

# Operational Description

## CWW7VB916-0140

### Identification of equipment:

A nameplate on front panel identifies the equipment (RF Amplifier) as:

Model Number: 800V28-015-OR2R

And by a separate label reading:

FCC ID: CWW7VB916-0140

### Operational description:

The equipment is designed to operate as an amplifier in the frequency range of 840-950 MHz. providing power gain for FM and PM excitors.

Type of emission,	36F3
Frequency range	840-950 MHz.
Power level	15 watts
Maximum power rating	15 watts
DC Voltages and currents:	22-28 VDC at 2-3 amperes

### Function of active devices:

The sole RF active component is a hybrid amplifier module manufactured by Motorola P/N: MHW916. The MHW916 is a class AB module; however, VoCom will use the device for analog FM, not multi-channel or for linear applications. This module supplies nearly (20 dB gain over the specified bandwidth. Module is identified as U1 on the RE deck schematic. Other active components are voltage regulators used for power control (Q1-Q3) and RF sensing stages used to operate cooling fans during operation.

### Description of circuits employed for suppression of spurious outputs:

Refer to RF deck schematic. Bypassing of the DC leads to the module is present to reduce low frequency coupling from output to input stages. Harmonics are attenuated internal to the module at levels of -60 dBc. An additional 3 pole filter is added to the output stage to assure compliance to -70 dBc or greater.