

SAMSUNG TECHWIN

8 CHANNEL/ 16 CHANNEL DVR

Quick Guide

SRD-830/830D/830DC/
850/850D/850DC/870/870D/870DC/
1610/1610D/1610DC/1630/1630D/1630DC/
1650/1650D/1650DC/1670/1670D/1670DC



SAMSUNG

English



FEATURES

The SRD DVR employs H.264 video encoding for 8 or 16 channel inputs and G.723 audio encoding for 4 or 16 channels while simultaneously supports hard disc recording and playback. These DVRs also supports network connectivity, providing remote monitoring from a remote PC transferring video and audio data.

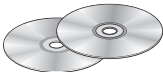
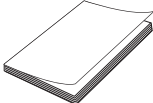
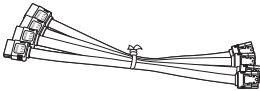
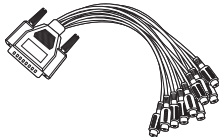
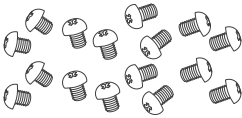
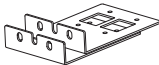
- Provides convenient User Interface
- 8/16 CH Composite Input Connectors
- Supports CIF(S)/2CIF(M)/4CIF(L) recording formats
- With the network specific codec, network transfer enabled regardless of the recording conditions
- De-interlacing processor for better picture quality
- HDMI enabling superior picture output quality
- Display of HDD information and status by using HDD SMART
- 4CIF Size Recording in 480 (NTSC)/400 (PAL) fps speed (SRD-1670/1670D/1670DC)
- CIF(S) Size Recording in 480 (NTSC)/400 (PAL) fps speed (SRD-1650/1650D/1650DC/1670/1670D/1670DC)
- CIF(S) Size Recording in 240 (NTSC)/200 (PAL) fps speed (SRD-850/850D/850DC/870/870D/870DC/1630/1630D/1630DC)
- CIF(S) Size Recording in 120 (NTSC)/100 (PAL) fps speed (SRD-830/830D/830DC/1610/1610D/1610DC)
- 8/16-channel Loop Through Video port connection
- Hard Disk overwrite function
- Mass storage hard disk backup through high-speed USB 2.0
- Mass storage hard disk backup through eSATA (SRD-850/850D/850DC/870/870D/870DC/1650/1650D/1650DC/1670/1670D/1670DC)
- Backup function using USB 2.0 flash memory and external CD/DVD writer
(Internal DVD writer is not available for SRD-830/850/870/1610/1630/1650/1670)
- Simultaneous Record and Playback of 8/16-channel video data
- Various Search Modes (Search by Time, Event, Backup, POS and Motion Detection)
- Various Recording Modes (Time Lapse, Event, Scheduled Recording)
- Extended Hard Disk Connection (USB 2.0, eSATA) (SRD-850/850D/850DC/870/870D/870DC/1650/1650D/1650DC/1670/1670D/1670DC)
- Alarm Interface
- Remote Monitoring function by Windows Network Viewer



- 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.

Package Contents

Please unwrap the product, and place the product on a flat place or in the place to be installed.
Please check the following contents are included in addition to the main unit.

		
Remote Control	Mouse	Power Cable
		
Network Viewer Software / User Manual CD	User Manual	Remote Control Battery (AAA)
		
SATA Cable	Audio Extension Cable (optional)	HDD Fixing Screw
		
Bracket Fixing Screw	Bracket Rack	



- For models that are not equipped with the HDD, one SATA cable is provided for HDD installation.
- The quantity of HDD fixing screw or SATA cable varies depending on the model (refer to the specifications of each model).

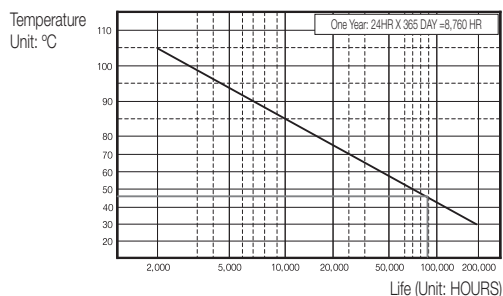
Please take note of the followings before using this product.

- Do not use the product outdoor.
- Do not spill water or liquid in the connection part of the product.
- Do not impose the system to excessive shock or force.
- Do not pull out the power plug forcefully.
- Do not disassemble the product on your own.
- Do not exceed the rated input/output range.
- Use a certified power cord only.
- For the product with an input ground, use a grounded power plug.

