

Varanus

POWER OF POSSIBILITIES



Foton
ACCESSORIES

USER MANUAL

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Thank you for choosing the electronically operated drive set Varanus. We are certain that you are holding a unique product in your hands. Innovative functions will open a new set of possibilities in registering video.

Advanced software will allow you to obtain a remarkable movie material without the assistance of another operator. Automatically operated camera will register a path which you create, either in cycles or just once.

The magical world of time-lapse will become more accessible to you. Owing to advanced algorithms, registration of dynamic time-lapse photos will be possible without complex calculations.

We believe that your work with Varanus will give you unforgettable experiences,

Foton Accessories Team

Introduction

The presented multifunctional device is employed to make very smooth shots in motion, in all planes, in a constant mode (Video) or step mode (Time-lapse). The set is mounted on the Kameleon sliders (64, 94, 130 or 200 cm long). The driver precisely regulates the work of one or two motors, with the possibility of developing pictures. The product is mainly aimed at professional users. This device is one of the most technologically advanced pieces of equipment on the market. **In order to benefit from all its developments and improvements requires practical exercise. Therefore, this user manual should be studied carefully before starting work.**

The trolley and rotating head are driven by motors connected to the controller. The heart of the device is a microprocessor with unique software, based on complex algorithms and computational tables. Movement in both axes can be synchronized and allows the camera to accurately track the filmed subject. Applied electronics responsible for the perfect replication of the route, regardless of the mode, engine speed and other parameters. In some modes the software automatically sets the parameters, greatly facilitating the operator's work.

The whole set, apart from the mains power supply, has the ability to use Li-ion batteries Sony NP-Fxxx series or a substitute. This solution gives many hours of comfortable work in the field (up to 70 hours Time-lapse mode, up to 8 h Video mode). The trolley may work in all planes - horizontal, slant or vertical. Permissible weight of a recording device installed in a horizontal plane is 6 kg, in a vertical plane 3 kg.

The set is manufactured mainly from durable and hard aluminum alloys. The housing of the controller is resistant to splash, physical impact and allows to work in difficult weather conditions (-10 to + 40 ° C). Unlike the joysticks used in similar devices, which, under the influence of time and contamination have frequent mechanical defects, intentionally used hermetic navigation buttons were installed, ensuring long-term and reliable operation of our product.

First-class motors with gear transmission were used for trolley and head drives. Their rigid openwork housing protects them from mechanical damage. The motors are additionally secured with soundproof material, which substantially eliminates sounds coming from the gearbox.

Short preparation time of the set is possible thanks to modular design power units equipped with quick connectors. There is a possibility of mounting the rotary head in the horizontal PAN plane with the TILT engine on a mount with external thread 3/8" (SV-3 Set). Each set includes a bracket for mounting the controller on the slider and a handle for battery power unit.

The trolley is coupled to a toothed belt, which should be the extended gently after installing it with the adjusting wheel (1-2 turns). Too much tension can overload the drive motor.

Stronger belt tension can only be used when working vertically. In that position you should increase the power to the value of 50 in Power Motor settings and possibly increase engine speed with the Speed knob.

DC voltage supply must not be higher than 12 V. Exceeding this parameter will cause damage to the controller.

Basic functions of the device

A unique feature of this device is the ability to synchronize operation of the drive engine with the turning engine. When the start and end points of both engines are entered into the memory of the controller, the motion performed during the recording device automatically maintains the subject in the center of the frame!

The enhanced driver also has many regulations in order to select the most optimal parameters necessary for the implementation of the planned tasks.

Basic settings of the controller – MENU:

- (Distance A) – the length of the trolley drive manually set with the navigation buttons or by editing values in the control program.
- (Rotation B) – rotation of the head set manually or using the navigation keys or by editing values in the control program.
- (Video) – continuous drive mode selection.
- (Time-lapse) – stop-motion driving mode selection.
- (Photo) – frame rate of 5 – 4500.
- (Pause) – triggered interval between frames 1 - 3600 s (1 s - 1 h).
- (Shutter) – shutter time 0,100 – 60 s.
- (Interval) – intermittent driving mode (On) or continuous (Off) triggering time-lapse.
- (Auto Speed) – automatically set engine speed in the Time-lapse / Interval-On in order to avoid jerking the trolley sliders.
- (Loop Video) – looped drive.
- (Delay Start) – delay starting the program from 0 - 240 s, a useful feature when creating animated films.
- (Ramp) – level of soft-start and brake motors in Video mode, adjustable with a knob.
- (Speed) – variable motors speed, adjustable with a knob.
- (Settings) – advanced settings.
- (New track) – to start a new path and cancel the previous path.

