TAINER

Portable Backup Storage for Professionals

Upload and share memory cards through TAINER



- User Guide
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ClouZen Co., Ltd.
www.clouzen.net

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Intro

Thank you for purchasing the Clouder TAINER (TN001S).

The TAINER allows camera operators to save footage from camcorders directly to an internal SSD or Cloud Storage without the use of a computer. This enables the camcorder to be used for recording new data. The performance of the TAINER has been optimized, allowing data to be transferred from a memory card to the TAINER more quickly than to other storage devices. Data stored on the TAINER can later be copied to a computer.

The TAINER supports professional video cameras from various manufacturers and accommodates a variety of memory card formats, such as: XQD, CFexpress, SD, SDHC, SDXC, or USB card reader for other memory types. The TAINER also supports network connections through LAN or Wi-Fi, enabling connection to a smartphone or Cloud Service. Users can then preview copied data on their devices.

Please read this manual before using the product. Follow the operating instructions carefully to avoid damage to the product or personal injury. This guide assumes that your TAINER unit contains a properly formatted internal SSD and a charged battery. If this is not the case, please refer to the User Manual for instructions on formatting the internal SSD and charging the battery.

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Important Safety Notice

- Do not drop, jar, bump, shock, or expose the TAINER to vibration during video preview or while data is being transferred.
- Avoid using the device near open flames (candles, stoves, grills, fires) or sparks (fireworks, welding torches).
- To ensure secure data management, periodically back up your data to an additional hard drive. Under no circumstances is ClouZen Co., Ltd. liable for loss or damage to a computer, program, records, or data, or for any consequential or incidental damages.

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ClouZen Co., Ltd reserves the right to make improvements and/or changes to the product and programs described in this User's Guide at any time without notice.

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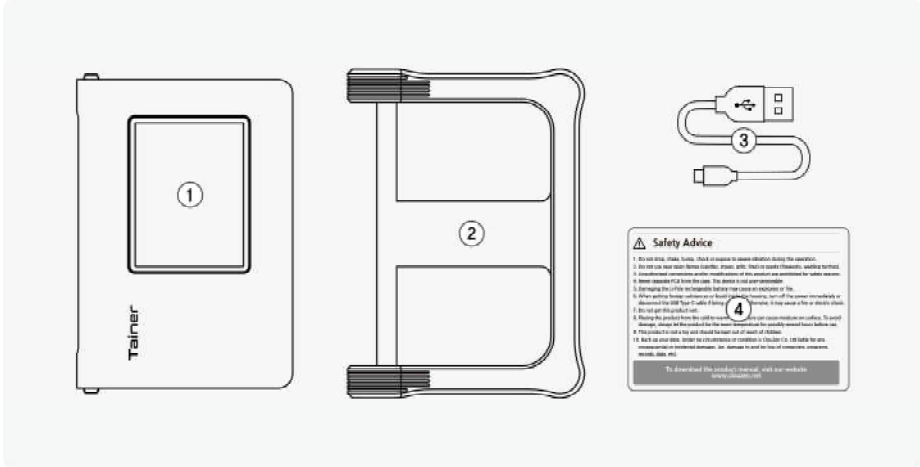
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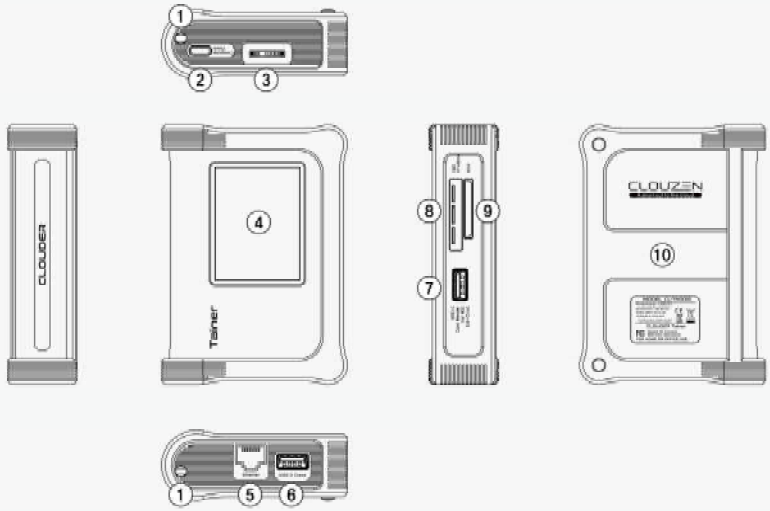
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01 Package Contents



① Clouder TAINER (TN001S) Unit : The original packaging does not come with an internal SSD. Users can install an M.2 2280 size M.2 SATA SSD.
② Shock-absorbing silicone jacket
③ USB 3.0 Type-C cable: For charging the TAINER and connecting it to a computer or smartphone.
④ Quick Reference Guide

02 Device Diagram



① Coin-slot screw: Loosen to add or exchange the internal SSD.
② USB Type-C port: Used for charging the TAINER or connecting it to a computer as an external hard drive.
③ Control button: Used to power on the TAINER and control cursor movement (up/down/left/right) and selection when the device is powered on.
④ LCD display: 2.4-inch TFT
⑤ LAN port: Ethernet (10/100/1000T) port for connecting to a wired network.
⑥ USB 2.0 Cloud port: For connecting the ClouZen-supplied Wi-Fi dongle or enabling network access via smartphone USB tethering.
⑦ USB 3.0 Host port : Connects to external drives (SSD/HDD/Docking Station) for backup or USB card readers for data transfer.
• External power required when connecting a USB external drive.
• No external power required when connecting a USB card reader, but only one memory card can be detected at a time when multiple cards are connected.
⑧ XQD/CFexpress slot: Slot for connecting XQD cards and CFexpress (type-B) cards
⑨ SD slot : Slot for connecting SD cards (UHS-II supported)
⑩ Shock-absorbing silicone jacket

03 Product Description

The TAINER provides the following various functions:

3.1. Memory card backup and verify

The TAINER features an optional M.2 SATA SSD and a rechargeable Li-Poly battery, allowing you to copy the contents of a memory card directly to the internal SSD without the need for a computer, even in the field where no power source is available. Simply insert an SD card into the SD slot, or an XQD/CFexpress card into the XQD slot. For other types of memory cards, you can connect them to the TAINER using a USB card reader via the USB 3.0 host port. The TAINER also supports copying data to an external USB drive or cloud storage.

In addition, the TAINER provides a verify function that compares the data stored on the internal SSD (Chapter 11), external USB drive (Chapter 13), or cloud storage (Chapter 15) with the data on the memory card. For complete backup information, please refer to the respective chapters of this manual.

3.2. Sequential copy

The 'Sequential copy' function copies data from multiple memory cards one by one, without requiring user input. The copy sequence is SD card, XQD/CFexpress, and USB card reader.

3.3. Incremental copy

TAINER's incremental backup feature saves time and storage space by detecting and copying only newly added data, preventing duplicate backups and increasing workflow efficiency. It also offers full backup options for added flexibility.

3.4. Secondary backup

Synchronize the internal SSD and external drive by copying the added backup folder to an external USB drive or cloud storage. This function provides an additional backup of your data for added security. See Ch.17 for more details.

3.5. Copy selected folders

Select and copy multiple backup folders stored on the internal SSD to an external USB drive or cloud storage, for easy data transfer and organization. This function provides flexibility and convenience in managing your data backups. See Ch.18 for more details.

03 Product Description

3.6 Folder naming options

Choose between 'Auto' or 'Manual' folder naming options to organize your backup folders. 'Auto' generates folder names based on the file creation time, while 'Manual' allows you to set custom folder names for easier identification and management. See Ch.22.2 for more details.

3.7. Preview function

Use the Preview Function to confirm that your data is stored without error. View previews of your videos and photos directly on the TAINER's built-in LCD screen, allowing for quick and easy verification of your data. See Ch.16 for more details.

3.8. Exchangeable internal SSD

The TAINER is designed to be drive exchange capable, allowing users to easily exchange the internal SSD. Please note that the original packaging does not include an internal SSD. Users need to install it themselves. The internal SSD is M2 2280 size SATA SSD, and can be replaced by unlocking two coin screws on the TAINER. See Ch.21 for more details.

3.9. Connecting to the computer or smartphone

The TAINER can also function as an external hard drive for computers and smartphones. By connecting to the Type-C port, users can edit footage directly on the TAINER without having to copy it to a computer. The USB Type-C port is USB 3.2, ensuring fast transfer speeds. See Ch.19 for more details.

3.10. Clouder App

The Clouder app is a convenient tool for managing your data on the TAINER from your smartphone. With the app, you can easily browse and preview your photos and videos, as well as perform various operations on your data, such as copying, moving, and deleting files. Clouder is available for download on the App Store and Google Play.(expected to be available in Q2 2023)

3.11. Simple interface

The TAINER can be operated using a simple interface consisting of a single button and an LCD screen. All operations, including turning the power on and off, are controlled by a single rotary switch on the right side of the device. See Ch.8 for more details.

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03 Product Description

3.12. Rechargeable internal battery

With a built-in rechargeable battery, this portable backup solution allows you to copy the contents of your memory cards without the need for a power source. The device can be charged using the USB Type-C port for added convenience. See Ch.7 for more details.

3.13. Multi-language support

The TAINER currently supports English and Korean languages, but additional languages will be supported in the future. Stay tuned for updates on supported languages. See Ch.22.3 for more details.

3.14. Firmware update

Firmware updates may be provided periodically on our website, which can be downloaded and installed on the TAINER to improve performance, add new features, or fix issues. See Ch.22.4 for more details.

3.15. Factory reset

Formatting the internal SSD and resetting all user settings and information. See Ch.22.5 for more details.

04 Symbols Used in This Document



WARNING

The flash icon in a triangle indicates warning for personal injury hazards such as electric shock.



CAUTION

An exclamation mark in a triangle indicates important instructions in this operating manual which must be observed.



REFERENCE

The exclamation mark icon gives you special tips and notes on the operation.

05 Important Safety Information



CAUTION

In case of any damage due to failure to observe these operating instructions, the warranty is voided. ClouZen does not assume liability for consequential damages. Nor do we assume liability for damage to property or personal injury caused by improper use or failure to observe the safety instructions. The warranty is void in any such case. The following safety instructions and warnings are not only to protect you, but also to protect the device. Please read the following warnings:



WARNING

- Unauthorized conversion and/or modification of the product is forbidden.
- Never open the product housing except when changing/adding the internal SSD. This device is not intended to be serviced by the user.
- Damage to the Li-Poly rechargeable battery may result in explosion or fire.
- Maintenance or repairs may only be carried out by an authorized repair center.
- The TAINER must not get damp or wet. Protect the device from humidity and water, from sun, excessive heat (>113°F) or cold (<32ºF), dust and dirt.
- When the product is brought from a cold place into a warm room, condensation may form. This could damage the product. Always let the product get to room temperature before use or before connecting the USB charger or external USB battery. This can take several hours.
- Do not use in tropical climate conditions.
- The product is not a toy and should be kept out of reach of children.
- Do not place liquid near the product. Liquid could get inside the housing and cause a fire or electric shock. In case of fire damage or short circuit, de-energize the respective socket (e.g. turn off circuit breaker) and only then pull the USB charger from the socket. Do not attempt to use the product! Take it to your dealer for repair immediately.
- Never touch the USB charger unit when your hands are damp or wet.
- In industrial facilities, safety regulations for electrical equipment and facilities must be observed. If the product is used at schools, training facilities, or do-it-yourself/hobby shops, it should not be handled unless supervised by trained, responsible personnel.
- Do not drop the TAINER device.

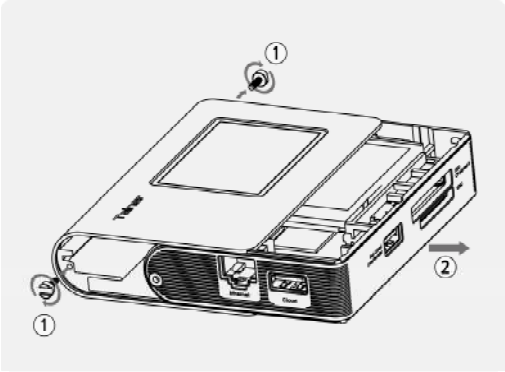
05 Important Safety Information

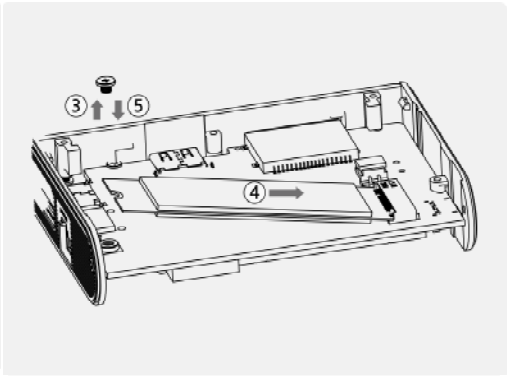
CAUTION

The product must not get damp or wet. This product is not a toy. It contains fragile and swallowable glass parts, small parts, and a rechargeable battery. Any use other than that described above may damage the product. Read these operating instructions thoroughly and carefully. The instructions contain important information for installation, operation, and handling. Take note of all safety instructions.

06 Installation of M.2 SATA SSD

You can easily install the internal SSD on your own. The TAINER accepts M.2 2280 size SATA SSDs. The maximum allowable capacity for the internal drive is 32TB.

