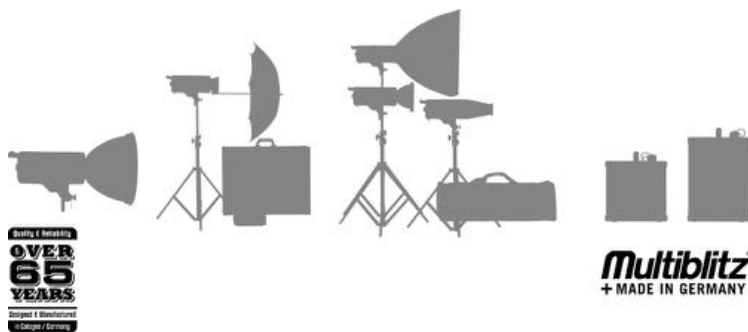


M16 **TTL**

Operations Manual



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Our name stands for technical revolution

Thank you for choosing MULTIBLITZ, we hope you enjoy working with this premium quality product.

Physicist Dr. Ing. Dieter Mannesmann, who founded Multiblitz in 1948, is considered one of the pioneers of studio flash technology. Through the development of the first electronic flash units under the name „Multiblitz“ he revolutionized professional photography. With the help of this new light source, it was possible for photographers to trigger multiple flashes without changing the flash bulb after each image. This groundbreaking invention was followed by many more ideas and innovations. Among other things, Dr. Ing. Mannesmann derived today's common definition of the Guide Number, which is used by photographers throughout the world. To date, we are continuing the legacy of Dieter Mannesmann with new groundbreaking concepts and reliable premium lighting solutions.

We are one of the most innovative studio lighting equipment manufacturers in the world, and have been for over 65 years. Our goal is to set new standards and to achieve the best outcome for all those for whom light shaping is a key part of their profession and art.

CAUTION!

General safety instructions

Please read the instruction manual carefully before using this product!

Flash-/ and halogen tubes as well as metal parts can become very warm during operation and may cause burns if not handled properly.

Opening the unit could be extremely dangerous! Do not open the unit by yourself! Service should only be executed by an authorized MULTIBLITZ service location.

Do not obstruct the venting slots.

Do not place filters, diffusing materials, or any other obstructions directly onto the ash-/ and halogen tubes.

Do not expose the unit to water, nor spray-/or dripping water.

Solely use the supplied Multiblitz lithium-ion battery (art. no. 719665) for battery operation. For mains operation solely use the corresponding multi-voltage power supply (art. no. 719668), available separately.



The crossed out wheeled bin label that can be found on your product indicates that this product should not be disposed of via the normal household waste stream. To prevent possible harm to the environment or human health please separate this product from other waste streams to ensure that it can be recycled in an environmentally sound manner.

For more details on available collection facilities please contact your local government office or the retailer where you purchased this product.

WEEE registration no.: DE 64253330

In order to avoid excessive concentration of ozone produced by using strong flash units, it is necessary to ventilate confined spaces regularly.

The minimum distance of 0.3m to the illuminated area must be strictly maintained.

This unit should be serviced once a year by an authorized MULTIBLITZ service location.



M6-TTL

Operating panel



1. Photocell
2. LCD display
3. Selector button (groups, power)
4. Selector button (channel/ID, repetitions/frequency)
5. Selector button (modeling light ON-OFF, acoustic charging check ON-OFF)
6. Control button (power flash energy/LED modeling light, select channel/ID, select repetitions/frequency, display/key illumination ON)
7. Sequence mode ON-OFF
8. Unit ON-OFF, TEST
9. USB interface
10. Selector button (manual mode with synchronisation via photocell/cable, TTL mode)

Unit



1. Stand adapter with fixing screw
2. Inclinations fixing lever
3. Sync socket
4. Battery compartment with battery

Power connection and mechanical main switch



A multi-voltage adapter (art. no. 719668), available separately, can be attached to the power connection socket 1., on the underside of the M6-TTL. This allows the unit also to be operated in 110V-260V networks. Using the mechanical main switch 2., you can switch the

unit to battery or mains operation as required. In the OFF status, the battery in the unit is separated from the electronics and the unit cannot be switched on using the "I-O" button on the operating panel. This status is recommended for transporting the M6-TTL.

