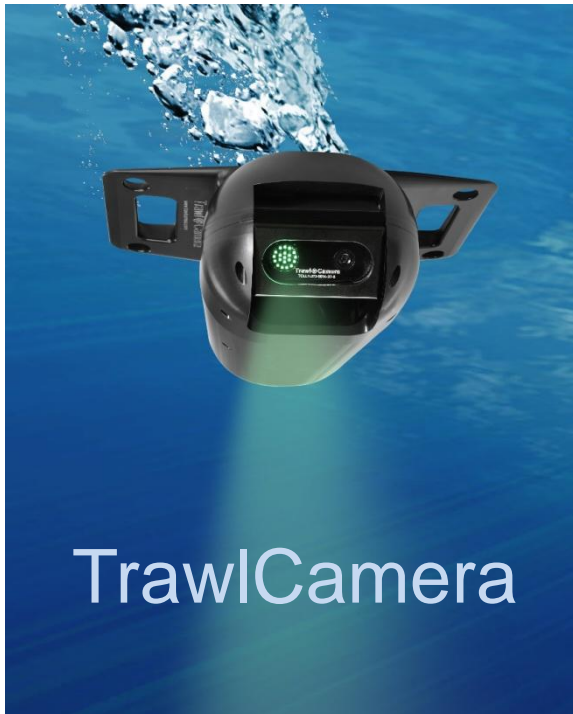


Manual



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Release date: 01/16

Introduction

This manual is a combined manual for the three products:

- **TrawlCamera DeepWater**
- **TrawlCamera Colour**
- **TrawlCamera LED**

TrawlCamera DeepWater and TrawlCamera Colour are similar products - except for the black/white or colour recordings. Therefore the usage of these two products is the same.

Before you use the product for the first time, we strongly recommend that you read the relevant chapter carefully.



Product list

Serial numbers:

Black housing

Tank

Front

Remote control

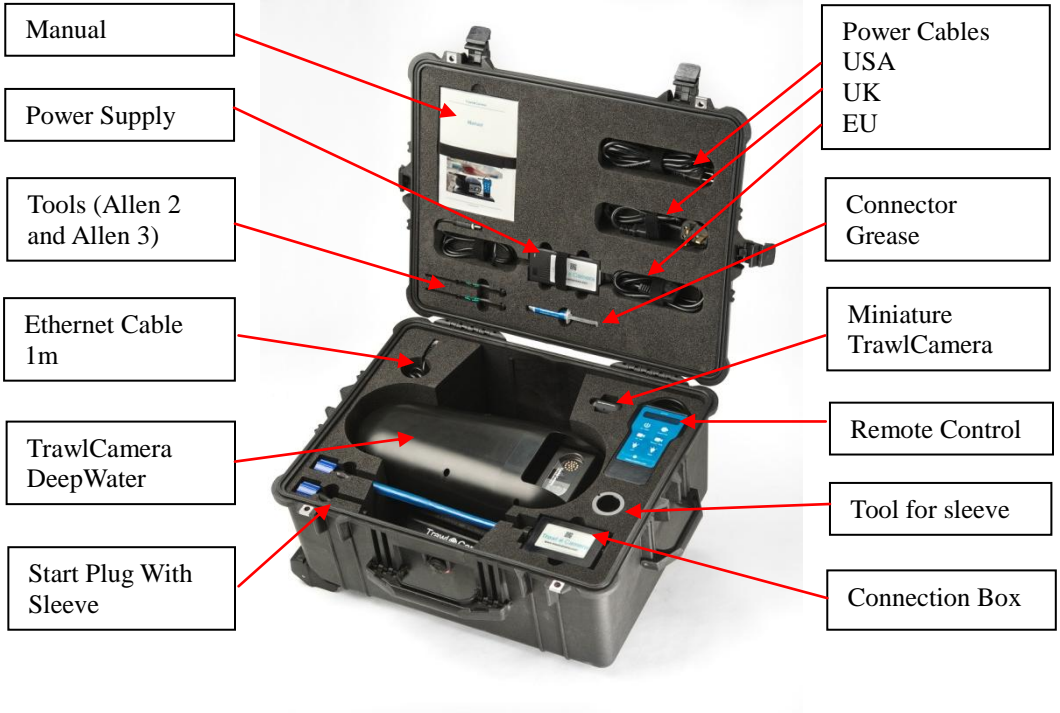
Connection box

Power supply

Case

Checked by and date

Content



Unpack Case

Inside the case you should find the following items:

1. Manual
2. Power Cables (EU, UK and USA)
3. Power Supply
4. Connector Grease
5. Tools (Allen 2 and Allen 3)
6. Miniature TrawlCamera (USB storage device)
7. Ethernet Cable 1m
8. Remote Control
9. TrawlCamera Deep Water
10. Tool for Sleeve
11. Start Plug with Sleeve
12. Connection Box

Checked by and date

Please verify that all these items are included before you start using the camera.

