Kanguru USB Duplicator 9, Kanguru USB Duplicator 20HD, 30HD, 40HD & Kanguru Combo Duplicators

User Manual

1 TO 9 USB DUPLICATOR
20 TARGET, 30 TARGET, 40 TARGET USB DUPLICATOR WITH HD
& KANGURU COMBO DUPLICATORS

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.

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. When returning a product, mark the RMA number clearly on the outside of the package, and include a copy of your original proof of purchase.

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.

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1. INTRODUCTION

1.1 WELCOME

Congratulations on your purchase of the Kanguru *USB Duplicator* by Kanguru Solutions. The Kanguru *USB Duplicator* is a high speed, stand-alone USB duplicator that can clone, format, and verify up to 5, 9, 20, 30, or 40 USB devices (dependant on the number of modules included with the model). The duplicator has many advanced features for the IT professional, yet a novice can begin cloning USB storage devices within minutes of taking it out of the box. Just select the function you wish to perform, attach your Master drive and 1 to 40 target drives (depending on model), and the Kanguru *USB Duplicator* will start automatically.

The Kanguru *USB Duplicator* copies the content from a Master USB drive to up to nine Target drives. With fast copy speeds of up to 10MB/s, the Kanguru *USB Duplicator* is one of the fastest USB duplicating systems available.

Note: 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.

1.2 KANGURU *USB DUPLICATOR* PACKAGE CONTENTS

- 1 – Kanguru *USB Duplicator* unit with internal power supply.
- 1 – AC power supply.
- This manual w/ user registration card.

Note: Models KUSB-DUPE-20HD, KUSB-DUPE-30HD, KUSB-DUPE-40HD and KUSB-DUPE-CMB1 contain an internal hard drive. These models have several extra functions that are used to manage image files stored on the internal hard drive.

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.

1.3 FEATURES

√ Supports: USB1.0 and USB2.0 transfer modes
√ Data Transfer Rate: up to 10MB/sec (Per USB Port)*
√ Copy, Compare, Erase from 5 - 40 USB devices (depending on models)
√ Drive size and brand independent: Master and Target drives can be different sizes, brands, and capacities.
√ 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, Win98, Win2K, Win NT, Win XP, Win Vista, Linux, Mac, and many more (Full Copy mode only). The USB Duplicator is also able to copy raw data.
√ 14 available functions**

* Data transfer rate performance based on flash drive.
** Hard Drive Functions only available on units with an internal hard drive.

Functions

Full Copy	Full data copy, sector by sector. Supports RAW data copy, including cloning all major file systems.
Brief Copy	Copies only sectors with data by scanning the file system on the master drive. Supports FAT/FAT32/NTFS/EXT2/EXT3/XFS/HPFS file systems.
Resize Copy	Copy between drives with different capacities. Only supports copying smaller capacity to larger capacities.
Full Compare	Compares Master to Target drives sector by sector for accuracy.
Brief Compare	Compares only sectors with data
Full Copy/Compare	Combination of Full Copy and Full Compare
Brief Copy/Compare	Combination of Brief Copy and Brief Compare
Resize Copy & Compare	Combination of Resize Copy and Brief Compare
Verify	Verifies the integrity of your data
Erase	Erases target drives sector by sector
Card Reader	Mode for using the USB Duplicator with flash memory cards attached via card readers
Load & Copy*	Loads data from a USB storage device to the installed Hard Drive in the form of either a Full or Brief image
Brief Select*	• Select Source IMG • Delete IMG File • Rename IMG File • HD Disk Usage • HD Clean
Full Select*	• Select Source IMG • Delete IMG File • Rename IMG File • HD Disk Usage • HD Clean

* Hard Drive Functions only available on units with an internal hard drive.

Agency Approvals: Please check the Kanguru Solutions website.

