ScienceCube

Free Linker 2 for MBL (KDM-BLU02)

User Guide

Rev. KDM-BLU02-2025

- **This product is to be used for educational purposes only. It is not appropriate for industrial, medical, research, or commercial applications.**
- **The contents of this manual are provided for informational purposes only, and product specifications and functions may be changed without prior notice to improve performance.**

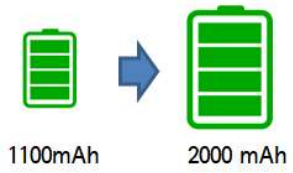
KOREADIGITAL

It is a compact and portable wireless science data logger that pairs to any Android and Windows device by Bluetooth or USB cable.

Features of ScienceCube Free Linker 2 include:

1. Performance is improved by using 32-bit ARM processors.

2. Longer usage time with large capacity battery. 160% improvement over existing Free linker.



3. Digital sensors (photogates, motion sensors, etc.) can be used on all channels.
   - Digital sensors can be used on all channels.
   - Experimental design can be more flexible.
4. The design has been improved.
   - The ergonomic power button has been applied to improve the key input feeling.
   - The case uses the latest pure white dye to maintain a color that is resistant to contamination and does not fade over time.

Composition

The ScienceCube Free Linker 2 consists of the following.

- **Free Linker 2** Interface
- Sensor Connection Guide
- Sensor Cable Gender
- Sensor Cable * 4 pcs
- Mimi-USB cable
- USB Charging Adapter

Usage Instructions

1. Power on

Long-press the power button for more than 2 seconds. The power LED will turn on and a buzzer will sound.

2. Connect to Smart Device

Connect the ***Free Linker 2*** to your PC using the provided USB cable, or connect it to your Android smart device or PC via Bluetooth.

3. Run Data Logger

Launch the Data Logger application(**Science#** for Windows or Android) and proceed with your experiment.

4. Auto Stop Function

If there is no sensor connection or communication for 10 minutes, the device will automatically stop. When the battery level drops below 5%, an alarm will sound and the device will automatically shut down.

Sensor Connection Method

Free Linker 2 can directly connect a general sensor or handle-type sensor without using a sensor cable. When connected this way, it is automatically recognized as CH[A].

1) General sensor connection

Connect the sensor directly to the ***Free Linker 2.***

This is the simplest connection method and can be used with most sensors.

2) Connecting a handle-type sensor using the connection guide.

Connect the handle-type sensor using the connection assistance guide.

This is useful when you need to fix the sensor port.

3) Connect all sensors to 4 channels.

Connect 4 sensors at the same time using the cable gender for sensor connection.

This is useful when measuring various sensor values at the same time.

4) Connect the sensor cable to CH[A].

Insert the cable gender into **CH[A]**, change the male to female, and then connect.

This is useful when connecting sensors using cables (DO, oxygen, etc.).

Specifications

Item	Description
Sensor Input	4 Channel (Analog & Digital)
Resolution	12bit A/D
Sampling Time	Max. 10Khz, (Only use 1 CH)
Condition	0 ~ 40℃
Wireless Connection	Bluetooth Classic 2.1
Wired Connection	USB 2.0
Battery	2000mAh, Li-Polymer rechargeable
Charging	Mini-USB (Max. 500mA @5VDC)
EMC	KC : R-R-KDY-BLU02 CE : EN 61326-1:2013, EN 55011:2016/A1:2017

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