B&D; Wireless Safety Beams for Garage Doors

Details:

B&D; Safety Beams Guide (Wireless Safety Beam Kit – the B&D; “Safety Beams” upgrade) Understanding B&D; Safety Beams: What You’re Installing B&D; Safety Beams are infrared (photoelectric) safety sensors designed to stop a closing garage door if something is in the way. When the door begins to close, the system “watches” an invisible beam across the opening. If the beam is interrupted by a person, pet, vehicle, or object, the opener is designed to stop the door and prevent it continuing to close. B&D; Safety Beams are wireless, meaning: The beam itself runs between a Transmitter (TX) and a Receiver (RX) mounted on opposite sides of the opening. The safety beam signal is sent wirelessly (radio) between the beam units and the system’s base station module. You do not run low■voltage cable across the doorway (one of the biggest installation hassles with older wired beam setups). Important: Although the beam units communicate wirelessly, the kit includes a base station module that must be connected to the opener’s harness. That connection step is part of the installation. B&D; recommends Safety Beams for automatic doors, and they are compulsory when installing B&D; smart opener devices (smartphone-capable setups). Critical Safety Notes Before You Start Keep the doorway clear of people and obstructions during installation and testing. Safety beam placement may not protect in every situation if installed poorly or in a compromised location—mounting height and alignment matter. If you use Auto■Close modes, Safety Beams must be fitted correctly and tested regularly. Extreme caution is required with Auto■Close. Disconnect mains power (and any battery backup, if fitted) before opening covers or connecting modules. The garage door must be in good working order (rollers, tracks, springs, and travel limits). Safety Beams must be installed if the closing force at the bottom edge of the door exceeds 400N (40kg force). If any of the above is unclear on your site, treat it as a “stop and escalate” point for a qualified installer/technician. What’s in a Typical B&D; Wireless Safety Beam Kit Most B&D; wireless kits include: TX Assembly (Transmitter) RX Assembly (Receiver) Base Station Assembly (connects to the opener harness) Mounting kit / brackets (Optional) Flush mounting kit for minimum sideroom or special mounting constraints Placement Rules That Matter Recommended mounting height For best protection, the beam should be 100 mm above floor/ground level. A common way this is achieved with standard brackets is: Bottom of TX and RX housings about 65 mm above the floor → beam line ends up ~100 mm above the floor. If your floor is uneven, sloped, or has a raised lip/threshold, you may need to adjust the exact mounting position while keeping the beam as low as practical for safety. Receiver should be mounted in shade Mount the Receiver (RX) on the shaded side of the opening where possible. This helps reduce sunlight-related interference and makes alignment more reliable. Line of sight, rigid mounting TX and RX must be mounted with clear line of sight. The mounting surface should be rigid so vibration doesn’t knock alignment out. Mount as close as possible to the door opening. Quick Compatibility Check Before drilling anything: Confirm your opener supports Safety Beams and has the correct accessory connection/harness provision for the base station module. Confirm your opening width suits the wireless beam distance: Wireless infrared beam range: 6 m (typical for the wireless kit) If your opening exceeds the infrared range, you’ll need an alternative solution (e.g., a wired beam option or a different kit suited to wider openings). Tools and Materials Tools Tape measure Pencil/marker Drill + appropriate bits for your mounting surface (timber/masonry/steel) Screwdrivers Level (or laser level if you have one) Ladder (stable, correct height) Consumables Fixings suited to your wall type (if not supplied) Wall plugs/anchors for masonry (if needed) Cleaning cloth for the lenses Batteries Wireless RX and TX typically use: C■Type batteries: 2 per unit (so 4 total) Battery life is typically around 3 years (usage and conditions affect this). Step-by-Step Installation 1) Plan and mark your mounting points Close the door. Choose your target beam height (aim for 100 mm above floor). Mark the TX side and RX side so the

