UB300
Flash Duplicator
User Guide

33MB	1 Sec.	2 Sec.	3 Sec.
Per Second Data Copy	Quick Quality Check	Real Capacity Check	Flash Speed Check

AN EASY YET POWERFUL CARRIAGEABLE COPIER

CONTENT

I. Product Introduction

1. Overview

The Flash duplicator is a stand alone, high speed and convenient equipment for easily copy data anytime and quickly check Flash device's quality. The checking capability assists you to find out defective Flash device efficiently, like Capacity Check enables you to find out the real capacity of Flash device; Measure Speed helps you to check each Flash device's read and write speed.

This 2 targets Flash duplicator is stand alone, no need of PC or any installation procedure, when the system is turned off, nothing will be left in it, so there is no risk of virus infection. And instant power on and off for quick boot up and shut down the duplicator can save your time greatly. Its lightweight design, friendly interface and easy operation is ideal for personal, office and shops application.
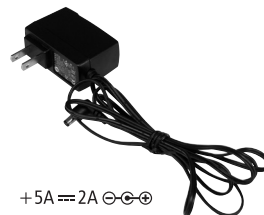
2. Features

1. Quick checking function to find out defective Flash device easily.
2. Standalone, no PC required, without risk of virus infection.
3. High writing speed up to 33MB/Sec.
4. Lightweight design and user friendly with instant power on and off.
5. Support multiple Flash media: it enables you to copy multiple Flash media of SD, MS, CF through a qualified USB interface card reader.
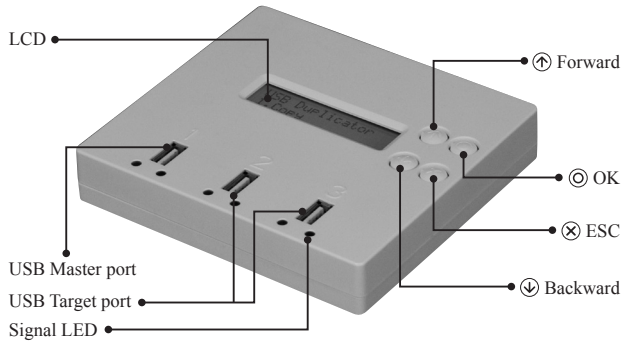
3. Package Content

UB300

+5A ⎓ 2A ⊖–⊙–⊕

Adapter

4. Basic Instruction

A. System Overview

- LCD
- Forward
- OK
- ESC
- Backward
- USB Master port
- USB Target port
- Signal LED

B. Back side

Power Switch and Plug of the Power Supply

- Power supply
- Power switch

C. LCD Configuration

Copy		870M
21%	0:20	275M

- Total Content Size
- Copied Size
- Copy progress
- Time (mm:ss)
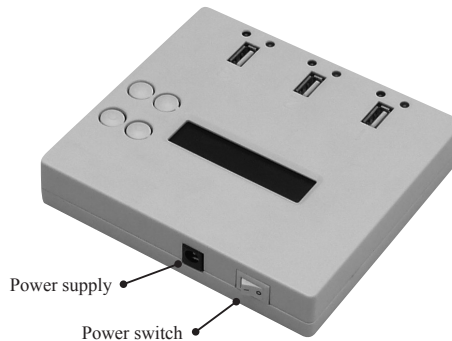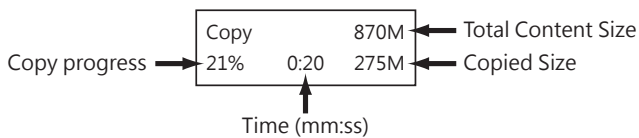
5. Function Table

