



DigiAna

## DigiAna is the definitive solution for Analog TV signal modulation

Linear 30 years of technical knowledge and our constant technological advances are present in the DigiAna modulator for analog TV signals.

For better stability, DigiAna is able to use of advanced digital processing techniques, solving analog circuit's implementation impossibilities.

By using FIR digital filters, for better spectra and group delay mask, we are able to provide large advantage over SAW filters.

Automatic switching when video signal is absent allows transmitter automatic shut-off.

DigiAna modulators are designed to deliver audio and video carriers for combined amplification TV transmitters.

For better stability, may use the transmitter time base. May also use GPS for sincronization.

There is a possibility to equalize or compensate video linear distortions, such as; frequency response and group delay, and video non-linear distortions, such as: differential gain, differential phase, sync compression, and sync stretch as well.

To be digital must be Linear.

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# PC0208

## HIGHLIGHTS:

- ✓ Digital modulation for analog audio and video
- ✓ Differential phase and gain pre-correction
- ✓ Use of high capacity integrated circuits
- ✓ OCXO time base and input for external time base, from the transmitter
- ✓ BTSC encoder input

## INCLUDED:

- ✓ English manual

## INPUTS:

### • Audio Mono

Level	0dBm
Impedance	600 balanced
Connector	XLR CANON
Frequency response	±0.5dB 30Hz to 15kHz

### • For BTSC Encoder

Level	1Vpp
Impedance	75
Connector	BNC
Frequency response	±0.3dB 30Hz to 120kHz

## IF OUTPUT:

I and Q levels	-10dBm
Impedance / connector	50Ω / BNC female
TV standard	M/N
Intermodulation	better than -60dBc
Harmonics / spurious	< -60dBc
Sync. compression	40 ± 3 IRE, adjustable
Frequency	41 to 47MHz (M/N)

## OUTPUT DEMODULATION:

### • Audio

Harmonic distortion (T.H.D.)	< 0.2%
Signal to noise ratio	>65dB

### • Video

Differential gain	< ± 1%
Differential phase	< ± 1°
Luminance non-linearity	< ± 1%
Chrominance/luminance delay	± 20ns
Field time distortion	< 0.6%
KpB Factor	< ± 1%
K2T Factor	< ± 1%
Noise/ratio relation	> 68dB

## GENERAL:

Serial communication interface	RS232 / RS485
Oscillator	synthesized by PLL
Internal time base	10MHz OCXO
Frequency stability	±0.3ppm (better than ±500Hz)
Squelch	turns off the transmitter in the absence of video
Power supply (48 to 62Hz)	110 or 220Vca (± 10%)
Consumption	30VA
Room temperature range	from 0°C to +40°C
Humidity range	from 0 to 90%
Operation altitude	up to 2,000m
Dimensions (mm)	19" = 44(H) x 483(W) x406(D) 25" = 44(H) x 635(W) x406(D)
Net weight (kg)	19" = 3.9 25" = 4.1

PC0208-REV00-PO-06-07-B - All specifications are subject to alteration.

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