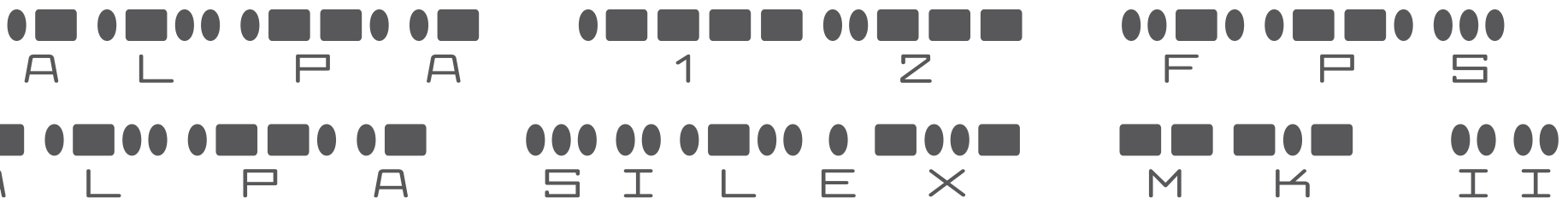
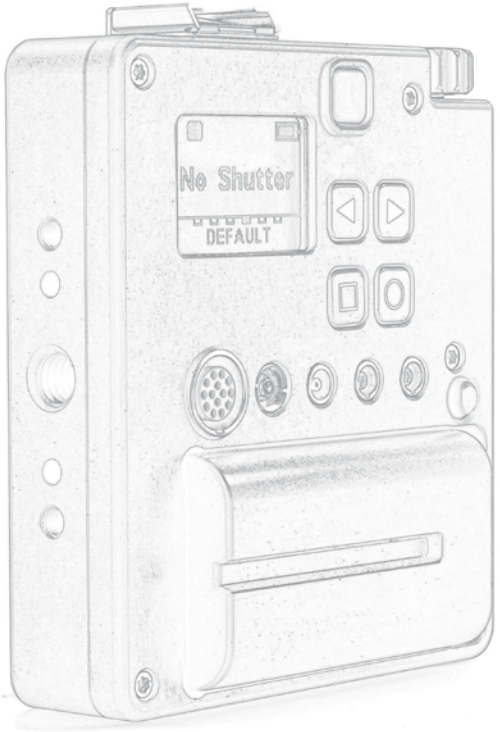


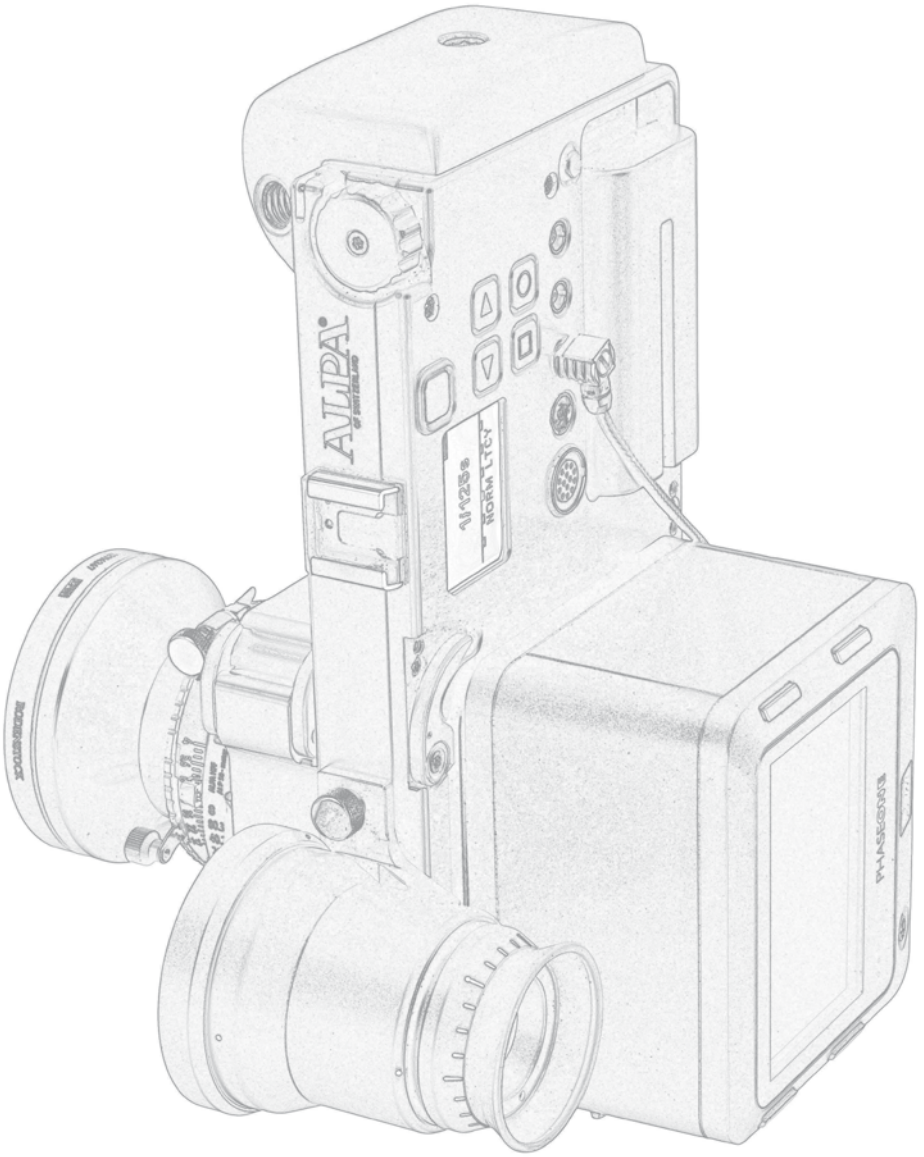
INSTRUCTION MANUAL

REL – 5.11

15 OCTOBER 2019

ALPA®
OF SWITZERLAND


No Shutter
DEFAULT


ALIPA

The ALPA 12 FPS (focal plane shutter) opens the door into a new dimension: from the modular camera platform to the open toolbox. The ALPA 12 FPS acts as a shutter module when used together with another ALPA 12 camera. However, it is also an independent camera when combined on its own with a back, a lens, and a suitable adapter. This flexibility opens up the use of brand-new or fond old lenses from dozens of different optical systems manufacturers – with or without a central shutter and with or without manual or electronic aperture control. Plus, a free choice of format is only limited by the lens's image circles and sensor sizes.

The ALPA Silex Mk II is the modularized "brain" of the ALPA 12 FPS without the focal plane shutter. This control element shares the numerous functionalities of the ALPA 12 FPS. Together with the ALPA Electronic Lens adapter (ELA), all ALPA Lens Modules can be operated identically on all standard ALPA bodies. It can control the Sinar/Leica/Rodenstock eShutter 125 and 250.

The ALPA 12 FPS and Silex Mk II open up the field of shift/tilt/swing/stitch in a wide range of variants and with the corresponding accessories to a whole new world which had previously hardly been possible, if at all. A continuously expandable firmware controls the whole system in a concept that includes all previous ALPA 12 models, many lenses, and almost all digital backs produced in the past ten years. A previously unknown variety of possibilities and combinations is opened up – a toolbox that the user can equip and utilize according to their own needs or while using already existing tools.

FPS: CONTROL ELEMENTS

k1		Switch-on by pressing 2 sec/off 5 sec, auto switch-off after selected time of inactivity when battery powered, see also (D)
k1		Release button, start/stop T exposure, [k5] & [k1] see upgrade process
k2		Turn left/right ➔ increases or decreases value depending on wheel configuration
k2		Push ➔ tab /// long ➔ key lock (except [k1]), push long again for unlocking
k3		Program page left
k3		Push long ➔ activates LCC offset mode (see page 21)
k4		Program page right, Push long for activate/deactivate bracketing
k5		Open/close focal plane or leaf shutter
k5		Push long ➔ turns the camera off, [k5] & [k1] see upgrade process
k6		Closes the aperture to the preset value, toggles between open and close (only Canon EF, Nikon E, Hasselblad H, Contax 645, Rollei 6000 lenses)
k6		Push long ➔ switching display illumination off/on
k2 & k1		Cancels a running bracketing or self timer program
k5 & k1		Firmware upgrade when switched off, see upgrade process

FPS: CONNECTORS

A	Lemo 14pin for external electronic leaf shutter systems like Sinar eShutter.
B	Flash connector PC type for synchronization of digital backs and/or flash control, alternative sync port
C	Lemo 1pin for synchronization of digital backs, main sync port
D	Lemo 3pin for hand grip trigger, starting the camera, cable remote trigger or triggering by Pocket Wizard, e.g., acts as [k1] ➔ activate for 2 seconds to turn the camera on, releases the shutter and activating for 5 seconds will turn the camera off
E	Lemo 4pin for external power supply in and out (no auto switch-off)
BAT	Release button for battery, push and slide battery out
RJ45	Ethernet port for remote control via LAN/WiFi
USB	Port for firmware upgrades and uploading sync programs
CS	Cold shoe, accessory adapter

Connect the ALPA Electronic Lens Adapter (ELA) with connector A in order to operate ALPA lens modules [ALPA article no 450.010.817].

