



Product Data Sheet: Interference Blanking Units

(02/15/2021)

General

An Interference Blanker Unit accepts pulse inputs from numerous transmitters and generates and distributes blanking suppression pulse outputs to affected receivers. The IBU conditions and mixes input pulses in a predetermined pattern for retransmission of blanking pulses to associated receivers.

For over 20 years Eon has designed and developed a variety of Interference Blanking Units for airborne and shipborne applications. Eon provides existing or customized IBU's with a variety of inputs/outputs and computer programmability. All Eon IBU's provide individual signal threshold, pulse width and delay adjustments. Many of these IBU's use analog programming methods such as potentiometers to configure the blanking map (when and how to turn on/off) for the host of transmitters/receivers.

▣ The BCU-101/D, BCU-102, BCU-103, and BCU-104

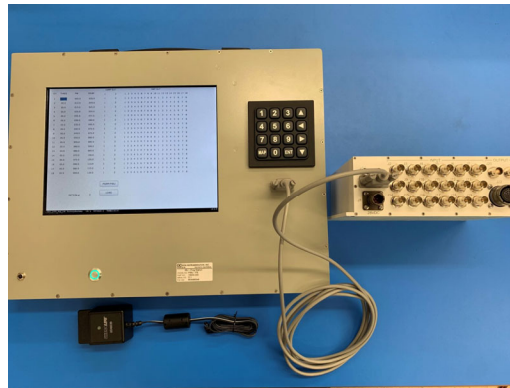
- Allow manual selection of how blanking pulse inputs are combined
- Fully customizable
- Helicopter/Fixed Wing, Ship, Ground Vehicles

In 2014, Eon in concert with the US Navy, designed a digitally programmable unit that controls 96 transmit inputs and 32 receiver blanking signal outputs – far too many for conventional analog control. This unit, known as the PCAB, has become the standard Blanking Unit for the Aegis EW weapon system and is being installed on all 300+ Navy Surface Ships that have Aegis installed.



PCAB Blanker for the Aegis weapon system

Eon has extended the programmable capability to all of its smaller Interference Blankers. The PIBU-102 is an example of an 18 input 18 output unit that is configured with a Programming Station. The PIBU-PS, is a rugged portable hand carried computer/display device that can be used in the laboratory or the flight line, to generate blanking maps. The PIBU-102 is currently installed on multiple fixed wing, helicopter and small ship upgrades. Eon can customize the PIBU for fewer or more inputs/outputs, different connector types or functionality.



PIBU-102 and Programming Station for airborne or shipborne applications

IBU Models and Characteristics

BCU-101/101D : 5 inputs/2 composite

BCU-102 : 12 inputs/8 outputs +1 composite

BCU-103 : 9 complex inputs/5 complex outputs

BCU-104 : 16 inputs/8 outputs + 1 composite

PCAB – (Pretrigger Condition and Blanking) - 96 inputs/32 outputs + 8 composite

PIBU-102 – 18 inputs/18 outputs + 2 composite

About Eon Instrumentation – Since 1961

Eon is a veteran owned multi-million dollar business that designs and manufactures military qualified products for airborne, shipborne, and ground vehicle platforms. These products include Analog and High Definition Digital Video Systems (splitters, converters, selectors, cameras, monitors and recorders); Interference Blanker Units; Rugged Power Supplies; Audio Amplifier Systems; and System Engineering Programs.

Please access Eon's website for information and engineering staff for updates on all product offerings.