# IDIS®

# Digital Video Recorder

Installation Manual

**TR-1204**
**TR-1208**

# Before reading this manual

This manual contains basic instructions on installing and using Digital Video Recorder, an IDIS product.

Users who are using this product for the first time, as well as users with experience using comparable products, must read this manual carefully before use and heed to the warnings and precautions contained herein while using the product. Safety warnings and precautions contained in this manual are intended to promote proper use of the product and thereby prevent accidents and property damage and must be followed at all times.

Once you have read this manual, keep it at an easily accessible location for future reference.

- The manufacturer will not be held responsible for any product damage resulting from the use of unauthorized parts and accessories or from the user's failure to comply with the instructions contained in this manual.

- It is recommended that first-time users of Digital Video Recorder and individuals who are not familiar with its use seek technical assistance from their retailer regarding product installation and use.

- If you need to disassemble the product for functionality expansion or repair purposes, you must contact your retailer and seek professional assistance.

- Both retailers and users should be aware that this product has been certified as being electromagnetically compatible for commercial use. If you have sold or purchased this product unintentionally, please replace with a consumer version.

## Safety Precautions

| | CAUTION | |
|---|---|---|
| ⚡ | RISK OF ELECTRIC SHOCK<br>DO NOT OPEN | ⚠ |
| | **CAUTION**: TO REDUCE THE RISK OF ELECTRIC SHOCK,<br>DO NOT REMOVE COVER (OR BACK).<br>NO USER-SERVICEABLE PARTS INSIDE.<br>REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. | |

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

| Symbol | Publication | Description |
|---|---|---|
| ∿ | **IEC60417, No.5032** | Alternating current |
| ▃▃ | **IEC60417, No.5031** | Direct current |

## Important Safeguards

**1. Read Instructions**

All the safety and operating instructions should be read before the appliance is operated.

**2. Retain Instructions**

The safety and operating instructions should be retained for future reference.

**3. Cleaning**

Unplug this equipment from the wall outlet before cleaning it. Do not use liquid aerosol cleaners. Use a damp soft cloth for cleaning.

**4. Attachments**

Never add any attachments and/or equipment without the approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

**5. Water and/or Moisture**

Do not use this equipment near water or in contact with water.

**6. Ventilation**

Place this equipment only in an upright position. This equipment has an open-frame Switching Mode Power Supply (SMPS), which can cause a fire or electric shock if anything is inserted through the ventilation holes on the side of the equipment.

**7. Accessories**

Do not place this equipment on an unstable cart, stand or table. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.



This equipment and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.

**8. Power Sources**

This equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power, please consult your equipment dealer or local power company.

You may want to install a UPS (Uninterruptible Power Supply) system for safe operation in order to prevent damage caused by an unexpected power stoppage. Any questions concerning UPS, consult your UPS retailer.

This equipment should be remain readily operable.

**9. Power Cords**

Operator or installer must remove power and TNT connections before handling the equipment.

**10. Lightning**

For added protection for this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the equipment due to lightning and power-line surges.

**11. Overloading**

Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

**12. Objects and Liquids**

Never push objects of any kind through openings of this equipment as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the equipment.

**13. Servicing**

Do not attempt to service this equipment yourself. Refer all servicing to qualified service personnel.

**14. Damage requiring Service**

Unplug this equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:

A. When the power-supply cord or the plug has been damaged.

B. If liquid is spilled, or objects have fallen into the equipment.

C. If the equipment has been exposed to rain or water.

D. If the equipment does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the equipment to its normal operation.

E. If the equipment has been dropped, or the cabinet damaged.

F. When the equipment exhibits a distinct change in performance — this indicates a need for service.

**15. Replacement Parts**

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

**16. Safety Check**

Upon completion of any service or repairs to this equipment, ask the service technician to perform safety checks to determine that the equipment is in proper operating condition.

**17. Field Installation**

This installation should be made by a qualified service person and should conform to all local codes.

