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# **XMS Flash**

## **User Guide**

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Congratulations on purchasing your new Bowens product.

Thank you for choosing the XMS range flash system.

The Bowens XMS monolight has been designed to meet the exacting high standards demanded by today's working professionals, whilst remaining simple and intuitive to use. Engineered for speed, power and reliability, the XMS system is the result of combined state-of-the-art technology, cutting-edge aesthetics and years of working closely alongside photographers.

The XMS500 is a 500Ws, A/C powered flash system, with integrated radio trigger, remote control functionality and high speed sync mode. It operates on the worldwide 2.4GHz radio frequency band and has 32 channels and 5 groups available. The XMS can also be controlled via optical/IR transmissions.

This unit is fully digital, ensuring consistent flash to flash power, colour temperature and short flash durations.

In order to obtain the full benefit from your purchase, please take a few moments to familiarise yourself with this user manual.

Electrical safety	05
Precautions	05
Environmental safety	05
Radio frequency	05
Final disposal	05
XMS	06
XMS - Display	07
Quick Start Guide	08
Stand Mounting	09
Reflector Removal and Mounting	09
Umbrella Mounting	09
Power	09
2.4Ghz Radio Sync	10
Optical Sync	10
Photocell	11
High-Speed Sync	11
3.5mm PC Sync	11
M	12
MLT	12
TTL	12
Modeling Lamp	13
Advanced Menu	14
Overheat Prevention	15
Error Codes	15
Specifications	16

### Electrical Safety

- This unit should only be connected to a mains socket outlet with a protective earth connection or to a suitably protected battery/mains inverter.
- Only use Bowens mains cables or extension cables.
- The mains cable and plug is regarded as an emergency disconnect device and should always be readily accessible so that it can be quickly removed.
- Do not open or disassemble the unit as it operates with a high voltage and contains capacitors that can remain electrically charged for a considerable time after the unit is turned off or is disconnected from the mains.
- Always disconnect the unit from the mains and avoid touching the flash tube or modeling lamp when changing reflectors or fitting an umbrella.

### Precautions

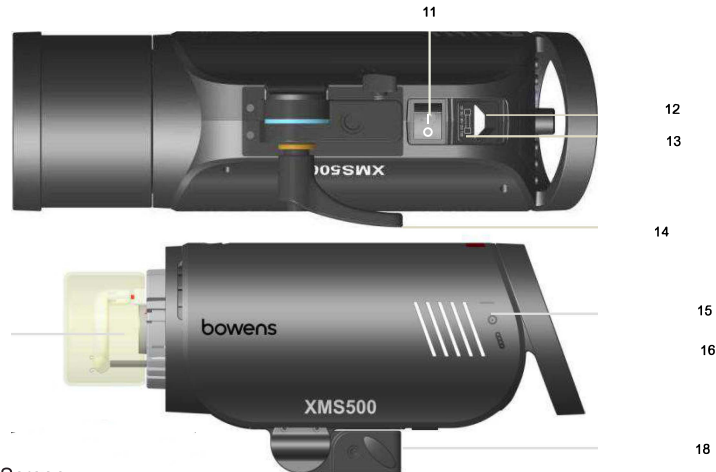
- Always study and understand this user guide and accompanying safety instructions before using this unit.
- Make sure that the Bowens Instruction and Safety Instructions always accompany this unit.
- Bowens products are intended for professional photographic use only and should not be used for any other purpose.
- Always remove the protective cap from the unit before use.
- Do not point the unit too close to persons or use the unit without the supplied protective glass dome.
- Do not use the unit if the glass dome has become visibly damaged to such an extent that its effectiveness is impaired. e.g. cracks or deep scratches.
- Do not use the modeling lamp if it is damaged or deformed.
- When replacing a modeling lamp avoid touching the bulb with bare hands, use a clean tissue or cloth.
- Do not touch any hot parts with bare fingers. The glass dome, modeling lamp, flash tube and certain metal parts can become very hot. Allow the unit to cool before touching any user changeable parts.
- Ensure that the modeling lamp voltage and power rating corresponds with that in the user guide specification. A lamp with a lower rated power may be safely used but the voltage must always be correct for the power supply being used.
- Equipment should only be serviced, modified or repaired by authorised and competent service personnel.