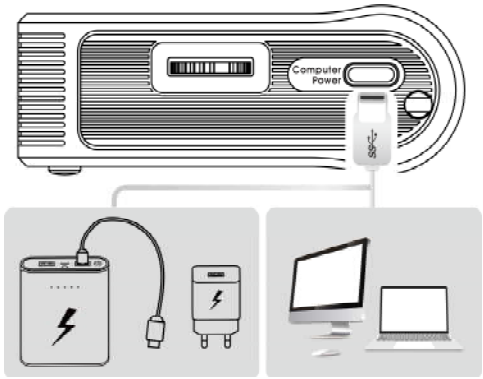




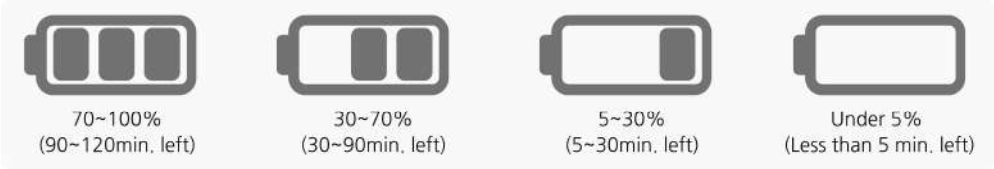
① Loosen the coin-lock screw.
② Remove the cover from the TAINER case.
③ Loosen the M.2 screw on the PCB board.
④ Slide the M.2 SATA SSD into the inner M.2 slot of the TAINER.
⑤ Retighten the M.2 screw to securely fasten the M.2 SATA SSD.
⑥ Install the aluminum cover onto the TAINER and tighten the coin-lock screw.

07 Battery Charging and Power Management

The TAINER can be charged through its USB Type-C slot using the provided USB Type-C cable. You can charge it by connecting to a USB charger (with an output current capacity of 5V 2A or more), a USB battery pack (with an output current capacity of 2A or more), or a USB terminal on a computer. When charging begins, the red LED located on the right side of the control button will turn on. Once charging is complete, the LED will turn off.



The built-in battery of the TAINER typically takes approximately 3 hours to fully charge. You can check the remaining battery power level by referring to the battery power indicator located on the top right of the LCD screen.



When the battery goes flat, warning message will be displayed on the LCD and the power will be off. When it occurs during the backup, the copy may be incomplete, and you should check the backup result. When the device is switched on again, the TAINER will display the previous backup status, indicating whether the backup was successful or failed.

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07 Battery Charging and Power Management

CAUTION

- Never damage the rechargeable battery--do not remove it from the TAINER. Consult the chapter on "Battery Disposal". Damaging the wrapping of the rechargeable battery might cause an explosion or fire.
- Never short circuit the contacts of the rechargeable battery. Never touch the connections or electrical components inside the TAINER with metal objects.
- Charge the rechargeable battery regularly, even if you do not use the product. The TAINER needs some "current" (a small quantity) at all times. Due to the Li-Poly rechargeable battery technology, it is not necessary to discharge the battery before recharging. Recharge the battery completely, about once a six month. The device will be ready for use at any time.

REFERENCE

- Please use a USB charger and a USB battery pack with output current capacity of 5V 2A or more.
- When the battery gauge goes down, the gauge will not seem to go up until the battery is fully charged.
- When connecting to the computer via the USB cable, the USB power from the computer may not be sufficient. Then, the built-in battery will be used together. Even if the power is supplied, the built-in battery may be exhausted and the power may be cut off during operation.
- Always keep the battery charged one or more of the gauge remaining on LCD. If the battery is completely discharged, it shortens the battery life.
- If the TAINER’s battery is completely discharged, the performance of the battery may be degraded. It is recommended that the TAINER’s battery be recharged before the battery gauge reaches the empty level.
- If the TAINER is fully charged and is using the internal battery only, you may use the “Backup” function for about 2 hours. (However, when the other functions such as the Video/Photo Preview are used, the usable time for the backup function may be reduced.)
- The rechargeable battery can be recharged 400 times. If the battery operation time gets shorter, it may be time to replace the battery. Consult your authorized ClouZen dealer to replace the internal battery.

08 TAINER Interface

08.1 Turning the TAINER on/off



Press the control button on the right side of the device for a few seconds in order to turn the TAINER on. The power up logo and firmware version will be shown on the LCD. When you see the logo on the LCD screen, release the key. Otherwise, the TAINER will automatically power off.



After completing the system check, the TAINER enters the [Device Control] mode. In this mode, you can add a memory card to initiate backup operations or access various device menus for further control and configuration.



The TAINER is designed to automatically turn off when not in use. Users have the option to customize the idle time before the automatic power off occurs, such as 90, 180, or 300 seconds. Additionally, users can manually power off the TAINER by pressing down on the control button for more than 1 second. For more information on setting the Auto Power Off feature, please refer to chapter 22.1.

REFERENCE

• In the event that the TAINER becomes unresponsive or frozen, you can force a power-off by pressing and holding the control button for more than 8 seconds. This action will shut down the TAINER even if it is not responding. Please note that this method should only be used when the device is frozen and not responding to normal controls.

08 TAINER Interface

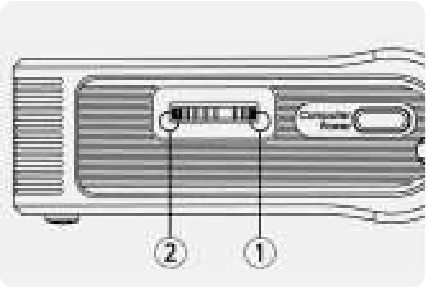
08.2 Button operation

Symbols		Operation
S	Short Press	Press once and release immediately.
L	Long Press	Press and hold the key for more than one second.
▲▼	Up/Down	Turn the control button up/down.
◀▶	Left/Right	

The TAINER is operated by a single control button, which can be used in four different ways. The display shows you the “S” (Short) or “L” (Long) symbol as a means to invoke the desired function.

08 TAINER Interface

08.3 The LED indicator



① Charging LED

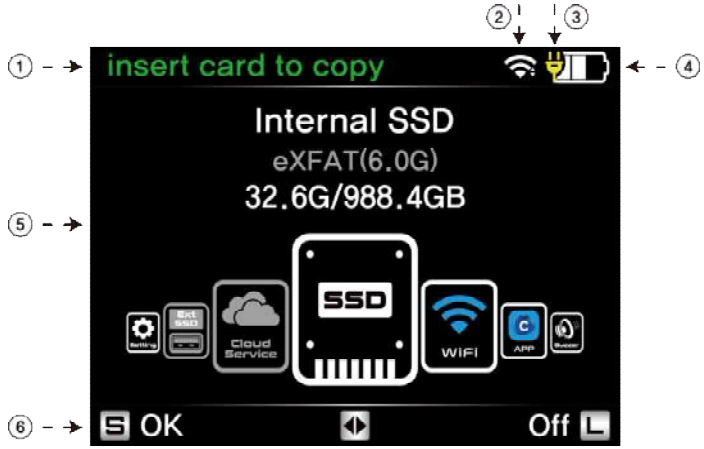
RED	Charging

② Power LED

Green	Power On
Blinking	Accessing memory card or SSD.

08 TAINER Interface

08.4 The LCD Display



① Status and Suggestions
Provides relevant information on the TAINER's state and guide users on the suggested operations or actions based on that status.

② Network Status
Connection Icon shown when connected.

③ External Power Status
When an external power source is connected through USB Type C cable, a round figure is displayed on the left side of the battery indication.

④ Remaining capacity of the rechargeable battery
The battery capacity is displayed in four levels: (3→2→1→empty) by the battery gauge.
When empty, the gauge is displayed in red. For more details, see Chapter. 7 “Battery Charging and Power Management”.

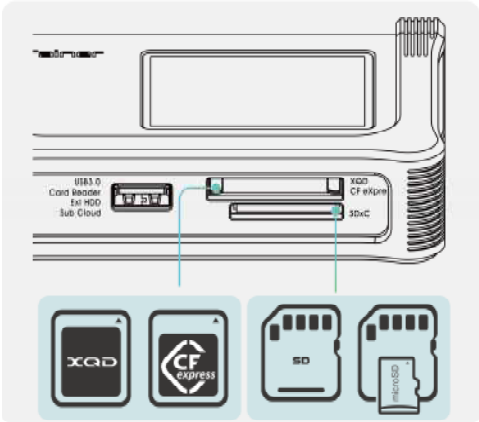
⑤ Current status of the device

⑥ Available button function for the current screen
The display varies depending on the function in use.

09 Connecting the Memory Card

09.1 Connecting a memory card into the built-in slot

Many types of the memory cards can be backed up on the TAINER either by connecting the cards directly into the applicable slots or by using the USB card reader through the USB3.0 Host port on the bottom side of the TAINER.



• Direct Slot for XQD and CFexpress Cards: Located at the upper side of the bottom section, this slot allows for direct insertion of XQD and CFexpress cards.

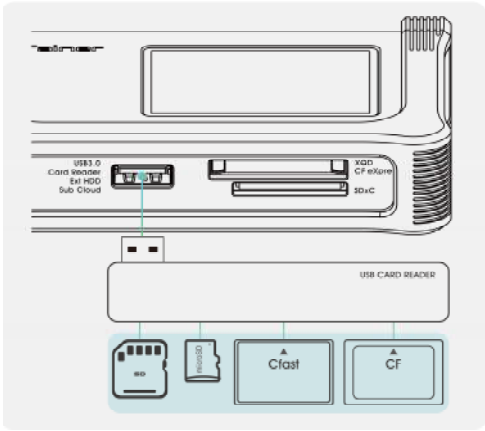
• Direct Slots for SDHC/SDXC Cards: Located at the bottom side of the device's bottom section, these slots allow for direct insertion of SDHC/SDXC cards.

CAUTION

• Insert the memory card carefully. The pins may bend if you insert the memory card incorrectly.

09 Connecting the Memory Card

09.2 Connecting the memory card by using USB card reader



• Connect the USB card reader that supports memory cards such as CF, CFAST to the “USB 3.0 Host” port located at the bottom of the device.

• The USB card reader is powered by the internal battery of the TAINER, allowing for seamless connection without the need for a separate adapter or external power sources.

REFERENCE

• To ensure detection, please insert only one memory card at a time into the TAINER. The device requires a single memory card to be inserted for proper detection and functionality.



When connecting a USB card reader to the USB 3.0 Host port of the TAINER, the device prompts the user to select the type of connected device, as shown in the left image. To select 'USB card reader,' use the control button and perform a short press to confirm the selection.

09 Connecting the Memory Card

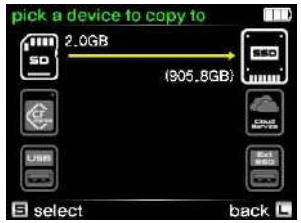
09.3 Checking the memory card connection



(1) When a memory card is connected to the TAINER, the device displays the detection progress, as shown in the left image. This progress screen indicates that the TAINER is actively detecting and recognizing the inserted memory card.



(2) If the inserted memory card is successfully detected, the TAINER displays a successful connection message on the LCD, as shown in the left image. Within a few seconds, the device automatically switches to [Copy Mode], indicating that it is ready to initiate the copying process.



(3) At [Copy Mode], users have the option to select the target device where the memory cards will be copied, as shown in the left image. The left side represents the source device, and the right side represents the available target devices. Users can choose the target destination from options such as internal SSD, Cloud, or an external USB drive.

10 Copy Modes and Destination Options

10.1 Copy Modes for Internal SSD / External USB Drive

The TAINER provides a range of copy modes that are determined by detecting and comparing the contents of the memory card. The suggested operation varies depending on the selected destination device.

(1) When the destination device is the internal SSD or an external USB drive, the TAINER offers three distinct modes of operation, as explained in Chapter 10.1. These modes provide different approaches for copying and verifying data, ensuring comprehensive backups based on specific user preferences.

(2) In the case of Cloud storage as the destination device, the TAINER incorporates an additional 'verification' process, as detailed in Chapter 10.2. This step accounts for potential network instability, enhancing the reliability of the backup operation.

10.1.1 Copy or Copy & Verify (New Memory Cards)



When a memory card is newly inserted and has not been copied before, the TAINER suggests two modes of operation: 'Copy' and 'Copy and Verify,' as shown in the left image. These modes enable a complete backup by copying the full data from the memory card. To select the preferred operation, navigate to the desired mode using the control button and press it shortly to confirm the selection.

Copy	Make a new folder on the drive and copy all the memory card data into the folder.
Copy & Verify	Same as the [Copy] but after copying, the data on the memory card is compared with the copied data in the drive. Each bit is verified.

10.1.2 Verify or New Copy for Copied, Unmodified Memory Cards



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders. If the memory card has been previously copied and remains unmodified, users are presented with the option to either verify the data or create a new copy.

10 Copy Modes and Destination Options

10.1 Copy Modes for Internal SSD / External USB Drive

New Copy	Make a new folder on the drive and copy all the memory card data into the folder.
Verify	Compare data stored in the drive to the data stored in the memory card.

10.1.3 Update for Memory Cards with Added Files



When you re-insert a memory card that has been already backed up once, the name of the folder saved in the internal drive will appear on display and you are able to choose one of the three options using the control button.

Copy	Make a new folder on the drive and copy all the memory card data into the folder.
Update	Copy only added files to the existing backup folder in the drive.
Update & Verify	Same as the [Update] but after copying, the data on the memory card is compared with the copied data in the drive. Verify added files only.

REFERENCE

• Handling of Failed Files during the Update Process :
When performing an 'Update' operation, the TAINER adds '.UPTMP' to the name of the original file and copies its contents to a file name with the format '[original name.UPTMP]'. If the copy process is successful, the file name reverts back to its original name. However, if you come across any file names in the backup folder that still contain the '.UPTMP' extension, it indicates that those files were not successfully copied during the update. Please review the backup folder for any files with this extension, as they may require further attention or recopying to ensure a complete backup.

10 Copy Modes and Destination Options

10.2 Copy Modes for Cloud Storage

When the destination device is Cloud Storage, the Copy modes differ from those for the 'internal SSD or external USB drive' as they include a verification step after the copying process. In this case, the verification method used is checksum verification.