CHECKING THE INSTALLATION ENVIRONMENT

Samsung Digital Video Recorder ("DVR" hereinafter) is a state-of-art security device, and contains mass storage hard disk(s) and critical circuits inside.

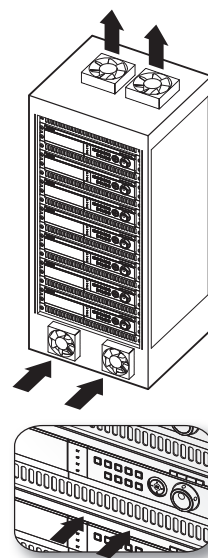
When the temperature rises inside the product, the product may breakdown and the product life be shortened. Please pay attention to the following recommendations before installation.



[Figure 1]

The followings are the recommendations when Samsung DVR is installed on a rack.

1. Please ensure that the rack inside is not sealed.
2. Please ensure the air is circulated through the inlet/outlet as shown in the picture.
3. If the DVR or other devices on a rack is to be stacked as in the picture, provide a suitable space or install a ventilating opening for air circulation.
4. For natural air convection, place the inlet at the bottom of the rack and the outlet on top.
5. It is strongly recommended that a fan motor is installed at the inlet and the outlet for air circulation. (Please fit a filter at the inlet to screen dust or foreign substances.)
6. Please maintain the temperature inside the rack or surrounding areas between 0°C ~ 40°C (32°F ~ 104°F) as shown in the figure 1.



[Figure 2]

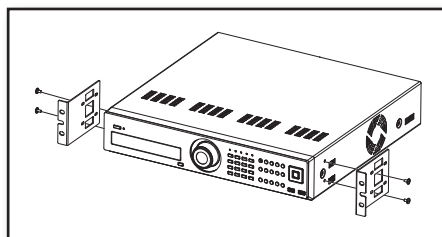
Rack Mount Instructions - The following or similar rack-mount instructions are included with the installation instructions :

- A) Elevated Operating Ambient - 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 maximum ambient temperature (Tma) specified by the manufacturer.
- B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- E) Reliable Earthing - Reliable earthing 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).

RACK INSTALLATION

Install the Bracket-Rack as shown in the figure, and then fasten the screws on both sides (2 screws on each side).

- Fix the screws not to be loosened by vibrations.



HDD ADDITION

You can install additional HDDs.

Make sure to unplug the power cord from the wall outlet to prevent possible electric shock, injury or product damage.

Please consult your provider for further information on HDD installation since improper installation or settings may damage the product.

- Number of HDDs supported : SRD-830D/830DC/850D/850DC/870D/870DC/1610D/1610DC/1630D/1630DC/1650D/1650DC/1670D/1670DC : Default 1 HDD + Up to 4 HDDs added
SRD-830/850/870/1610/1630/1650/1670 : Default 1 HDD + Up to 5 HDDs added
- Make sure to unplug the power cord from the wall outlet before proceeding with the installation.
- By factory default, the unit is equipped with one HDD.



- **Cautions for data loss (HDD care)**

Please pay attention so that the data inside the HDD is not damaged.

Before adding a HDD, please check the compatibility with this DVR product.

HDD is vulnerable to malfunction due to its sensitive nature especially against shock when operating.

Please ensure that the HDD is free from such shock.

We are not liable for any damage to the HDD incurred by user's carelessness or miss use..

- **Cases might cause damage to HDD or recorded data**

To minimize the risk of data loss from a damaged HDD, please backup data as often as possible.

Data may be lost due to external impacts during disassembly or installation of the DVR.

HDD may be damaged if the DVR is suddenly stopped by a power cut or power off during operation.

HDD or files stored inside may be damaged if the main body is moved or impacted during the HDD operation.

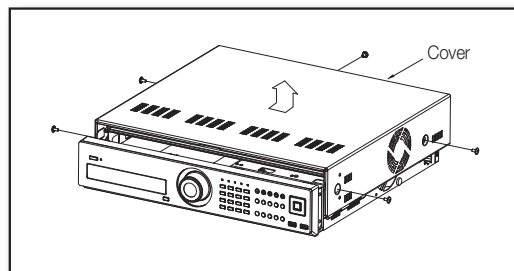
Cautions when adding a HDD

1. When adding a HDD, ensure that the cable does not get caught or the insulation does not come off.
2. Pay attention so as not to lose the disassembly screws or accessories.
 - If the screws or accessories are not put together correctly, the product may breakdown or not operate properly.
3. Please check the HDD compatibility before adding a HDD.
 - Please contact your nearest dealer to obtain the list of compatible devices.

