Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for NIKON SB-700. You'll find the answers to all your questions on the NIKON SB-700 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual NIKON SB-700
User guide NIKON SB-700
Operating instructions NIKON SB-700
Instructions for use NIKON SB-700
Instruction manual NIKON SB-700

Nikon

Autofocus Speedlight

SB-700

User's Manual

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Manual abstract:

A4 Icons used in this manual v t 0 Includes information or tips to make Speedlight use easier. Reference to other pages in this manual t Tips on identifying CPU NIKKOR lenses CPU lenses have CPU contacts. CPU contacts · The SB-700 cannot be used with IX-Nikkor lenses. A5 Preparation Describes a point to which you should pay particular attention in order to avoid Speedlight malfunctions or mistakes. A About the SB-700 and This User's Manual A Default settings: function and mode settings at the time of purchase Preparation Nikon Creative Lighting System (CLS): a lighting system that enables various flash photography functions with improved communication between Nikon Speedlights and cameras Illumination patterns: control types of light falloff at edges; the SB-700 provides three illumination patterns, standard, center-weighted and even. FX format/DX format: Nikon digital SLR camera image area types (FX format: 36 × 24, DX format: 24 × 16) Guide number (GN): the amount of light generated by a flash unit; GN = flash-to-subject distance (m or ft.) × f-number of aperture (ISO 100) Zoom head position: position of a Speedlight zoom head; the angle of coverage changes as the zoom head position changes. Effective flash output distance: flash-to-subject distance with correctly adjusted flash output Effective flash output distance range: range of effective flash output distance Flash compensation: intentional flash output change to obtain the desired subject brightness Terminology A6 i-TTL mode: flash mode in which the SB-700 fires monitor pre-flashes and the camera measures the reflected light and controls the SB-700 flash output Monitor pre-flashes: scarcely visible flashes emitted before actual firing that enable the camera to measure the light reflected on a subject i-TTL balanced fill-flash: i-TTL mode type in which flash output level is adjusted to well-balanced exposure of the main subject and background Standard i-TTL: i-TTL mode type in which flash output level is adjusted to the correct exposure of the main subject regardless of background brightness Manual flash mode: flash mode in which the flash output level and aperture are manually set to obtain the desired exposure Distance-priority manual flash mode: manual flash mode with distance priority; the flash-to-subject distance is set and the Speedlight flash output level is adjusted in accordance with the camera settings. Step: a unit of the shutter speed or aperture change; a change of one step halves/ doubles the amount of light entering the camera EV (Exposure Value): each increment of 1 in exposure value corresponds to a one-step change in exposure, which is made by halving/doubling shutter speed or aperture A Preparation A7 About the SB-700 and This User's Manual A Preparation Wireless multiple flash-unit photography: flash photography with multiple wireless flash units simultaneously firing Master flash unit: the flash unit that commands remote flash units in multiple flash-unit photography Remote flash unit: a flash unit that fires following commands from the master flash unit Advanced Wireless Lighting: wireless multiple flash-unit photography with CLS; multiple remote flash unit groups can be controlled with the master flash unit. Quick wireless control mode: mode for multiple flash-unit photography with Advanced Wireless Lighting in which the flash output level ratios of two remote flash unit groups (A and B) can be easily balanced SU-4 type wireless multiple flash-unit photography: wireless multiple flash-unit photography suited to taking picture of a fast-moving subject A8 Q&A Index You can search for specific explanations according to objective.

Flash photography 1 (with SB-700 mounted on camera) Question Which flash mode can I take pictures with? How can I take pictures in the simplest way? How can I take portrait photos emphasizing the main subject? How can I take formal group shots? How can I take pictures with soft shadows cast on a wall? How can I confirm lighting conditions? Key phrase Flash modes Basic operation Illumination pattern: Center-weighted Illumination pattern: Even Bounce flash operation Modeling illumination 0 C-1 B-7 E-3 E-3 E-5 E-29 E-23 A B C D E F G H A9 How can I take brighter (or darker) pictures of Flash compensation the subject? How can I take pictures under fluorescent light and incandescent light and balance the lights' color effects? How can I take pictures adding specific color to the light of Speedlight? Color compensation filters Color filters E-17 E-19 Q&A Index A Preparation Question How can I use autofocus in dim lighting? How can I take pictures of both the subject and background at night? How can I take pictures without the subject's eyes appearing red? How can I use the SB-700 with a non-CLS-compatible SLR camera? How can I use the SB-700 with a COOLPIX camera? Key phrase AF-assist illumination Slow sync Red-eye reduction Non-CLS-compatible SLR camera COOLPIX camera 0 E-27 E-33 E-34 F-1 G-1 Flash photography 2 (with wireless SB-700) Question How do I take pictures using multiple flash units? How do I take pictures in a quick and simple way with wireless multiple flash units? How do I take pictures of a fast-moving subject using wireless multiple flash-unit photography? How do I take pictures with the SB-700 and a COOLPIX camera compatible with wireless multiple flash-unit photography? Key phrase Advanced Wireless Lighting Quick wireless control mode SU-4 type wireless multiple flash-unit photography CLS-compatible COOLPIX camera 0 D-2 D-9 D-13 D-3 D-18 G-1 A10 Table of Contents A Preparation About the SB-700 and This User's Manual .....

A Preparation A13 For Your Safety A Preparation Before using your product, please read the following safety precautions carefully and thoroughly to ensure correct and safe use and to help prevent damage to your Nikon product or injury to yourself or others. For quick reference by those who use the product, please keep these safety instructions near the product. In this manualr catch on fire. A16 15. When using standard size (AA, AAA, C, D) or other common rechargeable batteries such as NiMH batteries, or when recharging them, be sure to use only the battery charger specified by the battery maker and read the instructions thoroughly. Do not recharge these batteries with their terminals reversed in the charger or before the batteries have cooled off sufficiently because they could leak corrosive liquids, explode or catch on fire. The same caution also applies to using the rechargeable batteries that may be supplied by the photo product's manufacturer. A Preparation A17 For Your Safety A 1.