During the copying process to the cloud storage, the cloud storage system calculates the checksum for each file it stores. Once the copying is complete, the TAINER performs its own checksum calculation on the files within the memory card data. The calculated checksum is then compared with the checksum calculated by the Cloud Storage system to ensure data integrity and accuracy.

10.2.1 Copy & Verify (New Memory Cards)



When a memory card is newly inserted and has not been copied before, the TAINER suggests the 'Copy and Verify' mode, as depicted in the left image.

Copy & Verify	Creates a new folder in cloud storage and copies all memory card data. Performs a checksum-based verification for data integrity.

10.2.2 Verify or Copy & Verify for Previously Copied, Unmodified Memory Cards



For previously copied and unmodified memory cards, users can choose to verify the data or create a new copy with verification.

Copy & Verify	Creates a new folder in cloud storage and copies all memory card data. Performs a checksum-based verification for data integrity.
Verify	Performs a checksum-based verification on existing data for data integrity.

10 Copy Modes and Destination Options

10.2 Copy Modes for Cloud Storage

10.2.3 Update for Memory Cards with Added Files



When re-inserting a previously backed up memory card, the name of the corresponding folder stored in the internal drive will be displayed. You can choose one of the following options using the control button

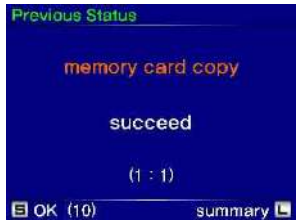
Update & Verify	Copies only the added files to the existing backup folder in the drive and performs a checksum-based verification for data integrity.
Copy & Verify	Creates a new folder in cloud storage and copies all memory card data. Performs a checksum-based verification for data integrity.

10 Copy Modes and Destination Options

10.3 Previous Backup Status

After completing a backup, the TAINER may automatically power off if left unused for a certain amount of time (e.g., 90 seconds) to conserve battery power. Additionally, in case of any errors during the backup process, the TAINER will also shut down automatically. To inform users about the status of the previous backup, the TAINER displays the backup status on the LCD screen upon the next power-up.

[If the previous operation was successful – displays the status in BLUE screen][If the previous operation was successful – displays the status in BLUE screen]



[If the previous operation was failed – the error message is displayed on the RED screen]



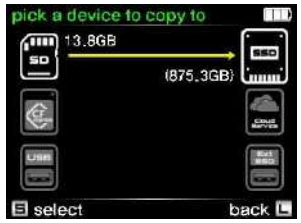
11 Internal SSD as Destination Drive

11.1 Copy or Copy & Verify to internal SSD (New Memory Cards)

In this section, we will guide you through the process of copying memory card data to the internal SSD of the TAINER.

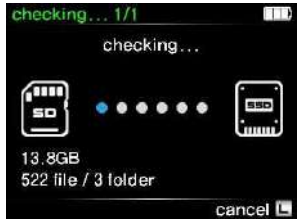
In this section, we will walk you through the steps of copying memory card data to internal SSD of the TAINER. For instructions on connecting memory cards to the TAINER, please refer to Chapter 9. To learn about selecting copy modes for transferring data from connected memory cards to the USB drive, please see Chapter 10.1.

If you have multiple cards inserted into the TAINER, the copying sequence will follow the order of "SD card -> XQD card -> USB card reader"



(1) Selecting Copy Destination

When memory cards are inserted into the TAINER, the LCD displays a destination selection page. An arrow line indicates the source (memory cards) and the available destinations (Internal SSD, Cloud Storage, USB drive). Using the control button, navigate to internal SSD option on the destination selection page. Press the control button shortly to select internal SSD as the desired destination device.



(2) Checking

When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside internal SSD to determine if it has been previously copied.



(3) Copy Mode Selection

If the memory card is new and has not been copied before, you will be prompted to select the copy mode. Choose the "Copy" or "Cpy&Vfy" mode from the menu options.

11 Internal SSD as Destination Drive

11.1 Copy or Copy & Verify to internal SSD (New Memory Cards)

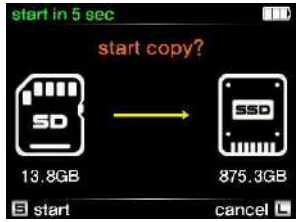
11.1.1 Copy

In this section, we will guide you through the process of copying memory card data to the internal SSD of the TAINER.



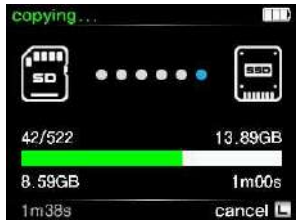
(1) Menu Selection

Choose the "copy" mode from the menu options.



(2) Start Copy

Initiate the copy operation by pressing the control button shortly.



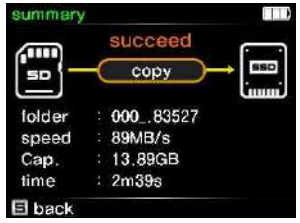
(3) Copy Progress

The TAINER will display the "Copying" and "Preparing" messages on the LCD as it proceeds to copy the data from each connected memory card. This process will be repeated until all the memory cards are successfully copied.



(4) Copy Results

Press the control button shortly to view the summary of the copy operation on the LCD.



(5) Summary

The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

11 Internal SSD as Destination Drive

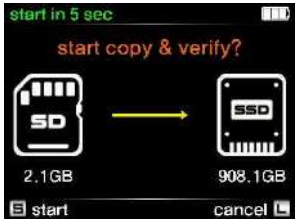
11.1 Copy or Copy & Verify to internal SSD (New Memory Cards)

11.1.2 Copy & Verify to Internal SSD

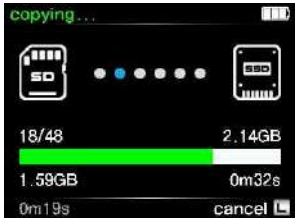
In this section, we will guide you through the process of copying and verifying memory card data to the internal SSD of the TAINER



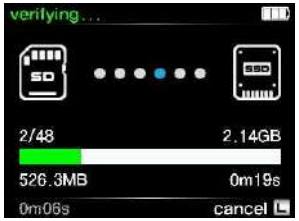
(1) Menu Selection
Choose the "Cpy&Vfy" mode from the menu options using the control button.



(2) Start Copy & Verify
Initiate the Copy & Verify operation by pressing the control button shortly.



(3) Copy Progress
The TAINER will create a new folder on the internal SSD and begin copying the data from the memory cards to this folder.



(4) Verification Progress
Once the copying process is complete, the TAINER will perform a verification process. It will compare the data on the memory cards with the copied data on the internal SSD, ensuring data integrity.

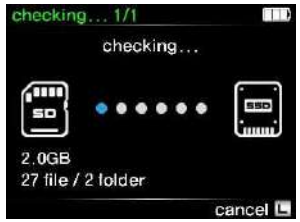


(5) Copy Results
Press the control button shortly to view the summary of the Copy & Verify operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

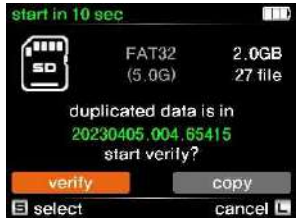
11 Internal SSD as Destination Drive

11.2 Verify or New copy to internal SSD (Already Copied, Unmodified Memory Cards)

In this section, we will explain the process of verifying or creating a new copy of memory card data that has already been copied to the internal SSD of the TAINER.



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders.



If the memory card has been previously copied and remains unmodified, users are presented with the option to either verify the data or create a new copy.

11 Internal SSD as Destination Drive

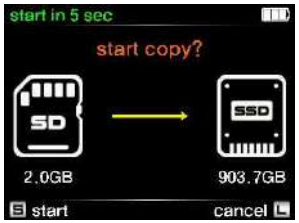
11.2 Verify or New copy to internal SSD (Already Copied, Unmodified Memory Cards)

11.2.1 New Copy to Internal SSD

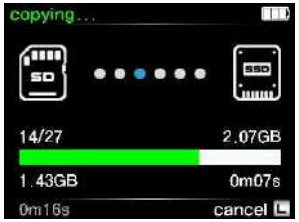
In this section, we will provide a detailed explanation of the "New Copy" operation to the internal SSD of the TAINER.



(1) Menu Selection
Choose the "New copy" option to copy memory card again.



(2) Start Copy
Initiate the Copy operation by pressing the control button shortly.



(3) Copy Progress
The TAINER will create a new folder on the internal SSD and begin copying all the memory card data into this folder. The progress of the copy operation will be displayed on the LCD.



(4) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD.



(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

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11 Internal SSD as Destination Drive

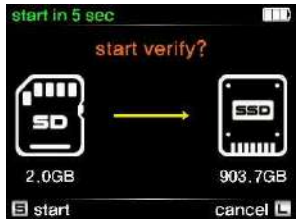
11.2 Verify or New copy to internal SSD (Already Copied, Unmodified Memory Cards)

11.2.2 Verify to Internal SSD

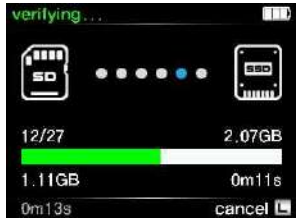
In this section, we will guide you through the "Verify" operation to ensure the integrity of the data stored in the internal SSD of the TAINER.



(1) Menu Selection
Choose the "Verify" option from the menu.



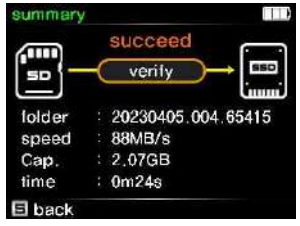
(2) Start Verify
Initiate the Verify operation by pressing the control button shortly.



(3) Verification Progress
The TAINER will compare every file on the memory card with the corresponding files in the backup folder stored in the internal SSD. The progress of the verification process will be displayed on the LCD.



(4) Verification Results
Press the control button shortly to view the summary of the verify operation on the LCD.

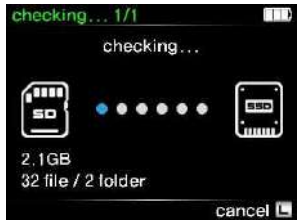


(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

11 Internal SSD as Destination Drive

11.3 Update or New copy to Internal SSD (Memory Cards with Added Files)

In this section, we will explain the process of updating or creating a new copy of memory card data to the internal SSD of the TAINER when additional files have been added.



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders.



When you re-insert a memory card that has been previously backed up once and contains new footage added after the initial backup, the name of the folder saved in the internal drive will appear on the display. You will then have three options to choose from using the control button.

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11 Internal SSD as Destination Drive

11.3 Update or New copy to Internal SSD (Memory Cards with Added Files)

11.3.1 Update to Internal SSD

In this section, we will explain the process of updating the internal SSD of the TAINER with added files from a memory card that has been previously backed up



(1) Menu Selection
Choose the "Update" option from the menu.



(2) Start Update
Initiate the Update operation by pressing the control button shortly.



(3) Update Progress
The progress of the update process will be displayed on the LCD. Only the added files, excluding those that have already been copied, will be selected for the update.



(4) Update Results
Press the control button shortly to view the summary of the update operation on the LCD.



(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

11 Internal SSD as Destination Drive

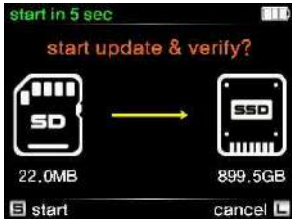
11.3 Update or New copy to Internal SSD (Memory Cards with Added Files)

11.3.2 Update and Verify to Internal SSD

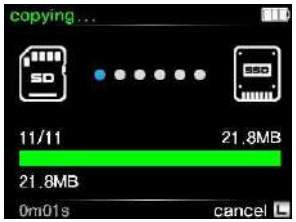
Perform an update and verification process to the internal SSD of the TAINER with added files from a previously backed-up memory card.



(1) Menu Selection
Choose the "Up&Vfy" option from the menu.



(2) Start Update
Initiate the Update & Verify operation by pressing the control button shortly.



(3) Update Progress
The TAINER will perform the update process, selecting only the added files from the memory card and excluding those that have already been copied during the initial backup. The progress of the update process will be displayed on the LCD.



(4) Verification Progress
After the update process is completed, the TAINER will perform a verification process to compare the added files in the memory card with the updated files in the backup folder.



(5) Update and Verify Results
Press the control button shortly to view the summary of the update and verify operation on the LCD. The summary will provide details such as card information, the name of the backup folder, copy speeds, and elapsed time for the update and verification processes.

11 Internal SSD as Destination Drive

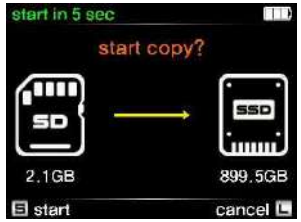
11.3 Update or New copy to Internal SSD (Memory Cards with Added Files)

11.3.3 New Copy to Internal SSD

Perform a new copy of all the memory card data to a new folder on the internal SSD.



(1) Menu Selection
Choose the "Cpy" option from the menu.



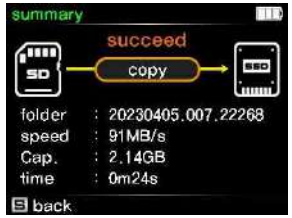
(2) Start Copy
Initiate the Copy operation by pressing the control button shortly.



(3) Copy Progress
The TAINER will create a new folder on the internal SSD and begin copying all the memory card data into this folder. The progress of the copy operation will be displayed on the LCD.



(4) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD.



(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

12 Connecting USB External Drive to the TAINER

12.1 Compatible USB Drives for the TAINER

The TAINER supports connecting USB external drives via the USB 3.0 interface (USB 3.0 Host port). This enables you to conveniently copy memory card data to the connected USB external drive or synchronize the internal SSD data with the USB external drive.

It is important to note that using both the internal SSD and USB external drive simultaneously may require additional power. To ensure stable operation, it is recommended to connect the TAINER to a power source using the USB Type-C port located on the right side of the TAINER.