Adapter connection (adapter available separately) Mechanical main switch (battery mode ON / unit OFF / Mains mode ON) Ventilation openings.

Initial start-up

Remove the protective cap from the unit by pushing the red reflector lock on the underside of the unit towards the operating panel, then turn the protective cap anti-clockwise and remove it. You can now connect a light shaper of your choice to the unit by inserting the bayonet ring into the bayonet mount of the unit, turning it clockwise and closing the reflector lock again by pushing it towards the connected light shaper.

To ensure optimum performance, the battery must be charged before using the unit for the first time. To charge the battery, you must only use the Multiblitz Li-Ion charger supplied (art. No. 719666).

Connect the battery charger to the corresponding socket on the underside of the M6-TTL battery.



Fig.: Battery charging socket

Check the charging display on the charger.

If the battery charger indicates the charging process has finished and the charging status display on the charger is flashing green, the battery can be disconnected from the charger.

Insert the battery supplied into the corresponding battery compartment on the upper side of the unit, press gently on the battery from the top until it audibly clicks into the unit.



Important note: The type label of the battery should point towards the operating panel when it is being inserted.

The anti-twist safeguard in the battery compartment (see markings, Fig. on left) prevents the battery from being inserted with the wrong polarity.

Fig.: Battery compartment with safety unit

Using the mechanical main switch on the underside, switch the unit to the required operating mode (battery or mains mode, ON).

Important note: The battery can remain in the unit during mains mode but is then not automatically charged.

Switch on the unit using the "I-O" button on the operating panel, holding the button down for about a second (you will

switch the unit off again if you hold down the same button for three seconds).

Operating modes

TTL (Thru the lens) Mode

In TTL Mode, the M6-TTL automatically adjusted to the flash measurement mode of the camera. In coordination with the camera's flash control, the M6-TTL automatically sets the flash power. If required, a lighting correction can be carried out, which can be set in levels of a third up to ± 3 levels.

Important note: TTL Mode on the M6-TTL can only be used with a separately available Multiblitz TTL Trigger remote control C or N which is used for communication between the camera and the flash unit and takes over the TTL control on the M6-TTL.

Button functions in TTL Mode



1. Selector button (group A, B, C)
2. Selector button (Channel/ID)
3. Selector button (modeling light ON-OFF, acoustic charging check ON-OFF)
4. Control button (power modeling light, 10-100% / channel & ID)
5. Unit ON-OFF, TEST
6. Selector button (manual mode with synchronisation via photocell/cable, TTL Mode)

Group select

With the selector button 1. select the required flash group (A, B, C) the unit is to be assigned to.

Channel/ID select

With the selector button 2., select the channel and the ID to which the unit is to be assigned to. Operating the button 2. marks the channel number "CH" in the display, and the control button 4. can now be used to select the required channel (1-15). Operating the selector button 2 again marks the ID number "ID" in the display, and the control button 4. can be used now to select the required ID (1-99). Turn to the right to select the units (.1-.9), or to the left for the tens of the required ID. Use selector button 2. again to leave Select.

Important note: All units within a flash set-up must be set to the same channel (CH) so that the units flash synchronously, as required, when triggered.

By selecting the ID, you are giving each unit in your flash set-up a "name" (ID no.) so that every unit can be controlled individually (power, charging check, etc.).

The same settings for channel (CH) and ID should therefore be set on the separately available Multiblitz TTL Trigger remote control C or N.

Activating the modeling light and the acoustic charging check

Briefly operate button 3. to switch on the modeling light ON-OFF. If you operate button 3. for longer, you will switch the acoustic charging check ON-OFF.

