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Z64™

MR . BACKUP™

User Guide

Version 2.0

Emulation64.fr



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Welcome to Mr.BACKUP™ - Z64™

Mr. BACKUP™ is a unique enhancement to the Nintendo N64™ system which brings a lot of fun to thousands of families all over the world.

With the connection between Nintendo N64™ and Mr.BACKUP™ Z64™, you can seamlessly enjoy the fun of cartridge games and also assure the future data usage (including game data and record data) through simple BACKUP process.

With Mr. BACKUP™ you can avoid any loss due to the damage of the game cartridges. It's also a good practice to BACKUP the game data before you play a new game cartridge newly purchased.

A. Package Checklist

The package you purchase should include the following parts and pieces:

- Z64™ Processor
- Z64™ Power Transformer
- ZIP100™ Floppy Disk (capacity at 100 Megabytes)
- this User Guide

If any of the above parts or pieces are not included in your package, please contact your local distributor.

B. Installation

The installation for Z64™ is very simple and straightforward. You'll be able to enjoy the magic of Z64™ after you execute the following steps which will not take you more than 3 minutes:

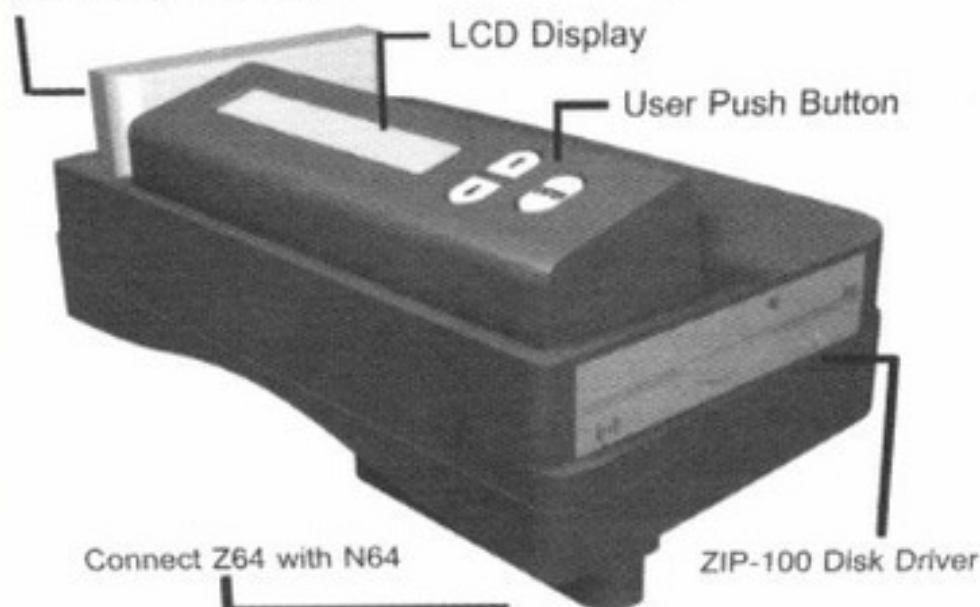
- Make sure that Z64™ processor and N64™ processor are turned off
- Connect Z64™ processor to the cartridge socket located at the upper corner of N64™ processor
- Plug Z64™ power transformer into the wall socket
- Turn on Z64™ power transformer and wait for about 10 seconds
- When the LCD panel at Z64™ processor shows < Mr. BACKUP >, it means that Mr. BACKUP is ready to serve you.

If the LCD panel doesn't display any message, please repeat the whole steps.



C. Key Components Diagram and Description

- Game Cartridge Slot
- LCD Display
- User Push Button
- Connection Interface between Z64™ and N64™
- ZIP100™ Disk Drive

Game Cartridge Slot**D. Features Description**

- Support for flashable memory in BIOS for on-going BIOS update
- Independently operating without connecting to computers or any peripherals
- Simple installation, plug and play only with a few buttons
- Capability to backup cartridge data into magnetic disks (including game record data)
- Capability to play game files stored in the magnetic zip disks (including game record data)
- Capability to play games in the cartridge
- Capability to clear data files stored in the magnetic zip disks
- With built-in 256Mbit memory
- With built-in ZIP100™ Zip drive
- Average storage capacity of ZIP100™ magnetic disk at 6 to 11 game files
- With large-scale LCD display panel
- Support for V64™ files(.v64), patch files(.ips), cheat code files(.zcc), and game files(.rom)
- Support for operations under LCD screen
- Support for On Screen Display Menu
- Support for cheat code file creation by the user himself



E. Quick Usage Guide

- One Beep: meaning operation completed
- Two Beeps: meaning some mistakes happening, but still can continue operation
- Three Beeps: meaning obvious mistakes, and immediate re-start is needed

Please bear in mind that you should utilize the Z64 power supply when you are going to change any game cartridges.