USB External Drive	External Power	Possible Funstions
USB SSD	Recommended	Memory card copy & Verify Make secondary copy
USB Hard Drive	Required	Memory card copy & Verify Make secondary copy
USB Docking Station (Self Powered)	Not required	Memory card copy & Verify Make secondary copy

12 Connecting USB External Drive to the TAINER

12.2 Connecting and Presenting USB Drives on the TAINER





(1) Connecting USB Drives to the TAINER
As shown above, connect the larger plug of the USB cable (USB 3.0 Standard-A plug) to the USB 3.0 Host port located on the bottom side of the TAINER, and connect the smaller plug to the USB drive. Whenever connecting a new USB device, users need to select the type of operation mode as shown in the figure on the left.



(2) Connect External Power
Whenever an external drive is selected, the TAINER will display a message requesting the application of external power to the USB Type-C port located on the right side of the TAINER. For more information, please refer to the relevant section below.



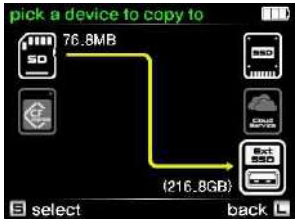
(3) The TAINER is detecting and checking the connected USB drive.

12 Connecting USB External Drive to the TAINER

12.2 Connecting and Presenting USB Drives on the TAINER



(4) The TAINER has successfully detected the USB drive.



(5) The TAINER displays the USB drive icon in the destination list on the LCD screen, along with the free capacity of the USB drive and the size of the memory card data. This provides users with important information about the available space and the data size on both the USB drive and the memory card.

REFERENCE

- When using the USB external drive, it is important to connect the TAINER to an external power source. In cases where the power supplied through USB is not sufficient, the built-in battery will be used simultaneously. However, please note that even with external power supplied, the built-in battery may be drained during operation, leading to a power cut-off.
- The USB 3.0 Host port of the TAINER can provide an average power of up to 700mA. This power capacity is generally suitable for most portable USB SSDs, but it may not be sufficient for certain USB drives. Specifically, if the USB drive contains a Hard Drive as its internal storage, the TAINER may not be able to support it due to the peak power requirements of the hard drive during operation.

13 USB External Drive as Destination Drive

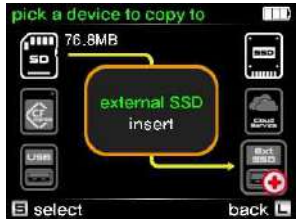
13.1 Connecting USB Drive as Copy Destination

In this section, we will walk you through the steps of copying memory card data to a USB drive using the TAINER. For instructions on connecting memory cards to the TAINER, please refer to Chapter 9. To learn about selecting copy modes for transferring data from connected memory cards to the USB drive, please see Chapter 10.1.

If you have multiple cards inserted into the TAINER, the copying sequence will follow the order of "SD card -> XQD card -> USB card reader"



(1) Selecting Copy Destination
When memory cards are inserted into the TAINER, the LCD displays a destination selection page. An arrow line indicates the source (memory cards) and the available destinations (Internal SSD, Cloud Storage, USB drive).



(2) USB Drive Selection
Using the control button, navigate to the USB drive option on the destination selection page. Press the control button shortly to select the USB drive as the desired destination device.



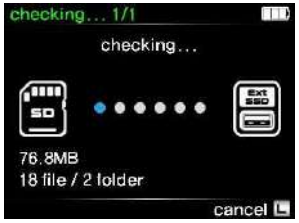
(3) USB Drive Connection Prompt
If the USB drive is not connected yet, the TAINER displays a message instructing the user to connect the USB drive to the USB 3.0 Host port, as shown in the left figure.

13 USB External Drive as Destination Drive

13.2 Copy or Copy & Verify to USB drive (New Memory Cards)

13.2.1 Copy

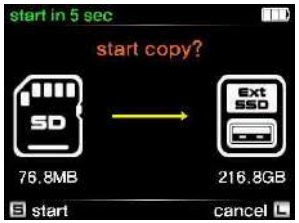
In this section, we will guide you through the process of copying new memory card data to a USB external drive using the TAINER.



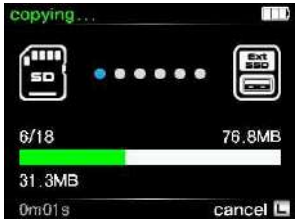
(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside USB drive to determine if it has been previously copied.



(2) Menu Selection
If the memory card is new and has not been copied before, you will be prompted to select the copy mode. Choose the "Copy" mode from the menu options.



(3) Start Copy
Initiate the copy operation by pressing the control button shortly.



(4) Copy Progress
The TAINER will display the "Copying" and "Preparing" messages on the LCD as it proceeds to copy the data from each connected memory card. This process will be repeated until all the memory cards are successfully copied.



(5) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD. The summary will provide details such as card information, the name of the backup folder, copy speeds, and elapsed time for the update and verification processes.

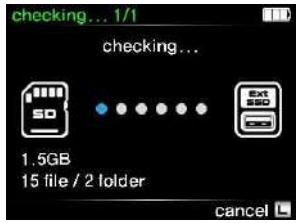
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13 USB External Drive as Destination Drive

13.2 Copy or Copy & Verify to USB drive (New Memory Cards)

13.2.2 Copy & Verify to USB drive

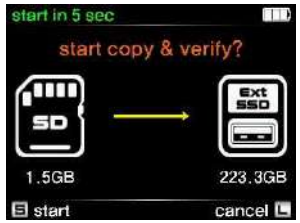
In this section, we will guide you through the process of copying and verifying memory card data to the USB drive usign the TAINER.



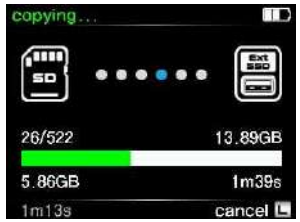
(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside USB drive to determine if it has been previously copied.



(2) Menu Selection
If the memory card is new and has not been copied before, you will be prompted to select the copy mode. Choose the "Cpy&Vfy" mode from the menu options using the control button.



(3) Start Copy & Verify
Initiate the Copy & Verify operation by pressing the control button shortly.



(4) Progress
The TAINER will create a new folder on the USB drive and initiate the copying process of the data from the memory cards into this folder. Once the copy is complete, the TAINER will perform a thorough comparison between the memory card data and the data stored on the USB drive to ensure data integrity and accuracy.

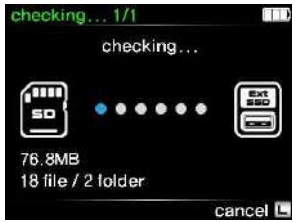


(5) Copy & Verify Results
Press the control button shortly to view the summary of the Copy & Verify operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

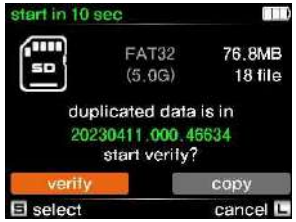
13 USB External Drive as Destination Drive

13.3 Verify or New copy to USB External Drive (Previously Copied, Unmodified Memory Cards)

In this section, we will guide you through the process of verifying the integrity of previously copied memory card data or creating a new copy on the USB external drive using the TAINER.



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders.



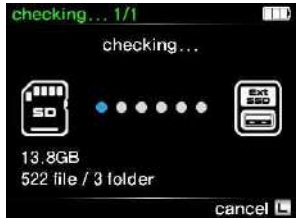
If the memory card has been previously copied and remains unmodified, users are presented with the option to either verify the data or create a new copy.

13 USB External Drive as Destination Drive

13.3 Verify or New copy to USB External Drive (Previously Copied, Unmodified Memory Cards)

13.3.1 New Copy to USB Drive

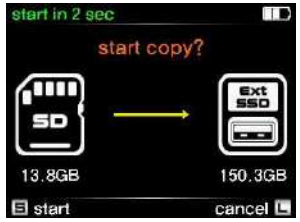
In this section, we will provide a detailed explanation of the "New Copy" operation to the USB drive using the TAINER.



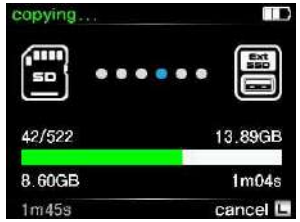
(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside USB drive to determine if it has been previously copied.



(2) Menu Selection
Choose the "New copy" option to copy memory card again.



(3) Start Copy
Initiate the Copy operation by pressing the control button shortly.



(4) Copy Progress
The TAINER will create a new folder on the USB drive and begin copying all the memory card data into this folder. The progress of the copy operation will be displayed on the LCD.



(5) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

13 USB External Drive as Destination Drive

13.3 Verify or New copy to USB External Drive (Previously Copied, Unmodified Memory Cards)

13.3.2 Verify to USB drive

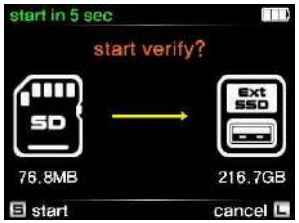
In this section, we will guide you through the process of copying and verifying memory card data to the USB drive usign the TAINER.



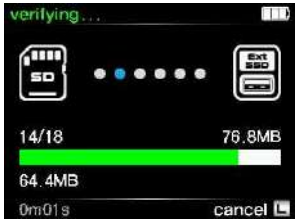
(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside USB drive to determine if it has been previously copied.



(2) Menu Selection
If the memory card is new and has not been copied before, you will be prompted to select the copy mode. Choose the "Cpy&Vfy" mode from the menu options using the control button.



(3) Start Copy & Verify
Initiate the Copy & Verify operation by pressing the control button shortly.



(4) Progress
The TAINER will create a new folder on the USB drive and initiate the copying process of the data from the memory cards into this folder. Once the copy is complete, the TAINER will perform a thorough comparison between the memory card data and the data stored on the USB drive to ensure data integrity and accuracy.

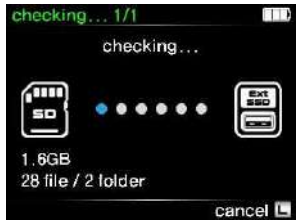


(5) Copy & Verify Results
Press the control button shortly to view the summary of the Copy & Verify operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

13 USB External Drive as Destination Drive

13.4 Update or New copy to USB Drive (Memory Cards with Added Files)

In this section, we will explain the process of updating or creating a new copy of memory card data to the USB drive using the TAINER when additional files have been added.



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders inside USB drive.



When you re-insert a memory card that has been previously backed up once and contains new footage added after the initial backup, the name of the folder saved in the USB drive will appear on the display. You will then have three options to choose from using the control button.

13 USB External Drive as Destination Drive

13.4 Update or New copy to USB Drive (Memory Cards with Added Files)

13.4.1 Update to USB Drive

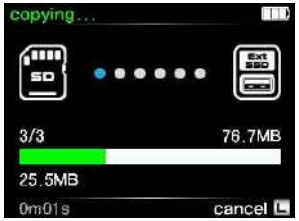
In this section, we will explain the process of updating the USB drive using the TAINER with added files from a memory card that has been previously backed up.



(1) Menu Selection
Choose the "Update" option from the menu.



(2) Start Update
Initiate the Update operation by pressing the control button shortly.



(3) Update Progress
The progress of the update process will be displayed on the LCD. Only the added files, excluding those that have already been copied, will be selected for the update.



(4) Update Results
Press the control button shortly to view the summary of the update operation on the LCD.



(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

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13 USB External Drive as Destination Drive

13.4 Update or New copy to USB Drive (Memory Cards with Added Files)

13.4.2 Update and Verify to USB Drive

Perform an update and verification process to the USB drive using the TAINER with added files from a previously backed-up memory card.



(1) Menu Selection
Choose the "Up&Vfy" option from the menu.



(2) Start Update
Initiate the Update & Verify operation by pressing the control button shortly.



(3) Update Progress
The TAINER will perform the update process, selecting only the added files from the memory card and excluding those that have already been copied during the initial backup. The progress of the update process will be displayed on the LCD.



(4) Verification Progress
After the update process is completed, the TAINER will perform a verification process to compare the added files in the memory card with the updated files in the backup folder.



(5) Update and Verify Results
Press the control button shortly to view the summary of the update and verify operation on the LCD. The summary will provide details such as card information, the name of the backup folder, copy speeds, and elapsed time for the update and verification processes.

13 USB External Drive as Destination Drive

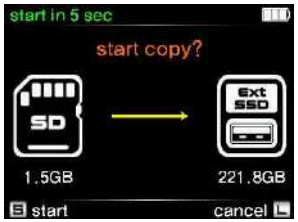
13.4 Update or New copy to USB Drive (Memory Cards with Added Files)

13.4.3 New Copy to USB Drive

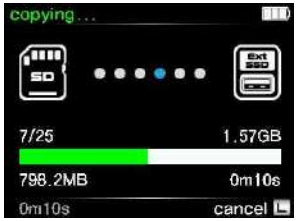
Perform a new copy of all the memory card data to a new folder on the USB drive.



(1) Menu Selection
Choose the "Cpy" option from the menu.



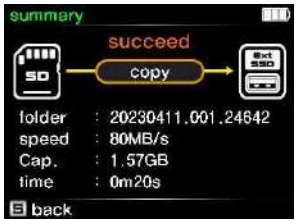
(2) Start Copy
Initiate the Copy operation by pressing the control button shortly.



(3) Copy Progress
The TAINER will create a new folder on the USB drive and begin copying all the memory card data into this folder. The progress of the copy operation will be displayed on the LCD.



(4) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD.



(5) Summary
The LCD will display information such as card details, the name of the backup folder, copy speeds, and elapsed time for each operation.

14 Connecting to the Network and Cloud Storage

14.1 Connecting to Cloud Storage via Wired Connection

In order to access Cloud Storage, it is necessary to establish an internet connection with the TAINER. There are two methods to connect the TAINER to the internet: 1) Wired connection using a LAN cable or USB cable, and 2) Wireless connection using a USB WiFi Dongle.

