Mamiya

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Metz

Mamiya
SCA 3952

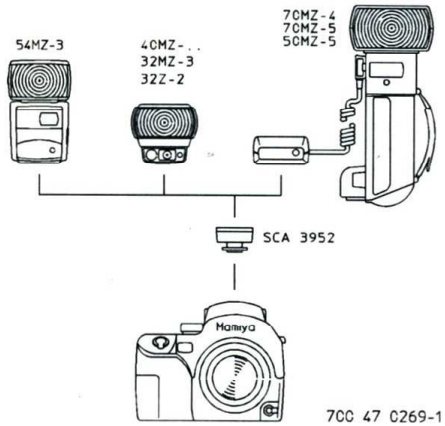
Flash Adapter for Cameras (see rear)

® System **SCA 3002**

Made in Germany

GB

The SCA 3952 adapter has been specifically developed for the Mamiya 645AF medium format camera. It is not compatible with other Mamiya cameras!



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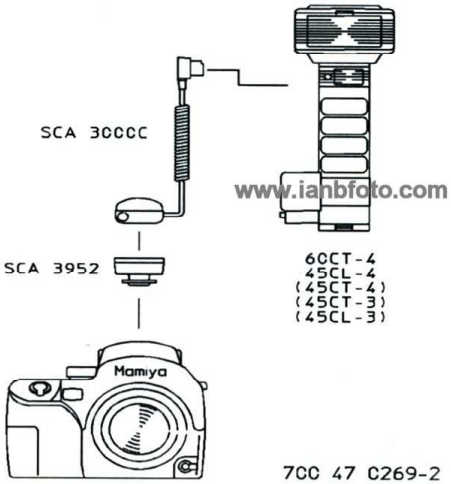

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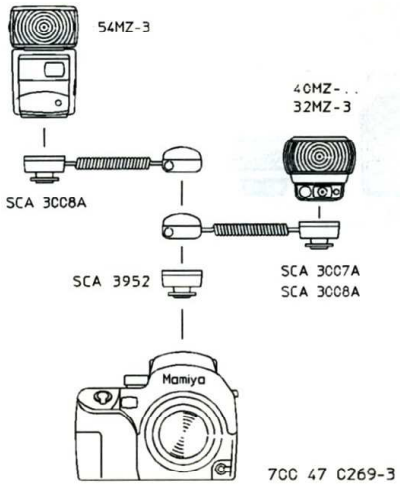

