

Phottix

The Phottix Juno Flash

Note: To immediately start using this flash please refer to the quick start guide. For advanced features please read this manual and be familiar with your camera manual and operations.
The Phottix Juno Flash is designed to work with most popular DSLR and DSL-M cameras systems. It features manual power control and transceiver technology for off-camera use.

Warnings

- 1. Use your flash safely. Do not fire the flash into the eyes of people or animals or shoot directly at – humans and/or animals can be hurt.
- 2. Be careful using the flash in an around cars, buses, motorcycles or other moving vehicles as accidents can result.
- 3. Never use the flash near combustible gases (gasoline, solvent, etc).
- 4. Do not expose the flash or batteries to dripping/splashing water, or high humidity.
- 5. Do not leave the flash or batteries in a hot location (direct sunlight, in a closed car, etc).
- 6. Remove batteries from the flash when not being used for an extended period of time.
- 7. Charge the batteries when required. Use undamaged batteries in good condition. Do not mix battery types or new and used batteries.
- 8. Do not put foreign objects in front of the flash lens when firing the flash. The energy emitted by the flash may cause objects to burn, or cause damage to the flash lens or sensor lens.
- 9. Use caution in touching the flash head after use. It may be hot and can cause burns.
- 10. The flash contains high voltage electronic parts. Do not disassemble or attempt to repair the flash. Never touch the flash's internal components.
- 11. Do not touch the External Power Port contacts with any metal objects – this can cause electric shock and serious injury.

Contents

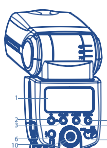
- 1. Juno Flash
- 2. Flash Bag
- 3. Flash Stand
- 4. User Guide
- 5. Flash Diffuser

Please note:

- These instructions assume:
Both the flash and camera are switched on.
The flash and camera are set to the same settings as this manual.
The flash is being used with a compatible camera.

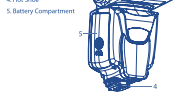
Parts

- Back / Left Side
- 1. LCD Display
- 2. Wireless Mode Button
- 3. Channel / Group Button
- 4. Master Mode Button
- 5. Zoom Button
- 6. Test Status Button
- 7. Power Light
- 8. Control Wheel
- 9. Seriation
- 10. Power Switch
- 11. Locking Lever
- 12. PC Sync Port
- 13. External Power Port
- 14. Canon compatible
- 15. 1/4" x 20 Mounting Lug



Front / Right Side

- 1. Zoom Cast
- 2. Wide Angle Diffuser
- 3. Flash Head
- 4. Hot Shoe
- 5. Battery Compartment



Installing batteries

- 1. Press the battery cover while pushing it towards the bottom of the flash. The battery cover will open and rise.
 - 2. Insert AA batteries as shown by the diagram inside the battery compartment.
 - 3. Lower the battery cover and push back towards the top of the flash, locking in place.
- Please note:**
- Please use four standard high-capacity batteries of the same brand. Make sure all batteries are at similar power levels.
 - Batteries can get hot when the flash is being used. Use caution when changing batteries.
 - If you do not use the flash for an extended period of time, store with batteries removed.

Attaching the flash to a camera

- Turn off both the camera and flash**
- 1. Align the flash hot shoe with the camera hot shoe. If fitted, insert the lock wedge with a flick.
- 2. Insert the flash into position by pushing the locking lever to the right until the lock engages with a click.
- 3. To lock, press the locking release button on the locking lever and slide to the left.

Turning the Flash On / Off

- 1. To power on the flash move the power switch to the on position.
- 2. To power off the flash move the power switch to the off position.

Approximate Level Indicator

The battery level indicator on the LCD (see below) will display an approximate indication of how much power remains in the batteries in the flash. Use this as a rough guide as to when a battery charge is needed. If flash recycling time has become very long (30 seconds) change the batteries.

Raising and Rotating the Flash Head

- 1. The flash head will extend from 7 to 90 degrees with stops at 45, 60, 75 and 90 degrees. Gently raise or lower the flash head into the required position.
- 2. The wide angle diffuser panel will rotate in either direction with stops at 30, 60, 75, 90, 120, 150 and 180 degrees. Gently rotate the flash head into the required position.

