



Operation Manual

HDMI to SDI Scaler

DSR-500



HDMI to SDI Scaler

Table of Contents

Before Using.....	3
About Warranty.....	3
Notice and Warning.....	3
Before Starting.....	4
Release History	5
Free maintenance.....	6
Names of connections and Installation.....	7
Table of Video Resolution and Frame Rate	8
Method of Connection	9
Before thinking it defective	10
Appendix	11

Product Configuration

Before unpacking the product package, please find out a flat, moisture-less place for Unpacking. After unpacking the package, please check whether there are following components.



Main Body



Power Cable

HDMI to SDI Scaler

Before Using ..

Before using this device, please read this manual carefully from the beginning to the end to fully exercise its performance and ensure longer service life through the correct use of products.

About Warranty ..

- The product warranty is included in the rear part of this users manual. We carry out free warranty repair system for one year from the date of purchase of the product based on our warranty policy. However, even during the warranty period, if there is no confirmation of our agent (or our company), or any failures/damages of the product were caused by the customers negligence, the actual cost of repair shall be charged. Therefore, please be sure to get a confirmation on the warranty from our agent (or our company) where you have purchased our product.
- Please keep the box etc used for packaging well so you can be eligible for the after-sale service.
- The period of keeping parts for after service of this device is 8 years. For more information, please contact our company.

※ Note : The parts for after service mean the circuits ·functional parts except the exterior.
(In accordance with our company regulation).

Notice Warning

- This product is an electronic products, especially the internal circuitry is very sensitive to shock and static electricity.
- Please avoid hot and humid place for storage.
- Optimum operating temperature is -10°C ~ +40°C.
- Failures resulted by the customers negligence shall not be warranted by the manufacturer.
- Please be noted that falling apart of the sticker or label from the product or damaged parts may be the direct cause of failure.
- Please do not remove the connecting cable or turn the power OFF while the system is operating.

HDMI to SDI Scaler

Before starting ..

This manual is a guidebook with regard to the method of use and composition of the **HDMI TO SDI Scaler** Hereinafter "Device"). Before using this device, please be sure to read this manual thoroughly. After unpacking the package, please check various components and, if you have any questions or inquiries, please contact our agent from whom you have purchased the device or our company.

Safety Cautions (Please check without fail)

1. Cautions before installation of the product.

- Please pay special attention not to install the device in the following places to avoid potential failure of the device.
 - A place directly exposed to sunlight or close to heating elements such as steam, heater, stoves etc.
 - Bad ventilation, humid and dusty area.
 - ※ When using assembled on the system rack, please use a rack designed to be well ventilated as possible.
 - A place near to magnetizing equipments.
 - An unstable place where is vibrating or sloping.
 - A place near to strongly flammable substances such as alcohols, aerosol insecticide.
 - ※ When cleaning this device, please lightly wipe out with a dry soft cloth applied with poly-wax and then wipe out again with a dry cotton flannel for preservation.
- Before connecting power cord, please check the voltage for sure.
- After unpacking the package, please discard the vinyl pack. (Please keep it out of children's reach as it will be very dangerous if the child puts it on the head).

2. Cautions on product usage

- If products are dismantled for repair by an unauthorized person, you may not be eligible for the maintenance and repair service. Hence, in case of failure of the products, please contact the dealer from whom you have purchased the product or our company.
- Please read carefully the users manual before using the product.
- When inevitably dismantle or repair the defects, please perform the work very carefully as the parts or components are very sensitive.
- Please do not touch receptacles or power lines with wet hand for safety.
- Please be noted that the power line must be accurately plugged into the receptacles.
- Please do not wipe the products with substances containing alcohol such as thinner and benzene etc.
- Please do not touch the terminal exposed to the outside as possible.
- Please operate the device in a well air-ventilating place.
- Please do not dismantle or repair device randomly.
- Please do not place heavy objects on the main body of the device.
- Please do not move the device during operation.
- Before unplugging the power cord, please pull out the power cord after shutting off the power switch. In case of frequent unplugging and plugging the power during operation of the device under the state that power switch is not shut off, abnormalities may be caused to the device.
- If smoke arises or strange odor smells from the main body during the operation of the device, immediately lower the power switch and contact the dealer or our company for necessary technical supports and maintenance.

