

Datachaot

ARBITRARY SIGNAL GENERATOR AWG 500X



> Ford ES-XW7T-1A278-AB
> Ford ES-XW7T-1A278-AC
> Ford WDR 00.00EA
> GMW 3172
> Hyundai/Kia ES 95400-10,
Rev. D
> DO 160 Section 16
> Case N ew Holland
ENS0310
> Audi (Reference vehicles)
> Fiat 9090110
> DaimlerChrysler PF-10541
> Ford EMC-CS-2009.1

Introduction

The test waveforms in automotive become more and more complicated, and more attention are paid to vehicle or components. Normal waveform generator can't meet these requirements, especially, multiple waveforms superposition during one test is needed, AWG 500 arbitrary signal generator is the best solution.

1. Multiple sequence oscillator

- \cdot Signal output part is cordwood components, can be extended to max.4 channels.
- Can generate arbitrary waveforms: DC wave, ramps, sine, sweep frequency, exponential, frequency modulation/amplitude modulation sine wave, irregular and random arbitrary wave.
- · Can generate variation waveform with voltage and time axis
- · Can generate waveform timing sequence
- 2. Software for generating arbitrary waveform

Using excellent GUI arbitrary waveform generation software, it can easily generate complex waveforms with repeated voltage, time scanning.

Features

- > Meet the tests as per ISO16750 (corresponding individual manufacturer standard)
- > Every oscillation channel has waveform arithmetic circuitry to output waveform with high resolution and accuracy
- > By software control with Ethernet, represent kinds of variation phenomenon easily and really.
- > Ensure the synchronization deviation among channels to be less than 1µs
 > Waveform data (CSV) received from oscilloscope can be output with high
- accuracy.

Application Areas

- > Automotive
- > Aviation
- > Military



rechnical pa	ameters
Number of Channels	1 ch \sim 4 ch,2 or 4 optional
Synchronization accuracy among channels	<1 µs
Waveform type	DC wave, ramps, triangle wave, sine, square wave, sweep frequency, exponential, frequency modulation/amplitude modulation, Oscilloscope storage data waveform, user's self-defined waveform, irregular and random arbitrary wave
Parameters	Amplitude, duration, frequency, DC offset, rectification, duty cycle, phase angle, trigger, noise
Amplitude and offset ramping	Static, linear, exponential
Frequency ramping	Static, linear, exponential, log(base 10)
Start/End phase angle	0 \sim 360°in 1°step
Rectification	None, positive, negative, bridge rectification, programmable
Frequency range per channel	Operate mode: 500 kHz max. sine, square, triangle wave, etc, which include sweep frequency, amplitude, offset, phase angle and synchronization change among channels. Direct internal storage mode: DC-500 kHz arbitrary wave, 1 MHz square wave
Waveform output rate	25 MSPS per channel
Frequency resolution	0.001 Hz
Rise/fall time	≪100 ns @ 20 Vpp
Waveform voltage amplitude	0∼±10.00 V
Drive capacity	\geq 1 k Ω
Short circuit protection	Yes
Voltage setting resolution	1 mV
Output accuracy	$\begin{array}{c} \pm \ (0.2\% + 10 \ \text{mV}) DC - 10 \ \text{kHz} \\ \pm 1\% \qquad \qquad 10 - 100 \ \text{kHz} \\ \pm 2\% \qquad \qquad 100 - 350 \ \text{kHz} \\ \pm 5\% \qquad \qquad 350 - 500 \ \text{kHz} \end{array}$

Technical parameters		
File type	CSV	
File waveform points	16 MB Max	
Waveform data storage	Dynamic cache data storage: 1 GB DDR3 NVDS: 32 GB NAND FLASH	
Segments of waveform	1000 segments per waveform, each segment is composed of several kinds of waveforms	
Segment duration	100 μs to 999 hrs or infinite loop	
Delay	None	
Test duration	1ms~9999 hrs, 1 to 99999 count, or infinite loop	
Trigger oscilloscope output	A BNC socket 0-5 V, setting trigger point at the arbitrary point of waveform generation software, monitoring the generated waveform by oscilloscope external trigger function	
External	One BNC socket 0-5 V input, used for	
control input	1~4 ch waveform external control	
PC interface	Ethernet	
Operating temperature range	15 ℃ - 35 ℃	
Operating humidity range	45%-75%	
Driving power supply	AC 90 V - 260 V 50/60 Hz 100 VA	
Dimension	19'/4u	
Weight	Approx.10 kg	
Optional Accessories		
By self-developed AutoLab software, users can edit kinds of waveforms for waveform segment or test points.		

of waveforms for waveform segment or test points. According to different requirement, users can regulate the waveform by advanced image tools, and recording waveforms by other way is also supported like oscilloscope capturing. All types of waveforms can be downloaded to AWG 500.

AWG 500, APS and APG series must be matched together.

Standard Accessories

User manual, factory, test lines, power line, Generator



Naming rules:



Test Connection Diagram





SUZHOU 3CTEST ELECTRONIC CO., LTD.

Add.: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China Tel: +86 (0)512 6807 7192 Fax: +86-512-68079795 Sales Email: globalsales@3ctest.cn Service Email: service@3ctest.cn www.3c-test.com

3ctest is always striving for product innovation and quality improvement.

Product appearance and technical specifications are subject to change without further notice.