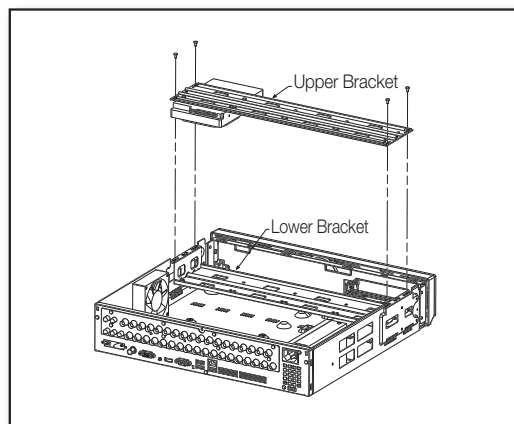
If adding HDDs to SRD-830/850/870/1610/1630/1650/1670

- The following figures are based on Model SRD-1630.

1. First, loosen the screws on both sides and remove the cover.



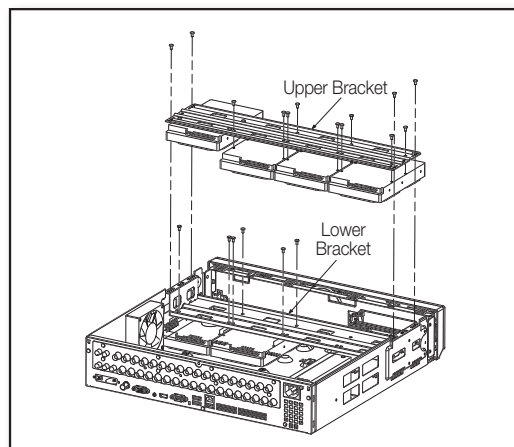
2. Disconnect the power and HDD Signal cable from the existing HDDs, then loosen the screws (x4) in the left/right and upper sides and remove the upper brackets.



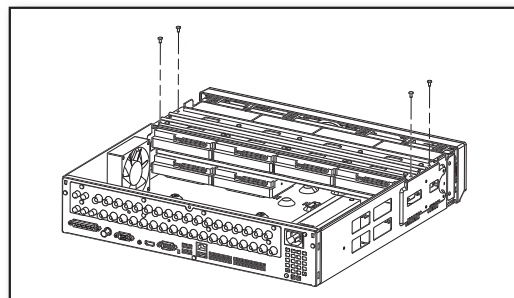
3. Install HDDs (x2) on the lower bracket and fix them with screws.

- Firmly secure the screw so that it does not become loose from vibration.

4. Install HDDs (x3) on the upper bracket and fix them with screws.

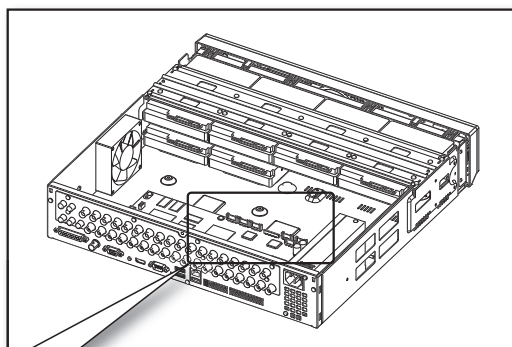
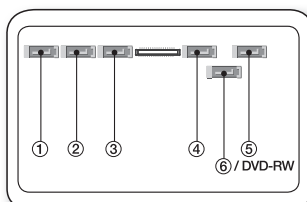


5. When the installation of additional HDDs is done, insert the lower and upper brackets into the DVR and fix them with the provided screws.



6. When the installation of additional HDDs is done, connect the power cable and connect the HDD signal cables (SATA Cable) to connectors ① ~ ⑥ on the main board.