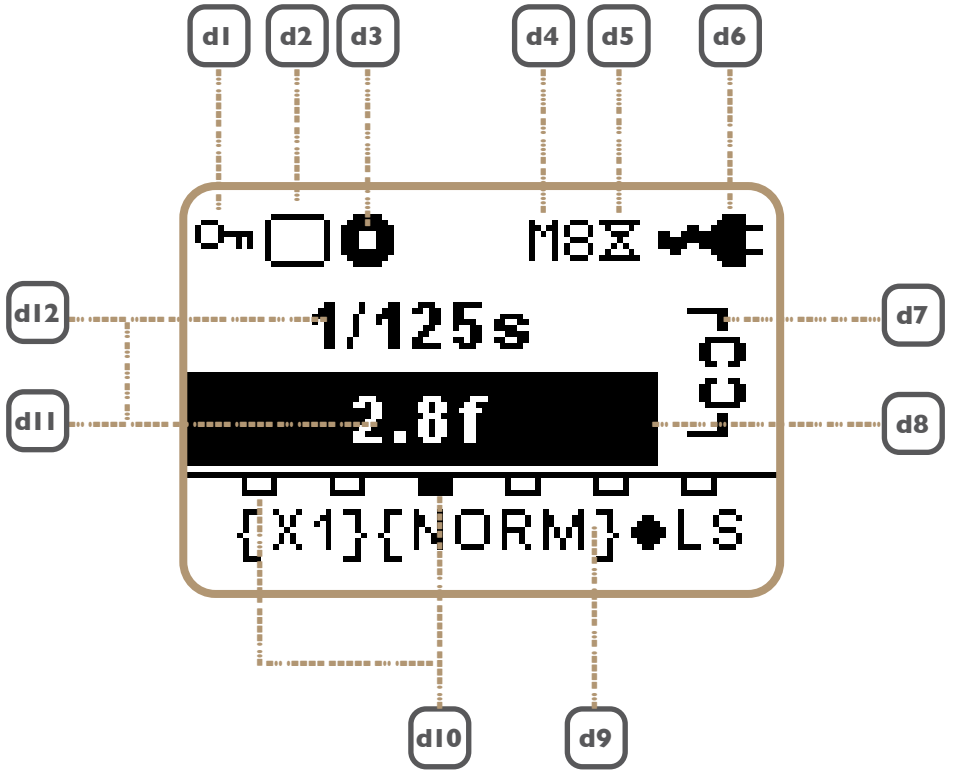
Lenses in eShutter 125 & 250 can get connected directly on the ALPA Silex Mk II via LEMO socket in front.

Silex Mk II: CONTROL ELEMENTS

k1		Switch-on by pressing 2 sec/off 5 sec, auto switch-off after selected time of inactivity when battery powered, see also (D)
k1		Release button, start/stop T exposure, [k5] & [k1] see upgrade process
k2		Turn left/right ➔ increases or decreases value depending on wheel configuration
k2		Push ➔ tab /// long ➔ key lock (except [k1]), push long again for unlocking
k3		Program page left
k3		Push long ➔ activates LCC offset mode (see page 21)
k4		Program page right, Push long for activate/deactivate bracketing
k5		Open/close focal plane or leaf shutter
k5		Push long ➔ turns the camera off, [k5] & [k1] see upgrade process
k6		Closes the aperture to the preset value, toggles between open and close (only Canon EF, Nikon E, Hasselblad H, Contax 645, Rollei 6000 lenses)
k6		Push long ➔ switching display illumination off/on
k2 & k1		Cancels a running bracketing or self timer program
k5 & k1		Firmware upgrade when switched off, see upgrade process

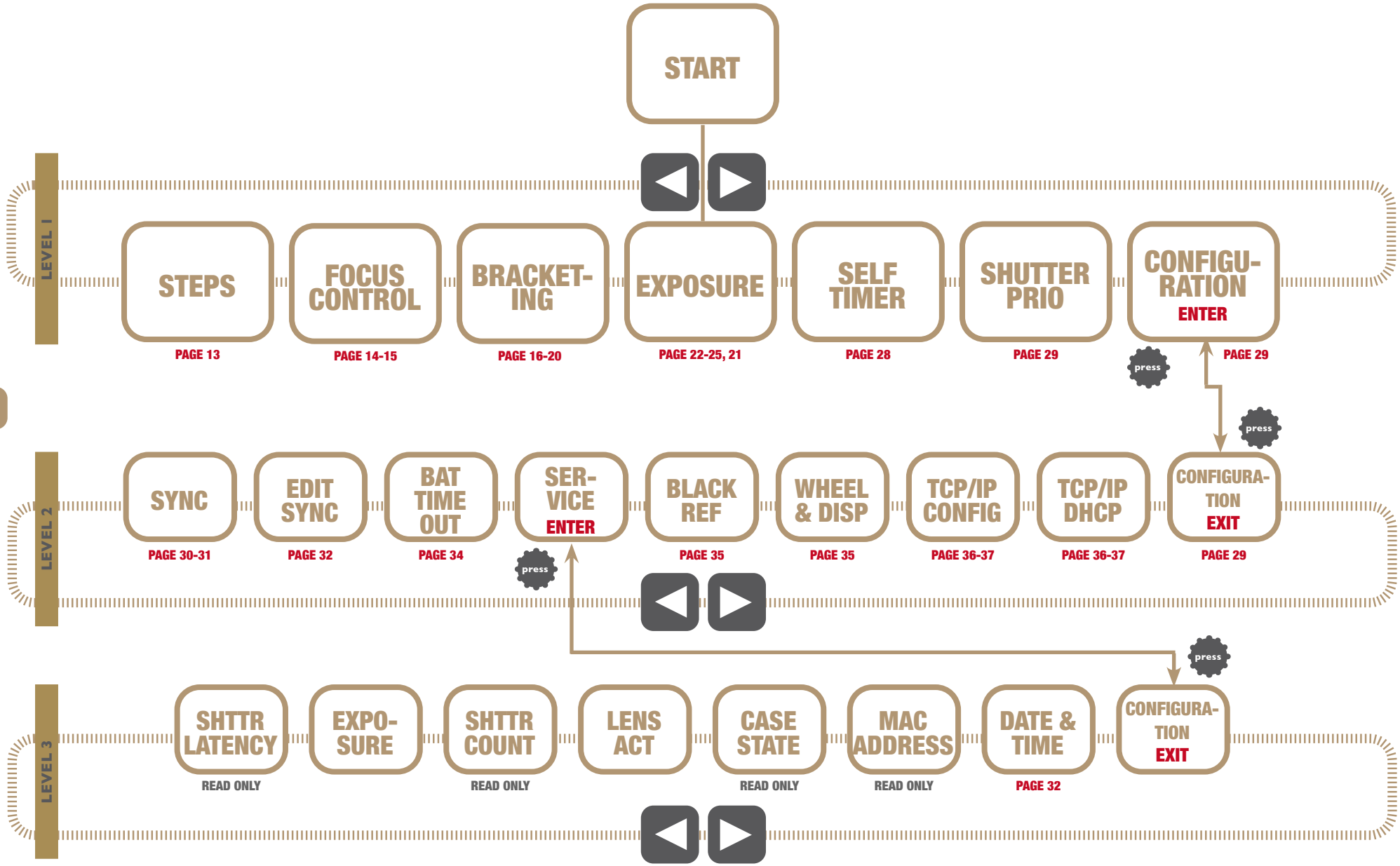
Silex Mk II: CONNECTORS

A	Lemo 14pin for external electronic leaf shutter systems and ALPA Electronic Lens Adapter (ELA).
B	Flash connector PC type for synchronization of digital backs and/or flash control, alternative sync port
C	Lemo 1pin for synchronization of digital backs, main sync port
D	Lemo 3pin for hand grip trigger, starting the camera, cable remote trigger or triggering by Pocket Wizard, e.g., acts as [k1] ➔ activate for 2 seconds to turn the camera on, releases the shutter and activating for 5 seconds will turn the camera off
E	Lemo 4pin for external power supply in and out (no auto switch-off)
BAT	Release button for battery, push and slide battery out
RJ45	Ethernet port for remote control via LAN/WiFi
USB	Port for firmware upgrades and uploading sync programs
CS	Cold shoe, accessory adapter


d1
d2
d3
d4
d5
d6
M8Z
d12
1/125s
d7
d11
2.8f
d8
{X1}{NORM}LS
d10
d9

DISPLAY ELEMENTS

d1	key lock - all elements except release button are blocked
d2	shutter status - a dark rectangular indicates a closed shutter, a light framed rectangular indicates an opened shutter
d3	aperture status - a light framed circle indicates an open aperture, a dark doughnut-like cirlce indicates a stopped down aperture
d4	multi-exposure / bracketing status (bracketing can be switched on and off by long pressing arrow right [k4] shows "LCC" if this mode is activated by long pressing [k3]
d5	self-timer
d6	battery level / power supply
d7	chaining exposure time & aperture
d8	tab selector (on the respecitve interface page/widget)
d9	info area (sync mode; shutter priority see settings)
d10	menu page indicator - the black tab indicates the position in the menu
d11	aperture value
d12	exposure time

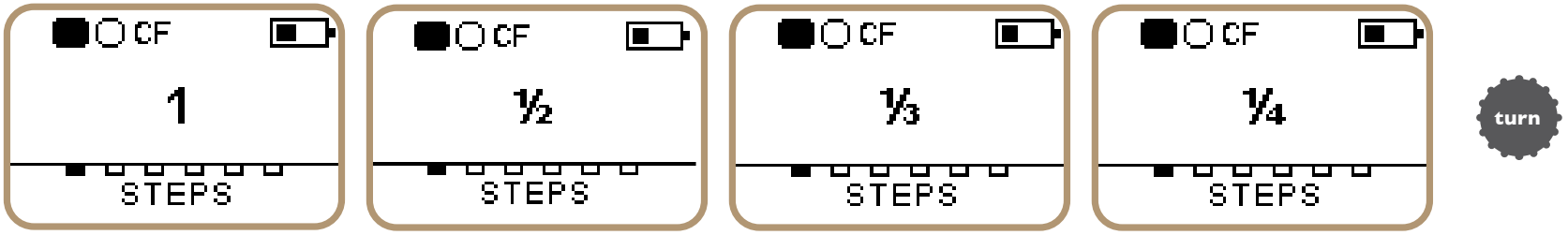

START
LEVEL 1
STEPS
PAGE 13
FOCUS CONTROL
PAGE 14-15
BRACKET-ING
PAGE 16-20
EXPOSURE
PAGE 22-25, 21
SELF TIMER
PAGE 28
SHUTTER PRIO
PAGE 29
CONFIGU-RATION ENTER
PAGE 29
press
press
LEVEL 2
SYNC
PAGE 30-31
EDIT SYNC
PAGE 32
BAT TIME OUT
PAGE 34
SER-VICE ENTER
press
BLACK REF
PAGE 35
WHEEL & DISP
PAGE 35
TCP/IP CONFIG
PAGE 36-37
TCP/IP DHCP
PAGE 36-37
CONFIGURA-TION EXIT
PAGE 29
press
LEVEL 3
SHTTR LATENCY
READ ONLY
EXPO-SURE
SHTTR COUNT
READ ONLY
LENS ACT
CASE STATE
READ ONLY
MAC ADDRESS
READ ONLY
DATE & TIME
PAGE 32
CONFIGURA-TION EXIT

