

# mz-8 HoTT

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## © GRAUPNER

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## FUNCTION

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Main function and Channel

Basic 4 Channels and added 6 Channels.

6 Channel is as below.

### ① LED : ON / OFF

-> CH8 1100us / 1900us

### ② SPEED : Attitude mode / Rate mode

-> CH5 1100us / 1900us

### ③ SNAP : Taking pictures

-> CH9 1100us (1500us nothing)

### ④ RECORD : Film movies

-> CH9 1900us

### ⑤ FLIP : Use the button on top left of image (360° FLIP)

-> CH10 1100us / 1900us

now channel 10, later channel 7, (Alpha 150 not active in autopilot mode as soon as GPS is connected it will be channel 6 coming home function)

### ⑥ 3D / EASY : Use the button on top right of image

(180° revolution and additional function)

-> CH6 1100us / 1900us

CH6, when AKRO3D is adjusted in the receiver, for normal flight mode with GPS (Alpha 150) it will be autopilot function

### ⑦ 2.4GHz Quad with 6-Axis Gyro

⑧ You can attach camera and video module by choosing option. You can take a video on the radio using Photo & Video button.

## mz-8

Frequency band	2400MHz ~2483.5 MHz
Modulation	FHSS
Transmission output	about 1mW
Temperature range	-10 ... +55 °C
Antenna	Monopole Antenna
Battery	AA Size x 3 pcs
Operating voltage	3.6 ... 4.8V
Output voltage	about 50mA
Dimension	151 x 134 x 63.7 mm
Weight	about 260g (Incl. battery)

# Transmitter manual

## Operating transmitter

- Power on : Pull Slide switch up
- Power off : Pull Slide switch down

### 1) Flip Function

If you push Flip button, buzzer will ring with 0.5 seconds intervals.

To rotate a full 360 degrees, push Flip button and when buzzer starts ringing, move stick of transmitter to maximum position quickly.

### 2) 3D & Easy Function

When you push 3D button, buzzer will ring twice with 1 second intervals.

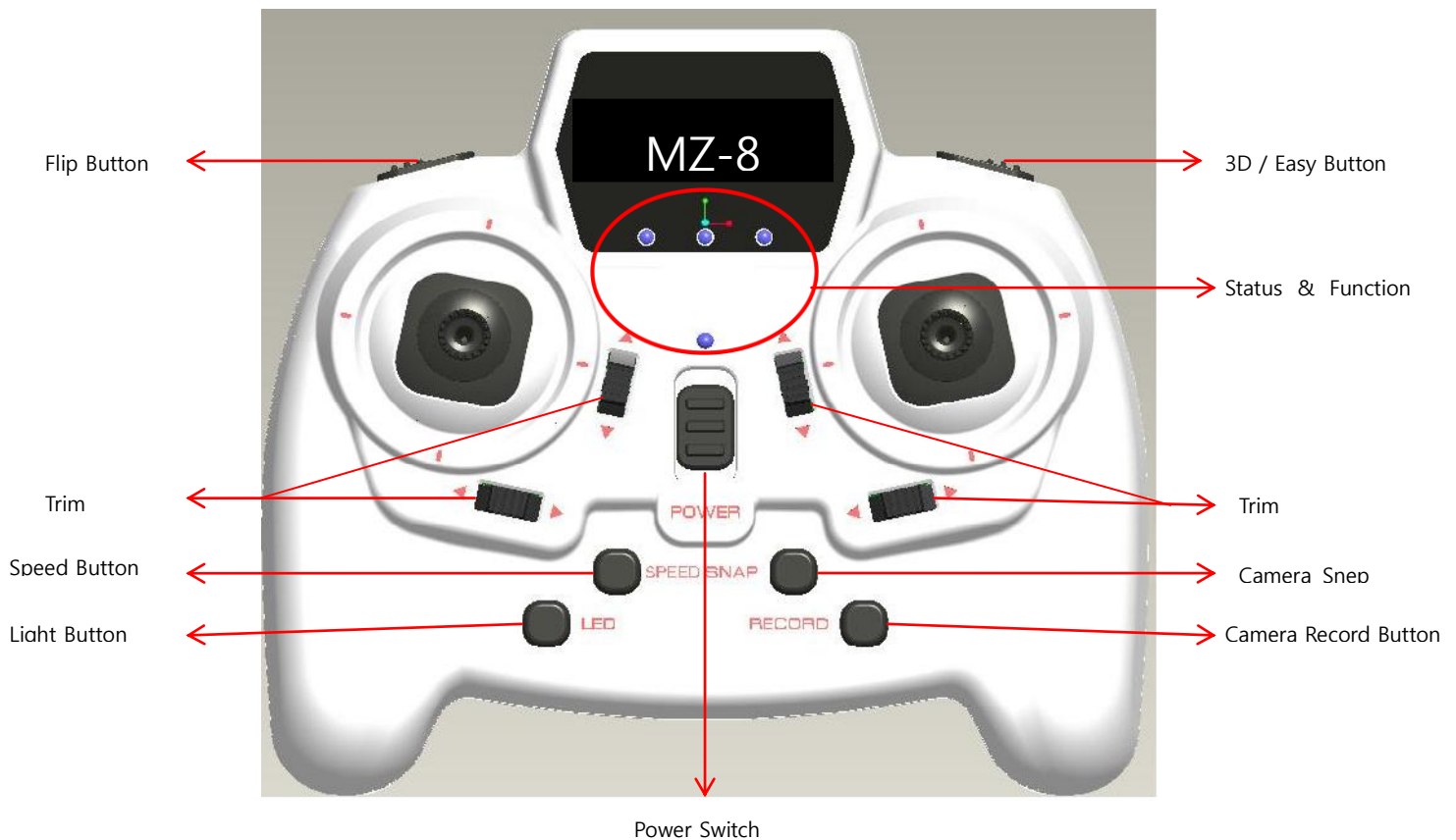
3D function is for 180 degrees flight. To operate, use same function with Flip.

