Max
- Completely flat on one side, providing the soldier with the option of using hook-and-loop fastener to attach the cable to virtually any surface.
- Rounded corners prevent the U-ROC™ from snagging on uniform loops or on other gear in a rucksack.

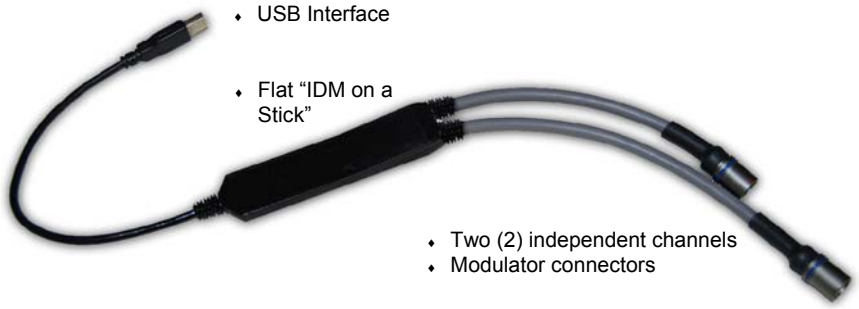
Modular Radio Connectors:

- Each channel of the U-ROC™ features a modular connector to provide the flexibility needed to allow a single cable to interface to a wide variety of radios.
- Low-reflectivity, brushed steel finish incorporates a positive-force coupling mechanism that prevents inadvertent disconnects.
- Modular Radio Connectors are available for any currently fielded radio.

Interoperable Now With:

- WinIDM™, PTAC ICE™

The U-ROC also supports a 'raw' mode to allow any custom application to control the U-ROC with their own protocol stack.



IDM Overview

In 2001, Aeronix partnered with Symetrics Industries to develop the Improved Data Modem (IDM) 501/IDM Junior™, VPIDM, and Mini IDM suite of Tactical Data Link (TDL) products. This IDM family has grown to include the Weapons Data Link IDM (WDL IDM), and now, the U-ROC and WinIDM, providing a USB and Software solution to the TDL community.

Our IDMs are integrated and deployed in a variety of military platforms worldwide. Through this partnership, Aeronix has taken an active leadership role in the Combat Net Radio Working Group (CNRWG) to ensure interoperability of your MIL-STD-188-220/MIL-STD-2045-47001-based Tactical Data Link (TDL).

Shown at right:

- TACP Dashboard
- WinIDM
- U-ROC
- PRC-117 Radio

Interoperable!

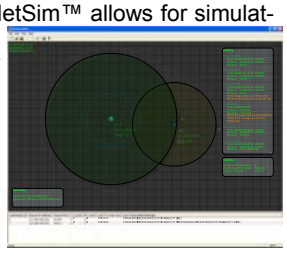
Related Technologies:

WinIDM™

WinIDM™ provides customers with a software-only implementation of the VMF TDL, featuring the F-35 Joint Strike Fighter (JSF) MIL-STD-188-220 D Change Notice 1 Protocol Stack, as well as legacy support for MIL-STD-188-220 B/C, AFAPD, and TACFIRE tactical data links. WinIDM™ can be combined with the U-ROC™ to provide a complete TDL solution or paired with NetSim™ for simulation and testing.

NetSim™

The NetSim™ application provides a software simulation of a Combat Net Radio network. Individual instances of the WinIDM™ application can be connected to the network representing any number of platforms. NetSim™ allows for simulating noisy networks, configuring the range of each participant's radio, and is easily extensible for modeling radio timing and automation of participant behavior.



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