EasyLog Data Loggers
Quick Start Guide

Pour la traduction française, voir le CD
Para traduccion en castellano, vea el CD
Per la traduzione in italiano, vedere il CD
Für die deutsche Übersetzung, siehe die CD

For full Installation and Operation Manuals, see the website www.nieuwkoopbv.nl

1 FIRST INSTALL YOUR BATTERY

EL-USB-1, EL-USB-1-LCD, EL-USB-2, EL-USB-2+, EL-USB-2-LCD, EL-USB-2-LCD+, EL-USB-3, EL-USB-4, EL-USB-5, EL-USB-CO, EL-USB-CO300, EL-USB-TC, EL-USB-TC-LCD

Before using the data logger you will need to insert the 3.6V 1/2AA battery provided, following the instructions below. Replacement batteries available from Nieuwkoop BV, Art.nr. RG7500 PN: BAT 3V6 1/2AA.

1   2   3   4

EL-USB-1 PRO

Before using the data logger you will need to insert the 3.6V 2/3AA High Temperature battery provided, following the instructions below. Replacement batteries available from Nieuwkoop BV, Art.nr. RG7500, PN: BAT 3V6 2/3AA H TEMP.
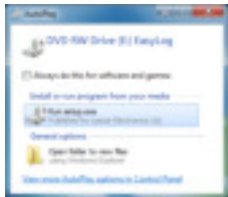

1   2   3   4

EL-USB-1-RCG BATTERY IS PREINSTALLED

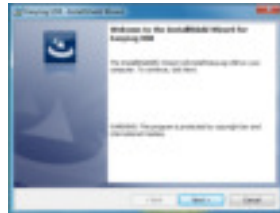To charge the battery connect to USB port until green LED shows.

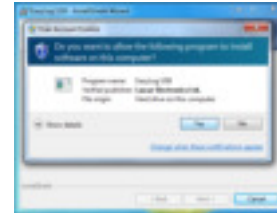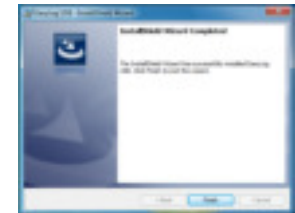## 2 THEN INSTALL YOUR SOFTWARE & USB DRIVER
Windows ™ 2000/XP/VISTA/7

1. Insert the EL-USB-USB CD into the CD drive of your computer. If the CD does not automatically load, navigate to the CD and double click "Setup"
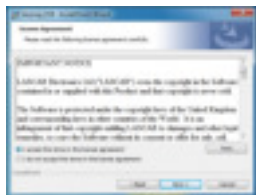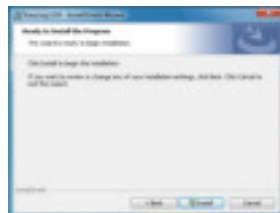
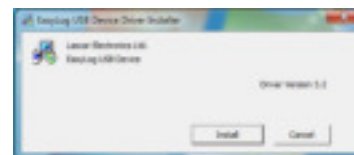2. Click "Next"

5. Click "Yes"

6. Click "Finish"

3. Read the "IMPORTANT NOTICE", select "I agree" and "Next"

4. Click "Install"

7. Click "Install"

8. You have successfully installed the necessary software and driver for your EL-USB data logger. An "EasyLog USB" icon will be placed on your desktop.

3 YOUR DATA LOGGER IS READY FOR USE

▪ Ensure the battery is correctly installed.

▪ Insert the data logger into an available USB port on your PC.

▪ Double click on the EasyLog USB icon on your Windows™ desktop. This will load the configuration software. Setup the data logger for a new log, download a data logger that has been recording, view previously saved data in graph format and check the current status of the attached data logger (including the serial number).

▪ When setup is complete, the data logger should be removed from the USB port to begin recording. If you would like advice on how best to use the data logger for a particular application, please contact your nearest Lascar representative.

▪ **Do not leave your data logger in the USB port as this will cause some of the battery capacity to be lost** (with the exception of EL-USB-1-RCG; see '1. First Install Your Battery' for further information).