Adjusting the modeling light

If the modeling light is activated (see above), the desired power can be set via control button 4..

Triggering a TEST flash

Operate button 5. to trigger a TEST flash.

Switching between synchronisation modes

Operate button 6. to switch between

- TTL Mode
- Manual mode, synchronisation via photocell
- Manual mode, synchronisation via synchronising cable

All further functions for use of TTL Mode are switched on via the separately available Multiblitz TTL trigger remote control C or N.

Please see the relevant instructions for more information.

Note for Nikon cameras: If the "FP" function is activated in the camera menu, high-speed synchronisation is also automatically active in TTL Mode and all the camera's specified shutter speeds can be used.

Note for Canon cameras: With Canon cameras, switching must be carried out manually on the Multiblitz TTL trigger remote control C. You will find further information on this in the operating instructions for your Canon camera and in the

operating instructions of the Multiblitz TTL trigger remote control C.

M (Manual) Mode

In manual mode, the M6-TTL can be used like a classic flash unit, e.g. for studio operation. The power is regulated with the power control button via eight apertures in 1/3 aperture stops (1/128 - 1/1). The M6-TTL can be triggered / synchronised with a camera in manual mode via the supplied synchronising cable, visually via the photocell and remotely via the built-in radio receiver.

Important note: For triggering/synchronisation via remote, the separately available Multiblitz TTL trigger remote control C or N is required.

Button functions in manual mode "M" for synchronisation via photocell, symbol in display "Eye"



1. Selector button (power control modeling light/flash energy)
2. Selector button (modeling light ON-OFF, acoustic charging check ON-OFF)
3. Power control button (modeling light 10-100%, flash energy 1/128-1/1)
4. Unit ON-OFF, TEST
5. Selector button (manual mode with synchronisation via photocell/cable, TTL mode)

Adjusting the modeling light and flash energy

Using the selector button 1., choose whether you wish to use the power control button 3. to adjust the power of the modeling light or the flash energy. By pressing button 1., the flash power display is marked in the display and can be set using the power control button. Press button 1. again to adjust the power of the modeling light. (After seven seconds, the marking of the flash power display goes off automatically and the modeling light can be adjusted again).

Activating the modeling light and the acoustic charging check

Briefly operate button 2. to switch the modeling light ON-OFF. By operating button 2. for longer, you switch the acoustic charging check ON-OFF.

Triggering a TEST flash

Operate button 4. to trigger a TEST flash.

Switching between synchronisation modes

Operate button 5. to switch between

- Manual mode, synchronisation via synchronising cable
- TTL mode
- Manual mode, synchronisation via photocell

Button functions in manual mode "M" for synchronisation via synchronising cable, symbol in display "SL"



1. Selector button (power control modeling light/flash energy)
2. Selector button (repetitions/frequency in sequence mode "SEQ")
3. Selector button (modeling light ON-OFF, acoustic charging check ON-OFF)
4. Control button (modeling light 10-100%, flash energy 1/128-1/1, select repetitions/frequency in sequence mode "SEQ")
5. Selector button (Sequence mode "SEQ" ON-OFF)
6. Unit ON-OFF, TEST
7. Selector button (manual mode with synchronisation via photocell/cable, TTL mode)

Adjusting the modeling light and flash energy

Using the selector button 1., choose whether you wish to use the power control button 3. to adjust the power of the modeling light or the flash energy. By pressing button 1., the flash power display is marked in the display and can be set using the power control button. Press button 1. again to adjust the power of the modeling light. (After seven seconds, the marking of the flash power display goes off automatically and the modeling light can be adjusted again).

Activating the modeling light and the acoustic charging check

Briefly operate button 2. to switch the modeling light ON-OFF. By operating button 2. for longer, you switch the acoustic charging check ON-OFF.

Triggering a TEST flash

Operate button 4. to trigger a TEST flash.