Advanced settings of the controller – SETTINGS:

- (Load menu) – loading settings from individual memory banks.
- (Motor PAN) – disconnecting the motor B. **Important! The disconnection is required when using only the motor A.**
- (Power motor) – motor power adjustment 1-50, selected depending on the load of the trolley for example: angled or vertical drive - maximum values should be set. The optimum level is 20.
- (Sel Batt) – to select the power source to properly display information about the current voltage and warning about its low level (Low Battery).

- (Reset Menu) – resetting the menu.
- (Save menu) – save individual settings in 10 memory banks (0-9).

Messages depending on the chosen function:

- (Go back?) – when engines are running, click [OK], then [M] – it gives the ability to quickly withdraw the trolley to the beginning of the route with the possibility of restarting the program.
- (Low Battery) – low battery voltage indicator. It will appear around 30 min. before complete battery depletion.
- (Overload) – a 2 seconds warning message of total motor overload and – consequently - its disconnection for couple of seconds. Also indicates the absence of motor wire communication with the controller.
- (Reset Settings) – indicating the reset advanced settings of the controller *Settings*. The activity is performed by simultaneously holding down the [M] and [OK] button while turning on the control unit. The value of memory banks will be retained.

Drives assembly



1. Start the assembly by turning out the brake knob and mounting the trolley drive.



2. Place the toothed belt between the trolley and the slider rail.



3. Tighten the belt at the end of the rail on the side unregulated by its tension.



4. Place the belt on the running rollers and the wheel gear.



5. Tighten the belt at the side regulated by its tension and do 1-2 turns with the knob so that the belt is not too tight.



6. In order to mount the panoramic drive, first mount the adapter with the distance case on the trolley plate with the inner 3/8" thread. Use the Allen wrench to tightly secure the counter screw so that the quick connector socket is perpendicular to the slider rail. Instead, use the photographic head **SGF1F** optional accessory.



7. For the SV2 set, secure the turning drive in the quick connector of a) the case or b) the **SGF1F** head and tighten the knob blocking the plate. Now, **ADAP V** adapter socket may be mounted on the turning drive or directly mount the registering device. In the case of a) an **SGF1F** head may be used additionally.



a



b

8. If necessary, a controller holder or a monitor may be mounted:
 a) under the slider foot,
 b) by attaching to the plate with an internal 1/4" or 3/8" thread under the slider.



9. Next, place the battery in the adapter with the power supply cable, and with the elastic Velcro straps mount it on the battery holder. Place the power supply cable in the socket, place the drives A and B operating cables in the socket, and optionally place the shutter controlling cable in the Shutter socket (for Time-lapse mode).



10. Optionally, the panorama *PAN* drive (motor A), or the panning *TILT* drive (motor B) may be mounted on the tripod with the external 3/8" thread – SV-3 Set.

When the device is ready to use, press the On/Off button on the controller.

Depending on your needs, motors may be connected to controller interchangeably. You should remember that work of motor connected to socket B always depends on work of motor connected to socket A.

Basic functions of controller buttons

All device functions are controlled by two knobs and four buttons: [M], [OK], [+], [-].



- Long press (hold) - change the motor A to B. Motor A (trolley slider) is the primary motor.
- Short press (click) – go into/out of Menu (you can only go into the Menu when there is no program operating and the trolley is not moving).
- Move to the left when entering numerical values in the controlling program.
- Short press - exit from the Settings.

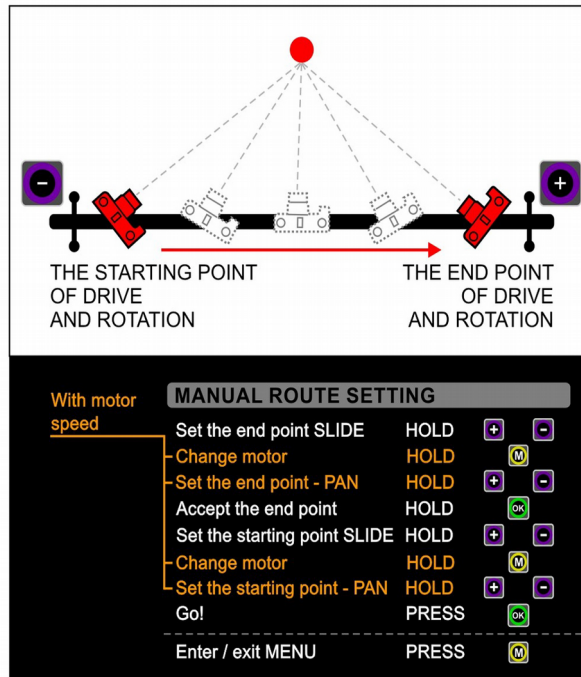


- Long press memorizes the target way point ("END accepted" flashes on the screen).
- Short press starts the program if the route is set (Go!).
- Move to the right when entering numerical values.
- During the program, a short press immediately interrupts its operation, short press again to restart the program.
- A short press in the Settings allows you to enter to the advanced settings.
- Short press in some commands alters their functions.



