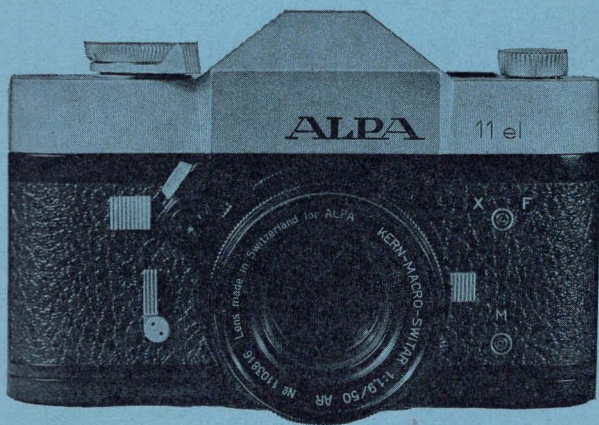


Instructions for use of the ALPA 11 el



CONTENTS

	Page
A. General Description	1
B. External Controls	1
1) Winding the film	1
2) Setting the shutter speeds	2
3) The shutter release	2
4) The self-timer	3
5) Flash synchronization	4
C. Framing and Focusing	4
1) Framing	4
2) Focusing on the screen	5
a) by split-image rangefinder	5
b) by microprisms	5
3) Focusing by distance scale	5
D. Loading and Unloading	6
1) Loading	6
2) Rewinding the exposed film	8
E. ALPA Lenses	8
1) Changing the lens	8
2) ALPA lenses	9
F. Exposure Readings	9
1) Basic principles	9
2) Methods of use	9
a) by setting the shutter speed first	9
b) by setting the aperture first	10
3) Important note	10
4) Direct meter readings	10
5) Changing the battery	11
G. General Recommendations	11

Instructions for use of the ALPA 11 el

Poor results or even damages are often caused by ignorance of the equipment. We strongly recommend that you study these instructions carefully, so as to get the best results with your ALPA.

Most of the instructions apply also to the ALPA 11s, with exception of the sections about release lock, selftimer, mirror lock, and M synchronization.

The ALPA 11 el and the unlimited ALPA system of photography are the results of more than 30 years of research and development to meet the evergrowing demands of the creative photographer, as well as of scientific and industrial photography.

Replacing the delicate galvanometer with quivering needle, this shockproof meter gives you easier, faster, more sensitive and far more precise exposures-up to 1/10th of an f/stop – and eliminates most meter repairs.

The ALPA body is a light-weight, compact die-cast of great strength and long-lasting rigidity. The ALPA 11 el has a pentaprism for eyelevel viewing, and an instant-return mirror which reacts even if the shutter release is kept depressed. Any slight vibration accompanying the return occurs only after the exposure is completed, and cannot affect the sharpness of the picture. A film-type reminder is on the back of the camera (F, fig. 12). All controls are easily accessible and can be operated even if wearing gloves. Every feature has been planned for fool-proof operation.

A. GENERAL DESCRIPTION

The Swiss ALPA 11 el is a 35 mm single-lens reflex camera (24×36 mm, 18×24 mm or 17×22.5 mm) with through-the-lens light matching meter. The precise, shockproof solid state electronic circuit has six transistors, a yellow light for over and a red light for under exposure, visible both below the groundglass and on top of the ALPA.

B. EXTERNAL CONTROLS

1) Winding the film

The winding lever A (fig.1) cocks the shutter, advances the film, and counts the

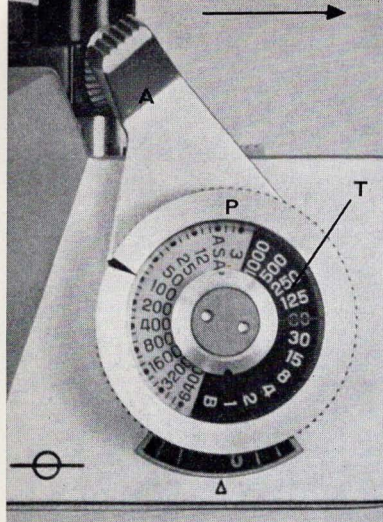


Fig. 1

exposures. The short travel of only 160° and operation of the three separate functions give a slight resistance. If the lever is not wound fully to its stop the shutter release is blocked. Remember, therefore, to move the lever fully round (but without forcing it).