### Environmental Safety

- Do not place or use the unit where it could be exposed to moisture, dripping, splashing, extreme electromagnetic fields or in areas with flammable liquids, gases or dust.
- Do not expose the unit to rapid temperature changes in humid conditions as this can lead to internal condensation.
- When transporting the unit between cold and warm conditions always allow the unit to acclimatise for at least two hours before connecting to the mains.
- Do not obstruct the ventilation slots in any way with filters, diffusing materials, etc.
- Do not place any form of material over or close to the glass dome, modeling lamp or flash tube.

Radio Frequency - This equipment makes use of the radio spectrum for triggering and remote control and therefore receives and emits radio frequency energy. Ensure that all specifications within this document are followed, especially those concerning operating temperature and supply voltage range. Make sure that the unit is operated according to local regulations. The frequency spectrum that this unit uses is shared with other users so interference either with this unit or with other users is possible.

Final Disposal - This unit contains electrical and electronic components that could be harmful to the environment. Follow local legal requirements for disposal of waste, for instance WEEE directive for electrical and electronic equipment on the European market at the end of the product life.



- 01. Display Screen
- 02. BEEP ON/OFF
- 03. Flash Mode / User Menu
- 04. Open / Test Flash
- 05. Rotary Control Dial
- 06. SyncMode / High-Speed Sync
- 07. Group / Channel
- 08. Modeling Lamp
- 09. Modifier Release Latch
- 10. Light Sensor
- 11. Power Switch
- 12. AC Power Socket

- 13. Fuse
- 14. Angle Adjustment Handle
- 15. 3.5mm Jack sync
- 16. Type-C Firmware Upgrade
- 17. Glass protective cover
- 18. Mounting Bracket



- 01. Flash Power
- 02. Radio Group
- 03. Over-Temperature Protection
- 04. 2.4G wireless transmission

- 05. Radio Channel
- 06. Flash Duration
- 07. Optic Slave Flash
- 08. Sync Delay
- 09. Modeling lamp step

- 10. Modeling Lamp
- 11. Beep
- 12. High-Speed Sync
- 13. Sync Mode

## REARPANEL CONTROLS:

## PUSH BUTTONS:

## Primary (Top) Functions:

BUZZ	- ON/OFF
MODE	- Selects flash mode (M,MLT, or TTL)
TEST	- Open / test flash.
SYNC	- Selects syncmode (2.4 Ghz radio, Optical transmission, Photocell).
GROUP	- Toggles through available radio group settings (A-E).
LAMP	- Toggles through available modelling lamp output settings.

## Secondary (Bottom) Functions:

MENU	- Selects advanced user menu system.
HSS	- Selects High-Speed Sync mode.
CHANNEL	- Selects radio channel settings (1-32).

## Unless specified all buttons operate as follow:

- Single press to toggle through available options for primary (top) function.
- Press and hold to select secondary function.

## ROTARY CONTROL DIAL:

Turn the Rotary Control Dial clockwise or anti-clockwise to adjust function / setting values.  
Push to confirm setting / values.

## FUNCTIONS OVERVIEW:

Pull the Angle Adjustment Handle away from the unit to unlock the Stand Mount.  
Remove the Stand Mount from the storage channel.  
Place the XMS500 on top of a suitable support stand.  
Secure the XMS500 in place by turning the Stand Mount Thumbscrew.  
Adjust the XMS500 to the desired angle and close the Angle Adjustment Handle to lock in place.

## Reflector Removal and Mounting

1. To remove a reflector/ light modifier, pull the Modifier Release Latch away from the front end of the unit.
2. Turn the modifier and pull away from the main unit.
3. To attached a modifier, align the reflector mount with the mount on the flash head push together and turn to click/lock in place.

## Umbrella Mounting

1. Open your chosen umbrella and slide it into the umbrella mount.
2. Once in the desired position turn the thumb screw to lock in place.

## Power


- To turn the power ON, press and hold the POWER button.
- To turn the power OFF, press and hold the POWER button.

