

clintonelectronics

# CE-RP2

SINGLE CHANNEL DVR w/ BUILT IN CAMERA



**INSTRUCTION MANUAL**



The lightning flash with an 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 to persons.



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.

**INFORMATION** - This equipment has been tested and found to comply with 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.

**WARNING** - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

**CAUTION** : To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

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

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## Warning

### **The camera requires periodic inspection.**

Contact an authorized technician to carry out the inspection.

### **Stop using your camera when you find it malfunctioning.**

If the camera emits smoke or is unusually hot for a long period, a fire may be caused.

### **Do not install the camera on a surface that can not support it.**

If the camera is installed on an inappropriate surface, it may fall and cause injury.

### **Do not hold plug with wet hands.**

It could cause an electric shock.

### **Do not disassemble the camera.**

It may result in an electric shock or other hazards.

### **Do not use the camera close to a gas or oil leak.**

It may result in a fire or other hazards.

## Precautions

Do not install the camera in extreme temperature conditions.



Only use the camera under conditions where temperatures are between 41°F ~ 104°F. Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.

+90%

It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.



Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.



This is one of the most important parts of the camera. Be careful not to leave fingerprints on the lens cover.

Do not drop the camera or subject it to physical shocks.



It can cause malfunctions to occur.

Never keep the camera pointed directly at strong light.



It can damage the CCD.

Do not expose the camera to rain or spill beverage on it.



If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

Do not expose the camera to radioactivity.



If exposed to radioactivity the CCD will fail.



#### Notes

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Check that the power satisfies the normal specification before connecting the camera.

## Components

1. RP2 Device



2. Video Cable



3. Power Adapter  
DC 12V/1A



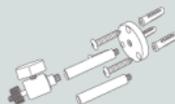
4. Power Extension Cord



5. 4GB SD Card



6. Mounting Hardware  
3 Screws & Anchors



7. BNC to RCA Adaptor



8. Instruction Guide

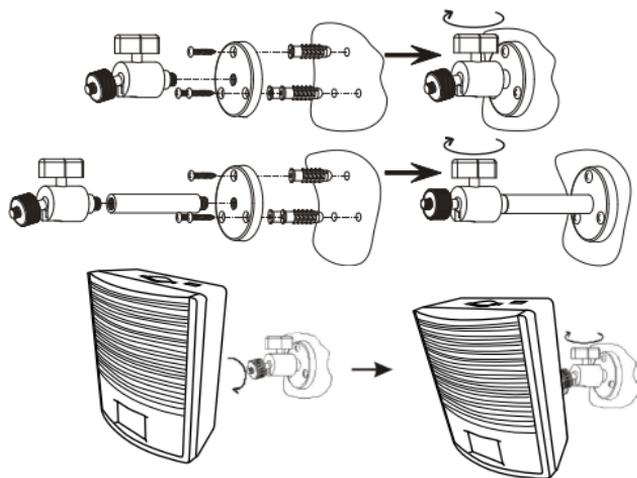


9. Remote Control

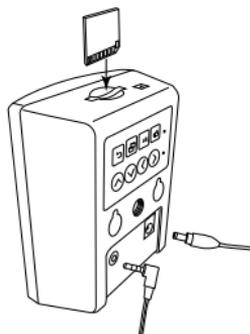


## Installation

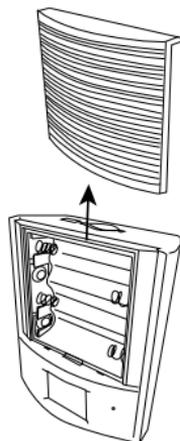
Mounting with included wall mount bracket