The names above will be used henceforth in this chapter.

TrawlCamera DeepWater



Ultra Low Lux
Black and White
0,003Lux@F1,2

Thank you for purchasing the TrawlCamera DeepWater System from JT electric. The DeepWater system is able to record in near-dark conditions and is a helpful tool for improving the fishing experience by bringing the seabed to the bridge.

1.1 Charging

The camera is delivered, tested and partly charged and thus can be used without charging, but to ensure the longest possible operating time, we recommend that the camera is charged before it is used.

The involved items, necessary for charging the camera are: TrawlCamera DeepWater, Power Cable, Power Supply and the Connection Box.



Connect the Connection Box to TrawlCamera, the 13pin connector can only be mated in the correct angle. Fasten the locking sleeve.



Select the correct Power Cable, depending on your local Power Outlet. Connect it to the Power Supply. Plug the Power Cable into a Power Outlet. The Power Supply will light up green.



Connect the Power Supply to the Connection Box and tighten the nut on the connector. The light turns red, while the TrawlCamera is charging. The TrawlCamera is fully charged when the light turns green again. An empty battery will fully recharge in 5 hours.



While the Connection Box is connected to the TrawlCamera, you can switch the TrawlCamera on by flipping the switch on the Connection Box.

You can also transfer recordings while charging. See section 1.7 for more details.

1.2 Prepare to Deploy


Before the camera can be sent out with the trawl, it must be switched on, setup in the right angle and with the right light intensity. Finally it must be mounted on the trawl, and the recording can be started.

Switch on



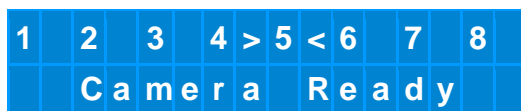
- Connect the Start Plug to the TC-connector.
- Tighten the Locking sleeve firmly.





- The camera is ON when the light is glowing. When the light has made a bright flash, the camera is ready for use.
- Turn on the remote control by pressing **On/Scan** .



- The camera and the remote are connected when an arrow is pointing towards a number on the display. This is the number of your camera. An X indicates that the unit is of the type: TrawlCamera DeepWater.
- The last number of the serial number on the camera front is the camera number



- It can take up to 1 minute for the camera to become ready. The light on the TrawlCamera makes a bright flash when it is ready.
- To manually check if the camera is ready to use, press **On/Off** . It may be necessary to press **On/Scan**  again to connect the remote control to the camera.
- The Remote Control will automatically turn of after 30 sec, to save battery.

Settings

- To change the LED intensity to a desired level, press either the **Left**  or the **Right**  button.



- The levels are “Off”, “Low”, 33%, 66% or 100%.




- The camera front can be adjusted in 5 steps between 0° and 90°
- Set the angle of the front of the camera using the big screw driver.

Mount on Trawl

The TrawlCamera is now ready to be mounted to the fishing gear. Ensure that the wings of the camera are thoroughly fastened to the trawl before deploying. If the camera is mounted far away from the edge of the trawl, it might be beneficial to cut a hole in the net, put the camera through the hole, patch the hole, and mount the camera on the inside of the trawl.

Start Recording

- When the camera is ready press **Record/Stop**  to start recording¹.



- After a moment the display will read “Camera Recording”.
- After 30 sec. the Remote Control will switch off automatically.

1.3 Deploying

When the camera has been switched on, adjusted, mounted to the trawl and the recording has been started, then the camera may be sent out with the trawl.

¹ The connection between the Remote Control and the TrawlCamera will be lost when the camera is in sea.

1.4 After Deploying


When the camera is back on deck, the recording can be stopped and the camera must be dismantled from the trawl and rinsed with fresh water, before the camera is connected to a computer, where the recordings can be handled.

Stop Recording

To stop the recording, follow these steps:

- Turn on the remote control by pressing **On/Scan** .



- The camera and the remote are connected when an arrow is pointing towards a number on the display. This is the number of your camera.
- press **Record/Stop**  to stop recording.

Dismounting and rinsing

To dismount the camera, cut or untie rope. Keep the Start-Plug on the camera during rinsing.

To remove sea water and organic matter from the camera, place the camera upright with the Start Plug up – beware of the lens.

Rinse with fresh water through the hole around the Start Plug for 3 minutes.

After rinsing, remove the Start Plug.

To ensure long product life the rinsing must be done after each deployment.

Connect to a computer

To connect the camera to a computer, the following items are needed: The TrawlCamera, Connection Box, Ethernet Cable and a computer with a TrawlCamera Laptop and TrawlCamera Video Player installed (see section 1.7 for more details).