MENU ELEMENTS

0-0	Start screen
1-1	Steps in EV for aperture and shutter speed
1-2	Focus control
1-3	Bracketing and multi-exposure programs
1-4	Exposure
1-5	Self timer
1-6	Shutter priority mode
1-7	Enter configuration menu (level 2)
2-1	Select sync programs
2-2	Manage sync programs
2-3	Battery Time Out
2-4	Enter service menu (level 3)
2-5	Enable/disable black reference
2-6	Wheel configuration (+/- or -/+)
2-7	Configure TCP/IP or read received values depending on the DHCP status
2-8	Define DHCP configuration (IP via DHCP or fixed)
2-9	Exit configuration level (back to level 1)

START SCREEN

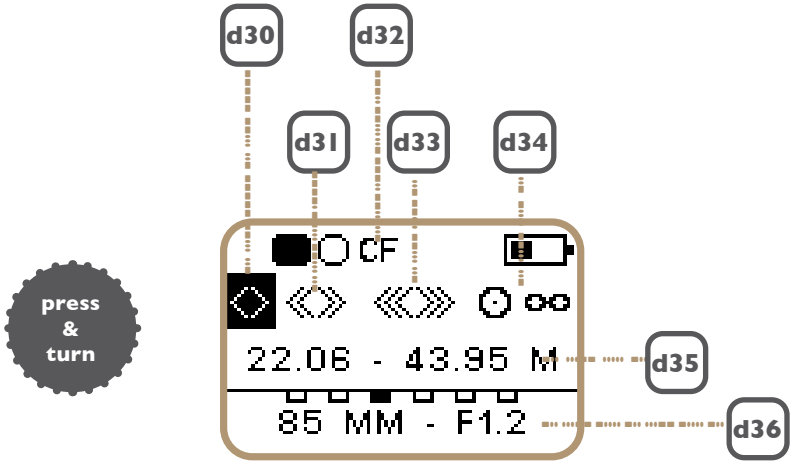
d15	Actual number of actuations of the internal focal plane shutter. The factory delivery counter shows 100 actuations of the focal plane shutter. Not relevant for ALPA Silex Mk II.
d16	Indication of the FPS/Silex Mk II firmware release successfully installed on the camera.



STEP VALUES

Select the increments for exposure time (and aperture, if available) in value steps of 1, ½, ⅓ , ¼ as you like.

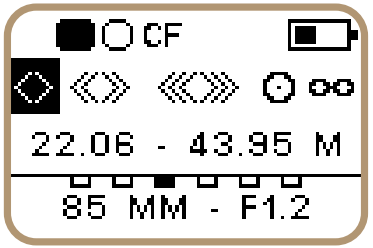
HINT: If you change the STEPS and navigate back to EXPOSURE the value can jump to 1/4000 (Silex Mk II and leaf shutter lenses = the shortest exposure time available) if the previously selected value is not available in this step table.

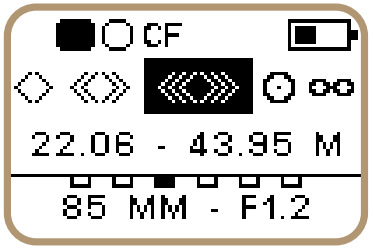


DISPLAY ELEMENTS

Select the function [d30, d31, d33, d34] by clicking the turn-wheel (k2) for tabbing and turn for executing. At the moment only CANON EF lenses are supported.

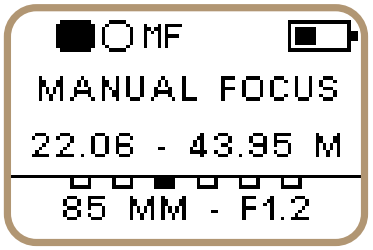
d30	change focus "superfine" by one step, defined by specific lens
d31	change focus "fine" by 2 % of focus hub of the specific lens
d32	indication for controlled focus (CF) or manual focus (MF), the latter mode is reflecting the focus status of the specific lens (manual switch on various lenses)
d33	change focus "coarse" by 10 % of focus hub of the specific lens
d34	turn lens to stop at close focus distance or infinity (and beyond)
d35	indication of the focus sector in meters, availability of this information and accuracy is defined by the specific lens
d36	indication of the lenses focal length (fixed) or the actual focal length (zoom) in millimeters, indication of the actual pre-dialed aperture, all indications defined by the specific lens. Only if provided by the lens.





Select the focus step by pressing the turn-wheel for tabbing. Turn for activating. The focus motor follows the direction as indicated with the "close focus" and "infinity" signs, therefore turn left for focusing towards close focus and turn right for focusing towards infinity.

HINT 1: Depending on the Wheel configuration the effect might be inverse, see page 33.

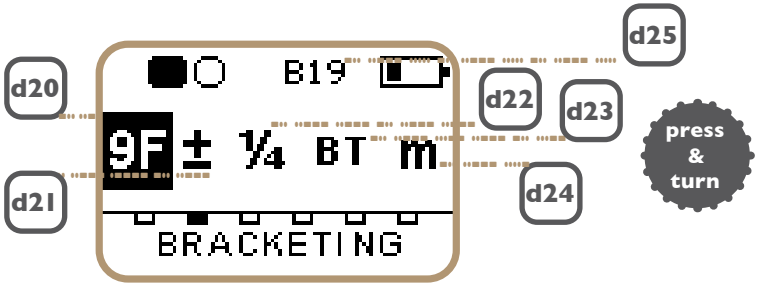


The status "MANUAL FOCUS" is shown when a manual focus lens or an auto focus lens set to "MF" is detected. A focus range in meters is shown if available by the specific lens. Precision and spread is determined by the lens.

If no or a not supported lens is attached the screen shows FOCUS CONTROL being "NOT AVAILABLE".

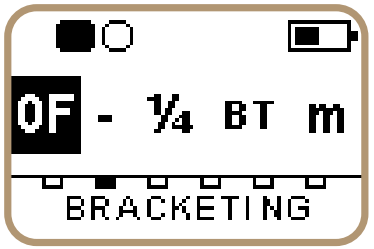
HINT 1: The status area shows the status of the lens (CF, MF or empty) in the status area in every menu screen.

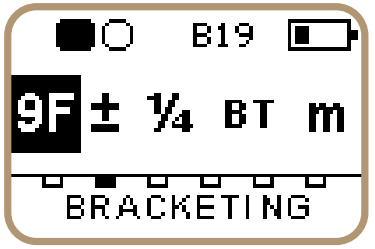
HINT 2: Do not touch the lens until it has performed the complete turn from close to infinity focus, ending in the middle position. Otherwise mount a different (Canon) lens, let the camera perform the focus calibration and re-mount the original lens. Wait until the camera has performed the focus calibration again.



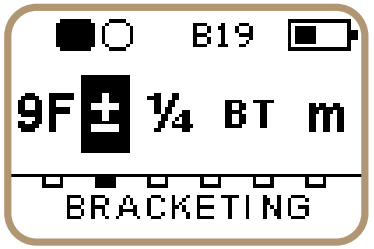
DISPLAY ELEMENTS

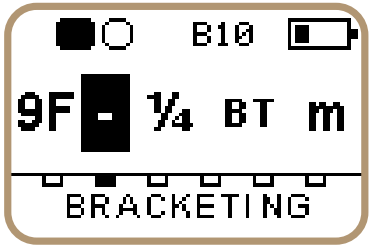
d20	frames per sequence	**d23**	program type
d21	sequence	**d24**	timing
d22	increment	**d25**	total frames



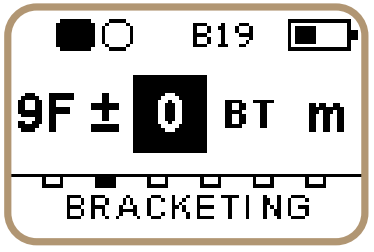


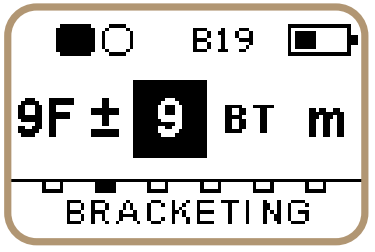
The first variable allows to set up the number of images to be taken. The values range from 0 to 9 frames, where the setting "0F" disables the compete program. All other settings remain stored also after switching the camera off for a comfortable reactivation. The order or sequence of the complete program is defined in the next setting. Always push the turning knob and tab to the next variable.



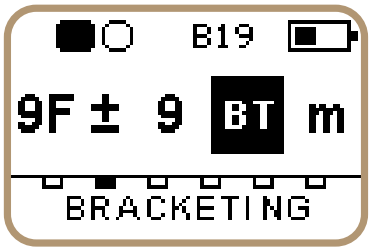


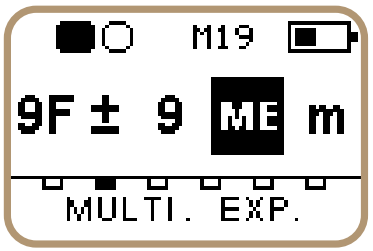
The sequence defines in which order the frames get taken. Possible values are +/-, -/+, +, -. A setting "+/-" starts with the frames with longer exposure, then the base setting followed by the shorter exposures. The indication "B19" expresses 9 images "+" in exposure, the base setting and then the 9 images with "-" exposure. A "9F" with "-" sequence equals 10 images (9 plus base). The variation is defined by the increment in the next setting.

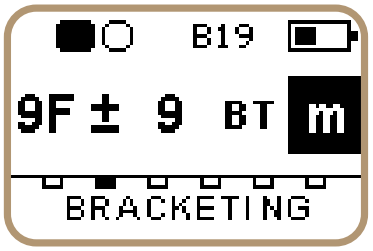


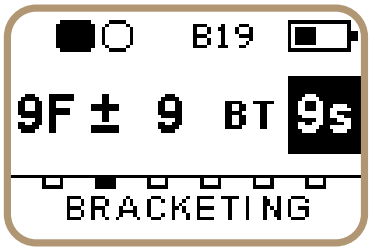


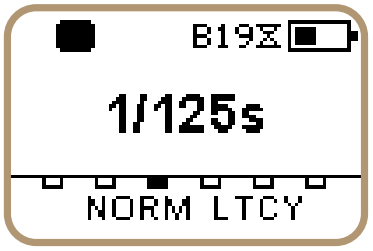
The increments range from ¼ to 9 EV. The bracketing program will add/deduct the given steps for each number of images. Therefore 9 frames in +/- mode and a step of 2 EV would start with 18 EV correction for the first, 16 EV for the second shot etc. A setting of "0" allows an automatic sequence of shots based on the setting in the timing field. The next variable defines the type of program.