Preparation 2. CAUTIONS for Speedlights Do not touch the flash unit with wet hands, as this could cause an electric shock. Keep the flash unit away from children to prevent them from putting the unit in or near their mouth, or otherwise touching a dangerous part of the product; as such contact could cause an electric shock. Do not apply strong physical shocks to the unit, as this could cause a malfunction that could cause the unit to explode or catch on fire. Never use active agents that contain flammable substances such as paint thinner, benzene or paint remover to clean the unit, never use insect deterrent spray on the unit, and never store the unit in locations containing chemicals such as camphor and naphthalene, as this could damage the plastic case, cause a fire or cause an electric shock. Remove any batteries from the unit before storing the unit for a long time to prevent the unit from catching on fire or leaking corrosive liquids. 3. 4. 5. A18 WARNINGS for Batteries 1.

Never heat or throw batteries into a fire, as this could cause the batteries to leak corrosive liquids, generate heat or explode. 2. Do not short-circuit or disassemble the batteries because this could cause the batteries to leak corrosive liquids, generate heat or explode. 3. Do not mix battery types, brands or old and new batteries, as this could cause the batteries to leak corrosive liquids, generate heat or explode.

4. Do not install batteries in the reverse direction as this could cause the batteries to leak corrosive liquids, generate heat or explode. Even if only one battery is installed in reverse it will cause the Speedlight to malfunction. 5. Be sure to use the battery charger specified by the battery maker to avoid the possibility of batteries leaking corrosive liquids, generating heat or exploding.

6. Do not carry or store batteries along with metallic materials such as necklaces and hair pins because such materials could cause the batteries to short-circuit, leading to battery leakage, heat generation or an explosion. In addition, especially when carrying a quantity of batteries, place them carefully in a storage case that prevents the battery terminals from touching another battery's terminals because if they touch in reverse order it could also cause the batteries to short-circuit, leading to battery leakage, heat generation or an explosion. 7. If corrosive liquids seep from the batteries and get in your eyes, immediately wash your eyes with running water and consult with a doctor. Your eyes could be seriously damaged if they are not treated quickly. A19 A Preparation For Your Safety A Preparation 8. If corrosive liquids seep from the batteries and come in contact with your skin or clothes, wash immediately with running water. Prolonged contact could injure your skin. 9.

Always follow the warnings and instructions printed on the batteries to avoid activities that could cause the batteries to leak corrosive liquids, generate heat or catch on fire. 10. Be sure to use only batteries specified in this user's manual, to avoid the possibility of batteries leaking corrosive liquids, generating heat or exploding. 11. Never open the casing surrounding batteries or use batteries whose casing has been breached as such batteries could leak corrosive liquids, generate heat or explode. 12. Keep batteries out of the reach of children to help avoid the possibility of them being swallowed. If a battery is accidentally

swallowed, immediately consult with a doctor. 13. Batteries should not be submerged in water, exposed to rain, moisture or saltwater unless they are properly protected from the wet environment.

If water or moisture gets inside the batteries, this could cause them to leak corrosive liquids or generate heat. 14. Do not use any battery that appears abnormal in any way, including a change in color or shape. Such batteries could leak corrosive liquids or generate heat. 15.

Stop recharging rechargeable batteries if you notice that recharging is not completed within the specified time to help prevent the possibility of the battery leaking corrosive liquids or generating heat. A20 16. When recycling or disposing of batteries, be sure to insulate their terminals with tape. If the battery's positive and negative terminals short-circuit after coming into contact with metallic objects, it could cause fire, heat generation or an explosion. Dispose of used batteries in accordance with local government regulations.

17. Non-rechargeable batteries should never be charged in a battery charger because they could leak corrosive liquids or generate heat. 18. Remove dead batteries from your equipment immediately, as they could leak corrosive liquids, generate heat or explode. 19. Be careful when replacing batteries after continuous flash use, because batteries may generate heat during continuous flash photography. A Preparation A21 For Your Safety not throw or the batteries A Dothis could causeapply strong physical shocks to generate heat or as batteries to leak corrosive liquids, CAUTION for Batteries Preparation explode. Symbol for separate collection applicable in European countries This symbol indicates that this product is to be collected separately.

A22 Check before Use Tips on using the Speedlight Take trial shots Take trial shots before photographing important occasions such as weddings or graduations. A Preparation A23 Have Nikon spot-check your Speedlight regularly Nikon recommends that you have your Speedlight serviced by an authorized dealer or service center at least once every two years. Use your Speedlight with Nikon equipment The Nikon Speedlight SB-700's performance has been optimized for use with Nikon brand cameras/accessories including lenses. Cameras/accessories made by other manufacturers may not meet Nikon's criteria for specifications, and incompatible cameras/accessories could damage the SB-700's components. Nikon cannot guarantee the SB-700's performance when used with non-Nikon products. Check before Use A As part of Nikon's "life-long learning" commitment to ongoing product Preparation support and education, continually updated information is available online at the following websites: · For users in the United States: http://www.nikonusa.com/ · For users in Europe and Africa: http://www.

europe-nikon.com/support/ · For users in Asia, Oceania and the Middle East: http://www.nikon-asia.com/ Visit these sites to keep up to date with the latest product information, tips, answers to frequently-asked questions (FAQs), and general advice on digital imaging and photography. Additional information may be available from the Nikon representative in your area.

See the URL below for contact information: http://imaging.nikon.com/ Life-long learning A24 A25 A Preparation B Operation Speedlight Parts B Operation 6 7 8 9, 10 11 12 1 2 3 4 5 B1 13 14 15 16 1. Flash head 2. Flash head tilting/rotating lock release button (0E-6) 3.

Light sensor window for wireless remote flash (0D-23) 4. Battery chamber cover 5. Battery chamber cover lock release (0B-8) 6. Built-in bounce card (0E-12) 7. Built-in wide panel (0E-14) 8. Flash panel 9. Filter detector 10. Nikon Diffusion Dome detector 11. Flash-ready indicator (in remote mode) (0D-27) 12. AF-assist illuminator (0E-27) 13.

External AF-assist illuminator contacts (0H-14) 14. Locking pin 15. Accessory shoe contacts 16. Mounting foot B Operation B2 Speedlight Parts 17 B Operation 18 20 19 21 B3 17. Flash head tilting angle scale (0E-6) 18. Flash head rotating angle scale (0E-6) 19. Flash-ready indicator (0B-15, D-27) 20. LCD panel (0B-16, H-11) 21. Mounting foot lock lever (0B-11) B Operation B4 Speedlight Parts 22 27 28 29 30 31 B Operation 23 24 25 26 B5 25. [MENU] button Displays custom settings.