2) Setting the shutter speeds

To set the shutter speed turn ring P (fig. 1) to the required speed, shown by the red line of the transparent disc, without going past the black sector (do not force it).

The speed may be set whether or not the shutter is tensioned. The range of speeds, evenly spaced, is the standard: B, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60, 1/125, 1/250, 1/500, 1/1000 sec. B may be locked for T time exposure. To keep the shutter open, the release lock V (fig. 2) must be moved to its innermost position.

Setting B allows you to make time exposures of any length, the shutter staying open as long as the release button is pressed (D, fig. 2). A cable release with locking screw is very useful for long exposures, and when the equipment is on a tripod. The release button should also be locked in position B with shutter open, if any special shutter is used instead of the focal-plane shutter of the camera.

Important: when long shutter speeds are used, for example 1 sec, with automatic-diaphragm lenses, either the shutter release must remain pressed throughout the exposure, or the automatic diaphragm must be disconnected.

The speed 1/60 sec is marked in red because it is the fastest speed which will synchronize with electronic flash; if any faster speed is used only part of the frame will be exposed.

The shutter speed is, of course, chosen to take into account any movement of the subject. Factors to be considered include the speed, distance, and direction of movement of the subject; the focal length of the lens used is also important, as is the way the camera is being supported. For maximum sharpness, use as short a speed as possible.

3) The shutter release

The release button D (fig. 2) is situated on the front of the camera. The finger squeezes the button while the thumb presses against the other side of the ALPA.

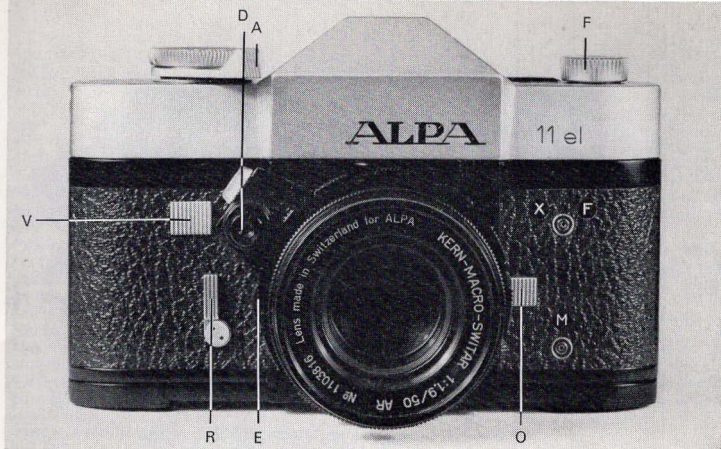


Fig. 2

This arrangement minimizes risk of camera shake. The thread in the release button takes a standard cable release. Lenses with automatic diaphragm have their own release buttons which in turn depress that of the camera. When taking a rapid succession of pictures, if this button is not released before winding, the film will not be advanced, and the last exposure made will be spoiled by another, partially fogged because the mirror will not have returned.

The shutter lock V (fig. 2) in its inside position blocks the shutter release while light readings are made. If a cable release is fitted the lock is not effective.

Note: if the release button is pressed very slowly the mirror may flip up before the actual exposure is made. This does not affect picture quality.

It is sometime useful to be able to lock the mirror in its raised position (when using

very short focal lengths for example). To do this, simply slide down knurled lever E (fig. 2).

Double or multiple exposures are made as follows: after the first exposure press the shutter release while winding (to tension the shutter without winding the film), let the shutter release go first, then the winding lever, raise the mirror by means of E, and make the second exposure. Do not forget to move E back again afterwards to lower the mirror for viewing.

4) The self-timer

The ALPA 11 el has a self-timer (R, fig 2). This delayed-action release can be set according to the length of delay required.

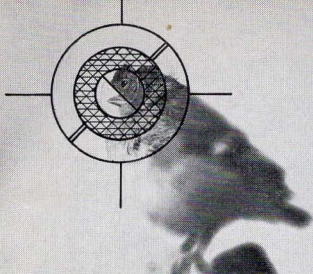


Fig. 3

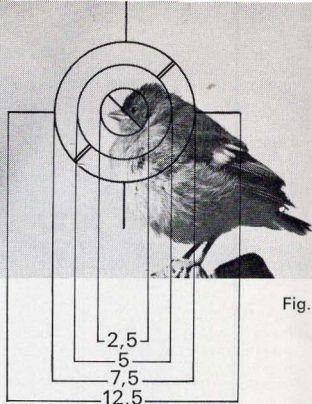


Fig. 4

If the lever is moved fully round the delay is about 18 secs; if moved only 90° the delay is about 6 secs.