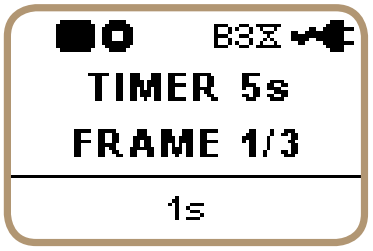












FPS & Silex Mk II: CONTROL ELEMENTS

k4	▶	**Press and hold to enable/disable the bracketing program. An activated program is indicated by „Bxx“ in the upper display area.**

Apart from the standard bracketing program for HDR et al, the ALPA 12 FPS also allows digital multiple exposures. For a better identification the count in the info header changes from “B99” to “M99” (a running program is indicated when these values blink).

For a closer look at the multiple exposure see the specific section on page 16.

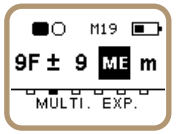
The timing variable defines the way how the program sequences gets executed. Available values are “m”anual (user triggers next release), 1 to 9 seconds (automatic release). The waiting time for the black reference is added automatically and in addition if BLACKREF is ON, see page 33.

A prepared bracketing program is visible in the info header on every menu screen.

During th execution of a bracketing program the indication in the info header blinks with the remaining number of frames to go. The main info area shows timer/exposure (here 5s until the next frame is taken) and the status like frame 1 of 3. The footer info area shows the exposure time of the next frame.

HINT 1: Test for the best timing with your digital back and typical storage medium in use in advance. Mind the typical writing speed of your personal back/storage combination.

HINT 2: Interrupt a running self timer program by swiftly click/holding the turning knob and pushing the release button at any time.

	ME: MULTIPLE EXPOSURE	MES: MULTIPLE EXPOSURE SEQUENCE	MF: MULTIPLE FLASH
USE	Multiple exposures with digital backs. Ease of use via bracketing menu. For artistic or technical photography.	Primarily technical photography in daylight situations.	Technical or artistic photography in studio situations; visualization of movements, e.g.
OPERATION	via bracketing menu 	via XML, sample see appendix	via XML, sample see appendix
DISPLAY	shown in upper status area like "M19", blinking when program is running	only via exposure program name shown in lower status area	only via exposure program name shown in lower status area
SHUTTER TIME LIMITATION	none, apart from 1/125 sec as shortest flash sync time for the focal plane shutter when flash lights are used	none, apart from 1/125 sec as shortest flash sync time when flash lights are used; if combined with multiple flash, see MULTIPLE FLASH	must be longer than the complete program duration; FPS terminates the program if shutter time elapsed before program is completed; audible delay of the re-cocking of the shutter is indicating the override
FLASH SYNC LIMITATION	FPS: 1/125 sec as fastest shutter time Leaf shutter lenses: all shutter times	FPS: 1/125 sec as fastest shutter time Leaf shutter lenses: all shutter times	FPS: 1/125 sec as fastest shutter time Leaf shutter lenses: all shutter times
COMBINATIONS	can be combined with Bracketing, combination with MES and MF via sync programs possible but not recommended	can be combined with Bracketing, combination with MES and MF via sync programs possible but not recommended	can be combined with Bracketing, combination with MES and MF via sync programs possible but not recommended
PROGRAM ABORT	any time by swiftly pressing the turning knob down and activating the release button; image is written down after program abort too	any time by swiftly pressing the turning knob down and activating the release button; image is written down after program abort too	any time by swiftly pressing the turning knob down and activating the release button; image is written down after program abort too

XML

This mode allows multiple exposures with a high repeat accuracy. The XML files can consist of as many shutter cycles as needed. Timing is determined in microseconds. Please store the file with an .fps ending and UTF-8 encoded.

A combination with multiple flash is possible (within a complete shutter cycle). Please mind the fastest recycling times of your flash devices. The program can be used with all exposure times but the fastest flash sync time for normal operation is 1/125 sec. Please use a "RunDelay" of 5000 microseconds before firing the flash. The sample fires the shutter twice (one right after the other, delays can be timed with the "RunDelay" command).

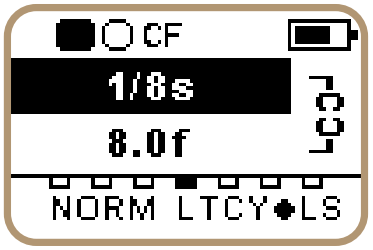
```
<?xml version="1.0" encoding="UTF-8"?>
<ProgramSequence version="100" Name="Multi 2x">
        <Action delayTimeUSEC="200">SETSYNCHLEMO</Action>
        <Action delayTimeUSEC="50000">CLEARSYNCHLEMO</Action>
        <Action delayTimeUSEC="200">SETSYNCHLEMO</Action>
        <Action delayTimeUSEC="100">OpenIShutter</Action>
        <Action delayTimeUSEC="5000">RunDelay</Action>
        <Action delayTimeUSEC="100">1VSetFlash</Action>
        <Action delayTimeUSEC="100">1VClrFlash</Action>
        <Action delayTimeUSEC="100">CloseIShutter</Action>
        <Action delayTimeUSEC="100">OpenIShutter</Action>
        <Action delayTimeUSEC="5000">RunDelay</Action>
        <Action delayTimeUSEC="100">1VSetFlash</Action>
        <Action delayTimeUSEC="100">1VClrFlash</Action>
        <Action delayTimeUSEC="100">CloseIShutter</Action>
        <Action delayTimeUSEC="100">CLEARSYNCHLEMO</Action>
</ProgramSequence>
```

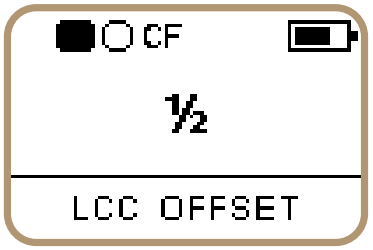
XML

This mode allows multiple flash triggering with a high repeat accuracy. The XML files can consist of as many flash cycles as needed. Timing is determined in microseconds. The shortest flash recycling time depends on the brand and make as well as the output power set. Please store the file with an .fps ending and UTF-8 encoded.

The multiple flash sequence can be programmed in microseconds with highest repeat accuracy. Please mind the fastest recycling times of your flash devices and the FPS' fastest flash sync time for normal operation of 1/125 sec. The exposure time should be at least as long as the complete cycle. Otherwise the FPS cuts the execution after the exposure time has elapsed. An audible delay of the re-cocking of the shutter can be heard in this case. The sample triggers the flash 6 times every 1/10 sec.

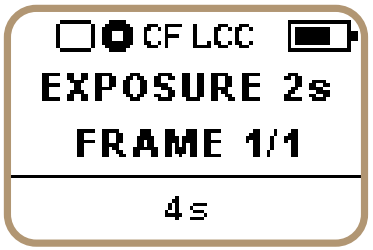
```
<?xml version="1.0" encoding="UTF-8"?>
<ProgramSequence version="100" Name="Flash6Pac">
      <Action delayTimeUSEC="200">SETSYNCHLEMO</Action>
      <Action delayTimeUSEC="50000">CLEARSYNCHLEMO</Action>
      <Action delayTimeUSEC="200">SETSYNCHLEMO</Action>
      <Action delayTimeUSEC="100">OpenIShutter</Action>
      <Action delayTimeUSEC="5000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSetFlash</Action>
      <Action delayTimeUSEC="100">1VClrFlash</Action>
      <Action delayTimeUSEC="100000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSETFLASH</Action>
      <Action delayTimeUSEC="100">1VCLRFLASH</Action>
      <Action delayTimeUSEC="100000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSETFLASH</Action>
      <Action delayTimeUSEC="100">1VCLRFLASH</Action>
      <Action delayTimeUSEC="100000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSETFLASH</Action>
      <Action delayTimeUSEC="100">1VCLRFLASH</Action>
      <Action delayTimeUSEC="100000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSETFLASH</Action>
      <Action delayTimeUSEC="100">1VCLRFLASH</Action>
      <Action delayTimeUSEC="100000">RunDelay</Action>
      <Action delayTimeUSEC="100">1VSETFLASH</Action>
      <Action delayTimeUSEC="100">1VCLRFLASH</Action>
      <Action delayTimeUSEC="100">CloseIShutter</Action>
      <Action delayTimeUSEC="100">CLEARSYNCHLEMO</Action>
</ProgramSequence>
```



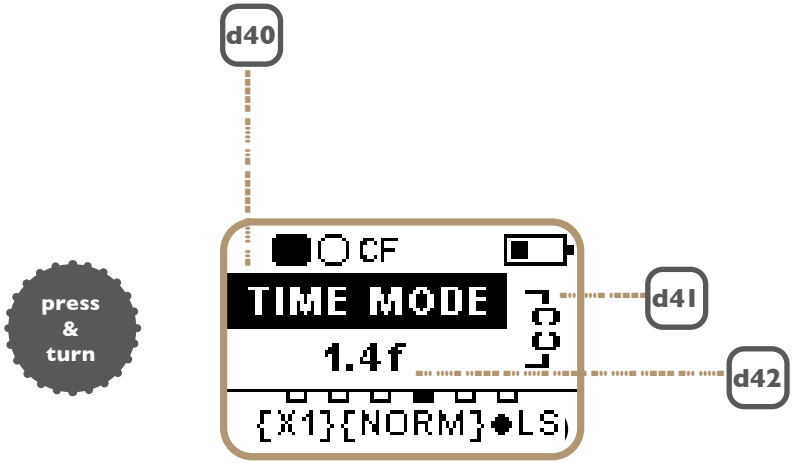


Taking correction images for eliminating possible false colours, vignetting and sensor dust the LCC, White Calibration et al. are routine in demanding photography with technical cameras. To simplify the necessary exposure correction for these "white shots", press [k3| long and the exposure modes switches into the LCC offset mode. This handy feature allows any temporary exposure time extension by 0.5 to 5 EV at the push of a button.

The LCC offset mode stores the last value even after the camera is turned off. The range is from 0.5 EV to 5 EV in half steps. Pressing the trigger button executes the program. The correction value extends the currently selected shutter speed accordingly.



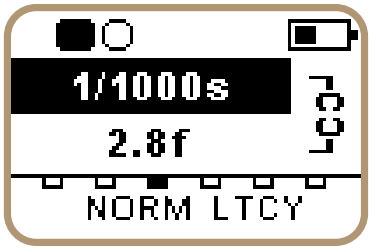
Exposure times above 1 second are shown in the display with the real, extended shutter speed and counted down. If the "BLACKREF" function is switched on, the additional calibration time is counted down after exposure.