SD-Card Insertion, Video Output,  
DC Power Supply

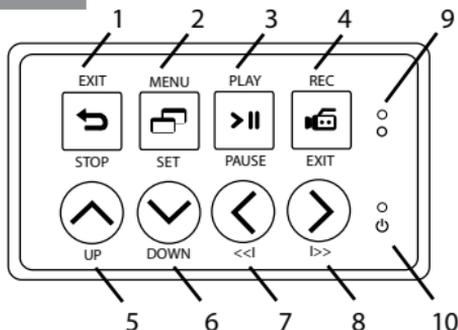


Battery Compartment Access



## Operation

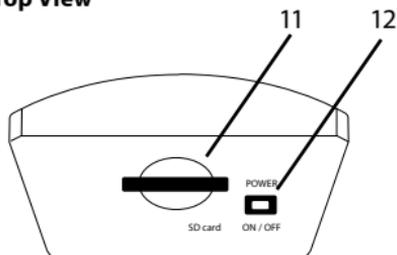
### ● Button Functions



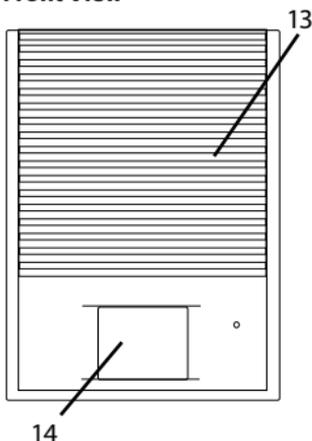
No.	Name	Function
1	Exit / Stop	Stop record / Play, or Exit sub-menu
2	Menu/Set	Menu: Confirm or open sub menu Live View: Open main menu
3	Play/Pause	Live View: Start playback Playback: Pause playback, press again to continue playback
4	Rec/Exit	Live View: Start menu recording Recording: Stop recording
5	Up Button	Menu: Navigate up
6	Down Button	Menu: Navigate down
7	Left Button	Menu: Decrease value Playback: Fast rewind Playback Paused: Step rewind
8	Right Button	Menu: Increase value Playback: Fast forward Playback Paused: Step forward
9	Recording Indicator	LED Red: Device is recording LED Flashing: SD-Card is not inserted LED Off: Device is not recording
10	Power Indicator	LED Green: Device is On LED Off: Device is Off

## Operation continued

**Top View**



**Front View**



No.	Name	Function
11	SD Card Slot	SD card storage connection - SD card should be inserted with the label facing the front of the device. *Fast Flashing: SD-Card not inserted SD-Card capacity is reached SD-Card failure SD-Card write-protected SD-Card not inserted & playback activated *Solid Red: Recording activated
12	Power Switch	Recessed power switch
13	Battery Cover	Push upward to remove cover & access battery compartment
14	Lens Window	Mirrored surface conceals lens from view

## ● Initial Start Up

1. To turn the device ON / OFF:
  - Move the switch on the top of the device to the on or off position. This switch is slightly recessed to prevent accidental or unwanted switching.

NOTE: Each time after power-on, the system auto-detects its peripherals. When the REC LED flashing indicates that the SD card is proceeding testing (complete boot time is several seconds) When an image file error has been detected, the system will display error message on OSD.

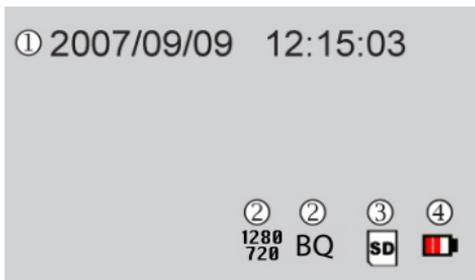
2. The default menu language is English. To change the languages:
  - Select item [POWER ON SETUP] in the main menu. Here you can change the language of the menu.
3. After successful start-up the recorder shows the live view.
  - If schedule recording has been programmed, the device will automatically resume this schedule.
  - During recording the REC LED indicator will be solid red.
4. If the symbol [] is shown, the SD-Card has not been recognized, or the SD-Card is inserted improperly.
  - If the SD-Card cannot be recognized the REC LED flashes red. In this case, erase the SD-Card contents, or re-format the card.
5. If the write-protection lock on the side of the SD-Card is activated, it is only possible to read recorded data.
6. When SD card is writing data during recording, record indicator will light on.
7. After power-loss the system auto returns to the previous recording mode.



