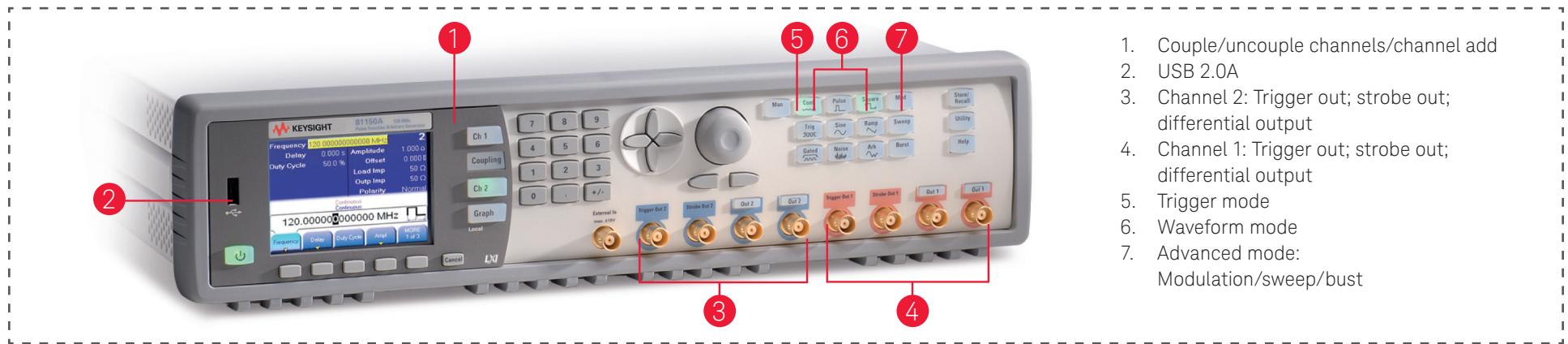


Keysight 81150A Pulse Function Arbitrary Noise Generator

Quad versatility, optimum signal fidelity—from anywhere at any time



1. Couple/uncouple channels/channel add
2. USB 2.0A
3. Channel 2: Trigger out; strobe out; differential output
4. Channel 1: Trigger out; strobe out; differential output
5. Trigger mode
6. Waveform mode
7. Advanced mode: Modulation/sweep/burst

A 4-in-1 device for accelerated and accurate insight into your device

- Create pulse, sine, square, ramp, noise and arbitrary waveforms to test your device—not the source.
- A 2 Channel version can be used either as 2 independent generators or as time synchronized coupled or added.
- Integrated in one instrument, which increases signal performance, minimizes cabling, space and test time.
- Glitch free change of timing parameters (delay, frequency, transition time, width, delay cycle).
- Programming language compatible with Keysight Technologies, Inc. 81101A, 81104A and 81110A pulse pattern generators.

Choose your hardware

| Code | Description |
|------|---------------------------------|
| #001 | 81150A with 1 channel |
| #002 | 81150A with 2 channels |
| #DOC | Printed documentation |
| #1CP | Rack mount kit |
| #1A6 | Z 540 calibration documents |
| #1A7 | ISO 17025 calibration documents |
| #PAT | Pattern generator license |

LXI Class C compliant

LXI www.lxistandard.org
 LAN extensions for Instruments puts the power of Ethernet and the Web inside your test systems. Keysight is a founding member of the LXI consortium.

| Key specifications | Description |
|------------------------|---|
| Frequency range | 1 μ Hz to 120 MHz (pulse) 1 μ Hz to 240 MHz (sine) |
| Waveforms | Noise, adjustable crest factor, sine, pulse, square, ramp, arbitrary waveform |
| Channels | 1 or 2, differential outputs |
| Output amplitude | 50 Ω into 50 Ω |
| High voltage | 100 mVpp to 10 Vpp |
| High bandwidth | 50 mVpp to 5 Vpp |
| Modulation types | AM, FM, PM, FSK, PWM external and internal, double pulse |
| Transition times | 2.5 ns to 1000 s (10% to 90%) |
| Output impedance | 50 Ω /5 Ω selectable |
| Sample rate | 14-bit, 2 GSa/s arbitrary waveform |
| Memory | Arbitrary: 512 k samples per channel Pattern: 16 Mbit per channel |
| Noise repetition rate | 26 days |
| Display | Color, bright |
| Programming interfaces | LAN, SCPI 1992, IEEE 488.2 (GPIB), USB |
| Supported drivers | Keysight VEE, IVI-COM, NI Labview, Matlab® |

