



"Technology on the move!"

Kanguru USB Duplicator Quick Start Guide

Models: U2D

This is a Quick Start Guide only. For detailed information about your Kanguru USB Duplicator, please refer to the User Guide. A digital copy of the User Guide can be downloaded from our website at: support.kanguru.com

Before using your duplicator, please make sure that your Source drive is in good condition and that your Target drives are healthy. For best results, use drives that are USB-IF compliant when possible.

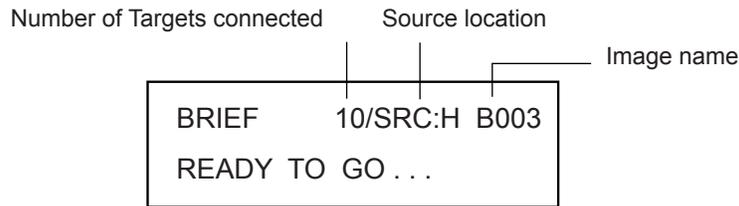
Copy Drive to Drive

1. Turn on the duplicator and wait for the system to boot up.
2. Check that port 1 (top-left USB port) is set as the Source location. The Source port is indicated by a blinking green LED. If port 1 isn't selected as the Source location:
 - a. Press and hold the SET button for 3 seconds to enter the Setup menu.
 - b. Press the SET button until "SELECT SOURCE" appears.
 - c. Press the RUN button to configure the Select Source option to "1".
 - d. Press and hold the SET button for 3 seconds to return to the main menu.
3. Press the SET button until the desired copy mode appears on the screen.
 - **SMART**: Checks the Source and Target drives and automatically determines the most efficient copy mode.
 - **BRIEF**: Copies only sectors that contain data, skipping empty sectors. You can only run BRIEF Copy if the Source drive is formatted in a supported file system: FAT, FAT32, exFAT, NTFS, EXT2, EXT3, EXT4, HFS.
 - **RESIZE**: Copies from a smaller capacity Source drive to larger capacity Target drives. It first performs a BRIEF copy and then extends the partitions on the Target drives to take up any remaining unallocated space. You can only run RESIZE Copy if the Source drive is formatted in a supported file system: FAT, FAT32, exFAT, NTFS.
 - **FULL**: Complete sector by sector duplication. Full copy supports any file system.
4. Connect your Source drive to port 1 and then connect your Target drives into any available ports.
5. Once the screen displays "READY TO GO", press the RUN button to begin the duplication process. **Warning!** Do not remove any drives while duplicating. Wait for a solid red or green LED to appear next to the port before removing a drive.

Copy Image to Disc

1. Turn on the duplicator and wait for the system to boot up.
2. Press and hold the SET button for 3 seconds to enter the Setup menu.
3. Press the SET button until "SELECT SOURCE" appears.
4. Press the RUN button to change the Select Source setting to "H".
5. Press and hold the SET button for 3 seconds to return to the main menu.
6. Press the the SET button until "LOAD" appears on the screen. The Load function will create an image of your Source drive and save it to the duplicator's internal hard drive.
7. Insert the Source drive into any port on the top row.
8. Once the screen displays "READY TO GO", press the RUN button.
9. The system will ask you to input a name for the image file. An image file name consists of 3 digits. To enter the image name:
 - a. The digit farthest to the right is blinking, indicating that it is currently selected. Press the RUN button to increase the digit's value by 1.
 - b. Press the SET button to select the next digit to the right. Press the Run button to increase the digit's value by 1. Repeat this step as necessary.
10. When you have completed naming the image file, press and hold the RUN button for 3 seconds to begin the Load process. **Note:** If the image file name that you entered is the same as the name of a pre-existing image file, then the previous image file will be overwritten.
11. Once the Load process has completed, you can remove the Source drive.

12. Press the SET button until the desired copy mode appears on the screen.
 - **SMART**: Checks the Source and Target drives and automatically determines the most efficient copy mode.
 - **BRIEF**: Copies only sectors that contain data, skipping empty sectors. You can only run BRIEF Copy if the Source drive is formatted in a supported file system: FAT, FAT32, exFAT, NTFS, EXT2, EXT3, EXT4, HFS.
 - **RESIZE**: Copies from a smaller capacity Source drive to larger capacity Target drives. It first performs a BRIEF copy and then extends the partitions on the Target drives to take up any remaining unallocated space. You can only run RESIZE Copy if the Source drive is formatted in a supported file system: FAT, FAT32, exFAT, NTFS.
 - **FULL**: Complete sector by sector duplication. Full copy supports any file system.
13. Connect your Target drives into any available USB ports.
14. When all of the drives have been recognized by the system, the screen will display the following:



Note: If the image name starts with a 'B' (e.g. B003) then the image is a Brief image. If the image name starts with a 'F' (e.g. F003) then the image is a Full image. Brief images can be used for SMART, BRIEF and RESIZE copy modes. Full images can only be used for FULL copy mode. The USB Duplicator will load a Brief image by default.

15. Press the RUN button to start the duplication process. **Warning!** Do not remove any drives while duplicating. Wait for a solid red or green LED to appear next to the port before removing a drive.
16. Once the duplication process has completed, Target drives that were successfully duplicated will have a green LED displayed next to it.

The Kanguru USB Duplicator is guaranteed to be free from defect in materials and workmanship for one year. Kanguru Solutions does not offer money back returns on its duplicator product lines due to the unique nature of the product. If you experience any problems using your Kanguru USB Duplicator or have any technical questions, please call our technical support department. Our tech support is free and available Monday through Friday, 9am to 5pm EST. Call 1-508-376-4245 or visit our website at www.Kanguru.com

Kanguru Solutions assumes no responsibility for the illegal distribution of copyright protected material.



"Technology on the move!"

A black silhouette of a kangaroo in a leaping position, positioned to the right of the slogan and connected to the "Solutions" part of the logo above.

KANGURU USB DUPLICATOR USER MANUAL

BEFORE FIRST USE

This user's manual is intended for use with the latest firmware version. If any of the functions on your unit are different from those mentioned here, please contact Kanguru Solutions to receive the latest firmware version.

Copyright© 2010, Kanguru Solutions. All rights reserved.

DOS®, Windows 95®, Windows 98®, Windows NT®, Windows 2000®, Windows ME®, Windows XP®, Windows Vista™, and Windows 7™ are registered trademarks of Microsoft Inc. Apple® and Macintosh® are registered trademarks of Apple Computer Inc. IBM and OS/2 are registered trademarks of the International Business Machines Corporation. All other brand or product names are trademarks of their respective companies or organizations.

DISCLAIMER

The Kanguru USB Duplicator only supports USB devices that are USB-IF compliant. If you are making duplications using USB devices that are not USB-IF compliant, the USB Duplicator may not function properly. The Kanguru USB Duplicator will also not work with hardware encrypted/protected USB devices.

In no event shall Kanguru Solutions' liability exceed the price paid for the product from direct, indirect, special, incidental, or consequential software, or its documentation. Kanguru Solutions offers no refunds for its products. Kanguru Solutions makes no warranty or representation, expressed, implied, or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Kanguru Solutions reserves the right to revise or update its products, software, or documentation without obligation to notify any individual or entity.

Kanguru Solutions will not be held responsible for any illegal use of this product nor any losses incurred while using this product. The user himself is responsible for the copyright laws, and is fully responsible for any illegal actions taken.

CUSTOMER SERVICE

To obtain service or technical support for your system, please contact Kanguru Solutions Technical Support Department at 508-376-4245, or visit www.Kanguru.com for web support.

LIMITED WARRANTY

Kanguru Solutions guarantees that every Kanguru *USB Duplicator* will be free from defects in workmanship and materials for 1 year from the date of purchase. This product carries a *1 year limited warranty on the power supply, controller, and all internal components. The warranty does not cover any USB cables, Power cables, or USB devices used in conjunction with the Kanguru *USB Duplicator*. This warranty does not apply if, in the judgment of Kanguru Solutions, the product fails due to damage from handling, accident, abuse, misuse, or if it has been used in a manner not conforming to the product's instructions, has been modified in anyway, or the warranty labels have been removed. If the product proves defective during this warranty period, call Kanguru Solutions Technical Support in order to obtain a RMA required for service.

Kanguru Solutions does not offer money back returns on its duplicator product lines due to the unique nature of the product. All units will be fully supported under manufacturer's and/or extended warranty plans.

