

### **Dynamic Range Correction Box**

## **DRC-100**

### **Operation Manual**

This Operation Manual covers safety, functions, installation and the correct operating procedure for the DRC-100. First, we ask you to read this Operation Manual thoroughly, then install and operate the DRC-100 as advised. In addition, for future reference, we also advise safekeeping of this

Please contact the distributor or dealer from which the DRC-100 was purchased, if you do not understand the installation, operation or safety instructions laid out in this manual. Not understanding the contents of the Operation Manual sufficiently may cause damage to the unit.

## Guide to the Safety Symbols

The meanings of the symbols used in this operation manual are:



When you do not adhere to or take notice of the "Danger" sign, it may lead to serious accident such as death or injury caused by fire or electric shock.



When you do not adhere to or take notice of the "Warning" sign, it may cause severe damage such as a physical injury.



When you do not adhere to or take notice of the "Caution" sign, it may incur injury and cause damage to peripheral objects in the immediate surroundings

## Cautions for Safety

The DRC-100 is designed to be used safely; however, it may lead to physical accident caused by fire and electric shock if not used correctly. Therefore, please keep and read the "Cautions for safety" for protection against accidents



- Do not disassemble and/or modify the DRC-100.
- Do not operate the DRC-100 with wet hands.



• Use only the AD901-120/230 or equivalent power adaptor for the DRC-100.

The recommended voltage is DC+12V±10%

• Do not expose the DRC-100 to wetness or high moisture conditions.

The DRC-100 is designed and approved for indoor use only. The DRC-100 is not water-resistant or waterproof. If the location of the unit is outdoors or in an outdoor like environment. we recommend that you use an outdoor housing.

- Protect the DRC-100 from condensation. Keep the DRC-100 dry at all times, during storage and
- Should the unit not work properly, switch off the power immediately. Then, check the unit according to the "Trouble Shooting" section.



#### • Avoid the striking of hard objects or dropping the DRC-100.

The DRC-100 uses high quality electrical parts and precision components

• Do not connect any power supply directly to the video out terminal of the unit.

Do not connect the DRC-100 with any monitor using a video/power single transmission terminal. The DRC-100 is not designed for use with this type of equipment. We also advise you to read the operation manual of the monitor you plan to use before any connections are made

- Select a stable place for the DRC-100.
- Do not move the DRC-100 with the cables connected. Before moving the DRC-100, always remove the video cable and power cable from the rear of the camera first.
- Avoid using the DRC-100 near any strong electromagnetic field.

After installing into main equipment, if the DRC-100 is exposed to electromagnetic waves causing the monitored image to become distorted, we recommend the unit be shielded by appropriate protective casing.

### **Problems and Trouble Shooting**

If any of the following problems occur when using the DRC-100,

- An optimal picture cannot be obtained, after checking that all the cables and connections are correctly in place
- Smoke or any unusual odor emerges from the DRC-100.
- An object becomes embedded or a quantity of liquid seeps into the unit
- More than the recommended voltage or/and amperage has been applied to the DRC-100 by mistake
- · Anything unusual occurring to any equipment connected to the

#### Disconnect the unit immediately according to the following procedures:

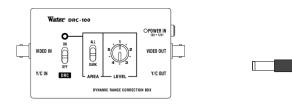
①Switch off the main power supply to the unit.

2 Remove the power and video cables connected to the DRC-100.

3 Contact the distributor or dealer from which the DRC-100 was purchased.

### Contents

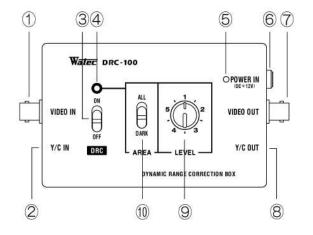
Using the contents figures below, check to make sure all parts are present

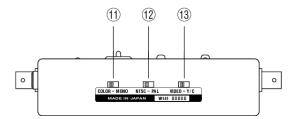


**DRC-100** 

DC plug

# **Description of Parts**





#### ①VIDEO IN (BNC)

• The terminal for composite video signal input

#### ②Y/C IN

• The terminal for Y/C signal input

#### ③ON/OFF SWITCH

• The switch for correction mode

#### **4) DRC INDICATOR**

· The red LED to indicate correction mode is ON.

#### **5POWER INDICATOR**

• The red LED to indicate a power supply is present.