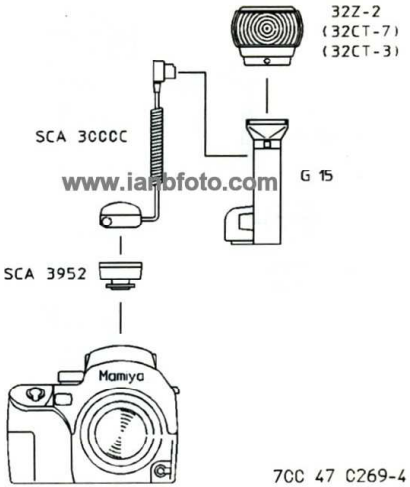

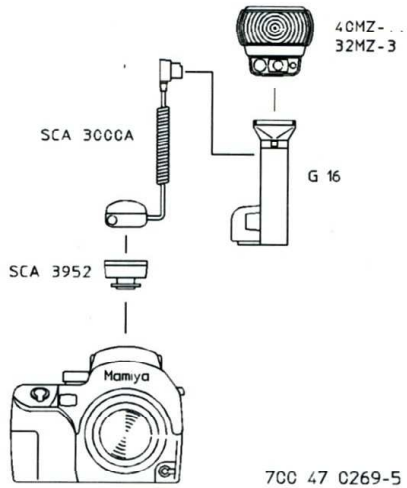

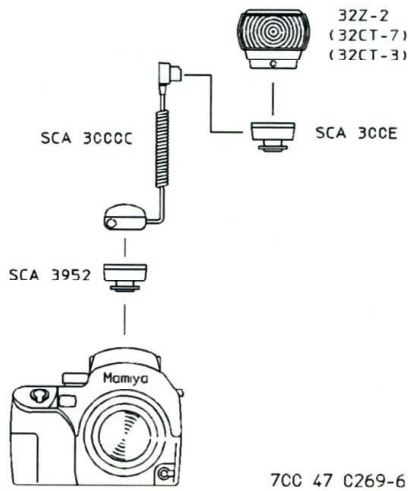

1. Camera, mecablitz and adapter functions

mecablitz type / Camera	Flash readiness indication in camera viewfinder	Correct exposure confirmation in camera viewfinder	Automatic flash synch speed control 1)	TTL flash control	Cordless TTL flash control (Metz remote TTL mode)	Motor zoom control	AF measuring beam control	Automatic transfer of ISO film speed to mecablitz	Automatic transfer of lens diaphragm to mecablitz	Exposure correction values taken into account on mecablitz display	Maximum flash range indication	Flash exposure compensation (+/- EV) in the auto mode of the mecablitz	Flash bracketing in the auto mode of the mecablitz	Programmed auto flash mode		Wake-up-function for the mecablitz	
70 MZ-5	●	●	●	●	●	●	●	●	●	●	●	●	●	●		X	
70 MZ-4	●	●	●	●	●	●	●		●	●	●	●		●		X	
60 CT-4 mit SCA 3000C	●	●	●	●			●							●		X	
54 MZ-3	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	
50 MZ-5	●	●	●	●	●	●	●	●	●	●	●			●		X	
45 CL-4 mit SCA 3000C	●	●	●	●			●							●		X	
40 MZ-3i	●	●	●	●	●	●	●	●	●	●	●			●			
40 MZ-3	●	●	●	●	●	●	●	●	●	●	●			●			
40 MZ-1i	●	●	●	●	●	●	●	●	●	●	●			●			
40 MZ-1	●	●	●	●	●	●	●	●	●	●	●			●			
32 MZ-3	●	●	●	●		●	●							●			
32 Z-2	●	●	●	●										●			
Mamiya 645 AF	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	

● = *Supported dedicated function*

x = The mecablitz has no Auto-OFF function

1) = Only in the camera modes "P" and "Av"

☞ *The dedicated functions will only be performed if supported by both the camera and the mecablitz!*

mecablitz flash units of the SCA 300 system (e.g. mecablitz 60 CT-4 or 45 CL-4) additionally require the use of an SCA 3000C converter cable!

Older compact flashguns of the SCA 300 system (not listed in this table) will be compatible with the SCA 3952 adapter if you use an SCA 3000C converter cable in combination with the Power Grip G 15, or an SCA 300E adapter plus a 40-36 flash bracket.

Motor zoom control and maximum flash range indication are automatically completed only when using lenses that support these functions (see Mamiya manual).

When using lenses that do not transfer focal length and f-stop data, a correct indication of the maximum flash range is provided on the LC display of the mecablitz only if the aperture and the zoom position have been manually set on the mecablitz.

2. Mounting the adapter

☞ *Before mounting or removing the SCA adapter on/from the mecablitz or the mecablitz on/from the camera, both the flash unit and the camera must be switched off by their main switch!*

Mounting on the mecablitz 32 Z-2, 32 MZ-3, 40 MZ-. . , 50 MZ-5, 70 MZ-4 and 70 MZ-5:

- Turn the flash unit's foot by 90° (not with 50 MZ-5 / 70 MZ-...).
- Press the retention catch against the casing, simultaneously pushing the hitherto used standard foot or SCA adapter out of the guide Any cover plate that may still be in place (required for the 301 standard foot or SCA 300 adapter) should be gripped in the centre and withdrawn.

Mounting on the mecablitz 54-MZ . .:

- Open the battery compartment cover.
- Press the coloured unlatching button in the battery compartment, simultaneously pulling off the standard foot or SCA adapter. Any cover plate that may still be in place (required for the 301 standard foot or SCA 300 adapter) should be gripped in the centre and withdrawn.

Mounting on the camera:

- Screw the knurled nut of the adapter as far as possible towards the head of the adapter case. The locking pin in the adapter shoe is now fully retracted in the case.
- Slide the adapter into the camera's accessory shoe.

- Screw the adapter's knurled nut as far as possible toward the camera body to clamp the adapter in position.