**18. Correct Batteries**

Warning: Risk of explosion if battery is replaced by an incorrect type. Replace only with the same or equivalent type. Dispose of used batteries according to the instructions. The battery shall not be exposed to excessive heat such as sunshine, fire or the like.

**19. Tmra**

A manufacturer's maximum recommended ambient temperature (Tmra) for the equipment must be specified so that the customer and installer may determine a suitable maximum operating environment for the equipment.

**20. Elevated Operating Ambient Temperature**

If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature (Tmra).

**21. Reduced Air Flow**

Installation of the equipment in the rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

**22. Mechanical Loading**

Mounting of the equipment in the rack should be such that a hazardous condition is not caused by uneven mechanical loading.

**23. Circuit Overloading**

Consideration should be given to connection of the equipment to supply circuit and the effect that overloading of circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

**24. Reliable Earthing (Grounding)**

Reliable grounding of rack mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

HDMI Port Precautions

- Use a certified cable marked with an HDMI logo when using an HDMI. The screen may not appear or a connection error may occur if you do not use a certified HDMI cable.

- It is recommended that you use the following HDMI cable type.
  – High-speed HDMI Cable
  – High-speed HDMI Cable with Ethernet

## In-Text

| Symbol | Type | Description |
|--------|------|-------------|
| ⚠ | **Caution** | Important information concerning a specific function. |
| ✓ | **Note** | Useful information concerning a specific function. |

## User's Caution Statement

Caution: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

## FCC Compliance Statement

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 USERS WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT THEIR OWN EXPENSE.

**WARNING**: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS OF DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE CAUSING EQUIPMENT REGULATIONS.

## WEEE (Waste Electrical & Electronic Equipment)

***Correct Disposal of This Product***

***(Applicable in the European Union and other European countries with separate collection systems)***

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life.  To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

## Copyright

© 2020 IDIS Co., Ltd.

IDIS Co., Ltd. reserves all rights concerning this manual.

Use or duplication of this manual in part or whole without the prior consent of IDIS Co., Ltd. is strictly prohibited.

Contents of this manual are subject to change without prior notice.

## Registered Trademarks

IDIS is a registered trademark of IDIS Co., Ltd.

Other company and product names are registered trademarks of their respective owners.

# Table of Contents

# Part 1 – Introduction

## Product Features

This is a video recorder that supports surveillance, recording, and playback of video from analog cameras (or video encoders).

This DVR (Digital Video Recorder) unit offers the following features:

- Real-time 8 channel network surveillance
- Supports up to Full HD 240ips video recording
- HDMI out (1) and VGA out (1) ports
- Fast and easy search feature (Time-Lapse, Event log, Motion)
- Simultaneously survey, record, play back, and transmit data in real-time
- Graphic User Interface(GUI) and multilingual
- Multiple recording modes (Schedule, Event, Pre-Event, and Panic)
- 2 x USB 2.0 (for connecting peripherals, upgrading software, and saving recording data)
- 1 internal SATA2 HDD bay
- Self-diagnosis and automated system event alerts (industry standard S.M.A.R.T. protocol for HDD status alerts)

