

The R.L. Drake DMM 806 is a professional quality agile television channel demodulator that provides an audio and video output from any VHF, UHF, or CATV channel (54 - 806 MHz). The modular design of the DMM 806 permits convenient pairing with a Drake Mini-rack Video Modulator to perform off-air or CATV channel processing.

The desired off-air VHF or UHF television channel from 2 through 69 or CATV channel from 2 through 125 is selected by a front panel pushwheel switch and associated slide switch. The DMM 806 provides a standard negative sync video output at a nominal level of 1 Vp-p, and an audio output signal that is level adjustable from approximately 0.5 to 1.5 Vp-p with a front panel control.

As previously described, channel selection switches and audio output level control are located on the front panel. The RF Input is through an "F" type connector located on the rear panel. The rear panel Video Output is also an "F" type connector. The Audio Output is through a rear panel RCA type phono connector. The unit is powered by a compatible Drake Mini-rack power supply module.

# **SPECIFICATIONS**

RF

Input Frequency: 54 - 806 MHz,

Off air channels

2 - 69.

CATV channels

2 - 125.

Input Level: -10 to +35 dBmV.

Noise Figure: VHF: 8 dB.

UHF: 10 dB.

Image Rejection: VHF: 65 dB.

UHF: 50 dB.

Input Impedance: 75 Ohms.

**VIDEO** 

Output Level: 1.0 Vp-p, NTSC

standard negative

sync.

Output Impedance: 75 Ohms.

Differential Gain: Less than 5%.

Differential Phase: Less than 5 degrees. L/C Delay: ±50 nSec maximum. **AUDIO** 

Output Level: 300 mV rms nominal,

adjustable with front panel control ±10 dB.

Output Impedance: Less than 500 Ohms,

unbalanced.

**GENERAL** 

DC Power Input: +12 VDC @ 120 mA,

+5 VDC @ 100 mA.

Operating

Temperature: 0° C to +50° C. Dimensions: 1" W x 3.5" H x 7.5" D.

Weight: 12 oz.

Order From: **MULTICOM** 800-423-2594 www.multicominc.com multicom@multicominc.com

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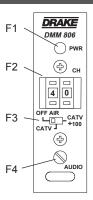


Figure 1

## F1 - POWER Indicator

Lights when the unit is connected to the required source of DC power via the rear panel DC INPUT connector.

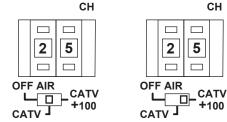
#### F2- Channel Number Switch

Sets the received channel number for off-air TV channels 02 through 69 or for CATV channels 02 through 125. See also Item F3 which sets the type of channel (Off-Air or CATV) and sets the leading "1" for CATV channels 100 through 125.

#### F3 - Mode Switch

Sets the type of channel, Off-Air or CATV. The third position sets a leading "1" for CATV channels from 100 through 125. See also Item F2 for setting the channel number.

For example: Setting for CATV channel "25"- For example: Setting for CATV channel "125"-



### F4 - AUDIO Output Level Control

This screwdriver adjustment permits setting the audio output level over a range of approximately 0.5 to 1.5 Vp-p.

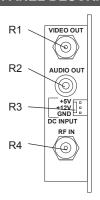


Figure 2

# **R1 - VIDEO OUTPUT Connector**

This is the 75 Ohm baseband video output at a fixed, nominal 1.0 Vp-p level.

#### R2 - AUDIO OUTPUT Connector

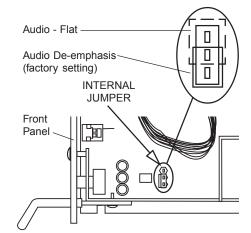
This is the unbalanced, audio output which is adjustable with the front panel AUDIO control over a range of approximately ± 10 dB from the nominal output level of 300 mV rms. NOTE: An internal jumper defeats the audio de-emphasis for stereo capability, if required.

#### **R3 - DC INPUT Connector**

This 3-pin connector (Male) accepts the appropriate mating DC power cable. Observe proper orientation and wiring.

#### **R4 - RF INPUT Connector**

This is the 75 Ohm input to the demodulator circuits from an off-air television receiving antenna or from a CATV cable input.



# CONNECTIONS and CONTROLS

INSTALLATION

All connections to and from the DMM 806 are made through the rear panel. Figure 3 illustrates the use of the DMM 806 as an offair channel processor. For this purpose, the feed from a television antenna is connected via a 75 Ohm coaxial cable to the RF IN connector of the DMM 806. The front panel switches are set for "OFF-AIR" and the received TV channel number is set for 02 through 69 as required. The VIDEO OUT and AUDIO OUT signals are connected to the VIDEO IN and AUDIO IN connectors respectively of an adjacently located Video Modulator, such as a Drake Mini-rack Video Modulator, operating on the desired cable TV

channel. Alternatively, cable TV channels can be processed by connecting the 75 Ohm coaxial cable of a CATV feed to the DMM 806 RF IN connector and setting the front panel switches for "CATV" or "CATV +100" and the received cable channel number 02 through 125 as required. Additional channels can be processed by adding combinations of DMM 806 units with Drake Mini-rack Video Modulator units.

#### RACK MOUNTING

Adequate ventilation is very important in multi-channel installations. Units should be spaced apart by at least one panel height wherever possible, and some air movement is advisable in enclosed rack cabinets. Excessive heat will shorten component life and system performance will be degraded without proper cooling.

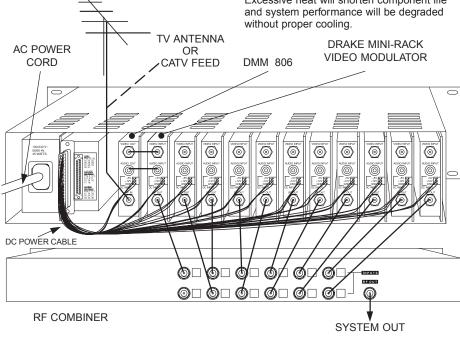


Figure 3
Illustration of Channel Processing using DMM 806 and a Drake Mini-rack Video Modulator.