### Attention

- Never remove the SD-Card during the boot process. This can lead to permanent damage of recorded data.

## ● Live View



If the video output of the device is connected to a monitor, you can view the live images on the monitor. The following icons may be shown:

No.	Live View Function
1	Shows the current date and time.
2	Shows the recording setup:  Shows the recording resolution  Shows the recording quality
3	Shows the status of the SD card:  SD-Card has been removed or SD-Card cannot be recognized  SD-Card is being checked  SD-Card has been recognized  SD-Card will be overwritten
4	Shows the battery status:  100% battery power  60% battery power  30% battery power  Battery is empty and has to be recharged / DC Power Connected

### Attention

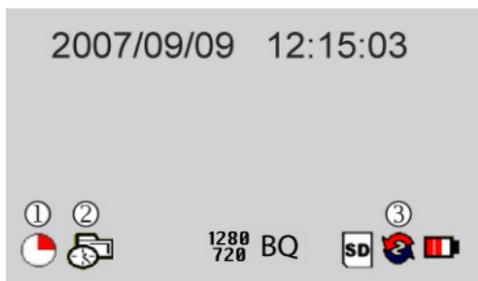
- If no SD-Card is inserted only live view is possible.
- Press  button on remote controller, You will see the status of LED in front of case. This status LED will help you check the device recording status when not connected to an external monitor.

\* Continuous light for 3 seconds : In recording mode.

\* Slow flash for 3 seconds : In live, play back, or menu mode.

\* Quick flash for 3 seconds : SD-Card is not inserted, SD card failure, or device malfunction.

## ● Recording View



No.	Recording View Function
1	Record Status:  Device is recording data
2	Record Mode:  Manual Record  Motion Detection  Schedule Record
3	Record Storage Mode Status:  Overwrite is activated

There are three different ways to start recording:

Symbol	Mode	Start Recording Function
	<b>Manual</b>	Press [  ] button to start recording
	<b>Schedule Recording</b>	Enable schedule recording in the menu.
	<b>Motion Detection</b>	As soon as device detects motion, the device starts recording. Motion detection must be setup in menu to be active.

Press [  ] to stop a manual recording.

Press [  ] to stop recording and enter play mode.

## ● Recording View continued

To continue the recording following a stop or pause, proceed as follows:

Mode	Continue Recording Function
Manual	Press [  ] button again
Schedule Recording, Motion Detection	Exit playback or menu

1. The event status is determined by the system recording, according to the order of priority. The order of priority is: Manual, Motion, and then Schedule Record.

2. Different recording modes can have different recording parameters (video size, recording frames, and video quality).

When the different recording modes are triggered, the system starts recording according to the set parameters. This kind of design provides flexibility to ensure efficient recording time and quality.

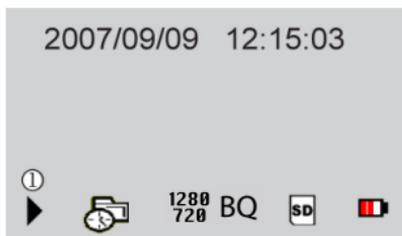
**Example:** *Work hours [Schedule Record] from 8:00am to 5:00pm, are setup to low video quality with less recording frames to extend the recording time. Non-work hours, [Motion Record] setup to enable high video quality with the highest recording frames, when an event occurs.*

3. The record LED flash indicates that the system is currently loading files on to the SD-Card.

- Do not withdraw the SD-Card while recording. It may destroy the stored data.
- Power loss during recording results in incomplete videos or errors.
- Video loss during recording, the system stops recording, will backup the files, and when the videos signal is normal again, the system will continue recording.