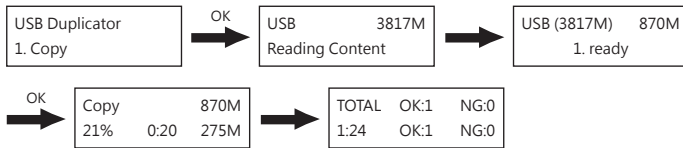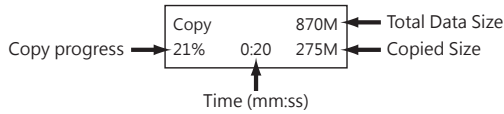| Function	Description
1. Copy	USB/SD/Micro SD/CF Flash copy.
2. Compare	This option makes bit-by-bit comparison between the master source and all other copied flash cards.
3. Copy+Compare	This option will make a copy first and then compare the copied Flash devices with the source immediately after the copy has finished.
4. Utility	**4.1 Device Info.** This function will show Flash device's general information includes capacity, format and data size.
	4.2 Chk USB Virus To check USB VIRUS in Flash
	4.3 Capacity Check To check Flash device's real capacity.
	4.4 Format FAT To execute Flash FAT16/32 format.
	4.5 Measure Speed To measure Flash device's read and write speed.
	4.6 Erase Content To quick erase the content in Flash device (support FAT format).
	4.7 System Info. To check the firmware version.
	4.8 System Update To update the firmware via USB.
5. Setup	**5.1 Copy Area** To set copy area.	**5.1.1 Only Data Area** To detect the format FAT16,32/NTFS/Linux (Ext2, Ext3) and copy the data area directly.
		5.1.2 Whole Media To copy the whole content of Flash including empty space.
	5.2 Button Beep To hear a beep or not when press a button.	
	5.3 Language Support English and Japanese	

II. Function Introduction

1. Copy

It copies data from source Flash device to target Flash devices. The default setting of copy area is "Data Only". If you like to change copy area from "Data Only" to " Whole HDD" or "All Partitions", please refer to function [5.1 Copy Area] for selecting the copy modes

Steps of copy:

Plug source and target Flash devices into duplicator→Select [1. Copy]→Press ◎ [OK]→The LCD will show the number of target flash plugged in and ready for copy→Copy processing→Copy finished→Press ⊗ [ESC] to finish copy.

```
                    OK                                   
┌────────────────┐     ┌────────────────┐     ┌────────────────────┐
│ USB Duplicator │ ──▶ │ USB       3817M │ ──▶ │ USB (3817M)   870M │
│ 1. Copy        │     │ Reading Content │     │          1. ready  │
└────────────────┘     └────────────────┘     └────────────────────┘

  OK                                         
     ┌────────────────┐     ┌──────────────────────┐
──▶  │ Copy      870M  │ ──▶ │ TOTAL  OK:1    NG:0  │
     │ 21%  0:20  275M │     │ 1:24   OK:1    NG:0  │
     └────────────────┘     └──────────────────────┘
```
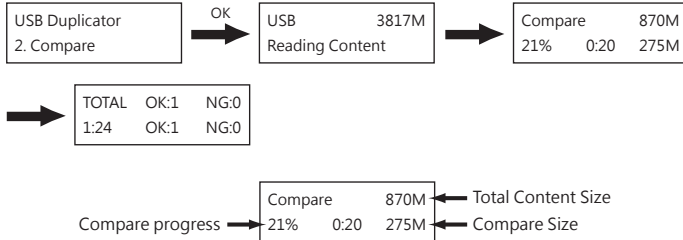
In < Data Only > Mode:

```
                       ┌────────────────┐
                       │ Copy      870M ◀──── Total Data Size
Copy progress ───────▶ │ 21%  0:20  275M ◀──── Copied Size
                       └────────┬───────┘
                                │
                           Time (mm:ss)
```

** *Do not take out any Flash device while the program is processing.*

** *It is strongly recommended that target and source have to be in the same capacity.*

** *After copy, the target flash cards' data and format will same as source flash card. Original data in target flash cards will be no longer existed.*

** *When the program is in process, the green LED will flash. When the process has finished the green LED will stop flashing but will remain illuminated. If an error occurs the red LED will illuminate.*

2. Compare

It is used to check if the data on source Flash device is identical to the copied Flash devices after duplication.

Steps of compare:

Plug Flash devices into duplicator→Select [2. Compare]→Press ◎ [OK]→Compare Processing→Compare finished→ Press ⊗ [ESC] to finish compare.

| USB Duplicator
2. Compare | **OK** → | USB   3817M
Reading Content | → | Compare   870M
21%   0:20   275M |

| TOTAL   OK:1   NG:0
1:24   OK:1   NG:0 |

Compare progress → | Compare   870M | ← Total Content Size
| 21%   0:20   275M | ← Compare Size

*** **Do not take out any Flash device while the machine is processing.***

*** **When the machine is in process, the green LED's will flash. When the program has finished the green LED's will stop flashing but will remain illuminated. If an error occurs the red LED will illuminate.***

3. Copy & Compare

It makes copy first and then compare target Flash devices with source Flash device to ensure data correctness.