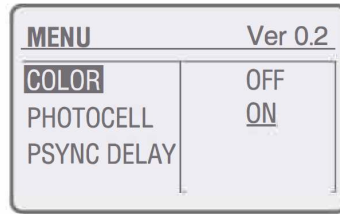
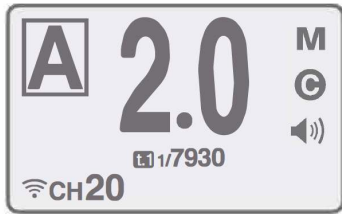
## Charging

## Power Connection

Use the power cord to connect the flash to an AC power source and turn on the power switch.

### Stable Color Temperature Function

When use this function, the color temperature changes within  $\pm 100\text{K}$  over the entire power range: enter MENU C.Fn-COLOR and set it as ON, which means the color temperature function is turned on. When adjusting the power output from high to low in M mode,  Flash Ready Indicator will blink (the beeper will alarm for 10 times). Now press the Test Button to discharge, and the flash can be used as normal.



 This function can only supported in M non-high-speed mode.

### Wireless Sync

#### 2.4GHz Radio Sync

The XMS500 has a built-in 2.4GHz radio receiver to enable full control over the flash via a XMS R Radio Transmitter.

To set up and use a XMS R 2.4GHz radio transmitter:

1. Press the SYNC button until the radio/ symbol is displayed on the LCD screen.
2. To set the radio channel press and hold the CHN button to select the channel options.
3. Turn the rotary encoder to select the desired channel (1-32).
4. Press the Rotary Control Dial to select the required channel.
5. To set the radio group press the GRP button to scroll through the available groups (A-E).

### Photocell

The XMS500 features a built-in light sensitive photocell for flash synchronisation. The XMS500 Photocell can be set to fire on the first or second flash detected.

To set up and use the Photocell to trigger the XMS500:

1. First select either S1 (1st flash) or S2 (2nd flash) Photocell option with in the Advanced Menu.

### High-Speed Sync

High-Speed Sync allows the flash to sync with shutter speeds up to 1/8000th sec. To setup and use High-Speed Sync:

1. Press and hold the HSS button to turn on High-Speed Sync.
2. Adjust the shutter speed on your camera.
3. To turn off High-Speed Sync press and hold the HSS button.

Further information:

- If the shutter speed on your camera is set to it's X-Sync or slower High-Speed Sync will not work.
- High-Speed Sync will not work in MLT mode.

### Wired Sync

#### 3.5 mm PC Sync

The XMS can be triggered via a standard 3.5 mm PC sync lead. Wired sync is always on.

### Flash Modes

The XMS has three different flash modes including M,MLT and TTL. To select one of the three flash modes press the MODE button on the rear panel of the XMS.

#### M

To set up and use mode:

1. Press the MODE button on the rear panel until M is displayed on the LCD screen.
2. Turn the Rotary Control Dial to adjust the flash power to the desired level.
3. Press the Rotary Control Dial to set and confirm the desired flash power.

#### MLT

In MLT mode the XMS can rapidly fire a predetermined number of flashes at set time intervals. This feature can be used to capture multiple images of a single event on one exposure.

To set up and use MLT mode:

1. Press the MODE button on the rear panel until MLT is displayed on the LCD screen.
2. Turn the Rotary Control Dial to adjust the flash power to the desired level.
3. Press the Rotary Control Dial to set and confirm the desired flash power.
4. To set the number of flashes and time interval press the Rotary Control Dial.
5. The time interval value (Hz) will then be highlighted and can be adjusted. Press the rotary dial to confirm desired time interval value and to select the number of flashes required.
6. Turn the Rotary Control Dial to adjust the number of flashes required.
7. Press the Rotary Control Dial to confirm the number of flashes.
8. When the unit is fired it will MLT, with the set number of flashes at the set time interval.

Calculating your shutter speed when using MLT mode - When in MLT mode, your cameras shutter will need to remain open long enough to capture all of the flashes. The formula below will help you calculate the required shutter speed.

Number of flashes / Flash frequency = Shutter speed

Example: number of flashes @ 20 / flash frequency @ 5 (Hz), then the shutter speed = 4 seconds.

Further information:

- In MLT mode only 8.0 flash power or lower can be selected. Full or 9.0 power can not be selected.
- To prevent overheating and component deterioration, do not use MLT mode repetitively in excess of 10 times. If MLT mode is used in excess of 10 bursts the XMS may automatically disable all flash modes to allow the components to cool down. If all flash modes are disabled due to excessive MLT bursts allow at least 15-20 minutes for the unit to cool sufficiently.