## ● Playback View

To start playback, you can decide between two different modes:



### Normal Playback

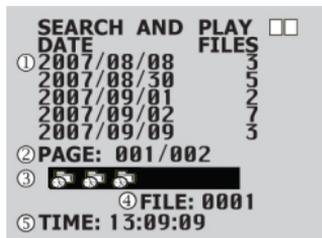
During live view press the playback/pause [ >|| ] button to start normal playback:

Symbol	Normal Playback Function
▶	: Normal playback speed
◀▶	: During the normal playback press [ ◀ ] or [ ▶ ] button to rewind or fast forward. By pressing in the same direction again you raise the search speed (Speed: x2/ x4/ x8/ x16/ x32). Press [ >   ] button to playback at normal speed.
	: During playback, press [ >   ] button to pause playback and press again to return to playback status.
◀▶	: After pressing Pause button you can search picture by picture, using [ ◀ ] or [ ▶ ] button. Press [ >   ] button to playback at normal speed.

Press the exit/stop [ ⏏ ] button to stop playback and return to live view.

### Event List

In order to open the search menu open the main menu and select the menu item SEARCH & PLAY.



No.	Event List Function
1	The file view shows the date of recording and the number of files belonging to the recording. To navigate press the direction button up or down and press [  ] button to playback. To return to the selection mode press the exit/stop button.
2	Shows the number of pages.
3	Record Mode:  Manual Record  Motion Detection  Schedule Record
4	Press the direction button right or left in order to show the first picture of the event.
5	Shows the time of the recording.

## Playback Using a Computer

All files on the SD-Card are stored in a folder named DVH264 and will have an approximate size of 3MB ~100MB, and will be ordered chronologically. These files can be viewed with Microsoft® Media Player or DivX Player. In order to playback the files correctly, an update to the video codec of the Windows Media Player may be necessary.

## SD-Card Maintenance

1. The device supports only FAT32 file system- it is unable to determine other file systems. Please format the SD card (enter [MENU/ SD CARD OPTIONS] and select "Format").
2. The system supports only partial SD card file system repair. The system is unable to detect any file system damage, therefore please format the SD card (enter [MENU/ SD CARD OPTIONS] and select "Format").
3. When using SD card, you need to choose class 10 or above.

## Firmware Update

Use the SD-Card to update your system firmware.

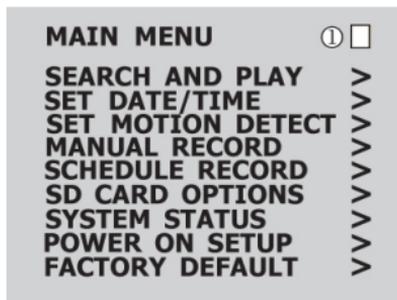
1. Using your computer, copy new firmware into the directory of the SD-Card.
2. Insert the SD-Card into the device, switch off the main power and then restart.
3. Wait for 10-20 seconds, the system update will be completed and return back to live mode. You can check your version number in [MENU/ SYSTEM STATUS].



Do not remove the SD-Card while booting, if a power-loss occurs while completing step 3, please repeat steps 2 and 3.

## System Settings

### ● Main Menu

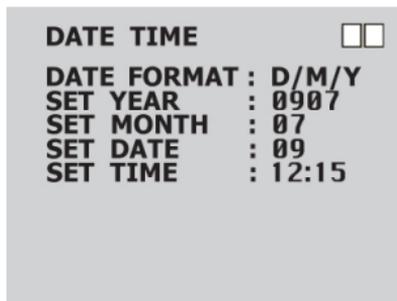


1 In the top right corner the menu level is shown:

□	First level (main menu)
□□	Second level
□□□	Third level

- Press [▲] or [▼] buttons to navigate.
- To confirm or select press [Enter] button.
- Press [◀] or [▶] buttons to change the value.
- Press [Esc] button to leave the menu.

## ● Date/Time Setup

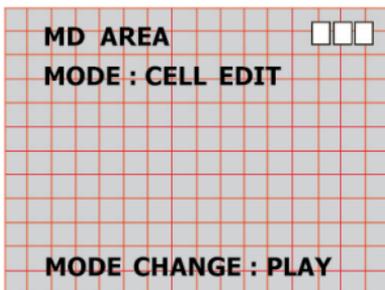


- **Date Format** : Here you can change the way the date is displayed.
- **Date/Time Adjustment** : Here you can change the date and time.