14.1.1 Wired Connection Setup for Internet Access

Wired internet connection can be established using one of the following three methods ① LAN ② USB2.0 ③ USB3.0

Method	How to make
LAN	• If you selected 'LAN,' connect the LAN cable to the Ethernet port located on the left side of the TAINER.
USB 2.0	• If you selected 'USB2.0,' connect one end of the USB cable to the USB2.0 Cloud port located on the left side of the TAINER and the other end to the Smart Phone.
USB 3.0	• If 'USB2.0' does not work, use the USB3.0 Host port to connect the Smart Phone through a USB cable.



(1) Wired Connection Options
Inside the menu, select one of the available options: LAN, USB2.0, or USB3.0. Refer to the accompanying figure for visual guidance.



(2) Wired Device Connection
Connect the appropriate cable based on your selection:
① LAN: Connect an Ethernet cable to the Ethernet port located on the left side of the TAINER.
② USB2.0: Connect one end of a USB cable to the USB2.0 Cloud port on the left side of the TAINER, and the other end to your smartphone.
③ USB3.0: If the USB2.0 option is not working, use the USB3.0 Host port to connect your smartphone using a USB cable.

14 Connecting to the Network and Cloud Storage

14.1 Connecting to Cloud Storage via Wired Connection





(3) Once the cable is properly connected, the TAINER will automatically detect the internet connection, as indicated in the left figure.

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14 Connecting to the Network and Cloud Storage
14.1 Connecting to Cloud Storage via Wired Connection

14.1.2 Smartphone Setup for USB Connection

In this chapter, we will guide you through the necessary setup steps for connecting your smartphone to the TAINER using a USB cable. Please follow the instructions below based on the type of smartphone you have.

Hotspot or USB tethering	
	(1) iPhone Activate the 'Hotspot' feature on your iPhone's settings. Then, on your phone, tap 'Trust' to establish a trusted connection with the TAINER.
	(2) Android Phone Activate 'USB tethering' on your Android phone's settings.
	With the appropriate smartphone settings configured, the TAINER will establish a connection to the internet using either 'Hotspot' or 'USB tethering'.

14 Connecting to the Network and Cloud Storage

14.1 Connecting to Cloud Storage via Wired Connection

14.1.3 Connecting to Cloud Storage

When your TAINER is connected to the internet, you can choose from various supported cloud storage options and log in using your respective account credentials for the selected cloud storage service.



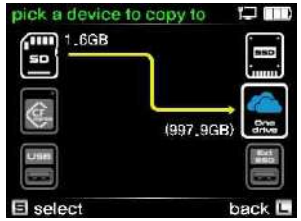
(1) Selecting Cloud Storage
Choose your preferred cloud storage service from the list provided on the LCD display.



(2) Login to the Cloud Storage
If the connection to the cloud service is successful, a QR code will be displayed on the LCD. Use a QR code scanner on your phone to log in to the selected cloud storage.



(3) If the login is successful, the TAINER will display "Login Succeeded" on its LCD screen to indicate a successful connection to the Cloud Storage.



(4) To initiate the copying process from the memory card to the Cloud Service, simply press the control button briefly.

14 Connecting to the Network and Cloud Storage

14.2 Wireless Connection to Cloud Storage

The TAINER supports wireless connection to Cloud Storage using the included USB WiFi dongle.

14.2.1 Wireless Connection Setup for Internet Access



(1) To establish a wireless connection, insert the USB WiFi dongle included in the package into the USB 2.0 port located on the left side of the TAINER. Once properly connected, the TAINER will detect the USB connection.



(2) Upon successful USB detection, the TAINER will search for available WiFi signals.



(3) The LCD will display the available WiFi SSIDs. Use the control button to select your preferred WiFi network.



(4) Enter the password for the selected WiFi network. Use the control button to select each character on the LCD keyboard. Once entered, the TAINER will save the password for that SSID, so you won't need to enter it again in the future.

14 Connecting to the Network and Cloud Storage

14.2 Wireless Connection to Cloud Storage

14.2.2. Connecting to Cloud Storage

When your TAINER is connected to the internet, you can choose from various supported cloud storage options and log in using your respective account credentials for the selected cloud storage service.



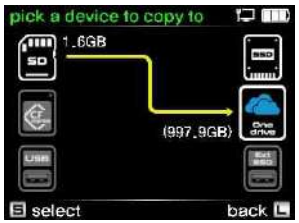
(1) Selecting Cloud Storage
Choose your preferred cloud storage service from the list provided on the LCD display.



(2) Login to the Cloud Storage
If the connection to the cloud service is successful, a QR code will be displayed on the LCD. Use a QR code scanner on your phone to log in to the selected cloud storage.



(3) If the login is successful, the TAINER will display "Login Succeeded" on its LCD screen to indicate a successful connection to the Cloud Storage.



(4) To initiate the copying process from the memory card to the Cloud Service, simply press the control button briefly.

14 Connecting to the Network and Cloud Storage

14.3 Logout from the Cloud Storage

Logging out from the Cloud Storage removes all user credentials and disconnects the TAINER from the service.



(1) Access the Cloud Storage menu by selecting the Cloud Storage icon on the main page and pressing the control button briefly.



(2) On the menu selection screen, navigate to the 'log out' option and press the control button briefly to log out from the Cloud Storage. This will also remove the stored login information for that Cloud Storage.



(3) You are now logged out.

14.4 Re-Login: Convenient Login Process

If you have previously logged in to a Cloud Storage service and turned off the TAINER without logging out, the TAINER will remember your previous login information. This allows for a more convenient login process in the future. Please note that the TAINER can only remember one set of login information at a time. If you log in to another Cloud Service, the previous login information will be replaced.



"When an internet connection is established, the TAINER displays the previous login information on the LCD, as depicted in the figure. Press the control button shortly to log in using the stored information. Alternatively, press and hold the control button for more than 2 seconds to select a different Cloud storage option or log in with a different account.

14.4.1 Re-Login with Previously Stored Login Info



(1) Re-Login Selection
Press the control button briefly to automatically log in using the previous login information.



(2) Logging In
The TAINER will now use the previous login information to log in to the selected cloud service.



(3) Login Successful
You are now logged in to the cloud storage service, and you can begin uploading your data using the TAINER.

14.4.2 Login to Different Cloud Storage/Account



(1) Changing Cloud Storage or Account
To choose a different cloud storage or use a different account, press and hold the control button for more than 2 seconds to access the cloud service selection menu.



(2) Selecting a New Cloud Storage
On the LCD, you will see a list of supported cloud services. Use the control buttons to select your preferred service and then press the control button shortly to confirm your selection.



(3) Establishing Connection
The TAINER will attempt to establish a connection with the selected cloud storage service.



(4) Login to the Cloud Storage
If the connection to the cloud service is successful, a QR code will be displayed on the LCD. Use a QR code scanner on your phone to log in to the selected cloud.



(5) If the login is successful, the TAINER will display "Login Succeeded" on its LCD screen to indicate a successful connection to the Cloud Storage.

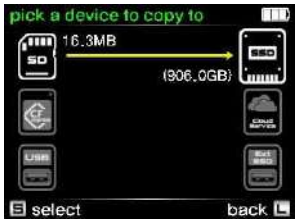
15 Cloud Storage as Destination Drive

15.1 Connecting Cloud Storage as Copy Destination

In this section, we will walk you through the steps of copying memory card data to cloud storage using the TAINER. Refer to Chapter 9 for memory card connection instructions and Chapter 10.2 for copy mode selection.

If you have multiple cards inserted into the TAINER, the copying sequence will follow the order of "SD card -> XQD card -> USB card reader"

To copy data to cloud storage, you must first log in to your cloud storage account. Please refer to Chapter 14 for detailed instructions on how to connect to cloud storage using the TAINER.



(1) Selecting Copy Destination
When memory cards are inserted into the TAINER, the LCD displays a destination selection page. An arrow line indicates the source (memory cards) and the available destinations (Internal SSD, Cloud Storage, USB drive).



(2) Cloud Storage Selection
Using the control button, navigate to cloud storage option on the destination selection page. Press the control button shortly to select cloud storage as the desired destination device.

15 Cloud Storage as Destination Drive

15.2 Copy & Verify to Cloud Storage (New Memory Cards)

In this section, we will guide you through the process of copying new memory card data to cloud storage using the TAINER.



(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside cloud storage to determine if it has been previously copied.



(2) Menu Selection
If the memory card is new and has not been copied before, you will be prompted to select the copy mode. Choose the "Copy & Verify" mode from the menu options.



(3) Copy Progress
The TAINER will create a new folder on cloud storage and initiate the copying process of the data from the memory cards into this folder.



(4) Verification Progress
Once the copy is complete, the TAINER will perform a checsum comparison between the memory card data and the data stored on cloud storage to ensure data integrity and accuracy.



(5) Copy & Verify Results
Press the control button shortly to view the summary of the operation on the LCD. The summary will provide details such as card information, the name of the backup folder, copy speeds, and elapsed time for the processes.

15 Cloud Storage as Destination Drive

15.3 Verify or Copy & Verify to Cloud Storage (Previously Copied, Unmodified Memory Cards)

In this section, we will guide you through the process of verifying the integrity of previously copied memory card data or creating a new copy on cloud storage using the TAINER.



When a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders.



If the memory card has been previously copied and remains unmodified, users are presented with the option to either verify the data or perform a new copy and verify the integrity of the copied data.

15 Cloud Storage as Destination Drive

15.3 Verify or Copy & Verify to Cloud Storage (Previously Copied, Unmodified Memory Cards)

15.3.1 Copy & Verify to Cloud Storage

Perform a new copy and verify the integrity of the copied data.



(1) Checking
When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside cloud storage to determine if it has been previously copied.



(2) Menu Selection
Choose the "cpy&vfy" option to copy memory card again.



(3) Copy Progress
The TAINER will create a new folder on cloud storage and initiate the copying process of the data from the memory cards into this folder.



(4) Verification Progress
Once the copy is complete, the TAINER will perform a checsum comparison between the memory card data and the data stored on cloud storage to ensure data integrity and accuracy.



(5) Copy Results
Press the control button shortly to view the summary of the copy operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

15 Cloud Storage as Destination Drive

15.3 Verify or Copy & Verify to Cloud Storage (Previously Copied, Unmodified Memory Cards)

15.3.2 Verify to Cloud Storage

In this section, we will guide you through the "Verify" operation to ensure the integrity of the data stored in the cloud storage using the TAINER.



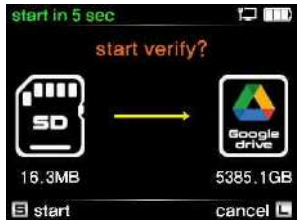
(1) Checking

When a memory card is inserted, the TAINER checks its folder structure and compares it with stored backup folders inside USB drive to determine if it has been previously copied.



(2) Menu Selection

Choose the "Verify" option from the menu to check integrity of the backup folder inside cloud storage.



(3) Start Verify

Initiate the Verify operation by pressing the control button shortly.



(4) Verification Progress

The TAINER will compare each file on the memory card with its corresponding file in the backup folder stored in the cloud storage. The progress of the verification process will be displayed on the LCD. This verification process utilizes checksum comparison to ensure data integrity.



(5) Results

Press the control button shortly to view the summary of the verify operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

15 Cloud Storage as Destination Drive

15.4 Update or New copy to Cloud Storage (Memory Cards with Added Files)

In this section, we will explain the process of updating or creating a new copy of memory card data to the cloud storage using the TAINER when additional files have been added.



Wen a memory card is inserted, the TAINER parses its folder structure and compares it with stored backup folders inside USB drive.



When you re-insert a memory card that has been previously backed up once and contains new footage added after the initial backup, the name of the folder saved in the USB drive will appear on the display. You will then have two options to choose from using the control button.

15 Cloud Storage as Destination Drive

15.4 Update or New copy to Cloud Storage (Memory Cards with Added Files)

15.4.1 Update to Cloud Storage

In this section, we will explain the process of updating the cloud storage using the TAINER with added files from a memory card that has been previously backed up.



(1) Menu Selection
Choose the "up&vfy" option from the menu.



(2) Start Update & Verify
Initiate the Update operation by pressing the control button shortly.



(3) Update Progress
The progress of the update process will be displayed on the LCD. Only the added files, excluding those that have already been copied, will be selected for the update.



(4) Verification Progress
Once the update is complete, the TAINER will perform a checsum comparison between the memory card data and the data stored on cloud storage to ensure data integrity and accuracy.



(5) Results
Press the control button shortly to view the summary of the operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

15 Cloud Storage as Destination Drive

15.4 Update or New copy to Cloud Storage (Memory Cards with Added Files)

15.4.2 New Copy to Cloud Storage

Perform a new copy and verify the integrity of the copied data.



(1) Menu Selection
Choose the "cpy&vfy" option from the menu.



(2) Start Copy & Verify
Initiate the Copy & Verify operation by pressing the control button shortly.



(3) Copy Progress
The TAINER will create a new folder on the cloud storage and begin copying all the memory card data into this folder. The progress of the copy operation will be displayed on the LCD.



(4) Verification Progress
Once the copy is complete, the TAINER will perform a checsum comparison between the memory card data and the data stored on cloud storage to ensure data integrity and accuracy.



(5) Results
Press the control button shortly to view the summary of the operation on the LCD. This summary will provide information such as the card details, the name of the backup folder, copy speeds, and the elapsed time for each operation.

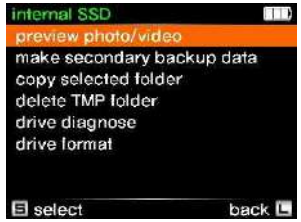
16 Video/Photo Preview

16.1 Browsing Folders

With the Browse Folders function, you can easily view and navigate through the contents stored in the internal SSD, external drive, or memory card.



(1) Navigate to the preferred device for preview in the main mode. Select the device to view the available menu options for that device.