Advanced Features:
- **Verify** - Scans USB drives for bad sectors
- **Full Erase** - Erases all data on USB drive

1.4   SPECIFICATIONS

Dimensions	• Duplicator 9 • Duplicator 20HD • Duplicator 30HD • Duplicator 40HD • Duplicator Combo	15" (L) x 7 1/3" (W) x 6 3/4" (H) 15.5" (L) x 7" (W) x 10.5" (H) 17.75" (L) x 7" (W) x 13.75" (H) 18" (L) x 7" (W) x 17" (H) 17 ¾" (L) x 7" (W) x 13 ¾" (H)
Operating Temperature	5 ~ 55 C°	
Relative Humidity	20% ~ 60%	
Weight	• Duplicator 9 • Duplicator 20HD • Duplicator 30HD • Duplicator 40HD • Duplicator Combo	11.5lbs (5.21 KGs) 18 lbs 21 lbs 27.4 lbs 26.35 LBS
Power Supply	300W, 4P Power (5V and 12V)	
Input Device	2 Push Buttons	

2.   GETTING TO KNOW YOUR KANGURU *USB DUPLICATOR*

2.1   USING YOUR KANGURU *USB DUPLICATOR* FOR THE FIRST TIME

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. Select the desired function and then insert the Master USB drive in the top left USB port.
4. If your unit contains an internal hard disk that has been newly installed, you have to run the "Create System HD" function; otherwise the unit will not function properly.

Note: The hard drive shipped with the unit has already been formatted and does not require you to run the "Create System HD" function.

Things to remember:
- 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.
- 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 device normally requires an external power source to operate (most USB Hard Drives require an external power source), then it will still require that added power source.
- It is OK to connect and disconnect Master 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 the solid green light snd OK message or solid red light and Fail message are displayed for the specified drive before removing it. When performing a Copy or Compare function, you can remove a Master drive once all the Target drives have been removed, even if the indicator light above the Master drive is still blinking.
- Make sure that the USB devices are USB-IF compliant. USB devices that are not USB-IF compliant will not work with the USB Duplicator.
- The USB Duplicator will not work with hardware encrypted/protected USB devices.

2.2   THE USER INTERFACE

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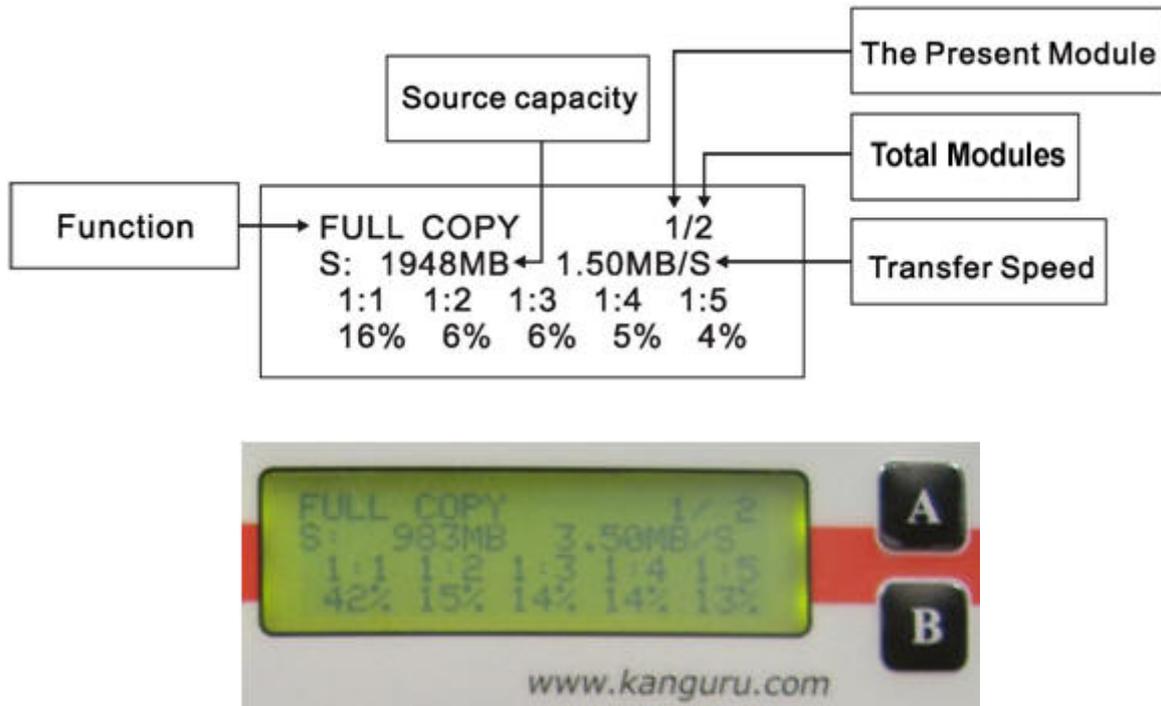
The UI is controlled by 2 buttons located to the right of the LCD screen marked as 'A' and 'B'.