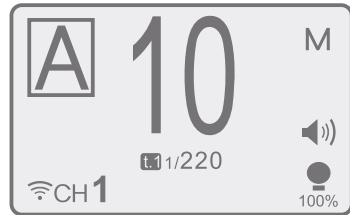
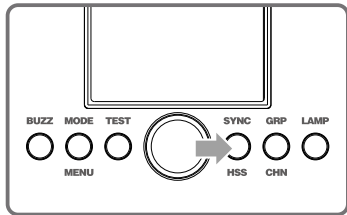
XMS500 adopts 2.4G wireless, which has good compatibility with other products of our company.  
As a slave unit, XMS500 is automatically compatible with Canon E-TTL II, Nikon i-TTL, Sony.

As a slave unit, XMS500 can be controlled by the following master units: XMTRC/N/S



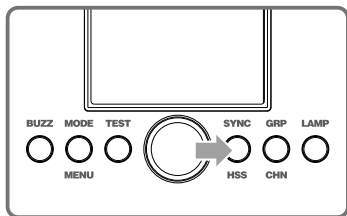
### 1. Wireless Settings

Press < CH 1 > Wireless Setting Button again until < CH 1 > is displayed on the panel.



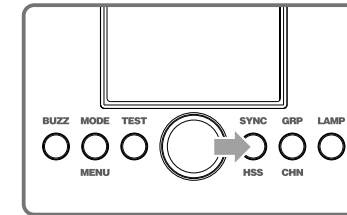
### 2. Setting the Communication Channel

If there are other wireless flash systems nearby,  
The channel of the master unit and the slave unit(s) must be set to the same.



### 3. Setting the Communication Group

Short press the < GR/CH > Button to choose group from A to E.





**Maximum Flashes in MLT mode:**

Flash Output	Hz	1	2	3	4	5	6-7	8-9	10	11	12-14	15-19	10-50	60-100
8.0	7	6	5	4	4	3	3	2	2	2	2	2	2	2
7.0	14	14	12	10	8	6	5	4	4	4	4	4	4	4
6.0	30	30	30	20	20	20	10	8	8	8	8	8	8	8
5.0	60	60	60	50	50	40	30	20	20	20	18	16	12	
4.0	90	90	90	80	80	70	60	50	40	40	35	30	20	
3.0	100	100	100	100	100	90	80	70	70	60	50	40	40	
2.0	100	100	100	100	100	90	80	70	70	60	50	40	40	

**TTL**

In TTL mode the camera determines the flash output by metering light levels through the lens. To enter TTL mode press the MODE button until TTL is displayed on the LCD screen.

**TTL Flash Exposure Compensation**

Flash Exposure Compensation allows you to make adjustments to the flash power level as determined by the camera in TTL mode. The flash output can be adjusted by f-stops in 1/3-stop increments.

To adjust the Flash Exposure Compensation in TTL mode:

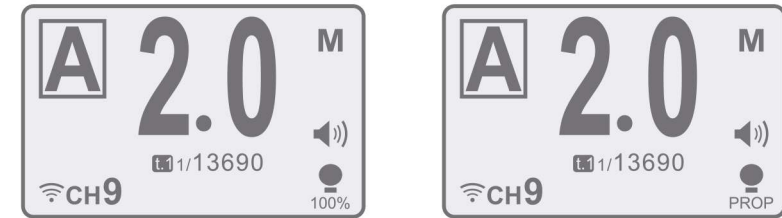
1. Press the Rotary Control Dial to select Flash Exposure Compensation.
2. Turn the Rotary Control Dial to adjust the compensation level.
3. Press the Rotary Control Dial to set the desired compensation level.

**Further information:**

- In TTL mode XMS units can be divided into a maximum of three groups.
- Flash ratios of XMS units in different groups can be adjusted (up to a max of 3 groups).
- In TTL mode different flash modes can be used on different groups.

XMS500 is equipped with a 38W LED modeling lamp which has two continuous lighting modes.