### **©POWER IN**

· The terminal designed for connection with the DC-plug of the power adaptor.

#### 7VIDEO OUT (BNC)

• The terminal for composite video signal output

### ®Y/C OUT

• The terminal for Y/C signal output

**9CORRECTION LEVEL ADJUSTMENT DIAL (10 steps)** 

• The dial for setting the correction level

**(10) CORRECTION AREA SELECTION SWITCH** 

• The switch for selection of the desired correction area

(1) COLOR/MONOCHROME MODE SELECTION SWITCH

• The switch for selection of color mode or monochrome mode

**®TELEVISION SYSTEM SELECTION SWITCH** 

• The switch for selection of NTSC or PAL signals.

(13) INPUT SIGNAL SELECTION SWITCH

- The switch for selection of composite or Y/C

## **Power Supply**

If any other power adaptor besides the AD901-120/230 is used, please use a stabilized power adaptor designed for DC+12V  $\pm$  10%, with a current capacity of more than 250mA.

Use the optional DC plug if the shape or polarity of the DC plug of the power adaptor to be used is not compatible with the DRC-100 (See the drawing on the right below).





The wiring on the connector must be exact. Be careful no to touch the other terminal while wiring. Protect the wiring portion by using insulation tape after wiring. If the above care and attention is not adhered to, damage to the DRC-100 and power adaptor may occur and may also cause fire.



# **Set-up and Operation**

- 1) Ensure that the power to the DRC-100 and the peripheral equipment is turned off before making any connections.
- 2) Connect ①VIDEO IN on the DRC-100 and camera, ⑦VIDEO OUT on the DRC-100 with the monitor, using a coaxial cable with  $75\Omega$ impedance, such as an RG-58/U or an RG-6/U. If the monitor has an S-terminal, high resolution imaging is possible by connecting with <code>®Y/C</code> OUT
- 3) Select the input signal composite video signal or Y/C signal by (3) INPUT SIGNAL SELECTION SWITCH.
- 4) Select the color or monochrome mode by ①COLOR/MONOCHROME MODE SELECTION SWITCH, then select NTSC or PAL by ① TELEVISION SYSTEM SELECTION SWITCH.
- 5) Turn on the power to the monitor and all other allied equipment, then insert the power plug of the power adaptor into 6 POWER IN on the side panel of the DRC-100. Confirm that the power adaptor is not connected to the power supply before insertion of the power plug into 6POWER IN.
- 6) Set the correction area to ALL by <code>@CORRECTION</code> AREA SELECTION SWITCH. If needed, change the switch setting to DARK.

	Setting	Effect
ALL ALL areas on the mon		ALL areas on the monitor are corrected evenly.
	DARK	ALL areas are corrected, especially dark areas.

- DIAL(10 steps) according to your environment.
- \*When gray-scale cannot be corrected, using the DRC-100. Narrow the iris on the camera to improve the image

### **Options**

To purchase these options, please contact the distributor or dealer from which you purchased the DRC-100.



### AC Adaptor (AD901-120/230)

The recommended AC adaptor for the DRC-100 for a constant and stable power supply.

DRC-100

## **Specifications**

Model

1410	aci	B10 100
Input to	erminal	BNC×1, MINI DINS×1 (Internal termination)
Input	signal	S-video/CVBS/VBS
Output	terminal	BNC×1, MINI DINS×1
Output	signal	S-video / CVBS/VBS
Video	system	NTSC / EIA / PAL / CCIR
	Correction	ON / OFF
	Correction area	DARK / ALL
Functions	Correction level	10 steps
	Input select	S-video / CVBS
Power	Supply	DC+12V±10%
Power Co	nsumption	1.5W (125mA)
Operating T	emperature	-10 - +40°C (Without condensation)
Operating	Humidity	Less than 95% RH
Storage Te	emperature	-30 - +70°C (Without condensation)
Storage	Humidity	Less than 95% RH
Size		151(W) × 80(H) × 37(D) (mm)
Weight		Approx. 178g

- Design and specifications are subject to change without notice.
- Watec is not responsible for any inconvenience or the attendant damages to the video and monitoring recording equipment caused by misuse, misoperation or improper wiring of our equipment.
- If for any reason the DRC-100 does not work properly, or if you have any questions regarding installation or operation, please contact the distributor or dealer from which it was purchased.
- This product uses technology provided



by Apical Limited, UK.

### **Contact information**



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