HDMI to SDI Scaler

Release History

Edit	Date	Approved by	Description
0	Dec 19, 2012		First Version
1	Jan 17, 2013	PSY	Update

HDMI to SDI Scaler

Free Maintenance

In case any problems occur with this product, you are eligible to receive services for the replacement of the parts or exchange of the product. The period of maintenance may be extended by a separate contract. For more information in this regard, please contact your dealer from whom you have purchased the product or our company.

Maintenance Condition

In case any abnormalities occur with this product within one year, replacement of the parts or exchange of the product shall be available free of charge.

(However, please be noted that failures due to the user's negligence or natural disasters are not subject to free replacement of the parts or product).

Free maintenance, replacement of parts or product is not applicable on following cases.

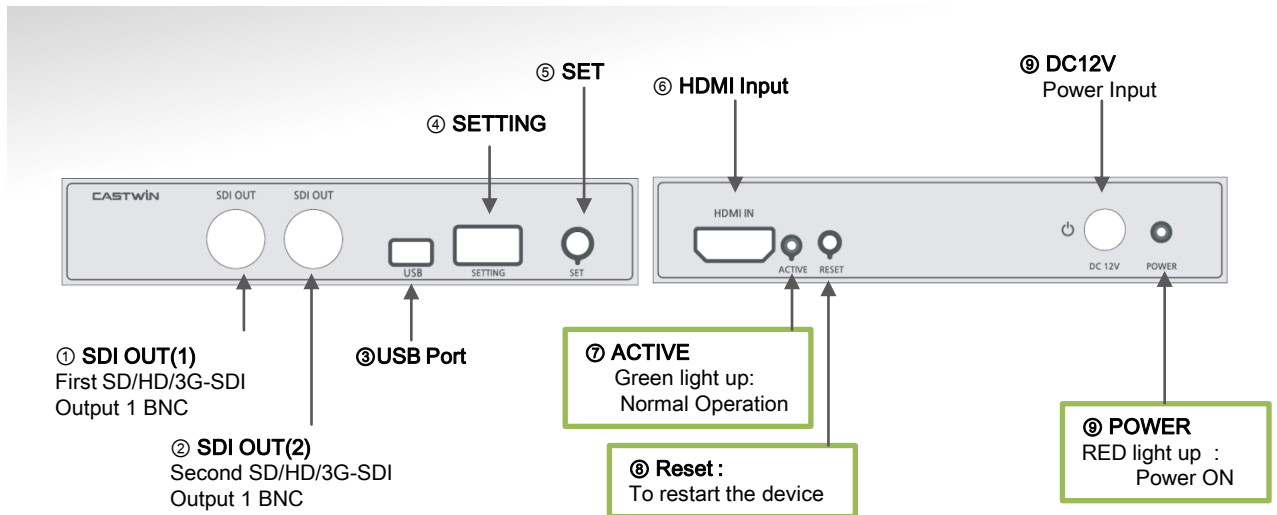
- Failures resulted by the user's negligence.
 - Random use of the product, not following the instructions specified in this users manual.
 - In case the rated voltage or frequency specified in this users manual is not used.
 - In case failure occurs while dismantling and repairing the device by an unauthorized person who are not qualified through a professional education.
- ※ Replacement of supplies and cleaning of the device are excluded from the maintenance.

Product up-grade and replacement & repair of the device after the free maintenance period shall be available at minimum cost. Please contact your dealer or our company for further information in this regard.

Product		HDMI to SDI Scaler
Model No		DRS-500
Where purchased/ Telephone number		
Date of purchase		
Free maintenance period		
Customer Information	Name	
	Address	
	Tel No.	

- ◇ Contents related to the product purchasing information shall not be reissued.
- ◇ Must be fully informed about the contents and conditions at the time of purchasing the product.
- ◇ This information must be presented when taking maintenance service for the product.

Names of connections and Installation



① **SDI OUT(1)**
First _SD/HD/3G SDI Output

② **SDI OUT(2)**
Second_ SD/HD/3G SDI Output

③ **USB Port**
All of media scaler can be updated via USB port.

④ **SETTING**
Setting of Video Resolution and Frame Rate. (DIP S/W)
You are able to set by pen as "Table of Video Resolution and Frame Rate"
※Refer to page 8. Table of Video Resolution and Frame Rate.

⑤ **SET**
After Setting the Resolution and Frame Rate by pen, press the SET button to save the set value.