(0B-18) 26. Selector dial Rotate to change selected item. The selected item is highlighted on the LCD. (0B-16) 27. Illumination pattern selector Selects illumination pattern.

(0E-2) 28. [SEL] button (select button) Selects item to be configured. (0B-16) B6 Operation 22. Mode selector Selects flash mode. 23.

[ZOOM] button Press to adjust zoom head position. (0E-26) 24. Test firing button Controls test firing. (0E-29) 29. Lock release To select master or remote mode in wireless multiple flash-unit photography, rotate the power switch/wireless mode switch for multiple flash units while holding down the lock release in the center of the switch. (0D-6, D-8) 30. Power switch/wireless mode switch for multiple flash units · Rotate to turn power on and off. · Selects the master or remote mode in wireless multiple flash-unit photography. (0D-6, D-8) 31. [OK] button Confirms selected setting.

(0B-16) B Basic Operations This section covers basic procedures in i-TTL mode in combination with a CLS-compatible camera. v Notes on continuous flash photography B Operation · To prevent the SB-700 from overheating, allow it to cool down for at least 10 minutes after 15 times of continuous firing. · When continuous flash firing is repeated in quick succession, the internal safety function adjusts the recycling time by up to 15 seconds. If flash firing continues, the thermal cut-out indicator appears on the LCD and all operations are suspended. (0E-31) Allow it to cool down for several minutes to disable this function. · The conditions under which the internal safety function is activated differ depending on the temperature and the SB-700 flash output level. B7 STEP 1 Inserting the batteries Slide the battery chamber cover open while pressing the battery chamber cover lock release. Insert the batteries following the [+] and [-] marks. B Operation Close the battery chamber cover. B8 Basic Operations Suitable batteries When replacing batteries, use four fresh AA-type batteries of the same brand from any of the following types: B Operation 1.

5 V alkaline AA battery 1.5 V lithium AA battery Rechargeable 1.2 V NiMH AA battery · For minimum recycling time and number of flashes for each battery type, refer to "Specifications." (0H-27) · Alkaline battery performance may vary greatly depending on the manufacturer. · 1.

5 V carbon-zinc AA batteries are not recommended. v Additional precautions regarding batteries · Read and follow battery warnings and cautions (0A-19 A-22). · Be sure to read and follow the warnings for the battery on the section, "Notes on Batteries" (0H-9), before using the battery. · The recycling time can be longer when lithium AA batteries are used because they incorporate a function that suppresses the output current when heat is generated in the batteries. B-9 Replacing/recharging batteries Refer to the following table to determine when to replace batteries with fresh ones or recharge batteries according to how long the flashready indicator takes to come on.

1.5 V alkaline AA battery 1.5 V lithium AA battery Rechargeable 1.2 V NiMH AA battery 10 seconds or more 10 seconds or more 10 seconds or more B Operation Low battery power indicator When battery power is low, the icon shown at the left appears on the LCD and the SB-700 stops functioning. Replace or recharge batteries. B10 Basic Operations STEP 2 Attaching the SB-700 to the camera B Operation Make sure the SB-700 and the camera body are turned off. Make sure the mounting foot lock lever is on the left (white dot). Slide the SB-700's mounting foot into the camera's accessory shoe. Turn the lock lever to "L." v Lock the Speedlight in place Turn the lock lever clockwise until it stops at the mounting foot lock index.

B11 Detaching the SB-700 from the camera Make sure the SB-700 and the camera body are turned off, turn the lock lever 90° to the left, and then slide the SB-700's mounting foot from the camera's accessory shoe.

· If the SB-700's mounting foot cannot be removed from the camera's accessory shoe, turn the lock lever 90° to the left again, and slide the SB-700 slowly out. · Do not forcibly remove the SB-700. B Operation B12 Basic Operations STEP 3 Adjusting the flash head Adjust the flash head to the front position. B Operation · The flash head is locked at front. LCD indicator for flash head status Flash head is set at front. Flash head is set at angle other than front. (Flash head is tilted up or rotated to the right or left.) Flash head is tilted down. B13 STEP 4 Turning the SB-700 and camera on Turn the SB-700 and the camera body on.

B · The image below is the SB-700 LCD sample under the following conditions: flash mode: i-TTL mode; image area: DX format; illumination pattern: standard; ISO sensitivity: 100; zoom head position: 35 mm; f-number of aperture: 5.6 · Icons on the LCD may differ depending on the SB-700 settings and the camera and lens in use. SB-700 flash information SB-700 status icons Flash mode Effective flash output distance range DX format Connected to a CLS-compatible camera Zoom head position B14 Operation LCD sample Basic Operations STEP 5 Selecting the flash mode Set the mode selector to [TTL]. B Operation Make sure that the flashready indicator on the SB-700 or in the camera's viewfinder is on before taking a picture. B15 Settings and the LCD Icons on the LCD show the status of settings.

Displayed icons vary according to selected flash modes and settings. · Configurable settings are highlighted when the [SEL] button is pressed. · Highlighted settings can be changed with the selector dial. · The basic control of SB-700 functions is as follows: B Operation · If there is a configurable setting, an icon indicating the setting appears in the bottom right corner. If there are two or more configurable settings, the SEL icon is displayed, indicating configurable items can be selected with the [SEL] button.

Press the [SEL] button to highlight the selected item. Change the setting by rotating the selector dial. Press the [OK] button to confirm setting. · Once confirmed, the highlighted item returns to normal display. · If the [OK] button is not pressed, the highlighted item is confirmed and returns to normal display after 8 seconds. B16 Custom Functions and Settings Various operations for the SB-700 can be easily set using the LCD. · Displayed icons vary according to the combination of camera and status of the SB-700. · Functions and settings indicated with grid boxes do not function even though they can be configured and set. B Operation B17 Custom setting Press the [MENU] button to display the custom setting. Rotate the selector dial to choose an item, and then press the [OK] button.

· The highlighted item can be configured. B Operation Custom settings Position of highlighted item (within 11 items) This is not displayed while a selected item is being configured. Items indicated with grid boxes can be configured but do not effect flash operation. B18 Custom Functions and Settings Rotate the selector dial to highlight the chosen setting, and then press the [OK] button. B Operation · Highlighted while selected · Press the [OK] button to return display to item selection. Available selection º: Current setting Press the [MENU] button to return to normal display. · The LCD returns to normal display. B-19 Available custom functions and settings (Bold: default) Color filters (0E-20) The color of the filter in use can be set. RED BLUE YELLOW AMBER OTHER (Set when filter color is none of the above.) B Operation B20 Remote flash unit setting (0D-1, D-18) Advanced: Advanced Wireless Lighting SU-4: SU-4 type wireless multiple flash-unit photography Sound monitor (0D-27) When the SB-700 is used as a wireless remote flash unit, the sound monitor function can be activated or canceled.