## ● Motion Setup

### Set MD Area

The motion detection area is split up into 16 x 12 cells. Cells which are marked to detect motion are displayed in red. One or more red cells form a block.



## ● Motion Setup continued

In order to navigate use [   ] buttons and confirm by pressing [] button. Press [] record button in order to change the editing mode.

- **CELL EDIT** : Here you can (de-) activate every single cell.
- **DEL BLOCK** : Here you can deactivate a complete block of cells.
- **DEL ALL** : Here you can deactivate all cells at once.
- **ADD BLOCK** : Here you can activate a complete block of cells.
- **ADD ALL** : Here you can activate all cells at once.

## Set MD Sensitivity

Here you can set the sensitivity of motion detection.

- **MD ENERGY** : Shows the current recognized motion.
- **MD THRESHOLD** : By pressing the buttons [] or [] you can set the value when motion detection is triggered. The lower the value is set the more sensitive motion detection reacts.

## ● Manual Record



## ● Manual Record continued

### – VIDEO SIZE / FRAME RATE:

Here you can change the video size and frame rate for the manual recording.

Video Size	640 x 480		1280 x 720		1920 x 1080		
Max. Frame Rate	1 fps	2 fps	4 fps	10 fps	15 fps	20fps	30fps

*Note : Max. frame rate is 25 fps for 1920 x 1080*

### – QUALITY:

Here you can choose between three recording qualities:

• High (HQ)    • Normal (NQ)    • Basic (BQ)

### – BRIGHTNESS: Adjustable 0~9

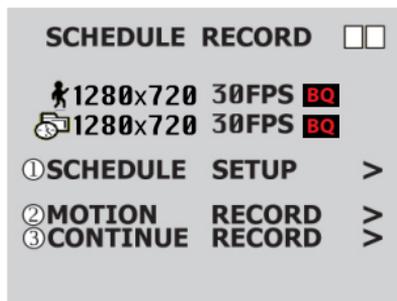
### – SHARPNESS: High / Normal / Basic

### – MODE: Off / Fixed

### – GAIN: X2 / X4 / X8

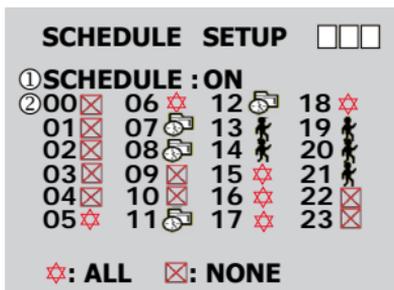
## ● Schedule Record

Here you can see a short summary of the settings for motion and continuous recording.



No.	Mode	Schedule Record Function
1	SCHEDULE SETUP	Activate / Deactivate the schedule and the recording settings.
2	MOTION RECORD	Settings for the motion detection.
3	CONTINUE RECORD	Settings for continuous recording.

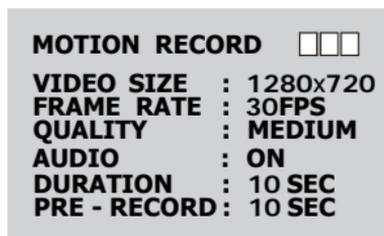
## Schedule Setup



No.	Mode	Schedule Setup Function
1	SCHEDULE	Recording ON / OFF (default value is OFF)
2	00 - 23	<p>With [▲] and [▼] buttons you can navigate between the hours.</p> <p>Press [◀] or [▶] to change the recording types.</p> <p> : Motion detection   : Continuous recording   : All modes active   : No mode active</p>

## Motion Record

Here you can change the settings for the motion detection.



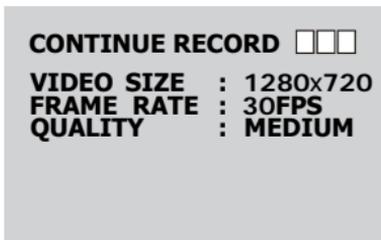
## ● Motion Record continued

### – Motion record functions:

- **VIDEO SIZE** : Here you can set the recording resolution.
- **FRAME RATE** : Here you can set up how many fps to be recorded.
- **QUALITY** : Here you can set the recording quality.
- **DURATION** : Here you can set how long the device shall record after motion has been detected.
- **PRE-RECORD**: Here you can set the amount of footage that will be saved before an event is triggered.

