

# Operating instructions

**JETCAM**   
4.0



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# Preface

Please read through these instructions for use carefully.  
It contains valuable instructions on correct use of the JetCam, but also tips for effective operation.

We wish you all the best when using it.  
Team OPTRONIC

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## Warnings



- For cleaning, do not use any high-pressure cleaners
- Do not place any heavy objects on the device
- Do not perform repair work by yourself, consult an authorised customer service. Otherwise, the manufacturer guarantee shall be invalidated!
- Do not use when the cable is damaged.

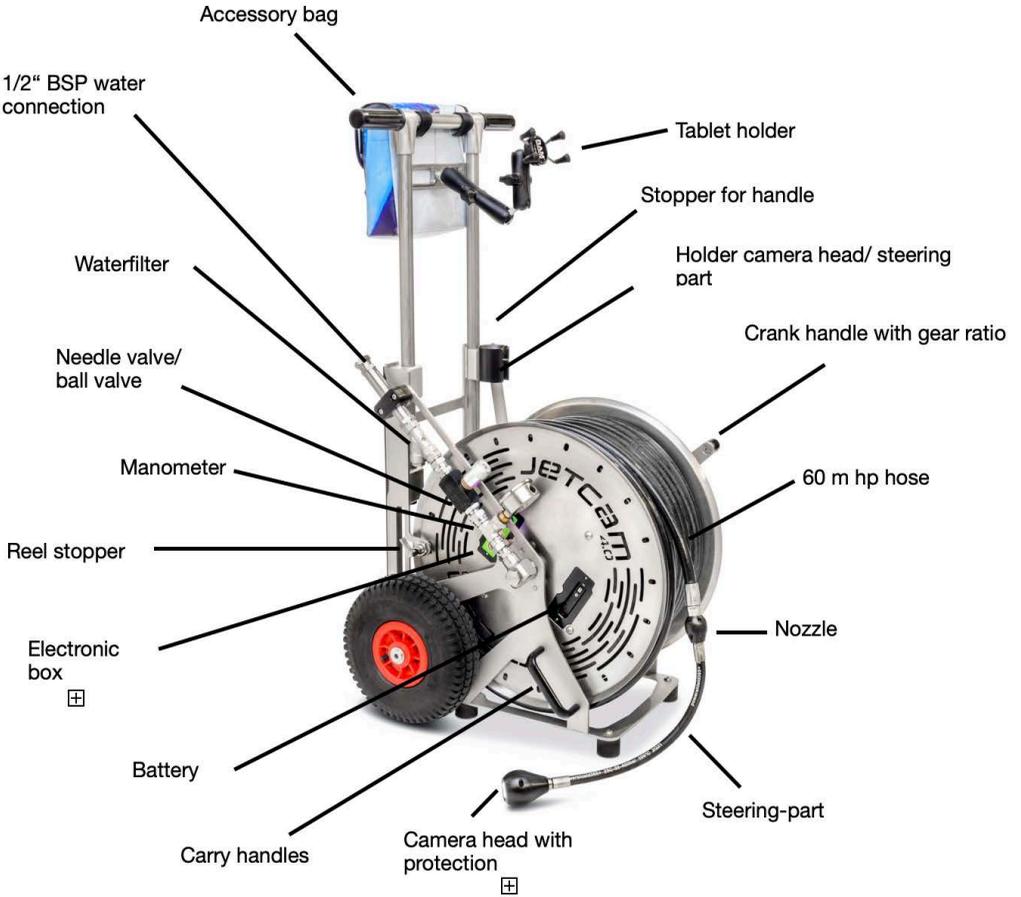


- This system must be disposed of in a professional manner and must not be disposed of with domestic waste.

## Quality characteristic

Components of the JetCam, such as camera head, impact guard, steering piece, high-pressure hose may have minimal scratch marks when being delivered. These marks are the result of our end test.