Table of Contents

1. INTRODUCTION	5
1.1 Technical Specifications.....	6
1.2 Package Contents.....	6
2. USING YOUR KANGURU USB DUPLICATOR	7
2.1 Navigating the User Interface.....	8
2.1.1 The Menus	9
2.1.1.1 The Main Menu.....	9
2.1.1.2 The Setup Menu	9
2.1.1.3 The Advanced Setup Menu	9
2.2 Function Tree.....	10
3. GENERAL OPERATION	11
3.1 Duplication Modes	11
3.1.1 FULL	11
3.1.2 BRIEF	11
3.1.3 RESIZE.....	11
3.1.4 SMART	11
3.2 Defining Copy and/or Compare Functionality.....	13
3.2.1 Set Copy Functionality	13
3.2.2 Set Compare Functionality	13
3.2.3 Set Copy & Compare functionality	13
3.3 Duplicating Using a USB Device as the Source.....	14
3.4 Duplicating Using the Internal Hard Drive as the Source.....	16
3.5 Duplicating Using a Storage Center as the Source	18
3.6 Verify	21
3.7 Erase.....	22
3.8 Load.....	23
3.8.1 Loading an image to the internal hard drive.....	23
3.8.2 Loading an image to a Storage Center.....	24
4. SETUP MENU OPTIONS	25
4.1 Set Copy	25
4.2 Set Compare	25
4.3 Select Source.....	26
4.4 BTN. Sound	27
4.5 Show EXE Time	27
4.6 Sel Img File	27
4.7 Del Img File	28

5. ADVANCED SETUP MENU OPTIONS.....	29
5.1 Device Info	29
5.2 System Info	30
5.3 Set to Default.....	30
5.4 No Cap Check.....	31
5.5 Max UDMA Mode.....	31
5.6 Burn In.....	31
5.7 Skip Read Error	32
5.8 Auto Run.....	32
5.9 Load Full Image.....	32
5.10 Most Var. Cap.....	33
5.11 Need Resize	33
5.12 Format Source.....	34
5.13 Total Copy Count.....	34
5.14 Update Firmware.....	35
6. WARRANTY	36
7. TECH SUPPORT	36
8. RMA PROCEDURE	37

1. INTRODUCTION

Congratulations on your purchase of the Kanguru USB Duplicator by Kanguru Solutions. The Kanguru USB Duplicator is a high speed, stand-alone USB duplicator with an internal hard drive that can duplicate, erase or verify up to 11, 21 or 43 USB devices (depending on model). The duplicator has many advanced features for the IT professional, yet it easy enough to for a novice to use.

The Kanguru USB Duplicator copies data with fast copy speeds of up to 30MB/s*. The Kanguru USB Duplicator is one of the fastest duplication systems available today.

** Actual data transfer rate performance dependant upon drive*

Note: The Kanguru USB Duplicator only supports USB drives that are USB-IF compliant. If you are making duplications using USB drives that are not USB-IF compliant, the USB Duplicator may not function properly. The Kanguru USB Duplicator will also not work with hardware encrypted/protected USB drives.

FEATURES

- √ Supports: USB1.0 and USB2.0 A-type devices
- √ Data Transfer Rate: up to 30MB/s (Per USB Port)*
- √ Supports various copy modes including: Full, Smart, Brief and Resize
- √ Copy, Compare, Erase from 11, 21 or 43 USB devices (depending on model)
- √ Drive size and brand independent
- √ Internal hard drive for storing device images
- √ One-year Standard Warranty: This system comes complete with a one-year warranty that covers parts and a 90 day warranty for labor.
- √ Clones any file system: including DOS, FAT, FAT32, NTFS, HFS+, EXT2, EXT3, EXT4. The USB Duplicator is also able to copy raw data.

** Actual data transfer rate performance dependant upon drive*

1.1 Technical Specifications

Model	11 Target	21 Target	43 Target
Display	Text LCD		
Input	2 x Push Buttons		
Max Number of Devices	11	21	43
Supported Media	USB2.0 (backwards compatible with USB1.1)		
Dimensions	11" x 15.2" x 4"	11" x 15.2" x 5.75"	15.2" x 15.2" x 8"
Weight	13.25 lbs	15.5 lbs	22 lbs
Power Requirement	200W	200W	500W
Operating Temperature	41°F - 122°F		
Operating Humidity	15% - 90%		

1.2 Package Contents

- Kanguru USB Duplicator unit with internal hard drive
- AC Power Cord
- User manual
- User registration form

If any of the above items are missing, please call Kanguru Solutions' Tech Support department at: (508) 376-4245, extension 2 and replacement parts will be shipped to you ASAP.

2. USING YOUR KANGURU USB DUPLICATOR

To setup your Kanguru USB Duplicator for use:

1. Before plugging in the AC Power Cable, please make sure that the voltage is adjusted to the same as your local voltage 110V/220V.
2. Make sure no USB drives are connected when powering on the unit.
3. You are now ready to begin using your Kanguru USB Duplicator. To begin, turn on the unit using the power switch located on the back panel. The Kanguru USB Duplicator is powered by an internal power supply that is controlled by a rocker switch located at the rear of the unit. Flip the switch to the On position.



The system will start up and you will see some initialization screens. When the system has finished initializing you will enter the Main menu. You are now ready to use your Kanguru USB Duplicator.

Things to remember:

- The Kanguru USB Duplicator supplies USB bus power to all drives. Most USB flash drives can operate using USB bus power only. If your USB drive normally requires an external power source to operate (most external USB Hard Drives require an external power source), then it will still require that power source.
- Throughout this manual we will be referring to Source and Targets. The Source refers to the device or image file that contains the data that you want to duplicate. Targets refer to devices that data will be copied to.
- It is OK to connect and disconnect Source or Target drives while the Kanguru USB Duplicator is powered on. However, do NOT disconnect drives while the machine is performing a function. Do not unplug devices while their activity lights are blinking! Please wait until a solid green light or solid red light appears next to the port the drive is connected to before removing it.
- When performing a Copy or Compare function, you can remove a Source drive once all the Target drives have been removed, even if the indicator light next to the Source port is still blinking.
- Make sure that your USB drives are USB-IF compliant. USB drives that are not USB-IF compliant will not work with the USB Duplicator.
- The USB Duplicator will not work with hardware encrypted/protected USB drives.

2.1 Navigating the User Interface

Kanguru Solutions designed the user interface with the professional in mind. The interface is fast, responsive, and concise. This means that very few key presses are needed to achieve a desired action. The UI is controlled by 2 buttons located to the right of the LCD screen marked as ‘SET’ and ‘RUN’.



The ‘SET’ and ‘RESET’ buttons can be pressed in two ways:

- **Tap** – the button is pressed and released immediately. If the *BTN. SOUND* option is enabled (see section 4.4 *BTN. Sound* on page 27), a Tap will be accompanied by a short audible tone.
- **Hold** – the button is pressed and held for 3 seconds. If *BTN. SOUND* option is enabled (see section 4.4 *BTN. Sound* on page 27), a Hold will be accompanied by a short audible tone, followed by a higher pitched tone.

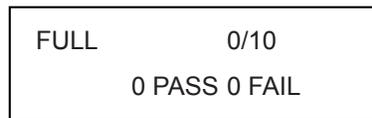
Note: When following the instructions listed in this manual, please pay close attention to whether you should **tap** a button or **hold** a button. The same button may function one way if tapped and another way if held.

2.1.1 The Menus

There are three tiers to the Kanguru USB Duplicator user interface: Main menu, Setup menu and Advanced Setup menu

2.1.1.1 The Main Menu

The Main menu contains the main duplication functions: FULL, SMART, BRIEF, RESIZE, VERIFY, ERASE and LOAD. The USB Duplicator will start in this menu by default.



- **Tap** the ‘SET’ button to navigate through the different functions within the Main menu.
- **Tap** the ‘RUN’ button to execute a function.

2.1.1.2 The Setup Menu

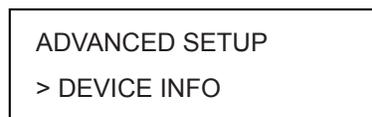
The SETUP menu contains options for configuring the way your USB Duplicator operates. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.



- **Tap** the ‘SET’ button to navigate through the different SETUP menu options
- **Tap** the ‘RUN’ button to select/configure an option.
- While in the SETUP menu, **hold** the ‘SET’ button to return to the Main menu.