First wind the shutter, then the lever R. The delayed action is started by pressing the shutter release button. If you wish to be in the picture, you have time to take up position.

Important: when using the self-timer with automatic-diaphragm lenses, the lens must be used pre-set or the picture will be taken at full aperture only. If the self-timer is used with the shutter set at B, the exposure time will be 3 secs. This known exposure can be very useful under poor light conditions or with small apertures.

The smooth release of the self-timer is useful also if you have no cable release. Use a fast speed in such circumstances for photographing in difficult conditions without risk of camera shake.

If the self-timer has been set but is then not required, it can be disengaged by shutter lock V and then keeping button D pressed while lever R is allowed to return to its original position.

5) Flash synchronization

The ALPA has two standard co-axial

synchronization sockets (fig. 2). The upper contact XF is for electronic flash at speeds up to 1/60 sec; a shorter speed than this will give only a partially exposed frame. This contact can also be used for special short-peak flashbulbs, but if these are used the manufacturer's instructions must be followed carefully as this kind of bulb is really designed for between-lens shutters. The lower M contact is for use with flashbulbs specially made for focal-plane shutters; their long peak allows short shutter speeds.

C. FRAMING AND FOCUSING

1) Framing

The image of the screen is reinverted and measures exactly 23×35 mm, i. e. ½ mm

less on each side than the 24×36 mm frame. This matches the window of slide mounts, so that there is no cut-off in projection. The image on the screen of the ALPA half frame cameras measures exactly 18×24 mm or 17×22.5 mm.

The screen image is magnified, to give life-size with the standard 50 mm lens, and even with small diaphragm openings the entire image is bright into the corners – most useful for composition, focus, depth-of-field.

An optional 0.7× eyepiece reduces magnification, so that persons with deep-set eyes or wearers of glasses can see the entire field. Even with small f/stops, telephoto lenses and bellows or tubes, etc.

The viewfinder has a rotatable bayonet-mounted rubber eyeshield cup which excludes extraneous light, and which can be replaced by a magnifier or a right-angle viewfinder.

People with eyesight needing correction can fit special lenses into a mount fixed in the eyepiece. The powers available are: -4, -3, -2, -1, +1, +2, +3, and +4 diopters.

2) Focusing on the screen

The ALPA 11 el has a screen which combines a split-image rangefinder with a circular zone of microprisms. The lens is focused by means of the ring which turns the lens in its helical mount. Sharpness is controlled over all the screen by means of one of the systems mentioned below.

a) by rangefinder

The groundglass screen has a built-in rangefinder formed by a pair of prisms which appear as a pair of semi-circles in

the middle of the screen. Choose a definite detail in the subject and focus the lens until the image of the line across the rangefinder is in perfect alignment; the subject is now sharply focused (figs. 3 and 4).

The clear ring helps you to identify the object you are focusing on. In photomicrography the aerial image is focused and it is necessary to see it clearly at the same time as one of the lines – that is, without parallax (fig. 4).

Both semi-circular prisms will appear uniformly bright under normal conditions. Under certain circumstances (smaller lens apertures, close-up photography) one of the semi-circular prisms may appear to be shaded. In this case you can align your image between the other, bright prism of the split-image and the clear glass ring.

The scales indicated by the cross are useful for comparison (figs. 3 and 4), especially in photomacro- and micrography.

b) by microprism

Microprisms are actually a large number of small rangefinders which show clearly the smallest mistake in focusing; as long as the focus is wrong the image is very blurred. As soon as the focus is correct the image snaps into clarity.

3) Focusing by distance scale

All ALPA lenses are calibrated for distance. It is thus possible to select a certain distance by using the scale (for example when using flash). Estimating the distance of the subject, it is set on the scale, taking into account the depth of field. This method is useful when it is impossible to focus, either when there is no time (as at a sporting event) or if it is too dark (when using flash etc.).