Switching between synchronisation modes

Operate button 5. to switch between

- TTL Mode
- Manual mode, synchronisation via synchronising cable
- Manual mode, synchronisation via photocell

Sequence mode (SEQ) with synchronising cable

If synchronisation via synchronising cable is selected, it is possible to switch within manual mode to SEQ (sequence) mode in order, for example, to flash several times during a time exposure in order to show the movements of an athlete or similar as a motion sequence on a photo*.

Activating sequence mode

Operate button 5. to activate sequence mode.



Setting parameters (Ti/Hz)

Using button 2., select, by operating once, the required number of flashes; the selected parameter will be marked in the display. The required number of flashes can now be set with control button 4.

By operating button 2. a second time, select the number of flashes per second (Hz); the selected parameter will be marked in the display. The required frequency can now be set with control button 4..

Confirm the selected parameters by operating the button a third time.

Important note: To be able to use the sequence mode of the M6-TTL properly, it is recommended that the shutter speed of the camera is set a time exposure ("Bulb" mode).

FP (Focal Plane) Mode / High-Speed Synchronisation

For high-speed synchronisation, you can use the M6-TTL in "FP" at all shutter speeds which are specified by the camera being used*. In addition, flash durations defined at the M6-TTL of 1/8000, 1/11000, 1/13000, 1/14000 sec** can be set for high-speed synchronisation.

Important note: The unit can only be switched to FP mode in combination with a separately available Multiblitz TTL trigger remote control C or N.

Accordingly, FP Mode can only be used on the M6-TTL in combination with a Multiblitz TTL trigger remote control C or N which communicated between the camera and the flash unit and takes over FP control at the M6-TTL.

Note for Nikon cameras: If the "FP" function is activated in the camera menu, high-speed synchronisation is also automatically active in TTL mode and all the specified shutter speeds of the camera can be used.

Note for Canon cameras: With Canon cameras, switching must be carried out manually at the Multiblitz TTL trigger remote control C. You will find further information about this in the operating instructions of your Canon camera and in the operating instructions of the Multiblitz TTL trigger remote control C.

Button functions in FP mode



1. Selector button (group A, B, C)
2. Selector button (channel/ID)
3. Selector button (modeling light ON-OFF, acoustic charging check ON-OFF)
4. Control button (power modeling light, 10-100% / channel & ID)
5. Unit ON-OFF, TEST
6. Selector button (FP OFF, manual mode with synchronisation via photocell/cable, TTL mode)

Group select

With the selector button 1., select the required flash group (A, B, C) which the unit is to be assigned to.

Channel/ID select

With the selector button 2., select the channel and the ID to which the unit is to be assigned to. Operating the button 2. marks the channel number "CH" in the display, and the control button 4. can now be used to select the required channel (1-15). Operating the selector button 2 again marks the ID number "ID" in the display, and the control button 4. can be used now to select the required ID (1-99). Turn to the right to select the units (.1-.9), or to the left for the tens of the required ID. Use selector button 2. again to leave Select.

Important note: All units within a flash set-up must be set to the same channel (CH) so that the units flash synchronously, as required, when triggered.

By selecting the ID, you are giving each unit in your flash set-up a "name" (ID no.) so that every unit can be controlled individually (power, charging check, etc.).

The same settings for channel (CH) and ID should therefore be set on the separately available Multiblitz TTL Trigger remote control C or N.

Activating the modeling light and the acoustic charging check

Briefly operate button 3. to switch on the modeling light ON-OFF. If you operate button 3. for longer, you will switch the acoustic charging check ON-OFF.

Adjusting the modeling light

If the modeling light is activated (see above), the desired power can be set via control button 4.

Triggering a TEST flash

Operate button 5. to trigger a TEST flash.

Switching between synchronisation modes

Operate button 6. to switch between

- FP Modus
- Manual mode, synchronisation via photocell
- Manual mode, synchronisation via synchronising cable
- TTL Mode

All further functions for use of TTL Mode are switched on via the separately available Multiblitz TTL trigger remote control C or N.

