Remote Head REMO ONE

Code 5750

Manual

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that are always state of the art.

Therefore we reserve the right to make chan-
ges based on technical advances

Table of Contents

1. General Information

This manual is an important part of the equipment and is aimed at personnel who operate and maintain the Remo One and the Remote Option. It contains information about the Remo One and its proper use. Above all it serves to safeguard users and the environment.

It is the duty of each user to familiarize themselves with the contents of the manual and to adhere exactly to all instructions relating to safety.

In addition, the rules and regulations governing the prevention of accidents must also be observed for the operating site being used.

Please keep this manual for future reference.

2. Intended Use

This remote head was developed to enable the joystick operated movement of cameras for the shooting of scenic performances. The Remo remote head can be attached to the Sachtler Cam Crane EFP or put on OB 2000 tripod, using the Remo FB adapter.

Any use above and beyond this purpose is deemed improper.

The maximum payload of the remote head is 13 kg (28.7 lbs) in parentheses and you may not exceed the limits given in Chapter Technical Data. The Remo One must only be operated with original Sachtler parts.

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3. Symbols used in the user's manual

Indicates a possible danger to the life and health of
users.
Non-observance of these instructions may have seriously
harmful consequences to health, including life-threatening
injuries.

Indicates a possibly harmful situation.
Non-observance can damage the machine or the envi-
ronment.

Indicates that metric tools are need to do complete this
operation.

4. Safety Instruction

o Observe all current safety regulations for the prevention of acci-
dents during stage and studio operation (BGV C1 and SP 25.1,
DIN15999 Operation of Camera Cranes).

o Observe the local safety regulations governing the prevention of
accidents

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o Do not leave the CamCrane EFP with the Remote Head unatten-
ded when set up. During shooting breaks, tilt the camera down and
remove the counterweights.

o Operate the Remote Head under the supervision of trained per-
sonnel only.

o Please read and understand the CamCrane EFP and Remote
Head instruction manuals before beginning setup. Proper assembly
of the remote head requires two persons. Do not set up the crane
and the remote head quickly or carelessly.

o Be sure that your working environment is suitable for crane opera-
tion - avoid wind, rain and saltwater. The CamCrane with Remote
Head must not be operated in high winds.

o If you need to operate the remote head during rain, cover the
control box with a plastic cover or other suitable material.

o The tripod must be placed on a stable and suitable surface.

o Make sure your tripod can handle the total payload of the crane,
remote head and counterweights. Make sure all tripod clamps, all
adpater clamps and all clamps of the remote head are securely
tightened.

o Please take note that there are a number of positions where jam-
ming can take place (e.g. when mounting the remote adapter or
when balancing the camera).

Tools: 13mm open-end wrench and screw driver
        10mm wrench, 4mm Allen wrench

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5. Remote Option (Code 5726)

5.1 Scope of Supply

Remote Head Adapter

Code: skr20e0420

Only for use with Sachtler
Cam Crane EFP

Head Adapter Clamp

Code: skr20b0416

Connecting clamp between crane
and adapter

Rod Connector Bracket

Code: skr20e0404

Connecting crane head with rod

Rod Kit

Code: skr20b0405

1 disk rod
1 base rod
3 standard rods (Code: skr20b0415)

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Head Rod

Code: skr20b0410

This end mounts to the rod connector bracket.

Base rod

Code: skr20b0406

This end mounts to the central unit of the Cam Crane EFP.

Rubber Pads

Code: skr20r0405

Two rubber pads for protecting the outrigger of the crane

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5.2 Set up Remote Option

Preparation:

Lower the crane and ask an assistant to secure the crane during the setup.

Tools:

Before you can operate the CamCrane EFP with Remo One, you need to attach the Remo remote option to the crane. You will need a 10 mm open-end wrench and a 4 mm Allen wrench.

Cables:

If the steering cable (with yellow marking) is still mounted, disconnect it from the disc cable and from the base disc.

Setting the damping

For an overall better performance it is recommended to activate the damping of the crane.

Turn both red pins fully to the right while moving the camera plate up and down, so that the pins snap in.

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Removing the disc

To remove the disc, loosen and remove the hexagon socket screw using the 4 mm Allen wrench.

Then loosen and remove the center screw by using the 10 mm open-end wrench.

Pull the disc away from the main axle.

10mm open-end wrench &
4mm Allen wrench

Mounting the rod connector bracket

Place the rod connector bracket on the center screw so that the top of the bracket is facing up.

Make sure that both screws are tightened securely!

10mm open-end wrench
& 4mm Allen wrench

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Connecting the rods

Start with the base rod at the crane pivot.
Make sure the rod end is mounted as shown.

Push the safety pin through the connector hole and make sure that it is locked.