4. Utility

4.1 Device Info.

This function will show Flash device's general information includes capacity, format and data size.

Steps of Show Flash device's Info.:

1. Plug Flash devices into duplicator→Select [4. Utility]→Press ⊚ [OK]→Select [4.1 Device Info.]→Press ⊚ [OK]→System shows the info.

| USB Duplicator
4. Utility | OK→ | [Utility]
1. Device Info. | OK→ | [#01]   USB 3817M
FAT32   870M |
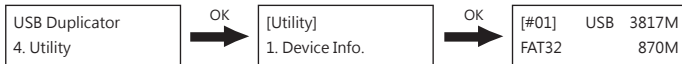
2. Press ⊕ [Forward] / ⊖ [Backward] to check other Flash devices' info.→Press ⊗ [ESC] to finish.

Flash No. → [#01]   USB 3817M ← Capacity
Format → FAT32   870M ← Data Size
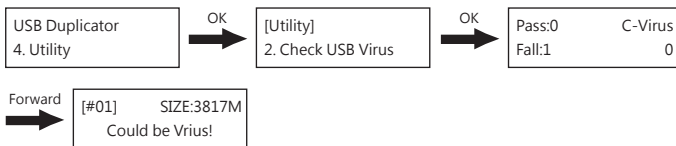
4.2 Check USB Virus

This function is to help you to find out USB VIRUS hidden in the Flash device quickly and easily.

** This function is especially for Auto Run USB VIRUS checking only, not for detecting all kinds of virus. It can only check the USB virus, can not clean or kill the virus.

Steps of Check USB virus:

1. Plug Flash devices into duplicator→Select [4. Utility]→Press ⊚ [OK]→Select [4.2 Chk USB Virus]→Press ⊚ [OK]→System search the USB Virus.

When red LED is on, it means the system found potentially risk of USB Auto run virus.

| USB Duplicator
4. Utility | OK→ | [Utility]
2. Check USB Virus | OK→ | Pass:0   C-Virus
Fall:1   0 |

Forward→ [#01]   SIZE:3817M
Could be Vrius!

2. Press ⊙ [Forward] / ⊙ [Backward] to check other Flash devices' virus→Press ⊗ [ESC] to finish

Flash without virus ⟶ Pass:0   C-Virus

Flash with virus ⟶ Fall:1   0 ⟵ Number of Flash in process
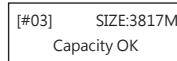
4.3 Capacity Check

This function is to check Flash device's real capacity and exam the Flash devices can work or not.

Steps of check Flash device's real capacity:

1. Plug Flash devices into duplicator→Select [4. Utility]→Press ⊙ [OK]→Select [4.3 Capacity Check]→Press ⊙ [OK]→System analyze the Flash device's real capacity.

USB Duplicator		[Utility]		Pass:0 Capacity
4. Utility	**OK ➡**	3. Capacity Check	**OK ➡**	Fall:1 0
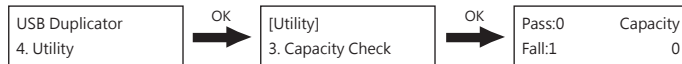
2. Press ⊙ [Forward] / ⊙ [Backward] to check other Flash devices' real capacity→Press ⊗ [ESC]to finish.

[#03]   SIZE:3817M

Capacity OK

*** Capacity check function supports asynchronous operation; you can plug in and pull out the Flash devices to check their real capacity continuously without pressing any other buttons.*
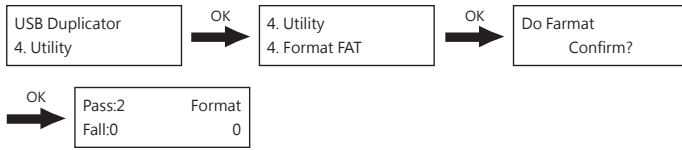
4.4 Format FAT

This function is to format Flash device. The system will format the Flash according to its capacity automatically. If Flash capacity is above 2GB, the system will format the Flash to FAT32, if Flash capacity is below 2GB, the format will be FAT16. During the process, you can check each Flash device's formatting status by pressing ⊙ [Forward] / ⊙ [Backward].