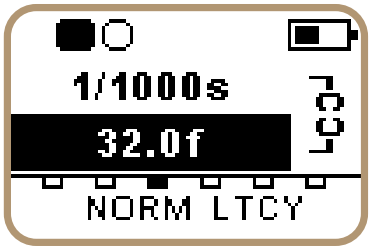


DISPLAY ELEMENTS

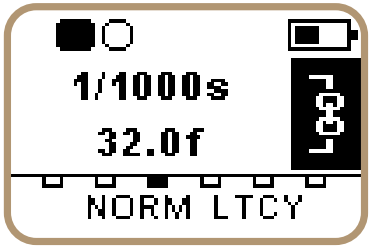
The screen changes its appearance depending on the lens attached.

d40	Exposure time: 128 - 1/4000 sec in various increments (see STEPS), plus TIME MODE (1st press for start, 2nd press for stop), if the lens does not offer automatic aperture control the exposure time only is displayed; value remains stored when camera is turned off. If initialized the value is 1/4000s or the shortest time available on leaf shutter lens.
d41	Chaining symbol, if selected time and aperture change in opposite direction keeping the EV stable
d42	Aperture: range depends on the lens in use, increments according pre-set (see STEPS). Value is stored when camera is turned off. The value is retrieved if the lens was not changed or the lens module has changed. If initialized the value is set to the largest aperture.

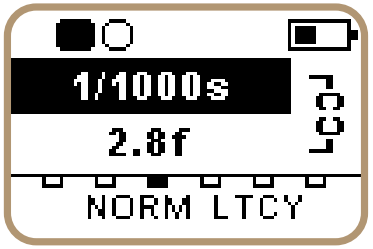


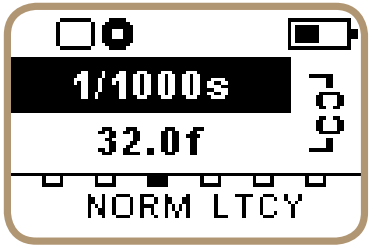


Navigate exposure time, aperture and chaining by pressing the turning wheel. Change values by turning the wheel. Standard: Turn left for increasing values, turn right for decreasing values. This behavior can be switched in the menu "Wheel Configuration", see page 33.



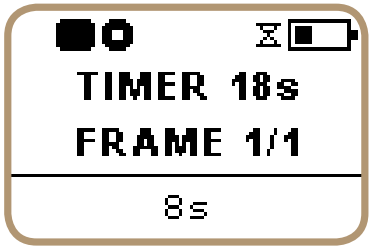
Select the chaining symbol. When selected time and aperture change in opposite direction keeping the EV stable. If nor or a lens without automatic aperture control is attached the exposure time is shown only.



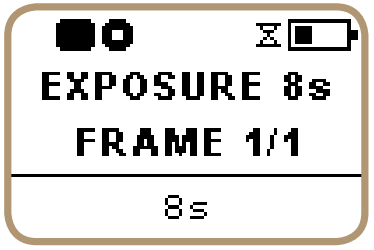


The status of the shutter (closed/open) is displayed in the info header. A solid rectangle indicates a closed shutter, a frame rectangle represents the opened shutter.

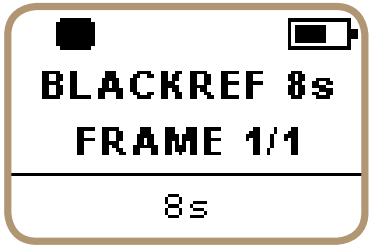
The frame circle indicates aperture open/not stopped down, where a bold circle represents the stopped down aperture.



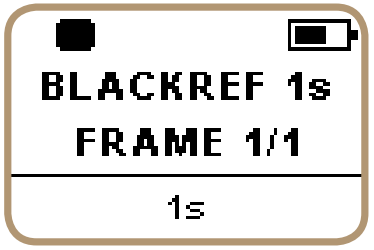
When a self timer is engaged the screens shows "TIMER" and the count down in seconds. Please note: the exposure time is added to the self timer (sample left: 10 sec self timer + 8 sec exposure = 18 sec).



When the timer has elapsed the screens switches to "EXPOSURE" counting down the exposure time to zero.



After the exposure the camera automatically adds the respective waiting time for the black-reference. The black-reference is a second image of the "dark" sensor (without light). Most backs use this technique in order to improve the image quality.



The black-reference waiting time is applied for any given time. So the exposure is counting up and the black-reference is counting down. It adds a small amount of time for security reasons. Please note that the display only shows the black-reference only down to one second. Below it still performs the black-reference waiting time but without being visible.

HINT: The automatic black-reference waiting time allows a fully automatized bracketing sequence also with long exposure times in use. The user can enable/disable the black-ref mode in the configuration.

MODE / FUNCTION	ALPA COPAL Hasselblad V Mamiya 645 manual	CANON EF	NIKON E	CONTAX 645	HASSELBLAD H	ROLLEI 6000	Sinar/Leica Rodenstock eShutter Silex Mk II only
Lens or Lens Module	SB 34: 180.888.017 FPS SB 17: direct HB V: 180.888.710* M645: 180.888.510*	180.888.310	180.888.110	fix: 180.888.612 shift: 180.888.630*	fix: 180.888.812 shift: 180.888.830*	fix: 180.888.910* shift: 180.888.930*	all lenses in eShutter 125 or 250
FPS Silex Mk II ELA	FPS: 010.888.010	FPS: 010.888.010 Silex Mk II & ELA: 030.010.010 & 450.010.817	FPS: 010.888.010 Silex Mk II & ELA: 030.010.010 & 450.010.817	FPS: 010.888.010 Silex Mk II & ELA: 030.010.010 & 450.010.817	FPS: 010.888.010 Silex Mk II & ELA: 030.010.010 & 450.010.817	FPS: 010.888.010 Silex Mk II & ELA: 030.010.010 & 450.010.817	all lenses in eShutter 125 or 250
Aperture	manual via Copal shutter, aperture not displayed	controlled by FPS, aperture on display	controlled by FPS for E lenses [1], aperture on display; manual with all manual aperture lenses, aperture not displayed	controlled by FPS, aperture on display, the aperture ring is disabled	controlled by FPS, aperture on display	controlled by FPS, aperture on display (some older lenses manual preset via lens only)	controlled by Silex Mk II
Focal Plane Shutter	T, 128-1/4000s	T, 128-1/4000s	T, 128-1/4000s	T, 128-1/4000s	faster then 1/800s	faster then 1/500s [3]	n/a
Copal Leaf Shutter (ALPA only)	T, B, 1-1/500s via Copal shutter [2]	n/a	n/a	n/a	T, 128-1/800s T, 128-1/1000 [5]	T, 128 - 1/500s	e250: T, 128 - 1/250s e125: T, 128 - 1/125s
Focus Control via Camera and Remote	n/a	yes	yes [4]	yes	yes	n/a	n/a
Display Distance	n/a	yes [4]	yes [4]	yes	yes	n/a	n/a
Display Focal Length	n/a	yes [4]	yes [4]	yes	yes	n/a	yes
Display Aperture	n/a	yes [4]	yes [4]	yes	yes	yes [4]	yes

Remarks

[1] Only lenses with electronic aperture control are supported for aperture control. The lenses aperture ring is disabled. Use the control wheel of your ALPA 12 FPS/Silex Mk II. Type "G" lenses not supported.

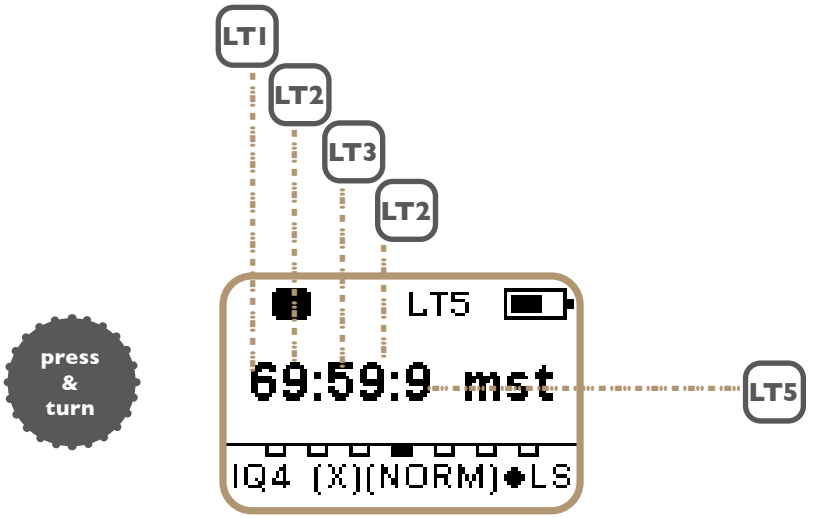
[2] Please open the FPS shutter permanently and use the Copal flash sync post for synchronizing your digital back and NOT the A or B connector of your ALPA 12 FPS/Silex Mk II.

[3] For precision reasons the leaf shutter of Rollei PQS is only used for exposure times 1/500 s and slower.

[4] Only with newer or premium lenses; focus control with non manual focus lenses.

[5] Only new "orange" lenses.

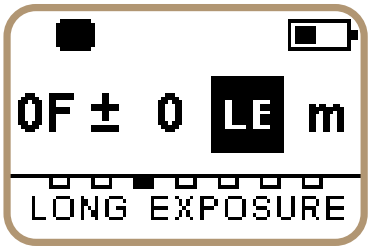
* Ask for availability and/or combination of adapters possible or needed



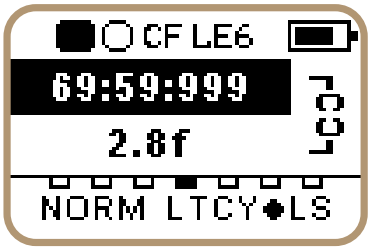
DISPLAY ELEMENTS

The screen changes its appearance depending on the lens attached.

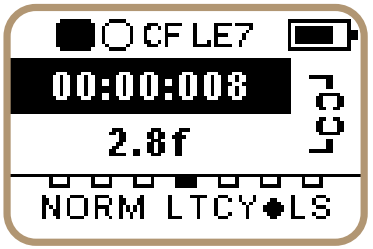
LT1	Tab until the "#" sign appears at this position and use the turning wheel to set 0 to 60 minutes.
LT2	Tab until the "#" sign appears at this position and use the turning wheel to set 0 to 9 minutes.
LT3	Tab until the "#" sign appears at this position and use the turning wheel to set 0 to 50 seconds.
LT4	Tab until the "#" sign appears at this position and use the turning wheel to set 0 to 9 seconds.
LT5	Tab until the "#" sign appears at this position and use the turning wheel to set 0 to 9 tenths of a seconds.



