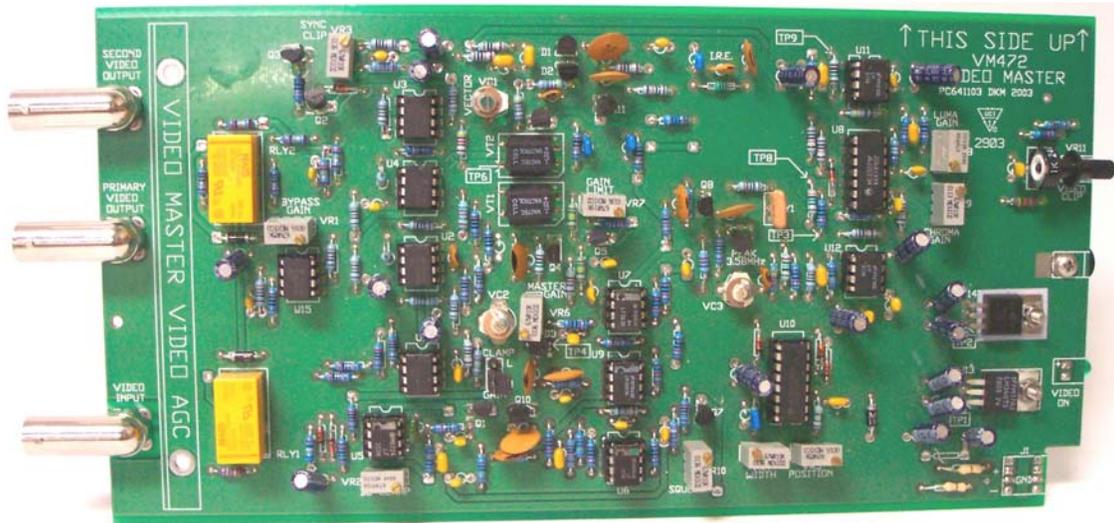


# VM472



## VIDEO MASTER AUTOMATIC LEVEL CONTROL

The **VM472 VIDEO MASTER** is a baseband video processor with two video outputs that automatically establish correct sync pulse amplitude, video amplitude, clamps out low frequency interference and automatically corrects any loss in high frequency response. The VM472 input level operating range is 0.5 to 2.0 Volts peak-to-peak. Over this range the video output level will be controlled to a standard 1 Volt peak-to-peak. Levels outside this range will be automatically bypassed to the output connector by a relay. If a power failure occurs the video is automatically by-passed to the output connector.

The Sync level is automatically gain-regulated to 40 IRE Units. Both high and low level signals are corrected. Luminance (White level) is automatically gain-regulated so as not to exceed 100 IRE Units, (but still permits a fade to Black). White level is not clipped, and is gain controlled to retain its linear gray scale.

Color Burst and Chrominance are corrected to 40 I.R.E. units and Luminance-to-Chrominance ratio is automatically corrected to compensate for cable slope loss or other sources of high frequency attenuation.

Back Porch Clamping eliminates all incoming low frequency distortion such as 60 cycle ground loops. The Clamp gain is field programmable for high and low clamping conditions.

A front panel video level clip control can be used if video needs to be clipped. The level is adjustable and a peak clip LED indicates the point of clipping. This control can be set just above the normal video level to prevent high level high frequency transient signals from over-driving the down stream equipment.

Since VM472 processes sync and picture peak voltages through a time-gated Automatic Level Control System, the timing relationships within a video signal remain unaffected. Therefore horizontal Sync, Color Burst Timing, and Chrominance Phase retain their original relationship. This feature distinguishes the VM472 from Proc Amps that strip and re-insert new sync signals.

The VM472 insures constant standard video signals when video from a multitude of variable level sources are used. This insures correct CATV Scrambler operation and video recording levels. The Video Master can be used ahead of a TV modulator to guarantee correct depth of modulation to prevent high video levels and titling from creating sync buzz.

#### **INPUT**

#### **SPECIFICATION**

Level	0.5 to 2.0 Volts peak-to-peak
Impedance	75 Ohm
Video Standard	NTSC, (optional PAL)
Common Mode Rejection	45 dB Rejection @ 60Hz
Power Fail By-pass	Relay to Primary Output Only
Low Level Input	Relay to Primary / Secondary

#### **PROCESSING**

Clamping	Back Porch, (Gain Selectable)
Sync Control	Time Gated AGC
Video Control	Time Gated APL Control
L.F. Interference reduction	100 IRE reduced to 1 IRE Unit
H.F. Loss Compensation	10 dB (at 3.58 MHz)

#### **OUTPUT**

Video Level	140 IRE Units (IRE Filter)
Sync Level	40 $\pm$ 1 IRE Unit
Luminance Level	100 $\pm$ 2 IRE Units (maximum)
Back Porch	Ground Potential $\pm$ 0.01 Volts
Signal-to-noise ratio	> 80db at 1 Vpp Input (4.2MHz)
Impedance	75 Ohm (Un-balanced)
Secondary Video Output	Isolated Video Distribution

#### **MECHANICAL**

Size	10.00" L X 4.75" W X 1.00' D
Connectors	BNC (Female)
Shipping Weight	2 lbs
AGC Display Indicator	Green "AGC On" L.E.D.
Clipper Display Indicator	Red "Peak" L.E.D.
Mounting	Slide-in Card for RMS400
Power Requirement	+/- 12VDC 100mA (RMS400)

The VM472 is a Slide-In PC Card that fits into the RMS400 Mainframe and Power supply. This Mainframe occupies 3 standard (RU) Rack Units and contains the power supply to power all cards. The RMS400 will hold up to Nine 400 series products. Nine video channels can be controlled in one RMS400 Mainframe. Each VM472 Card is shipped with a front panel label to fit the RMS400 and an Instruction Book.