

# IMPULSIVE NOISE SIGNAL GENERATOR 1908A

## General

This unit is impulsive noise generator that can conduct impulse noise test (Burst noise test) regulated by standard, such as DVB-T, ATSC, DOCSIS and etc.

By input of IF signal to this unit, addition of impulse noise and phase noise corresponding to C/N setting and frequency conversion are made and output is made as RF signal.

Also, without input of IF to this unit, this unit can be used as noise generator (Max. NBW=100MHz) that outputs only noise centering setting frequency.

Every parameter needed for impulse noise and phase noise measurement can be set easily, so that this unit is most appropriate for performance evaluation of receiver.



Main Unit	.....1
	425(W) × 100(H) × 480(D) mm
Weight	9kg
Accessories	Power Cable (including 3pin→2pin converter) .....1
	Instruction Manual .....1
Power Source	Input Voltage Allowable Range
	: AC90V~AC250V (50Hz/60Hz)
	Power Consumption : Approx. 135VA
Operating Environment	: +5°C~+35°C
Temperature	: 10%RH~85%RH ( No dew generation )

## Features

- Possible to set 4 pulse noise parameters.
  - (a) PD (Pulse Duration) (b) PS (Pulse Spacing)
  - (c) BS (Burst Spacing) (d) Pulse Per Burst
- Possible to select "Impulse" and "Continuous".
  - By using unit with "Continuous" condition, usage as AWGN generator is possible.
- Setting of phase noise mask is made by calling out profile pre-set in advance.
  - Making of profile data is made by defining phase noise value of 5 points that are off set 100Hz, 1KHz, 10KHz, 100KHz and 1MHz from carrier.
- Output noise band width : 6 kinds of 100, 24, 8, 6, 4 and 2 MHz.
- IF input frequency : 36~44MHz (1 Hz step)
- RF output frequency : 30~2150MHz (1 Hz step)
- RF output level : 0 ~ -110dBm (0.1dB step)
- C/N setting range : -35~+40dB (0.1dB step)
- Impulsive noise test and phase noise test corresponded to following standards are possible.
  - EICTA MBRAI 2.0 MOBILE AND PORTABLE DVB-T/H RADIO ACCESS
    - Part1: Interface specification Item 10.12 Tolerance to impulse interference
    - Part2: Interface conformance testing Item 11 Tolerance to impulse interference
  - DOC.A/74 ATSC Recommended Practice: Receiver Performance Guidelines
    - Item 4.3 Phase Noise
    - Item 4.4.4 Burst Noise Performance
  - ANSI/SCTE 79-1 2003 Data Over Cable Systems 2.0
    - Part1: Radio Frequency Interface
      - Item 4.3.1 Transmission Downstream, Item 4.3.2 Transmission Upstream
      - Item F.4.3.1 Transmission Downstream, Item F.4.3.2 Transmission Upstream