There are two tiers to the Kanguru *USB Duplicator* user interface:

COPY MENU

1. By default, the unit will boot to this menu.
2. Press the 'A' button to toggle between the different functions within the Copy Menu.
   - BRIEF COPY, FULL COPY, BRIEF COMPARE, FULL COMPARE, BRIEF CPY&CMP, FULL CPY&CMP, RESIZE COPY, RESIZE CPY&CMP, VERIFY, ERASE
   - LOAD & COPY, FULL SELECT, BRIEF SELECT modes are only available on units with a built in hard drive.

SETUP MENU

1. From the Copy Menu, press and hold the 'A' button for 2 seconds to enter the Setup Menu
2. Once in the Setup Menu, press the 'A' button to navigate the different options and press the 'B' button to enter an option.
3. Press and hold the 'A' button for 2 seconds to exit the Setup Menu and return to the Copy Menu.

2.3   FUNCTION DIAGRAM

```
                              FUNCTION
                 ┌───────────────┴───────────────┐
           COPY MODE                         SETUP MODE

          BRIEF COPY                         CARD READER

          FULL COPY                          NO CHECK USB CAP

          BRIEF COMPARE                      BURN IN

          FULL COMPARE                       ALWAYS OVER WRT

          BRIEF CPY&CMP                      SET AS DEFAULT

          FULL CPY&CMP                       UPDATE FIRMWARE

          VERIFY                             SAVE SETTING

          ERASE                              CREATE SYSTEM HD

          LOAD & COPY                        ABOUT

          FULL SELECT    ◄──────────┐    SELECT SOURCE IMG

          BRIEF SELECT   ◄──────────┤    DELETE IMG FILE

          RESIZE COPY               ├    RENAME IMG FILE

          RESIZE CPY&CMP            ├    HD DISK USAGE

                                    └    HD DISK CLEAN
```

3. USING YOUR *KANGURU USB DUPLICATOR*

3.1 COPYING

The Kanguru *USB Duplicator* can copy USB drives in one of three modes:

1. **Full Copy** – this mode clones USB drives sector by sector from the Master to the Target(s), and supports all major OS formats (DOS/Windows/Mac/Linux). This mode is the slowest copy mode, but the safest.

2. **Brief Copy** – this mode clones only the sectors with information and skips the blank sectors (including information hidden in sub channels). This mode is the fastest copy mode; it supports the following formats: Microsoft Windows /Dos (FAT12, FAT16, FAT 32, NTFS, EXT2, EXT3, HPFS)

3. **Resize Copy** – this mode is used to copy between Master and Target drives of different capacities. The Resize Copy function supports copying from a smaller capacity Master drive to larger capacity Target drives only. You cannot perform the copy function using a Master drive with a larger capacity than the Target drive.

Note: Kanguru Solutions strongly recommends using Master and Target drives of the same capacity when performing a Full or Brief Copy. If the Master and Target drive capacities are different, it may lead to data being copied incompletely and/or incorrectly.

To begin copying:
1. From the Copy Menu, press the 'A' button to navigate to the desired copy mode (BRIEF COPY, FULL COPY, BRIEF CPY&CMP, RESIZE COPY, RESIZE CPY&CMP or FULL CPY&CMP).

2. Once you have navigated to the desired copy mode, connect the Master drive to the top left USB port and connect the Target Drives into any of the unoccupied ports. Once the Master and Target Drives have been inserted, the copy process begins automatically. The indicator lights will blink red indicating that the function is in progress.

3. Press the 'B' button to toggle between the different module layers.

    Module 1: 1:1, 1:2, 1:3, 1:4, 1:5
    Module 2: 2:1, 2:2, 2:3, 2:4, 2:5
    Module n: n:1, n:2, n:3, n:4, n:5

4. When the Kanguru *USB Duplicator* has finished copying, The LCD will display either an "OK" for passed drives, or an error message for failed Target drives along with a solid red light above the corresponding USB port. For more information regarding error messages, please refer to Chapter 6 Error Codes.

Note: 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.

3.2   COMPARING COPIED USB DEVICES

The Kanguru *USB Duplicator* can compare copied USB storage devices in one of two modes:

1. **Full Compare** – This mode compares Master and Target drives sector by sector to assure that all of the Target drives have the same information as the Master drive.

2. **Brief Compare** – This mode compares only the sectors with information and skips the blank sectors to assure that all of the Target drives have the same information as the Master drive.