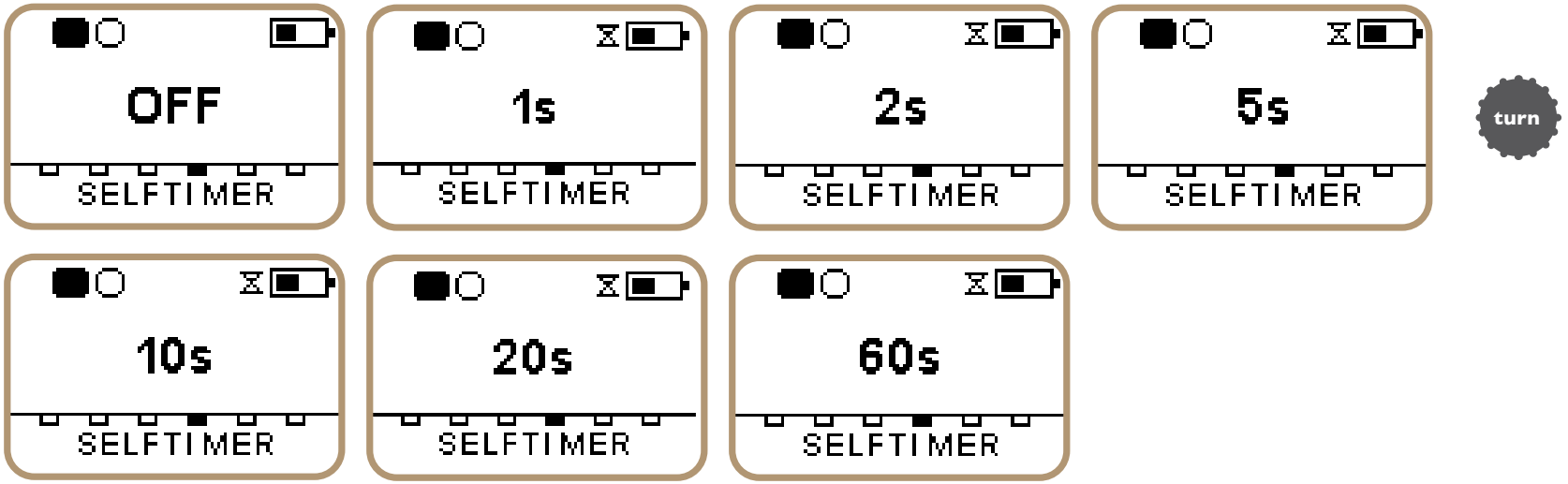
Tab to the exposure program selector. Turn the wheel until LE for long exposure appears. The other parameters are not used in this mode and can remain unchanged.



Press and hold the arrow right key [k4] until LE1 (or LE2 to LE7) appears next to the battery symbol and the display changes from the standard exposure screen to the long time exposure screen. When swithing back to the standard exposure (long press on k4) the exposure time will change to the closest matching time of the last long exposure.



Hint: The shortest time selectable is 8/1000 sec. If you intend to change LE from 00:00:100 (or 00:00:010 or the like) to 00:00:008: first increase LE7 to 8 and then alter LE 5 zero. If you need to manually exit the program (pressing wheel and simultaneously pressing the exposure button), please turn the camera/unit off/on.

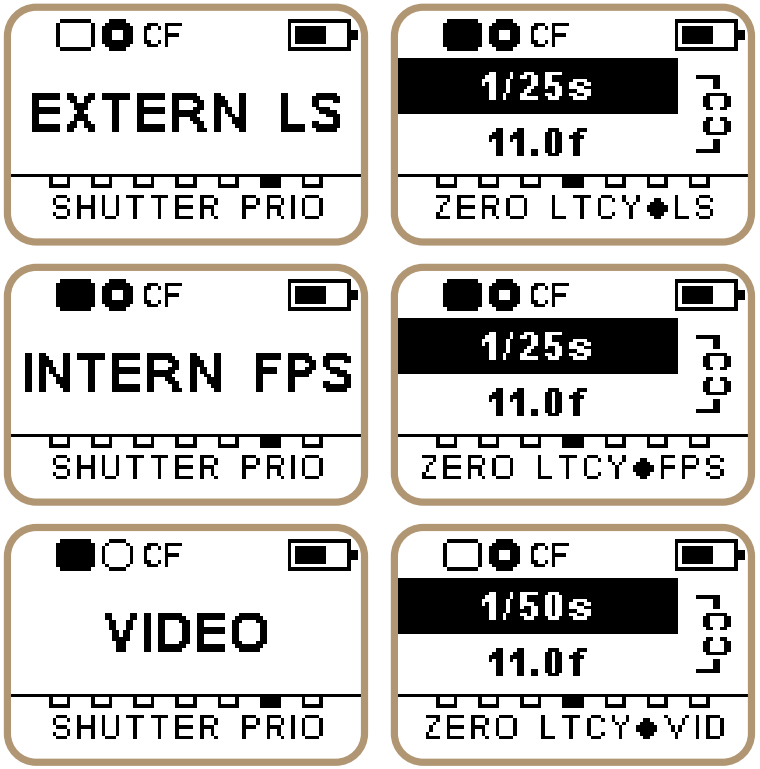


SELF TIMER VALUES

Select the self timer value from 1 sec to 60 sec or disengage it by choosing OFF. The sand clock in the info header indicates a self timer in place on every screen.

HINT 1: Interrupt a self timer countdown by swiftly clicking/holding the turn-wheel and pressing the release button [k1] anytime.

HINT 2: In Bracketing Mode the self timer is executed only once in the beginning but not before every shot. For introducing a waiting time use the timing delay/variable in the Bracketing menus.



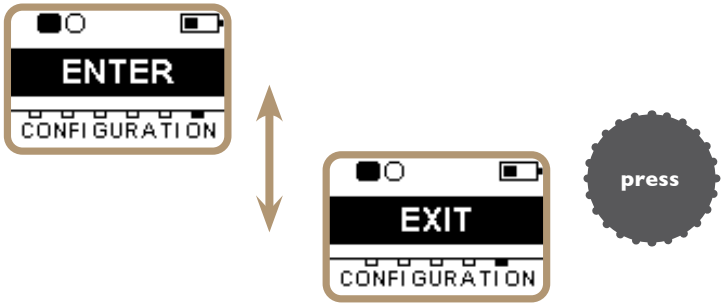
turn

The shutter priority controls the behavior of the internal and external shutters and offers three options:. The mode becomes active after leaving this menu. The mode is indicated as LS, FPS or VID in the main exposure screen (see corresponding graphic on the right).

EXTERN LS (LS): This is the base mode. for both the ALPA 12 FPS and Silex Mk II. If a lens with electronic leaf shutter is attached the FPS will use this shutter down to the fastest shutter time and then switch to the internal focal plane shutter enhancing the range to 1/4000s. The ALPA Silex Mk II displays either "No Shutter" or EXTERN LS.

INTERN FPS (FPS): This mode applies only to the ALPA 12 FPS. In this setting the external leaf shutter is deactivated and only the internal focal plane shutter is active. The aperture of the lens is controlled electronically as usual.

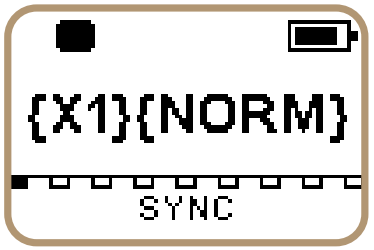
VIDEO (VID): In this operation mode all shutters stay open and the aperture is stopped down for video recording purpose. If you intend to take a picture by temporarily leaving the digital back's video mode the initial setting of open shutters is restored again.

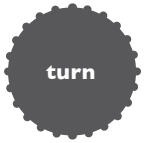


press

ENTER the configuration level by pressing the turn-wheel. All the menu levels are organized in circles. So by pressing [k4] the STEPS page will appear.

EXIT the configuration level by pressing the turn-wheel. Navigate within the configuration level as usual and flip the menu pages by pressing [k3] and [k4]. All the menu levels are organized in circles. So by pressing [k4] the SYNC page will show up.





The FPS allows the sync control of various digital backs with zero/no latency (always on) or normal latency (wake-up before starting the exposure). It can also be combined with flash for first and second curtain or using the flash sync port as alternative sync port for the digital back (fall-back). Predefined programs come with the camera but the user might alter them with the ALPA Sync Language (XML).

Please refer to the seperate instruction for operating the electronic shutter mode of the Phase One IQ3 100 / Trichromatic.

HINT: Update - see also following pages

Navigate to the EDIT SYNC menu. Delete older files first if you want start clean: Select DELETE ALL by turning the turn-wheel, then execute the command by pressing the turn-wheel down.

For the update insert the USB stick and select UPDATE by turning the turn-wheel, then execute the command by pressing it down. The progress bar shows the ongoing upload of the .fps file(s). Once the camera shows UPDATE again the upload is complete.

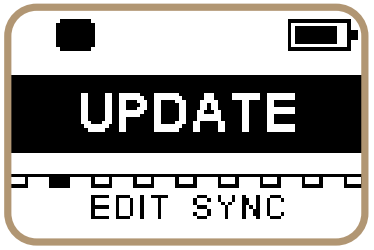
If only DEFAULT is visible in the SYNC menu all individual sync programs have been deleted. Please re-load all or just the needed files.

ALPA SUGGESTS TO SAVE INDIVIDUAL SYNC PROGRAMS ALWAYS SEPARATELY FOR BACKUP REASONS AND PERFORM A COMPLETE RELOAD OF THE STANDARD AND INDIVIDUAL PROGRAMS WITH EVERY FIRMWARE UPGRADE (DELETE ALL/UPGRADE).

