

HANIMEX

Dedicated Bounce,
Zoom Flash
Thyristor Computer
TZ2*36

INSTRUCTIONS
GEBRAUCHSANWEISUNG
MODE D'EMPLOI
ISTRUCCIONES



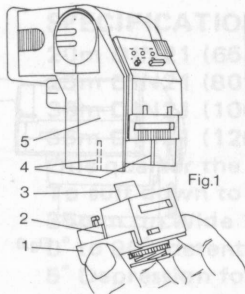


Fig.1

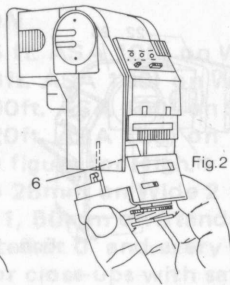


Fig.2

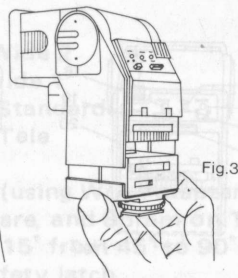


Fig.3

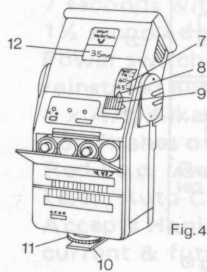


Fig.4

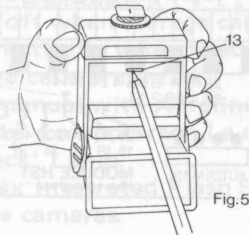


Fig.5

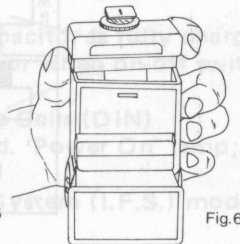


Fig.6

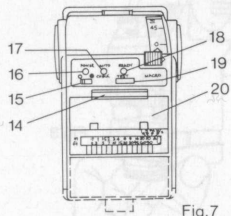


Fig. 7

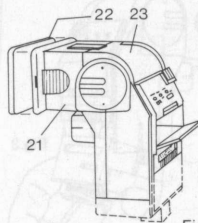


Fig. 8

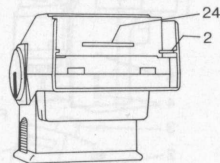


Fig. 9

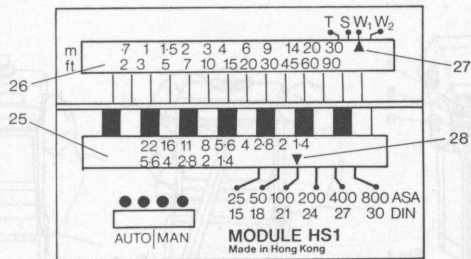


Fig. 10

TZ2*36

Guide Number
(High)

Guide Number
(Low)

Coverage Angle

Bounce

Macro

Flash Duration

Recycle Time

Auto Check

Auto-Off Circuit

Power Source

Battery Life

Indicator

Dedication

SPECIFICATION

20m DIN21 (65 ft. ASA 100) on Wide 2

25m DIN21 (80ft. ASA 100) on Wide 1

30m DIN21 (100ft. ASA 100) on Standard

36m DIN21 (120ft. ASA 100) on Tele

One quarter the figure for High.

To suit down to 28mm on Wide 2 (using W/A Adapter),
35mm on Wide 1, 50mm on Standare, and 85mm on Tele.

0° to 90°, detented at 0° and every 15° from 45° to 90°

5° Depression for close-ups with safety latch.

1/1500 second effective on manual, down to 1/25000 second on auto.

7 seconds with Alkaline cells (manual)

1½ second display of yellow l.e.d.

Power switches off when storage capacitor is fully charged. Power
reinstated automatically when fired or when on-off switch re-operated.

4 x AA, Alkaline cells preferred.

180 flashes on manual with Alkaline Cells (DIN)

Red l.e.d. 'Ready' Lamp; Green l.e.d. 'Power On' lamp; Yellow
l.e.d. 'Auto-Check' Lamp.

