

***innovision***<sup>®</sup>  
**OPTICS, INC.**



**Spintec Rain Deflector  
Owner's manual**

Innovision Optics Inc 1719 21st Street Santa Monica, CA 90404  
Tel: 310-453-4866 Fax: 310-453-4677 [www.innovision-optics.com](http://www.innovision-optics.com)

## **Letter from the inventor.**

Dear Cameraman,

For the past 19 years I have operated in the field as cameraman and producer. One of my major frustrations was a raindrop hitting the lens of my camera. This visual disturbance was unacceptable.

As we all know, television creates the illusion that there is nothing between the viewer and the action. One drop of rain scatters that illusion. Time and again that disturbance forced me to stop shooting and clean the lens. A few moments later I had to do it all over again. Therefore, using my experience as a news cameraman and producer, I set myself the goal to look for a solution that would give me a real time solution to get rid of that disturbance.

The technology available for at least 20 years was the use of a spinning glass in front of the lens. This did an excellent job of cleaning the lens in real time, but it resulted in a big piece of equipment that required a separate power source and had a very strong gyro effect. It made those devices unsuitable for day-to-day use.

For three years I worked on the development of a device that would give me a total solution. It had to protect the camera against rain and snow, and at the same time block any interference of water drops or snow flakes with the optics.

I'm very happy that I achieved this with the RD series. I hope that all my fellow cameramen will accept this, and help me make this problem a thing of the past.

Sincerely,

Daniel Sherwin

## **Description**

The Rain Deflector was designed using the highest quality standards and materials to ensure the delivery of a product with long life and reliable performance.

The most important features of this Rain Deflector are the complete absence of any gyro effect and, since it is light, a minimal inertia, and a low power consumption. All these features make it a very handy tool.

We understand that speed is of essence. Therefore we made the Rain Deflector snap on the lens or mount on rods. The included rain cover protects the camera. The battery of the camera powers the unit. The housing is equipped with a sun cover to contain spun off water.

**Read this first.**

1. The Spintec Rain Deflector is an electro-mechanical device. Please handle with care.
2. Read instructions.  
All the safety and operating instructions should be read before the Spintec Rain Deflector is operated.
3. Retain Instructions.  
The safety and operating instructions should be retained for future reference.
4. Heed Cautions.  
All warnings on the Spintec Rain Deflector and in the operating manual should be adhered to.
5. Follow instructions.  
All operating and use instructions should be followed.

**Set up.**

Requirements for set up.

Before you take your Spintec Rain Deflector out of the box, locate the following parts:

- Rain Deflector
- Snap-on rings (3)
- Camera rain cover
- Power cable (open ended)
- Lens cap (front and back)

Installing the Spintec Rain Deflector

Lenses with internal or external focus require a different procedure.

External focus

Since the front ring of a lens with external focus turns, the clip-on feature cannot be used. Instead use standard ARRI or Chrosziel 15 mm rods.

1. Attaching the rod support bracket.
  - Take off the back lens cover.
  - Place the bracket onto the back of the Rain Deflector, making sure that the screw grooves are facing you.
  - Use a 1.5 mm Phillips screwdriver to tighten the 5 screws (provided).

## Set up (cont.)

2. Adjusting the brackets and the rods.

Caution: Make sure that the Rain Deflector easily slides over the lens.

- Use an M3 Allen wrench to adjust the height of the Rain Deflector to the center diameter of the lens.
- Move the rods for side-by-side adjustment.
- Tighten the clamping screw to secure the Rain Deflector.

3. Inserting the Rain Deflector into the rain cover.

- Put the lens cover back on. This avoids making fingerprints on the filter glass while installing the Rain Deflector. It also makes it easier to unscrew the sunshade.
- Unscrew the sunshade and the clip-on locking knob. You do not need the latter for this application.
- From the inside insert the Rain Deflector into the rubber frame of the camera rain cover. Make sure both draining holes of the Rain Deflector line up with those of the rain cover. The rubber of the rain cover should sit snug around the Rain Deflector.
- Screw the sunshade back on (approximately 3 ½ turns). Do not force the sunshade onto the Rain Deflector as this may damage the threads. Before tightening, make sure the rubber of the rain cover is not squeezed between the Rain Deflector and the sunshade.

4. Inserting the cable.

- Solder the appropriate connector onto the open end of the cable. Shorten the cable if necessary. There is no difference between polarities.
- Thread the cable through the loops on the inside of the rain cover. Close the Velcro loop to secure the cable.
- Connect the Limo to the Rain Deflector.

5. Mounting the Rain Deflector.

- Turn the focus to its extended position.
- Take off the back cover.
- Slowly slide the Rain Deflector onto the rods. Make sure there is no contact between the spinning glass and the lens frame.  
Caution: Any contact, however slight, between the lens front and the rotating filter will damage the filter beyond repair.
- Tighten the clamping screw to secure the Rain Deflector.

6. Finishing.

- Wrap the rain cover over the camera, while inserting the cable connector into the power source.
- Take off the front lens cover.

## Set up (cont.)

### Internal focus:

1. Inserting the Rain Deflector into the rain cover.
  - Leave the lens covers on. This avoids making fingerprints on the filter glass while installing the Rain Deflector. It also makes it easier to unscrew the sunshade.
  - Unscrew the sunshade and the clip-on locking knob.
  - From the inside insert the Rain Deflector into the rubber frame of the camera rain cover. Make sure both draining holes of the Rain Deflector line up with those of the rain cover. The rubber of the rain cover should sit snug around the Rain Deflector.
  - Screw the sunshade back on (approximately 3 ½ turns). Do not force the sunshade onto the Rain Deflector as this may damage the threads. Before tightening, make sure the rubber of the rain cover is not squeezed between the Rain Deflector and the sunshade.
  - Insert the clip-on locking knob.
  