# Component description



# Factsheet

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|  |
|--|
| <b>Highend steelcart with:</b>             |
| 1/2" waterconnector with BSP female thread |
| Waterfilter                                |
| Ballvalve                                  |
| Pressure gauge                             |
| Hand crank with gear ratio                 |
| Camera holder                              |
| Reel brake                                 |
| Pneumatik tyres                            |
| Rails to unload                            |

|  |
|--|
| <b>Control unit 4.0</b>                          |
| Controllable via tablet with Sewerlink App incl: |
| Protection class IP 64                           |
| Data type in                                     |
| Light regulation                                 |
| Recording  |
| Battery display                                  |
| Location 512 Hz                                  |
| Precise meter counter                            |

|                    |                              |
|--------------------|------------------------------|
| <b>Camerahead:</b> | Incl. impact guard           |
| Diameter range:    | DN 50 - 300                  |
| Steerable from:    | DN 50                        |
| Housing:           | Stainless steel, 32 mm, 50mm |
| Resolution:        | 560 TV lines/ PAL            |
| Optic:             | Wideanglevision, 145°        |
| Focus:             | Fix                          |
| Illumination:      | 9 LEDs up to DN 300          |
| Waterproof:        | IP68 up to 5 bar             |

|   |
|---|
| <b>Steeringpart:</b>  |
| Hp hose 35 cm, electronically assembled                             |
| 1 x steering nozzle   |
| Standart cleaning nozzle ENZ with 6 jets (1,1 or 1,2 mm), screwable |
| Plugable at camera head side  |

|                                     |
|-------------------------------------|
| <b>Dimension:</b>                   |
| Weight: 54 kg                       |
| Folded down:(LxWxH) 60 x 48 x 77 cm |

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**Battery:**

Lithium Ion Battery

Power cable with magnetic connection

Working hours &gt; 7 h

Battery voltage: 14.4 V DC

Charging voltage: 17 V DC

Output: 6.9 Ah (for app. 10 operating hours)

Charging time: app. 7 hours

**Possible hazards !**

Lithium-Ion batteries are sealed gas tight and are harmless as long as they are used and handled in line with the manufacturer regulations.

**Warning !**

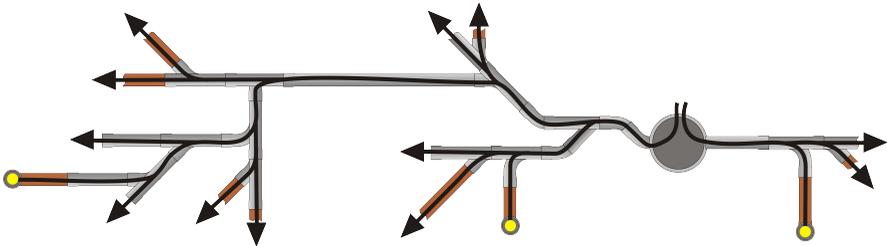
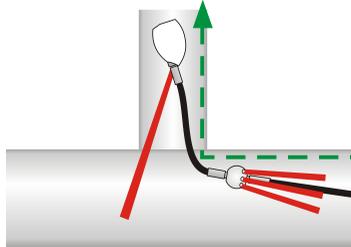
Never use battery chargers that are not intended for the battery type!

Do not short-circuit. Do not damage mechanically (puncture, deform, dismantle, etc.) Do not heat above the permissible temperature or burn. Keep batteries away from smaller children. Always store batteries dry and cool.

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## Instructions for use

The JetCam has been optimally designed for your tasks in diameters from **50 to 300 mm**



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## Preparation

Please make sure that the following are available at the operating location:

- a jetter, where the output corresponds approximately to:
  - 40 - 60 litre / min. 100 - 150 bar for JetCam with 3/8" hose
  - 60 - 80 litre / min. 100 - 150 bar for JetCam with 1/2" hose
- 2 open-ended spanners, 27mm for connecting the high-pressure hose of the jetter to the JetCam
- Charged battery:  
Please note that the rechargeable battery of a brand-new system is not fully charged when delivered.

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# **Preparatory measures**

## **On the camera**

Make sure that the camera head is cleaned. To ensure for a clear view as long as possible, the sapphire glass and the macrolon must be cleaned before or after being used each time.

## **Changing the camera head**

When fastening the camera head, make sure that the

- fit on the camera head and steering part match each other precisely.
- spring washer (13 x 1.5 mm) is inserted.
- sealing ring is present and is not damaged.

Ideally operate camera head with Mugel (protection)

The Mugel is used to protect the camerahead and internal mechanics from excessive abrasion and excessive acceleration forces. In addition, the alignment of the camera head partially depends on the Mugel.