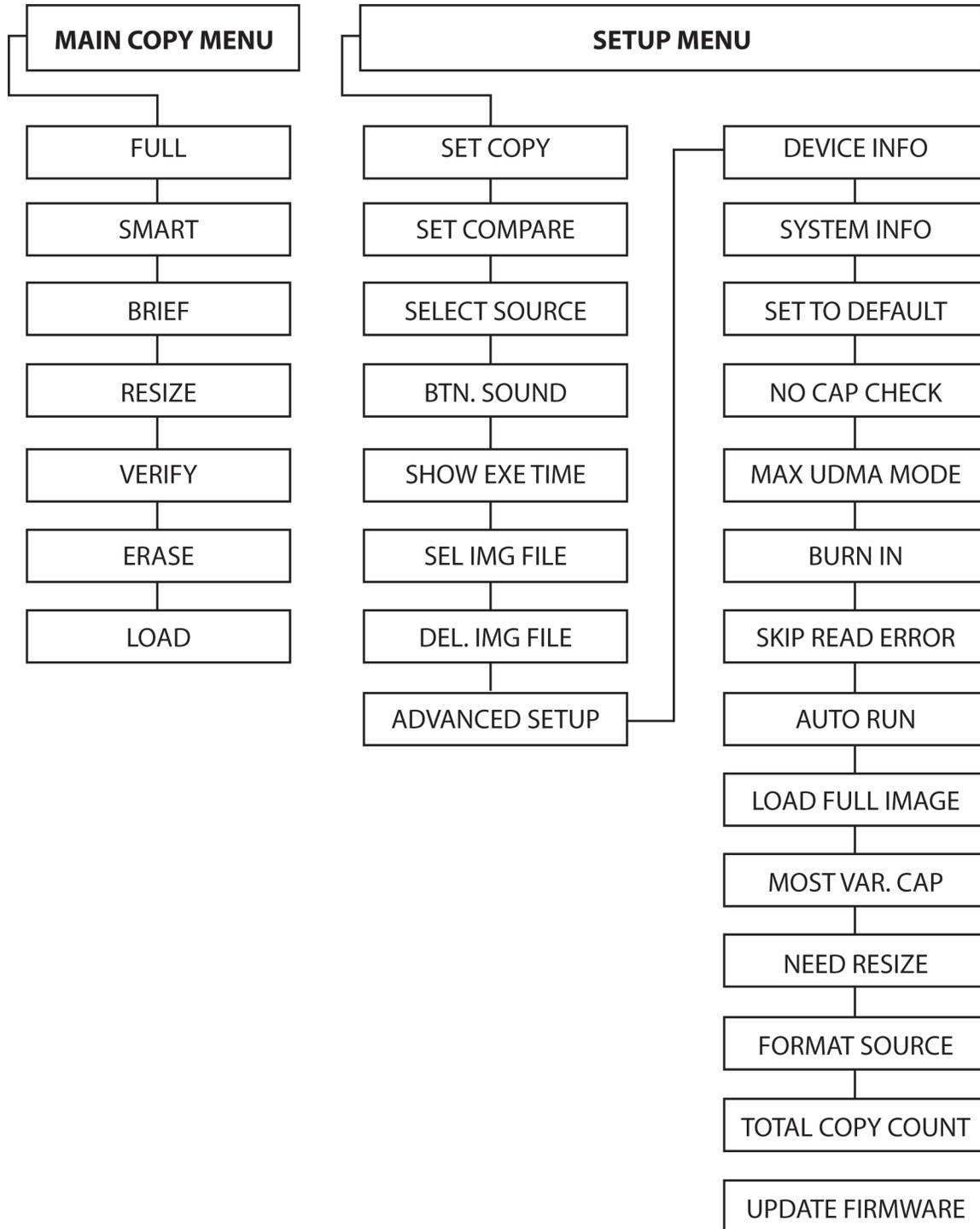
2.1.1.3 The Advanced Setup Menu

The ADVANCED SETUP menu contains advanced options for configuring the way your USB duplicator operates. From the SETUP menu, **tap** the ‘SET’ button to navigate to the ADVANCED SETUP option and then **tap** the ‘RUN’ button to enter the ADVANCED SETUP menu.



- **Tap** the ‘SET’ button to navigate through the different menu options.
- **Tap** the ‘RUN’ button to select/configure an option.
- While in the ADVANCED SETUP menu, **hold** the ‘SET’ button to return to the SETUP menu.

2.2 Function Tree



3. GENERAL OPERATION

The Kanguru USB Duplicator comes with an integrated hard drive. You can designate either a connected USB drive or the internal hard drive as the Source. For more information about designating the Source location, please see section 4.3 *Select Source* on page 26. After you have selected your Source location, select a Copy mode.

3.1 Duplication Modes

The Kanguru USB Duplicator can Copy and/or Compare USB drives in any one of four modes:

3.1.1 FULL

FULL mode copies drives sector by sector from the Source to the Target(s), and supports all major OS formats (DOS/Windows/Mac/Linux). This mode is the slowest copy mode, but the safest.

3.1.2 BRIEF

BRIEF mode copies only the sectors that contain data and skips any blank sectors (including information hidden in sub channels). This mode is the fastest copy mode; it supports the following file systems: FAT, FAT32, NTFS, EXT2, EXT3, EXT4, HFS.

Note: If the Source is not formatted as a supported file system then the duplicator will automatically switch to FULL mode.

3.1.3 RESIZE

RESIZE mode is used to copy between Source and Target drives of different capacities. The Resize mode allows for copying from a smaller capacity Source to larger capacity Target drives. Resize copy supports the following file systems: FAT, FAT 32, NTFS, EXT2, EXT3, EXT4, HFS. If the Source is not formatted as a supported file system then the duplicator will automatically switch to FULL mode. When duplicating in Resize mode, Target drives should all be the same capacity.

Note: Due to technical limitations the Resize function may only be executed on devices connected to the top row of USB ports. This feature may be updated in the future with a firmware update to allow Resize to function on all ports. Please contact Kanguru Solutions Technical Support for information about the latest firmware version (see chapter 7. *Tech Support* on page 36).

3.1.4 SMART

SMART mode checks the Source and Target drives and determines which copy mode is the most efficient and automatically operates in that mode.

- First it will try to detect the Source drive's file system. If it does not recognize the file system

then it will copy in FULL mode. The USB Duplicator supports the following file systems: FAT, FAT32, NTFS, EXT2, EXT3, EXT4, HFS

- If it is able to recognize the file system of the Source, it will compare the capacity between the Source and the Target.
 - If the Source's capacity is smaller than the Target then it will copy in RESIZE mode. The system will determine whether it needs to execute in Resize mode based on the NEED RESIZE option under the ADVANCED SETUP menu (see section 5.11 *Need Resize* on page 33).
 - If the Source's capacity is equal to the Target, then it will copy in BRIEF mode.
 - If the Target drives are of mixed capacities, it will determine a suitable copy mode based on the capacity of the smallest Target drive.
 - If the Target drives are of mixed capacities and the difference between drives exceeds the MOST VAR. CAP parameter, then the higher capacity drives that exceed the MOST VAR. CAP parameter will be excluded from the duplication. The MOST VAR. CAP parameter can be configured under the ADVANCED SETUP menu (see section 5.10 *Most Var. Cap* on page 33).

3.2 Defining Copy and/or Compare Functionality

Before performing a duplication, take a moment to define the SET COPY and SET COMPARE options under the SETUP menu. These options will tell the duplicator how the FULL, SMART, BRIEF and RESIZE modes will function.

3.2.1 Set Copy Functionality

When enabled FULL, SMART, BRIEF and RESIZE modes will execute a Copy process. The SET COPY option is enabled by default.

To change the SET COPY option:

1. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.
2. **Tap** the ‘SET’ button to navigate to the SET COPY option. It is marked with an asterisk by default, signifying that copy functionality is currently enabled.
3. **Tap** the ‘RUN’ button to toggle whether copy functionality is enabled or disabled.

SETUP
> [*] SET COPY

3.2.2 Set Compare Functionality

When enabled FULL, SMART, BRIEF and RESIZE modes will execute a Compare process, comparing the data between the Source and Target drives and confirming that they are identical. The SET COMPARE option is disabled by default.

To change the SET COMPARE option:

1. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.
2. **Tap** the ‘SET’ button to navigate to the SET COMPARE option. It should not be marked by default, signifying that compare functionality is currently disabled.
3. **Tap** the ‘RUN’ button to toggle whether the option is enabled or disabled.

SETUP
> [*] SET COMPARE

3.2.3 Set Copy & Compare functionality

Both the SET COPY and SET COMPARE options can be enabled at the same time. When both options are enabled FULL, SMART, BRIEF and RESIZE modes will execute a Copy & Compare process, copying the data from the Source to the Target drives and then comparing the data on all drives to ensure that they are identical.

3.3 Duplicating Using a USB Device as the Source

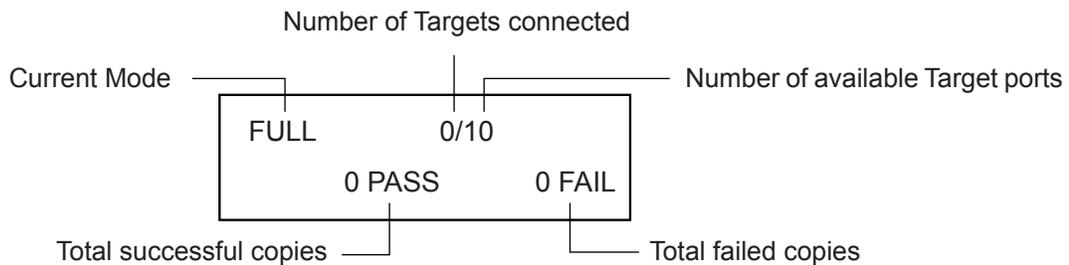
Using a USB drive as the Source is the simplest and most convenient way to perform a duplication process. To duplicate using a USB drive as the Source you have to make sure that a USB port is designated as the Source location.

