

# rcu104

## Ultra Wideband (UWB) Wireless Receiver Coordinator Unit

SpectraPulse® ultra wideband (uwb) wireless systems



conference rooms, for example. The rcu104 allows for flexible meeting configurations with strong Ultra Wideband connections. For each connected drm141, the rcu104 Receiver Coordinator Unit also manages Ultra Wideband pulse timing, manages data coming from the aci707, and verifies the correct programming of encryption keys.

Use of the rcu104 and additional drm's does not increase the number of usable mtu's in a SpectraPulse® system, which remains 14 in a system with two linked aci707 Audio Control Interface devices, and 7 in a system with a single aci707.

A SpectraPulse® system consists of up to 14 Microphone Transmitter Units, up to two Audio Control Interfaces (aci707), and one Digital Receiver Module (drm141) or up to four Digital Receiver Modules (drm141) with use of the rcu104 Receiver Coordinator Unit.

### Architect's and Engineer's Specifications

The receiver coordinator unit shall be part of a wireless microphone system operating in the 6 GHz band using Ultra Wideband timed pulse technology with a pulse duration of 2 nanoseconds and a UWB rate of 8 mbps. The receiver coordinator unit shall expand system coverage, allowing use of up to four digital receiver modules in a single system, and permitting two independent co-located systems to operate simultaneously. The system shall permit use of up to 14 microphone transmitter units and up to two audio control interfaces.

The receiver coordinator unit shall be a 1U rack mounting unit that shall receive data streams from up to four digital receiver modules and create a single data stream that can be interpreted by up to two linked audio control interface devices. It shall enhance microphone/transmitter performance and allow for increased robustness of an Ultra Wideband connection.

The receiver coordinator unit shall be an Audio-Technica rcu104 or equivalent.

### Features

- Increases robustness of the Ultra Wideband connection by allowing use of up to four drm141 Digital Receiver Modules in a SpectraPulse® system
- Allows for expanded coverage of a SpectraPulse® system through use of multiple drm's
- Allows adjacency, permitting two audio systems in side-by-side rooms to share a single SpectraPulse® system
- Receives data streams from up to four drm141 Digital Receiver Modules and creates a single data stream that can be interpreted by up to two linked aci707 Audio Control Interface devices
- Enhances mtu (microphone/transmitter) performance

### Description

While a SpectraPulse® wireless microphone system can operate with just a single drm141 Digital Receiver Module, it is often beneficial to expand coverage area and/or boost the robustness of the UWB connection beyond the range and signal strength that a single drm141 can provide. The SpectraPulse® rcu104 Receiver Coordinator Unit achieves this by allowing use of up to four drm141 Digital Receiver Modules in a SpectraPulse® system.

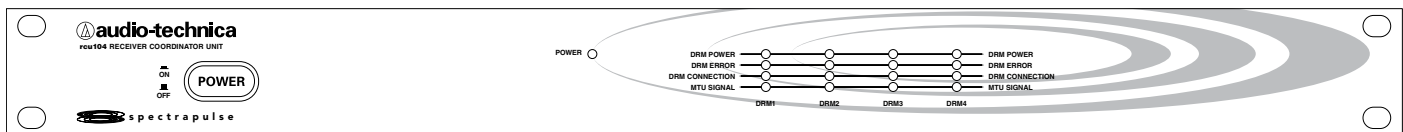
The SpectraPulse® rcu104 Receiver Coordinator Unit is a 1U rack mounting unit that receives the data streams from up to four drm141 Digital Receiver Modules and creates a single data stream that can be interpreted by up to two linked aci707 Audio Control Interface devices.

The rcu104 enables SpectraPulse® systems to be used in larger spaces and adjacent rooms, permitting a single SpectraPulse® system to be shared by two closely located or co-located audio systems, in side-by-side

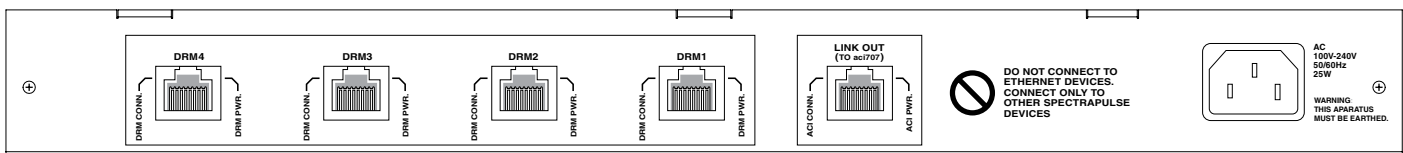
### Specifications

Power Input	100 – 240V AC, 50/60 Hz	
Current Consumption	25W	
Cable Length	drm to rcu	152 m (500') maximum
	rcu to aci	60 m (200') maximum
	aci to aci	60 m (200') maximum
Dimensions	480.0 mm (19.00") W x 45.7 mm (1.80") H x 193.8 mm (7.63") D	
	Weight	2.0 kg (4.5 lbs)

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request. Specifications are subject to change without notice.



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