Using the Bounce Card or Wide Angle Diffuser

The Phottix Juno Flash comes equipped with a white bounce card and wide-angle diffuser panel in the flash head.

- 1. The white bounce card can be used when the flash head is in a direct position to bounce light forward to assist with catch-light in a subject's eyes.

- To open:** Push the diffuser panel and bounce card from the flash head using the ridge on the bottom of the diffuser panel.
- 2. Using the diffuser panel it will drop into position over the flash head; gently push the bounce card back into the flash head if not needed. When used, the diffuser panel will automatically reset the flash head zoom in X and flash head zoom cannot be set.

- 3. Using the bounce card only gently push the diffuser panel back into the flash head.

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Using the Flash Head Diffuser

The Phottix Juno Flash comes with an attachable diffuser that can be added to the front of the flash head when needed. It is good for softening light, reducing hot spots and shadows and better coverage for macro photography.

- To use:**
- 1. Align the diffuser with the flash head to the relevant dot.
- 2. Snap one side of the diffuser mount into the corresponding flash head mount.
- 3. Repeat step 2 on the other side of the diffuser.

Overheating Protection

The Phottix Juno contains an overheating protection circuit that will slow flash recycle time to avoid overheating-related damage. Approximately 20 full power flashes in a short amount of time will trigger the protection. A 'Heat' icon will appear when the overheating protection circuit is in operation.

PC Sync Port

1. The PC Sync Port can be used with a PC sync cable (not included) to trigger the flash – from a flash trigger or camera. This port is input only – flash output is not output from the port.

Test/Status Button

- 1. The Test/Status Button will light solid red when the flash is fully charged and ready to use.
- 2. Pressing the Test/Status Button will trigger the flash. In Wireless Master Mode pressing the test button will fire slave flashes on the same channel being controlled by the Master Flash.

Power Light

The Power Light will illuminate red when the flash is powered on, and to indicate the flash is ready to fire.

External Battery Port

The External Battery Port is Canon-compatible and a Canon CD-84 compact battery pack or compatible models can be used with the Phottix Juno.

Please note:

- Batteries must be used in the flash even when an external battery pack is used.
- Never use non-Canon-compatible battery packs.

The LCD Display



The LCD display on the Phottix Juno Flash contains important information regarding flash settings and functions.

- 1. Flash mode (M, Manual mode; M-MA, Master Mode)
- 2. Flash output level (1/128 - 1/1 in 1/3 stop increments)
- 3. Wireless mode (Master, Slave, Slave 1, Slave 2 or off (not used))
- 4. Channel: (CH1-16)
- 5. EV (EV1-LE, EV000-999)
- 6. LCD flash maximum shutter speed and frequency display (1/1000-1/3000)
- 7. Flash zoom range (width: 14200mm)
- 8. Group display (A,B,C,D)
- 9. Battery indicator.
- Note:** Dependent on chosen mode, not all settings will be display at the same time.

Auto-Save Functions

The Phottix Juno will remember flash settings, Mode, power levels, etc. will be retained in the flash if it is turned off and then back on.

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Setting Flash Zoom

The Phottix Juno Flash allows users to adjust flash head zoom from 14mm to 200mm.

- To set:**
- 1. Press the zoom button.
- 2. Rotate the adjustment wheel. As it increases or decreases the zoom distance.
- 3. Press the 'On' button when the zoom is adjusted.

Please Note:

When using the flash head diffuser panel will set to 14mm and cannot be functioned.

Auto-Idle Functions

- To save battery power the Phottix Juno Flash will go into Idle and Auto-Off modes.**
- 1. In Non-Wireless Slave Modes: The flash will go into Auto-Idle mode after 10/30/90 min depends on setting. If no buttons have been pressed or it has not been fired, the flash LCD will go blank. Re-pressing the camera shutter button or pressing the test button on the flash will wake up the Phottix Juno.
- 2. In Wireless Radio Slave Mode (Slave mode but not Slave 1 and Slave 2): The flash will not go to auto-Idle.

Flash Modes

The Phottix Juno has two flash modes Manual (M) and Multi (Stroboscopic).