To set the Source location as the top-left USB port:

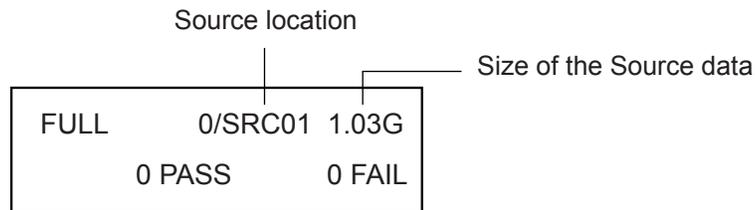
1. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.
2. **Tap** the ‘SET’ button to navigate to the SELECT SOURCE option.
3. The SELECT SOURCE option should be set to “1” by default. If it is not set as “1”, **tap** the ‘RUN’ button to set this option to “1”.
4. **Hold** the ‘SET’ button to return to the Main menu. The Source port will be indicated by a blinking green LED.

Now that you’ve set the Source location you can begin the copy process.

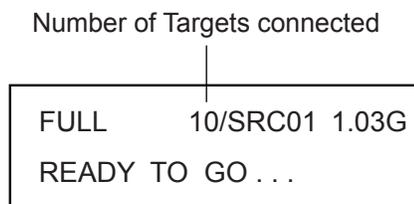
1. From the Main menu, **tap** the ‘SET’ button to navigate to the desired copy mode. For more information on the different available copy modes see section 3.1 *Duplication Modes* on page 11. The screen will display the following:



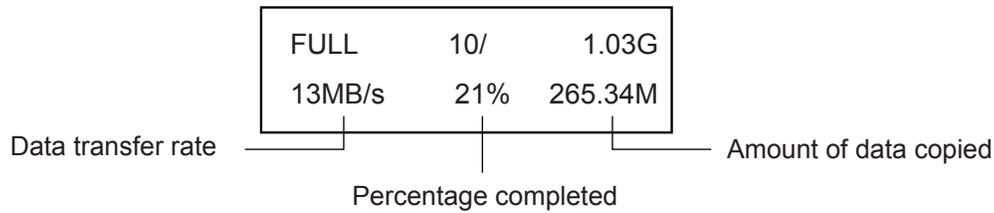
2. Connect your Source USB drive to the top-left port. The screen will display the following:



3. Once your Source drive has been connected, connect your Target drives into any available ports. When all connected drives have been initialized, the screen will display the following:

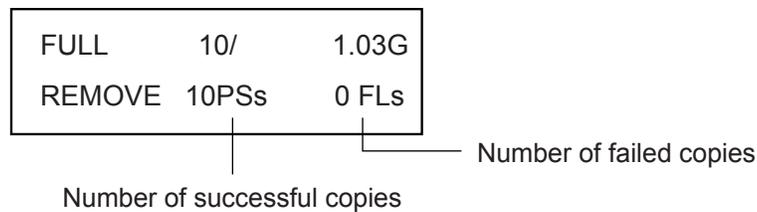


4. Once the screen displays “READY TO GO”, **tap** the ‘RUN’ button to execute. During duplication the screen will display the following:



WARNING! Do not remove any drives while they are in use. You can tell if a drive is in use if the green LED next to it is blinking. Wait for a solid green or red LED before removing a drive. If you want to interrupt the current process, **tap** the ‘RUN’ or ‘SET’ button.

5. Once the copy process is completed the screen will display the following:



Drives that completed successfully will have a green LED displayed next to it, indicating that there were no errors on that drive. Drives that failed the duplication process will have a red LED next to it.

Note: The duplicator will keep a running count of passed and failed drives until you change copy modes.

6. Remove all the target drives and you will return to the Main menu.

3.4 Duplicating Using the Internal Hard Drive as the Source

The USB Duplicator has an internal hard drive that allows you to load an image of a USB drive directly onto the hard drive. This provides you with a convenient way to store common jobs directly on the duplicator.

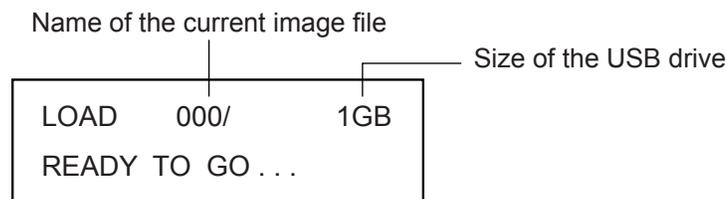
Note: When you designate the internal hard drive as the Source location it frees up an additional USB port, which would normally be used as the Source location, for use as a Target port.

First you need to designate your USB Duplicator’s internal hard drive as the Source location.

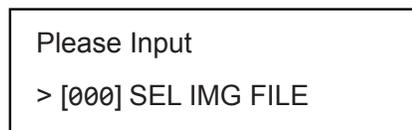
1. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.
2. From the SETUP menu, **tap** the ‘SET’ button to navigate to the SELECT SOURCE option.
3. **Tap** the ‘RUN’ button to change the SELECT SOURCE option to “H”. This will designate the internal hard drive as the source location.

Next you have to load an image of your USB drive to the internal hard drive:

1. From the SETUP menu, **hold** the ‘SET’ button to return to the Main menu.
2. From the Main menu, **tap** the ‘SET’ button to navigate to LOAD.
3. Connect the USB drive into any of the USB ports on the top row. When the Source drive has been initialized you will see the following screen.



4. **Tap** the ‘RUN’ button. The duplicator will ask you to input a name for the image file.

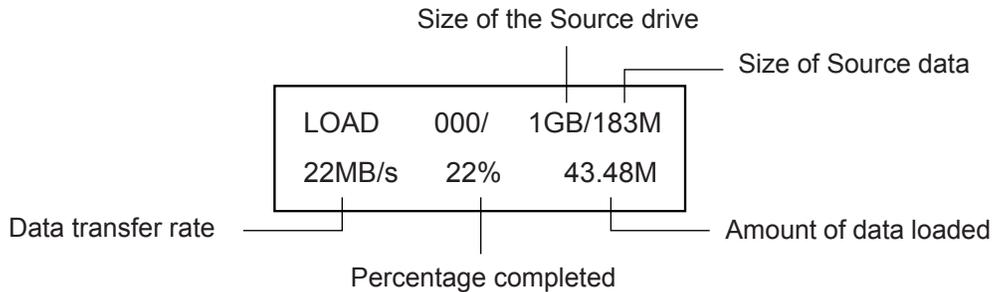


To enter the image file name:

- a. The image file name consists of three digits. The digit furthest to the right will be blinking, indicating that it is currently selected. **Tap** the ‘RUN’ button to increase the digit by one.
- b. **Tap** the ‘SET’ button to select the next digit to the left. **Tap** the ‘RUN’ button to increase the digit by one. Repeat this step as necessary.

Note: If the image file name you enter is the same as the name of an image file previously stored on the internal hard drive, then the old file will be overwritten.

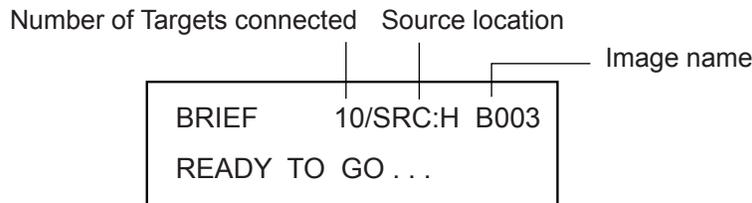
- When you have completed naming the image file, **hold** the 'RUN' button and the Load process will begin.



- When the Load process has completed you can remove the Source drive.

Now that you have loaded a Source image on the internal hard drive, you can begin the copy process.

- From the Main menu, **tap** the 'SET' button to navigate to the desired copy mode.
- Connect your Target drives to any available USB ports.
- When all connected drives have been initialized, the screen will display the following:



Note: If the image name starts with a 'B' (e.g. B003) then the image is a Brief image. If the image name starts with a 'F' (e.g. F003) then the image is a Full image. Brief images can be used for SMART, BRIEF and RESIZE copy modes. Full images can only be used for FULL copy mode. The USB Duplicator will load a Brief image by default. To load a Full image, please see section 5.9 *Load Full Image* on page 32.

- Tap** the 'RUN' button to execute.

WARNING! Do not remove any drives while they are in use. You can tell if a drive is in use if the green LED next to it is blinking. Wait for a solid green or red LED before removing a drive. If you want to interrupt the current process, **tap** the 'RUN' or 'SET' button.

- Once the copy process is completed, Target drives that completed successfully will have a green LED displayed next to it, indicating that there were no errors on that drive. Target drives that failed the duplication process will have red LED next to it.

Note: The duplicator will keep a running count of passed and failed drives until you change copy modes.

- Remove all the Target drives and you will return to the Main menu.

3.5 Duplicating Using a Storage Center as the Source

The Kanguru USB Duplicator allows you to turn a connected USB drive into a Storage Center. You can load images of USB drives directly to the Storage Center providing you with a convenient way to store common jobs, similar to the way that device images can be saved to the USB Duplicator’s internal hard drive.