Accepts Hanimex Integrated Flash System (I.F.S.) modules to suit
current & future cameras.

INTRODUCTION

The TZ2*36 is unique among dedicated flash guns in that all the circuit requirements to suit your particular camera are all built into the IFS module. When the correct IFS module is fitted, the TZ2*36 exactly suits your camera and operates all the flash interface circuits your camera provides. Furthermore, and contrary to most other dedicated flash guns, there are no circuits for other cameras extra to your needs that you have had to pay for. So now you can have all the benefits of your camera's flash dedication while enjoying the use of such an economic, compact, powerful, zoom bounce flash gun as the TZ2*36.

Full enjoyment comes with understanding so,

please, read these instructions, and those of your module, thoroughly.

INSTALLING THE MODULE

If your dealer did not install the module (1) to the flashgun proper (5) please proceed as follows

1. Check the module package that the module is suitable for your camera and that the module type number on the package and the module itself are the same.
2. Hold the flash gun, rear side uppermost in one hand and the module, also rear side uppermost but slightly tilted forward, in the other hand, See Figure 1.

3. The flashgun has ribs (4) one in each side of its lower housing which have to engage in slots (2) in the module. Further, the gun has a slot (24, fig 9) to accept the circuit board tongue (3) of the module. Therefore enter the module into the gun housing so that the corners (6) just rest on the start of the ribs as in Figure 2.
4. Push the module in a little more and straighten it up so that the tongue (3) enters the slot (24) as in Figure 3.
5. Finally push the module home, when it will be felt to lock into place.

LOADING BATTERIES

1. Push the lid catch (14) upwards to release the battery lid (20), as in Figure 8. Note.

In a new gun a tight lid (20) may not open far without tapping the gun lightly in the palm of the hand. Once batteries are installed they will always push the lid open on operating the latch.

2. Take 4 AA Cells (Alkaline are preferred) and load them in one after another observing the polarity signs on the lid contacts or observing the arrangement in Figure 4.
3. Close the lid which will automatically latch.

POWERING UP & TESTING

1. Switch on by moving the Power Switch (15) from left to right (from 0 to •). The green l.e.d. 'Power' lamp (16) will light up to show that power is being consumed.

2. After a time (only a few seconds with fresh batteries) the red l.e.d. 'Ready' lamp (18) will light up to indicate that the gun's capacitor is charged to at least 70% of it's capacity.
3. The green Power lamp (16) will extinguish after a few minutes. This is normal as power is only supplied to the charging circuit until full charge is reached.
4. Switch to one of the 'Auto' positions on your module and press the 'Test' button (19) to fire the flash while pointing at some close object. The yellow Auto-check l.e.d. (17) will light up for about 1½ seconds to confirm correct auto thyristor action.
5. After carrying out (4) above, the red l.e.d.

(18) may go out but in any case the green l.e.d. will re-light to restore the power used.

6. Switch off by moving the switch (15) to the left (0 position).

AUTO-OFF CIRCUITRY

The TZ2*36 employs a battery saving automatic on-off circuit (AUTO-OFF) such that, if you do not fire the flashgun, it disconnects the batteries from the power inverter stage, switching off the green 'Power' l.e.d. as it does so. The red 'Ready' l.e.d. will remain alight for some time indicating that the gun is still ready to fire.

If you fire the flash at any time, battery power is automatically re-connected and the

green l.e.d. lights up again until the used charge has been restored to the flash capacitor. If, after a long time without use, the red 'Ready' l.e.d. extinguishes, the gun may be readied again by switching off and then on again. A great advantage with this circuit is that even if you forget to switch off the TZ2*36 when putting the gun away, you can safely depend on the circuit disconnecting the batteries. Naturally, if you do not intend using the flashgun for some weeks, it is better to remove the batteries to avoid the possibility of contact corrosion.