For the latest base sync programs, see... fps.alpa.camera

SYNC PROGRAMS

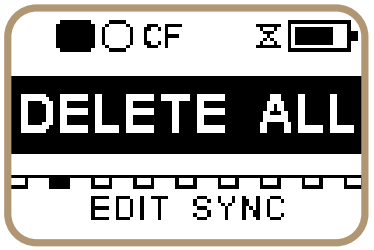
MODE	ZERO LATENCY	NORMAL LATENCY
BRAND	PHASE ONE IQ series LEAF CREDO & Aptus/Aptus II series HASSELBLAD various series depending on firmware	PHASE ONE IQ series (not for electr. shutter) PHASE ONE P-series see HINT II LEAF CREDO series
STANDARD (NO FLASH USE)	Program ZERO LTCY No wake-up, sync signal (start/stop exposure) is available from port (B) and (C)	Program NORMAL LTCY Wake-up signal executed first. Sync signal (start/stop exposure) is available from port (B) and (C)
SYNC & FLASH ON FIRST CURTAIN	Program {X1} {ZERO} No wake-up. Sync signal (start/stop exposure) is available from port (C). Flash sync signal via Port (B). Do not use flash port of your digital back!	Program {X1} {NORM} Wake-up signal executed first. Sync signal (start/stop exposure) is available from port (C). Flash sync signal via Port (B). Do not use flash port of your digital back!
SYNC & FLASH ON SECOND CURTAIN	Program {X2} {ZERO} No wake-up. Sync signal (start/stop exposure) is available from port (C). Flash sync signal via Port (B). Do not use flash port of your digital back!	Program {X2} {NORM} Wake-up signal executed first. Sync signal (start/stop exposure) is available from port (C). Flash sync signal via Port (B). Do not use flash port of your digital back!
FLASH SYNC TIME	T, 128 sec - 1/125 sec, full range with leaf shutters	T, 128 sec - 1/125 sec, full range with leaf shutters
HINT I	When using a Copal taking lens (leaf shutter built in), please use the sync port of the digital back (FPS shutter needs to be open).	When using a Copal taking lens (leaf shutter built in), please use the sync port of the digital back (FPS shutter needs to be open).
HINT II		A series of long latency programs is available for older PHASE ONE P/P+ backs, if needed. See "resources" folder in the firmware delivery package release 3.00 and newer for the programs LONG LTCY, {X1} {LONG} and {X2} {LONG}



press & turn

Insert the USB stick with the needed sync programs (.fps) and press the turn-wheel. The upload of the programs found on the stick will start. Existing files will be overwritten and new files will be added. Other files remain untouched.

HINT: If only DEFAULT is visible as sync program all additional files were deleted and only the fall-back program is available.



press & turn

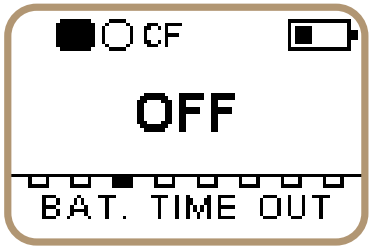
Select DELETE ALL and press the turn-wheel for deleting all stored sync programs from the camera.

HINT: This feature comes handy if you like to load only a sub-set of the sync programs available. After deleting perform the update with only the files you need on your USB stick.

LIST OF COMMANDS ALPA OPEN SYNC LANGUAGE

The ALPA Open Sync Language allows a flexible sync control of various digital backs, brands and operation modes. These sync programs are written in simple XML with an ending of ".fps". For illustration, see the samples on fps.alpa.camera.

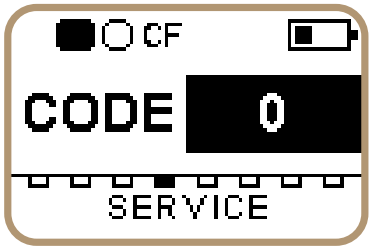
COMMAND	DESCRIPTION	USE
delayTimeUSEC	Time in microseconds to wait until the following command is executed.	Minimum is 10 microseconds. One second equals to 1,000,000 microseconds
SETSYNCHBOTH	Sets a signal to both LEMO1 and PC sync port (connectors [C] and [B]) simultaneously.	General, for controlling digital backs. Flash should not be controlled by the digital back.
CLEARSYNCHBOTH	Terminates a previously set command.	General, for controlling digital backs. Flash should not be controlled by the digital back.
SETSYNCHLEMO	Sets a signal to both LEMO1 sync port (connector [C]) only.	General, for controlling digital backs. Used if PC sync port shall be used for dedicated flash control. Special flash control via PC sync port.
CLEARSYNCHLEMO	Terminates a previously set command.	General, for controlling digital backs. Used if PC sync port shall be used for dedicated flash control. Special flash control via PC sync port.
OPENISHUTTER	Opens the internal leaf shutter according to the preset exposure time. If an adaptation/lens with automatic aperture control is in use, the camera stops the aperture down automatically before opening the shutter.	Mandatory for exposure.
CLOSEISHUTTER	Closes the internal shutter after the preset exposure time elapsed. If an adaptation/lens with automatic aperture control is in use, the camera fully operates the aperture (open up/stop down).	Mandatory for exposure.
1VSETFLASH	Set flash trigger via PC sync port [B] for 1st curtain (execution after the internal shutter has opened).	General, flash triggering. Multiple use of this command is possible (experimental).
1VCLRFLASH	Terminates the flash trigger.	
2VSETFLASH	Set flash trigger via PC sync port [B] for 2nd curtain (execution before the internal shutter closes).	General, flash triggering.
2VCLRFLASH	Terminates the flash trigger.	
RUNDELAY	Delays the next program line for the defined time	



turn

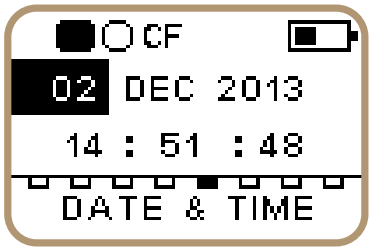
The battery time out can be selected from OFF (always on) to 100 minutes. The complete range is OFF, 2, 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 minutes.

HINT: When operated with ALPA power supply the camera is always on and does only turn off after user interaction.



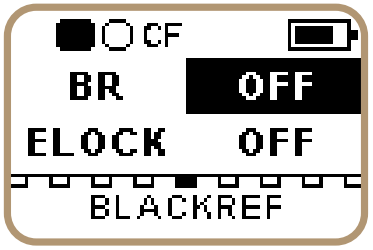
press

Press for wheel for entering and leaving the service menu. Here you find the shutter latency settings, shutter count, special lens actuation (internal use only), case state (internal use only), MAC address of your camera, shutter count (read only), date & time.



press & turn

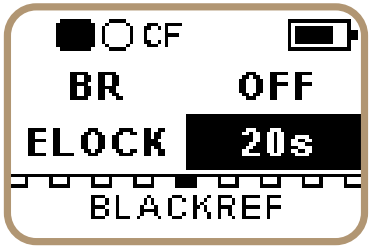
Change system date and time here. Tab between the elements by pressing the turn-wheel and change values by turning it.



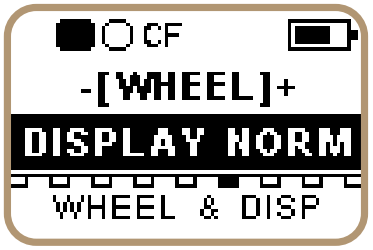
press & turn

Some digital backs perform a black-reference after each exposure or sometimes in an optimized but not always predictable pattern. If BLACKREF is ON the camera adds and displays the potential black-reference delay. This is especially important for bracketing series. Set it to OFF and no additional delay will be included.

Individual digital backs require more time to write the data from the cache to the storage medium. Besides, storage media can have different write speeds. In order to prevent erroneous exposures, the "EXPOSURE LOCK" function can be activated for 1 to 20 seconds. After the exposure and a possible "BLACKREF," the feature adds a corresponding safety delay before the next exposure can be taken.



HINT: Only after exposure, blackreference and exposure lock have expired, the display illumination returns and the camera allows the next exposure.

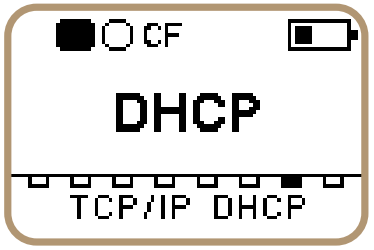


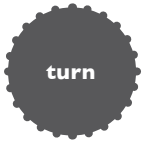
press & turn

Allows to change the way/direction how increasing or decreasing values are applied. Turn the wheel for selecting either "+/-" or "-/+" . The minus direction shortens the exposure time and other values, the minus direction increases it, e.g.

The possibility to rotate the display by 180° can be useful depending on the mounting of the camera (e.g. reprography). As before, the navigation direction of the arrow keys and the direction of rotation of the wheel remains consistent. In the browser view (remote) the display is always upright.

HINT: Choose the setting "+/-" if the wheel direction should match the Canon/Nikon behavior.

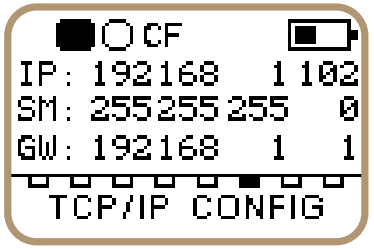




Choose DHCP if you want to retrieve an IP from your router/gateway. Switch from DHCP server in your network to FIXED IP and back for renewing the IP lease from your network.

HINT I: If no network connection is present after 60 seconds the IP might show "169.254.xxx.xxx". Renew lease as described above.

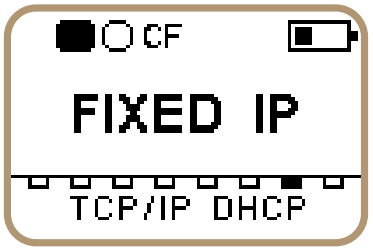
HINT II: The distribution time depends on the network and hardware. Please wait a few moments if needed.



In DHCP mode this screen is for information only. Check here for the IP retrieved in order to approach the camera via REMOTE CONTROL. The screens shows the IP, SubNet mask (SM) and standard gateway (GW) from the network the camera is connected to.

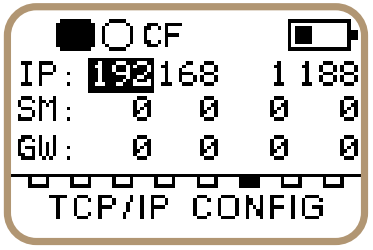
HINT: The screen shows "0"s until an IP is acquired. The retrieval time depends on the network and hardware. Please wait a few moments if needed.

