



## ES-DLA-8 & ES-DLA-16 Logic Analyzer - Quick Start Guide

Congratulations on your purchase of the Connective Peripherals ES-DLA-8 or ES-DLA-16 Logic Analyzer. This guide contains the specifications and installation procedure for the ES-DLA-8 and ES-DLA-16 drivers and application software.

Both the ES-DLA-8 and ES-DLA-16 combine the functions of RAW, RLE, internal clock, external clock and 8 (ES-DLA-8) or 16 (ES-DLA-16) channels into a single instrument.

It features the maximum channels of 8 or 16, the maximum sampling rate of 60MHz RLE or 4-bit RAW and an external clock input. Powered from USB, the ES-DLA-8 and ES-DLA-16 need no external power supply.

ES-DLA-8 and ES-DLA-16 software for Windows can be downloaded for free from the Connective Peripherals website: <http://www.connectiveperipherals.com>.

## Features

### Hardware Features

Number of Channels: 8 (ES-DLA-8) or 16 (ES-DLA-16)  
Capture clock: external clock and internal clock  
Data capture modes: Raw data or RLE (Run Length Encoding)  
Internal capture: use internal clock programmable rates up to 60MHz RLE or 4-bit raw  
Maximum number of samples: 255MB  
Maximum input voltage: -0.5 to +5.5V DC  
Input Overvoltage protection:  $\pm 40V$  DC,  $\pm 15V$  AC \*  
CMOS standard voltage thresholds: -0.5 to +0.8V – Logic Low; +2.0V to +5.5V – Logic High  
Bus Powered USB Interface (60mA)  
Dimensions - W: 40mm x H: 10mm x D: 53mm

\* Note: The analyser is not designed for prolonged operation outside -0.5 to +5.5V

### Software Features

Trigger modes: Rising Edge, Falling Edge, High Level and Low Level  
Maximum number of samples: 1 Billion  
Pre-Trig Mode: 0%, 25%, 50%, 75% and 100%  
Zoom-in, Zoom-out and Full view  
Protocol Analyzer: I2C, SPI, 1-Wire<sup>®</sup> and UART  
Search Function: Data and Condition  
Save results to CSV file  
Save results to BMP file

© Connective Peripherals Pte Ltd.

Clearance Number: CP#035  
Document Reference Number: CP\_000045  
ES-LA\_Quick\_Start\_Guide Version 1.1

## What's In the Box?

Please check that the box contains the following items:

1 x ES-DLA-8 or 1x ES-DLA-16 Logic Analyzer

ES-DLA-8: 1x cables (black) plus 10 clips; ES-DLA-P8

ES-DLA-16: 2x cables (1x white, 1x black) plus 20 clips; ES-DLA-P16

1 x 0.9m USB cable

This Quick Start Guide

Soft sided carrying case

## Getting Started

Both the ES-DLA-8 and ES-DLA-16 require device drivers to be installed on your PC to enable communication with the instrument. Install the device drivers prior to installing the applications below.

## Driver Installation

Driver installation can be completed in one of two ways:

The latest ES-DLA-8 and ES-DLA-16 device drivers are available through the Microsoft Windows Update service. Simply plug in the ES-DLA-8 or ES-DLA-16 with your computer is connected to the internet. When the Found New Hardware Wizard appears, allow it to find the drivers from the Windows Update service. Windows Vista and later defaults to automatically download the device drivers without prompts.

Download the latest device drivers available (at the time of writing the latest version was 2.08.28):  
<https://www.connectiveperipherals.com/products/usb-instruments/pc-logic-analyzers/es-dla-8.html>

Extract the files to a convenient location on your local drive.

Connect the supplied USB cable to the ES-DLA-8 or the ES-DLA-16 and the other end of the cable to a spare USB port on the PC. Power is supplied by the USB port, so no external power is required.

The Windows "Found New Hardware Wizard" will appear. Select the choice to install the drivers from a specific location and then browse to the folder created in the previous step where you unzipped the files.

On completion of installation, the device is ready for use.

## Application Installation

The scope application file can be downloaded from:

<https://www.connectiveperipherals.com/products/usb-instruments/pc-logic-analyzers.html>

Extract the files to a convenient location on your local drive.

© Connective Peripherals Pte Ltd.



## ES-DLA-8 & ES-DLA-16 Logic Analyzer - Quick Start Guide

Run the executable LogicAnalyzerSetup.exe by double clicking on the file and follow the on screen prompts to install the application.

The applications can then be accessed through the Windows Start Menu.

### **CAUTION: High Voltages**

The ES-DLA-8 and ES-DLA-16 are rated at -0.5 to+5.5V DC maximum input. Higher voltages than this directly may damage the instrument and invalidate the warranty. The instrument is not galvanically isolated. The ground of the internal circuitry connects directly to the ground of the host PC via the USB connection.

The ground clip of the ES-DLA-8 or ES-DLA-16 must be connected to the ground of the circuit being measured before any of the channel clips are connected. Due to the common grounds, do not connect the analyser to a circuit under test which has its ground at a different potential to the ground of the computer/analyser.

### **Troubleshooting**

If a static / ESD discharge occurs down the earth lead of the Logic Analyzer, the unit may lock up and require the host PC to be restarted to resume operation. In practice, this is an unusual condition and should not affect normal operation.

We anticipate you will receive many years of satisfactory service out of your purchase, however, should you experience any problems we will do our best to rectify them. Please check our website for known issues and software updates. You can also Email our support department using the contact details below.

### **Contact Details**

Website: <https://www.connectiveperipherals.com>

E-Mail (Support): [support@connectiveperipherals.com](mailto:support@connectiveperipherals.com)

© Connective Peripherals Pte Ltd.

Clearance Number: CP#035  
Document Reference Number: CP\_000045  
ES-LA\_Quick\_Start\_Guide Version 1.1