MICROWAVE RADIO COMMUNICATIONS

101 Billerica Ave., Bldg. 6
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Introduction:

The STATXU2D is a general mobile transmitter designed for use in the **1999 Mhz. to 2700 Mhz.** band.

Emissions: FC3CR2TXU2D 17M0W7D, 16M0W7D, 12M0W7D (Digital Modulation)

FC3CR2TXU2A 17MOF8W, 16MOF8W, 12MOF8W (Analog (FM) Modulation)

Operation under FCC rule parts **74, 90**

Application:

For transmission of video, audio, data, and related Television Broadcast program material from events occurring at points removed from the TV Broadcast station or other users.

A compact, mobile, weatherproof, modular transmitter. Designed to be adaptable over a wide range of outdoor field applications, The transmitter accepts a wide range of SMPTE defined video inputs (SDI, ASI, NTSC…) delivered to a highly integrated internal MPEG-2 Encoder and COFDM modulator.

A front panel LCD display details the internal RF and Baseband configurations. Status display of frequency, power, modulation, and RF output… is also viewable from the same LCD display.

The CODERUNNER® (CR2) is typically deployed as a mobile vehicle mounted device. It could be described as a multi – box configuration. The base band component of the Transmitter or Indoor Unit (IDU) is mounted in the interior of the vehicle, in a multi mode offering the IDU is typically populated with a analog Frequency Modulated Transmitter module (FMT) with a assortment of defined audio sub-carrier devices or utilizing an internal COFDM modulator and MPEG-2 encoder operates also and more often as a true digitally modulated mobile transmitter. The baseband units are all hosted internal to the IDU outputting 70MHZ To the Out Door Amplifier Unit (ODU). The ODU is complete with the RF Amplifier and Up-Converter. The IDU provides control and RF (70MHz) as drive to the RF Up-Converter. System control can be displaced from the RF unit by as much as 150 feet.

Digital Modulation:

A COFDM architecture utilizing QPSK and QAM modulation has been integrated into the CR2 design. The imbedded control allows the user to select various digital modulation formats while maintaining the specifications as set forth by ETSI TR 101 190 v1.1.1 for Digital Video Broadcasting. Output of the modulator at 70 MHz. is applied to the input to the transmitter, frequency is selected, and the RF output is delivered to the antenna.

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TECHNICAL DESCRIPTION

A technical description is contained within the manual

MEASUREMENT DATA

In Order to demonstrate compliance to the FCC Rules and Regulations as set forth in CFR 47 (as revised October 1, 2002), measurement data per paragraphs2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 where performed at Microwave Radio Communications facilities. The results of these measurements show that the CR2TXU2D (Digital modulation) and CR2TXU2A (analog modulation) transmitter meets or exceeds all requirements for parts 74, 78, 90 and 101.

ENGINEERING CERTIFICATION

It is here by stated that as an ISO-2000 certified company the Certification tests on the Microwave Radio Communications CODERUNNER 2 GHZ Transmitter (CR2) where made under factory test conditions. All test equipment calibration certification is on file here at the Microwave Radio Communications Inc. facility. All of the submitted data in the attached report is true and correct to the best of my knowledge and belief.

Richard Miller
Systems Engineering