This document covers the 4- and 8-channel digital video recorders. The DVRs are identical except for the number of cameras and alarms that can be connected and the number of cameras that can be displayed. For simplicity, the illustrations and descriptions in this document refer to the 8-channel model.
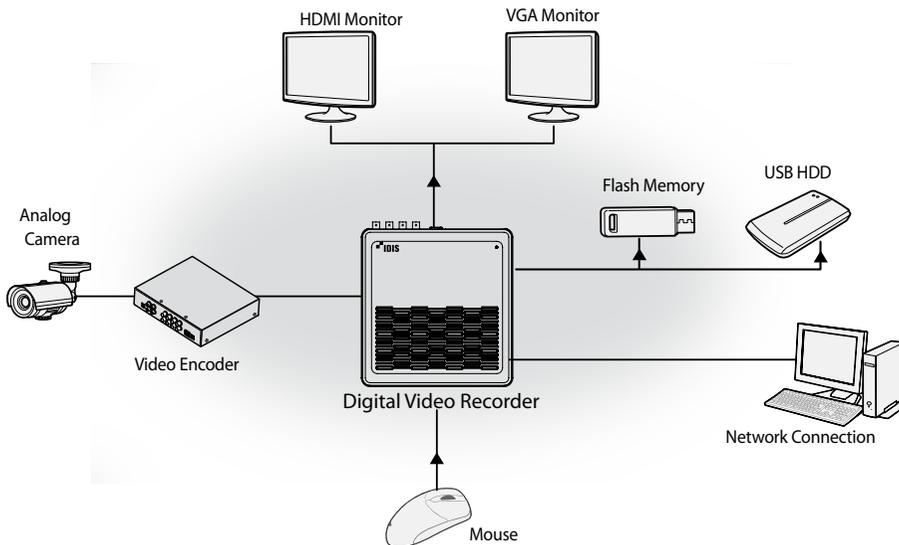
## Accessories

Upon unpackaging the product, check the contents inside to ensure that all the following accessories are included.
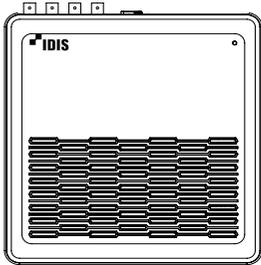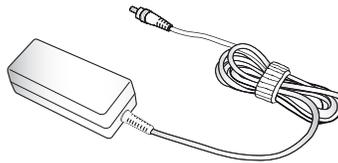
| Digital Video Recorder | Adapter | Quick Guide |
| --- | --- | --- |

| Optical USB Mouse |
| --- |

## Overview

### Front Panel and Dimensions

(Unit: mm)
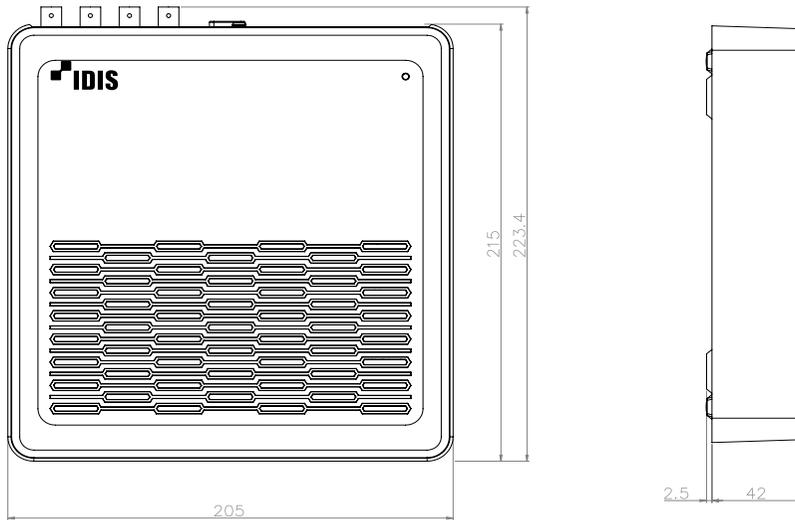


- Access various windows and menus using a USB mouse as you would on a personal computer.
- The IDIS logo should be positioned correctly when fixing the product to the wall.