(2) Menu selection screen

Navigate to the "Preview Photo/Video" menu and select it by pressing the control button shortly.



(3) Folder selection screen

The LCD will display a list of stored backup folders. The backup folders are organized in descending order based on the date of the backup. Select the desired folder for preview and press the control button shortly to preview its contents.



(4) Information about the selected folder

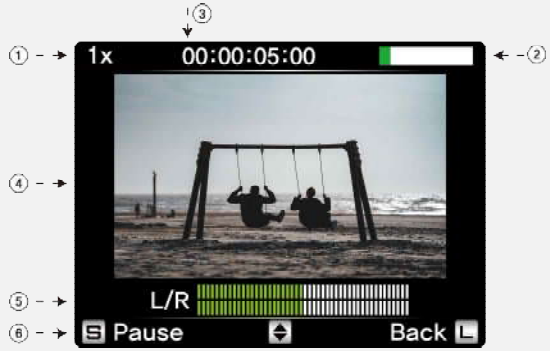
The LCD will indicate the number of folders and files stored inside the selected folder. Additionally, the number of video files and photo files will be displayed. You will have three options: Preview Video, Preview Photo, or Delete this backup folder.

16 Video/Photo Preview

16.2 Video Preview



When you select "Preview Video," thumbnails of the videos will be displayed, as shown in the example on the left. Unsupported video files will be marked with [N/A]. You can navigate through the video clips by using the wheel scroll up and down on the control button. To select a clip for preview, simply press the control button briefly.



The TAINER displays a preview of the video file at a reduced resolution. To control the preview, you can press the control button to play or pause the video. Additionally, you can adjust the preview speed by scrolling the control button up or down.

① Preview speed
② Progress of preview in %
③ Elapsed time
④ Preview video
⑤ Audio bar
⑥ Selectable command

REFERENCE

- See http://www.clouzen.net for supported preview formats.
- The preview of the TAINER is a “best effort” preview. Various preview speeds, ranging from 1X to 64X, are supported.

16 Video/Photo Preview

16.3 Photo Preview



When you select "Preview Photo," thumbnails of the photo will be displayed, as shown in the example on the left. Unsupported photo files will be marked with [N/A]. You can navigate through the photo clips by scrolling the control button up and down. To select a clip for preview, simply press the control button briefly.



If you select a photo, the TAINER will display it in a larger size. You can scroll up or down using the wheel on the control button to preview the next image. Additionally, you can press the control button to enter slideshow mode and automatically preview the photos.

① File name
② Resolution of images
③ Preview Images
④ Selectable command

16 Video/Photo Preview

16.4 Deleting the Backup Data



(1) To delete a backup folder, select the 'delete' icon and press the control button briefly.



(2) The TAINER will ask for confirmation twice. This is the first confirmation. If you want to proceed, select 'yes' and press the control button briefly.



(3) This is the second confirmation. Please exercise caution as the deletion is irreversible once performed on the TAINER.



(4) Displaying the delete progress.



(5) When the deletion is completed, the LCD will show 'deleted'. Press the control button briefly to return to the backup folder list screen.

16 Video/Photo Preview

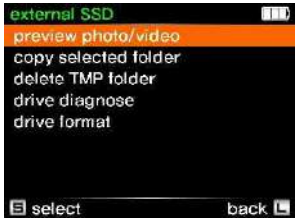
16.5 Preview from External Devices

The TAINER provides support for previewing video files stored on a USB external drive. Additionally, it also supports the preview of video files stored on memory cards. For more detailed instructions on connecting memory cards and USB external drives to the TAINER, please refer to Chapters 9 and 12 respectively.

16.5.1 Preview from USB External Drive



(1) Navigate to the "external SSD" icon in the main mode. SSelect it to view the available menu options for that device. For more detailed instructions on connecting a USB external drive to the TAINER, please refer to Chapter 12.



(2) Menu selection screen
Navigate to the "Preview Photo/Video" menu and select it by pressing the control button shortly.



(3) Folder selection screen
The LCD will display a list of stored backup folders. The backup folders are organized in descending order based on the date of the backup. Select the desired folder for preview and press the control button shortly to preview its contents.



(4) Information about the selected folder
The LCD will indicate the number of folders and files stored inside the selected folder. Additionally, the number of video files and photo files will be displayed. You will have three options: Preview Video, Preview Photo, or Delete this backup folder.

16 Video/Photo Preview

16.5 Preview from Memory Card

16.5.2 Preview from Memory Card



(1) To preview videos or photos from a memory card, insert the memory card into the TAINER. For detailed instructions on how to connect memory cards to the TAINER, please refer to Chapter 9. Once a memory card is inserted, the LCD will display the 'Backup Mode' screen, as shown in the example on the left. Select the desired memory card to proceed with the preview.



(2) Check the memory card to view the count and size of video and photo files stored on it.



(3) Memory Card Information
The LCD will provide details about the selected memory card, including the number of folders and files stored on it. You will also see the number of video and photo files. At this stage, you can choose from three options: Preview Video, Preview Photo, or Perform Self Test for the memory card.

17 Making a Secondary Copy

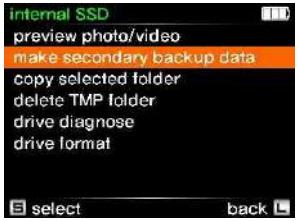
17.1 Making a Secondary Copy to Cloud Storage

In this chapter, we will guide you through the process of creating a secondary copy of the backup folders stored on the internal SSD. The TAINER provides a convenient feature that allows you to sync or copy the backup folders to a Cloud Storage service or a USB external drive. This secondary copy ensures an additional level of data redundancy and provides peace of mind for preserving your valuable files. Let's explore the step-by-step instructions for making a secondary copy in the following sections.

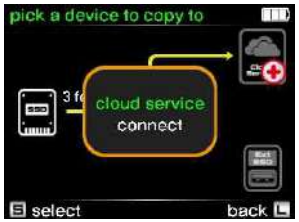
17.1.1 Selecting Cloud Storage for Secondary Copy



(1) Navigate to the 'Internal SSD' icon on the 'Main Mode' LCD and press the control button briefly to select it and display the list of available menu options.



(2) Scroll through the menu options and select 'Make Secondary Backup Data' from the list.



(3) Use the wheel control button to navigate to the cloud icon located on the upper right side of the LCD. Press the control button briefly to select it.

17.1.2 Connecting to the Network and Cloud Storage

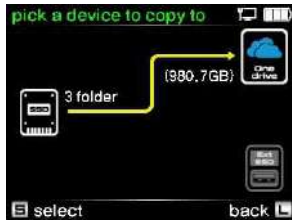
Before creating a secondary copy to the cloud storage, ensure that you are connected to the internet and have logged in to your preferred cloud storage. For detailed instructions, please refer to Chapter 14.

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17 Making a Secondary Copy

17.1 Making a Secondary Copy to Cloud Storage

17.1.3 Making a Secondary Copy to Cloud Storage



(1) Select the cloud icon to initiate the process of making a secondary copy to the cloud storage.



(2) Press the control button briefly to start the secondary copy operation. The TAINER will compare each backup folder inside the internal SSD with the backup folder in the cloud storage and only copy the added folders.



(3) Verify if the backup folder has already been copied or not.



(4) Copy Progress



(5) Results

Once the operation is successfully completed, the TAINER will display 'succeed' on the LCD and provide information such as the copied backup folders and the elapsed time.

17 Making a Secondary Copy

17.2 Making a Secondary Copy to USB External Drive

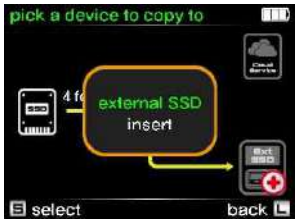
17.2.1 Selecting USB Drive for Secondary Copy



(1) Navigate to the 'Internal SSD' icon on the 'Main Mode' LCD and press the control button briefly to select it and display the list of available menu options.



(2) Scroll through the menu options and select 'Make Secondary Backup Data' from the list.

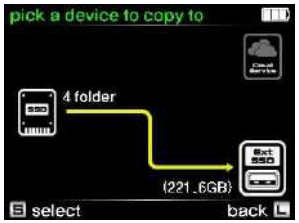


(3) Use the wheel control button to navigate to the 'EXT USB' icon located on the lower right side of the LCD. Press the control button briefly to select it.

17.2.2 Connecting USB External Drive

Before creating a secondary copy to the USB drive, ensure that you are connected to the USB external drive. For detailed instructions, please refer to Chapter 12.

17.2.3 Making a Secondary Copy to USB External Drive



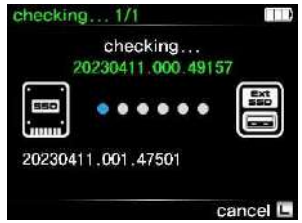
(1) Select the 'EXT SSD' icon to initiate the process of making a secondary copy to the USB drive.

17 Making a Secondary Copy

17.2 Making a Secondary Copy to USB External Drive



(2) Press the control button briefly to start the secondary copy operation. The TAINER will compare each backup folder inside the internal SSD with the backup folder in the USB drive and only copy the added folders.



(3) Verify if the backup folder has already been copied or not.



(4) Copy Progress



(5) Results
Once the operation is successfully completed, the TAINER will display 'succeed' on the LCD and provide information such as the copied backup folders and the elapsed time.

REFERENCE

- If an error occurs, such as the USB drive being removed during the operation, the TAINER will display an error on the LCD and automatically turn off.
- If no operations are performed after the completion of making a secondary copy, the power will be automatically turned off.
- If the TAINER is automatically turned off, it will display the previous operational status upon the next power-up, indicating whether the last backup was successful.

18 Copying Selected Folders

In this chapter, we will explain how to selectively copy specific backup folders from the internal SSD to external drives. Unlike the previous method of making a secondary copy, this allows users to choose specific folders for copying, providing more flexibility and convenience.



(1) Navigate to the 'Internal SSD' icon on the 'Main Mode' LCD and press the control button briefly to select it. This will display the list of available menu options. Scroll through the options and select 'Copy Selected Folder'.



(2) Folder Selection
From the list of backup folders stored in the internal SSD, choose the folders you want to copy.



(3) You can select multiple folders by using the control button to navigate and press it briefly to mark the selection.



(4) Once you have made your folder selections, navigate to the 'Start' icon located at the bottom right of the screen. Press the control button shortly to proceed to the next step.



(5) Choosing Destination
You can now choose the destination for the copied folders. Use the wheel button to scroll up or down and select either the USB external drive or the cloud storage option.

18 Copying Selected Folders

18.2 Selecting Folders to Copy

18.2.1 Selecting Cloud Storage as the Destination



If you wish to copy the selected folders to the Cloud Storage, navigate to the Cloud icon located at the bottom right of the LCD screen and press the control button briefly to select it. This will set the Cloud Storage as the destination for the copy operation.

18.2.2 Connecting to the Network and Cloud Storage

Before proceeding with copying the selected folders to the Cloud Storage, make sure you are connected to the internet and have successfully logged in to your preferred cloud storage. Please refer to Chapter 14 for detailed instructions on how to connect to the network and log in to the cloud storage.

18.2.3 Copying Selected Folders to Cloud Storage



(1) Select the cloud icon to initiate the process of copying the selected folders to the cloud storage.



(2) Press the control button briefly to start the copy operation.

18 Copying Selected Folders

18.2 Copying Selected Folders to Cloud Storage



(3) Check the contents of the backup folder before copying.



(4) Monitor the copy progress for each individual backup folder.



(5) Verify the copied data for each backup folder.
When copying to the cloud storage, the verification process is based on checksum comparison. If you have selected multiple backup folders, the copy and verify process will be repeated for each folder.

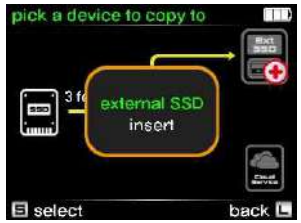


(6) Results
Once the operation is successfully completed, the TAINER will display 'succeed' on the LCD and provide information such as the copied backup folders and the elapsed time.

18 Copying Selected Folders

18.3 Copying to USB External Drive

18.3.1 Selecting USB Drive as the Destination

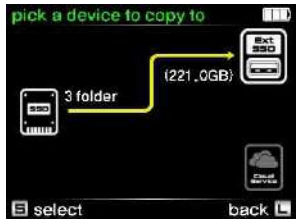


If you prefer to copy the selected folders to a USB external drive, select the 'EXT SSD' icon located at the upper right of the LCD.

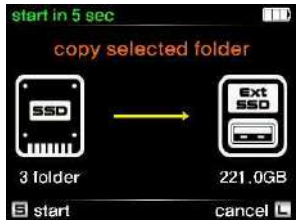
18.3.2 Connecting USB External Drive

Before proceeding with copying the selected folders to the USB drive, ensure that you are connected to the USB external drive. For detailed instructions, please refer to Chapter 12.

18.3.3 Copying Selected Folders to USB External Drive



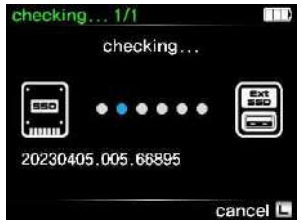
(1) Select the 'EXT SSD' icon to initiate the process of making a secondary copy to the USB drive.



(2) Press the control button briefly to start the copy operation.

18 Copying Selected Folders

18.3 Copying to USB External Drive



(3) Check the contents of the backup folder before copying.



(4) Copy Progress



(5) Results

Once the operation is successfully completed, the TAINER will display 'succeed' on the LCD and provide information such as the copied backup folders and the elapsed time.

19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.1 Computer Mode

The TAINER can be connected to a computer or smart phone as an external USB SSD. There are three connection options available: Computer mode, phone or tablet mode, and USB Power mode. Each mode differs in power consumption and functionality. In Computer mode, the TAINER draws power from the connected computer. In phone or tablet mode, the TAINER operates on its internal battery to save smart phone battery power. In USB Power mode, the TAINER solely relies on the connected USB cable for power and does not function as an external USB SSD.