F. Operations Under Z64™ LCD Screen

(1) How to Switch to Z64™ LCD Screen

By default, the Z64 system will automatically enter into this LCD Screen mode when you turn on the Z64 device as described in the General Operations Flow

(2) Play Nintendo 64™ Game Cartridges from Z64™

- Insert the game cartridge into the slot
- Turn on Z64™
- If you don't insert the zip disk into the zip drive, you can only choose "**Play Cartridge**" from the LCD Screen
- Choose "**Play Cartridge**" and push "**Enter**" button
- The system will request you to turn on N64™ console at this moment
- Turn on N64™
- Now you can start to play the game from Z64

(3) Play Nintendo 64™ Games from Z64™ Zip Disks

- Insert the zip disk which has already stored the backup game files into the zip drive
- Turn on Z64™
- The LCD Screen will display all the game titles in the zip disk
- Move the **Up** and **Down** buttons to choose the game you want to play and push **Enter** button
- The system will start to load the game file from the zip disk into the Z64™ memory
- If the game file is accompanied with a patch file (.ips), the system will ask you whether you also want to load this patch file into the memory
- After completing the file loading, the LCD Screen will ask you to turn on your N64™ console
- Turn on the N64™ console and start to play the Nintendo 64™ game stored in the zip disk

(4) Backup Nintendo 64™ Game Cartridges from Z64™

- Insert the game cartridge into the slot and zip disk into the zip drive
- Turn on Z64™
- On the LCD Screen, you have two choices. One is "**Play Cartridge**". The other is "**Backup Cartridge**".
- Choose "**Backup Cartridge**" and push "**Enter**" button
- The system will display the free space of the zip disk on the LCD Screen
- If there are already backup files or other files in the zip disk, the system will also display these files on the LCD Screen
- The system will start to do the backup
- The system will show "Free Space Not Enough" message if the files size of the cartridge is bigger than the remaining free space in the zip disk
- The system will display "Backup Completed" when completing the backup process



Please bear in mind that it is not necessary for you to turn on N64™ console when you are running the game backup process from the original game cartridge to the zip disk.

(5) File Deletion for Zip Disks

- Insert the zip disk which has already stored the files (e.g. game backup files, patch files, and BIOS update file)
- Turn on Z64™
- The LCD Screen will display all the files in the zip disk
- Simultaneously push the **Up** and **Down** buttons for about 3 seconds. The LCD Screen will display the Delete option
- Move **Up** and **Down** buttons to choose the file you want to delete and push the Enter button
- The LCD Screen will display the the name of the game you want to delete
- Choose **Yes** for deletion. Choose **No** to give up deletion

(6) BIOS Update File Operations Procedures

- Insert the zip disk which has already stored the **BIOS update file** into the zip drive
- Turn on Z64™
- Move the **Up** and **Down** buttons to choose the **BIOS update file** in the zip disk and push **Enter** button
- The system will display 2 options for your choice. One is **Update** (i.e. BIOS Update). The other is **Copy** (i.e. copy BIOS update file to another zip disk)
- Move the **Up** and **Down** buttons to choose **Update** and push **Enter** button
- The system will start to update your BIOS inside Z64 device.
- When completed, the system will display **Update Completed, Turn Off Z64** on the LCD Screen
- Turn off Z64 and turn on Z64 again
- New BIOS is now available

Warning!

During the BIOS update process, you must make sure not to power off Z64™ .

Otherwise, the whole Z64™ system will be crashed due to incomplete BIOS update process. It means you cannot avoid sending back the Z64™ device to your dealer for repair, which is time consuming.

(7) Power-On Self Testing Procedures

You can conduct the **Power-On Self Testing** when you feel that your Z64™ device is not working smoothly.