### Rear Panel
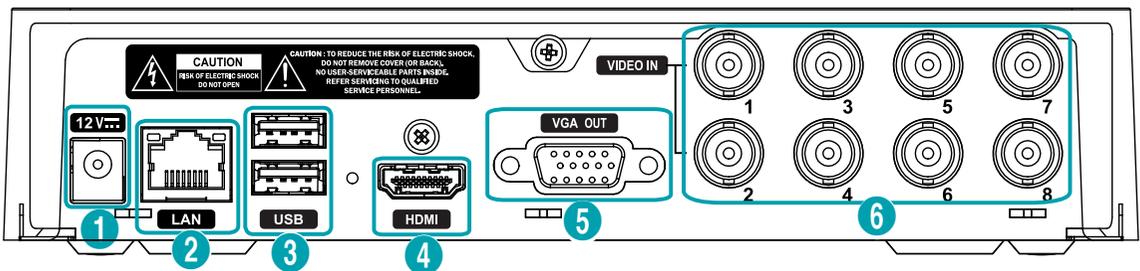


| ❶ | Power In Port (12V) | ❷ | Network Port | ❸ | USB Port |
|---|---|---|---|---|---|
| ❹ | HDMI Out Port | ❺ | VGA Out Port | ❻ | Video In Port |

# Rear Panel Connections

## Monitor Connection

Connect to the **HDMI** or **VGA OUT** port.
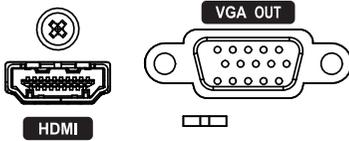
## Network Connection
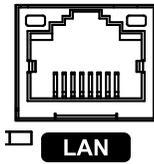
This DVR is capable of connecting to networks via an ethernet connector. Connect an RJ-45 cable (Cat5, Cat5e, or Cat6) to the DVR's network port. It's possible to operate and upgrade the DVR remotely over a network. Fore more information on ethernet connection setup, refer to **Network Setup in the operation manual**.

> Green LED on the right will begin to turn on if connected a 100Mbps network. The LED will turn off if connected a 10Mbps network. Orange LED on the left will flash once a link has been established.

## Video Connection

- **Video In Port**
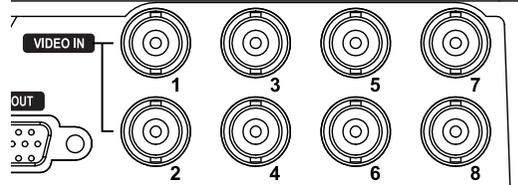
Connect the coaxial cables from the video sources to the composite Video In connectors or BNC connectors.

## Power Cable Connection

This DVR does not feature a separate power on/off button and will turn on the moment power is supplied. Connect the connector(12V) of adapter to the DVR and then connect the AC power cable of adapter to the power outlet.

> - Organize the power cable so that it will not cause people to trip over or become damaged from chairs, cabinets, desks, and other objects in the vicinity. Do not run the power cable underneath a rug or carpet.
> - Do not connect multiple devices to a single power outlet.

## Connections on the Rear Panel



Power(12V)