## Continue Record

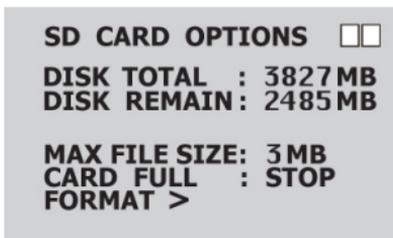
Here you can change the settings for the continuous recording.



### – Continuous record functions:

- **VIDEO SIZE** : Here you can set the recording resolution.
- **FRAME RATE** : Here you can set up how many fps to be recorded.
- **QUALITY** : Here you can set the recording quality (LOW / MEDIUM / HIGH). The higher the quality, the better the playback image, but the recording requires more space.

## ● SD-Card

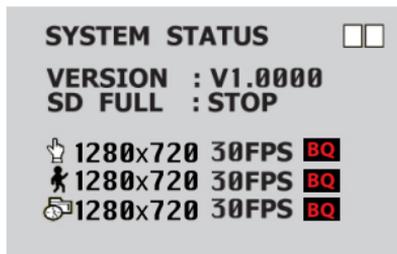


### – SD-Card functions:

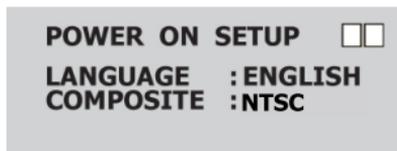
- **DISK TOTAL** : Shows the total capacity of the inserted SD-Card.
- **DISK REMAIN** : Shows the remaining capacity of the inserted SD-Card.
- **MAX FILE SIZE** : Here you can set the max. file size (3 ~ 100 MB) of a recording. If the size is reached a new file is created.
- **CARD FULL** : Here you can choose what happens when the total capacity of the SD-Card is reached:
  - **STOP** : The recording is stopped.
  - **LOOP** : The recording continues. The oldest files are replaced by the new recordings.
- **FORMAT** : Here you can format the SD-Card. All data will be deleted, and a new .

## ● System Status

Here you can find a summary of the firmware version and the recording settings. Press exit/stop to return to the main menu.



## ● Power on Setup

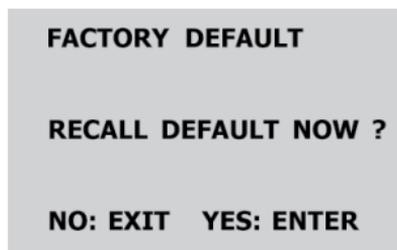


– Power On Functions:

- LANGUAGE : Here you can set the OSD menu language.
- COMPOSITE : Here the video standard for the video output is shown.

## ● Factory Settings

Here you can reset all settings, except Date and Time, to factory default.



- Press [- To back up, press [

## Possible Recording Times

32GB SD-Card (example)	Frame Rate Resolution	30 fps at 640x480	30 fps at 1280x720
	Quality		
	High	134 Hrs.	TBD
	Normal	290 Hrs.	TBD
Basic	434 Hrs.	TBD	

Recording times are approximate. Design and specifications are subject to change without notice.

## Troubleshooting

If you have trouble operating your device, refer to the following table. If the guidelines do not enable you to solve the problem, contact Clinton Electronics Technical Support at 1-800-549-6393 or 815-633-1444.

Problem	Solution
<b>Why is the power button not functioning?</b>	<ul style="list-style-type: none"><li>• Ensure the power cord is fully engaged.</li><li>• Check the battery power, insert new batteries if necessary.</li></ul>
<b>Why does the system auto reboot during normal operation?</b>	<ul style="list-style-type: none"><li>• It indicates that an SD-Card error has been detected. To enable data completeness, monitoring procedure will reboot the device. After device reboot the system returns to the status before reboot (ie. returns to Manual Record or Schedule Record).</li></ul>

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