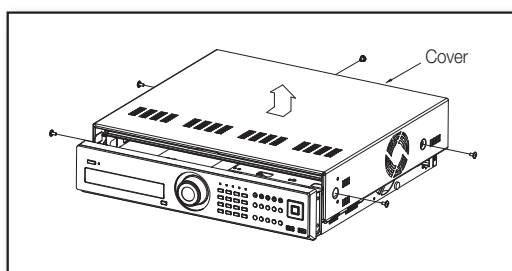
- You can check the HDD map directly on the DVR. Refer to "**Storage Device > HDD Map**".
- Note that the order the HDD data cable is connected will not affect the operation. The only consideration is the length of each cable.



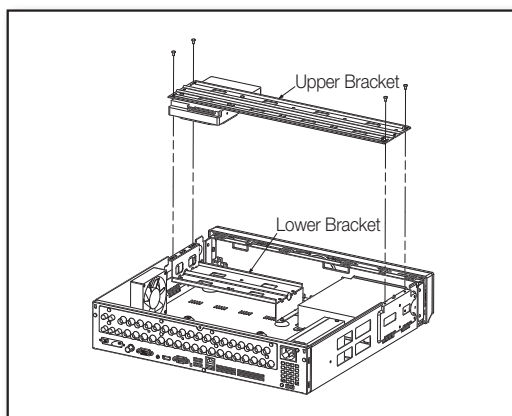
If adding HDDs to SRD-830D/830DC/850D/850DC/870D/870DC/1610D/1610DC/1630D/1630DC/1650D/1650DC/1670D/1670DC

- The following figures are based on Model SRD-1670D.

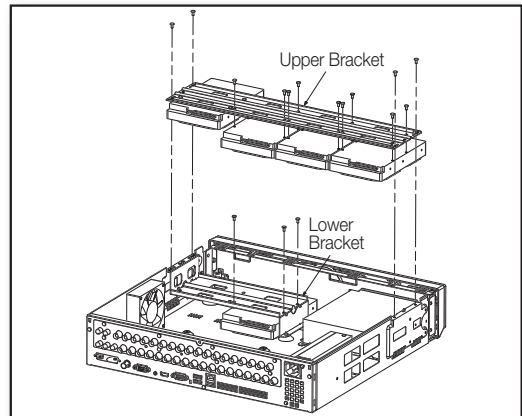
1. First, loosen the screws on both sides and remove the cover.



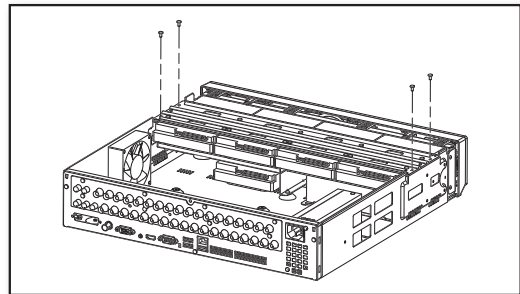
2. Disconnect the power and HDD Signal cable from the existing HDDs, then loosen the screws (x4) in the left/right and upper sides and remove the upper brackets.



3. Install a HDD (x1) on the lower bracket and fix it with screws.
4. Install HDDs (x3) on the upper bracket and fix them with screws.

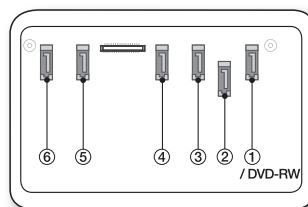
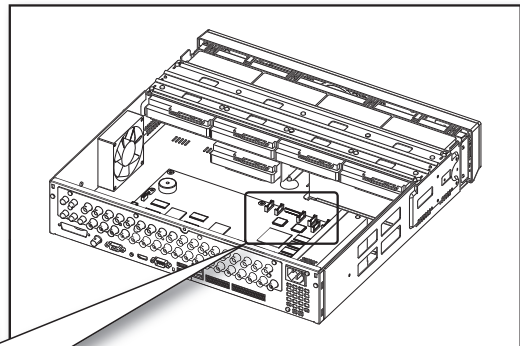


5. When the installation of additional HDDs is done, insert the lower and upper brackets into the DVR and fix them with the provided screws.

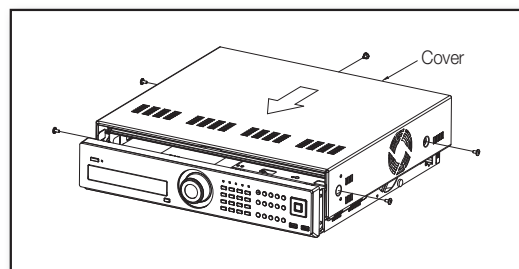


6. When the installation of additional HDDs is done, connect the power cable and connect the HDD data cables (SATA Cable) to connectors ① ~ ⑥ on the main board.