USB HDD

Network

IDIS Center
Remote Monitoring

Keyboard

HDMI Monitor

VGA Monitor

Camera
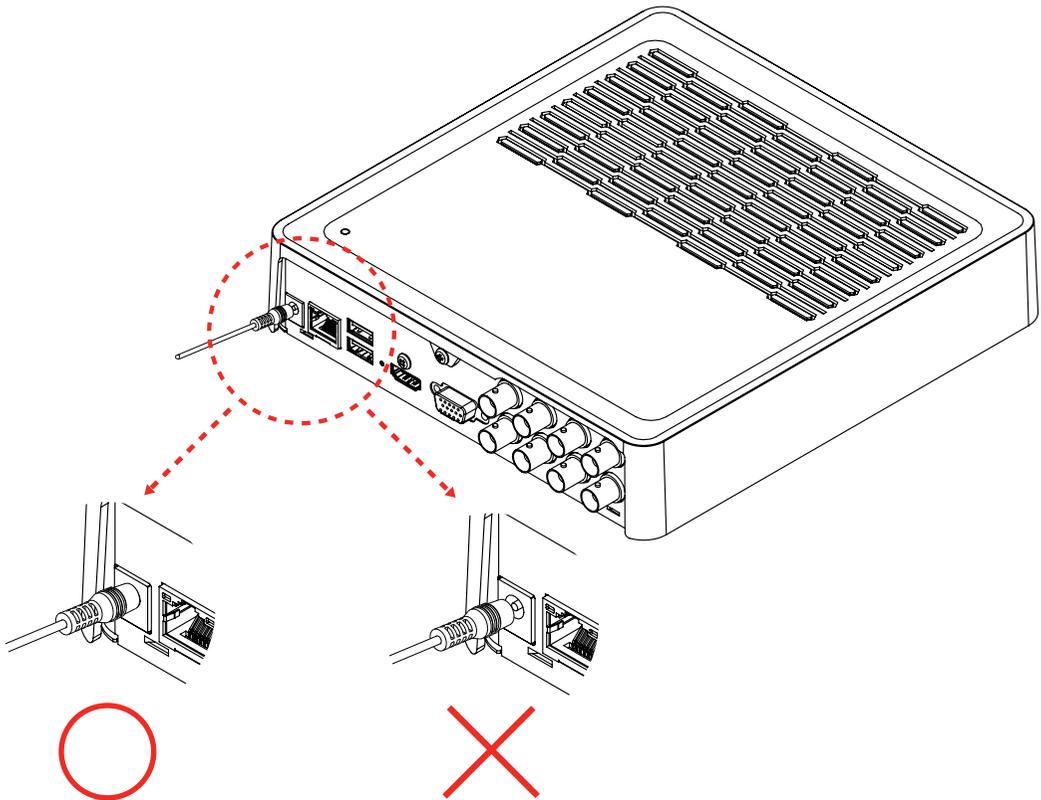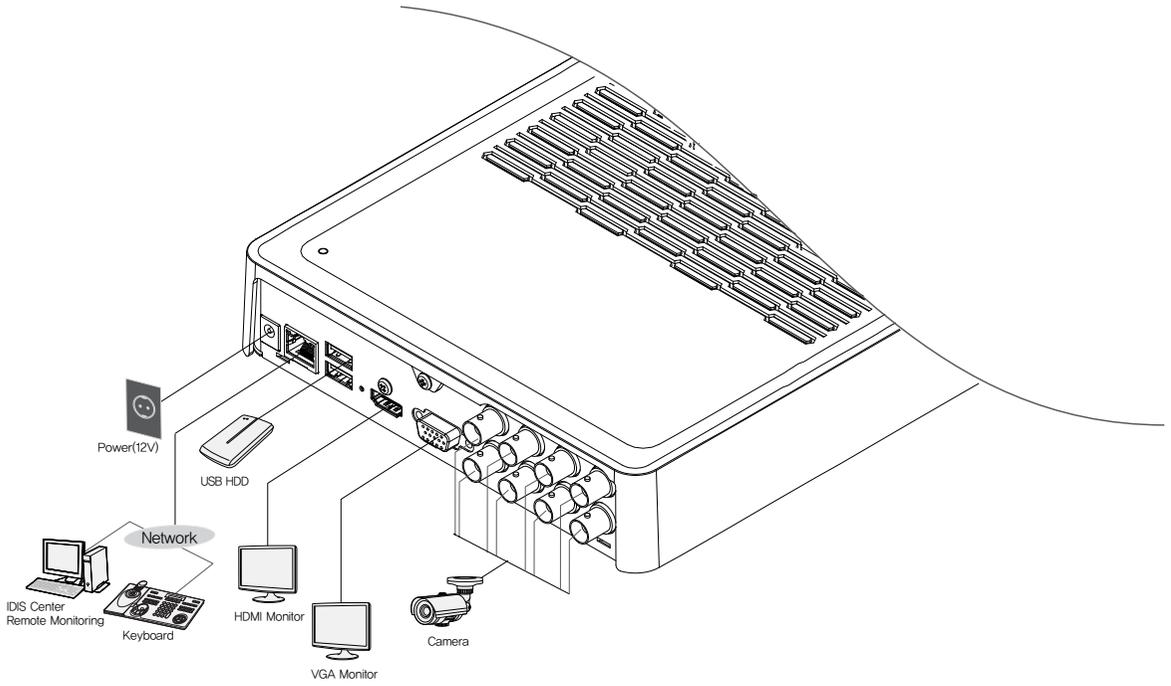
# Part 2 - Appendix