3. Possible flash modes

TTL:

The light emitted by the mecablitz is measured off the film plane by a sensor inside the camera. That's why TTL flash control will work correctly only if a film is loaded in the camera.

A (Auto):

The sensor integrated in the mecablitz controls the emitted light.

M (Manual):

The mecablitz always emits the same defined amount of light. Depending on the mecablitz model, full or partial light output levels can be chosen.

The W ("Winder"), "Motor-Drive" and "Stroboscopic" modes are partial light output levels. (Exceptions: The mecablitz 40 MZ... and 50 MZ-5 also permit partial light output levels to be combined with the "Auto A" and "TTL" modes).

4. Program flash mode

When in Program mode "P", the Mamiya 645AF mixes the ambient light with the flash light. The camera automatically adjusts a suitable shutter speed/aperture combination and controls the flash in TTL mode.

Settings:

Flash unit: Set the operating mode TTL or EM (EM = Easy-Mode-TTL; only with 40 MZ-... and 50 MZ-5).

Camera: Select the Program "P" mode with the operating mode selector; the autofocus dial must be set to "S".

5. Operation

5.1 Flash readiness indication

After the mecablitz has been switched on or after a flash has been fired, flash readiness is signalled in the camera viewfinder by a lit " ↯ " flash symbol.

The mecablitz will only be triggered if flash readiness is established. No flash will be fired if flash readiness is not indicated. The picture may be underexposed!

5.2 Automatic flash synch speed control

After the mecablitz has been turned on, the fastest flash synch speed in the Program "P" and "Av" aperture priority mode of the camera is 1/125s! Shutter speeds slower than 1/125s are retained. For shutter speeds slower than 1/60s, a tripod should be used to prevent camera shake.

In its operating mode "X" (synch operation), the camera automatically selects the fastest synch speed of 1/125s.

☞ *Shutter speeds faster than the camera's flash synch speed (1/125s) must not be set in the camera modes "M" (Manual) and "Tv" (shutter speed priority) because the fastest flash synch speed is not automatically selected in*

these modes.(please refer to the camera's operating instructions)!

5.3 Correct exposure confirmation

Flash readiness indication in the camera viewfinder additionally provides a correct exposure check (after a flash was fired) by one of the two following methods:

Display flashes: Correct exposure

Display is extinguished: The shot was underexposed.

5.4 TTL flash control

Set the mode "TTL" or "EM" (EM = Easy Mode TTL; only with 40 MZ-.. and 50 MZ-5) on the mecablitz.

This is an auto flash mode in which the flash exposure is measured by a sensor inside the camera. The sensor measures the light that reaches the film through the lens and is reflected off the film plane. When the necessary amount of light for a correct exposure has been obtained, the camera sends a signal to the flash unit which causes the flash to be instantly cut off.

The benefit of TTL flash mode is that all factors which could affect the film exposure are automatically taken into account, such as filters, variable apertures and shooting angles of zoom lenses, extension tubes for close-ups, etc.

☞ *The mecablitz 40 MZ-... or 50 MZ-5 also allow partial light output levels to be set in the TTL flash mode so that the maximum light output of the mecablitz can be limited (e.g. when using the camera in winder or motor drive*

mode). Do not mistake the use of partial light output levels for a flash exposure correction (no flash override)!

☞ *When making tests in the TTL flash mode, a section of film must be loaded in the camera!*

☞ *A test flash to check the maximum flash range can only be triggered by the camera, and not with the manual firing on the mecablitz (if necessary, the camera must be set to multiple exposures).*

5.5 Motor zoom control

This function is only possible when flash units featuring built-in motor zoom (32 MZ-3; 40 MZ-.., 50 MZ-5, 54 MZ-3 and 70 MZ-..) and suitable lenses are used.

The motor zoom control function automatically adjusts the illumination angle of the reflector to the focal length setting of the camera lens.