- Before turning on Z64™, push the Down button continuously
- Turn on Z64™ but still continue to push the Down button until the LCD Screen displays the following

TEST IO: ENTER TO END



If Z64™ is now linked with N64™ (but not turned on yet) and inserted with a game cartridge, the LCD Screen will display the following:

```
TEST   IO:   ENTER TO END
N64    CARD
```

If Z64™ is now linked with N64™ (turned on now) and inserted with a game cartridge, the LCD Screen will display the following

```
TEST   IO:           ENTER TO END
N64    NPWR         CARD
```

- Move the **Up** and **Down** buttons. If the **Up** and **Down** buttons are normal, the LCD Screen will display **Up** and **Down** words respectively
- Push **Enter** button to test the next function
- If a game cartridge is inserted for testing, the system will automatically test the game cartridge first to verify whether its **ROM** and **EEPROM** are normally operated. If the cartridge is broken, the LCD Screen will display **TEST CARD READ ERROR** message.
- When you see the **TEST CARD READ ERROR** message, there are two possibilities. One is really the Cartridge Error. The other is possibly the error from the Z64 cartridge slot interface
- To verify whether it is the error caused by the problematic Z64™ cartridge slot interface, please make sure to use workable cartridge for testing
- When cartridge is protected, it may also show **TEST CARD READ ERROR**.
- If the **EEPROM** for the cartridge is damaged, the system will display **EEPROM ERROR** message
- Finally the system will self test its 256 M-bit DRAM memory. If the memory is damaged, it will display the **ADDRESS ERROR** or **MEM ERROR (Memory Error)** on the LCD Screen

G. Operations Under Enhanced Screen Display Menu

Warning!

Enhanced Screen Display Menu mode may not work with some cartridges. Please use another cartridge or use LCD Screen mode.

(1) How to Switch to Enhanced Screen Display Menu

- Insert the game cartridge into the slot
- Turn on Z64™
- When Z64™ is ready, don't choose any game from either the cartridge or the zip disk
- Turn on N64™ console



- The LCD Screen will display the following message
N64™ MENU
ON SCREEN
- Now your TV screen will display the following main menu (as a sample main menu):

MR. BACKUP™ – Z64™

Yoshi Story™	128M	JPN
Super Mario 64™	64M	USA

1/2 XX MB Free

--	--	--	--

Play Cartridge

Zip Disk
(Backup Cartridge)

Edit

Cheat Code

Options

The **Long List** at the front is the file list for all of the files in the zip disk. If you insert another zip disk, the file list will change the contents to reflect the files in the new zip disk.

Play Cartridge: to play the game cartridge under this Enhanced Screen Display Menu

Zip Disk (Backup Cartridge): to do the game backup from the cartridge to zip disk and zip disk file management

Edit Cheat Code: to provide you the user-friendly interface to self edit the Cheat Code for the games

Options: to allow you the tune up the system configurations and do advanced file management

(2) Play Cartridges under Enhanced Screen Display Menu

- **Move the Up / Down / Left / Right** buttons on the **N64 Joypad** to choose **Play Cartridge** function and push **Enter** button (**A**) on the **Joypad**

(3) Play Game Files in the Zip Disk under Enhanced Screen Display Menu



- Since the Z64™ device and N64™ console are turned on already at this moment, please insert the zip disk which has already stored the backup game files into the zip disk
- The file list at the front of the main menu will be refreshed to reflect the new file list after you insert the zip disk
- Move the **Up** and **Down** buttons on the **Joypad** to choose the game file in the zip disk and push **Enter** button (**A**) on the **Joypad**
- The system will start to download the game file from the cartridge to the system memory
- After completing the loading, you can start to play the game

(4) Backup Nintendo 64™ Game Cartridges into Zip Disks

- Since the Z64™ device and N64™ console are turned on already at this moment, please insert the game cartridge and zip disk respectively.
- Move the **Left** and **Right** buttons on the **Joypad** to choose **Zip Disk (Backup Cartridge)** function and push **Enter** button (**A**)
- The system will show the cartridge name and ask you the following
Backup? Yes No
- Choose **Yes** and the system will start to run the backup process
- If there is not enough free disk space, you will see the following message on the TV screen:

Disk Space Not Enough

(5) BIOS Update under Enhanced Screen Display Menu

- Since the Z64™ device and N64™ console are turned on already at this moment, please insert the zip disk which has already stored the BIOS update file in it.
- Move the **Left** and **Right** buttons on the **Joypad** to the file list at the front of the main menu
- From the file list, move the **Up** and **Down** buttons to choose the **BIOS update file** and push **Enter** button
- The system will automatically start to update the BIOS
- Next time when you turn on the Z64™ device, the new BIOS will be utilized.