### 3) Attitude Function

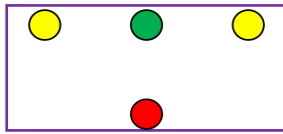
When you push Function button, one short sound rings. This function is attitude control of general quad copters.

### 4) Rate Function

When you push Function button, two short sound rings. You can do rotation and normal flight on 3D flight mode with transmitter. Function is same with 3D helicopter.



## LED Function



&lt; LED arrangement of transmitter &gt;

## 1) LIGHT ON / OFF Function



Yellow Led

- ① When the lights are off, LED stay OFF condition.
- ② When the lights are on, LED stay ON condition.  
( default status )

## 2) SPEED Attitude and Rate Function



Red Led

- ① Attitude mode : LED stay ON condition. ( default status )
- ② Rate mode : LED blinks with one second intervals.

## 3) Camera function ( Optional feature )



Green Led

- ① When power is switched on, stay On condition.  
--> Photograph mode ( default status )
- ② When movie button is pressed, LED blinks with one second intervals.  
--> Video mode

## 4) Binding and Transmitter status function.



Red Led ( Status Led )

- ① Show Power and Binding
- ② If device is not bound, LED blinks with 0.5 second intervals.
- ③ If device is bound, LED stay ON condition.

Status	Discription	Red LED	Green LED	Buzzer
Bind range	Bind status (No bind)	blinking (1s)		low beep(1)
	Bind Success,	on		low beep(2)
	RX receive OK	on		
	Range Test	fast blinking		low beep(2) /2sec
Error	Low Voltage	fast blinking		High beep(4) /2sec
	Sensor Warring			High beep(3) /2sec
	Rx Voltage, Temp Error	fast blinking		High beep(2) /2sec
	Receive rate low, No RX	slow blinking		High beep(1) /2sec
	Factory Error			Low beep(1) /2sec
Normal mode	Trim inc/dec			low beep(1) /click
	Trim 0%			High beep(1) /click
Program mode	Program mode start	1 blink		low beep(1)
	Program mode exit			low beep(1)
	Servo Reverse (Normal)		1 blink (5times)	low beep(1)
	Servo Reverse (Reverse)		2 blink (5times)	low beep(2)
	ATV 100%			High beep(1)
	Fail Safe mode start	2 blink		low beep(2)
	Fail safe (trim dn, hold)		1 blink (5times)	low beep(1)
	Fail safe (trim up, fail)		2 blink (5times)	High beep(1)
Stick Calibration	Calibration mode start	3 blink		
	Stick move done	3 blink (3times)	3 blink (3times)	low beep(2)
	Dead range set		Dead blink/3sec	

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### Normal Mode

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#### (1) Basic Operation

- When Power on, the last used memory will be bound to Receiver.
- In case of No Receiver connection, if you press the button of left stick for 1sec, it will search Receiver.
- if Receiver is not searched, it will be repeated until find Receiver, and you can bind with new Receiver by pressing BIND/LED Switch.

#### (2) BIND mode

In case of no having receiver, which is already saved in memory, then you can bind with new receiver by pressing BIND Switch.

If Receive Signal is normal, RED LED will be turned On.  
In case of Waiting Receiver or Range warning, RED LED will be slow blinked.

#### (3) Range Test mode

Functional switch: Press shortly button of SPEED + SNAP once.

After Binding with Receiver, if you shortly press this functional Switch, Range Test mode will operate for 90sec.

While operating Range mode, if you shortly press this switch, Range test mode will be ended.

At Range mode operation, RED LED will blink quickly and make buzzer sound.