To Begin Comparing:
1. From the Copy Menu, press the 'A' button to navigate to the desired compare mode (FULL COMPARE or BRIEF COMPARE).

2. Insert the Master drive into the top left USB port. The unit will automatically begin scanning the Master Drive.

3. Wait for the process to cycle through to 100%.

4. Connect the Target drives you wish to compare against the Master.

5. Wait for process to complete – there will be a green light above each of the drives that completes successfully and an 'OK' message displayed on the LCD screen.

3.3   COMBINED COPY & COMPARE FUNCTIONS

The Kanguru *USB Duplicator* has three combined functions which allow USB devices to be copied and compared in one step. During these functions the progress will reach 200% when complete. 0-100% is allocated for the copy function and then 101-200% is allocated for the compare function.

The three combined functions are:

1. **Full Copy & Compare**

2. **Brief Copy & Compare**

3. **Resize Copy & Compare**

## 3.4   HARD DRIVE AND SELECT MODES

The features found under Hard Drive Modes are only available on the KUSB-DUPE-20HD, KUSB-DUPE-30HD, KUSB-DUPE-40HD and KUSB-DUPE-CMB1 models that contain an internal hard drive. If you have installed a new hard disk inside the unit, you will have to run the "Create System HD" function before the unit can operate properly.

3.4.1 LOAD & COPY

The Load & Copy function allows you to load an image from a source USB drive to the installed internal hard drive and then copy the image to Target drives without a Master drive.

To load an image from a source USB drive to the internal hard drive:
1. From the Copy Menu, navigate to the "LOAD & COPY" function.

2. Insert the Master drive into the top left USB port. The loading options menu will appear automatically.

```
Please Select Type
Full Image   =>A
Brief Image =>B
ESC          =>A+
```
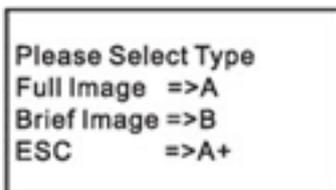
3. Press the 'A' button to select Full Image load. Press the 'B' button to select Brief Image load.
   ○ When using Full Image load, the entire USB drive will be loaded. A Full Image will be assigned a file name with a *.BIN extension.
   ○ When using Brief Image load, only the parts of the USB drive that contain stored data will be loaded. Brief Mode supports the following file systems: FAT/FAT32/NTFS/EXT2/EXT3/HPFS. The Brief Image will assign a file name with a *.BRF extension.

Note: If you want to select "ESC =>A+" to exit the Load & Copy menu and return to the Copy Menu, first remove the USB drive and then press and hold the 'A' button for 2 seconds to escape.

4. The unit will begin scanning the Master drive and loading the image to the internal hard drive. The indicator light will light up solid green when the load is successful and it will light up solid red when the load fails. After the Maser drive's image has been successfully loaded to the hard drive, the LCD panel will prompt you to remove the Master drive.

```
Load & Copy
Load File:
V0951P160300.BIN  OK!
Please Remove Source
```
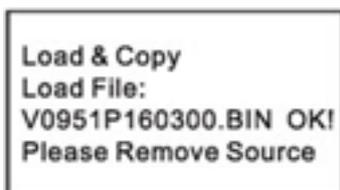
5. Remove the Master drive. The unit will automatically enter into Full or Brief Copy mode, depending on whether you loaded a Full or Brief Image.

6. Insert the Target drives into any available USB port and the unit will automatically begin copying the image file loaded on the hard drive to the Target drives.

RENAMING IMAGE FILES

During the loading process, the Kanguru *USB Duplicator* will automatically assign the image file a default file name. The default file name is created according to the USB device driver's type (i.e. V0951p160300.bin). The same type of USB device will create the same file name. Although the file name may be the same, the data could be different. In the case that the same type of USB device is used to load different images, the LCD display will present you with options to either rename the file to be loaded or overwrite the existing file.

```
Image File Exist
V0951P160300.BIN

Over write=>A
Rename=>B · ESC=>·A+
```
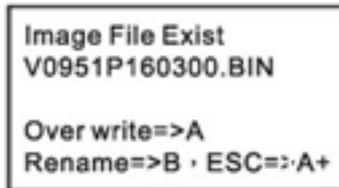
Press the 'A' button to overwrite the existing file. Press the 'B' button to rename the current image file.