(6) Edit Cheat Code

The key purpose of this function is to let you create the cheat codes (.zcc files) by yourself under the Enhanced Screen Display Menu

- Since the Z64™ device and N64™ console are turned on already at this moment, please insert the zip disk which has already stored the backup game files into the zip drive.
- Move the **Left** and **Right** buttons to choose the file list for the zip disk
- Move the **Up** and **Down** buttons to choose the file which you want to create the cheat code for it and push **Enter** button (**A**) from the Joypad



- The system will ask you to input the Cheat Name. Please input the Cheat Name from the **Joypad**. (You can name it whatever you like.) and push **Start** button.
- After inputing the Cheat Name, the system will ask you to input the exact **Cheat Code** for this game. Please input the **Cheat Code** from the **Joypad** and push **Start** button.
- After inputing the Cheat Code, the system will display the following message for your confirmation:
Update Cheat Code: Yes No
- Please choose **Yes** and push **Enter** button (A)
- Next time when you want to load this game for play from the file list at the front of the main menu, the system will ask you: Load Z64 Cheat Code? Yes No.
- You can repeat this process to create multiple Cheat Codes for the same game

(7) System Configurations and Options

- At this moment, we assume that the Z64™ device and N64™ console are turned on already.
- Move the **Left** and **Right** buttons to the **Options** function and push **Enter** button (A)
- The system will display the following options for your further configurations:
Auto Load IPS : On / Off
Auto Load Cheat: On / Off
Auto Save Record: On / Off
Speaker: On / Off
File Copy
Delete
- Move the **Up** and **Down** buttons to choose the function you want to execute and push **Enter** button (A)

Functions Description:

- **Auto Load IPS:** If you choose On, the system will automatically load the patch file(s) (.ips) in the zip disk if the game you are playing from the zip disk has already had the patch file(s)
- **Auto Load Cheat:** If you choose On, the system will automatically load the cheat code(s) (.zcc) in the zip disk if the game you are playing from the zip disk has already had the cheat code(s)
- **Auto Save Record:** If you choose On, the system will automatically save the game record in zip disk.
- **Speaker:** If you choose On, the internal speaker will be turned on
- **File Copy:** When you execute the function, the system will copy the backup game file from the original zip disk into another zip disk. That is, the system will ask you to insert another zip disk after it reads the game file from the original zip disk to the system memory.
- **Delete:** This function is for you to delete the files (e.g. backup game files, .ips, .zcc, etc.) from the zip disk. When you execute this **Delete** function, the system will prompt you to the file list at the front of the main menu. Please move the **Up** and **Down**



buttons to the location of the file you want to delete and push the **Enter** button (A). You can only delete one file for each time.

H. Cautions

- Don't open or reconfigure the machine
- Don't leave any liquid or miscellaneous trash inside the machine
- When hearing any unusual noise, please immediately stop the operation.
- Before inserting or disconnecting this machine from your N64™, turn off the power
- Don't operate this machine under bad ventilation environment
- Don't operate this machine under hot temperature or under direct radiation from Sun
- Please play only the original N64™ game cartridges to assure compatibility
- Please use Z64™ specified power adapter.



I. FAQ (Frequently Asked Questions for Z64™)

Q1. Is 256Mbit in the Z64™ large enough to backup every game?

A> This Z64™ version 2.0 is in-built with 256Mbit memory which can support almost every games available in the market.

Q2. How do I know my Z64™ is the new version 2.0 or not?

A> You can identify it by the serial number. The serial number of new version begins at 2. The Z64 is the version 2.0 when the serial number is 2xxx.

Q3. How do I upgrade the Z64™ if needed? Can I do the upgrade myself if I am not a technical person?

A> When Z64™ has any new BIOS released, we will put the BIOS update file on our website at www.emulation64.fr for download. Please copy it to your zip disk in your PC. You can upgrade by yourself, just insert the upgrade diskette to the zip drive of Z64™ and then turn the Z64™ power on. The Z64™ system will upgrade it for you automatically and it takes only a couple of minutes.

Q4. How much time needed to back up each game? If I play the game from the back up disk, will it slow down?

A> On average, it only takes about 30 seconds to back up each games, the speed of game play remains the same whether you play from cartridge or zip diskette.

Q5. Can the Z64™ power adapter support different voltages? Can it support American and European type videos?

A> It comes with a universal power adapter, supporting 110v to 220v automatically. About Video, it supports NTSC which is American type, and PAL which is European type.

Q6. Does Z64™ require link to any other devices such as PC when backing up games?

A> No, it is not necessary to link to a PC.

Q7. Does Z64™ have any output interface that I can link to my PC?

A> No, the Z64™ has no output interface for PC connection. It is not necessary to link to any PC. It is designed for users to back up original N64™ game cartridges only.

Q8. Can I save the game records into Z64™?