ON: Sound on OFF: Sound off Custom Functions and Settings LCD panel contrast (0H-11) Contrast levels are displayed on the LCD in a nine-step graph. 5 levels in 9 steps B Operation Standby function (0E-30) Adjusting the time before the standby function is activated. AUTO: Standby function activated when the camera's exposure meter is turned off 40: 40 seconds ---: Standby function canceled FX/DX format selection (0A-6) When the zoom head position is manually set, image area settings can be selected. FX±DX: Automatically set according to the camera's image area FX: Nikon FX format (36 × 24) DX: Nikon DX format (24 × 16) Flash compensation step in manual flash mode (0C-9) Setting flash compensation step between M1/1 and M1/2 in manual flash mode 1/3 EV: Compensation with 1/3 EV step 1 EV: Compensation with 1 EV step B21 Unit of measuring distance m: meters ft: feet AF-assist illumination (0E-27) ON: Activate AF-assist illumination OFF: Cancel AF-assist illumination B Operation B22 Version of firmware (0H-12) Reset custom setting Reset custom setting except unit of measuring distance, color filters and version of firmware to default setting. YES: Reset to default NO: Do not reset C Flash Modes i-TTL Mode Information obtained by monitor pre-flashes and exposure control information is integrated by the camera to automatically adjust flash output levels.

· To take pictures using the SB-700 set in i-TTL mode, see "Basic Operations" (0B-7). · Either the i-TTL balanced fill-flash mode or the standard i-TTL mode option is available depending on the camera settings. The SB-700 does not have i-TTL mode type selection. C Flash Modes C1 i-TTL balanced fill-flash The flash output level is automatically adjusted for well-balanced exposure of the main subject and background. appears on the LCD.

Standard i-TTL The main subject is correctly exposed regardless of background brightness. This is useful when you want to highlight the main subject. appears on the LCD. t Camera's metering mode and i-TTL mode · When the camera's metering mode is changed to spot metering while i-TTL balanced fill-flash is in use, the i-TTL mode automatically changes to the standard i-TTL mode. · The i-TTL mode automatically changes to i-TTL balanced fill-flash, after changing the camera's metering mode to matrix or centerweighted. C Flash Modes C2 i-TTL Mode Setting i-TTL mode Set the mode selector to [TTL]. C Flash Modes i-TTL mode LCD sample : Monitor pre-flashes : i-TTL : Balanced fill-flash C3 SB-700 effective flash output distance range The effective flash output distance range is indicated by numbers and a bar chart on the LCD. · The actual flash-to-subject distance should be within the range displayed.

· The range varies depending on the camera's image area setting, illumination pattern, ISO sensitivity, zoom head position and aperture. For more information, see "Specifications.

" (0H-18) C Flash Modes This icon means that the flash output cannot be effectively adjusted for a shorter distance. t Auto setting of ISO sensitivity, aperture and focal length When using the SB-700 with a CLS-compatible camera and a CPU lens, ISO sensitivity, aperture and focal length are automatically set according to the lens and camera information. · For more information about ISO sensitivity range, see the camera user's manual. C4 i-TTL Mode v When insufficient flash output for correct exposure is indicated · When the flash-ready indicators on the SB-700 and in the camera's viewfinder blink for approx. 3 seconds after a picture is taken, underexposure due to insufficient flash output may have occurred. · To compensate, use a wider aperture or higher ISO sensitivity, or move the flash unit closer to the subject and reshoot. · Underexposure due to insufficient flash output is indicated by the exposure value (-0.3 EV to -3.0 EV) on the SB-700's LCD panel for approx. 3 seconds.

C Flash Modes C5 Manual Flash Mode In manual flash mode, aperture and flash output level are manually selected. This allows for control of exposure and flash-to-subject distance. · The flash output level can be set from M1/1 (full output) to M1/128 to suit creative preferences. · Underexposure due to insufficient flash output is not indicated in manual flash mode. C Flash Modes C6 Manual Flash Mode Setting manual flash mode Set the mode selector to [M].

C Flash Modes Manual flash mode LCD sample Effective flash output distance (numerical indicator) Effective flash output distance ( ) Flash output level C7 Taking a picture in manual flash mode Press the [SEL] button to highlight the flash output level. Set the flash output level by rotating the selector dial, and then press the [OK] button. · Flash output level can be set with the [SEL] button as well. · Make the flash-to-subject distance equal to the effective flash output distance indicated. C Flash Modes Confirm the flash-ready indicator is on, and then shoot.

C8 Manual Flash Mode Setting the flash output level Highlight the flash output level, and then rotate the selector dial to change the flash output level. Selector dial rotated counterclockwise Flash output level: large Selector dial rotated clockwise 1/1 1/1 1/2 -0.3 -0.7 +0.7 +0.3 1/4 -0.3 -0.7 +0.7 +0.3 1/8 -0.

3 -0.7 +0.7 +0.3 1/16 -0.3 -0.7 +0.7 +0.3 1/32 -0.3 -0.7 +0.

7 +0.3 1/64 +0.7 +0.3 1/128 Flash output level: small C Flash Modes 1/2 1/4 1/8 1/16 1/32 1/64 -0.3 -0.

7 1/128 C9 C10 Flash Modes · When the selector dial is rotated counterclockwise, the indicated denominator increases (flash output level decreases). When the selector dial is rotated clockwise, the indicated denominator decreases (flash output level increases). · The flash output level changes in ±1/3 EV steps except between 1/1 and 1/2. 1/32 -0.3 and 1/64 +0.