Note: If you want to select "ESC =>A+" to exit without loading an image and return to the Copy Menu, first remove the USB drive and then press and hold the 'A' button for 2 seconds to escape.

The Rename function will allow you to rename a Full or Brief Image stored on the hard drive. A file name consists of 12 alphanumeric characters followed by a 3 character file extension (ex, V0951P160300.BIN for a full image and/or V0951P160300.BRF for a brief image). You cannot edit the 3 characters in the file extension.

To rename an image file:
1. Press the 'B' button to select 'Rename'. The image file's name appears on the screen. The right-most character in the file name is blinking.

2. Press the 'B' button to change the character.

3. Press the 'A' button to shift one character position to the left.

4. Repeat steps 2 and 3 until you are satisfied with the name change.

5. Press and hold the 'A' button to set the changed name and continue the Load & Copy function.

3.4.2 FULL SELECT

This function will allow you to access full image files that have already been loaded to the internal hard drive.

Navigate to the 'FULL SELECT' function in the Copy Menu. Select it by pressing the 'B' button.

There are several secondary functions under FULL SELECT:
- SELECT SOURCE IMG
- DELETE IMG FILE
- RENAME IMG FILE
- HD DISK USAGE
- HD CLEAN

3.4.3 BRIEF SELECT

This function will allow you to access brief image files that have already been loaded onto the internal hard drive.

Navigate to the 'BRIEF SELECT' function in the Copy Menu by pressing the 'A' button. Select it by pressing the 'B' button.

There are several secondary functions including:
- SELECT SOURCE IMG
- DELETE IMG FILE
- RENAME IMG FILE
- HD DISK USAGE
- HD CLEAN

3.4.4 FULL SELECT AND BRIEF SELECT FUNCTIONS

There are many functions in sub-menu under 'FULL SELECT' and 'BRIEF SELECT'. These functions will allow you to manage the image files that have been loaded to the internal hard drive.

SELECT SOURCE IMAGE

1. Navigate to and select 'FULL SELECT' or 'BRIEF SELECT' from the Copy Menu. 'SELECT SOURCE IMG' is listed first.

2. Press the 'B' button to enter 'Select Source IMG'. A list of image files appears on the screen. If the hard drive doesn't contain any image files, the LCD screen will show "No IMG Found".

```
No IMG Found!
Please Load IMG!
Press any key
```
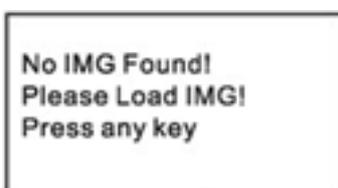
3. Press the 'A' button to navigate the image files.

4. Press the 'B' button to enable an image file. Enabled image files are marked with the star [�֎].
   Press the 'B' button again to disable the selected image file.

```
>[   ]V13fePId0000.BIN
>[*]V0951P160300.BIN
```
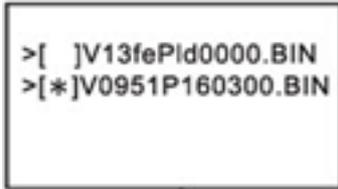
5. Press and hold the 'A' button to return to the previous menu and save the selected image file.

DELETE IMAGE FILE

The 'DELETE IMG FILE' function allows you to delete image files loaded to the internal hard disk.

To delete an image file:
1. Navigate to and select 'FULL SELECT' or 'BRIEF SELECT' from the Copy Menu.

2. Navigate to the 'DELETE IMG FILE' function.

3. Press the 'B' button to enter the 'DELETE IMG FILE' function. A list of image files appears
   on the screen. If the hard drive doesn't contain any image files, the LCD screen will show "No
   IMG Found".

4. Press the 'A' button to navigate the image files.

5. Press the 'B' button to enable the selected image file for deletion. Enabled image files are
   marked with the star [✖]. Press the 'B' button again to disable the selected image file.

6. Press and hold the 'A' button to go back to delete any marked image files and return to the
   previous menu.

RENAME IMAGE FILE

This feature will allow you to rename a Full or Brief Image stored on the hard drive. A file name
consists of number (0-9) and/or alphabet (A-Z). The length of file name is 12 characters and 3
characters file extension (ex, V0951P160300.BIN for a full image and/or V0951P160300.BRF for a
brief image).

To rename an image file:
1. Enter 'Full Select' or 'Brief Select' from the Copy Menu.