After 90sec, Beep sound will be occurred one time, and enter to Main Mode.

#### (4) Low Battery Voltage warning

RED LED will do fast blinking. ( RED LED indicate State)

At under 3200V, Warning will be announced and at 3300V, warning will be removed.

3Cell Alkaline Battery will be used.

#### Important Point :

While Binding, Transmitter should always have distance from the Receiver. At least 1m should have.

Otherwise, it might be connected to Return channel, and do malfunction.

### Program Mode (workable only at Binding condition)

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#### (1) Condition of Basic Operation

Enter to Program mode : Press two Stick Switch simultaneously for 2sec.

Release Program mode : Press two Stick Switch simultaneously for a second.

Indication of Program mode : Red Led will be blinked once per a second interval



Program mode : Blink once per a second interval

#### (2) Saving Data

50pcs of last used Data could be saved.

#### (3) Adjustment of Servo End Position

In case of Stick Calibration, Default will be 100%. At this value, Customer can adjust trim as below way.

- 100% --> 1100us ~ 1900us

At Max. or Min. Position of Stick, adjust Trim Switch

Range of Trim is available 0% ~ 100% ~ 150%.

If move to 100% position, High Beep sound will be occurred once.

- Red Led will be blinked once per a second interval



Program mode : Blink once per a second interval

#### (4) Servo Reverse Set

This is used when change Servo direction.

All sticks are on neutral position, and move the trim switch to Max. or Min. Position.

If press Power switch with pressed trim switch to Max. or Min. position, Normal mode and Reverse mode will be changed.

- Indication of Servo Receiver mode : Red Led will be blinked once per a second interval

- Normal mode : Green LED will be blinked once per a second interval.

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-Reverse mode : Green LED will be blinked twice per a second interval.



Program mode : Blink once per a second interval



Normal mode : Blink once per a second interval  
(Repetition 5times)

Reverse mode : Blink twice per a second interval  
(Repetition 5times)

### (5) Fail Safe Set

Press right stick switch for a second at Program mode.

Press trim button per channels and select Fail pos mode and Hold it.

Whenever press Trim button, Setting-condition will be transferred to Receiver.

If press right-stick switch for a second, Fail safe setting mode will be ended.

- Indication of Fail Safe mode : RED LED will be blinked twice per a second interval.

- Pos mode : If Trim is UP, it is a Fail safe mode, and Green LED will be blinked twice per a second interval.  
(Repetition 5times)

- Hold mode : If Trim is Down, it is a Hold mode, and Green LED will be blinked once per a second interval.  
(Repetition 5times)



Program mode (Failsafe mode): Blink twice per a second interval



Hold mode : Blink once per a second interval (Repetition 5times)

Pos mode : Blink twice per a second interval (Repetition 5times)

## How to do Stick Calibration

### (1) Enter to Stick Calibration Mode

Turn On the Radio, in state of pressing left stick switch.

If enter to Mode, RED LED will blink 3 times.



Stick calibration mode : Blink 3 times per a second interval

### (2) Set Stick Calibration

Move all sticks from side to Side and back to middle position.

After operated last stick, hold it to middle position for 3Seconds.

If Set is done, Red and Green LED will blink 3Times at same time.



Stick calibration mode



Stick move done

Blink 3 Times per a second interval

✗ after that, it is moved to Dead Range set mode automatically.

### (3) Dead range set

This is for keep Neutral position, in case of they have no accurate Neutral value.

Dead range set about Neutral position, is set by trim switch up and down.

It can be settable from 1 to 6 steps. ( 0, 2, 4, 6, 8, 10% )

✗ in case of Throttle CH1, there is no spring, Do not set.  
( only set for CH2, CH3, CH4 )

Green LED will blink depends on Neutral set steps.

For example, if you set Dead range to 6%, LED will blink 4times per a second interval.



Dead range mode

Blink 3times per a sec interval.



Dead range set

Blinks depends of setting value (6 steps)

If set is done, press left stick button for 2 sec.

## (1) KC 인증



Graupner mz-8 Transmitter  
KCC인증번호: MSIP-CRM-sjr-16006700

## (2) Conformance Européenne



Product(s): Graupner mz-8 Transmitter,

## (3) FCC Information



Graupner mz-8 Transmitter  
FCC ID: SNL-16006700

FCC Statement

1. This device complies with Part 15 of the FCC

Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## • NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- \_Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## © Notes on environmental protection



This symbol on the product, user manual or packaging indicates that this product must not be disposed of with other household waste at the end of its life. It must be handed over to the applicable collection point for the recycling of electrical and electronic

equipment.

The materials are recyclable as marked. By recycling, material reusing or other forms of scrap usage you are making an important contribution to environmental protection.

Batteries and accumulators must be removed from the device and disposed of at an appropriate collection point. Please inquire if necessary from the local authority for the appropriate disposal site.