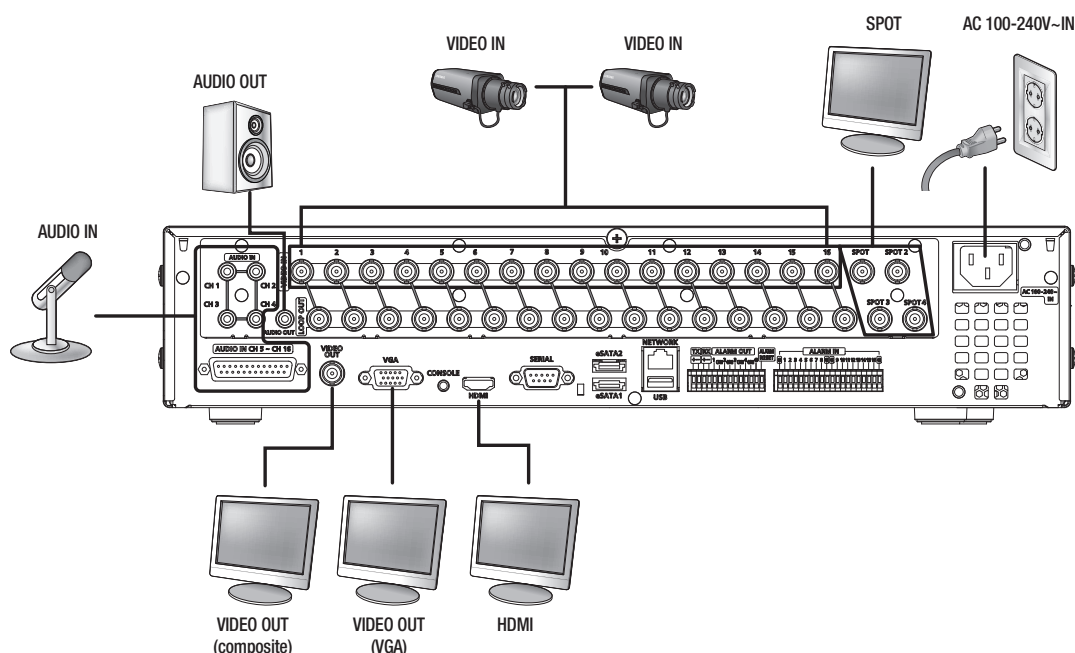
- Note that the number of a HDD data cable is nothing to do with operation of the HDD. Just make arrangements of the connectors considering the length of each connector.



7. Check if the connectors are properly connected and there is no problem with wiring, and close the cover and fix it with screws.



CONNECTING THE VIDEO, AUDIO, AND MONITOR



CONNECTING THE USB

1. By factory default, a USB port is provided for external connection.
2. You can connect a USB HDD, USB CD/DVD player, USB memory or mouse to the USB port.
3. If a USB HDD is connected to the system, recognition and settings are available in **"Menu > Setting the Device > Storage Device"**.
4. This product supports hot-plugging, which connects/removes the USB device during the system operation.



- If you use the USB device for Backup purposes, format it with FAT32 on PC if it is not formatted on the DVR.

CONNECTING EXTERNAL SATA HDD (eSATA)



- The external SATA connection port is not available in SRD-830/830D/830DC/1610/1610D/1610DC/1630/1630D/1630DC.

1. Two external SATA ports are provided on the rear panel by factory default.
2. If connected to the system, the external SATA HDD (eSATA) can be recognized and configured in **"Menu > Device > Storage Device"**.



- Only one SATA HDD can be connected to an external SATA port.
- Use a cable shorter than 1 m for the external SATA HDD (eSATA) connections.
- Unexpected disconnection to a device in use which is connected via eSATA may restart the system. Check whether the device is in use before disconnecting it.

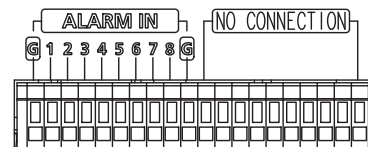
CONNECTING POS DEVICE

1. You can connect a POS device to the RS-232C port on the product's rear side when you connect it directly with a RS-232C cable.
2. Connection setup for the RS-232C port is available in **"Menu > Device > POS Devices"**, press the **<POS Device Setup>** button and set **<Baudrate, Parity, Data, Stop bit and Transfer Type>**.