* You will find information about this in your camera's operating instructions.

** The shorter the flash duration chosen, the lower the flash power.

Note for Nikon cameras: If the "FP" function is activated in the camera menu, high-speed synchronisation is also automatically active in TTL Mode and all the camera's specified shutter speeds can be used.

Note for Canon cameras: With Canon cameras, switching must be carried out manually on the Multiblitz TTL trigger remote control C. You will find further information on this in the operating instructions for your Canon camera and in the operating instructions of the Multiblitz TTL trigger remote control C.

Miscellaneous

Removing / changing the battery

Hold down the two locking buttons on the sides of the battery and pull the battery out of the battery compartment. Replace the recharged or replacement battery in the battery compartment as described in Initial start-up, point 2, page

Battery status

The battery charging status is shown on the top left in the display of the M6-TTL, with three bars inside a battery symbol. If the charge level of the battery falls too much, the unit switches off automatically in order to save the battery.

Replacement of flash tube and LED modeling light

The flash tube (art. no.: 635111) can be replaced by the user himself.

To replace the LED modeling light, please contact our Technical Support, your retailer or distributor.

Mains operation

Using a Multi-Voltage Adapter (art. No. 719668), available separately, the M6-TTL can also be operated in 110V-260V power networks. Here, the battery can be left in the unit, but is not charged automatically during mains operation. The output of the M6-TTL may vary depending on the voltage available.

TTL/FP modes combined with TTL TRIGGER C and N remote controls

In TTL and FP mode, the M6-TTL automatically recognises the type or remote control or camera (Canon or Nikon) with which it is communicating. The display then shows E-TTL for Canon and I-TTL for Nikon accordingly.

The TTL remote controls are available separately:

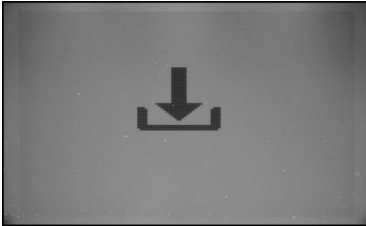
- TTL trigger C, for Canon (art. No. 719667)
- TTL trigger N, for Nikon (art. No. 719670)

Firmware Update

1. Using the USB cable supplied, the latest firmware can be transferred to the M6-TTL.
2. Using the link www.multiblitz.de/downloads (tab: "M6-TTL Firmware") load the firmware onto your computer. Click on the icon "M6-TTL Version ...", and the download starts automatically.
3. Using the USB cable supplied, connect the M6-TTL to your computer (MAC/PC).
4. The M6-TTL is shown as a drive on your desktop.
5. The following appears on the screen:



6. Select "YES". The download icon appears on the display.



7. Now drag the downloaded file onto the drive that is displayed on your desktop.
8. The update starts automatically, progress is shown in %.
9. As soon as the update is completed, the following appears on the display:



10. Follow the instruction "Remove" on the display and remove the USB cable from the unit.
11. The M6-TTL restarts automatically.
12. The firmware update is completed.

M6-TTL Accessories

- TTL-Trigger for Canon cameras, art. no. 719667
- TTL-Trigger for Nikon cameras, art. no. 719670
- Multi-Voltage power supply, art. no. 719668
- 12V car charger, art. no. 719673
- V- to P- bayonet mount adapter, art. no. 635114
- Li-Io battery, art. no. 719665
- Multi-Voltage charger, art. no. 719666
- Handle with 5/8" adapter, art. no. 718253
- Padded soft case with shoulder strap, art. no. 719671