☞ *The SCA 3952 adapter converts the focal length of the Mamiya medium-format lens (6x4.5) to the corresponding focal length of a 35 mm camera. The mecablitz reflector is then automatically set to the position that corresponds to the 35 mm focal length.*

☞ *The mecablitz 54 MZ-3 and 70 MZ-.. permit the reflector's focal length setting indicated on the LC display to be adapted to the camera's film format (dedicated zoom operation). Please note, however, that no additional correction may be made on the mecablitz, because it is the SCA 3952 adapter that automatically adjusts the focal length of the mecablitz reflector to the focal length of the Mamiya medium format lens!*

The following settings must be made on the mecablitz:

mecablitz 32 MZ-3:

Set the zoom reflector slide on the mecablitz to "CZ". The LED for the automatic motor zoom control "CZ" then lights.

mecablitz 40 MZ-.., 50 MZ-5, 54 MZ-3 and 70 MZ-.. :

The "Auto Zoom" mode will immediately be activated when the flash unit and the camera are switched on and the camera's shutter release has been lightly pressed for the first time.

Manual adjustment of the motor zoom reflector

For manual adjustment of the motor zoom reflector please refer to the operating instructions for the mecablitz.

5.6 AF measuring beam control

AF measuring beam control is possible with the mecablitz 32 MZ-3, 40 MZ-.., 50 MZ-5 directly or in combination with the Power Grip G 16 and the connecting cable SCA 3000A, as well as the connecting cable SCA 3007 A (or SCA 3008 A).

It is also possible with the mecablitz 54 MZ-3 and 70 MZ-.. directly or in combination with the connecting cable SCA 3008 A.

When using the mecablitz 32 Z-2, the autofocus illuminator built into the Mamiya 645AF is activated!

With flash units of the SCA 300 System (e.g. mecablitz 45 CL-3, 45 CL-4 or mecablitz 60 CT-4) the AF measuring beam function is completed by the SCA

3000C converter cable in combination with the SCA 3952 adapter. Compact flashguns of the SCA 300 System additionally require the SCA 300E spacer.

The AF measuring beam is activated by the camera electronics when the ambient lighting conditions are insufficient for automatic focusing.The AF beam projects a striped pattern on to the subject, and the camera uses this pattern to focus automatically.

☞ *The focusing mode selector on the camera must be set to "S"! The AF measuring beam is not activated when the selector is in the "C" or "M" position. Please refer to the operating instructions of the camera.*

The AF beam has a maximum range of approx. 9m when an f2.8/80 mm lens is used. Lower-speed lenses or filter attachments may considerably reduce the effective range of the autofocus measuring beam!

5.7 Maximum flash range indication

☞ *Only possible with mecablitz 40 MZ-.., 50 MZ-5, 54 MZ-3 and 70 MZ-.. (mecablitz with LC display).*

Irrespective of the selected flash mode, the aperture set on the camera, the film speed used and the focal length of the lens are automatically transmitted from the camera to the mecablitz for indication of the maximum flash range. These values are then given on the LC display of the mecablitz, along with the corresponding flash coverage or maximum distance range. If a flash exposure correction is made, it is automatically taken into account for the calculation of the maximum distance range.

5.8 Wake-up function for the mecablitz

The mecablitz 54 MZ-3 features an auto-off function that automatically switches the unit off 1 or 10 minutes after the flash was fired or a setting was made. The mecablitz is then in a standby state.

As soon as the camera's shutter release is depressed half-way the SCA 3952 adapter will "wake up" the mecablitz 54 MZ-3 and switch it on again (wake-up function).

6. Flash photography with the Mamiya 645AF

Fastest flash synch speed of the camera: 1/125s

6.1 TTL flash control:

Flashgun:

Select the operating mode "TTL" oder "EM" (EM = Easy Mode TTL; only with mecablitz 40 MZ-... and 50 MZ-5).

Camera:

Select the camera mode "P" for Program flash operation. The shutter speed may be 1/125s to 30s.

In the camera's operating mode "Tv", you can set on the camera a shutter speed of 1/125s or slower. Never select a shutter speed faster than the fastest flash synch speed of the camera (1/125s), because the camera does not switch over automatically.

If an aperture is to be set on the camera, you can do so in the operating modes "Av", "M" or "X".

When in "Av" mode, the camera will select a shutter speed that matches the ambient light conditions. The fastest shutter speed is 1/125s (= fastest flash synch speed of the 645AF).

In the operating mode "M", any shutter speed that equals or is slower than 1/125s can be set on the camera. Never select a shutter speed faster than the fastest flash synch speed of the camera (1/125s), because the camera does not switch over automatically.