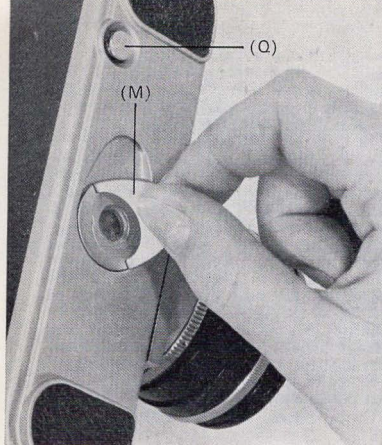
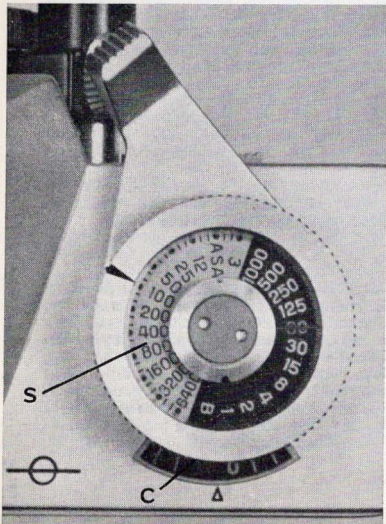


Fig. 5

Fig. 6



D. LOADING AND UNLOADING

1) Loading

The ALPA 11 el is opened by the key M (fig. 5), on the bottom of the camera. Lift the key and turn it to the right (fig. 5). Remove the back by pulling on the key. Hold the film cassette in the right hand and insert the film leader in the slot of the take-up spool (fig. 7). Take care to push the film well into the slit marked with an arrow so that the edge is against the lower flange of the spool; the leader is held by a tooth. Pull out enough film to enable the cassette to be put in its chamber, and engage the rewind lever into the cassette (fig. 8).

Remember to check the correct winding before closing the camera.

Replace the camera back and lock it by turning the key to the left; wind and release the shutter two more times while noting that the central screw of button F (fig. 2) is turning while the shutter is being wound.

The frame counter C (fig. 7) is automatically disengaged when the camera back is removed. It advances to zero after three windings of the film as mentioned above. Note: if a partly exposed film is removed from the camera, the number of exposed frames should be noted before opening the back, so that the film can later be inserted without loss of a frame.

Do not forget to set the film speed on the exposure meter; depress the outer ring of the speed dial P (fig. 1) and turn the black index mark until it is opposite the ASA speed of the film (fig. 10). For easier setting of the speed the dial can be put to one end of its scale.

