



The Noise Reducer/Ghost Buster is an advanced digital signal processing system that combines Intelvideo's exclusive **VIP** technology for outstanding random noise reduction, and adaptive equalizing for ghost cancellation.

VIP (Video Improvement Processor) is a proprietary system that utilizes recursive motion adaptive techniques to achieve over 9 dB's of noise reduction without the objectionable artifacts usually associated with other noise reducers. Independent control of luminance and chrominance noise reduction permits process optimization for many types of random noise, e.g. plain "snow", color streaking, extraneous interference and beats.

Noise reduction levels can be adjusted manually to handle unusual conditions, or automatically as a function of noise in the input video. The AUTO noise reduction mode utilized Intelvideo's proprietary noise sensing technology to adjust noise reduction levels, and it permits hands-off operation of the system.

The Ghost Buster circuit incorporates an adaptive equalizer DSP with embedded software that implements patented and proprietary ghost canceling algorithms using the national standard **Ghost Cancellation Reference (GCR)** signal transmitted in line 19 of the vertical interval of the television signal. The ghost canceling circuit operates with 11-bit filter coefficient precision, uses a 9-bit input video data, and outputs 10-bit data. As adaptive ghost equalizing can, depending on input conditions, introduce a noise penalty, the addition of Noise Reduction is ideal for a de-ghosting system.

Features:

- **Input:** NTSC color video signal, 1v pp into 75 Ohms Return Loss > 40dB
- **Output:** NTSC color video signal, 1v 0 dB to 9 dB (motion and initial picture quality dependent) power loss.
- **LUMINANCE NOISE REDUCTION:** 0 dB to 9 dB (motion and initial picture quality dependent)
- **CHROMINANCE NOISE REDUCTION:** 0 dB to 9 dB (motion and initial picture quality dependent)
- **GHOST REDUCTION:** 35 dB typical
- **OPERATING RANGE:** +3 μ s (leading ghost) to -42 μ s (trailing ghost).

VIDEO SPECIFICATIONS:

- **Frequency Response:** +/- 1dB to 4.2MHz
- **Non Linearity:** <2%
- **Differential Phase:** <2 plus quantizing effects
- **Differential Gain:** <3% plus quantizing effects
- **K Factor with 2T pulse:** Better than 2%
- **System Delay:** 10.7 μ s nominal
- **Power Requirement:** 120v AC, 60 Hz, 20 Watts
- **Operating Temperature:** 32° F to 110° F, ambient
- **Humidity:** 10% to 90% non-condensing
- **Mechanical:** 1RU cabinet: 1.75"H, 19"W, 10"L; 7Lbs