7 represent the same flash output level. · In default setting, the flash compensation step between 1/1 and 1/2 is ±1 EV step. This step can be changed to ±1/3 EV steps using a custom setting (0B-21). With some cameras, and when using faster shutter speeds with a flash output level higher than M1/2, actual flash output may decrease to M1/2 level. C Distance-priority Manual Flash Mode In this flash mode, when the flash-to-subject distance value is entered, the SB-700 automatically controls flash output level according to the camera settings. Setting distance-priority manual flash mode Set the mode selector to [GN]. C Flash Modes C11 Distance-priority manual flash mode LCD sample (at flash-to-subject distance of 4 m) Flash-to-subject distance (numerical indicator) Flash-to-subject distance ( ) and effective flash output distance range indicator (bar) When the flash-to-subject distance appears on the effective flash output distance range indicator, the SB-700 fires with appropriate flash output. C Flash Modes C12 Distance-priority Manual Flash Mode Taking a picture in distance-priority manual flash mode Press the [SEL] button to highlight flash-to-subject distance. Set the flash-to-subject distance with the selector dial, and then press the [OK] button. · The flash-to-subject distance can be set with the [SEL] button as well.

· The flash-to-subject distance varies depending on ISO sensitivity within a range of between 0.3 m and 20 m. · When the flash-to-subject distance ( ) appears on the effective flash output distance range indicator (bar), the SB-700 fires with appropriate flash output. C Flash Modes Confirm the flash-ready indicator is on, and then shoot. C13 v When the bounce flash warning indicator is displayed · Distance-priority manual flash is not possible when the SB-700's flash head is tilted up or rotated to the right or left. · The below indicator appears. · Set the flash head at front or tilt it down, or set the flash mode to i-TTL. C Flash-to-subject distance range in distance-priority manual flash mode · Flash-to-subject distance range of between 0.3 m and 20 m · If the desired flash-to-subject distance is not displayed, select a shorter flash-to-subject distance. E.

g., if the flash-to-subject distance is 2.7 m, select 2.5 m. C14 Flash Modes Distance-priority Manual Flash Mode v When insufficient flash output for correct exposure is indicated · When the flash-ready indicators on the SB-700 and in the camera's viewfinder blink for approx.

3 seconds after a picture is taken, underexposure due to insufficient flash output may have occurred. · To compensate, use a wider aperture or higher ISO sensitivity and reshoot. C Flash Modes C15 D Wireless Multiple Flash-unit Photography SB-700 Wireless Multiple Flashunit Photography Setup With the SB-700, "Advanced" and "SU-4" wireless flash operations are possible. · With the SB-700's default setting, flash photography with Advanced Wireless Lighting is possible. Advanced Wireless Lighting is recommended for standard multiple flash-unit photography.

D Wireless Multiple Flash-unit Photography D1 SB-700 Wireless Multiple Flash-unit Photography Setup Advanced Wireless Lighting Remote flash units (Group B) D Wireless Multiple Flash-unit Photography Remote flash units (Group A) Master flash unit mounted on camera The master flash unit commands the remote flash units to fire monitor pre-flashes. The camera measures the reflected light. The camera activates the flash units. · The SB-700 mounted on a camera is the master flash unit.

· When the SB-700 is the master flash unit, up to two groups (A and B) of remote flash units can be set up. · Single or several remote flash units can be allocated for one group. · The remote flash unit flash mode is the same flash mode set on the master flash unit. D2 SU-4 type wireless multiple flash-unit photography Remote flash units Master flash unit mounted on the camera · The Speedlight mounted on the camera or the camera's built-in flash can be used as the master flash unit. · The SB-700 can only be used as a remote flash unit. · Be sure to cancel the master flash unit monitor pre-flash function or select a master flash unit flash mode that does not activate monitor pre-flashes.

· The flash mode is set on each flash unit. Set the same flash mode on each remote flash unit. D3 Wireless Multiple Flash-unit Photography Remote flash units start firing triggered by the master flash unit firing (in AUTO mode or M mode). Remote flash units stop firing when the master flash unit stops firing (in AUTO mode). D SB-700 Wireless Multiple Flash-unit Functions When used in master mode · i-TTL · Manual flash · Quick wireless control Not possible 2 groups (A and B) 4 channels (1 4) When used in remote mode The SB-700 fires with the flash mode set on the master flash unit. Possible Up to 3 groups (A, B, C) 4 channels (1 4) Possible (AUTO, M, OFF) Flash mode Flash photography with Advanced Wireless Lighting Repeating flash photography*1 Group D Wireless Multiple Flash-unit Photography Channel*2 SU-4 type wireless multiple flashNot possible unit photography *1 See the master flash unit Speedlight (SB-900, SB-800) or the Wireless Speedlight Commander (SU-800) user's manual for details of repeating flash photography. *2 One of four channels can be used. Remote flash units can be triggered by other master flash units. Use a different channel number if another photographer is using the same type of wireless remote flash setup close by. D4 v Notes on canceling the flash of the master flash unit When the master flash unit flash function is canceled and only the remote flash units fire, the master flash unit emits a number of weak light signals to trigger the remote flash units.

This operation will normally not affect the correct exposure of the subject, although the exposure might be affected if the subject is close and a high ISO sensitivity has been set. To limit this effect, bounce the light by tilting up the master flash unit's flash head. D Wireless Multiple Flash-unit Photography D5 Setting the Master Flash Unit Set the power switch/ wireless mode switch for multiple flash units to [MASTER]. · Turn the switch while holding down the lock release in the center. Master mode LCD sample (i-TTL mode) D Wireless Multiple Flash-unit Photography Master mode Master flash unit flash mode Channel Master flash unit flash compensation value Remote flash unit flash compensation value Master flash unit zoom head position D6 Master mode LCD sample (manual flash mode) Master mode Master flash unit flash mode Channel Master flash unit flash output level Remote flash unit flash output level Master flash unit zoom head position D Wireless Multiple Flash-unit Photography D7 Setting the Remote Flash Unit Set the power switch/ wireless mode switch for multiple flash units to [REMOTE].

· Turn the switch while holding down the lock release in the center. Remote mode LCD sample (Advanced Wireless Lighting) D Wireless Multiple Flash-unit Photography Group Channel Remote mode Sound monitor Remote flash unit zoom head position D8 Advanced Wireless Lighting Operation Taking a picture with Advanced Wireless Lighting 1. Master flash unit setting (flash mode, flash compensation value and channel) [Setting i-TTL mode and channel 1 (example)] Set the mode selector to [TTL]. · In order to set the manual flash mode, set the mode selector to [M]. · Set the flash output level if the flash mode is set to manual flash.