When in the "X" mode, the camera adjusts its shutter speed to the fastest flash synch speed of 1/125s.

6.1.1 Cordless TTL flash control (Metz remote TTL mode)

Cordless TTL flash control (Metz remote TTL mode) with several flash units is possible with the mecablitz 40 MZ-... , 50 MZ-5, 54 MZ-3 and 70 MZ-...

Light control of the off-camera mecablitz flash units (slaves) is handled by the camera-mounted mecablitz master (controller).The off-camera slaves of the 40 MZ-... series and 54 MZ-3 additionally require for the remote mode the SCA 3080 adapter (only suitable for the 40 MZ-...) and the SCA 3082 adapter (suitable for the 40 MZ-... , 54 MZ-3 and 70 MZ-4)! The mecablitz 34 CS-2 and the mecablitz 50 MZ-5/70 MZ-5 handle-mount flash units can also be used as slaves without an additional adapter. See the operating instructions for the given mecablitz.

For the setting procedure of the Metz remote TTL mode please refer to the corresponding chapter of your mecablitz manual.

☞ *The camera's shutter speed for the Metz remote TTL mode must not be faster than 1/60s.!*

6.2 Auto flash mode

Flashgun:

Set the auto mode "A" on the mecablitz.

mecablitz 40 MZ-..., 50 MZ-5, 54 MZ-3 and 70 MZ-...:

The mecablitz automatically adopts as auto aperture the f-stop set on the camera.

Other mecablitz units:

Select an auto aperture on the mecablitz.

Camera:

Set the same aperture on the camera as on the flash unit. This can be done in the camera modes "Av", "M" and "X".

In the "Av" mode , the camera selects a shutter speed that matches the ambient light. The fastest shutter speed is 1/125s (= fastest flash synch speed of the 645AF).

In the operating mode "M", you can set on the camera any shutter speed that equals or is slower than 1/125s! Never select a shutter speed faster than the fastest flash synch speed of the camera (1/125s), because the camera does not switch over automatically.

In the operating mode "X", the camera adjusts its shutter speed to the fastest flash synch speed of 1/125s.

6.2.1 Manual flash exposure compensation in the auto mode "A"

The mecablitz 54 MZ-3, 70 MZ-4 and 70 MZ-5 permit a manual flash exposure compensation to be made in the auto mode "A".

The automatic flash exposure function of the mecablitz is based on a reflection factor of 25% (average reflection factor of subjects shot with flash). Consequently, a dark background that absorbs a great deal of light, or a bright background that reflects a great deal of light (e.g. contre-jour) may result in over- or underexposure.

The above effect can be compensated by manually correcting the flash exposure in keeping with the prevailing light and subject situation. The correction value depends on the contrast between the subject and the background. The flash exposure correction factors that can be set on the mecablitz in auto flash mode range from -3 EV (aperture values) to +3 EV, adjustable in one-third increments.

☞ *Dark subject against a bright background: positive correction value (approx. +1 to +2 EV). Bright subject against a dark background: negative correction value (approx. -1 to -2 EV)*

☞ *The setting of a correction value may result in a change of the maximum flash range indicated on the LC display of the mecablitz i.e. an adaptation to the correction value.*

The mecablitz must be set to auto flash mode:

Continue pressing the "Mode" key until "A" flashes on the mecablitz display. Press the setting disk in the direction of the arrow for storage. The setting will be automatically stored after 5 seconds if the setting disk is not pressed. "A" will then continuously be lit and does no longer flash.

Setting a correction value:

Turn the setting disk on the mecablitz until the arrow symbol > is aligned to the left of "EV". Briefly press the setting disk in the direction of the arrow. The arrow symbol > to the left of "EV" will now start flashing. Turn the setting disk to set the required exposure correction value: -3,0 EV to +3,0 EV, adjustable in one-third increments. Press the setting disk in the direction of the arrow to store the setting. Storage is automatic after 5 seconds if the setting disk is not pressed. "EV" and the adjusted correction value are indicated on the LC display of the mecablitz. Please also refer to the operating instructions for the given mecablitz.