- Connect the Connection box to the camera, as illustrated in section 1.1 – The 13pin connector fits only in one angle.



- Connect the Ethernet cable to the network connector on the Connection Box and the network connector on the computer. To avoid any network conflict, we recommend that any alternative network (cabled or wireless) is disabled during this process.



- Turn on the switch on the Connection Box, to start the camera. It may take up to one minute to start up. The camera is ready when the light flashes.

The camera may be charged at the same time, by connecting the Power Supply to the DC socket on the Connection Box. The switch on the Connection Box has no impact on the charging process. The charger will light up red while charging and green when the camera is fully charged. If there is no light on the Power Supply, there is no power on it.

1.5 Maintaining Unit and Accessories

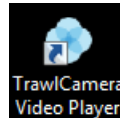
- If the remote control is not used for 30 sec. it will turn off automatically.
- If the remote control battery needs to be replaced, use the small screw driver to remove the two screws on the battery lid. Use a 6LR61 9V battery.
- The TrawlCamera connector must be treated with Connector Grease, to ensure long term product life.

1.6 Details

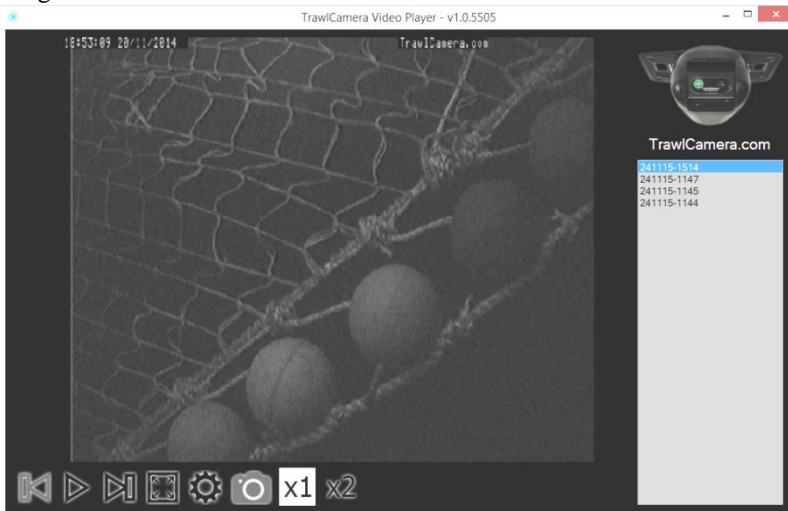
The TrawlCamera DeepWater is connected to a computer over Ethernet. To transfer recordings over Ethernet, the TrawlCamera Video Player program is needed. By default the TrawlCamera DeepWater is delivered with a laptop, where the program has been pre-installed and configured. The camera can also easily be used with an alternative computer or even across a network.

1.7 Using TrawlCamera Video Player

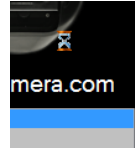
- Turn on the computer.
- Open TrawlCamera Video Player.



Program overview:



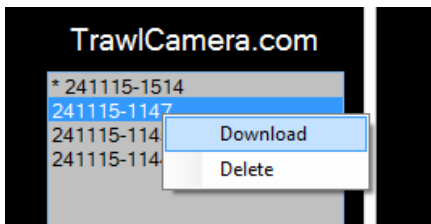
- An hour glass is shown for 2-4 sec. This means that the TrawlCamera and the program are connected.

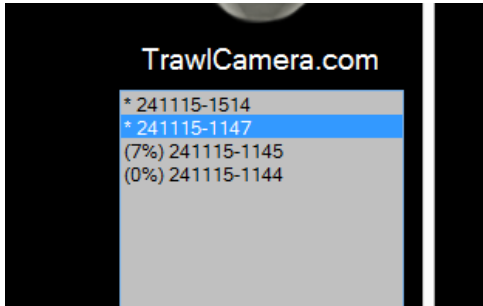


- On the right side there is a list of camera recordings. The items are labelled from the date and time of the actual recording. Syntax is "DDMMYY-HHMM". Example from April 16 2015 12:00 would be "160415-1200".
- Every recording is 5 minutes long.



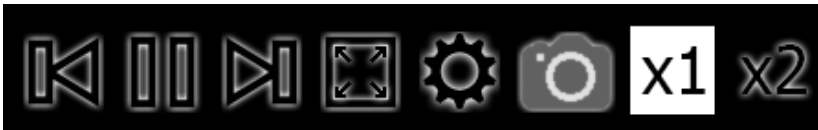
- A recording can be watched by double-clicking on the recording in the list.
- A recording can be downloaded to the computer by right-clicking the recording on the list and select: "Download".
- A recording can be deleted from the TrawlCamera DeepWater by right-clicking the recording on the list and select: "Delete".