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## Water side

- Connect the **hp-hose of the jetter** with 1/2" BSP external thread to the JetCam (two 27 mm open-ended spanners are required for this purpose)



- Make sure that **ball valve is completely opened**.



- **Clean steering nozzle** and nozzle inserts of the nozzle. These may not be clogged. The cleaning and feed behaviour is influenced significantly by this.



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# Commissioning

- Download and install the software (Sewerlink) for smartphone, tablet, Wifi monitor or Laptop at <https://www.wincan.com/en/support/downloads/>.  
Operating instructions for Sewerlink:  
<https://www.wincan.com/en/support/documentation/>
- Pull out the reel trolley completely
- Switch the system on / off using the knob on the control box  
Switching-on: Press the pushbutton ~1 sec.  
  
Switching-off: Keep the pushbutton pressed for ~3 sec.  
-> LED flashes  
then press the pushbutton ~1 sec.



- After switching on the system, the Wlan connection must be established via the tablet, smartphone or laptop used.

Network name: DrainSteer SN\*  
Password: 12345678

After a Wlan connection has been received, the system connected is displayed in the app.

- Take the camera out of the holder
- Unlock the stopper on the reel
- Position the camera at the start of the pipe

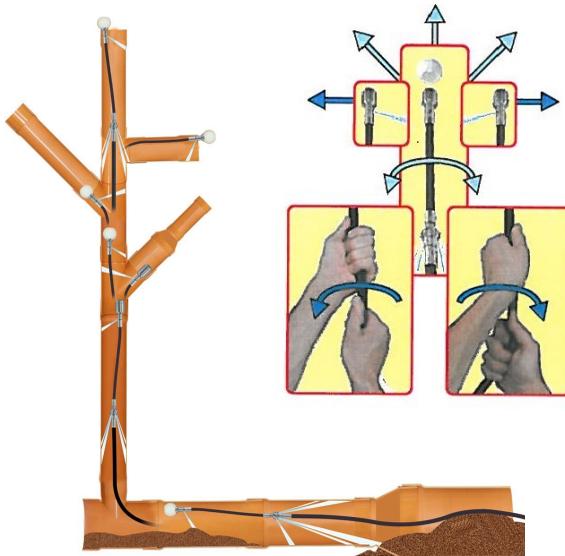
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## Cleaning/inspection with the JetCam

To avoid water damage or water leaking in an uncontrolled manner, the camera head along with steering part must be completely inserted into the pipe to be inspected.

Before the system is supplied with pressurised water, hold the hose tight in order not to lose control over the system!

- Become a feeling for the pulling behaviour of the hose
- Become a feeling for the drifting behaviour of the camera head (by the steering nozzle)
- The steering nozzle steers the camera head into branches/ laterals/ over dirt.



- You can control the drifting behaviour by twisting the hose (with or without strap) in the desired direction.
- The steering nozzle is always aligned downwards from the camera so that the top side of the camera image is decisive for the direction that should be travelled.  
If a branch can be seen in the camera image, the camera head must be aligned by twisting on the hydraulic hose so that the branch is in the upper area of the camera image.

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## **Elbows**

If this should be a problem, the steering nozzle may be aligned in an unfavourable angle to the pipe and thus may even prevent it from being travelled over.

*Solution:* Pull back the hose, twist and as a result, move the elbow at a different angle.

## **Branches, T-pieces**

Move to the branch or T-piece in the position (by twisting the hose) in which you see the branch or T-piece in the "12 o'clock" position. This guarantees that the steering nozzle acts precisely against the branch or T-piece. Slowly thread-in and run in.

## **Moving over soiling / obstacles**

Similar as described in "Branches, T-pieces" above, twist the hose until the soiling can be seen in the 6 o'clock position. This allows the soiling to be run over and if necessary, removed.

## **Pipe cleaning**

The best cleaning result (depending on the local circumstances) can be achieved with:

- 150 bar, 40 - 60 litres (JetCam with 3/8" hose)
- 150 bar, 60-80 litres (JetCam with 1/2" hose)
- Nozzle set, rotation nozzle, front jet

## **Cleaning the nozzles:**

Steering nozzle/ jet:

for cleaning the steering nozzle, the nozzle always has to be disassembled otherwise the reason for the blockage is guided back into the inside and creates another blockage.

Nozzle:

Disassembly of the nozzles is also a requirement for cleaning the nozzle inserts/ jets.