Repeat procedure above to set the flash compensation values of the remote flash unit groups (A and B). · Set the flash output level if the flash mode is set to manual flash. D9 Wireless Multiple Flash-unit Photography Press the [SEL] button to select the master flash unit, choose a flash compensation value with the selector dial, and then press the [OK] button. D Advanced Wireless Lighting Operation Press the [SEL] button to highlight the channel, choose CH 1 with the selector dial, and then press the [OK] button. D t Canceling the flash function Wireless Multiple Flash-unit Photography · In i-TTL mode, highlight the flash compensation value and rotate the selector dial counterclockwise. Press the [OK] button when the flash compensation value becomes "---" (flash function canceled) after "-3.0EV." · In manual flash mode, highlight the flash output level and rotate the selector dial. Press the [OK] button when the flash output level becomes "---" (flash function canceled). "---" appears between "1/128" and "1/1."

" D10 2. Remote flash unit setting (group, channel and zoom head position) [Setting group A and channel 1 (example)] Press the [SEL] button to highlight the group, choose A for group with the selector dial, and then press the [OK] button. · Group name and channel number being set appears larger. · Be sure to choose the same channel number as set on the master flash unit. D11 Wireless Multiple Flash-unit Photography Press the [SEL] button to highlight the channel, choose 1 for channel number with the selector dial, and then press the [OK] button. D Advanced Wireless Lighting Operation Press the [ZOOM] button to highlight the zoom head position, choose a zoom head position with the selector dial, and then press the [OK] button. Confirm the flash-ready indicator is on, and then shoot. D Wireless Multiple Flash-unit Photography D12 Quick Wireless Control Mode The flash output level ratios of two remote flash unit groups (A and B) can be easily balanced in quick wireless control mode. · The master flash unit does not fire in quick wireless control mode. Setting quick wireless control mode Set the power switch/ wireless mode switch for multiple flash units to [MASTER], and set the mode selector to [A:B].
· Turn the switch while holding down the lock release in the center. D Wireless Multiple Flash-unit Photography Quick wireless control mode LCD sample Quick wireless control mode Master mode Master flash unit (flash function canceled) Flash compensation value of remote flash unit groups A and B Flash output level ratios of remote flash unit groups A and B Channel D13 Quick Wireless Control Mode Taking a picture in quick wireless control mode 1.

Master flash unit setting (flash output level ratios, flash compensation value and channel) [Setting flash output level ratio of 1 : 2 and channel 1 (example)] D Wireless Multiple Flash-unit Photography Press the [SEL] button to highlight the flash output level ratio of remote flash unit groups A and B. Set the flash output level ratio to 1 : 2 with the selector dial and press the [OK] button. · The flash output level ratio can be set within a range of 8 : 1 1 : 8. · The flash function in one of the remote flash unit groups A and B can be canceled. · Set the flash compensation value if necessary. D14 Press the [SEL] button to highlight the channel, choose CH 1 with the selector dial, and then press the [OK] button. D Wireless Multiple Flash-unit Photography D15 Quick Wireless Control Mode 2. Remote flash unit setting (group, channel and zoom head position) [Setting group A and channel 1 (example)] Press the [SEL] button to highlight the group, choose A for group with the selector dial, and then press the [OK] button.

D Wireless Multiple Flash-unit Photography · Set the group A or B. · The selected channel number and group indicator appear larger on the LCD. Press the [SEL] button to highlight the channel, choose 1 for channel number with the selector dial, and then press the [OK] button. · Be sure to choose the same channel number as set on the master flash unit. D16 Press the [ZOOM] button to highlight the zoom head position, choose a zoom head position with the selector dial, and then press the [OK] button. Confirm the flash-ready indicator is on, and then shoot. D Wireless Multiple Flash-unit Photography D17 SU-4 Type Wireless Multiple Flash-unit Photography SU-4 type wireless multiple flash-unit photography is particularly suited to photographing fast-moving subjects. · The SB-700 can only be used as a remote flash unit in SU-4 type wireless multiple flash-unit photography. Setting SU-4 type wireless multiple flashunit photography Set the SU-4 type wireless multiple flash-unit photography in custom setting. D Wireless Multiple Flash-unit Photography · See "Custom Functions and Settings.

" (0B-20) Set the power switch/wireless mode switch for multiple flash units to [REMOTE]. · Turn the switch while holding down the lock release in the center. D18 LCD sample Remote mode SU-4 type Flash mode Sound monitor Flash function canceled Remote flash unit zoom head position D Wireless Multiple Flash-unit Photography D19 SU-4 Type Wireless Multiple Flash-unit Photography Flash modes for remote flash units SU-4 type wireless multiple flash-unit photography can operate in AUTO (auto), M (manual) and OFF (flash function canceled) modes. Flash mode can be set with the mode selector. · Set the mode selector to [TTL] for AUTO (auto), [M] for M (manual), [GN] for OFF (flash function canceled). D Wireless Multiple Flash-unit Photography (auto) mode: · In AUTO mode, the remote flash units start and stop firing in sync with the master flash unit. · Total flash output level of the master and remote flash units is controlled. · The maximum distance the SB-700's light sensor can detect is approx. 7 m (23 ft.) in front of the master flash unit.

D20 (manual) mode: · In M mode, the remote flash units start firing in sync with the master flash unit, but do not stop firing in sync with the master flash unit. · Flash output levels of the master and remote flash units are separately set. · The maximum distance the SB-700's light sensor can detect is approx. 40 m (131 ft.) in front of the master flash unit.

· The flash output level can be set from M1/1 to M1/128. (flash function canceled) mode: · Remote flash units do not fire, even when the master flash unit fires. D Wireless Multiple Flash-unit Photography v To prevent the remote flash units from firing accidentally Do not leave the remote flash units' power on. Ambient electrical noise caused by static electricity or other such electromagnetic waves can trigger them to fire accidentally. Always turn the power off. D21 SU-4 Type Wireless Multiple Flash-unit Photography Setting a remote flash unit for SU-4 type wireless multiple flash-unit photography [Setting AUTO mode (example)] Set the mode selector to [TTL]. D Wireless Multiple Flash-unit Photography Press the [ZOOM] button to highlight the zoom head position, choose a zoom head position with the selector dial, and then press the [OK] button. t Setting flash output level in M mode In M mode, set the flash output level with the [SEL] button. D22 Remote Flash Units Remote flash unit setting · The standby function of the SB-700, SB-900, SB-800, SB-600 and SB-R200 is canceled when remote mode is set. Make sure that there is sufficient battery power. · Set the zoom head position of the remote flash units wider than the image area, so that the subject will receive sufficient illumination even when the angle of the flash head is off axis from the subject. When the flash-to-subject distance is very short, set the zoom head position wide enough to achieve sufficient light. Setting up the remote flash units · In most cases, position the remote flash unit(s) closer to the subject than the camera, so that light from the master flash unit can reach the light sensor window for wireless remote flash of the remote flash unit(s). This is particularly important when holding a remote flash unit in the hand. D Wireless Multiple Flash-unit Photography D23 Remote Flash Units ·As a basic guide, the effective distance between the master and remote flash units is approx.