Connecting the standard rods

Thread together the standard rods. Add one, two or three rods depending on the crane length (short, medium, long).

Connecting the top rod

To connect the top rod at the rod bracket just push the safety pin through the connecting hole.

Push the safety pin through the connector hole and make sure that it is locked.

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Adding the rubber pads

The rubber pads should be placed on the left upper outrigger.

This will protect the outrigger from touching the rods.

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6   Remote head Remo One

6.1 Scope of Supply

Case

Code: sve20p0300

After using the Remo One remote head, all parts are put back into the case as shown.

Head L-frame

Two axis telescopic remote head with digital motors for camera load up to 13 kg (28.7 lbs).

Control Box

Digital control box

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Joystick

Joystick control unit

Joystick Cable

Code: evkm511022
Connecting cable between
joystick and control box.

Main Cable

Code: evkm511020
10 pin cable (8,5 meter)

Slave Cable

Code: evkm511021
10 Pin Cable
Connecting main cable and
connector in the remote head
frame

12V XLR Power Cable

Code: A1203
4 pin XLR 12 Volt power
cable (3 meter)

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6.2 Set Up Remote Head

Remove the stopper

Unscrew and remove the black plastic stopper in order to give the head enough space for movement.

Adjusting the Level

The adjustment screw on the rod allows to adjust the overall length and to level the head. Use the bubble level to set your level with the adjustment screw.

Attaching the remo head adapter

Attach the Remo head adapter to the top of the head with 6 screws.

Use a 3 mm Allen wrench

Make sure all 4 screws are tightened securely!

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Secure the crane

Use an apple box or a shipping case to keep the crane and head off the ground.

Secure the crane and put approx. 10 kg (22 lbs) of counter weight at the back of the crane.

Take care that the remote head is not touching the ground.
This will cause damage to the lower gearwheel!

Attaching the main cable

Start at the top of the crane by adding approx.10 cm extra cable.
Use the Velcro straps supplied with the Cam Crane EFP to mount the main cable all the way down the crane rod.

Mount the cable so it does not touch any moving parts.

Mount the control box

Mount the control box close to the end of the counterweight rod on to the crane tube with the Velcro straps and the connectors facing the top of the crane.

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6.3 Mounting the Remote Head

Remove the two wing screws of the head adapter clamp.

Lift the Remo head in front of the crane camera plate and slide the head adapter on it.

Push the head adapter clamp through the holes in the head and the camera mounting plate.

Make sure that the two wing screws are securely tightened.

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Connect the slave cable

The slave cable is a highly durable and flexible extension cable. It connects the main cable with the remote head and allows head movement better than the main cable.

Connect the slave cable to the main cable and slide it through the center hole in the head.

Plug in to the "Remote" connector on the frame.

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6.4   Mounting the camera

Be sure your camera is in standby mode with all batteries
and accessories attached before proceeding.

Mounting the camera plate

Take the camera platform and
mount the camera´s quick release
plate or mount the camera directly
on this platform.

Use two 3/8" screws
only!

Check center of gravity

First check the center of gravity of
the camera.
Slide the camera / quick release
plate fore and aft on the camera
plate until the camera center of
gravity is balanced to the center
of the platform.

Make sure that the two 3/8" screws are tighened again
after this adjustment!

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Mounting the camera

Place the thread of the camera-plate in the center of the L-frame.
Place the camera under the crane joint.

Make sure the lock lever is tightened securely.

Use the safety strap to secure the camera to the L-frame.

Connect camera power and video cables to the camera.

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Telescoping the frame

Depending on the camera size (length) the height of the remo one head can be adjusted.

13mm open-end wrench

Do not loosen the acorn nuts more than one turn!

Let the telescopic part slide out of the frame until the camera can easily rotate in the frame.

Try to keep the frame height as compact as possible; this will reduce unwanted crane movements.

Adjusting the center of gravity

Before adjusting the horizontal and vertical balance of the camera, make sure that the Remo One system is powered down.

Never move the frame / motors manually when the Remo One is powered up! This will cause damage to the motors!

Recommendation: For a very precise center of gravity adjustment, you need to disconect the gears. Loosen the two wing nuts and slide the motor upward.

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**Take your time with this adjustment
The remo head will not work properly if
the camera is not perfectly balanced! (Tilt speed will
not be equal in both directions).**

Adjusting the horizontal camera position.

Bring the camera to a horizontal
position.
If the camera is tilting toward the front,
it has to be moved back on the camera
plate.
If the camera is tilting toward the back,
it has to be moved forward.

To do this adjustment loosen the two
3/8" camera screws and move the
camera fore and aft until you find the
center of gravity.

Adjusting the vertical camera position.

Check again that all parts of the
camera are mounted properly
and that no parts are loose.

Bring the camera to a vertical position.