⑥ **HDMI Input**

⑦ **ACTIVE**
You will see the green light when scaler is running well.

⑧ **Reset**
If you press the reset port using by pen, the scaler will be restarted.

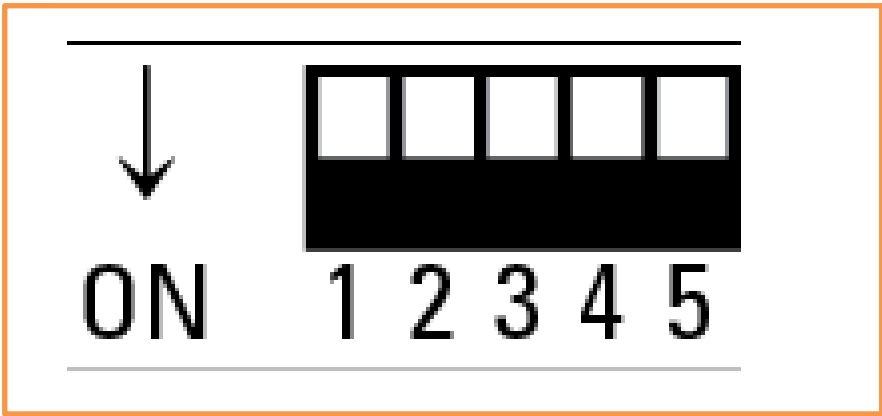
⑨ **POWER Input**
Use power DC12V / 1.0A
You will see the red light when scaler is power ON.

INSTALLATION

Typically, Scaler installation consists of the following steps :

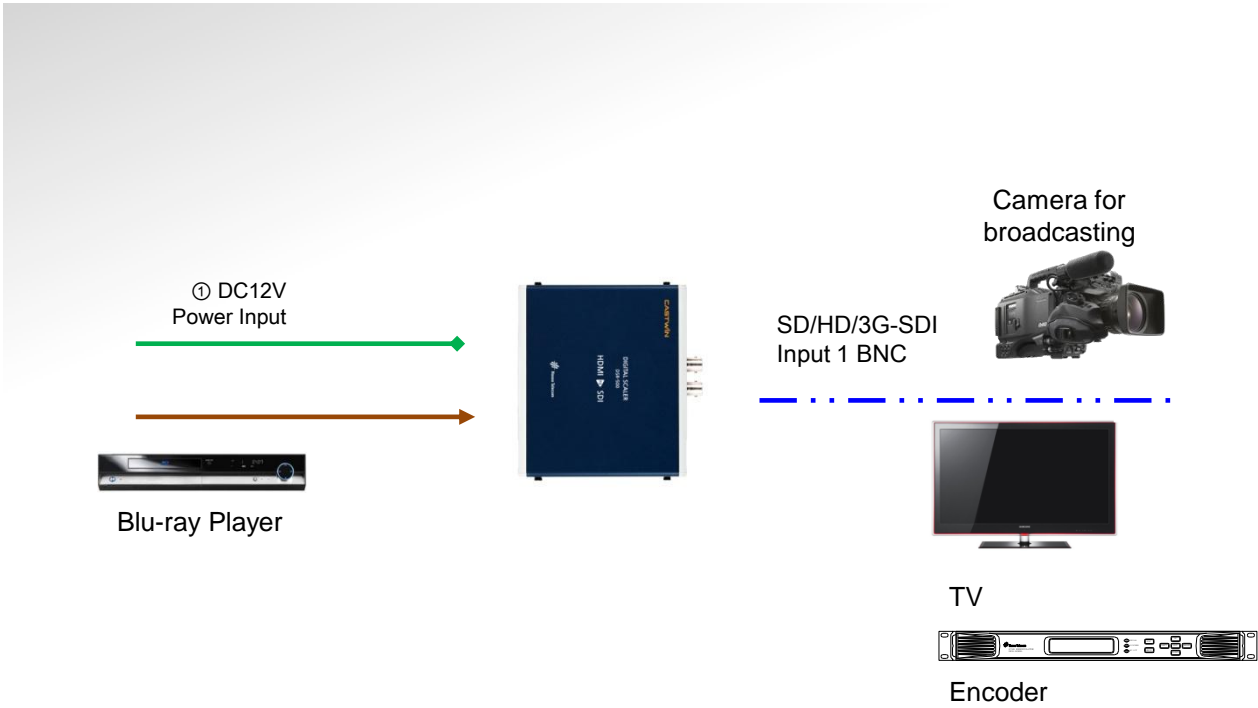
1. Ensure the Scaler is disconnected from power.
2. Connect video equipment to the scaler BNC and HDMI connector.
3. Apply DC12V power to the scaler.
4. Check the red light of Power and green light of Active after connect all the cables.

