Bonds Hoists

Remote Control Operated Ceiling Lamp Lifter

National and International Patents Apply

Instruction for Installation and Operation

Please read this document thoroughly before commencing installation of your hoist.

- Keep the area directly below installation clear and cordoned off; be aware of falling objects;
- Only install indoors in dry areas;
- Do not exceed your unit’s maximum safe load, clearly labelled on each unit;
- Never attempt to operate the hoist without at least 5kg load attached. The hoist will not operate without weight on it but trying to operate it without a weight may cause the wire-rope to birds-nest on the cable drum;
- Do not clean the steel cable with water or a corrosive cleaner;
- Check the steel cable regularly, for rust or corrosion.
- After cleaning, cover a coat of anti-rust grease on the steel cable.

Installation of the Hoist:

The hoist is designed with simplicity in mind. It is slim, fairly light (depending on model), has a steel base plate, making it sturdy and solid and is a completely integral unit. There are no ‘loose’ components, the wire rope cable drum is internal and there is no lowering of or coiled electric cable. Your hanging fixture is plugged in when fully raised and unplugged when lowered, making it safe to work on when in the lowered state. The hoist system therefore is very flexible to almost any situation.
It is designed to be installed either flush to the ceiling (in line-of-sight), where you may find the hoist cover plate (figure 1), sold separately, useful for cosmetic reasons, or in a void space such as, in between floors, in an attic/loft or in a false ceiling (non-line-of-sight).

Figure 1: Hoist Cover Plate

To secure the hoist:

Bolt securely, in all four corners, using the predrilled holes in the steel base plate.

The hoist can be bolted directly to a concrete or steel structure or alternatively can be hung on brackets made especially for the job. Alternatively it is possible on smaller scale jobs to use a ‘box-in’ arrangement to simply hold the hoist in place and stop it from moving – this method isn’t recommended but is a viable solution when the hoist isn’t due to hold a lot of weight. Figure 7 shows an example of how a hoist can be mounted.

Hoist Wiring Guide

Figure 2:

There is a black connection block coming from the hoist system (figure 2), labelled ‘L1, L2, N and PE’, into this, the supply for the hoist and fixture to be hung are wired. Removal of this block or alteration of the wiring from it to the hoist will void your warranty. Your fixture draws its power through the hoist – there is not a separate connection for your fixture.

- L1 (red wires) - is the live wire for the hoist and L1 on the connection plate (figure 3);
- L2 (blue wire) – is the live for L2 on the connection plate;
- N (black wires) – is the common neutral for the hoist, L1 and L2 on the connection plate;
- PE (green and yellow wire) – is the earth for both the hoist and hanging fixture.
Recommended Wiring:

The connection plate (displayed in figure 3) has three male connectors L1, L2 and N, giving you the ability to create two separately switched circuits. For example allowing you to turn tier one and tier two of a chandelier on separately. If you only require one switched circuit use L2, this will allow you to use the L1 circuit solely for the hoist, allowing you to switch it off completely when not in use.

Our recommendation for wiring these units, for best results is below:

i) Add a single new circuit breaker for the hoist (and hanging fixture), to your consumer unit (breaker board). Size dependant on model (ratings shown in figure 5) and to be determined by an electrician, as should the appropriate wire type for use throughout the installation.

ii) We recommend a ‘D’ class breaker to handle the normal motor start-up spike.

Please note: L1 and L2 cannot be wired to separate breakers due to them sharing a neutral. The common neutral means you will not be able to isolate either supply individually, which means there is a risk of electric shock if wired to multiple breakers.

   o If wiring for multiple units give each exclusive use of its own breaker.

iii) Switch both lives. If your light fixture is to be switched with only one circuit (hanging fixture plugged to L2 only), switch L2 with a light switch (as per the lighting in the rest of your building) and switch the L1 feed with a key switch placed in a secure
area or as per your preference. If you intend to use two circuits with your fixture (L1 and L2 on the connection plate), add light switching to both lives.

Figure 4 is intended to give you a sample idea of how to wire your unit.