MOUNTING THE FLASHGUN TO YOUR CAMERA

Always screw the lock-ring (11) fully upwards

before inserting the foot (10) into the accessory shoe of your camera. Push it right home and then screw the lock-ring down to clamp the gun firmly.

OPERATION

When you are about to use the flash, first move the switch (15) to the right (• position) as described in **POWERING UP & TESTING**. When the Ready Lamp (18) red l.e.d. lights up you may trip your camera shutter to fire the flash and expose your picture. The flash will not fire if the Ready Lamp is not lit so please check for the 'Ready' signal. **NOTE.** Most cameras will also show a 'Ready' indication in the viewfinder for greater ease of use.

AUTOMATIC CONTROL

Automatic control is the simplest and most economical way of using your flashgun. Basically, light reflected back from the subject is integrated (either in your camera or in the flashgun) and when the correct exposure has been reached, the flashgun is switched off by the series thyristor to ensure that any unused charge is saved for the next shot. This speeds up the recycle time and reduces battery drain.

No calculations are required for Automatic Control other than to check that the subject is within range. This you may do by using the Auto-Check facility, by using the Guide Number, or by using the calculator.

AUTO CHECK

Each time you use the TZ2*36 under automatic control, the yellow l.e.d. (17) will light up for about 1½ seconds if the subject was within range. This gives you ample time to lower the camera from the shooting position to check whether you have made a correct exposure.

NOTE. Some cameras have the facility for showing the auto-check signal in the viewfinder.

When in doubt whether the shot you wish to take is within automatic range you may test on open flash by pressing the 'Test' button (19) and noting the presence or absence of the yellow light.

NOTE. The range depends on your module as well as the relative light absorbency of the subject or background.

USING THE CALCULATOR

The calculator slide rule (see Figure 10) has two slides, one on the flashgun proper (the 'Distance' slide (26)) and one on the module (the 'Aperture' slide (25)). Your module may have a different appearance to Figure 10 but the principle of operation is the same in all cases. As well, full instructions are given with the module.

First set the index mark (27) of the 'Distance' slide to the zoom setting in use — T, S, W1, or W2 (see section on USING THE ZOOM). Secondly set the index mark (28) of the

'Aperture' slide to the film speed you are using. You may now read the appropriate distance above any given aperture. In Figure 10 it is to be noted that the Distance slide has been set to W1 and the Aperture slide to 100 ASA (DIN 21). Note that there are two aperture scales on the Aperture slide. The upper scale is for full power manual or for automatic control while the lower scale is for reduced power. (NOTE. These are switch selectable. See your module instructions). You may now look above the aperture you are using and read off the distance. In Figure 10 if you were using f2.8 at full power or on automatic the distance is 30 feet (9 M). If you were using f2.8 on low power it is 7 feet (2 M).

GUIDE NUMBER

The guide number of a flashgun is an indication of its power. Dividing the guide number by the distance from the flash to the subject gives the f number for the aperture to get correct exposure at that distance on man-

ual operation. Alternatively, dividing the guide number by the aperture in use will give the distance for correct manual exposure or the maximum distance for automatic control.

Film Speed		Guide Number (full power)							
		W2		W1		S		T	
DIN	ASA	ft	m	ft	m	ft	m	ft	m
15	25	33	10	40	12	50	15	60	18
18	50	45	14	55	17	70	21	85	25
21	100	65	20	80	25	100	30	120	36
24	200	92	28	115	35	140	42	170	50
27	400	130	40	160	50	200	60	240	72
30	800	180	56	225	70	280	85	340	100

Guide numbers at low power are $\frac{1}{4}$ the above.

For example, you are using 400 ASA (27 DIN) film you are shooting at f/4 and you have the zoom set to 'S'. The guide number is 200 feet (60 metre). Dividing this number by 4 gives a distance of 50 feet (15 metre). If you were using low power then the distance would be 12½ feet or 3¾ metres.