*** The source port (port #1) does not execute format function.*

*** This format function only format Flash device to FAT 16 or 32.*

Steps of formatting Flash device:

1. Plug Flash devices into duplicator→Select [4. Utility]→Press ◎ [OK]→Select [4.4 Format FAT]→Press ◎ [OK]→System format the Flash devices

```
┌─────────────────────┐  OK  ┌─────────────────────┐  OK  ┌─────────────────────┐
│ USB Duplicator      │ ━━▶  │ 4. Utility          │ ━━▶  │ Do Farmat           │
│ 4. Utility          │      │ 4. Format FAT       │      │         Confirm?    │
└─────────────────────┘      └─────────────────────┘      └─────────────────────┘
```

```
  OK  ┌─────────────────────┐
━━▶   │ Pass:2       Format │
      │ Fall:0            0 │
      └─────────────────────┘
```

2. Press ⬆ [Forward] / ⬇ [Backward] to check other Flash devices' format status→Press ✖ [Esc] to finish.

```
┌─────────────────────┐
│ [#02]    SIZE:3817M │
│  Format Complete    │
└─────────────────────┘
```

4.5 Measure Speed

This function is to measure Flash device's speed of read and write.

Steps of check Flash device's speed:

1. Plug Flash devices into duplicator→Select [4. Utility]→Pres ◎ [OK]→Select [4.5 Measure Speed]→Press ◎ [OK]→System check the speed of Flash devices

```
┌─────────────────────┐  OK  ┌─────────────────────┐  OK  ┌─────────────────────┐
│ USB Duplicator      │ ━━▶  │ [Utility]           │ ━━▶  │ [#01]               │
│ 4. Utility          │      │ 5. Measure Speed    │      │       Measuring…    │
└─────────────────────┘      └─────────────────────┘      └─────────────────────┘
```
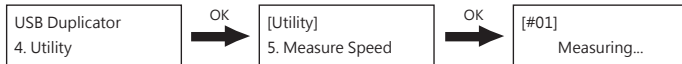
2. Press ⬆ [Forward] / ⬇ [Backward] to check other Flash devices' format status→Press ✖ [ESC] to finish.

```
┌─────────────────────┐
│ [#02] Read:16.2MB   │
│       Write:10.4MB  │
└─────────────────────┘
```

4.6 Erase Content

This function is to erase Flash device's FAT data content, it will not erase the Flash FAT16/32 format. If format is not FAT16/32, ie. NTFS, the quick erase will not execute.

*** The source port (port #1) does not execute erase function.**

Steps of erasing Flash device's content:

1. Plug Flash devices into duplicator→Select [4. Utility]→Press ◎ [OK]→Select [4.6 Erase Content]→Press ◎ [OK]→System quick erase the data in Flash devices.

```
                        OK                      OK
USB Duplicator   ━━▶  4. Utility         ━━▶  Do ERASE ALL
4. Utility             6. Erase Content          Confirm?


     OK      Pass:2        Q. ERASE
   ━━▶      Fall:0               0
```

2. Press ⬆ [Forward] / ⬇ [Backward] to check other Flash devices' erasing status→Press ✖ [ESC] to finish.
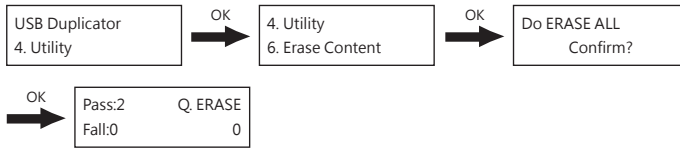
```
[#02]        Size 3871M
Erase Complete
```

4.7 System Info.

This function is to show the basic information of this system, which includes model number and firmware version.

```
                              USB 1-2       ◀━━ Model No.
Firmware Version ━━▶ Ver : 2.22.2
```
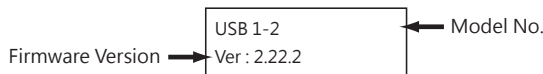
4.8 System Update

This function is to update the system's firmware version. Please save an un-zipped update file to your Flash device (DO NOT save the file in a folder). Plugging the Flash device in slot (port #1) and select [8 System Update], press ◎ [OK], the system will automatically start to do the update program. When it finished, turn the system off for around 5 seconds and then turn it on, the new firmware has been upgraded.