- Movement of the selected motor to the right or left.
- Move between functions in the Menu and Settings.
- Increase/decrease numeric values in the control program.

Manual track programming (for Video mode and Time-lapse)



HOLD ≥ 1 sec.

The easiest way to set the drive path is manually in the setting (see navigation scheme on the cover of this manual). When the route is not a programmed route "OK" and "+" or "-" will flash on the screen. It is a suggestion to move the trolley or memorize the current position as final. After selecting the final point on the slider by pressing [M] long, we can choose between motors and set a way point position. **View "Slide => Pan" suggests editing the slide motor and vice versa "Pan => Slide" suggests editing the pan motor.** The destination point of motors is memorized by pressing [OK] long. The status will be confirmed with the "End accepted" message. Then "OK" stops blinking, telling us about memorizing the destination position of the trolley. To drive automatically, you should return to the starting point of the route. We set trolley with the direction keys [+] or [-], then change the motors holding down [M]. Again, we use the [+] or [-] keys to program the determined angle of rotation of the head. When the message "GO!" appears, the pre-programmed path is ready to start. Flashing "OK" suggests clicking this button and starting the program.

Numerical track programming

The route can also be set directly in the menu by editing entry values of drive (Distance) and rotation (Rotation). **Before, however, you should give direction to motor A all the time bearing in mind that the trolley will go in the opposite direction than the last one made with the [+] or [-] keys.**

After the first run of trolley "GO!" appears again indicating a completely set route and readiness to return. Pressing [OK] will make a movement in exactly the opposite direction to the point where the trolley previously started. If [OK] is pressed quickly during the drive, it will be terminated immediately. Re-clicking the key continues to execute the program.

A detailed description of work modes

Video Mode

This mode is used to drive a camera in two directions and rotate the head in the panorama plane, with the function of smooth acceleration and deceleration of the motors. Driving can be automatic - the manually programmed memorized path between two points, or manual – by entering the values in "Distance A" and "Rotation B". Also available is a function of looping route. You can freely use the directional buttons [+] and [-] to move the trolley. The speed of the movement is set using a potentiometer.

Notice! In Video mode when driving the trolley vertically and with a heavy registering device it is recommended to set higher speeds and increased motor power in [Settings / Power Motor] to a value of 50 (nominally 20).

Time-lapse Mode

This mode is to create a very impressive movies with serial time-lapse images taken in a large period of time and combined in a smooth animation with the effect of time compression. For Time-lapse mode, two options are available:

- [Interval:On] step drive with electronic cyclical shutter release,
- [Interval:Off] continuous drive with electronic cyclical shutter release.

The routes are programmed in the same way as in Video mode. Controller has very useful function (Estimated) for automatic calculation of values for time-lapse movie Time-lapse / Interval On.

For example, we are planning to make a time-lapse movie (Time-lapse) of the movement of the moon in the night scenery during 120 min., of which:

- a) the constant value is founded upon the duration of the film after editing, which is expected to be 10 seconds. At 25 frames/s we should make 250 shots (10 s x 25 frames/s = 250 frames). This is the value we enter in the controller option - Photo: **250**.
- b) the constant value is the shutter speed that will be read from the camera settings for example. 2 s. This is the value enter in the controller option - Shutter: **2 s**.
- c) by entering experimentally a variable value of the pause between the individual frames, here Pause (s): **27**, after calculating, the display will read "Mode: Time-lapse / Estimated": **121** minutes – that is earlier estimated recording time. In this way, a built-in calculator helps to compose Time-lapse instantly without additional tables and other unnecessary tools, just by adjusting "Pause" value.

The length of the shutter (Shutter) is set in the range of 0,100 s. to 60 s. The default value is 0,100 s. The controller allows the execution of the animation on the set route with a maximum (Photo) 4500 images triggered at intervals (Pause) from 1 to 3600 s. (1 s. to 1 h), making the longest possible period of recorded images up to 187 days!

In "Time-lapse / Interval: Off" the controller alone calculates an estimate number of photos you will make for the programmed route. It depends on the speed, length of the drive, the time interval between frames and the shutter speed. In the menu after you turn the Photo mode option instead of photo values a "Not used" message will appear.

In [Time-lapse / Interval: On] the cycle begins from the trolley's passage to a way point, then deducting the timeout, taking the photo, and re-starting the trolley's movement. Thanks to this cycle photograph is taken before driving of the trolley. This process

stabilizes a recording device after the movement is executed. In addition, the slider trolley will start after 0.2 s from the closing of the shutter, thus eliminating the possible minor vibrations that occur when shutting a mirror in the camera.

The controller has by default an active optional feature for automatic selection of speed values between successive steps, so that the trolley can carry out individual sections very smoothly. If necessary, this feature is turned off in Auto Speed.