▪ Set-up, stop or view previously saved data

▪ Name your logger and select a sample rate

SPECIFICATIONS

Part No	Function	Range	Accuracy (overall error) Typ.	Max.	Readings	Battery	Battery Life*
EL-USB-1	Temperature	-35 to +80°C (-31 to +176°F)	±1°C (±2°F)		16,382	3.6V ½AA	1 year
EL-USB-1-LCD	Temperature with LCD	-35 to +80°C (-31 to +176°F)	±0.5°C (±1°F)	±1.5°C (±3°F)	16,382	3.6V ½AA	1 year
EL-USB-1-PRO	Extended Temperature	-40 to +125°C (-40 to +257°F)	±0.2°C (±0.4°F)		32,510	3.6V ⅔AA	3 years
EL-USB-1-RCG	Temperature with rechargeable battery	-20 to +60°C (-4 to +140°F)	±1°C (±2°F)		32,510	Lithium Ion	1 month (rechargeable)
EL-USB-2	Temperature, Humidity & Dew Point	-35 to +80°C (-31 to +176°F) / 0 to 100%RH	±0.5°C (±1°F) / ±3%RH	±2°C (±4°F) / ±5.0%RH	16,382 / 16,382	3.6V ½AA	1 year
EL-USB-2+	Increased Accuracy Temperature, Humidity & Dew Point	-35 to +80°C (-31 to +176°F) / 0 to 100%RH	±0.3°C (±0.6°F) / ±2.0%RH	±1.5°C (±3°F) / ±4.0%RH	16,382 / 16,382	3.6V ½AA	1 year
EL-USB-2-LCD	Temperature, Humidity and Dew Point with LCD	-35 to +80°C (-31 to +176°F) / 0 to 100%RH	±0.5°C (±1°F) / ±3.0%RH	±2°C (±4°F) / ±5.0%RH	16,382 / 16,382	3.6V ½AA	1 year
EL-USB-2-LCD+	Increased Accuracy Temperature, Humidity and Dew Point with LCD	-35 to +80°C (-31 to +176°F) / 0 to 100%RH	±0.3°C (±0.6°F) / ±2.0%RH	±1.5°C (±3°F) / ±4.0%RH	16,382 / 16,382	3.6V ½AA	1 year
EL-USB-3	Voltage	0 to 30V d.c.	±1%		32,510	3.6V ½AA	1 year
EL-USB-4	Current Loop	4 to 20mA	±1%		32,510	3.6V ½AA	1 year
EL-USB-5	Counter, Event & State	N/A		±3 secs/24 hrs	32,510	3.6V ½AA	1 year
EL-USB-CO	Carbon Monoxide	0 to 1000ppm **NOT A LIFE SAVING DEVICE**	±6ppm		32,510	3.6V ½AA	3 months
EL-USB-CO300	Carbon Monoxide	0 to 300ppm **NOT A LIFE SAVING DEVICE**	±4ppm		32,510	3.6V ½AA	3 months
EL-USB-TC	Thermocouple (J, K and T-type) K-type probe included	-200 to +1350°C (-328 to +2462°F) (K-type) -200 to +1190°C (-328 to +2174°F) (J-type) -200 to +390°C (-328 to +734°F) (T-type)	±1°C (±2°F)	±2°C (±4°F)	32,510	3.6V ½AA	6 months
EL-USB-TC-LCD	Thermocouple with LCD (J, K and T-type) K-type probe included	-200 to +1350°C (-328 to +2462°F) (K-type) -200 to +1190°C (-328 to +2174°F) (J-type) -200 to +390°C (-328 to +734°F) (T-type)	±1°C (±2°F)	±2°C (±4°F)	32,510	3.6V ½AA	6 months

*Depending on logging rate, ambient temperature, and use of alarm LED

LED FLASHING MODES

EL-USB-1

Green double flash
Delayed start

Red double flash
High alarm

Orange double/single flash
Memory full

Green single flash
Logging, no alarm

Red single flash
Low alarm

Orange single flash every 60 sec
Low battery

No LEDs flash
Logger stopped or battery empty

EL-USB-5

Green single flash
Every 10 seconds: normal logging

Green single flash
Every 20 seconds: low battery

Green double flash
Every 20 seconds: memory full

Red single flash
Event/State change/Count recorded

EL-USB-2, EL-USB-2+, EL-USB-2-LCD EL-USB-2-LCD+

Green triple flash
Logger full, no alarm on the channel

Red triple flash
Logger full, alarm on the channel

Green double flash
Delayed start

Green single flash
Logging, no alarm

Red single flash
Logging, low alarm on the channel

Red double flash
Logging, high alarm on the channel

No LEDs flash
Logger stopped or battery empty

Dual Red Flash
Battery low

EL-USB-1-LCD, EL-USB-1-RCG, EL-USB-3, EL-USB-4, EL-USB-TC & EL-USB-TC-LCD

Green double flash
Every 20 seconds: logger full, no alarm

Green single flash
Every 30 seconds: delayed start
Every 20 seconds: low battery, logging, no alarm
Every 10 seonds: logging, no alarm

Red/Green single flash
Every 20 seconds: logger full, last value equal to or exceeds the low or high alarm

Red double flash
Every 10 seconds: logging, high alarm
Every 20 seconds: logging, high alarm, low battery

Red single flash
Every 10 seconds: logging, low alarm
Every 20 seconds: logging, low alarm, low battery

No LEDs flash
LEDs disabled during configuration to save battery power and increase logging life /logger stopped / battery empty

LCD INDICATORS (EL-USB-1-LCD, EL-USB-2-LCD, EL-USB-2-LCD+ AND EL-USB-TC-LCD ONLY)

DISPLAY AND STATUS FUNCTIONS

EL-USB-1-LCD, EL-USB-2-LCD & EL-USB-2-LCD+

Maximum logged value symbol — Relative Humidity symbol* — Negative symbol — Minimum logged value symbol — Reading — Temperature scale

*EL-USB-2-LCD & EL-USB-2-LCD+ only

EL-USB-TC-LCD

Temperature scale symbols — Maximum/Minimum logged value symbol

LCD INDICATION

Display	Logger Status	Explanation
dS	Delayed Start	This is shown when the logger is set to start at a specific data and time*
PS	Push to Start	This is shown when the logger is setup for "Push to start" logging
LoG	Logging	This is shown when the logger is running in "LCD off" mode, and the button is pressed. The display clears again after three seconds
- - -	Stopped	If the logger has not been set to log and the button is pressed, three dashes are displayed for three seconds

* If the logger is set to "LCD off" or "LCD on for 30 seconds" mode, then this will only be shown after the button is pressed. Otherwise the display will remain blank.