19.1.1 Connecting to the Computer

To connect the TAINER in Computer Mode and use it as an external SSD, follow these steps:

1. Connect the TAINER to your computer using the USB Type-C port located on the right side of the device.
2. Press and hold the control button for longer than 2 seconds to turn on the TAINER.
3. On the mode selection screen, navigate to and select the 'Computer' icon.
4. The TAINER will draw power from the connected computer and be recognized as an external SSD.



REFERENCE

- The internal SSD of the TAINER is formatted using the exFAT file system.
- Windows 11, 10, 8, 7, and VISTA (Service Pack 1), as well as MAC OS 10.6.6 and Linux 2.4.18 and later versions, can fully access exFAT file systems.
- Users of Windows XP must have Service Pack 2 or later installed, along with an additional update to enable support for exFAT file systems.

19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.1 Computer Mode

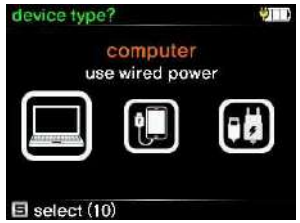
- The TAINER cannot be read by any version of Windows prior to Windows XP (Service Pack 1).
- A computer can only recognize the internal SSD of the TAINER and cannot detect a USB external drive or any memory cards connected to the TAINER. Therefore, the TAINER cannot be used as a memory card reader.
- When connecting to the TAINER via USB, it is recommended to use the back slot of the computer as the front slot may not be able to process the high-speed signal.

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19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.1 Computer Mode

19.1.2 Browsing Backup Data on the TAINER via Computer

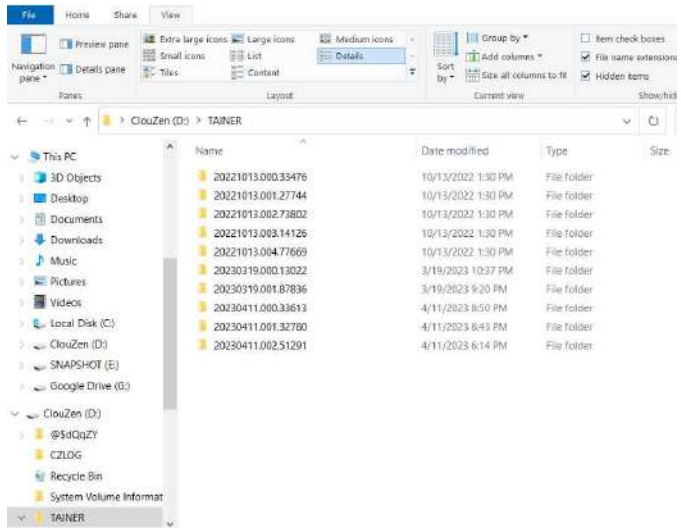


When the TAINER is connected to the computer via the Type-C port located on the right side of the device, you will have access to three options. Select the 'Computer' icon to enter Computer Mode and browse your backup data.



The LCD screen of the TAINER automatically turns off after 5 seconds to conserve power, following the display of the 'Connecting to Computer' message on the screen.

<Windows Explorer Screenshot>



19 Connecting TAINER as External USB Drive: Computer and Smart Phone

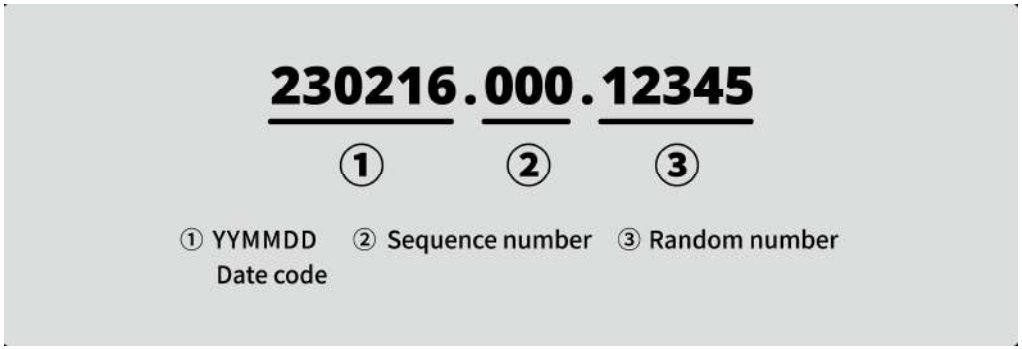
19.1 Computer Mode

- The backup data is stored in the 'TAINER' folder, with subfolders automatically created. The log file is stored in the 'CZLOG' subfolder.
- For each memory card backup, the TAINER creates a new folder and stores all the contents of the memory card in that folder.

- There are two options for setting the name of the backup folder: Default mode and Customize mode. Users can set this mode in the 'Folder Naming Options' menu under the 'Settings' menu.

(1) Default mode

In this mode, the TAINER automatically creates a folder with a date code. The folder name is based on the shooting date. For example, '20230216.000.12345' represents the last footage recorded on February 16, 2023. If you copy multiple items on the same day, the last three digits will be changed to indicate the download sequence, such as '000', '001', '002', '003', and so on.



REFERENCE

- The date code used for folder naming is based on the date from the video cameras. If the date on the video camera is incorrect, the folder name on the TAINER will also be incorrect.
- In the event of a copying failure, a TMP folder is created on your computer. The TMP folder retains the same file names, but the data within may be abnormal. You have the option to delete the TMP folder. For more details, refer to the TMP deletion function in Chapter 21.1.

19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.1 Computer Mode

(2) Customize mode

When you prefer to set the folder name manually, follow these steps:

1. Select the 'Setting' icon on the 'Main Mode' screen of the TAINER.
2. Navigate to 'Folder Naming Options' and select it.
3. Choose 'Customize mode' to enable manual folder naming.

For more detailed instructions, refer to Chapter 22.2.



When a memory card is inserted and selected for copying, if the TAINER is set to 'Customize mode' in the folder naming options, a keyboard for typing the folder name will be displayed on the LCD, as shown in the example on the left. The TAINER automatically sets the first four characters as a sequence number, such as 000_, 001_,



(1) You can add your desired folder name after the sequence number by scrolling the wheel up/down and pressing it shortly.



(2) Alternatively, you can erase the sequence number and enter the full name of the folder manually. Once you are done, select the 'Enter' character located at the bottom right side of the LCD, and press the control button shortly to set the folder name.

19.1.3 Disconnecting the TAINER from Your Computer

(1) For Windows

Right click the Storage device icon in the System Tray (lower right corner of your screen) and select “Safely Remove Hardware” or “Unplug” or “Eject Hardware”. Then disconnect the cable from the TAINER and your computer.

(2) For MAC

Drag and drop the CLOUZEN icon in the trash. Then disconnect the cable from the TAINER and your computer.

19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.2 Phone or Tablet Mode

19.2.1 Connecting to the Smart Phone

To connect the TAINER in Phone or Tablet Mode and use it as an external SSD, follow these steps:

1. Ensure that your Smart Phone is powered on before connecting it to the TAINER.
2. Turn on the TAINER by pressing and holding the control button for longer than 2 seconds.
3. Once both devices are powered up, connect the TAINER to your Smart Phone using the USB Type-C port located on the right side of the TAINER.
3. On the mode selection screen, navigate to and select the 'Phone or Tablet' icon.
4. In Phone or Tablet Mode, the TAINER will not draw power from the connected Smart Phone and will be operated by its internal battery.





When the TAINER is connected to the Smart Phone via the Type-C port located on the right side of the device, you will have access to three options. Select the 'Phone or Tablet' icon to enter Phone or Tablet Mode and browse your backup data.



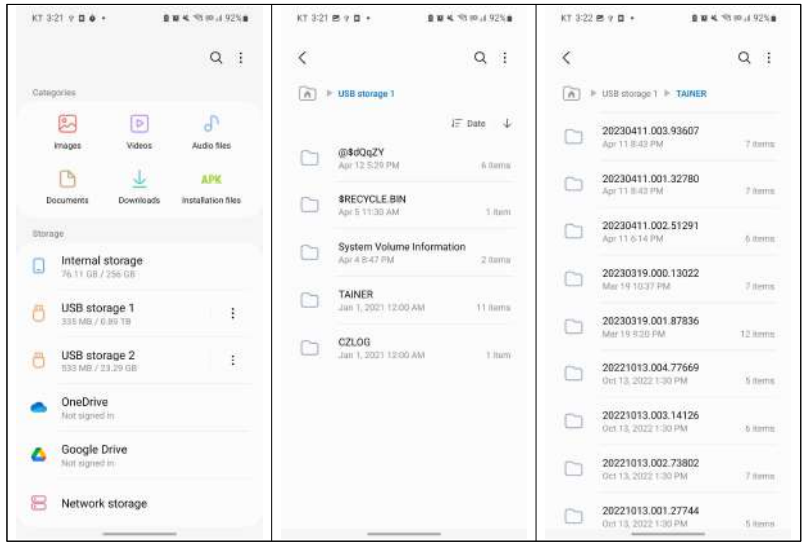
The LCD screen of the TAINER automatically turns off after 5 seconds to conserve power, following the display of the 'Connecting to Phone or Tablet' message on the screen.

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19 Connecting TAINER as External USB Drive: Computer and Smart Phone

19.2 Phone or Tablet Mode

19.2.2 Browsing Backup Data on the TAINER via Phone or Tablet



- On your Android phone, you may receive a notification indicating that an external USB drive is connected. Tap on the notification to open the USB settings.
- In the USB settings, select the option to "Use as USB storage" or "Transfer files" (the exact wording may vary depending on your Android version).
- Once the connection is established, you can access the contents of the TAINER by opening the file manager app on your Android phone.
- In the file manager, you should see the CLOUZEN listed as an external drive. Tap on it to browse and manage the files and folders stored in the TAINER.

20 Connecting to the App

20.1. Connecting the TAINER to the Clouder App

In this chapter, we will guide you through the process of connecting your TAINER to the Clouder App on your Android or iPhone device. The Clouder App provides a convenient way to control the functionality of the TAINER using your phone's larger screen.



(1) Enter App Control Mode
Navigate to the 'App' icon on the main mode screen and press the control button briefly to enter the App control mode.

(2) To use the App, make sure that you are connected to the internet. It is important to note that both the TAINER and the phone must be connected to the same local network.



This means they should be connected to the same router or have the same SSID (network name). This ensures that they can communicate with each each other properly. The TAINER is assigned a local IP address by the DHCP server in the local network, which is not globally unique. Therefore, if the TAINER and the phone are not on the same local network, they will not be able to establish communication. Please refer to Chapter 14 for detailed instructions on how to connect the TAINER to the internet.



(3) If the network is successfully connected, a QR code will be displayed on the TAINER's LCD screen, as shown in the example on the left. To connect the TAINER with the Clouder App, use the QR code scanner feature provided within the app. Simply scan the QR code using the Clouder App to establish the connection between the TAINER and the app.



(4) Connected to the Clouder App. Using the Clouder App, you can manage your data anywhere you want, whether it's on an SD card, XQD/Cfexpress card, internal SSD, external drive, or the cloud.

21 TAINER Management Utility Functions

21.1 Deleting TMP Folder

In this chapter, we will explore the management utility functions available for the TAINER. These functions allow users to perform essential tasks such as formatting the internal SSD, conducting drive self-tests for identifying potential issues with the media, and deleting unnecessary TMP folders that may have been created during backup failures.

When a backup fails, a TMP folder is created to store the files from the unsuccessful backup attempt. However, the data within the TMP folder may be incomplete or inconsistent. Therefore, it is recommended to delete the TMP folder to free up storage space on the TAINER.



(1) To delete the TMP folder, you can navigate to either the internal SSD menu or the external SSD menu. Simply select the drive icon on the main mode screen, and then choose the 'Delete TMP Folder' option from the menu, as shown in the example on the left side.



(2) The TAINER will display the number of TMP folders found on the drive and prompt for confirmation before proceeding with the deletion.



(3) To ensure the deletion, the TAINER will ask for confirmation twice, ensuring that you intend to delete the TMP folder.

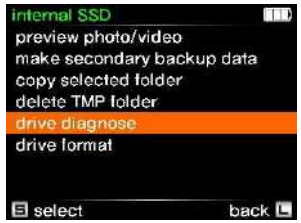


(4) Once the deletion is completed, the TAINER will display a confirmation message indicating that the TMP folder has been successfully deleted. Press the control button briefly to return to the main menu

21 TAINER Management Utility Functions
21.2 Drive Self Test

The Drive Self Test function allows the TAINER to check for the existence of bad sectors on the internal SSD, USB external drive, or memory cards. During the test, the TAINER attempts to read the full range of drive data and identifies any potential hardware errors, such as bad sectors.

21.2.1 Internal SSD Self Test



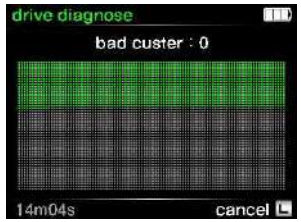
(1) Navigate to the 'Internal SSD' icon on the main mode screen and press the control button briefly to display the list of menu options. From the available options, select the 'Drive Self Test' menu.



(2) Since the test may take a significant amount of time, it is recommended to connect the TAINER to an external power source.



(3) Press the control button briefly to initiate the self-test.

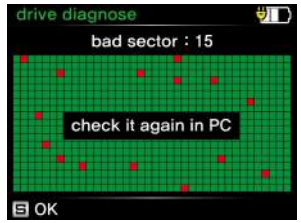


(4) The TAINER will display the progress of the test.

21 TAINER Management Utility Functions
21.2 Drive Self Test



(5) If no errors are found, the result will be displayed on the screen.