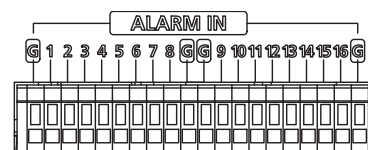
CONNECTING THE ALARM INPUT/OUTPUT

The Alarm In/Out port at the back is composed of the following.

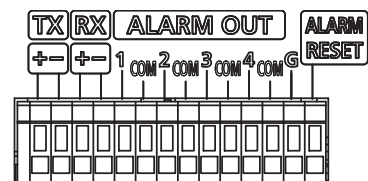
1. Alarm In Port for SRD-830/830D/830DC/850/850D/850DC/870/870D/870DC



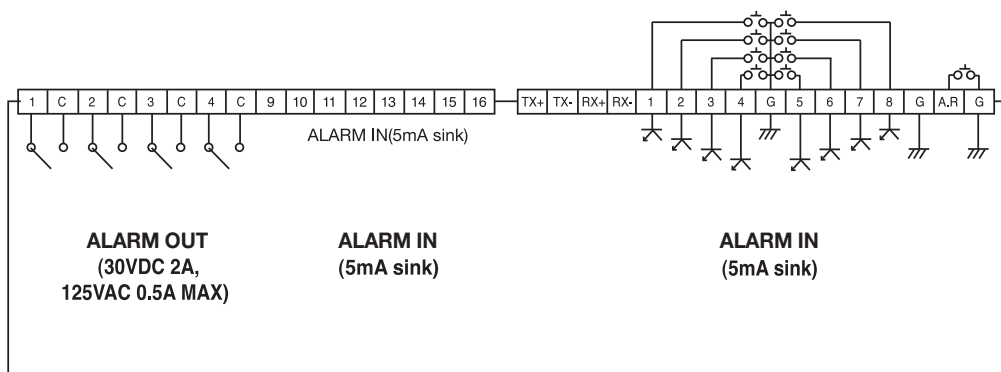
2. Alarm In Port for SRD-1610/1610D/1610DC/1630/1630D/1630DC/1650/1650D/1650DC/1670/1670D/1670DC



3. Alarm Out Port



- ALARM IN 1 ~ 8 (SRD-830/830D/830DC/850/850D/850DC/870/870D/870DC) : Alarm Input Port
- ALARM IN 1 ~ 16 (SRD-1610/1610D/1610DC/1630/1630D/1630DC/1650/1650D/1650DC/1670/1670D/1670DC) : Alarm Input Port
- ALARM RESET : On receiving an Alarm Reset signal, the system cancels the current Alarm Input and resumes sensing.
- ALARM OUT 1 ~ 4 : Alarm Output Port



CONNECTING THE RS-485 DEVICE

Connect the RS-485 device through the back port.

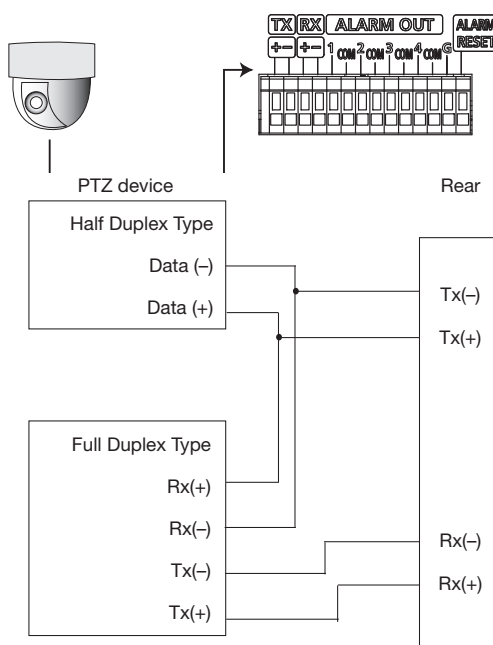


- You can connect and control the PTZ camera which supports the RS-485 communication.

- Transfer Type : You may select either Half Duplex or Full Duplex as the data transfer type.
- Baud Rate : Supported Baud rates are 600/1200/2400/4800/9600/19200/38400.