2. Inserting the cable.
  - Solder the appropriate connector onto the open end of the cable. Shorten the cable if necessary. There is no difference between polarities.
  - Thread the cable through the loops on the inside of the rain cover. Close the Velcro loop to secure the cable.
  - Connect the Limo to the Rain Deflector.
  
3. Step-down ring.
  - Slide the appropriate step-down ring over the front of the lens.  
Caution: Make sure the stop rim is facing the front of the lens.
  
4. Mounting the Rain Deflector.
  - Take off the back lens cover.
  - Slide the Rain Deflector over the step-down ring.  
Caution: If mounted correctly, there will be no contact between the spinning glass and the lens frame. Any contact, however slight, between the lens front and the rotating filter will damage the filter beyond repair.
  - Firmly tighten the locking knob.
  
5. Finishing.
  - Wrap the rain cover over the camera, while inserting the cable connector into the power source.
  - Take off the front lens cover.

**Operation.**

Start the Rain Deflector by using the on/off switch on the left side of the unit.

The Rain Deflector makes a slight noise and slightly vibrates while in operation. This is normal.

**Guidelines:**

- Do not touch the glass while it is spinning.
- Do not use the Spintec Rain Deflector under water.

**Storage.**

- Disconnect the power plug.
- Fold back the rain cover.
- Unscrew the clamping screw or the locking knob.
- Slide off the Rain Deflector from the camera.
- Shake off the excess water.
- Attach the front and back lens covers.

Note: There is no need to dismantle the Rain Deflector from the rain cover for storage.

**Cleaning the rotating filter.**

Caution: Do not attempt cleaning the filter while the Rain Deflector is mounted on the camera.

- Unscrew the sunshade.
- Take off the back lens cover.
- Simply push on the rim of the glass filter, while slightly rotating. The glass will pop free from the driving wheels. Take out the filter.
- Use soap and water to rinse.

Caution: Do not apply excessive pressure to the black ring of the glass, as you may damage it.

- Carefully insert the filter between the four driving wheels by slightly rotating the filter.

Note: Apply light pressure on the black ring of the glass. This will prevent smearing of the filter glass.

Caution: Do not attempt to clean the glass while it is spinning. It may cause injury.

- Put the back lens cover on.
- Screw the sunshade on.

Recommendation: If seawater has hit the Rain Deflector, let it spin while spraying clean water on the filter. This will clean out the salt water inside the case via the drain holes and thus avoid corrosion.

**Technical specifications.**

Dimensions: 142 mm (W) x 120 mm (H) x 38 mm (D)

Power: DC between 10.8 V and 12 V @ 700 mA

Weight: 437g (excluding bracket and rain cover)

Noise: 40 dB maximum

Operating Temperature: -20° C to + 35° C

Speed of spinning glass: over 50 rps (3000 rpm) at 12 V

Mounting: Clip-on for internal focus

Bracket to use with 15 mm rods for external focus

Rain cover: custom made and manufactured by Kata for Spintec.

**Attachments.**

Do not use attachments not recommended by Spin Technologies, Inc., as they may cause hazards.

**Limited Warranty.**

During the warranty period, any defective parts will be replaced if the unit is brought in, or delivered to a Spin Technologies Inc. Service Center.

To obtain warranty service you must ship the unit collect to Spintec, 205 Ben Zait Street, Jerusalem, Israel, email: daniel@spintec.co.il, or deliver it to your dealer in either the original package or a similar package that will offer the same degree of protection.

This warranty does not cover a unit

- That has been previously altered, repaired or serviced by anyone other than a dealer or Spintec.
- That has been subject to mishandling in transit, accident, misuse, vandalism, neglect, abuse, lack of reasonable care (including rental to others) or operated contrary to the instructions contained in the accompanying manual.
- On which the serial number has been altered or removed.

This warranty is valid worldwide and applies to product purchased from a Spin Technologies Inc. dealer. You must retain the dealer's dated bill of sales as evidence of the date of purchase.

Repair and replacement as provided under this warranty are the exclusive remedy of the purchaser. Spin Technologies Inc. shall not be liable for any incidental or consequential damages resulting from the use of the unit or arising out of any breach of any express or implied warranty on this product. All expressed and implied warranties, including the warranties of merchantability and fitness for a particular purpose, are limited to the one-year warranty period.

**Registration Card.**

Model No.:

Serial No.:

Date of Purchase:

Purchased from:

Address:

Your Name:

Address:

Your facility is A: TV Station/Cable; B: Corporate/Industrial; C: Educational; D: Rental; E: Other

Number of cameras at your facility for outdoors use?

What kind of lenses do you use?

What features would you like to add or change to improve Spintec's Rain Deflector?

We would like to hear from you. If you have access to the Internet, we would appreciate you filling out a registration on line. We would like to know what for and where you use the Spintec Rain Deflector. If not we would appreciate that you mail us the enclosed registration card.

If you like to submit an article for our web site about your production with the Spintec Rain Deflector please email to [peter@spintec.co.il](mailto:peter@spintec.co.il).