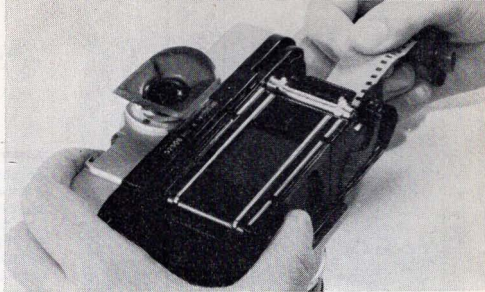


Fig. 7



Fig. 8

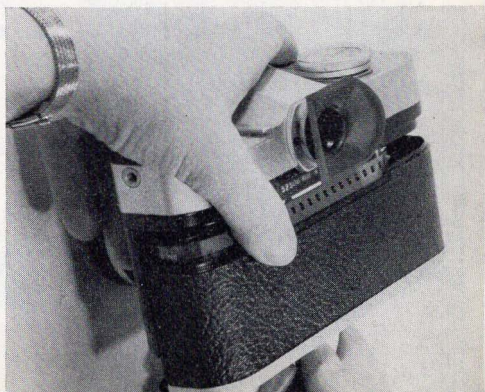


Fig. 9

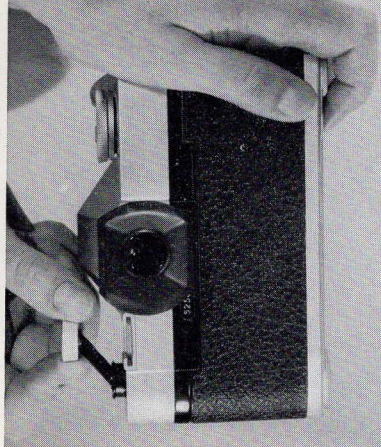


Fig. 10

2) Rewinding the exposed film

When the frame counter shows 19 or 35 exposures (according to the film loaded), wind to the next frame carefully to avoid tearing the perforations or pulling the film from its cassette altogether – this would make rewinding impossible. When definite resistance to winding-on is felt the film is used up and is rewound after pressing the rewind release knob Q (fig. 6) which disengages the sprockets. It is not necessary to keep your finger on this button. Pull out the rewind crank F (fig. 2) and turn in the direction of the arrow (fig. 10). The film will offer a slight pull against the rewind, until suddenly the crank begins to turn freely. The camera can then be opened and the cassette removed. Take care not to press the rewind knob except when rewinding. If pressed by mistake during exposure of a film, advance the film one frame to re-engage the sprockets.

Fig. 11



E. ALPA LENSES

1) Changing the lens

To change the lens, press the button O (fig. 2) and turn the lens to the left. Position the new lens so as to line up the two red dots, push it gently into the body, and turn to the right until it clicks into position.

2) ALPA lenses

ALPA have chosen an incomparable range of lenses from the best manufacturers - Kern, Kinoptik, Angenieux, Schneider, Zoomar and Zeiss.

Each lens is individually factory-tested by ALPA to very rigorous standards. Focal lengths available range from 24 to 600 mm, and their bayonet mounts have remained standardized for more than 20 years.

Among this selection of lenses are two designs which are exclusive to ALPA - the famous Kern Macro-Switar f 1.9/50 mm (the standard lens of the ALPA), and the Kinoptik APOCHROMATS.

The transistorized circuit receives information from two Cds cells which measure the light coming through the lens, while a third cell compensates for any stray light entering the system through the viewfinder. The electronic circuit lights the lamps: yellow indicates overexposure, red underexposure. When both lamps are lit at once, exposure is correct. The two cells integrate readings from the screen, with center weighting, to give highly accurate exposure control.

F. EXPOSURE READINGS

1) Basic principles

The meter system has a very wide range of sensitivity (1.6 - 400,000 asb). Current is supplied by one Mallory PX 28 battery (Eveready 544).

2) Methods of use

Two methods are possible

a) The shutter speed is set, depending on the subject (fig. 1). Remember to set the film speed when changing films (fig. 6). Lock the shutter release by sliding lever V towards the lens. Press the shutter release (D) to allow the meter and diaphragm to operate. While keeping pressure on the release turn the aperture ring until the lamps visible in the viewfinder and in the accessory clip are both lit.

If the subject is in focus, just slide back the lock V and take the picture.

Note: in its outermost position the lock V makes the meter inoperative but allows the shutter to be released (useful for repeated exposures of an identical subject).

In the center position the meter operates at half pressure on the shutter release, which also operates the automatic diaphragm, and the shutter is released at full pressure.

In the innermost position, next to the lens, both the shutter and the meter are blocked. This last position allows the shutter to be kept open after it has been released: open the shutter at B setting, and slide the lock toward the lens. The shutter is closed again after the exposure simply by sliding the lock back again.

Note: if the release button is kept depressed with the lock as just described, while the shutter is tensioned, the blind stays open fully at shutter settings between 1/30th and B, and partially so at all other settings.

b) The aperture is first set, according to required depth of field. Choose the opening, block the shutter with V, then press the release and find the correct time by turning the speed dial. Slide back the lock, check the focus, and take the picture.

Note: remember the cells are very sensitive and that to get both lamps lit at once may require the diaphragm to be set at an intermediate stop value. The shutter can be released if one of the lamps is not fully lit: at some light levels the system is so sensitive that it may be difficult to get both lit. The error in such case will not exceed 1/5 to 1/10th of an f-stop!

3) Important note

Another point to remember is that, like the human eye, the cells have to get used to darkness and are "blinded" by very intense light, so that they continue to register it for a short time. Therefore when passing from a very bright subject to a dark one, allow the meter to rest for a few seconds. Intentional over- or under-exposure is, of course, always possible. The eye should be kept as close as possible to the eyepiece during exposure readings (especially if wearing glasses), to minimize the effects of stray reflections entering the viewfinder. It is well compensated for by the third cell but this compensation might be insufficient in extreme circumstances.

When reading the meter in the accessory clip, it is good practice to cover the viewfinder with the hand or a lenscap. In other circumstance, to keep out unwanted light when working in intense illumination, the small sliding cover for the meter-window, on top of the camera, may be closed (G, fig. 12).