5. Setup

5.1 Copy Area

There are two options for copy: Only Data Area and Whole Media.

5.1.1 Only Data Area:

This function is to set the copy mode to copy data area only. It is faster than copy whole Flash. It will automatically analyze the source Flash device's file format. If the format is FAT16,32/NTFS/Linux (Ext2, Ext3) which is recognizable by the system, it will copy the data only instead of copy the whole Flash. If the format is non-recognizable, the system will copy the whole Flash card including empty space. For example a 2GB Flash card which is FAT32 file format and has only 50 MB of data inside, the system will only copy that specific 50MB of data, it take only a few seconds to copy the source.

** The default setting of copy area in the system is "Only Data Area".

5.1.2 Whole Media:

Setup the duplicator in Whole Media function, the system will copy the whole Flash card, including the empty space and format. This function is used when you have a Flash source which has an unknown file format or you perfer to bit by bit copy the whole Flash no matter how big is the data size. For example a 2GB flash card which is FAT32 file format and has only 50 MB of data inside, if you setup "Whole Media" the system will copy whole 2GB of Flash. It will take longer time to copy the source.

5.2 Button Beep

You can select to hear a beep or not when you press the buttons.

5.3 Language

This function is to setup the language.

III. FAQ

Q1:   Can I use UB300 to copy other Flash devices such as micro SD?

A1:   Some users may use a USB card reader to copy other different types of Flash device, such as SD, CF, and Memory Stick etc. Due to the quality and stability of USB card reader in market are different, a poor-quality card reader may damage the system and the quality of copy. Therefore, it is recommended to copy SD/Micro SD/CF by using qualified USB card reader.

Example : The card reader supports the major kinds of Flash: SD, Micro SD and CF.

Q2:   Can I copy USB devices with big different capacity ? (For example 4GB to 1GB)

A2:   Yes, UB300 will copy whatever the capacity size is. However, to avoid an unexpected poor quality of data duplication, it is strongly recommended that target and source have to be the same of capacity.

Q3:   What is the biggest capacity of Flash that UB300 can support?

A3:   Theoretically, it may support to bigger capacity. Based on the real test, the flash capacity of UB300 can support to 16GB.

Q4:   Can UB300 check all kinds of virus?

A4:   No.

   ● The [check USB virus] function is only to check Auto Run USB Virus, not for checking all kinds of virus.

   ● Also UB300 will not clean or kill any virus including the USB virus.

Q5: Can I copy data by USB HDD?

A5: Yes, but please provide enough power current to both the system and USB HDD while copying.

- The system needs more power current than 2A, 5V for copy USB HDD, you need to change the adapter to 5.5V, 4A.

- Some USB HDDs need to plug 2 USB power supply to keep a stable power supply (some USB HDDs may not need to use both of the 2 USB power supply).

USB HDD

USB Power Supply

USB Power Supply

- The number of USB ports on UB300 may not enough for copying USB HDD while the USB HDD needs both of 2 USB power supply plug to the duplicator.

IV.Specification

Model		UB300
Target		1:2
Operation		Stand alone
Support media		USB1.1 / USB2.0 SD / SDHC / Micro SD / MMC / Mini SD / CF (by USB multimedia card reader)
Display		2*16 Monochrome LCD display
Control Button		4 push buttons (Forward , Backward, OK, Esc)
LED		LED(Green/Red) on each slot
Temperature	Working	5°C~45°C
	Storage	-20°C~85°C
Humidity	working	20%~80%
	Storage	5%~95%
Power Supply		+5V, 2A
Copy mode		Only Data Area, Whole media
Check function		Device Info., Capacity Check, Measure Speed
Language		English, Japanese
System Dimension (L×W×H cm)		12×13×2.5

* *USB multimedia card reader is a optional accessory.*

* *It is strongly recommended to use same capacity Flash devices for duplication.*

* *The above information is for marketing reference only. The actual specification may subject to change without notice.*