Deactivating flash exposure correction:

Turn the setting disk on the mecablitz until the arrow symbol > is aligned to the left of "EV". Briefly press the setting disk in the direction of the arrow. The arrow symbol > to the left of "EV" will now start flashing. Turn the setting disk until no correction value is displayed. Press the setting disk in the direction of the arrow for storage. Storage is automatic after 5 seconds if the setting disk is not pressed. Please also refer to the operating instructions for the given mecablitz.

☞ *No flash exposure correction can be made in the TTL flash mode! A flash exposure correction set on the mecablitz will be ineffective because it is not supported by the Mamiya 645AF. In such an event, all shots will be taken at the same high output level. To warn you, the set EV correction value flashes on the LC display of the mecablitz.*

6.2.2 "Fb" flash bracketing in the auto mode "A"

In the auto mode "A", flash bracketing can be performed with the mecablitz 54 MZ-3 and 70 MZ-5.

A flash bracketing series consists of three successive flash shots with different flash exposure correction values. No correction factor is used for the first exposure. For the second shot a minus correction factor, and for the third shot a plus correction factor is set. The correction values only concern the flash light! There is no correction for the ambient light (background exposure). Flash bracketing is automatically cancelled after the third exposure.

Activating flash bracketing:

Switch the mecablitz to auto flash mode: To do so, press the "Mode" button repeatedly until "A" flashes on the mecablitz display. Press the setting disk in the direction of the arrow for storage. The setting will automatically be stored after 5 seconds if the setting disk is not pressed. "A" then stops flashing and lights continuously. Now repeatedly depress the "Select" button on the mecablitz until "Fb" is indicated on the display. "EV" and "OFF" will flash. Turn the setting disk on the mecablitz to select the desired EV value for flash bracketing. Press the setting disk in the direction of the arrow for storage. The setting will be automatically stored after 5 seconds if the setting disk is not pressed. "Fb1" is now indicated on the mecablitz display.

Flash bracketing sequence:

The first picture is shot without a correction factor. No correction value is indicated on the display. When the first shot has been taken, the display

changes to "Fb2". In addition "EV" and the minus correction factor for the second picture are indicated. After the second shot, the display changes to "Fb3" and additionally indicates "EV" and the plus correction factor for the third exposure. The flash bracketing function is automatically cancelled after the third shot and, if required, must be re-activated for a new flash bracketing sequence.

☞ *To abort flash bracketing before the complete series has elapsed, switch the mecablitz off and on again with the main switch.*

☞ *Flash bracketing cannot be performed in the TTL flash mode. You can set a flash bracketing sequence on the mecablitz but this will be ineffective because the Mamiya 645 AF camera does not support such setting. Consequently, all three shots will be taken at the same light output level, without considering any exposure correction values. The set EV correction values for the Fb2 and Fb3 shots will flash on the mecablitz to warn you.*

6.3 Manual flash mode "M"

Flashgun:

Select "M" (if necessary, set partial light output levels) or "stroboscopic mode" (only mecablitz 40 MZ-... , 50 MZ-5, 54 MZ-3, 70 MZ-5).

Camera:

Find the required working aperture by way of the formula

"aperture = guide number ÷ distance"

or by using the aperture calculator on the mecablitz. Select the operating mode "Av", "M" oder

"X" on the camera and then set the previously determined aperture.

In its operating mode "Av", the camera sets a shutter speed to match the ambient light conditions. The fastest shutter speed is 1/125s (= fastest flash synch speed of the 645AF).

In mode "M", you can set on the camera any shutter speed that equals or is slower than 1/125s. Never select a shutter speed faster than the fastest flash synch speed of the camera (1/125s), because the camera does not switch over automatically!

In the "X" mode, the camera adjusts its shutter speed to the fastest flash synch speed of 1/125s.

7. Troubleshooting hints

Should the LC display indicate meaningless information or should the flashgun not work properly in the individual modes, then switch off the unit by its main switch. Remove the batteries, switch the flashgun on for about 1 second and off again, and then re-insert the batteries.

The mecablitz should operate properly when it is switched on again. Contact your local dealer should this not be the case.

Errors excepted. Subject to changes!

(I)

L'adattatore SCA 3952 è stato progettato per la camera di medio formato Mamiya 645AF e non è adatto per altri tipi di camera Mamiya!