First you need to format your USB drive as a Storage Center:

1. From the Main menu, **hold** the ‘SET’ button to enter the SETUP menu.
2. From the SETUP menu, **tap** the ‘SET’ button to navigate to the SELECT SOURCE option.
3. The SELECT SOURCE option should be set to “1” by default. If it is not set as “1”, **tap** the ‘RUN’ button to set this option to “1”.
4. From the SETUP menu, **tap** the ‘SET’ button to navigate to the ADVANCED SETUP option and then **tap** the ‘RUN’ button to enter the ADVANCED SETUP menu.
5. From the ADVANCED SETUP menu, **tap** the ‘SET’ button to navigate to the FORMAT SOURCE function.
6. Connect the USB drive that you want to use as a Storage Center to the top-left USB port on the USB Duplicator.
7. **Tap** the ‘RUN’ button to run the FORMAT SOURCE option.
8. A confirmation screen appears. **Tap** the ‘RUN’ button to proceed with formatting the USB drive as a Storage Center or **tap** the ‘SET’ button to cancel.

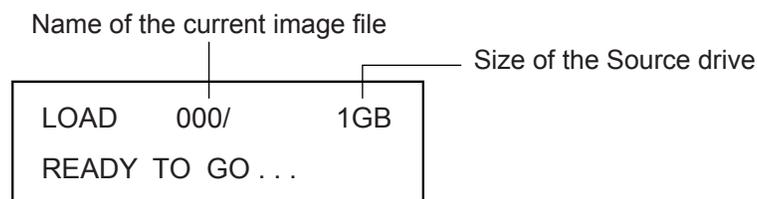
Caution! Formatting a USB drives will erase any data from the drive.

Your USB drive has now been setup as a Storage Center. You can now load images of USB drives to the Storage Center for convenient duplication.

Note: A USB drive formatted to be a Storage Center will not be recognized when connected to a computer. The Storage Center uses a proprietary format not recognized by most operating systems.

To load a USB drive image to the Storage Center:

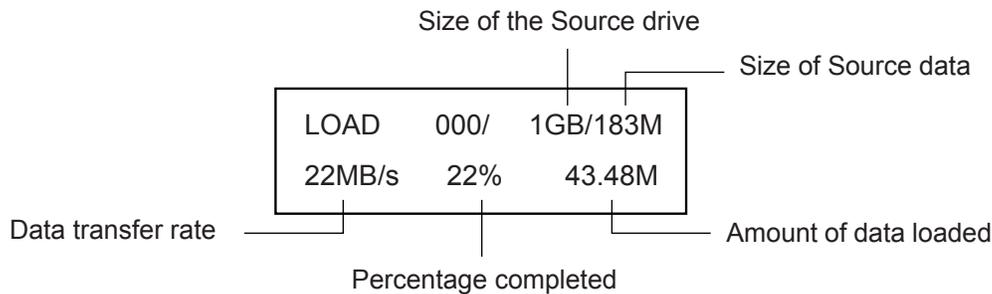
1. Make sure your Storage Center is connected to the top-left USB port and that the SELECT SOURCE option is set to “1” (for more information on SELECT SOURCE, see section 4.3 *Select Source* on page 26).
2. From the Main menu, **tap** the ‘SET’ button to navigate to LOAD.
3. Connect the USB drive into any available USB port on the top row. When the USB drive has been initialized you will see the following screen.



4. Tap the 'RUN' button. The duplicator will ask you to input a name for the image file.

Please Input
> [000] SEL IMG FILE

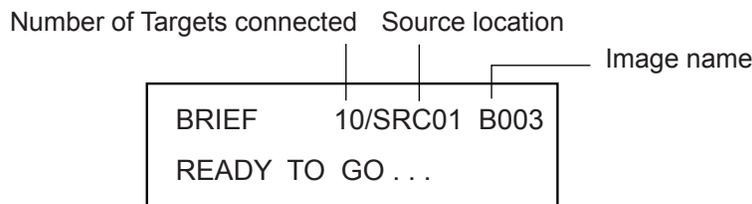
- a. The file name consists of three digits. The digit furthest to the right will be blinking, indicating that it is currently selected. Tap the 'RUN' button to increase the digit by one.
 - b. Tap the 'SET' button to select the next digit to the left. Tap the 'RUN' button to increase the digit by one. Repeat this step as necessary.
Note: If the image file name you enter is the same as the name of an image file previously stored on the Storage Center, then the old file will be overwritten.
5. When you have completed naming the image file, hold the 'RUN' button and the load process will begin.



6. When the load process has completed you can remove the USB drive.

Now that you have loaded an image on the Storage Center, you can begin the copy process:

1. Make sure the Storage Center is connected to the top-left USB port and that the SELECT SOURCE option is set to "1" (see section 4.3 *Select Source* on page 26).
2. From the Main menu, tap the 'SET' button to navigate to the desired copy mode.
3. Connect your Target drives into any available USB ports. When all connected drives have been initialized, the screen will display the following:



Note: If the image name starts with a 'B' (e.g. B003) then the image is a Brief image. If the image name starts with a 'F' (e.g. F003) then the image is a Full image. Brief images can be used for SMART, BRIEF and RESIZE copy modes. Full images can only be used for FULL copy mode. The USB Duplicator will create a Brief image by default. To load a Full image, please see section 5.9 *Load Full Image* on page 32.

4. **Tap** the 'RUN' button to execute.

WARNING! Do not remove any drives while they are in use. You can tell if a drive is in use if the green LED next to it is blinking. Wait for a solid green or red LED before removing a drive. If you want to interrupt the current process, **tap** the 'RUN' or 'SET' button.

5. Once the copy process is completed, Target drives that completed successfully will have a green LED displayed next to it, indicating that there were no errors on that drive. Target drives that failed the duplication process will display a red LED next to it.

Note: The duplicator will keep a running count of passed and failed drives until you change copy modes.

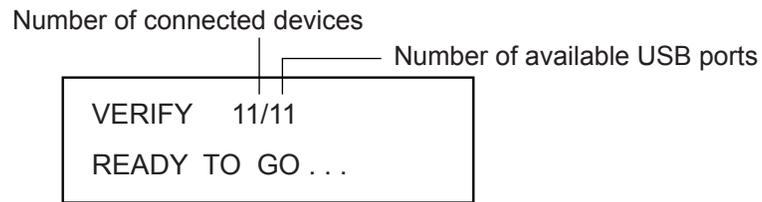
6. Remove all the Target drives and you will return to the Main menu.

3.6 Verify

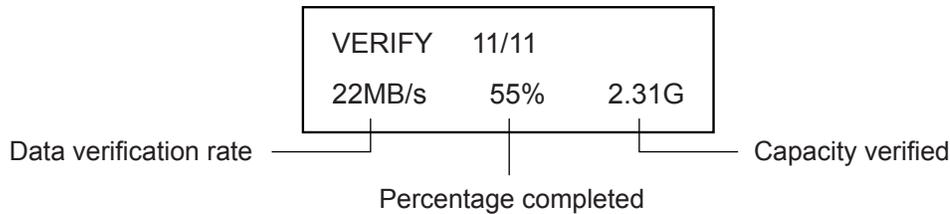
The VERIFY function will check all connected USB drives and determine if they are readable. The verification function doesn't require a Source drive so all USB ports can be used during the verification process.

To verify your USB drives for duplication:

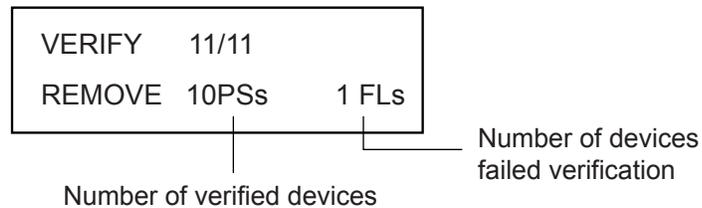
1. From the Main menu, **tap** the 'SET' button to navigate to the VERIFY function.
2. Connect your USB drives to any available USB ports. When your USB drives have been connected and initialized, the screen will display the following:



3. **Tap** the 'RUN' button to begin the verify process. The following screen will be displayed during verification:



4. Once the verification process has completed, the following screen will be displayed:



A green LED indicator light will appear by the devices that have been verified as readable. A red LED indicator light will appear by devices that are unreadable.

5. Remove all connected USB drives to return to the Main menu.

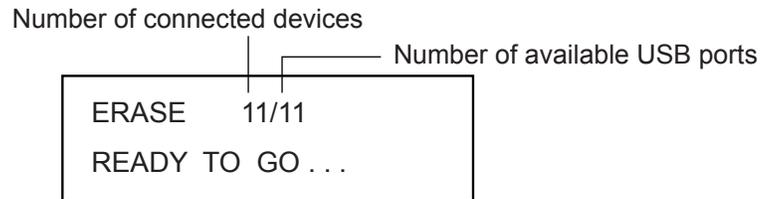
3.7 Erase

The ERASE function will delete all data on a USB drive. This function doesn't require a Source drive so all USB ports can be used during the erase process.

Caution! Make sure that you have removed any Source USB drives or Storage Centers before performing the erase function.