To change modes:

- 1. Press the Mode Button.
- 2. Rotate the Control Wheel and the desired mode.
- 3. Press the Set Button to set the new mode.
- 4. If the Set Button is not pressed the Juno will automatically set the new mode after approximately 10 seconds.

Manual (M) Mode

In Manual Mode the Phottix Juno will fire at the power level you set. The Phottix Juno Flash can be adjusted from 1/128 powered to 1/128 - 8 stops of adjustments in 1/3 stop increments. Aperture, shutter speed and ISO on the camera need to be manually adjusted. For best results use M-Manual Mode on the camera.

Adjusting Power Levels

- 1. Press the Set Button. The displayed power level will flash.
- 2. Rotate the Control Wheel and the desired power level is displayed.
- 3. Press the Set Button to set the new power level.
- 4. If the Set Button is not pressed the Juno will automatically set the new power level after approximately 10 seconds.

Multi-Stroboscopic Mode

With Multi-Stroboscopic mode a series of rapid flashes will be fired. The flash count, frequency and power of those flashes can be programmed in the Phottix Juno. Multi-mode is useful for capturing multiple images of a moving subject in the same photo and other special effects.

The frequency of the effect (Hz) = number of flashes per second, the total number of flashes and output levels can be set.

To use:

- 1. Set the Juno to Multi mode (above).
- 2. Pressing the \odot button will cycle through the Power, Flash Count and Frequency settings. Each setting will flash when highlighted.
- 3. When highlighted, use the Control Wheel to adjust the setting.
- 4. Press the \odot button to continue to the next setting. After cycling through these settings the display will revert to the native flash Mode display.

Please Note:

- 1. Overheating and damage can result from excessive use of the Multi-Stroboscopic Mode. Do not use more than 20 times in a session.
- 2. When overheated the flash will stop flashing and 'Hot' icon will be indicated on screen, please allow the flash to cool down.

Stroboscopic Mode and Shutter Speed

To determine the proper camera shutter speed to be used with various Stroboscopic Mode variables, use the following formula:
Stroboscopic Frequency x Shutter Speed

Example: 3x (number of flashes) / 10 Hz (Frequency) = 5 second shutter speed.
This is a rough guideline; you may need to increase or decrease the shutter speed to get the desired result.

Flash Output	1/18	1/32	1/64	1/128	1/256
Flash count	4	8	12	24	24

Wireless Modes

The Phottix Juno has a built-in transceiver. It can be used to trigger other nearby Juno flashes using radio signal (when used as a 'Master' transmitter). It can be set as a receiver 'Slave' flash and be triggered by Juno flashes in transmitter mode or by compatible Phottix Flash Triggers, or optically by other flashes.

Master Mode: The Juno Flash acts as transmitter and triggers other Juno flashes or compatible Phottix products. When set in Master Mode the Juno Flash can also be used as a flash with power set from 1/128 to 1/128, or set not to fire.

Slave Mode: The Juno Flash act as a receiver and fire as a flash with power set from receiving a radio signal from the Phottix Juno flash in Master Mode or other compatible Phottix product.

S1 Mode: Optical Slave Mode: The Phottix Juno will be triggered when other nearby flashes fire. This mode obviates the triggering of the Juno to access for any TTL pre-flashes that mode cause unwanted early triggering.

Selecting Wireless Triggering Modes

- To access and set the wireless triggering modes on the Juno:
- 1. Press the Wireless Mode Button.
- 2. The Wireless icon on the bottom-left of the LCD will flash when the selection is made.
- 3. Use the Selection Wheel to cycle between Master (M), Slave (S), Slave 1 (S1) and Slave 2 (S2) modes.
- 4. Press the Set Button to reflect the wireless mode.
- 5. If the Set Button is not pressed the Juno will automatically set the selected mode after approximately 10 seconds.

Channels, Groups and Digital ID in Master and Slave Modes

In Master and Slave Wireless Mode Channel, Group and Digital ID Control can be set on each flash.

Channel: The channel (1-16) that the Juno transmits or receives signal on.