## System Log Types

| | |
|---|---|
| Boot Up | Panic On |
| System Shutdown | Panic Off |
| Restart | Clear All Data |
| Upgrade Success | Clear Disk |
| Upgrade Error | Format Disk |
| Power Failure | Disk Full |
| Time Changed | Disk Config Change |
| Time Zone Change | Disk 'No.' : 'serial number' |
| Time Sync. | Disk 'No.' : Removed |
| Time Sync. Failed | Auto Deletion |
| Disk Bad | Search Begin |
| Login | Search End |
| Logout | Clip-Copy Begin |
| Setup Begin | Clip-Copy End |
| Setup End | Clip-Copy Cancel |
| Remote Setup Change | Clip-Copy Failure |
| Remote Setup Failure | Clip Copy User |
| Setup Import | Clip-Copy Begin |
| Setup Import Failure | Clip-Copy Finished |
| Setup Export | Clip Copy Duration of Video |
| Setup Export Failure | Clip Copy Camera |
| Setup Export Canceled | Callback Failed |
| Schedule On | Factory Reset |
| Schedule Off | |

# Error Code Types

| Upgrade Error Codes | | | |
|---|---|---|---|
| No. | Type | No. | Type |
| 0 | Unknown Error | 301 | Remote Network Error |
| 1 | Incorrect File Version | 302 | No Remote Upgrade Permission |
| 2 | Incorrect OS Version | 303 | Remote Upgrade File Save Failure |
| 3 | Incorrect Software Version | 304 | Remote Upgrade Cancelled by User |
| 4 | Incorrect Kernel Version | 400 | USB Storage Device Mount Failure |
| 100 | Storage Device Mount Failure | 401 | USB Storage Device File Read Failure |
| 101 | File Not Found | 402 | USB Storage Device File Copy Failure |
| 102 | File Decompression Failure | 403 | USB Device Not Connected |
| 103 | LILO Execution Failure | 404 | USB Storage Device in Use |
| 104 | Reboot Failure | 405 | Unsupported File System |
| 105 | Improper File | 500 | Clip Copy in Progress: Upgrade Not Available |
| 300 | Remote Connection Failure | | |

| Clip Copy Error Codes | | | |
|---|---|---|---|
| No. | Type | No. | Type |
| 0 | Unknown Error | 12 | Disk Error |
| 1 | Device Error | 13 | Clip Player Execution File Not Found |
| 2 | Device Connection Failure | 14 | Clip Player Execution File Access Failure |
| 4 | Incorrect Media | 15 | Clip Player Execution File Save Failure |
| 5 | File Name Taken | 16 | Image Generation Failure |
| 6 | Insufficient Space | 19 | Device Connection Failure |
| 7 | Temporary File Generation Failure | 20 | Device in Use |
| 8 | Disk Access Failure | 21 | Unsupported File System |
| 9 | Disk Format Failure | 22 | Data Validation Failure |
| 10 | Database Changed | 23 | Data Not Found |
| 11 | Save Failure | | |