To erase your USB drives:

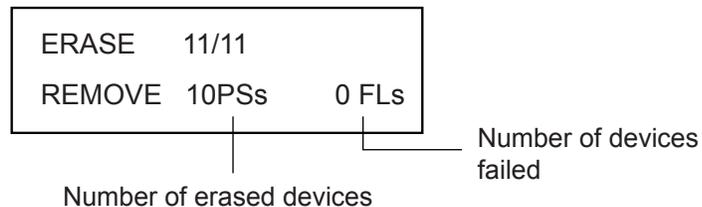
1. From the Main menu, **tap** the 'SET' button to navigate to the ERASE function.
2. Connect your USB drives to any available USB ports. When your USB drives have been connected and initialized, the screen will display the following:



3. **Tap** the 'RUN' button to begin the erase process. The following screen will be displayed during the erase function.



4. Once the erase process has completed, the following screen will be displayed:



5. Remove all connected USB drives to return to the Main menu.

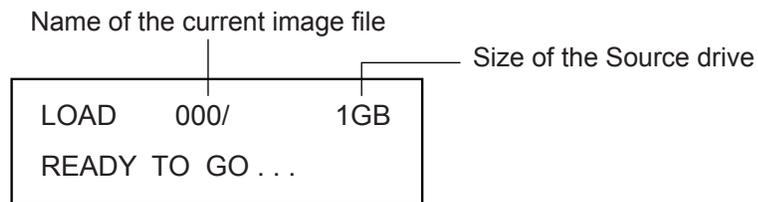
3.8 Load

The LOAD function allows you to store an image of a USB drive to either the internal hard drive or a Storage Center. This allows you quick and convenient access to any frequently used duplication projects.

3.8.1 Loading an image to the internal hard drive

To load an image to the internal hard drive:

1. Set the internal hard drive as the Source location. For more information see section 4.3 *Select Source* on page 26.
2. From the Main menu **tap** the ‘SET’ button to navigate to the LOAD function.
3. Connect the USB drive into any available USB port on the top row. When the Source drive has been initialized you will see the following screen.



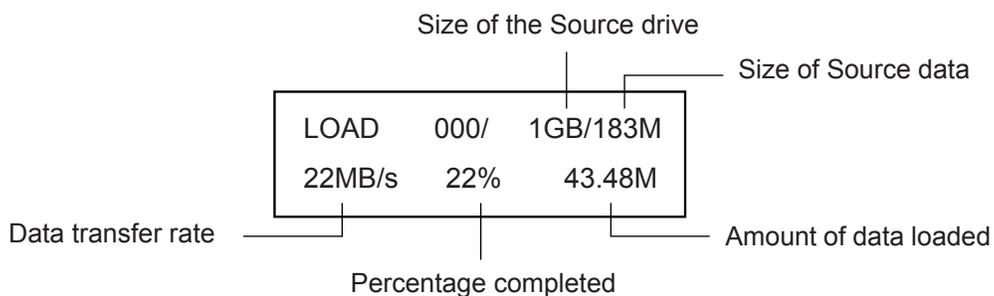
4. **Tap** the ‘RUN’ button. The duplicator will ask you input to a name for the image file.



- a. The file name consists of three digits. The digit furthest to the right will be blinking, indicating that it is currently selected. **Tap** the ‘RUN’ button to increase the digit by one.
- b. **Tap** the ‘SET’ button to select the next digit to the left. **Tap** the ‘RUN’ button to increase the digit by one. Repeat this step as necessary.

Note: If the image file name you enter is the same as the name of an image file previously stored on the internal hard drive, then the old file will be overwritten.

5. When you have completed naming the image file, **hold** the ‘RUN’ button and the load process will begin.



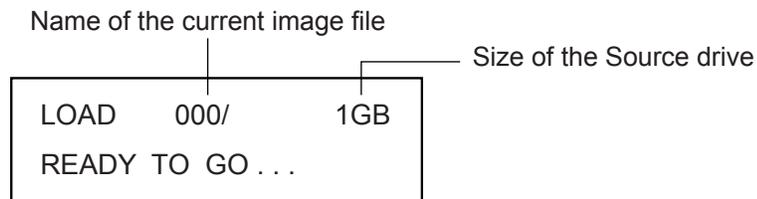
6. When the load process has completed you can remove the Source drive.

3.8.2 Loading an image to a Storage Center

A Storage Center is a USB drive that has been configured to store images, similar to the duplicator's internal hard drive.

To load an image of a USB drive to a Storage Center:

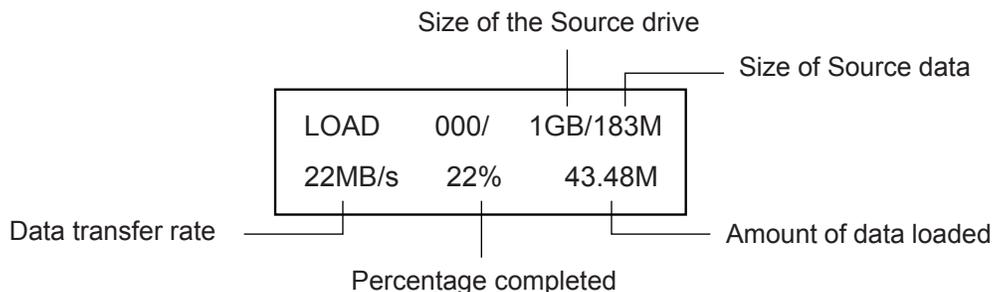
1. Set the Source location to the USB port that the Storage Center is connected to. For more information see section 4.3 *Select Source* on page 26.
2. From the Main menu **tap** the 'SET' button to navigate to the LOAD function.
3. Connect the USB drive into any available USB port on the top row. When the USB drive has been initialized the screen displays 'READY TO GO...'. **Tap** the 'RUN' to execute a load process.



Note: If the screen displays the message "DEVICE NOT FORMATTED" it means that the Storage Center has not been formatted in the duplicator's proprietary file system. For more information on formatting a USB drive as a Storage Center see section...

4. **Tap** the 'RUN' button. The duplicator will ask you to input a name for the image file.
 - a. The file name consists of three digits. The digit furthest to the right will be blinking, indicating that it is currently selected. **Tap** the 'RUN' button to increase the digit by one.
 - b. **Tap** the 'SET' button to select the next digit to the left. **Tap** the 'RUN' button to increase the digit by one. Repeat this step as necessary.

Note: If the image file name you enter is the same as the name of an image file previously stored on the Storage Center, then the old file will be overwritten.
5. When you have completed naming the image file, **hold** the 'RUN' button and the load process will begin.



6. When the load process has completed you can remove the USB drive.

4. SETUP MENU OPTIONS

To enter the SETUP menu, from the Main menu **hold** the ‘SET’ button. Once you have entered the SETUP menu:

- **Tap** the ‘SET’ button to navigate the different options.
- **Tap** the ‘RUN’ button to change an option’s setting.

The following are explanations for the various options available from the SETUP menu.

4.1 Set Copy

The SET COPY option allows you to enable or disable the Copy function. **Tap** the ‘RUN’ button to change this option’s setting.

- [*] – Copy enabled (default). FULL, SMART, BRIEF or RESIZE modes will perform a Copy function.
- [] – Copy disabled. FULL, SMART, BRIEF or RESIZE modes will not perform a Copy function.

Note: To perform a Copy & Compare function, set both the SET COPY and SET COMPARE options to enabled.

4.2 Set Compare

The SET COMPARE option allows you to enable or disable the Compare function. **Tap** the ‘RUN’ button to change this option’s setting.

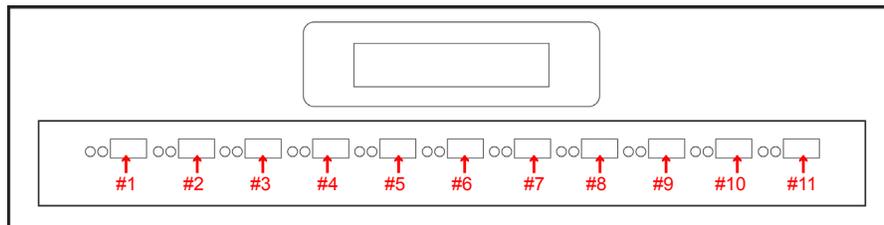
- [*] – Compare enabled. FULL, SMART, BRIEF or RESIZE modes will perform a Compare function.
- [] – Compare disabled (default). FULL, SMART, BRIEF or RESIZE modes will not perform a Compare function.

Note: To perform a Copy & Compare function, set both the SET COPY and SET COMPARE options to enabled.