- While downloading you can see the percentage of the current transfer. When it is downloaded there will be an asterisk (*) in front of the recording

The function of buttons:



Previous recording



Pause Playback



Next recording



Full screen



Settings



Snapshots



Normal speed

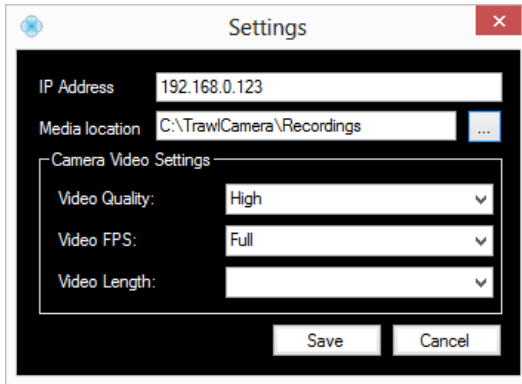


Double speed



In "Settings" you can see:

- Camera IP address
- Downloaded recordings are in folder C:\TrawlCamera\Recordings\
- Current video settings



- After download is complete, the camera can be disconnected and turned off.
- The downloaded recordings can be found in the folder following "Recordings - shortcut" on the desktop.



TrawlCamera Colour



Thank you for purchasing the TrawlCamera Colour system from JT electric. The TrawlCamera Colour functions exactly similar to the TrawlCamera Deepwater.

The only difference is that the recordings are in colour instead of black and white.

For further instructions on how to use this camera read the instructions for TrawlCamera Deepwater chapter 1.1 - 1.10.

Picture of a recording from TrawlCamera Colour:



TrawlCamera LED

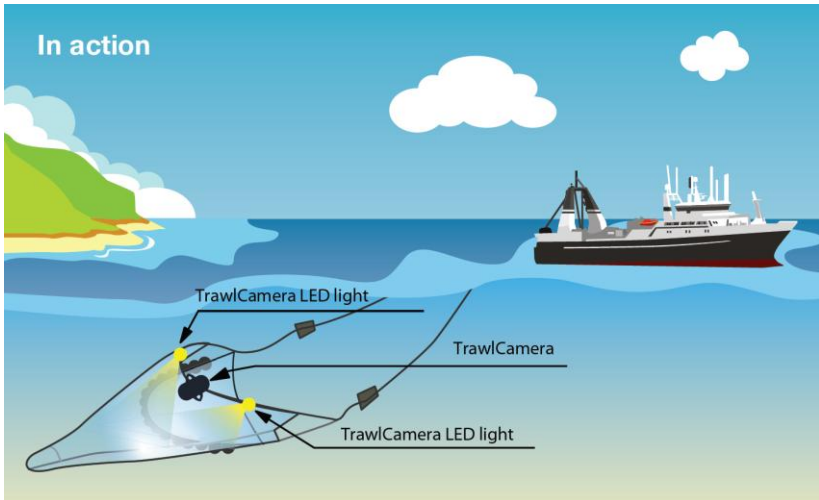


Thank you for purchasing TrawlCamera LED. This product is capable of extending the visible range of the TrawlCamera DeepWater. The TrawlCamera DeepWater can in optimal conditions see 8-10 meters ahead with its own integrated light source. But with the power and intensity of the TrawlCamera LED this distance can be much longer.

Depending on the relative placement of these units, the viewable area of TrawlCamera DeepWater can be made longer and/or wider.

If the units are e.g. mounted side by side on the headrope, 3-5 meters between, most of the bottom gear will become visible, still depending on the size of the trawl.

If the TrawlCamera DeepWater is mounted near the cod end and 3-5 meters in front of the TrawlCamera LED then the visible area can be prolonged several meters.



1	2	3	4	>	5	<	6	7	8
					L				

- The LED and the remote are connected when an arrow is pointing towards a number on the display. This is the number of your camera. An L indicates that the unit is of the type: TrawlCamera LED.
- The TrawlCamera LED is used, charged and maintained exactly as the TrawlCamera DeepWater. Except that there is no computer connection involved.

Tips

- If the Remote Control displays “No Response”, take out the start-plug and insert it again.
- Set the camera to record with the water flow, because if it is set against the flow, it will be like recording in snowy weather.
- It might be beneficial to have a known object in the camera view all the time. This makes it easier to decide place and size. For example you can have a 5 meter rope with a knot for every meter and then this will be fully stretched out as the recordings are made with the stream. Or mount a 10x10cm plate to the trawl by every metre for this same purpose.
- Before long term storage, rinse TrawlCamera to prevent unpleasant odour in the black case.

We are confident that TrawlCamera DeepWater, TrawlCamera Colour and TrawlCamera LED is a valuable tool in the fishing industry and are ready to assist you if you have any questions or problems.

Do not hesitate to contact JT electric.

TrawlCamera

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