Specifications

FLASH POWER	J(WS)	600
GUIDE NUMBER, ISO 100	REFLECTOR FILNOS- 2/65°	93
F-STOP, 2M, ISO 100*	REFLECTOR FILNOS- 2/65°	45,1
POWER RANGE	F-STOP / J(WS)	8 / 4,68 - 600
POWER INCREMENTS	F-STOPS	1/3 & 1/1
LED MODELING-LIGHT	W	10 (EQUALS 50W HALOGEN)
MODELING-LIGHT MODES		OFF, FREE (5-100%)
FLASH MODES		E-TTL, I-TTL, FP, HS, MANUAL, SEQUENCE
SYNC/TRIGGER		SYNC LEAD, RADIO (2.4GHZ), CELL (IR)
RECYCLING TIME	SEC	0,1 - 3,5
FLASH DURATION T 0,5	SEC	1/8100-1/650

FLASH DURATION T 0,5 IN FP/HS MODE UP TO...	SEC	1/15000
FLASH DURATION T 0,5 FP/HS 2	SEC	1/14000
FLASH DURATION T 0,5 FP/HS 3	SEC	1/13000
FLASH DURATION T 0,5 FP/HS 4	SEC	1/11000
FLASH DURATION T 0,5 FP/HS 5	SEC	1/8000
COLOUR TEMPERATURE (@ MAX OUTPUT)	K	5500 +/- 150
BATTERY	TYPE	CHANGEABLE LITHIUM-ION / 1,1V-6000mAh-66,6Wh
BATTERY CAPACITY	MAX FLASHES @ MAX OUTPUT	400
BATTERY CHARGING TIME	HRS, WHEN FULLY DISCHARGED	3,5
MAINS OPERATION		YES, WITH OPT. MULTI-VOLTAGE POWER SUPPLY, 100 - 240V / 12 V
BUILT-IN WIRELESS RECEIVER		YES
ACOUSTICAL "READY" INDICATION		YES
IR/PHOTO CELL ON-OFF		YES
"TEST" BUTTON		YES
AUTOMATED COOLING FAN		YES
AUTO-DUMPING		YES
COLOUR TEMPERATURE STABILIZED		YES
FLASH TUBE, UV-ABSORBING		MROR/MROW
SYNC VOLTAGE	V	< 5
FLASH VOLTAGE STABILITY	%	+/-0,5
RADIO INTERFERENCE SUPPRESSION		ACCORDING TO CE, DIN
DIMENSIONS (W x H x L)	MM	120x185x280
WEIGHT WITH BATTERY	KG	2,9

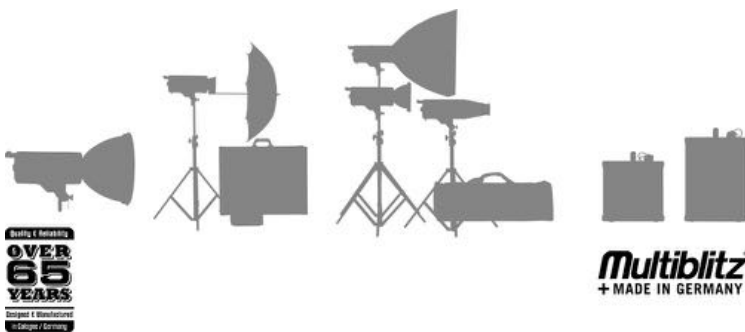
Tolerances of the technical data for measured values and components according to the standard DIN IEC // Specifications subject to change without notice.

*Metered with 65° FILNOS-2 standard reflector at ISO 100. Distance: 2 m to minimize measuring inaccuracies. Reflector not included with single unit!

3-year limited warranty

Multiblitz warrants products bearing the Multiblitz mark against defects in materials and manufacture for three years from the date of purchase by a Multiblitz distributor/the original end-user. If a defect occurs and a valid claim is made under the warranty within the warranty period, Multiblitz will choose to either repair the defect using new or reconditioned parts at no cost, replace the product with a new product or one produced using new or reconditioned parts, and resulting in at least the same performance level as the original.

Learn more about our warranty, go to: www.multiblitz.com



Multiblitz Mannesmann GmbH – Ferdinand-Porsche-Str. 19 – 51149 Cologne, Germany

Tel: 02203/9396-35 - www.multiblitz.com - info@multiblitz.com