Figure 4: A Guide for Installation

Figure 5: The hoists have the following required ratings, so cable and breakers should accommodate:

<table>
<thead>
<tr>
<th>Model: AN2</th>
<th>Model: AN3</th>
<th>Model: AN4</th>
<th>Model: AN5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power: 4kW</td>
<td>Power: 4kW</td>
<td>Power: 6kW</td>
<td>Power: 6kW</td>
</tr>
</tbody>
</table>

Attaching your Hanging Fixture:

Your fixture is attached to the connection plate using the included D shaped shackle (as shown in figure 6).

- It is recommended that you use some thread lock adhesive on the threaded boss (screwed into the connection plate), as an added security.
If you are not mounting your hoist flush to the underside of your ceiling, you can bridge the gap between the underside of the ceiling and the position of your hoist with a few links of chain (see figure 7).

To provide power to your fixture connect to the male connectors on the underside of the connection plate, using the blue female crimp connectors provided.

- When the connection plate is fully raised the male connector pins on the underside of the connector plate will be LIVE, do not touch;
- If the hoist is connected to an electrical supply the brass pins (shown in figure 8a), where the connector plate rises to, will be LIVE – do not touch.
- Figure 8b shows the connector rings on the back of the connector plate.
Weight Safety Test:

To test the integrity of your hoist installation you should carry out a weight test. This test is more to test the fixings holding your hoist system rather than the hoist itself which has been tested during manufacture.

Warning – Do not stand underneath the hoist when carrying out a safety test

Process: fit a suitable vessel to hold the testing weights, to the connector plate on the hoist using the D shackle on the hoist. Lower the hoist (see use of remote below) so the vessel sits just above the floor. Add the safety test weights. Do not stand under the hoist whilst adding the weights. The hoist will not operate whilst overloaded. Check the gap under the vessel remains constant after the test weights have been added. Leave for 30 minutes. Remove the weights, check the operation of the hoist and visually inspect the fixings. Remember, the hoist will only work with a minimum of 5kg hanging on it. Lowering the hoist with weight and then removing the weight so that the unit is left lowered but without weight on it can render it unusable. Any damage caused in this way is not covered under our warranty. The wire that the fitting hangs on MUST be kept taught at all times.

Remote Operation:

The hoist is operated via a simple two button remote. To operate:

- Fully extend the remote aerial;
- Stand close to and point the remote at the hoist;
- Press and release the down button (the smaller of the two) to get the hoist to come down;
- Press and release either button to get the hoist to stop;
- Press the up button (the larger of the two) to get the hoist to go up.

Remote Operation Technique:

- Use firm, short, deliberate presses;
- Do not repeatedly press buttons quickly. Leave three to five seconds between pressing buttons. The hoist contains some sensitive switches which are not designed to be fired repeatedly; continued rapid usage may affect the long term durability of the unit.

Power will not be supplied to the hanging fixture until the connector plate is in its fully raised position. When the connector plate is fully raised it will auto-stop and a safety locking pin will enable, to hold the weight of the hanging fixture, ensuring the wire rope is not under permanent strain.

Please note: There is a built in safety device which means that after the hoist is powered up, it will only operate for 3 minutes either in the lifting or the lowering mode. After a lapse of more than 3 minutes without the hoist being operated, the safety device will prevent the hoist from operating. Simply power off the electrical supply and
power on again then press the remote control once more to activate the hoist to lower or lift up the lights.

Troubleshooting:

If you are experiencing problems with your hoist there are a variety of potential solutions/reasons, please read this section carefully.

If you’re hanging fixture works (e.g. lights up) but your hoist doesn’t operate:

- Have you checked the batteries on the remote? If the remote’s (red) light is either not activating at all or is quite dim when a button is pressed or if the remote just isn’t that sensitive, it is a good idea to try a new battery and see if this solves any issues. The remote’s battery can be found under the bottom panel on the back of the remote. Replacement remote control battery type: 23A12V

- If you believe the remote’s battery is good, then there may be a potential signal problem. The effective remote range is around 15-30 metres depending on environment. Signal strength/sensitivity issues have been experienced where hoists have been placed near heavy electric conduits or near stage trussing and rigging. Try and find the location which has the best direct line-of-sight to the hoist, without interference from other items for best results.

- Check the wiring of the hoist – power can be supplied to the hanging fixture from both ‘L1’ and ‘L2’ on the connection block; however the hoist will only operate if ‘L1’ has been supplied.