WARNING! If the timeout is over, and the movement is going on, program execution will be stopped. "TIME ERROR!" will appear on the screen. This error will occur if the pause between shots is too short. You should then withdraw the trolley (option "Go back?" - described above) and increase the pause parameter.

Important! In the Time-lapse mode, exposure time (Exposure) in Varanus should be equal to or longer than in the camera. For shutter speed 1/10 or less, controller should be set at 0,100 s. In case of longer exposures, values set in controller and camera should be similar. Not applying to above recommendations may result in trolley movement while the camera's shutter still open and will effect in motion blurred frames.

Setting camera in BULB mode will let the controller manage the shutter speed completely. In other camera modes controller only initiates exposure and shutter speed will be as set in camera.

The electronic system uses a protection against excessive motor overload. If the drive encounters an obstacle, then after 2 seconds "Overload" indicator will appear and the movement will be canceled temporarily.

A detailed description of current settings – Menu

Potentiometers **SPEED** and **RAMP**

The controller is connected to potentiometers for quick setting of SPEED parameter or slow acceleration and deceleration RAMP brake (for both motors).

Turning the knob will adjust the value in the Menu. At any time you can enter the menu and change the settings with the knob. **Potentiometers are active only in stationary mode or manual route programming. They do not work during the program execution!**

DistanceA – the distance to be covered by motor A (Slide) in millimeters.

The following is a description of numerical programming of the route.

If the trolley has not been moved with [+], [-] buttons, the display will show "UnknownDirection" and blinking information: "Move Slide + - M". The message suggests to go back to the main view in the display and shift the trolley in a chosen direction. **Keep in mind that the chosen direction will be opposite to the last executed one with the [+] or [-] keys.** After entering the length of the drive "Ready to ride! *" will appear on the display, which means that the route is already set with way points and you can make a move automatically. There is also the symbol "*" (asterisk) visible. It indicates that

the trolley *is* in the starting position. Pressing OK on the main screen will start driving. You can also edit the turn angle of the head in the horizontal plane with "RotationB: deg" option.

RotationB – the angle to be turned by motor B in the panorama plane, measured in degrees. **The channel of the turn motor is strictly dependent on the channel of motor A. You can edit the content after determining the driving route in advance.**

Mode: Video / Time-lapse

Changing the mode of operation of the controller from driving (Video) to: a step drive "Time-lapse / Interval: On" or continuous drive "Time-lapse / Interval: Off" while taking images. **Changing the mode does not erase the set route.**

Photo – number of time-lapse images to be taken on a given route.

The minimum value is 5, the maximum is 4500, which means that for 25 frames/s an edited, finished time-lapse movie can be up to 180 s ($180 \times 25 = 4500$). In the active mode, "Time-lapse / Interval: Off" this parameter cannot be edited. The controller automatically recalculates the number of frames that can be taken on a given route depending on other parameters (exposure time, pause, speed). The calculated number of pictures in this mode will be displayed by the controller while in operating mode in the upper right corner of the display.

Pause – pause between shots. This parameter is defined by the time between two shots. Values are 1- 3600 s (1 s - 1 h).

Shutter – duration of the pulse at the output of the electronic trigger. The controller, with the help of a special wire dedicated to a particular camera model can control the shutter in time-lapse modes. The default value is 0,100 s. **Reminder - in the Time-lapse mode, the exposure time (Shutter) should be equal or slightly longer than in the camera, with exception of shutter speeds less than 1/10 s – in that case value 0,100 s should be set!**

Interval On/Off – mode change: Time-lapse: step or continuous. In step mode Pause parameter sets the time interval between taking photos, and the parameter Photo defines the planned number of photos and the shutter speed.

Detailed description in section Time-lapse mode.

Auto Speed: - auto-tuning the speed of the trolley only in "Time-lapse / Interval On". In vertical drive, it is recommended to turn off the auto speed function and adjust that value manually.

Loop Video: (On/Off) - works in both Video and Time-lapse mode and it loops the drive endlessly until its termination with the [OK] key. If the delay is set to Delay Start, then each repetition will take place after the set delay.

Delay start - delays the start of the programmed track in the range of 1-240 s. The delay function is very useful when creating animations. During the delay countdown, pressing [M] skips the delay.

Ramp – a gradual acceleration / deceleration of the motor (1-15).

It introduces softer and longer acceleration or braking. At every motor speed set, that time is proportionally corrected.

Speed – editing speed of the motors. The minimum value is 1, maximum 20. Turning the potentiometer changes the value of speed.

Settings – advanced settings.

Pressing [OK] will enter the level of all configuration options of the controller that do not relate to the current path parameters. Press [M] to exit.

Available options of advanced settings – Settings

Load menu – load previously saved parameters from the memory banks (see Save Menu).