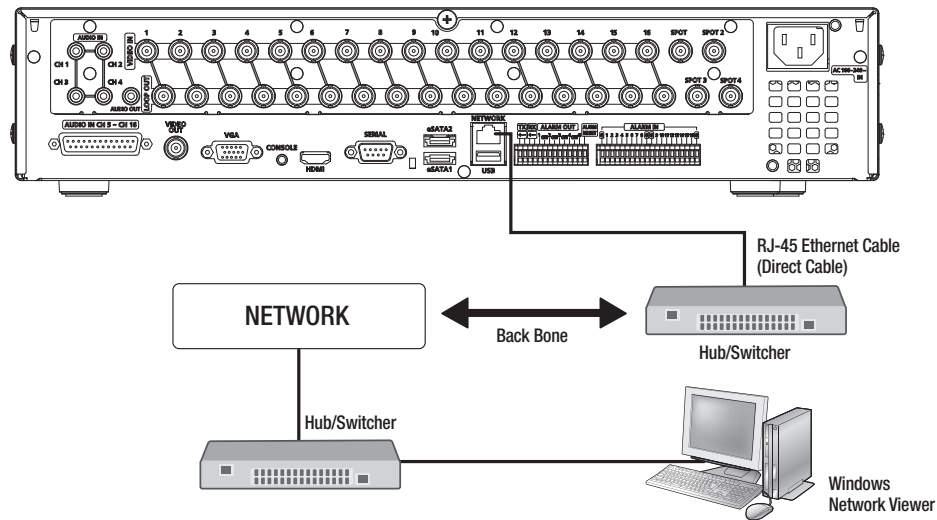


- Check if the RS-485 device is compatible with the product first.
- Pay attention not to change the polarity (+/-) of the RS-485 device when connecting it.
- Depending on camera's type, connection polarity can be different.
For further information, refer to the respective PTZ Camera's documentation.