Pulse pattern generator selection guide

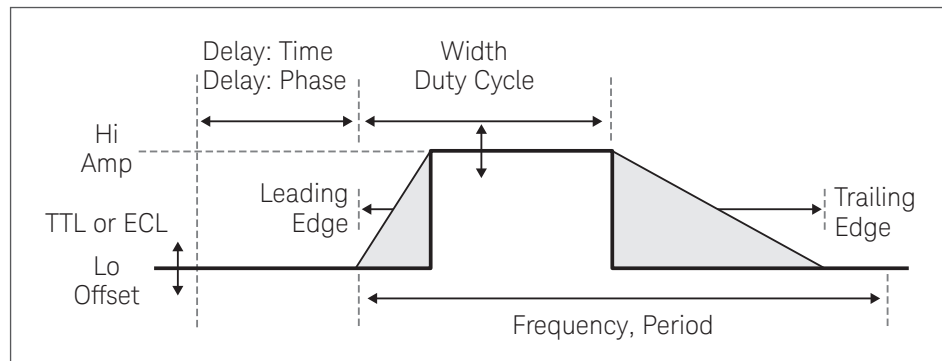
| Model | Bandwidth | Channels | Voltage |
|-----------------|-----------|-----------|----------------|
| 81110A + 81111A | 165 MHz | 1 or 2 ch | 100 mV to 10 V |
| 81110A + 81112A | 330 MHz | 1 or 2 ch | 100 mV to 10 V |
| 81130A + 81131A | 400 MHz | 1 or 2 ch | 100 mV to 10 V |
| 81130A + 81132A | 660 MHz | 1 or 2 ch | 100 mV to 10 V |
| 81150A | 120 MHz | 1 or 2 ch | 100 mV to 10 V |
| 81160A | 330 MHz | 1 or 2 ch | 50 mV to 5 V |

Complementary products

| Model | Description |
|--|--|
| Oscilloscopes | www.keysight.com/find/oscilloscopes |
| Function Arbitrary Waveform Generators | www.keysight.com/find/trueform |
| Power Supplies and Electronic Loads | www.keysight.com/find/power |
| Digital Multimeters | www.keysight.com/find/truevolt |

Characteristics on a pulse pattern shape

All parameters can be selected and edited with the Keysight Pulse Pattern Generators.



MATLAB is a U.S. registered trademark of the Math Works, Inc. PCI Express is a registered trademark of PCI-SIG.

Typical applications

- Automotive busses physical layer receiver test (CAN, LIN, FlexRay, MOST, BroadR Reach)
- Sensor simulation
- Clock signal generation
- Radar distance testing
- Disc drive tests
- Noise and jitter source with selectable crest factor
- Signal source with modulation
- Pulsed IV measurements
- System trigger source
- Capture and reproduce live signals

Related literature

| Pub number | Name |
|-------------|--|
| 5980-0489E | Pulse Pattern and Function Arbitrary Generators and Arbitrary Waveform Generator |
| 5989-6433EN | 81150A and 81160A Pulse Function Arbitrary Noise Generators - Data Sheet, Ver. 1.0 |
| 5989-7860EN | 81150A and 81160A Pulse Function Arbitrary Noise Generators - Application Note |
| 5989-9364EN | Keysight Precision Digital Noise - New Noise Technology and its Application |
| 5991-1943EN | Pulse Parameter Definitions - Application Note |

www.keysight.com/find/81150



Three-Year Warranty

www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.



Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.