Motor Pan - turns off the channel B. It is recommended when using only one motor A.

Power motor – adjustable motor power (value 1-50, optimally 20). This parameter can temporarily be changed when driving the trolley vertically or with a heavy load (set maximum values: 40-50).

Sel Batt – voltage setting Also provides information about the source of power and warns about battery depletion. Available values - 7.4V, 12V, and Off. Low battery warning appears around 30 minutes before it completely depletes.

Reset menu – Resets to default Menu settings. Memory banks 1-9 are reset as well. Changing the parameters of bank "0" is executed by overwriting the previously saved data.

Save menu – save parameter settings in the memory banks.

In memory banks you can save all user set-up, adjustable parameters of the menu, except the settings on the planned path that is: Distance A, Rotation B, Speed and Ramp. Banks may be used to store and quickly load modes such as: 0-video, 1-Time-lapse / Interval: On, 2-Time-lapse / Interval:Off with prescribed settings.

Warning! A unique bank is the bank number 0. The parameters of the current settings of the menu saved there will be starting settings each time the controller is turned on.

Technical Specification

Min. speed in Video mode, horizontal movement:	0,12 mm/s
Max. speed in Video mode, horizontal movement:	90 mm/s
Min. rotation in Video mode, horizontal movement:	14 s
Max. rotation in Video mode, horizontal movement:	320 s
Max. load of the trolley, horizontal movement:	6 kg
Max. load of the trolley, vertical movement:	3 kg
Operating time with NP-F 970 battery:	72 h in Time-lapse 8 h in Video mode (1 motor non-stop) 5 h in Video mode (2 motors non-stop)
Slide motor weight:	0,5 kg
Pan motor weight:	0,7 kg
Tilt motor weight:	0,9 kg

Available Sets

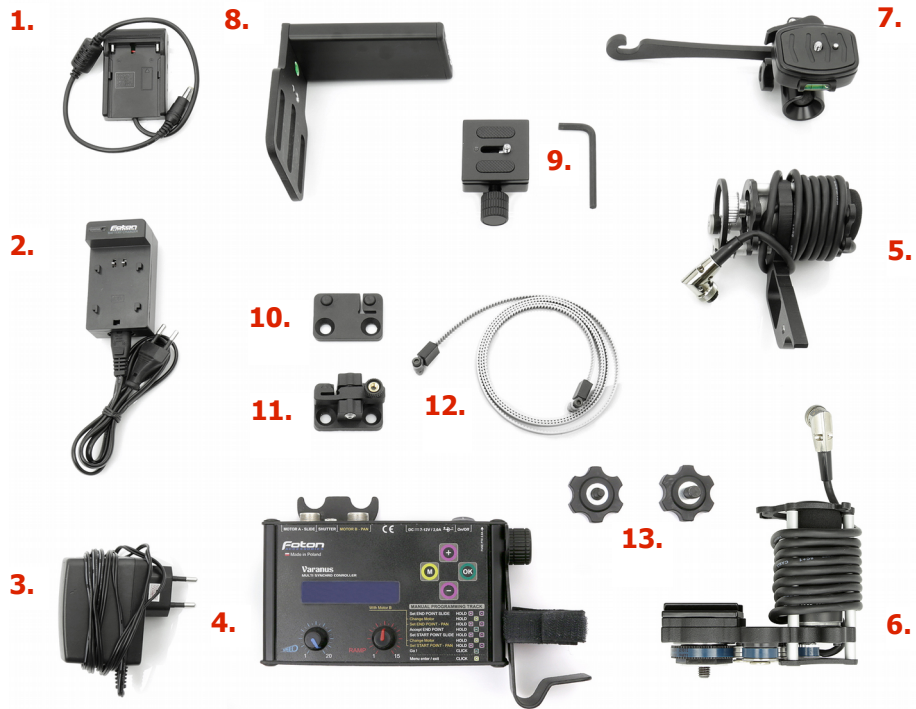
SV-1 – single drive set (slide), for Kameleon sliders



Components:

1. Battery Charger for Sony NP-Fxxx (or equivalent).
2. Battery Adapter with a power cord.
3. AC Adapter 230/12 V.
4. The controller with the battery holder and adapter for battery.
5. The movement motor (Slide).
6. Holder for the controller or the monitor.
7. Holder for the toothed belt.
8. Holder for the toothed belt with a tensioner.
9. Toothed belt.

SV-2 – double drive set (slide&pan), for Kameleon sliders



Components:

1. Battery Adapter with a power cord.
2. Battery Charger for Sony NP-Fxxx (or equivalent).
3. AC Adapter 230/12 V.
4. Controller with the battery holder and battery adapter.
5. The movement motor (Slide).
6. The rotation motor (Pan).
7. Holder for the controller or the monitor.
8. Holder for the recording device.
9. Adapter for the slider trolley with the internal 3/8" thread (+ Allen wrench).
10. Holder for the toothed belt.
11. Holder for the toothed belt with a tensioner.
12. Toothed belt.
13. Knobs with 1/4" and 3/8" thread for recording device mounting.