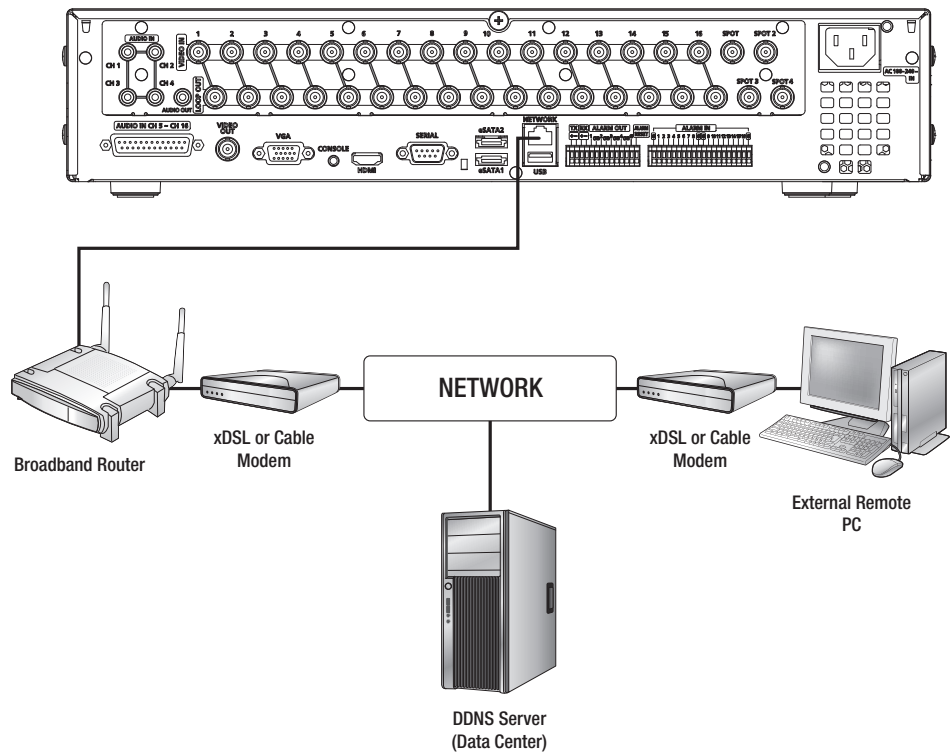


CONNECTING THE NETWORK

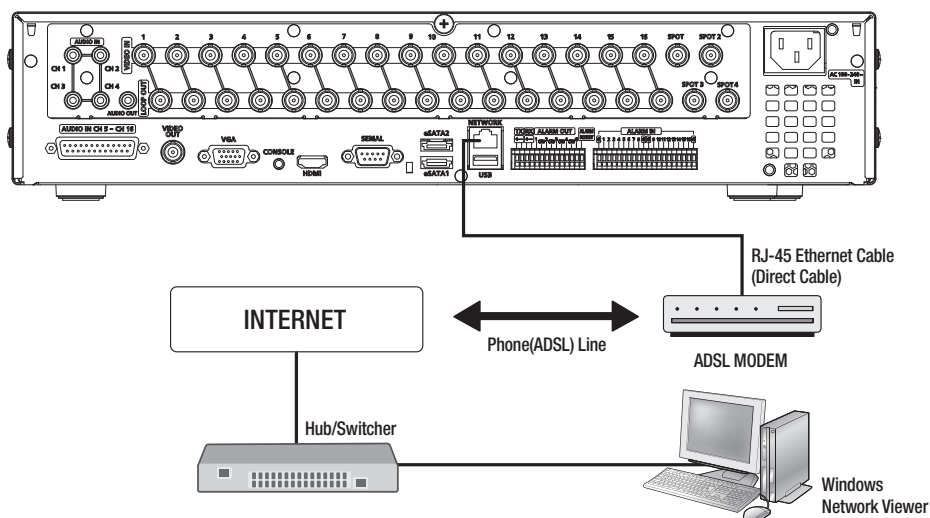
Connecting to Network through Ethernet (10/100/1000BaseT)



Connecting to the Network using the router



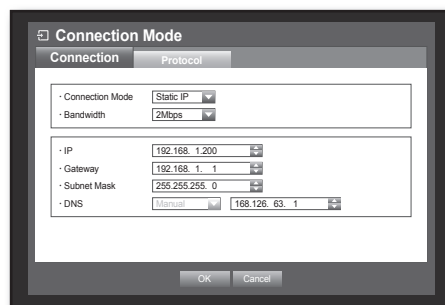
Connecting to Internet through ADSL



When no router is used

• Static IP mode

- Internet connection : Static IP ADSL, leased line, and LAN environments allows connection between the DVR and remote user.
- DVR Network Settings : Set the <Connection Mode> in <Connection> menu of the connected DVR to <Static IP>.
 - Consult your network manager for IP, Gateway and Subnet Mask.

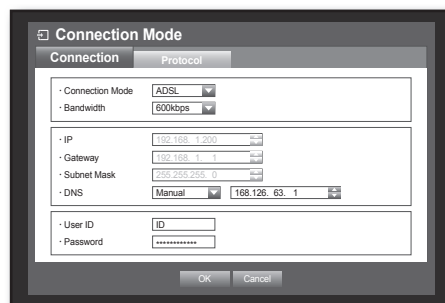


• Dynamic IP (DHCP) mode

- Internet connection : Connect the DVR directly to a cable modem, DHCP ADSL modem or FTTH network.
- DVR Network Settings : Set the <Connection Mode> in <Connection> menu of the connected DVR to <Dynamic IP>.

• ADSL (PPPoE: ID and password certification)

- Internet connection : An ADSL modem is directly connected to the DVR, where the ADSL connection requires user ID and password.
- DVR Network Settings : Set the <Connection Mode> in <Connection> menu of the connected DVR to <ADSL>.
 - ADSL <User ID> and <Password> should be the same to the ADSL user information.
If you don't know the ID and password, consult your ADSL service provider.





Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

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

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them 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 these items for environmentally safe recycling.

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



Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.



SALES NETWORK

SAMSUNG TECHWIN CO., LTD.

Samsungtechwin R&D Center, 701, Sampyeong-dong, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea, 463-400
TEL : +82-70-7147-8740~60 FAX : +82-31-8018-3745

SAMSUNG TECHWIN AMERICA Inc.

100 Challenger Rd. Suite 700 Ridgefield Park, NJ 07660
Toll Free : +1-877-213-1222 Direct : +1-201-325-6920
Fax : +1-201-373-0124
www.samsungcctvusa.com

SAMSUNG TECHWIN EUROPE LTD.

Samsung House, 1000 Hillswood Drive, Hillswood Business
Park Chertsey, Surrey, UNITED KINGDOM KT16 0PS
TEL : +44-1932-45-5300 FAX : +44-1932-45-5325

www.samsungtechwin.com
www.samsungsecurity.com
www.samsungipolis.com