Table of Video Resolution and Frame Rate



Resolution & Frame Rate	SW1	SW2	SW3	SW4	SW5
480i59.94	OFF	OFF	OFF	OFF	OFF
480i60	OFF	OFF	OFF	OFF	ON
576i50	OFF	OFF	OFF	ON	OFF
720p50	OFF	OFF	OFF	ON	ON
720p59.94	OFF	OFF	ON	OFF	OFF
720p60	OFF	OFF	ON	OFF	ON
1080i50	OFF	OFF	ON	ON	OFF
1080i59.94	OFF	OFF	ON	ON	ON
1080i60	OFF	ON	OFF	OFF	OFF
1080p23.97	OFF	ON	OFF	OFF	ON
1080p24	OFF	ON	OFF	ON	OFF
1080p25	OFF	ON	OFF	ON	ON
1080p29.97	OFF	ON	ON	OFF	OFF
1080p30	OFF	ON	ON	OFF	ON
1080p50	OFF	ON	ON	ON	OFF
1080p59.94	OFF	ON	ON	ON	ON
1080p60	ON	OFF	OFF	OFF	OFF

Method of Connection



ITEM	Symbol	Use cable	Connection	Note
AC power input		Power cable		
HDMI Input		HDMI exclusive use cable		
SDI Output		HD-SDI or SD-SDI exclusive use cable	BNC type	75Ω

Before thinking it defective..

Make sure before reporting troubles

Troubles	Points to be checked
Power does not IN Red light does not light up	<ul style="list-style-type: none">• Check whether the power plug is accurately connected.
Power IN but device does not work	<ul style="list-style-type: none">• Check if there is any magnetic objects near around the product.• Please unplug the power plug and reconnect it.
Can not see the screen and hear the voice. Picture quality is bad and sway	<ul style="list-style-type: none">• Check the connection status of the input signal cable.• Check the setting status of the input signal.• Check the connection status of the output cable.• Check if the connecting cable is not damaged.
The TV in short distance works but the one in long distance does not work	<ul style="list-style-type: none">• Check the status of the line amplifier setting.

Product Warranty

Product : _____ Model : _____
 Date of Purchase : _____
 Customer : _____
 Tel. _____ Addr. _____
 Sales Agent : _____
 Tel. _____ Addr. _____

Warranty Contents(Conditions)

Warranty
1 year

▪ Free Service – Within warranty period

▪ Paid Service –

1. After the warranty period
2. In case within warranty period
 - Failures by the mishandling in use.
 - Repair, modification by other than service engineer
 - Failures by the fault during transportation
 - Failure, damage by the natural disasters such as fire, flooding etc.
 - Failures by the power abnormalities.
 - No presentation of product warranty.
 - When consuming parts are worn.

*** The circuitry parts for repair of this product shall be available for eight years from the date of manufacture.**

Warranty Regulation

- ◆ This product is manufactured through the strict quality control and inspection processes.
- ◆ Any failures of the product resulted by the manufacturing defects shall be repaired free of charge during the warranty period from the date of purchase of the product.
- ◆ Any failures of the product occurred after the warranty period shall be repaired at the actual cost.
- ◆ In case all the columns prepared in the warranty are not completely filled up or warranty is lost, free repair service shall not be available. Therefore, please keep this warranty well after obtaining due confirmation from the dealer.

Information for Service Request

- ◆ In case failure occurs, please ask repair to your dealer from whom you have purchased the product or to our company.
- ◆ Matters not specified in this warranty are subject to the consumer damage compensation regulation.

Service Center (Company direct management) Information

Location	Repair detail and explanation for usage	Coverage	Tel No	FAX

Repair & Inspection Details

Y/M/D	Repair detail and Explanation for usage	Free or Paid Service	Where repaired	Engineer	Signature

- After receiving service, make sure to record the details of repair and get the signature so you can be benefited with it for your next request for service.
- Make sure to get a receipt after receiving paid service.