

DPA-400 2.1

DisplayPort™ AUX channel monitor



Essential Debug Tool

DPA-400 with the AUX Channel Monitor GUI provide a compact, pocket sized tool for recording and analyzing DisplayPort AUX channel traffic. They enable the user to monitor, capture and document the DPCD reads and writes and the MST Sideband Channel Communication over a DP link. DPA-400 is compatible with all DP versions from 1.1 to 2.1 and HDCP 1.3 and HDCP 2.2/2.3 messaging.

Unigraf AUX Channel Monitor is an almost mandatory tool for any engineer verifying or debugging Compliance Test or Interoperability Test results. Only by analyzing the details of the source sink interaction the designer is able to fully confirm the behavior of both parties. When the details of each read and write are available in detail, there will be no guessing any more..

Easy to Use

DPA-400 2.1 is USB-powered and measures only 10.5 x 13 x 3.5 centimeters, making it an ideal tool for a laboratory desktop and a snappy companion for a laptop computer.

DPA-400 2.1 delivery includes a custom cable for bypassing the DP main stream outside the unit. This ensures that the signal integrity of the main stream links will not be compromised.

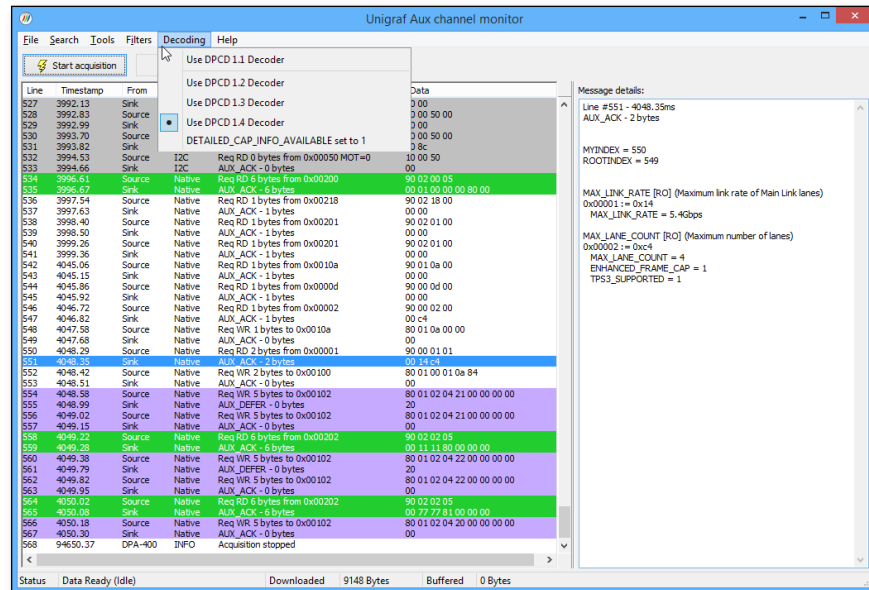
Benefits

- Device independent
- Compatible with all DP versions
- Time stamped interaction log
- Detect and parse all DPCD locations
- Decode Sideband Channel Communication messages
- Pocket Sized
- USB controlled and powered
- Supports DSC, FEC, LTTTPR registers



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Parsed and Raw DPCD Data

GUI parses all data captured from the AUX Channel traffic. This makes it straightforward for the engineer to follow the Sink / Source communication, the CTS test execution and refer it to the requirement of the standard. AUX Channel Monitor GUI lists every AUX Channel event both as as time stamped raw data and in parsed form. The details are explained with the same terminology used by the relevant VESA standard and Unigraf CTS Test report.

Compatible with all DP versions from DP 1.1 to 2.1 and HDCP 1.3 and 2.2/2.3

DPA-400 GUI detects and parses all DPCD locations used in all DP versions. It decodes as well the HDCP 1.3 and HDCP 2.2/2.3 messages and DP Sideband Channel Communication messages. The activity of the Hot Plug Detect (HPD) signal and optional user defined input signals will also be tracked and time stamped. All details of the communication can also be stored for later use or shared with colleagues as universally portable HTML files.

Main Features

DP Interfaces

One DisplayPort™ input and one output. AUX channel and HPD signals pass-through. For DP 2.1 use main stream lanes bypassed with a custom cable.

Custom I/O

3 trigger inputs, 3 expansion outputs, HPD output.

PC Interface

ESD protection on all external signals
USB interface, USB-powered.
Software upgrade capability through USB

Operating Systems

Windows® 10, 8 and 7

Functionality

Log AUX Channel traffic and trigger signals.

Detect and parse all DPCD locations used in all DP versions from 1.1 to 2.0 and Sideband CH Communication messages. Data store and reload in binary format. Virtually unlimited capture buffer size. Time stamps with 32 μ s resolution. HTML report generation.

Mechanical

Outline dimensions 10.5 x 13 x 3.5 cm
Weight 260 g

All specifications subject to change without notice