# Troubleshooting

| Problem | Solution |
|---|---|
| The main unit won't turn on. | • Check the power cable connection status.<br>• Check the power outlet. |
| Unable to display Live video. | • Check the camera's video cable connection status.<br>• Check the monitor's video cable connection status.<br>• Check the camera's power setting.<br>• Check the camera lens settings. |
| DVR stopped working in the middle of a recording. | • Hard disk may be full. Delete video recordings to free up space.<br>• Set the DVR to Recycle mode. For more information, refer to the **General in the operation manual**. |
| 🔴 icon is shown, but video is not being recorded. | If the Pre-Event is enabled, the ⚙ and 🔴 icons appears when recording is not inprogress, or the ⚙ and 🔴 icons appear when an event occurs and recording is in progress. For more information, refer to the **Schedule in the operation manual**. |
| The DVR keeps on rebooting during a system upgrade without completing the upgrade. | Check the upgrade file's version. To downgrade to a previous version, you must first press the factory reset button and reset all DVR settings to their factory defaults. A factory reset will clear all DVR settings configured by the user. For more information on factory reset, refer to the **Factory Reset on page 16**. |

## Specifications

These product specifications may change without prior notice.

| General | |
|---|---|
| **Exterior Dimensions (W x H x D)** | 8.1" x 1.8" x 8.8" (205mm x 44.5mm x 223.4mm) |
| **Weight (Main Unit)** | 1.24kg(with 2TB HDD) |
| **Working Temperature** | 0°C – 40°C |
| **Operating Humidity** | 0% – 90% |
| **Power Input** | US: ADAPTER (INPUT: 100-240V AC, 50/60Hz, 1.0A / OUTPUT: 12V DC, 3A) ETC: ADAPTER (INPUT: 100-240V AC, 50/60Hz, 1.2A / OUTPUT: 12V DC, 3A) |
| **Power Consumption** | 4CH: 12V⎓, 0.87A, 10.5W |
| | 8CH: 12V⎓, 1.11A, 13.32W |
| **Certifications** | FCC, CE |

| Video | |
|---|---|
| **Video In** | 4CH: Composite or HD-TVI - 4 inputs, 1 Vp-p, auto-terminating, 75 Ohms |
| | 8CH: Composite or HD-TVI - 8 inputs, 1 Vp-p, auto-terminating, 75 Ohms |
| **Monitor Out** | HDMI: 1, VGA: 1 |
| **Video Resolution** | HDMI: 1920x1080, 1440x900, 1280x1024 VGA: 1920x1080, 1440x900, 1280x1024 |
| **Recording Speed (IPS)** | 4CH: 30 ips @ Full HD or 120 ips @D1 |
| | 8CH: 60 ips @ Full HD or 240 ips @D1 |
| **Playback Speed (IPS)** | 4CH: 30 ips @ Full HD or 120 ips @D1 |
| | 8CH: 60 ips @ Full HD or 240 ips @D1 |

| I/O | |
|---|---|
| **Network Connection** | 10Mbps/100Mbps Ethernet |

| Connectors | |
|---|---|
| **Video In** | 4CH: Composite or HD-TVI - 4 inputs, 1 Vp-p, auto-terminating, 75 Ohms |
| | 8CH: Composite or HD-TVI - 8 inputs, 1 Vp-p, auto-terminating, 75 Ohms |
| **Monitor Out** | HDMI: 1, VGA: 1 |
| **Ethernet Port** | 1 RJ-45 |
| **USB Ports** | 2 x USB 2.0 |

| Storage | |
|---|---|
| **Primary Storage** | SATA hard disk drive |
| **Secondary Storage** | USB hard disk drive or flash drive |
| **Clip Copy Device** | USB Storage Device (USB HDD, USB Memory, etc.) |

Some hard disks may not function properly when mounted on to this product. Refer to the compatibility chart below before mounting any additional hard disk on to the product. Hard disk compatibility chart is subject to change without notice. Contact your retailer for the latest compatibility chart.

| Storage | Manufacturer | Model | Note |
|---|---|---|---|
| 2.0TB | Western Digital | WD20PURX-85GU6Y0 | |
| 3.0TB | Western Digital | WD30PURZ-85GU6Y0 | |
| 4.0TB | Western Digital | WD40PURZ-85TTDY0 | |

**IDIS**