units will be at the same height and directly facing each other. Confirm there are no permanent obstructions through the beam path at that height (stored items, ramps, etc.). 2) Assemble the mounting brackets Assemble the bracket sets for TX and RX using the supplied bracket parts and screws. General intent of the bracket assembly: One bracket set fixes to the beam unit. Another bracket provides adjustment so you can fine-tune alignment without re-drilling. 3) Mount RX and TX Mount the Receiver (RX) on the shaded side of the opening. Mount the Transmitter (TX) opposite, in line with the RX. Fix to a rigid surface. Use appropriate fixings for timber/brick/steel. Tighten enough that the units don't drift, but keep final "fine aiming" possible until alignment is confirmed. Some installs require a minimum of multiple screws to ensure the bracket doesn't rotate or creep over time—don't under-fix these brackets. 4) Install batteries in RX and TX Remove the front cover(s). Insert two C■Type batteries into each unit (RX and TX), matching polarity markings. The Receiver LED will light and then indicate status once communication establishes. Communication between each unit and the base station can take up to 60 seconds. Refit covers and secure them properly. 5) Connect the base station to the opener Disconnect power to the opener (and battery backup if fitted). Open the relevant cover/pocket where the accessory module connects. Connect the base station assembly to the harness from the opener (as per the opener's accessory connection method). Refit the cover. 6) Power up and align the beams Restore power to the opener with the safety beams connected. Use the alignment method available on your opener: If your opener supports "beam alignment via main light" Some openers provide a simple alignment aid: Main light bright = aligned Main light dull = not aligned or blocked If you're aligning by RX LED behavior Use the RX LED indication to confirm: Beam is detected / aligned Beam is blocked / misaligned Make small adjustments until alignment is stable. Tip: After you think you're aligned, gently tap the mounting surface and re-check. If alignment drops out easily, your fixings or bracket rigidity need improvement. 7) Set or confirm travel limits If the opener is a new install, set travel limits after the Safety Beams are aligned. If the opener was already installed and operating correctly, you generally do not need to clear/reset limits just because you added Safety Beams. Follow the opener's limit-setting process for your specific model. 8) Test the setup (don't skip this) Use a programmed remote and run the door through a few full cycles. During a close cycle, interrupt the beam (pass an object through the beam path). Confirm the door responds correctly (stops and prevents continuing to close). Repeat a few times: Near the TX side Mid opening Near the RX side Troubleshooting Symptom: Base station and receiver LEDs constantly on Likely cause: Receiver/transmitter/base station not in sync Fix: Wait 2 minutes If still not synced, cycle power and wait another 2 minutes Symptom: Receiver LED is blinking and the door will not close Likely causes: TX and RX not aligned properly Beam path obstructed Fix: Realign RX and TX Remove any obstruction from the beam path Symptom: During optical alignment, transmitter LED stops working Likely cause: Setup timed out Fix: Power the opener off, then back on Symptom: Wireless beam works, but LEDs on receiver/transmitter stop working Likely cause: Battery-saving behavior (transmitter LED may turn off after a number of cycles) Fix: No remedy required Symptom: Door will not close Likely causes: Safety Beam not working Safety Beam batteries flat Fix (short term / supervised close): Some compatible setups allow a supervised "safety close mode" where you hold the transmitter button to close for ~6 seconds and continue holding while the door closes. Only do this with: The doorway fully clear You in full control of the door Immediate follow-up to correct the beam fault (alignment/batteries/module connection) Symptom: Opener courtesy light flashes 4 times at the start and end of a cycle Symptom: LED on the receiver/transmitter starts flashing during operation Likely cause: Battery running low Fix: Replace the batteries Maintenance Routine Monthly (recommended) Test the Safety Beams by obstructing the beam during a close cycle. Wipe TX/RX lenses if dusty/dirty. When LEDs indicate low battery Replace batteries in TX or RX (wireless kits). Battery life expectation Approximately 3 years under typical conditions (usage and environment will change this). Advanced Mounting Scenarios Sloped or uneven floors Don't "mirror" measurements from the floor if the floor isn't level. Use a laser level (best) or measure from a consistent structural reference point so TX and RX end up at the same height. Minimum sideroom or tricky framing Use a flush mounting kit where required. Ensure the mounting surface remains rigid—flexing surfaces cause intermittent faults. Sunlight exposure Prioritise mounting the Receiver in shade. If sunlight still causes issues, adjust RX position slightly while maintaining correct beam height and line of sight. Frequently Asked Questions What do B&D; Safety

Beams do? They use an infrared beam across the opening to detect obstructions during closing and prevent the door continuing to close. Are B&D; Safety Beams wireless? Yes—B&D;’s Safety Beams upgrade is wireless between the beam units and the system module, and does not require running a beam cable across the opening. Do Safety Beams replace the opener’s auto-reverse? No. They complement it by detecting obstructions earlier (before the door contacts an object). What height should they be installed at? Aim for a beam height of 100 mm above floor/ground level, adjusted to suit the site and maximise protection. Why mount the receiver in shade? It improves reliability and reduces the risk of sunlight-related interference. What is the wireless beam distance limit? Typical wireless kits have an infrared beam range of 6 m (opening must be within this for reliable operation). What batteries do the wireless beams use? Typically C■Type batteries, 2 per unit (RX and TX). How long do the batteries last? Approximately 3 years in typical conditions. How do I know batteries are getting low? LED indications may change, and some systems show a low-battery warning behavior (e.g., flashing indicators). What is “safety close mode”? If beams are not working, some compatible systems allow a supervised close by holding the transmitter button continuously (after holding for ~6 seconds to initiate). This should be treated as temporary and only used with the doorway clear. Label Facts Summary Verified B&D-aligned; facts included in this guide Safety Beams are infrared photoelectric sensors used to detect obstructions during door closing. Wireless kit components include TX, RX, and a base station module that connects to the opener harness. Receiver should be mounted on the shaded side of the opening where possible. Recommended beam height is 100 mm above floor/ground level (site conditions may require adjustment). Wireless kit specifications commonly include: Infrared beam range: 6 m RF link range: 10 m RF frequency: 2.4 GHz ISM band Batteries: C■Type x 2 per unit Battery life: ~3 years Maintenance recommendations include: Periodically testing by obstructing the beam during operation Cleaning lenses in dusty/dirty environments Replacing batteries when indicators show low battery Accessory warranty period (typical): 1 year

Source Data (JSON):


```
"{\n  \"_type\": \"article\",\n  \"title\": \"B&D Wireless Safety Beams for Garage Doors\",\n  \"body\": \"B&
```