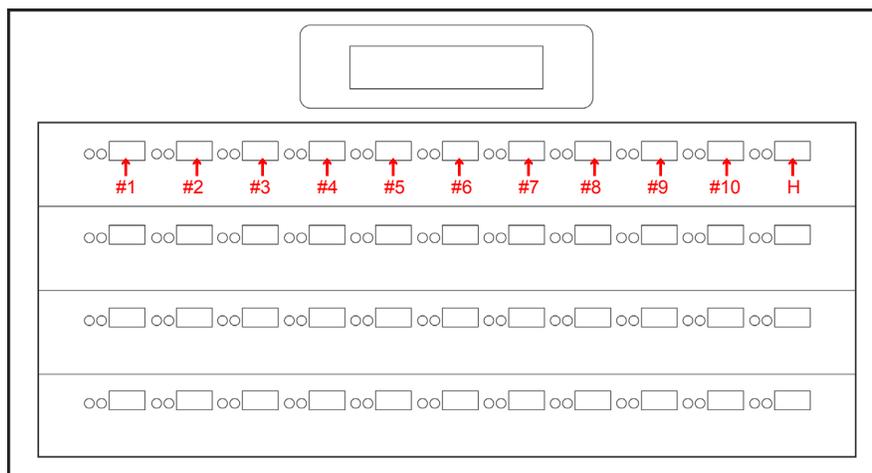
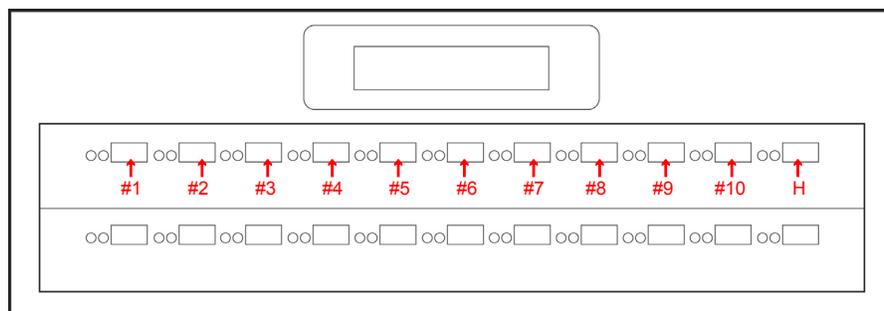
4.3 Select Source

The SELECT SOURCE option allows you to choose which USB port is designated as the Source location. You can configure any port on the top-most row to be the Source location, or you can configure the internal hard drive as the Source location. **Tap** the ‘RUN’ button to change the Source location.

- [H] – The internal hard drive is the Source location (default).
- [1] – The USB port furthest to the top-left is the Source location.
- [2 - 11] – You can select any of the USB ports on the top row to be the Source location. The USB ports are numbered as follows:



Note: On the 21 target and 43 target USB Duplicator models, the USB port #11 is designated as the internal hard drive location.



4.4 BTN. Sound

The BTN. SOUND option allows you to enable or disable the audible tone that sounds when you tap or hold a button. **Tap** the ‘RUN’ button to change this option’s setting.

- [*] – Button sounds are enabled (default). Tapping a button will be accompanied by a short tone. Holding a button will be accompanied by a long tone followed immediately by a higher pitched tone.
- [] – Button sounds are disabled. No audible tones will sound when you tap or hold a button.

4.5 Show EXE Time

The SHOW EXE TIME option allows you to enable or disable whether the total execution time for a function is displayed on the LCD screen. The total execution time will be displayed after a function has completed. **Tap** the ‘RUN’ button to change this option’s setting.

- [*] – Enabled. The total execution time is displayed.
- [] – Disabled (default). The total execution time is not displayed.

4.6 Sel Img File

The SEL IMG FILE function is used for selecting an image file that has been saved either to the internal hard drive or to a Storage Center.

To select an image file:

1. From the SETUP menu, **tap** the ‘SET’ button to navigate to the SEL IMG FILE option.
2. **Tap** the ‘RUN’ button. The digit furthest to the right will be blinking, indicating that it is currently selected. **Tap** the ‘RUN’ button to increase the digit by one.
3. **Tap** the ‘SET’ button to select the next digit to the left. **Tap** the ‘RUN’ button to increase the digit by one. Repeat this step as necessary.
4. When you have completed selecting an image file, **hold** the ‘RUN’ button to confirm your selection.

4.7 Del Img File

The DEL IMG FILE function is used for deleting an image file that has been saved either to the internal hard drive or to a Storage Center.

To delete an image file:

1. From the SETUP menu, **tap** the 'SET' button to navigate to the DEL IMG FILE option.
2. **Tap** the 'RUN' button. The duplicator will ask you to input the name of the image file you want to delete.
 - a. The file name consists of three digits. The digit furthest to the right will be blinking, indicating that it is currently selected. **Tap** the 'RUN' button to increase the digit by one.
 - b. **Tap** the 'SET' button to select the next digit to the left. **Tap** the 'RUN' button to increase the digit by one. Repeat this step as necessary.
3. When you have completed entering the name of the image file, **hold** the 'RUN' button to delete the image file.

Note: If the screen displays the following message, "NO FILE_SYS IN SRC" then there is no data saved to the image file that you selected.

5. ADVANCED SETUP MENU OPTIONS

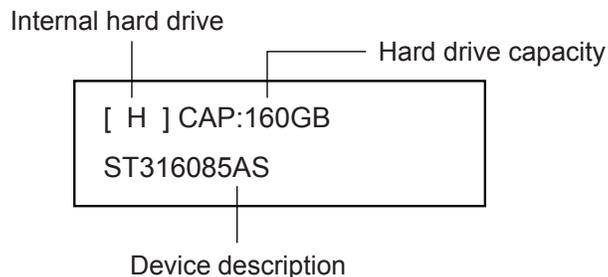
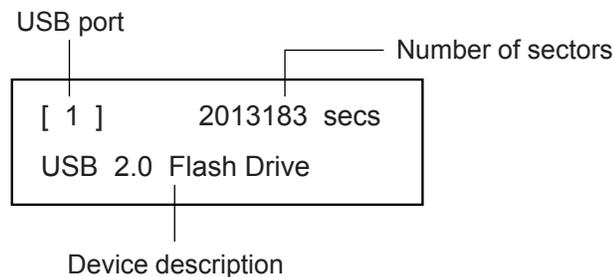
The ADVANCED SETUP menu provides you with extra options and functions for the advanced user. The ADVANCED SETUP menu can be accessed from the SETUP menu. From the SETUP menu, **tap** the 'SET' button to navigate to the ADVANCED SETUP option and then **tap** the 'RUN' button.

5.1 Device Info

The DEVICE INFO function allows you to view information about any USB drives currently connected to the USB duplicator.

To view device information:

1. From the ADVANCED SETUP menu, **tap** the 'SET' button to navigate to the DEVICE INFO function.
2. **Tap** the 'RUN' button to begin viewing the device information:



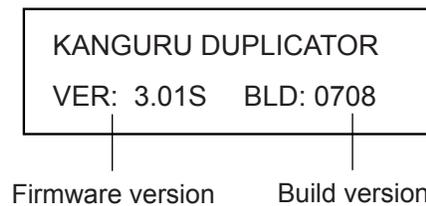
3. **Tap** the 'SET' button to view information about the next device.
4. After you have viewed all devices you will automatically return to the ADVANCED SETUP menu. You can also **hold** the 'SET' button to exit to the ADVANCED SETUP menu at any time.

5.2 System Info

The SYSTEM INFO function allows you to view information regarding your Kanguru USB Duplicator's firmware version and build.

To view the system information:

1. From the ADVANCED SETUP menu, **tap** the 'SET' button to navigate to the SYSTEM INFO function.
2. **Tap** the 'RUN' button to begin viewing the system's information:



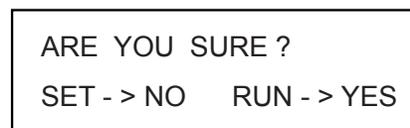
3. **Tap** the 'SET' button to exit back to the ADVANCED SETUP menu.

5.3 Set to Default

The SET TO DEFAULT function allows you to restore all settings back to their factory default values.

To reset your Kanguru USB Duplicator to its original default configuration:

1. From the ADVANCED SETUP menu, **tap** the 'SET' button to navigate to the SET TO DEFAULT function.
2. **Tap** the 'RUN' button. The screen will display a message asking you to confirm the reset. **Tap** the 'RUN' button to confirm, or **tap** the 'SET' button to cancel.



3. Once the reset has been completed, you will be displayed a confirmation message on the screen. Press any button to return to the ADVANCED SETUP menu.

5.4 No Cap Check

The NO CAP CHECK option allows you to enable or disable whether the USB Duplicator checks the capacity between the Source and Target(s). **Tap** the ‘RUN’ button to change this option.

- [*] – Enabled. When the duplicator executes either a Disk Copy or Brief Copy, the Kanguru USB Duplicator will not check the capacity between the Source and Target(s) and the copy process will begin normally.
- [] – Disabled (default). When the duplicator executes either a Disk Copy or Brief Copy, the Kanguru USB Duplicator checks the capacity between the Source and Target(s). If the capacity between the Source and Target(s) is different, then the system will automatically cancel the copy process.