SV-3 – double drive set (pan&tilt)



Components:

1. Battery Adapter with a power cord.
2. Battery Charger for Sony NP-Fxxx (or equivalent).
3. AC Adapter 230/12 V.
4. Controller with the battery holder and battery adapter.
5. Regulated tripod holder, for the controller or monitor (assembled on $\varnothing 15 \div \varnothing 40$ pipes) .
6. Adapter with a quick connector and with the internal 3/8" thread (+ Allen wrench).
7. The rotation motor (Pan).
8. The rotation motor (Tilt).
9. Holder for the recording device.
10. Knobs with 1/4" and 3/8" thread for recording device mounting.

Recommended Accessories

1. Kameleon Sliders – **SLK64, 94, 130, 200.**



1. Electronic cable releases

- a) **KWCL-N3** - for **Canon**: 10D, 1D, 1D C, 1D mk II, 1D mk II N, 1D mk III, 1D mk IV, 1D X, 1Ds, 1Ds mk2, 1Ds mk3, 20D, 20Da, 30D, 40D, 50D, 5D, 5D mk II, 5D mk III, 6D, 7D, D30, D60;

Kodak: DSC-530;

- b) **KWCL-DC2** - for **Nikon**: D3100, D3200, D5000, D5100, D5200, D60, D7000, D7100, D90, D750;

- c) **KWCL-DC0** - for **Nikon** with socket MC-30: D1, D1H, D1X, D2, D200, D2H, D2HS, D2X, D2XS, D3, D300, D300S, D3s, D3X, D4, D700, D800, D800 E, D1, D100 (with MB-D100 battery grip), D1H, D1X, D2, D200, D2H, D2HS, D2X, D2XS, D3, D300, D300S, D3s, D3X, D4, D4s, D700, D800, D800 E i D810;

FujiFilm: S3 Pro, S5 Pro;

Kodak: DCS Pro 14n;

- d) **KWCL-DC1** - for **Nikon** with socket MC-DC1: D70S, D80;

- e) **KWCL-CB1** - for **Olympus**: E1, E3, E10, E20, E30;

- f) **KWCL-UC1** - for **Olympus** with socket RM-UC1: e520, e510, e420, e410, e300, e-p3, sp-590 uz, sp-570 uz, sp-560 uz, sp-550 uz, sp-510 uz;

- g) **KWCL-L1** - for **Panasonic** with socket RS-1: FT2, FZ100, FZ15, FZ150, FZ20, FZ200, FZ30, FZ50, G1, G10, G2, G3, G5, GF1, GH1, GH2, GH3, GX1, L1, L10, LC1, TS2, GH4;

Leica: DigiLux 2, DigiLux 3, V Lux 1, V Lux 2, V Lux 3;



- h) **KWCL-S1** - for **Sony**: Digi DSLR-A900, DSLR-A850, DSLR-A700, DSLR-A580, DSLR-A560, DSLR-A-550, DSLR-A450, DSLR-A350, DSLR-A300, DSLR-A200, DSLR-A100, SLT-A99, SLT-A77 II, SLT-A77, SLT-A65, SLT-58, SLT-A57, SLT-A55, SLT-A37, SLT-A35, SLT-A33;
Konica Minolta: Maxxum / Dynax / Alpha 7D, 5D; Dimage: A2, A1, 7Hi, 7i, 7, 5;
- i) **KWCL-S2** - for **Sony** with socket Multi Terminal: A7, A7R, A7S, A58, A3000, A5000, A5100, A6000, RX10, RX100 II, RX100 III, HX300, HX50V, HX60V, NEX-3NL.