MAUAL CONTROL

You will want to use Manual Control when you wish to shoot at apertures that may not be possible in Automatic Control.

Generally you will use the high setting and use the calculator or Guide Number to determine the distance or f/no. (see USING THE CALCULATOR and GUIDE NUMBER sections).

You may also use the low level manual operation, particularly for motor-drive (up to 2 f.p.s.) or fill in flash.

Manual options are selected by a switch in the module. See your Module instructions for further details.

USING THE ZOOM

Normally the zoom shroud (21) is clicked into one of its 3 positions that suits the lens in use on your camera. The setting (W1-35mm, S-50mm, or T-85mm) appears in the window (12). The indication refers to the widest angle lens which that setting will adequately illuminate. Therefore always choose a setting equal or lower than the focal length of your

lens. For example, if you have a 42 mm lens you could use the W1-35mm (with or without the wide angle adapter — see below). The longer the focal length zoom setting you use the greater the distance under automatic control or the faster the recycle time for a given distance you can achieve.

Again, for example, you may have a 135mm tele lens on your camera. In this case, any position will cover the subject field, but again, the T-85mm zoom position will give you the fastest recycle time or the greatest distance. You can, of course, use the T-85mm position for special effects with a wider angle lens so that only the centre of the picture field is adequately illuminated. Or it may be that

your subject is unavoidable at a greater distance and evenness of illumination is secondary.

WIDE ANGLE ADAPTER (W2)

To cover down to 28mm lenses it is necessary to snap the wide angle adapter (22) on to the front of the zoom shroud (21) and operate the zoom in the closed-up W1-35mm position.

USING BOUNCE

Particularly in portraits, it is often preferable to soften the shadows by using bounce flash, wherein the subject is illuminated by bouncing the flash from the ceiling.

Apart from special effects, use the bounce at 45 or 60 degrees to avoid having too much light scattered back upsetting automatic operation. Just rotate the head (23) until the desired figure on the bounce scale (7) is indicated by the pointer (8).

Remember that the extra path length of the flash to the subject together with the scattering of light at the ceiling surface will drastically reduce the distance over which automatic control can operate. By all means zoom out to the T position to increase the distance, since ceiling scatter will diffuse the narrow beam into acceptable coverage with wider angle lenses. Also try a test flash with the Auto-Check circuit.

CLOSE-UPS

For distances closer than 6 feet (2 M), even though the TZ2*36 has one of the lowest profiles of its kind, the height of the flashgun above the camera can cause the lower part of the subject to be under illuminated.

To overcome this you may depress the bounce head (23) 5° below the horizontal. Do this by sliding the macro latch (9) to the right while depressing the head.

Always remember to restore the head to the normal (0°) when you've completed your close-up shots so all is in readiness for normal flash photograph. Just lift the head and the latch (9) will slide out of the way automatically.

The macro latch functions as a stop at 0° to prevent accidental use of the depressed head.

CHANGING THE MODULE

Normally you will never need to remove the module once it is installed. However if you change your camera you may elect to keep such a good flash-gun as the TZ2*36 and purchase only on IFS module to suit your new camera.

Figures 5 & 6 show how the module is removed. Grip the module between index finger and thumb with the palm and the remaining fingers gripping the flashgun proper. Push the

module upwards while depressing the catch (13) with a ball point pen. Once loosened, pull the module straight out.

THE USE OF COLOUR FILTERS

The colour filters supplied with the TZ 2*36 may be used for special lighting effects. They simply clip over the front of the main flash (13). Since the Auto Sensor (11), which controls automatic exposure, is colour sensitive, it will not give correct exposure with coloured light. The flashgun must therefore be used in the manual mode when using the flashgun filters.

Exposure must be increased according to the colour used.

Filter Colour	Flashgun used as fill-in or secondary light	Flashgun used as sole or main light
Green	O	Plus 1 stop (F/NO)
Red Blue	Plus 1 stop	Plus 1 to 2 stops