PLEASE CONNECT YOUR FPS WITH A STANDARD ETHERNET / NETWORK CABLE TO YOUR NETWORK. RESTART THE FPS/Silex Mk II IF YOU CHANGE SETTINGS.



turn

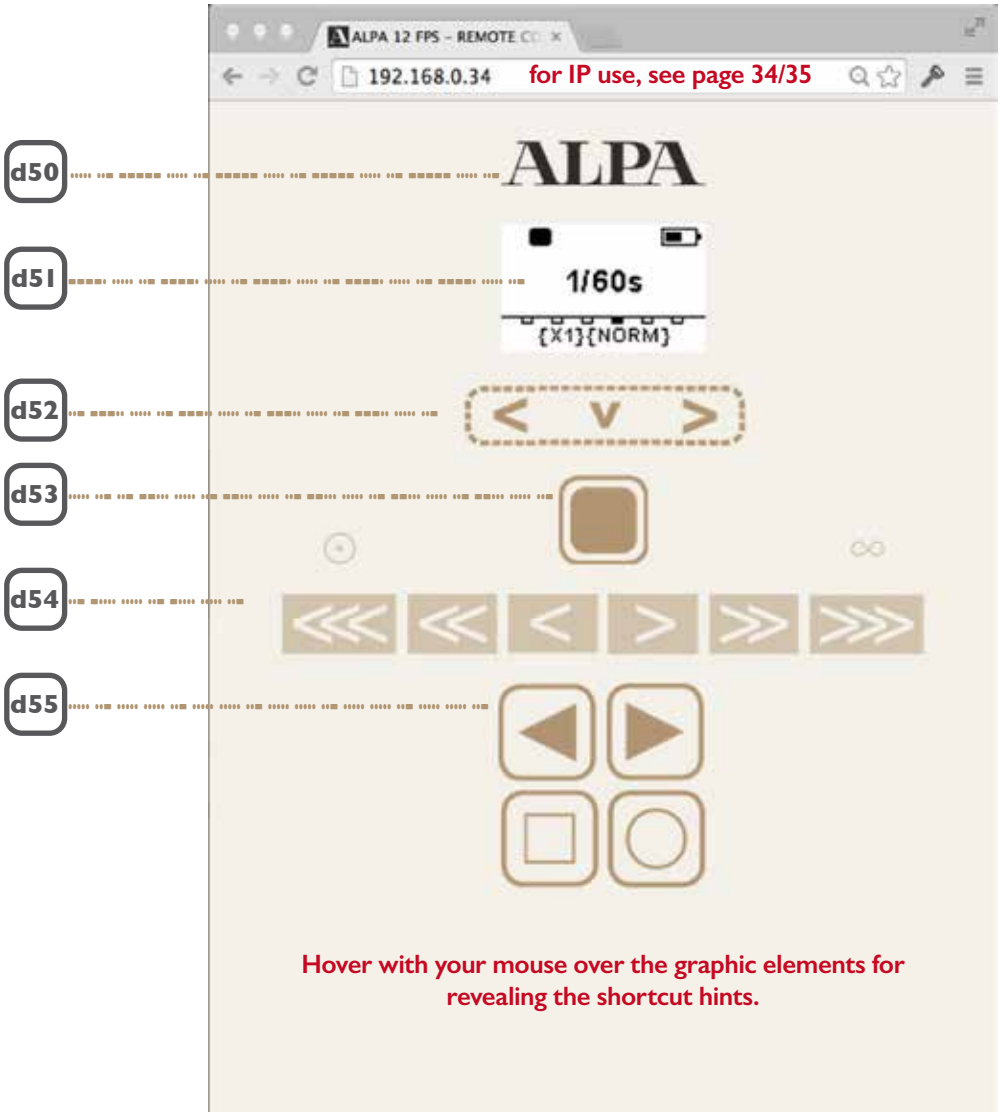
Choose FIXED IP if you want to define the IP manually. The IP has to be in the available range of your specific network.



press & turn

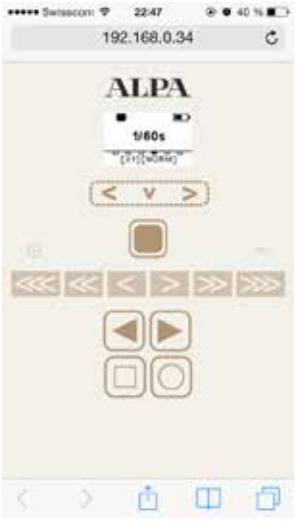
Turn for setting the corresponding block and tab by pressing the turn-wheel. First all four segments of the IP can be defined. Please also define the Subnet Mask and the Gateway address. Please set them up as needed.

PLEASE CONNECT YOUR FPS WITH A STANDARD ETHERNET / NETWORK CABLE TO YOUR NETWORK. RESTART THE FPS/Silex Mk II IF YOU CHANGE SETTINGS.



Representation in Chrome on Apple (camera light display on)
You can find the IP address in the TCP/IP config screen.
For a more convenient viewing you can also use the "CMD +" and "CMD - " function for zooming. "CMD 0" restores the normal display size.

representation in iPad (display off)



representation in iPhone

DISPLAY ELEMENTS

d50	click/tap on the ALPA logo for help pages or use fps.alpa.camera	Internet connection needed
d51	display reflecting 1:1 the status on the camera	reload browser if display is sluggish
d52	turn-wheel, click left/right or down for corresponding commands	keyboard representation: arrow left, arrow down, arrow right - long-press arrow down for locking keys (on and off)
d53	release button	keyboard representation: decimal point (on standard keyboard and numeric keypad)
d54	focus control (grayed out if not available or lens set to manual focus) from super fine (< >), fine (<< >>) to coarse (<<< >>>), infinity/max	keyboard representation: A S D F G H, I(nfinity), C(lose focus)
d55	command keys as found on the camera	keyboard representation press 1 for page left (long-press for turning display by 180°), press 2 for page right, press 3 for display on/off (long-press for turning the camera off), press 4 for aperture stop down/open (long-press for opening/closing shutter)
d52 & d53	interrupt a running program as self timer or bracketing	feasible mainly via keyboard: press swiftly arrow down and then "." for interrupting a running program.

FIRMWARE UPGRADE

1.	switch Camera off
2.	insert the USB card into camera and follow the instruction on the card

HINT	Until further notice the camera can be downgraded by simply performing the upgrade procedure with an earlier version. When downgrading from 1.14 and later, make sure the bracketing/multi exposure mode is NOT set to "ME".
HINT	IF THE USB DRIVE IS PULLED OUT BY MISTAKE OR THE CAMERA SHOWS A BLANK SCREEN, PLEASE REMOVE THE BATTERY/POWER SUPPLY AND RE-START THE UPGRADING PROCESS.
HINT	for the latest firmware, see... fps.alpa.camera

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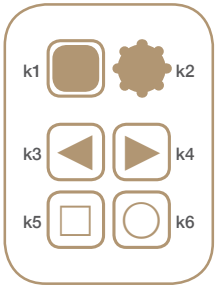
UPDATE FPS/SILEX

1. Switch camera off [k5]
2. Insert USB card
3. Press & hold [k5], then press release [k1]
4. Progress bar shows update process



UPDATE LENS MODULES

Attach every Lens Module Hasselblad, Contax, Rollei to FPS or Silex and execute...

1. Switch camera off [k5]
2. Insert USB card
3. Press & hold [k4 & k6], then press release [k1]
4. Confirm „Adapter Update" by pressing [k2]
5. Old version gets deleted and progress bar shows update process

TECHNICAL SUMMARY

DIMENSION	FPS: 204 x 109 x 26 mm (204 x 115 x 33 mm with lens mount and cold shoe) Silex Mk II: 99 x 109 x 43 mm
WEIGHT	FPS: approx. 750 g, without battery Silex Mk II: approx. 506 g, without battery
OPERATION MODES	Various, see diagram
SHUTTER	FPS: Integrated vertical metal focal plane shutter: T, 128 - 1/4000 sec in steps of ¼, ⅓, ½, 1 EV FPS/Silex Mk II: Lenses with integrated leaf shutters depending on their ability; the FPS automatically and seamlessly expands the shutter speed range of leaf shutter lenses up to 1/4000 s as a fastest shutter speed of
FLASH SYNC	1/125 sec, depending on flash (up to 1/180 experimental) – flash modes "fast flash", "1st curtain", "2nd curtain" according to sync programs, when using leaf shutter lenses up to their supported fastest exposure time possible
DISPLAY	Transflective display for optimal reading indoor/outdoor – modes: illumination on (turning automatically off during exposure for optical confirmation and avoiding false light) and permanently off – display orientation rotatable by 180° with automatic adjustment of the relevant navigation keys
APERTURE CONTROL	Depending on lens: manually or electronically controlled in steps of ¼, ⅓, ½, 1 EV (most Canon EF, Nikon E lenses, Contax 645, Hasselblad H, Rollei 6000, more to come)
BATTERIES	Delivered with two rechargeable lithium-ion batteries 7.4 V / 2600 mAh – compatible with Sony L series batteries (NP-Fxxx as NP-F550, NP-F750, NP-F950)
BATTERY CHARGER	Delivered with compact travel charger with exchangeable EU/UK/US plugs/adapters
POWER SUPPLY	Optional power supply unit available, inputs 100-240 V AC, output 7.5 V, with exchangeable AUS-CN/EU-CH/IEC/UK/US plugs/adapters An attached power supply disables the automatic battery power switch-off while inactive.

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STS 034

TEST REPORT REF.	EMCKP2064A
PROJECT NO.	EMCK2064
DATE OF ISSUE	01.11.2012
MANUFACTURER	ALPA Capaul & Weber Ltd.
TRADE MARK	ALPA of Switzerland
NAME OF E.U.T.	ALPA 12 FPS
STANDARD	EN 55022: 2010 EN 55024: 2010 FCC Part 15: 2008 Class A Digital Device
TEST RESULT	Complied according to test table on page 2
CLIENT	ALPA Capaul & Weber Ltd. Neptunstrasse 96 POB 1858 CH-8032 Zürich Switzerland
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Test Report Approval

Test performed by:	Max Hunziker		01.11.2012
	Name	Signature	Date
Test report reviewed by:	Armin Frei		01.11.2012
	Name	Signature	Date
Test report approved by:	Max Hunziker, Head EMC-Testcenter		01.11.2012
	Name / Function	Signature	Date

Test period
Equipment to be tested received on 01.11.2011

Witnessing
Mr. Martin Zünd, Computechnic AG
Mr. André Oldani, ALPA Capaul & Weber Ltd.

REVISION INDEX

Document Number	Issue date	Revision date	No. of revised pages / deleted pages*
EMCKP2064A	01.11.2012	---	---

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