A> Yes, you can save the records into Z64™ as long as the game cartridge that you plugged in has EEPROM built in. However, we do recommend you always have this type of cartridge plugged in and always have memory pad installed in your controller

Q9. How many backup files can I store in one Zip disk?

A> Each disk can store about 800Mbit (i.e. 100Mbytes) data. The size of each game is about 64 to 128Mbit, so it can store about 7 to 10 backup files. The Z64™ has a



feature that will display the size of each cartridge, and also will show how much space is left on the zip disk.

Q10. How many operation modes does Z64™ provide?

A> Two, Operations Under Z64™ LCD Screen and On Screen Display Menu

Q11. Can I use other power source for my Z64™?

A> No, you can only use the original power adapter from Z64™ package. It may damage the Z64™ if using an unproved power adapter.

Q12. Can I use any kind of game cartridges on the Z64™ ?

A> No, we suggest you to only run Z64™ with the original N64™ game cartridge to assure compatibility.

Q13. Can I use the download files with SRAM saves ?

A> Yes, you can use downloaded SRAM saves from website. Please copy it from your PC to the zip disk and insert the zip disk into Z64™ zip drive to simulate.

Example: If MARIO64 English version in disk is MARIO.ROM and patch file is SMTRTAIN.SAV. Just copy SMTRAIN.SAV to zip disk as MARIO.EEP.

Q14. Which type of zip diskettes should I use to backup my game cartridge under Z64 device?

A> Only DOS-compatible zip diskette is systematically acceptable to backup your original game cartridge.

Q15. Right now I upgrade the BIOS to version 1.11. Can I download version 1.09 or older version (such as version 1.08) into my Z64 for BIOS update?

A> No. Your BIOS will get damaged if you do it. When your BIOS is the newest version, you can't go back to older versions.

Q16. What file formats does Z64™ support?

A> It reads .rom, .v64, .ips, and .zcc file extentions.

Q 17. Does Z64™ support Doctor V64™ files?

A> Yes, it is compatible with both Doctor64™ and the Wildcard64™ It reads both types of bit streams.

Q18. Is Z64™ able to save game records?

A> Yes you can save the game (SRAM) and highscore table.

Q19. Can I use the Z64™ zip disks for PC purposes?

A> Yes, the files are saved in "DOS" format and the files can be read by any PC.



Q20. Where can I get ROMs?

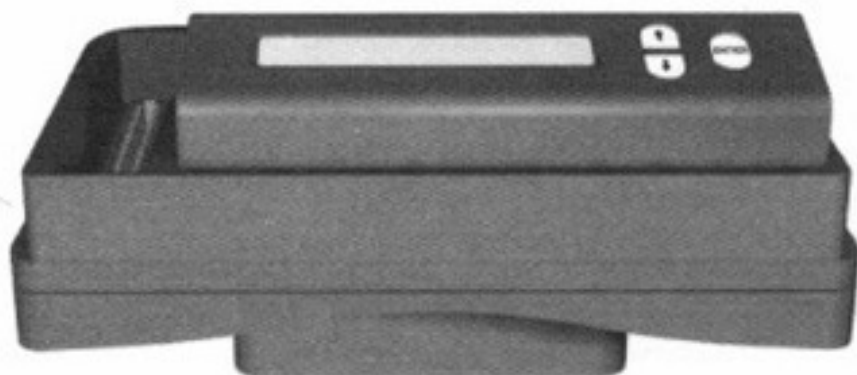
A> At your local game store, please refer to the Disclaimer. You must own the original cartridge otherwise you are not allowed to use the ROM.

Q21. My game is 128M and a ZIP holds 100MB, Must I use 2 ZIP Discs?

A> No, There is a big difference in one Mbit and one MByte. One bit contains one digital 1 or 0, but one byte contains eight bits (eg. 00110110), so one ZIP disc can hold approx 800 Mbit wich is equal to 100 MB. One ZIP disc can hold 6-11 games, and a lot more of SRAMs, BIOSes and Demos.

J. Detailed Specifications

- Range of Working Temperature: 0 to 55 degree centigrade
- Range of Storage Temperature: -25 to +80 degree centigrade
- Net Weight: 1.5 kg
- Power: 5W
- Input: AC100 - 240V, 0.2A
- Output: DC +5V / Maximum: 1.6A
- Dimension: 24cm x 14cm x 13cm (L x W x H)



K. DISCLAIMER

The Z64™ is intended for the private, non-commercial home use of the purchaser only. When enter into the back up mode, it is to be used exclusively for backing up game cartridges purchased by the user of this product only. Title 17 of the United States code prohibits the unauthorized copying of game cartridge for sale or distribution.

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