- Is your remote still tuned in? The remote is capable of operating over several frequencies. The hoist and remote obviously need to tie to the same frequency. Remotes/hoists are known to occasionally become unpaired leading to communication problems, especially during installation, possible causes may be due to power fluctuations or surges during this time. To retune your remote to your hoist:
  - Switch off all power to the hoist and leave off for 30 seconds;
  - Turn the power back on to the hoist;
  - Within 10 seconds and whilst you are within the remote’s signal range of the hoist (you are trying to retune) – point the remote at the unit and press and hold both buttons down on the remote and hold for at least 10 seconds. Your remote should now be back in sync with your hoist.

- If you attempt to lower the hoist, as stated above, without at least 5kg weight attached, the locking pin will unlock (you may hear a clunk noise) but the hoist will not lower and you may also cause damage to the unit. **NEVER** attempt to force the cable back into the unit; you will cause the cable to birds nest inside the unit resulting in the underweight switch being permanently activated, due to the slackness in the rope.
If your hoist works (e.g. lifts/lowers) but you’re hanging fixture doesn’t:

- Check how you have connected your hanging fixture to the connection plate.
  - Your fixture needs to be connected to the ‘N’ male connector and
  - Preferably ‘L2’ or both ‘L1 and L2’.
- Ensure your connectors, on the connection plate, are firm and secure. Crimp them tightly. During rising and lowering the connectors may otherwise work loose.
- Have you wired the black connection block (figure 2) accordingly. If you have attached your fixture to L2 on the connection plate, L2 on the block needs wiring. If you have attached it to ‘L1 and L2’ then you need to supply and keep supplied, ‘L1 and L2’ on the connector block.

Neither your hoist nor hanging fixture work:

- Check the wiring. Ensure everything from the consumer unit right down to the connection plate is wired as explained above.

**IMPORTANT** if you are working with multiple units:

- Trying to get a single remote to operate all units will not work.
- **DO NOT** attempt to lower multiple hoists at the same time using one remote - you will encounter problems.
- **DO NOT** attempt to connect a single object to multiple hoists. The hoists will not lift evenly and the load will therefore not be spread evenly – leading to extra load on individual units. A shift in the centre of gravity to a point which isn’t directly below a unit may also create undue stresses on the unit, shortening its life expectancy.
- **BE AWARE** when trying to retune a remote that you are only working with one hoist. Power down all the hoists you are not working with and work with one hoist at a time.
- **IF POSSIBLE** only attempt to lower one hoist at a time, unless you are sure that they are far enough apart that individual remote signals will not be ‘picked up’ by both hoists.

A hardwired solution, which replaces all remote operation, is available at extra cost.
Manufacturer’s Warranty

This hoist is fully warranted against defective materials and manufacturing faults for a period of 12 months from the date of purchase.

Goods sent back under our warranty MUST be accompanied by the sales invoice and warranty card. Failure to include a valid warranty card and sales invoice with a return may result a delay in your return being processed, extra expense by you and/or your return being rejected. A return postage fee will be charged on any product returned under the warranty which is found not to be faulty. We must be notified of all returns before receipt otherwise they may be rejected.

Examples of exclusions to our warranty, but without limitation to, are listed below:

a. Products damaged during installation.
b. Products damaged during transportation after arrival at the invoice delivery address.
c. Products damaged due to disassembly by users or repair agents not appointed by Bonds Hoists Ltd.
d. Products damaged as a result of fire, flood, abnormal voltage or natural disaster.
e. The product was damaged due to alteration in any way by an unauthorised technician including removal of the black connection block.
f. The hoist has been damaged by operation without at least 5 kg load attached
g. The hoist has been damaged by being left without at least 5 kgs load attached
h. The sales invoice has been altered in some way.
i. There is no sales invoice and valid warranty card returned with the hoist.

If you consider you need to make a claim under our warranty, please contact us in the first instance for assistance. It may be that there is a simple explanation why your hoist is not functioning.

Certification:
CE Certificate No. 572111007 (Safenet Ltd. UK)
Remote Control Operated Ceiling Lamp Lifter

Makes Cleaning and Maintenance Simple and Convenient.

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