5.5 Max UDMA Mode

The MAX UDMA MODE option allows you to configure the transfer speed specification for the Kanguru USB Duplicator’s internal hard drive. **Tap** the ‘RUN’ button to change this option. The MAX UDMA MODE can be set as 0 – 5. The MAX UDMA MODE is set to 4 by default.

5.6 Burn In

The BURN IN function allows the system to perform a Copy, Compare, Verify, Erase or Load function continuously to stress test for endurance, reliability and stability.

To perform a continuous burn in test:

1. From the ADVANCED SETUP menu, **tap** the ‘SET’ button to navigate to the BURN IN option.
2. The BURN IN option is disabled by default. **Tap** the ‘RUN’ button to enable it.
3. **Hold** the ‘SET’ button to return to the SETUP menu.
4. From the SETUP menu, **hold** the ‘SET’ button to return to the Main menu.
5. **Tap** the ‘SET’ button to navigate to the mode that you want to test. The screen will display:

“READY TO BURN 30...”.

6. **Tap** the ‘RUN’ button to begin the burn in test, or wait for the “30” to count down to “0” and the burn in test will start automatically.
7. Once the function has completed, The screen will display the total execution time, and then it will once again display “READY TO BURN 30...”. When it counts down to zero the function will start again. This will be repeated until you stop the burn in test.
8. To stop the burn in test, cancel a function while it is in progress by **tapping** either the ‘SET’ button or ‘RUN’ button. This will automatically disable the burn in function and the USB Duplicator will return to normal functionality.

5.7 Skip Read Error

The SKIP READ ERROR option allows you to enable or disable error skipping during FULL, SMART, BRIEF and RESIZE modes. **Tap** the ‘RUN’ button to change this option.

- [*] – Enabled. When an error is detected while reading from the Source, the duplicator will skip the bad sector on the Source and fill it with a zero on the Target.
- [] – Disabled (default). When an error is detected while reading from the Source, the duplicator will cancel the current process.

5.8 Auto Run

The AUTO RUN option allows you to enable or disable whether the system will automatically execute a function after 30 seconds. **Tap** the ‘RUN’ button to change this option.

- [*] – Enabled. FULL, SMART, BRIEF, RESIZE, VERIFY, ERASE or LOAD modes will automatically execute after 30 seconds.
- [] – Disabled (default). The user needs to manually start functions.

5.9 Load Full Image

The LOAD FULL IMAGE option allows you to control how device images are saved to a hard drive or Storage Center. **Tap** the ‘RUN’ button to change this option.

- [*] – Enabled. The system will not analyze the Source’s file system and will build the image sector by sector.
- [] – Disabled (default). The system will analyze the Source’s file system before building the image. If the Source’s file system is FAT/ NTFS/ EXT1/ 2/ 3/ 4, the image will be built based on the file system and data area. **Note:** If the system cannot recognize the file system then the system will automatically build a full image sector by sector.

5.10 Most Var. Cap

The MOST VAR. CAP setting is specifically for the SMART function. In SMART mode, the system will check the capacity of each connected Target drive. The MOST VAR. CAP setting defines the tolerance range for different Target capacities. **Tap** the 'RUN' button to adjust the tolerance range.

- **[0%]** – All targets must be exactly the same capacity. Any Target that has capacity larger than the smallest capacity Target will not be included when the SMART function is executed.
- **[1-20%]** – Any Target that has a capacity that is larger than the smallest capacity Target by the percentage defined (3% by default) will not be included when the SMART function is executed.

5.11 Need Resize

The NEED RESIZE setting is specifically for the SMART function. In SMART mode, the system will check the capacity between the Source and Targets. If the capacity between the Source and Target is different, the NEED RESIZE setting will determine whether the system will run in Brief or Resize mode when the SMART function is executed

- **[0%]** – If the capacity of the Targets is larger than the capacity of the Source then the system will run in Resize mode when the SMART function is executed.
- **[1-20%]** – If the capacity difference between the Target and Source falls below the percentage defined here (3% by default) then the system will run in Brief mode when the SMART function is executed. If the capacity difference between the Target and Source exceeds the percentage defined here then the system will run in Resize mode when the SMART function is executed.

5.12 Format Source

The FORMAT SOURCE function allows you to either:

- Format the internal hard drive (this will erase all data stored on the hard drive)
- Format a USB drive connected to the source port as a Storage Center

Caution! Formatting will erase all data from the USB drive.

To format the internal hard drive:

1. Make sure that the SELECT SOURCE option is set to “H” (see section 4.3 *Select Source* on page 26).
2. **Tap** the ‘RUN’ button to format the internal hard drive.
3. You will receive a message asking you to confirm formatting the drive. **Tap** the ‘RUN’ button to proceed or **tap** the ‘SET’ button to cancel.

Caution! Formatting the internal hard drive will erase any saved image files stored on the hard drive.

To format a USB drive as a Storage Center:

1. Make sure that the USB drive you want to format as a Storage Center is connected to the Source USB port.
2. **Tap** the ‘RUN’ button to format the USB drive as a storage center.
3. You will receive a message asking you to confirm formatting the drive. **Tap** the ‘RUN’ button to proceed or **tap** the ‘SET’ button to cancel.

Caution! Formatting the USB drive as a Storage Center will erase any data stored on the device.

5.13 Total Copy Count

The TOTAL COPY COUNT function allows you to view the total number of successful and failed operations performed on your USB Duplicator. This is a running count that includes all modes. **Tap** the ‘RUN’ button to view the total copy count.

5.14 Update Firmware

The UPDATE FIRMWARE function allows you to upgrade your Kanguru USB Duplicator to the latest firmware version. Do not attempt to update your Kanguru USB Duplicator's firmware unless specifically instructed to do so by a Kanguru Technician.

To update your USB Duplicator's firmware:

1. Contact Kanguru Technical Support at 508-376-4245 to receive a firmware update file.
2. Format a USB flash drive as FAT32 and copy the firmware file to the USB drive.
3. Plug the USB drive into the Source location on the USB Duplicator.
4. From the ADVANCED SETUP menu, **tap** the 'SET' button to navigate to UPDATE FIRMWARE and then **tap** the 'RUN' button.
5. A message will be displayed on the screen asking you to confirm the firmware update. **Tap** the 'RUN' button to proceed or **tap** the 'SET' button to cancel.
6. Wait for the firmware update process to complete.
7. Once the firmware update process has completed, reboot your system and the new firmware version and build number will be displayed on the startup screen.

Warning! Do not disconnect power or turn off the duplicator while updating the firmware. Doing so will cause the Kanguru USB Duplicator to become non-functional.

Caution! Updating the firmware may cause images on the internal hard drive to be corrupted or lost. Please backup any images saved to the internal hard drive.

6. WARRANTY

This product carries a *1 year limited warranty on the power supply, controller, and all internal components. The warranty does not cover any USB, IDE, SATA, or Power cables. Kanguru Solutions is not responsible for any damages incurred in the shipping process. Any claims for loss or damage must be made to carrier directly. Claims for shipping errors should be reported to Kanguru Solutions within three (3) working days of receipt of merchandise. Please refer to the RMA Procedure section of this manual if your duplicator needs servicing.

Kanguru Solutions does not offer money back returns on its duplicator product lines due to the unique nature of the product. All units will be fully supported under manufacturer's and/or extended warranty plans.

7. TECH SUPPORT

If you experience any problems installing your Kanguru product or have any technical questions regarding any of our products, please call our tech support department. Our tech support is free and available Monday thru Friday, 9am to 5pm EST.

Call 1-508-376-4245

Or visit our website at www.Kanguru.com

8. RMA PROCEDURE

ALL DUPLICATORS BEING SERVICED MUST BE PACKED IN THE ORIGINAL PACKAGING. If you do not have your original packaging, you can purchase replacement packaging for \$25.00 from Kanguru's Technical Support Department. Kanguru Solution's warranty will not be honored in the event that a duplicator is received improperly packaged, altered, or physically damaged.

STEP ONE: Call for a RMA Number: 508-376-4245

Duplicators will not be accepted for repair without a valid RMA number. RMA numbers are valid for 30 days upon assignment. Any return without a valid RMA number will be returned to the customer at their expense.

STEP TWO: Ship and Insure your Duplicator

Kanguru Solutions strongly recommends you fully insure the duplicator for shipping. Kanguru Solutions is not responsible for if the package is lost or damaged in transit. We suggest using a shipping company that utilizes a "tracking" feature to verify "proof of delivery." The customer is responsible for shipping charges when returning a product. Shipping back to the customer is covered by Kanguru Solutions during the first 90 days of purchase. **After 90 days of purchase the customer is responsible for shipping both ways.**

Clip and Use this Label to Ship Your Return

Kanguru Solutions Tech. Support Dept. 1360 Main St. Millis, MA 02054	
RMA#	<input type="text"/>



"Technology on the move!"



Kanguru Solutions
1360 Main Street
Millis, MA 02054
www.kanguru.com

06.25.10 v2.0 © 2010 Kanguru Solutions

Legal terms and conditions available at www.kanguru.com. Please review and agree before use. Thank you.