4) Direct meter readings

Film speeds ASA	DIN	Range of shutter speeds	
		fastest	slowest
3	(6)	1/60	1 second
6(ASA)	(9)	1/125	1 »
12	(12)	1/250	1 »
25	(15)	1/500	1 »
50	(18)	1/1000	1 »
100	(21)	1/1000	1/2 »
200	(24)	1/1000	1/4 »
400	(27)	1/1000	1/8 »
800	(30)	1/1000	1/15 »
1600	(33)	1/1000	1/30 »
3200	(36)	1/1000	1/60 »
6400	(39)	1/1000	1/125 »

If the speed required is outside the scale registered by the system it is easy to estimate it because ASA ratings are directly proportional to shutter speeds and f stops (except for a few maximum apertures on certain lenses).

For example, if an exposure of 1/1000 sec is required with a 25 ASA film a direct reading will not be obtained - the fastest speed for this film is 1/500 sec. If the correct stop at 1/500 sec was, say, f 5.6, the shutter speed is halved to 1/1000, therefore the aperture must be doubled, to f 4.

Sometimes 1 sec on the speed dial is not long enough: in this case the film setting can be altered instead of the shutter speed.

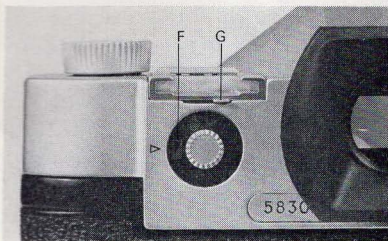


Fig. 12

For example, with a 25 ASA film, if the shutter is set to 1 sec without the meter lights coming on together, alter the film speed setting until the lights do come on together. If this happens at, say, 100 ASA, this is two stops above that of the film, so one just gives two stops (= $4 \times$ the time), that is 4 secs in this case.

5) Checking the battery

Remove the camera back (no film inside!). Take off the lid of the battery housing, and insert the new battery (Mallory PX 28 or Eveready 544) with the + sign facing outside (fig. 13), and replace the lid. If the lamps do not light check that the battery has been put in correctly (+ to the outside), and change it round if need be.

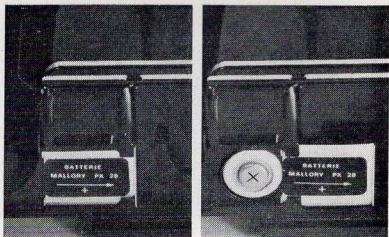


Fig. 13

The ALPA does not require a battery test because its design makes it unnecessary. Either the battery is good and the system functions, or the power is too low and the lamps will not light.

G. GENERAL RECOMMENDATIONS

The ALPA is well known for its strength and robustness, as proved by its use on numerous expeditions in all kinds of extreme climates. At the same time one must remember that it is a precision instrument, and should be used with care if it is to give the best possible service. This applies equally to its lenses and accessories.

Please pay special attention to the following points:

- 1) Protect the ALPA from dust, sand, and high humidity. In the tropics it should be kept in a sealed container with a bag of silicagel. In winter, if it becomes coated with mist on coming in out of the cold, do not try to wipe it dry but simply wait until the moisture disappears by itself.

2) Clean the film channel and pressure-plate occasionally with a piece of lint-free cloth.

3) Never oil the mechanism. The shutter will work for many tens of thousands of exposures without lubrication.

4) Never try to dismantle the ALPA yourself. This requires not only expert knowledge but also special tools. Your guarantee becomes void if the ALPA is serviced by any unauthorized person.

5) If you are so unlucky as to drop the camera into the sea, it must be thoroughly rinsed in several changes of fresh water before being dried. It must then be sent without delay to an authorized dealer or to the factory.

6) If your camera is lost or stolen advise the factory at once of the serial numbers of body and lens. We strongly recommend that you insure your ALPA equipment.

7) When inserting a film, either a new one or one reloaded by yourself, check that the lips of the cassette are not too tight, and that the film comes out easily.

It is a good idea also to check that there are no loose velvet threads hanging from the cassette; these can easily become trapped in the film window and make shadows on all your pictures.

ALPA[®]
SWITZERLAND

PIGNONS S.A. CH -1338 Ballaigues