Group: Flashes can be assigned to a group - A, B, C or D. Very useful when using several lights.

Digital ID: Digital ID is a unique four digit code that can be set on the Juno. The Juno will only trigger from another Phottix product using that unique code when using Channel ID (not on).

Adjusting Channels, Groups and Digital ID in Master and Slave Modes

- 1. Press the Channel/Group Button. The Channel Display on the LCD will begin to flash.
- 2. Rotate the Control Wheel to cycle between Channels, Groups and Digital ID.
- 3. To adjust: Press the Set Button when Channel, Groups and Digital ID is selected. The adjustable parameter will begin to flash.
- 4. Rotate the Control Wheel to make adjustments.
- 5. Press the Set Button when adjustments are made.
- 6. If the Set Button is not pressed the Juno will automatically set the selected mode after approximately 10 seconds.

Please Note:

- 1. S1 and S2 modes only the power level can be set on the Juno. Do not use any physical buttons between the master unit and slave units. Distances can block signal transmissions.
- 2. Ensure the slave flash's Wireless Signal Receiver Area faces toward the triggering flash.
- 3. TTL pre-flashes will set off a flash set to S1 Slave mode. The flash will fire before the exposure. Do not use S1 Slave mode with other flashes using TTL. In these situations use S2 Slave mode.

Adjusting Group in Master Mode

When using Wireless Master Mode on the Juno you can set Slave flashes Groups on On or Off. Groups set to Off will not trigger.

- 1. Press the Channel/Group Button. The Channel Display on the LCD will begin to flash.

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- 2. Rotate the Control Wheel to cycle Groups.
- 3. Press the Set Button and Release the Control Wheel to the Group to be turned on/Off.
- 4. Press the Set Button.
- 5. The LCD will display an On or Off (OFF) to show the status of the group.
- 6. Press the Set Button and Release the Control Wheel to change the group from On to Off.
- 7. The on-camera flash in Master Mode is Group M. Power can be set (in On/Off) or can be turned off and used only as a trigger.

When using Wireless Master Mode:

- Make sure the M, Master Juno and S (Slave) Juno are set to the same synchronization Channel (1 - 16). If Master and Slave flashes are set to different channels the Slave flashes will not fire.
- If used, make sure the same Digital ID Code is used on all Juno flash. If the codes are different the flashes will not trigger.

Custom Functions

The Phottix Juno Flash comes with a number of programmable custom functions. To edit these functions (below):

- 1. Press and hold the wireless and Custom buttons simultaneously to access the custom function menu.
- 2. Use the control wheel to edit between speaker sound (OFF/on) or sleep mode time (S1 (15) S2 (30) 60min/Off).
- 3. To change a custom setting, press the set button while the custom setting is displayed.
- 4. Use the control wheel to make the selection value.
- 5. Press set to confirm.

Auto Backlight

The auto backlight will glow for approximately 15 seconds and then go off if no buttons are pressed.

Resetting to Factory Defaults

The Phottix Juno Flash can reset to factory defaults.

To reset the flash:

- 1. Press and hold the \odot and \odot buttons for 3 seconds.
- 2. The flash will reset to factory default settings.
- 3. All custom functions will reset to factory defaults.

Changes to the Flash capacitor:

If the flash is used for some time physical changes will take place within the flash's capacitor. Make sure to turn on the flash a minimum of 30 seconds every three months to prevent any physical changes.

Technical Specification

Flash mode: Manual(M), Multi(M), Slave (S)

Flash head coverage: 220x200mm (14mm with wide angle diffuser)

Guide No: 58 (820/100, 100mm)

Flash head angle: Top: 0-90 degree, Down: 0-7 degree, Left: 30 degree, Right: 30 degree

Battery: 4 x AA (Alkaline or NiMH) batteries

Recycle time: 1/5-60seconds

Multi-Flash frequency: 1-120Hz

Multi-Flash max: 1/24 time

Recycle power confirm: Test button Red

Power saving: Off / 10 min / 30min / 60min

Wireless system: Master-Slave/S1/S2

Wireless range: Approx 100 meters

Dimensions: 190x75x30mm

Weight: 180g

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FCC Statement

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.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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