10 m (33 ft.) or less in the front position, and approx. 7 m (23 ft.) at both sides (in Advanced Wireless Lighting). These ranges vary slightly depending on ambient light. · There is no limit to the number of remote flash units that can be used together. However, when using many remote flash units, light may be unintentionally picked up by the light sensor of the master flash unit and interfere with correct functioning. The practical number of remote flash units for wireless multiple flash-unit photography is three. In Advanced Wireless Lighting, for practical purposes, the number of remote flash units should be limited to three for one group. D Wireless Multiple Flash-unit Photography D24 · Place all remote flash units in the same group close together and facing the same direction.

Less than approx. 10 m (33 ft.) Group B Approx. 7 m (23 ft.) Within 15° Master flash unit Group A D · An obstacle between the master flash unit and remote flash units can interfere with transmission of data. · Take care not to let light from the remote flash unit enter the camera lens.

D25 Wireless Multiple Flash-unit Photography Remote Flash Units · Use the provided Speedlight Stand AS-22 for stable placement of remote flash units. Attach and detach the SB-700 to and from the AS-22 in the same way it is attached to/detached from the camera's accessory shoe. D Wireless Multiple Flash-unit Photography · Be sure to press the master flash unit test firing button to test fire remote flash units after setting up. · Be sure to confirm the remote flash unit flash-ready indicator is on before photographing.

D26 Checking Status in Wireless Multiple Flash-unit Photography The flash-ready indicator on the SB-700 and the sound monitor can be used to check that wireless multiple flash-unit photography is operating during and after taking a picture. · When the SB-700 is used as a wireless remote flash unit, the sound monitor can be used to check operational status. This function can be activated or canceled using custom setting (0B-20). It is set to activate as the default. Checking flash operation using the flash-ready indicator or sound monitor Master flash unit Remote flash unit Sound monitor Speedlight status Flash-ready Flash-ready indicator indicator The back indicator lights Lights up up and the front indicator blinks. The back indicator Goes out lights and lights up and up when the front ready to fire indicator blinks or goes out. D Wireless Multiple Flash-unit Photography D27 One beep Ready to fire Two short beeps Fired properly Checking Status in Wireless Multiple Flash-unit Photography Master flash unit Remote flash unit Sound monitor Three long beeps for approx. 3 sec. Speedlight status Insufficient flash output for correct exposure*1 Underexposure due to insufficient flash output may have occurred. To compensate, use a wider aperture or higher ISO sensitivity, or move the flash unit closer to the subject and reshoot.

· Auto aperture flash mode or non-TTL auto flash mode is set on the master flash unit. Change the flash mode to an operable flash mode. · The remote flash unit light sensor has failed to receive the command light from the master flash unit. This is because the light sensor cannot detect when to stop firing in sync with the master flash unit, either due to a reflection from the remote flash unit itself or light from another remote flash unit that may have entered the light sensor window. Change the direction or position of the remote flash unit and reshoot. Flash-ready Flash-ready indicator indicator Quickly blinks for approx. 3 sec. Blinks for approx. 3 sec. D Wireless Multiple Flash-unit Photography Goes out and lights up when ready to fire Quickly blinks for approx. 6 sec. High and low tone beeps alternate for approx. 6 sec. D28 *1 Indicators shown below appear when underexposure due to insufficient flash output may have occurred. Master flash unit Remote flash unit D Wireless Multiple Flash-unit Photography D29 E Functions This section explains the SB-700 functions that support flash photography and camera functions.

· For detailed information regarding camera functions and settings, refer to the camera user's manual. Switching illumination patterns (0E-2) Bounce flash operation (0E-5) Taking close-up photographs (0E-13) Fluorescent filter (included) Flash photography with Incandescent filter (included) color filters (0E-17) SJ-4 color filters (optional) Flash compensation Power zoom function Flash photography AF-assist illumination support functions Test firing (0E-23) Modeling illumination Standby function Thermal cut-out Auto FP high-speed sync FV lock Functions to be set on Slow sync the camera (0E-32) Red-eye reduction/red-eye reduction slow sync Rear-curtain sync Functions E E1 Switching Illumination Patterns In flash photography, the center of the image is most illuminated, while the edges are darker. The SB-700 provides three types of illumination patterns with different light falloff at edges. Select the suitable pattern according to the photography environment. Standard · The basic illumination pattern for common flash photography environments E2 Functions E Switching Illumination Patterns Center-weighted · The center-weighted pattern provides larger guide numbers at the center of the image than the standard illumination pattern (the light falloff at the edge will be greater than the standard illumination pattern).

· Suitable for shots, such as portraits, in which the light falloff at the edge of an image can be ignored. Functions E Even · The light falloff at the edge of the image is less than with the standard illumination pattern. · Suitable for group photographs, in which sufficient light is required without light falloff at the edges. E3 To set illumination pattern The illumination pattern can be set using the illumination pattern selector. · The selected illumination pattern is indicated with an icon on the LCD. Standard Center-weighted Even E4 Functions E Bounce Flash Operation Bounce flash is a photographic technique using light that is bounced off a ceiling or wall using a tilted or rotated flash head. This provides the effects listed below compared to those with direct light from a flash unit: · Overexposure to a subject that is closer than other subjects can be reduced. · Background shadows can be softened. @@@@@@@@@@@@@@@@@@1 m to 2 m (3.3 ft.

to 6.6 ft.) depending on photographic conditions. @@@@@@@@@@@The zoom head position differs depending on the illumination pattern. @@@@@@Adjust according to results. @@@@Next, set this aperture on the camera. @@@@· To insert the bounce card, pull out the built-in wide panel again and slide both back into place together. E12 Functions E Taking Close-up Photographs When the flash-to-subject distance is less than approx. 2 m (6.6 ft.