3. Pan Drive – symbol: **SVSP**



4. Tilt Drive – symbol: **SVST**



5. High Tripod dedicated to Kameleon Slider (95 cm ÷ 160 cm) – symbol: **SLT**



6. Low Tripod dedicated to Kameleon Slider (65 cm ÷ 135 cm) – symbol: **SLTN**



7. Supporting Props designed for Kameleon Slider – symbol: **SLP**



8. Ball Head for various Drives setups – symbol: **SGF1F**



9. Ball Head for mounting Slider on Tripod – symbol: **SGF1**



10. Controller Holder to be mounted on pipes $\varnothing 15 \div \varnothing 40$ – symbol: **SUGV**



11. Mounting Adapter with 3/8" inner thread, for Pan Drive or additional accessories – symbol: **ADAP V**



12. 360° Turntable for packshot photography, ø 50 cm – symbol: **SVTZ**



13. Shutter release cord extension (1,8 m) – symbol **K22**



14. Signal cords extensions for Drives – symbols: **K23** (3 m) i **K24** (6 m)



15. Battery replacement of Sony NP-F970 – symbol: **AS08/F** capacity 7800 mAh








16. A small bag (for SV1 set) – symbol: **TK5**



17. A large bag (for SV2 and SV3 sets) – symbol: **TK10**

Work Safety

-  The manufacturer is not responsible for the installation other than as provided in the manual. It is not recommended to install the equipment at high altitudes, which could be a threat to the environment.
-  By installing a slider with the drive on the tripod, remember that the center of gravity changes while the trolley is driving. The whole set must be assembled so that stability in the full range of work is preserved.
-  Remember that the device is an open mechanical system. Do not interfere in its drive and work.
-  The cable must be installed taking into account the full range of operation.
-  Do not allow children near the device during its operation.

Maintenance and Cleaning

Due to its design the device does not require special maintenance service, lubrication, etc. It is important to keep the device clean of any dirt.

Warranty

The manufacturer reserves all copyrights to this manual. We provide a 12-month warranty from the date of purchase. It covers defects of construction and material. The warranty covers all repairs or where repair is not possible, a replacement of the product with a new one. This warranty does not cover damage and defects in the product resulting from its misuse, as well as non-compliance of improper maintenance. Please note that use of the slider drive in a manner inconsistent with the manual may result in damage or failure, for which the manufacturer is not responsible. The warranty is also invalid in the case of flooding, moisture, unauthorized attempts to repair and modification of mechanical damage incurred during transport or operation.

The warranty service is Foton Accessories headquarters – Kalisz, Poland.

We wish you a pleasant use!
Foton Accessories Team

Manufacturer:
Foton Accessories

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This manual may be downloaded
in electronic version at:



www.fotonexport.com



Made in Poland

A DETAILED DESCRIPTION OF THE VARANUS CONTROLLER NAVIGATION

Varanus

Main view of the display

Set End
Slide=>Pan holdM

Change the motor
M HOLD

Mode:Video

Mode:Time-lapse
Estimated:1min

Photo:50
(5-4500)

Pause [s]:2
(1-3600s)

Shutter:0,100s
(0,1-60,000s)

Interval:0h

Auto speed:0h

↓ MENU CURRENT SETTINGS ↑

DistanceA:0mm

UnknowDirection
MoveSlide (+->) M

RotationB:0deg

Time-lapse mode. The second row determines the time of the route in the step drive mode.

The number of time-lapse images (only in interval mode)

Pause between individual shots (does not include shutter time)

Shutter exposure time. Important! In order to avoid blurred images, set the controller time as equal or little longer than the shutter time in the camera.

Interval or continuous drive mode for time-lapse.

Automatic of the motors speed regulation only for time-lapse

When you turn off the controller, it does not cancel the settings values. In order to cancel the advanced settings press M + OK + Power ON simultaneously.

↓ SETTINGS ↑
ADVANCED SETTINGS

Loop track:Off

Delay start:Off
(0-240s)

Ramp:1
By ramp knob

Speed:20
By speed knob

Settings

New Track? OK

Loop track mode

Delay the start of the program (useful while creating animations)

Edit the values of soft start/breaking of the motors for the Video mode

Edit the values of the motors speed

Advanced settings

Cancel the previous track and start a new one

Seve menu:0
0 - default menu

Reset menu ?

Se1 Akku:7,4V
Info:8.11V

Power motor:20
1-50 optimal=20

Motor Pan:0h

Load menu:0
0 - default menu

Save settings on memory banks. Delete data on banks 1-9 by overwriting data. Bank 0 is the default bank. The banks do not store values of route and rotation.

Reset the current MENU settings and delete data on bank 0.

Information about power source, the voltage and the low voltage

Change motor power. Increase the parameter in vertical drive or high load and decrease the value in continuous time-lapse drive.