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To adjust the vertical position of the L-frame loosen the large lock lever.

Move the L-frame fore and aft, until the camera is holding the upright (vertical) position.

Make sure that the lock lever is tightened again after this adjustment.

If you had disconected the gears, slide the motor (gear) back to the normal position and tighten the motor clamp wing screws.

Do not over tighten these wing screws!

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Adjusting the head bubble level

After all adjustments are completed, check the bubble level again!

Add joystick and counter weights

Add as many counter weights as required to balance the crane.

Mount the joystick on the counter weight rod. Open the clamp screw of the joystick unit, slide it over the counter weight rod and tighten the clamp screw.

Connect the joystick cable to the control box.
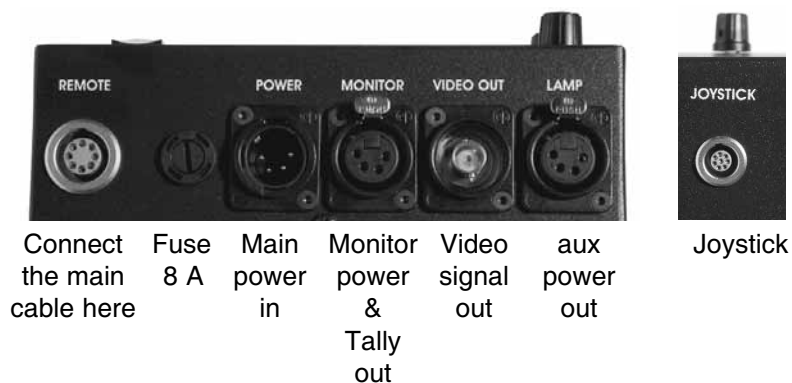
6.5 Control box

Make sure that the control box is powered down before connecting any cables!

Plug in the main cable and all other cables needed.

Connectors & functions of the control box

Connect the main cable here	Fuse 8 A	Main power in	Monitor power & Tally out	Video signal out	aux power out	Joystick

The Remo One can be powered by a 12Volt or a 24Volt power supply.

Note: Using a 24V power supply, all power outputs (camera power, monitor out, lamp/AUX out) will provide 24 Volt!

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On/Off for the Remo system only.
Camera and external monitor have to be switched On/Off separately!

Power supply LEDs display the remaining battery capacity.
When the red LED shows low power, exchange the battery.

Tally indicates that the camera is recording.

The error light indicates there is a problem with the system:

Constant red light = problem with main cable, slave cable, remote head.

Flashing red light = problem with joystick cable.

Switch the camera, monitor and the remo system off and check all connections (main cable, slave cable, joystick cable) and replace if needed.

To avoid damaging the slave cable from overwinding, LEDs indicate the number of turns in the same direction. If the red LED lights, turn the head in the opposite direction until the center LED lights.
The LEDs show the actual head turn number, not the joystick direction.

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 This potentiometer adjusts the speed of the horizontal movement and the push botton allows changing the direction of this movement.

 The "RAMP" potentiometer allows adjustment of the motor ramping. The higher the ramp is adjusted, the slower the head will start and stop.

 This potentiometer adjusts the speed of the vertical movement and the push botton allows changing the direction of this movement.

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7. General recommendations

Please note:

* Take care that the remote head is not touching the ground.
This will cause damage to the lower gearwheel!

* Never move the frame / motors manualy when the Remo One
system is powered up! This will cause damage to the motors!

* If you move the head when it s powerd off, turn it very slowly.

* When the Remo system is switched off, the camera and monitor
are still consuming power.

* Using a 24V power supply, all power outputs (camera power,
monitor out, lamp/AUX out) will provide 24 Volt!

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8. Cleaning and maintenance

You can keep your remote head operating at full functionality by removing dust and grease from the frame, motor and gears on a regular basis.

Keep the telescope clean, especially after working at a sandy location.
Do not remove the grease on the telescope!

9. Inspection Note

In accordance with DIN 15 999, the Remo One and the remote option must undergo inspection each time they are used, including both visual and operational testing, in order to ensure operating safety.

10. Warranty

The warranty expires if the Remo One is operated improperly, or not in line with the specified technical data (please refer to our General Terms of Sale and Delivery).

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11. Technical Data

Code no: 5750
Payload max: 13 kg   (28.7 lbs)
Weight: L-frame: 5,2 kg   (11.5 lbs)
Remo in case complete: 16,8 kg   (37.0 lbs)

Remo One: 12-24 V, electrically isolated, 700mA, head consumpti-
on 12V 9W , 24V 18W

Camera: 12V-24V - 6A Camera max (camera, monitor, lamp...)

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12. Options and accessories

Adapter Remo/FB

Code. 5757

Adapter to mount Remote head
to OB 2000 tripod.

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