2. Navigate to the 'Rename IMG File' function by pressing the 'A' button.

3. Press the 'B' button to enter the 'Rename IMG File' function. If the hard drive doesn't contain
   any image files, the LCD screen will show "No IMG Found".

4. Press the 'A' button to select an image file.

5. Press the 'B' button to enable the selected image file to be renamed. Enabled image files are marked with the star [✿]. Press the 'B' button again to disable the selected image file.

6. The image file's name appears on the screen. The right-most character in the file name is blinking.

7. Press the 'B' button to change the character.

8. Press the 'A' button to shift one character position to the left.

9. When you have finished renaming the image file press and hold the 'A' button to set the changed name and either begin renaming the next image file or return to the previous menu.

HD DISK USAGE

The 'HD DISK USAGE' function will display the total capacity, used space and free space available on the hard drive.

To view the hard disk's usage:
1. Navigate to and enter 'FULL SELECT' or 'BRIEF SELECT' from the Copy Menu.

2. Navigate to the 'HD DISKUSAGE' function.

3. Press the 'B' button to view your hard drive disk usage.

```
Capacity:146G
Used:1G
Free:137G
Use%:1%
```
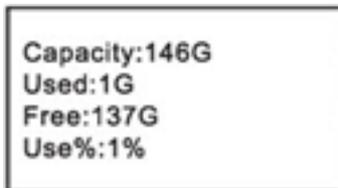
4. Press the 'A' or 'B' button to return to the previous menu.

HD CLEAN

Running the 'HD CLEAN' function will erase all data on the internal hard drive and create a single partition. Any data stored on the hard disk will be unrecoverable after running "HD Format"

Warning: Do NOT turn off the power while HD Clean is in progress.

1. Navigate to and enter 'FULL SELECT' or 'BRIEF SELECT' from the Copy Menu.

2. Navigate to the 'HD CLEAN' function.

3. Press the 'B' button to run the 'HD CLEAN' function.

4. After the 'HD Clean' function has been completed, reboot the unit.

4. ADVANCED FEATURES

4.1 VERIFY A USB DEVICE

The 'VERIFY' function randomly reads sectors to see if there are bad sectors in the USB storage device.

To verify a USB Storage Device:
1. Navigate to 'Verify' in the Copy Menu by pressing the 'A' button.

2. Insert the first USB storage devices you want to verify in the Master slot, located on the top left.

3. Insert additional USB storage devices to be verified in any of the other target USB ports. The unit will automatically begin testing the USB drives.

4. Once finished, if the Kanguru *USB Duplicator* determines that the device does not have any bad sectors, the indicator light above the drives will be green and an 'OK' message will appear on the LCD screen.

4.2 ERASE A USB DEVICE

The 'ERASE' function will erase the entire USB storage device, including file system files. After the erase mode is completed, it will need to be formatted before it can be used on a computer.

To erase a USB Storage Device:
1. Navigate to 'ERASE' from the Copy Menu.

2. Insert the first USB storage device you want to erase in the Master slot, located on the top left.

3. Insert additional USB storage devices to be erased in any of the other target USB ports. The unit will automatically begin erasing the USB drives.

4. Once finished, a green LED light above the erased drives as well as an 'OK' message on the LCD screen.
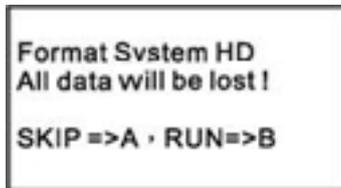
5. THE SETUP MENU

The Setup Menu can be accessed by pushing and holding the 'A' button for 2 seconds. Press the 'A' button to navigate the different functions. Press the 'B' button to enable/disable an option or enter a function.

- **Card Reader:**
  - Enabled [�]: The card reader will be allowed to keep the slot and only remove the memory card from the card reader.
  - Disabled [   ]: The card reader will be not allowed to keep the slot. You have to remove whole card reader including the memory card.

- **No Check USB Cap** – This feature will check the USB storage drive capacity between the USB source and the target USB before starting the copy process. If the capacity is different, the machine will stop working and the screen will show an error code "BK". If this feature is disabled, it will ignore the capacity issue and continue the process, even if the capacity is different between the Master drive and the Targets. Error messages could occur if disabled based on USB storage size(s).

- **Always Overwrite** – This applies when loading data image with the same file name. This feature will allow the machine to overwrite the file or change the file name manually.
  - Enabled [✱]: Automatically overwrites image files with the same name.
  - Disabled [   ]: Allows you the option to manually change the filename.