), tilting down the flash head is recommended to ensure sufficient illumination of the lower part of the subject in close-up photography. · The bounce-down icon appears and the effective flash output distance range is underlined with a dotted line when the flash head is tilted down. · With the built-in wide panel, the flash from the SB-700 is diffused. This softens shadows and prevents overexposure. · When using a long lens, be careful that the light from the flash is not obstructed by the lens barrel.

· Vignetting may occur in close-up flash photography due to the illumination pattern, lens in use, focal length setting, etc. Therefore, make test shots if taking an important picture. Functions E 0° 7° Bounce-down icon Dotted underline indicates the flash head is tilted down. E13 Setting the built-in wide panel Carefully pull the built-in wide panel all the way out and position it over the flash head. Slide the bounce card back into place inside the flash head.

· To replace the built-in wide panel, lift it up and slide it into the flash head as far as it will go. E14 Functions E Taking Close-up Photographs · When the built-in wide panel is attached and the camera's image area is set to FX format, the zoom head position is automatically set at 12 mm, 14 mm or 17 mm. @@The zoom head position differs depending on the illumination pattern. (0E-2, H-20) Functions E E15 Taking close-ups with bounce-down flash Set the SB-700's flash mode. Position the built-in wide panel. Tilt the flash head down. · The flash-to-subject distance is underlined. Confirm the flashready indicator is on, and then shoot. E16 Functions E Flash Photography with Color Filters Color compensation filters, a fluorescent and an incandescent filter, are included with the SB-700 for use with flash photography under incandescent/tungsten and fluorescent lighting. · For photo examples with colors balanced using color compensation filters, see the separate booklet, "A collection of example photos.

" · Color filters (Color Filter Set SJ-4) that change the color of the light emitted by the SB-700 are separately available. (0H-13) Functions Using color compensation filters and color filters Filters Fluorescent filter (Fluorescent Filter SZ-3FL), included Incandescent filter (Incandescent Filter SZ-3TN), included Color filters (Color Filter Set SJ-4), optional Purpose Balance the color of light from the flash to match that of fluorescent lighting Balance the color of light from the flash to match that of incandescent or tungsten lighting Create interesting effects by changing the color of the light emitted by the flash E E17 How to attach color compensation filters (included) Place the filter on the flash head and insert into the slit at the top. · Place the filter with the Nikon logo facing up, as shown in the diagram. Check the LCD. · Filter type is displayed. · The information is transmitted to the camera from the SB-700. Fluorescent filter Incandescent filter E18 Functions E Flash Photography with Color Filters How to attach SJ-4 color filters (optional) Attach the filter to the filter holder (SZ-3) as shown in the diagram. · Insert the filter with the name of the color filter at bottom. · The filter should be inserted with the name of the color filter facing out. · Insert the edges of the filter between the filter holder and the filter attachment tabs.
· Attach the filter to the filter holder without creasing the filter or leaving any gaps. Functions E E19 Place the filter holder on the flash head with the Nikon logo facing up, as shown in the diagram, and insert it into the slit at the top. · Once the filter holder is attached, the LCD panel shows the color filter setting display. · Be sure to attach the filter to the filter holder before placing the filter holder on the flash head. Set the color.
· In custom settings, select the color of the filter attached. (0B-20) RED BLUE YELLOW AMBER E20 Functions E Flash Photography with Color Filters v Notes on using SJ-4 color filters · These filters are consumable items. Replace them when they deteriorate or their colors fade. · The heat generated from the flash head can warp the filters. However, this will not affect their performance.
· Scratches on the filters will have no effect on performance unless the filters fade in color. · To remove dust or dirt, wipe the filter lightly with a soft, clean cloth. Functions Balancing light from the flash using color compensation filters and color filters When a color compensation filter is attached to the SB-700 while the camera's white balance is set to auto or flash, filter information is automatically transmitted to the camera, and the camera's optimum white balance is automatically adjusted to give the correct color temperature. · When a SJ-4 color filter is attached to the SB-700, set the camera's white balance to auto, flash or direct sunlight. · When using the SB-700 with a camera not equipped with filter detection (D2 series, D1 series, D200, D100, D80, D70 series, D60, D50, D40 series), set the camera's white balance according to the filter in use while referring to the following table. · For more details on white balance, see your camera user's manual. E E21 White balance depends on camera in use Camera Filter D7000 D3X, D3S, D3*1, D700, D300S, D300*2, D90, D5000, D3100, D3000 D2 series, D1X, D1H, D200, D100, D80, D1, D50 D70 series, D60, D40 series Not compatible Incandescent (fine tune -1) Not compatible SZ-3FL SZ-3TN Color filters (RED, BLUE, YELLOW, AMBER) Auto, flash Auto, flash Auto, flash Auto, flash, direct sunlight Auto, flash (A6) Auto, flash, direct sunlight Auto, flash, direct sunlight Auto, flash, direct sunlight *1 D3 camera with firmware A and firmware B version 2.00 or later. *2 D300 camera with firmware A and firmware B version 1.10 or later.

· Please check the image results and adjust the flash compensation value and other settings accordingly. E22 Functions Not compatible E Flash Photography Support Functions Flash compensation Exposure compensation for a flash-illuminated subject without affecting background exposure can be achieved by adjusting the SB-700's flash output level. · Some plus compensation may be necessary to make the main subject brighter, and some minus compensation to make it darker. · Flash compensation is possible in i-TTL mode. Functions Press the [SEL] button to highlight the flash compensation value. Turn the selector dial to set desired flash compensation value. · The compensation value can be set in 1/3 EV steps from +3.0 EV to -3.0 EV. E Press the [OK] button. E23 v Canceling flash compensation · To cancel, turn the selector dial to return the compensation value to "0." · Flash compensation cannot be canceled by simply turning the SB-700 off. t For digital SLR cameras with a built-in flash featuring the flash compensation function · The flash compensation can also be set on the digital SLR camera with a built-in flash. For details, see the camera user's manual. · If the flash is compensated on both the camera and the Speedlight, the flash output is modified by the sum total of both compensation values.
In this case, the SB-700's LCD panel shows only the compensation value set on the SB-700. E24 Functions E Flash Photography Support Functions Power zoom function The SB-700 automatically adjusts the zoom head position to match the lens focal length. · Zoom head positions automatically adjusted differ depending on the settings. For more details, refer to "Specifications.