- There are TWO modes: Percentage and PROP. Short press the Modeling Lamp Button, and the three mode will be displayed on the LCD panel in sequence:
  1. Percentage: 10%~100%
  2. PROP: The modeling lamp's power changes with the flash's power. The bigger power the flash has, the brighter the modeling lamp is.
- Long press the modeling lamp for 2 seconds to adjust the percentage of modeling lamp from 10% to 100%.
- When the over-temperature protection is started, the Modeling Lamp Symbol and Overheating Protection Symbol will be flashed alternately.

**Advanced Menu**

The advanced menu allows users to custom set functions on the

Mono XT: To access the advanced menu and functions:

1. Press and hold the MENU button to access the advanced menu system.
2. Turn the rotary encoder to highlight the required function.
3. Press the rotary encoder to access the required function options.
4. Turn the rotary encoder to highlight the required function option.
5. Press the rotary encoder to select the required option.
6. Press the MENU button to exit the advanced menu.

**Advanced Menu Functions:**

FUNCTION	DESCRIPTION	SETTING	DESCRIPTION	RESTRICTION
COLOR	Color temperature mode	On Off	On Off	
PHOTOCELL	Flash Sync	Off S1 S2	Off S1 S2	M only
MODEL	Modeling lamp	CONT INTER	Continuous lighting Off after finishing the flash recycle	NO
SYNC DELAY	Flash Delay	Off,0.01-30secs.	Can be triggered on 2 <sup>nd</sup> curtain.	M&MLT only
CONTRAST	Screen Contrast	0 - 9	Varied brightness levels	
RESET	Factory Reset	No Yes	Canon Factory Reset	RESET

### Overheat Prevention

To prevent the unit from overheating, the XMS includes internal temperature sensors that will automatically enable the overheat function after excessive use. To prevent the overheat function from enabling, do not fire the unit at full power more than 100 times in quick succession.

If the temperature sensors enable the overheat function the XMS will automatically reduce flash recycle to over 10 seconds. If this occurs allow the unit to rest and cool for at least 10 minutes before commencing use.

### Error Codes

In case of failure the following is a list of unit error codes:

ERROR CODE	DESCRIPTION	SOLUTION
E1	Recycling error.	Restart the unit.
E3	Flashtube error.	Restart the unit.
E9	There are some errors occurred during the upgrading process. Please using the correct firmware upgrade method.)	

### Firmware Updates

The XMS firmware may be updated via the micro USB connector.

XMT500	SPECIFICATIONS
Part Code:	BW6500
Flashtube:	Quartz tube
Modeling Lamp:	38W LED
Rated Energy:	500Ws
Energy Range:	9-stops (full - 2.0   500Ws - 2Ws)
Power Control:	1/10rd-stop adjustment
Flash Duration (shortest):	1/13690 sec.
Guide Number:	76 (100 ISO, with high-efficiency standard reflector)
Flash Modes:	M,MLT and TTL.
Colour Temperature:	5600 °K ± 100
Recycle Time:	0.9 sec (to full / 500Ws)
Flash Delay:	0.01 - 30 sec.
Flash Sync:	High-Speed-Sync (up to 1/8,000 sec), 1st curtain sync, 2nd curtain sync.
Photocell:	Yes. Sync on 1st or 2nd flash.
Flash Exposure Compensation:	±3-stops in 1/3rd-stop increments
MLT Flash:	Max 40 flashes (@ 2.0 power & 5Hz). Max 100Hz (@ 40 flashes & 2.0 power)
Ready Indications:	Illuminated test button, beep
Modeling Control:	10%~100%,PROP
Fan Cooled:	Yes
Display:	DOT matrix
Sync Voltage:	5V
Sync Input:	3.5 mm jack sync input
<b>WIRELESS OPERATION</b>	
Wireless Control Options:	2.4 GHz receiver mode   Optical receiver mode
2.4 GHz Transmission Range:	<80m
Optical Transmission Range:	Indoors: 12-15m (39.4 -49.2ft) Outdoors: 8-10 m (26.2 -32.8ft)
Remote Groups:	2.4GHz operation: 5 (A- E)
Remote Channels:	2.4GHz operation: 32 (1-32)
<b>Operating Voltage</b>	
Operating Voltage	AC220V-240V~50Hz
Fuse	5A
Dimensions (L x W x H):	407 mm x 169 mm x 137 mm