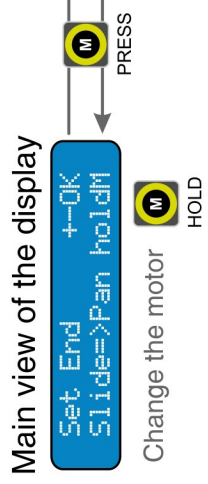
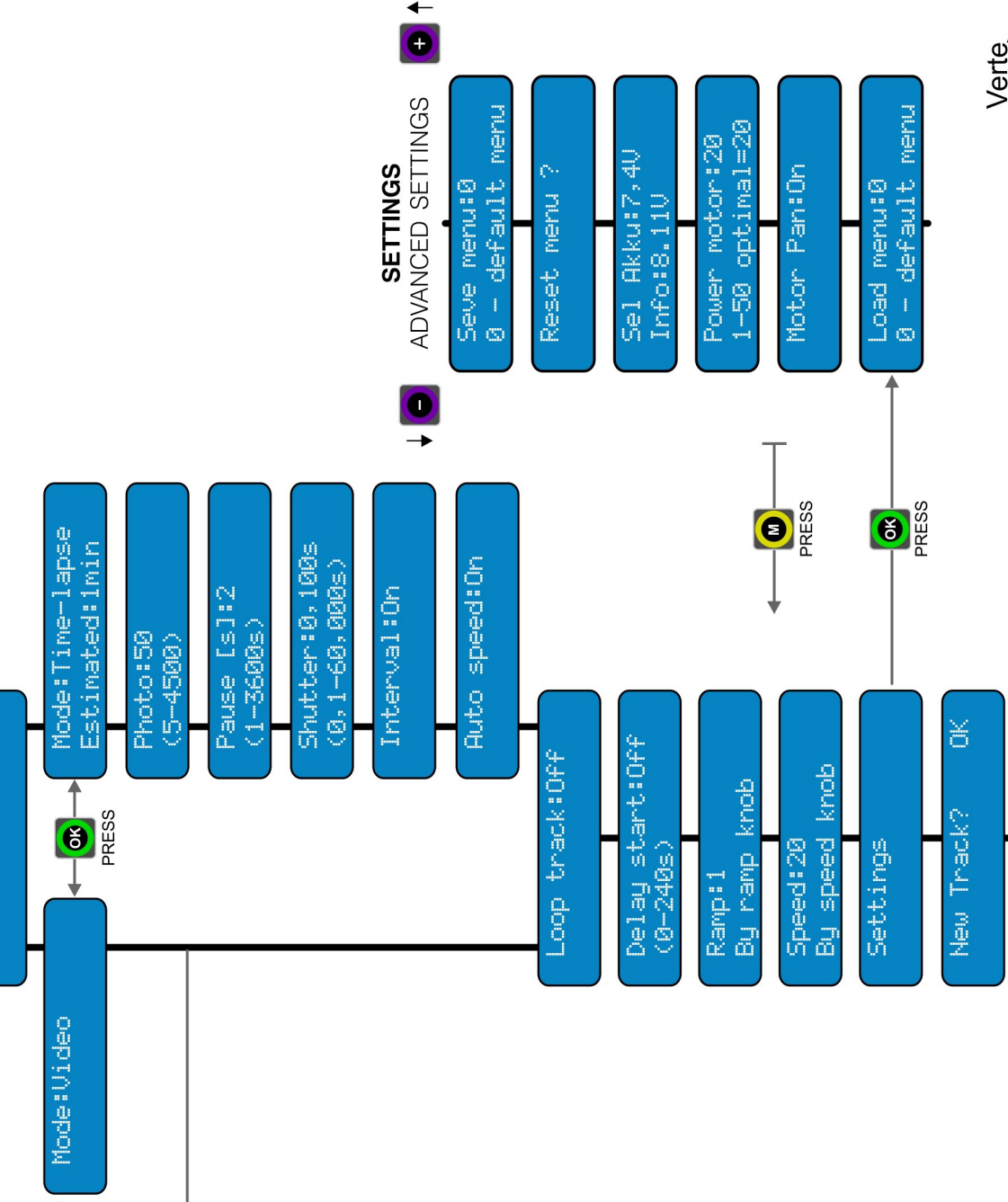
Turn off motor B (panorama) - required when only motor A is used.

load values from memory banks.

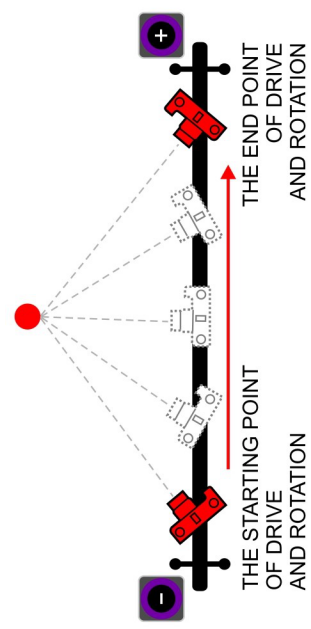
M PRESS

OK PRESS

CONTROLLER NAVIGATION Varanus



An easy way to set the route:



MANUAL ROUTE SETTING			
Set the end point SLIDE	HOLD	HOLD	HOLD
-Change motor	HOLD	HOLD	HOLD
-Set the end point - PAN	HOLD	HOLD	HOLD
Accept the end point	HOLD	HOLD	HOLD
Set the starting point SLIDE	HOLD	HOLD	HOLD
-Change motor	HOLD	HOLD	HOLD
Set the starting point - PAN	HOLD	HOLD	HOLD
Go!	HOLD	PRESS	PRESS
Enter / exit MENU	PRESS	PRESS	PRESS

Legend: HOLD ≥ 1 sec PRESS = Click