- **Burn In** - This feature provides a test mode. When this feature is enabled, the machine will perform a continuous Copy & Compare. This feature will only stop when disabled in the Setup Menu or when the unit is powered off.

- **Set as Default** - Restore the unit to the default system values.

- **Update Firmware** - Upgrade the machine to the latest firmware.
  For units with an internal hard drive: After upgrading the firmware, all images on the hard drive could be lost or corrupted.

  - To update the machine's firmware:
    1. Receive the latest firmware.

    2. Format a USB Flash drive and copy the firmware file to the USB device.

    3. Plug the USB drive to the top left Master USB port.

    4. Select 'UPDATE FIRMWARE' from the Setup Menu to update the machine.

    5. Wait for process to complete and reboot the system.

    6. On system boot up, the Version and Build number will be displayed.

WARNING: Do not disconnect power while updating firmware. Doing so will cause the Kanguru *USB Duplicator* to become non-functional.

- **Create System HD** – This feature allows you to create a system hard disk. This function is only available on models that contain an internal hard drive.

  ○ To Create a system HD
    1. Navigate to and enter 'CREATE SYSTEM HD' from the Setup Menu. A message appears on the LCD confirming whether you want to Format the System HD.

    ```
    Format Svstem HD
    All data will be lost !

    SKIP =>A · RUN=>B
    ```

    2. Press the 'A' button to cancel the format and return to the Setup Menu. Press the 'B' button to proceed with the hard disk format.
    3. When the disk format has been completed, reboot the system.

- **Save Settings** – Save all settings made.

- **About** – Displays current system information including version and build information.

6. ERROR CODES

Error Code	Description	Solution
RD	Unable to read from USB drive.	Recheck the USB Drive.
WR	Write data error from Master to Targets.	Remove the Master USB drive and reload. Remove the Targets and start copy again.
BK	The capacity of the USB drive is different between the Master and Targets. Source is larger than Targets.	Check the capacity of the USB drive and confirm they both have the exact same total capacity. If required; go to the 'No Check USB Cap' function under the Setup Menu and disable. Replace with same USB drive capacity units.
VR	Verify USB drive failed.	Copy and verify again.
ER	Failed erasing.	Erase again.
CO	Data compare failed; error in memory.	Copy & compare again.
CR	Data compare failed; error in reading USB drive.	Copy & compare again.
OP	USB drive is not ready.	Remove the Master USB device and reload.
CL	Close file error at end of copy process.	Reload the targets and reload and copy again.
LG	Temporary file failed	Remove the Master USB device and reload.
SE	Master USB Device issue.	Remove the Master USB device and reload.
FD	Master USB Device issue.	Remove the Master USB device and reload.
SR	Source error	Check source and reload again.

7.   F.A.Q.'S

Q1. Do all Target drives have to be the same capacity? Same Brand?
A1. All Target drives are required to be the same capacity drive if using full copy. If using resize of brief copy modes, allocated space must be available in order to complete the copy successfully. Please check the 'No Check USB Cap' function prior to using different capacity drives. The Kanguru *USB Duplicator* is brand independent.

Q2. Can I copy a smaller capacity Master drive to larger capacity Target?
A2. Yes, this is only possible within the Brief Copy and Resize Copy modes.

Q3. Can I copy to Targets of various brands simultaneously?
A3. Yes, the machine is able to copy USB storage devices of different brands.

Q4. Do the Diagnostic features check the Master or the Targets?
A4. The Diagnostic features will check the Target USB storage devices against the Master.

Q5. Can the USB duplicator copy file systems such as HFS+, UNIX and OS/2?
A5. Yes, use the "Full Copy" function to copy any file system.

Q6. Can the duplicator de-fragment a partition?
A6. No, this must be done directly by the operating system of your PC.

Q7. Can the duplicator make copies using any USB drive?
A7. No, the USB drive must be USB-IF certified in order to work with the USB Duplicator.

Q8. Can the duplicator duplicate hardware encrypted/protected USB drives?
A8. No, the USB Duplicator cannot duplicate hardware encrypted/protected USB drives.

8.   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.

*90-day warranty on labor. After 90 days, a $20.00 service charge will be applied to all RMAs. Shipping back to the customer is covered during the first 90 days of purchase. After 90 days the customer is responsible for shipping both ways.

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.

9.   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#

10.   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

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1360 Main Street
Millis, MA 02054

www.kanguru.com