(6) If any errors are detected, the TAINER will emit a beep sound and display an error message indicating the presence of bad blocks. In such cases, we strongly recommend replacing the internal SSD.

WARNING

- Once the self-test is completed, the TAINER will emit a single beep every 3 seconds to notify the user.
- To return to the main menu, simply press the control button briefly.
- The power of the TAINER will remain on until the user manually turns it off by pressing the control button. It is important to promptly check the test results to avoid draining the battery.
- It is recommended to connect the TAINER to a wall power source before performing the self-test to ensure sufficient power supply.

21 TAINER Management Utility Functions
21.2 Drive Self Test

21.2.2 Memory Card Self Test

To perform a self-test on a memory card, follow these steps after connecting the memory card to the TAINER. Refer to Chapter 9 for details on how to connect memory cards to the TAINER.



(1) Insert the memory card into the TAINER. The backup mode LCD screen will appear, and you can select the memory card icon.



(2) The TAINER will display the available menus for the memory card. Select "Self Test."

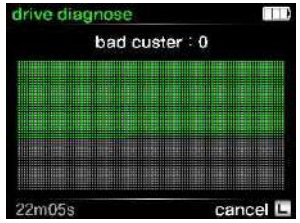


(3) Since the self-test may take a significant amount of time, it is recommended to connect the TAINER to an external power source.

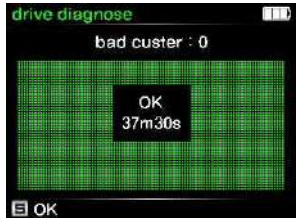


(4) Press the control button briefly to initiate the self-test.

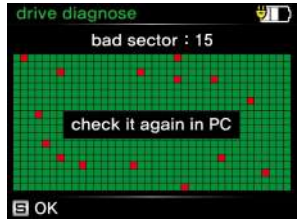
21 TAINER Management Utility Functions
21.2 Drive Self Test



(5) The TAINER will show the progress of the test on the screen.



(6) If no errors are detected, the test result will be displayed.



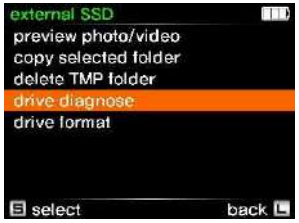
(7) If any errors are found, the TAINER will emit a beep sound and display an error message indicating the presence of bad blocks. In such cases, we strongly recommend not using the memory card for further data storage.

21 TAINER Management Utility Functions
21.2 Drive Self Test

21.2.3 USB External Drive Self Test



(1) Select the 'EXT SSD' icon on the main mode screen and press the control button briefly to display the list of menu options.



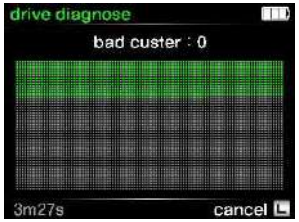
(2) From the available options, select the 'Drive Self Test' menu.



(3) Since the test may take a significant amount of time, it is recommended to connect the TAINER to an external power source.



(4) Press the control button briefly to initiate the self-test.



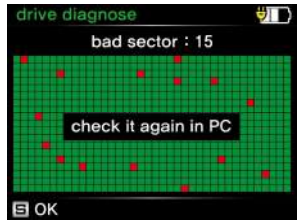
(5) The TAINER will display the progress of the test.

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21 TAINER Management Utility Functions
21.2 Drive Self Test



(6) If no errors are found, the result will be displayed on the screen.



(7) If any errors are detected, the TAINER will emit a beep sound and display an error message indicating the presence of bad blocks. In such cases, it is recommended to immediately backup the data from the USB drive to another storage device and avoid using it further to prevent potential data loss.

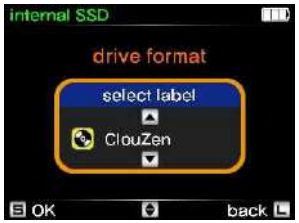
21 TAINER Management Utility Functions
21.3 Formatting Drive

While it is recommended to format the internal SSD or external USB drive using the TAINER's self-formatting feature, it is not a requirement. The TAINER can also accept any exFAT formatted drives. However, using the TAINER's formatting feature ensures compatibility and optimal performance with the device.

21.3.1 Formatting the Internal SSD



(1) Navigate to the 'Internal SSD' icon on the main mode screen and press the control button briefly to display the list of menu options. From the available options, select the 'Drive Format' menu.



(2) Scroll the control button up or down to select the volume label of the drive, then press the control button briefly to confirm your selection.



(3) The TAINER will ask for confirmation of the format. It is important to note that formatting will erase all data on the drive, and it cannot be recovered. Press the control button shortly to proceed if you are sure.



(4) The TAINER will ask for confirmation once again to ensure the formatting process. Press the control button shortly to start the format if you are certain.

21 TAINER Management Utility Functions
21.3 Formatting Drive



(5) The formatting process will begin, and it may take up to 1 minute depending on the capacity of the drive.



(6) Once the format is completed, the TAINER will display the result and automatically return to the main menu.

WARNING

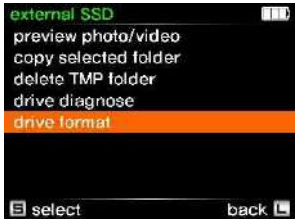
- Formatting is an irreversible process that will erase all data on the drive. It is crucial to backup your data before proceeding with the format.
- The TAINER will format the entire capacity of the drive as a single partition using the exFAT file system.

21 TAINER Management Utility Functions
21.3 Formatting Drive

21.3.2 Formatting USB external drive



(1) Select the 'EXT SSD' icon on the main mode screen and press the control button briefly to display the list of menu options.



(2) From the available options, select the 'Drive Format' menu.



(3) Scroll the control button up or down to select the volume label of the drive, then press the control button briefly to confirm your selection.



(4) The TAINER will ask for confirmation of the format. It is important to note that formatting will erase all data on the drive, and it cannot be recovered. Press the control button shortly to proceed if you are sure.



(5) The TAINER will ask for confirmation once again to ensure the formatting process. Press the control button shortly to start the format if you are certain.

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21 TAINER Management Utility Functions
21.3 Formatting Drive



(6) The formatting process will begin, and it may take up to 1 minute depending on the capacity of the drive.



(7) Once the format is completed, the TAINER will display the result and automatically return to the main menu.

WARNING

• Formatting is an irreversible process that will erase all data on the drive. It is crucial to backup your data before proceeding with the format.

22 Setting
22.1 Power Saving

To conserve battery power, the TAINER is designed to automatically power off if there is no user activity for a certain amount of time. You can adjust this power-saving duration according to your preference.



(1) Select the 'Setting' icon on the main mode screen to access the settings menu.



(2) Navigate to the 'Power Saving' option and select it.



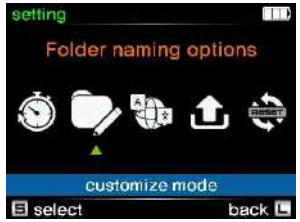
(3) In the 'Power Saving' menu, you can set the desired duration for automatic power-off. Press the control button shortly to save your selection.

22 Setting
22.2 Folder Naming Options

The TAINER offers two methods for setting the backup folder name: auto-generated folder name or user-defined folder name. You can choose your preferred option in the 'Folder Naming Options' menu under the 'Settings'.



(1) Select the 'Setting' icon on the main mode screen to access the settings menu.



(2) Navigate to the 'Folder Naming Options' option and select it.



(3) If you prefer the TAINER to automatically generate date-coded folder names, select 'Default Mode'.



(4) If you want to create custom folder names, select 'Customize Mode'.

REFERENCE

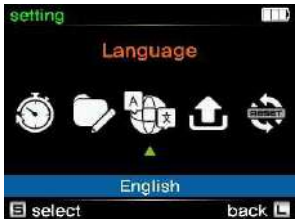
For detailed information on the folder naming rules of the TAINER, please refer to Chapter 19.1.2.

22 Setting
22.3 Language

The TAINER supports multiple language settings, allowing you to choose your preferred language for the device.



(1) Select the 'Setting' icon on the main mode screen to access the settings menu.



(2) Navigate to the 'Language' option and select it.



(3) Scroll the control button up or down to select your preferred language, then press the control button briefly to confirm and set the selected language.

22 Setting
22.4 Firmware Upgrade

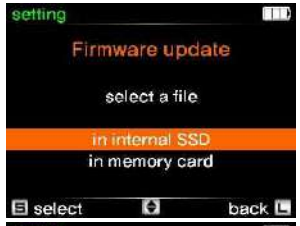
ClouZen periodically releases new firmware updates to add new features or fix bugs. To upgrade the firmware on your TAINER, follow these instructions.

(1) Download the latest firmware file (TN001S.CFW) from ClouZen's web download page.

(2) Copy the firmware file to the root folder of the internal SSD of the TAINER, or the root folder of the memory card.



(1) On the TAINER, navigate to the 'Setting' icon on the main mode screen and select it. Among the available options, select 'Firmware Upgrade'.



(2) Select the location where the firmware file (TN001S.CFW) is stored, such as the internal SSD or a memory card. Press the control button shortly to select it.



(3) The TAINER will check for the existence and validity of the firmware file. If no issues are found, it will display the current firmware version. Press the control button shortly to start the firmware upgrade.

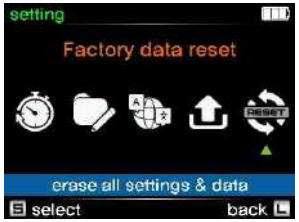


(4) During the firmware upgrade, it is important not to turn off the TAINER. The upgrade process may take approximately two minutes. Ensure that the battery level is at least two or more bars.

22 Setting

22.5 Factory Data Reset

The TAINER provides a Factory Reset feature that allows you to erase all stored data, including Cloud login information, Wi-Fi passwords, and format the internal SSD.



(1) On the TAINER, select the 'Setting' icon on the main mode screen to access the settings menu. Navigate to the 'Factory Data Reset' option and select it.



(2) Once you initiate the reset process, all data, including Cloud login information and settings, will be erased, and the internal SSD will be formatted. Press the control button shortly to proceed with the reset.



(3) Confirm the reset. Please note that this action is irreversible.



(4) To ensure the reset is intentional, the TAINER will ask for confirmation twice. Press the control button shortly if you are certain about proceeding with the reset.



(5) The TAINER will begin the erasing process, and once completed, it will return to the main mode screen.

23 Troubleshooting Tips

23.1. If the power of the TAINER cannot be turned off:

If you encounter a situation where the power of the TAINER cannot be turned off due to a hardware or software malfunction, you can safely turn off the power by pressing and holding the control button for at least 8 seconds. This ensures that the data stored in the TAINER will not be lost or altered.

23.2. If the power cannot be turned on:

The TAINER is equipped with an internal rechargeable battery. If you are unable to turn on the TAINER using the control button, it is possible that the internal battery has been discharged. To resolve this, connect the TAINER to a USB charger using the USB Type-C cable and allow it to charge for more than 10 minutes. Once the battery has sufficiently charged, press and hold the control button for more than three seconds to turn on the TAINER.

If you continue to experience any issues or have further concerns, please refer to the user manual or contact our customer support for assistance.

24 Battery Disposal

Batteries and rechargeable batteries that contain harmful substances are marked with specific symbols, such as Cd for cadmium, Hg for mercury, and Pb for lead. It is important not to dispose of these batteries in the household trash. Instead, you can return them free of charge to authorized disposal stations in your area, our stores, or any other store that sells batteries and rechargeable batteries.

Please note that the Li-Poly rechargeable battery integrated into the TAINER must be removed from the housing before disposal. For assistance with this, please contact your authorized TAINER dealer or service center to ensure proper handling and disposal of the battery.

FCC Rules and Regulations – Part 15

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Modifications not expressly approved by the anufacturer could void the user's authority to operate the equipment under FCC rules.

25 Technical Specifications

Physical	Dimension (W x H x D mm)	106 x 74.3 x 24mm
	Weight	196g / 7oz
	Display	2.4” TFT, 320x240, 64K color
	Ambient Temperature	up to 45 Celsius
Connectivity	Internet	Ethernet (10M/100M/1G)
		WiFi Dongle[1] (802.11b/g/n)
		USB Tethering (Android/iPhone)
	Memory card[2]	SD UHSII, up to 270MB/s
		XQD / CFexpress Type-B, up to 400MB/s
		USB 3.0 card reader, up to 300MB/s
	USB external drive	USB 3.0 Type-A Host Port
	Internal drive	M.2 2280 size M.2 SATA SSD, up to 32TB (optional)
	Computer I/F	USB 3.1 Gen2 10Gbps, USB Mass Storage Class
Functional	Cloud service	OneDrive, Google Drive, Dropbox, 기타 클라우드 서비스[3]
	File System	Memory card : FAT32, exFAT (UDF & HFS+ supported at V1.1 or later firmware)
		Internal drive : exFAT
Preview	Photo	JPEG, TIFF(*), ARW, CR2, CR3, DNG, NEF, ORF, PEF, RAF, RWL, RW2, SRW
	Video	XAVC 4K, XAVC 2K, AVC Ultra 4K, AVC Ultra 2K, XF-AVC 4K, XF-AVC 2K, H.264 (.mov), AVCHD 2K, PRORES 4K, PRORES 2K, DNXHD 2K, MPEG 444/422/420, DVCPRO HD
Power	Input	USB Type-C, 5V, Max 1.8A
	Dimension	5~7W
	Internal Battery	3.8V, 3500mAH
	Battery run time	Card --> Internal SSD : up to 2hrs
		Card --> Cloud : up to 3hrs
	Charge	Rechargeable via USB Type-C cable
		Charger : 3hrs, Computer : 5hrs

REFERENCE

1) Please use only the Wi-Fi dongle provided by ClouZen Co., Ltd.
2) The recommended maximum speed for each memory card represents the actual copying speed to the internal SSD and may vary depending on the performance of the memory card being used.
3) Additional cloud services may be included in future firmware updates.