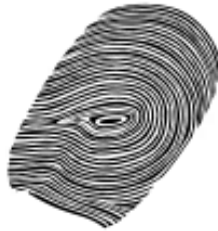


ADAPTIVATION
I N C O R P O R A T E D

The World at a Touch

Bright Box & Bright Box Tactile

Instruction Manual



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Introduction

The *Bright Box* and *Bright Box Tactile* add to a long line of high-quality, durable switches and communication devices offered by Adaptivation.

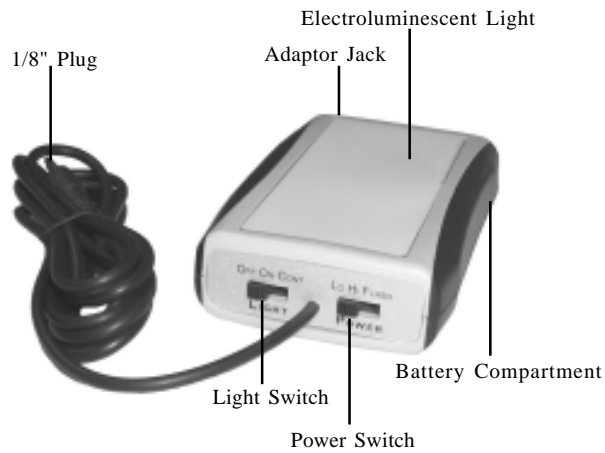
The Bright Box family of switches are powered switches operating on one 9-volt battery. These switches provide a visual (and tactile for *Bright Box Tactile*) cue or feedback when the top surface of the switch is pressed. There are two main sections to this manual, one for the *Bright Box* (p. 4) and one for the *Bright Box Tactile* (p. 12). They are similar, but are two separate products covered in this manual.

This manual describes the operation of your *Bright Box* or *Bright Box Tactile* switch. Please familiarize yourself with your new switch by reading this manual. This manual can be downloaded in a PDF format at www.adaptivation.com.

Your *Bright Box* or *Bright Box Tactile* switch is lightweight and rugged. It can handle being dropped from short distances and is, overall, a very durable device. However, your switch is not intended for use where liquids can be spilled on it. Damage from fluids that have reached inside the switch is not covered by warranty. If you must use your *Bright Box* or *Bright Box Tactile* switch in an environment where fluids, foods, urine or saliva might be a problem, then insert the switch in a plastic locking bag or use other suitable protection that will prevent the fluid from getting on the switch. As always, please feel free to contact Adaptivation for any questions or comments that you might have concerning *Bright Box* or *Bright Box Tactile*.

Bright Box

(Figure-1)



Introduction

Your *Bright Box* switch was designed with a large-display visual cue that is activated when the user presses the top surface of the switch. This visual cue is comprised of a large, flat electroluminescent lamp (EL) that glows a bright bluish, green color.

The *Bright Box* can be used as a visual cue to aid in locating the device for persons with low vision or for any nighttime user. It can also be used as a way to visually attract the attention of the switch user.

Battery Installation

The *Bright Box* switch operates on a single 9-volt battery. To install the battery, open the sliding battery cover on the underside of the device. Attach the battery securely to the battery clip. Place the battery in the battery compartment, and return the battery cover to its fully locked position.

Battery life of the *Bright Box* switch varies greatly depending on the mode being used and on the power setting of the EL. During typical Continuous operation, the battery should last from five to nine months, depending on the EL power setting. For maximum battery life, Adaptivation recommends using an Alkaline battery. Continuous operation and Momentary Operation are described later in this manual.

To conserve battery life, turn your *Bright Box* switch off when not in use. When storing for long periods of time, it is best to remove the battery completely.

AC Operation

The *Bright Box* switch has a jack that accepts power from an external adaptor, sold separately (Adaptivation catalog # AC9V). This adaptor plugs into a standard 120-volt AC outlet, and provides 9-volts, DC power at 300m Amps.

When the AC adaptor is used, the *Bright Box* will not draw power from the battery. Please note that if a battery is installed, the AC adaptor will not charge it. When the AC adaptor is unplugged, the *Bright Box* will automatically switch to drawing power from the battery. A battery is not necessary when operating with an AC adaptor. The primary advantage of the AC adaptor is that the battery life is not a factor. This is especially useful when the *Bright Box* is used in continuous mode. ***DO NOT use an AC adaptor other than the one described above, or permanent damage to your Bright Box switch could result.***

Using Your Bright Box Switch

As can be seen in Figure-1, there are two slide switches that are used to control the operation of the *Bright Box*, the Light Switch and the Power Switch.

Attached to the *Bright Box* switch is a 3-foot cord with standard 1/8-inch (3.5mm), plug. This plug attaches to most communication devices, mouse interfaces or switch-adapted toys.

Switch Functions

Light Switch: This switch has three functions:

Off: The *Bright Box* is off and is nonfunctional. To conserve power and to avoid false activations, always turn off your *Bright Box* when not in use.

On: This is also known as Momentary mode. In this mode, the electroluminescent lamp (EL) will light while the top surface is pressed. Also, any device that the cord is plugged into will be activated. The device will remain activated as long as the top switch surface continues to be pressed.

Cont: Continuous mode. The EL will be on at all times. The top surface must be pressed in order to activate the device. The device will remain activated as long as the top surface continues to be pressed. When the EL is low power, it will stay on indefinitely. For other power settings, the EL will go into Power Saver Mode, see p. 9.

Switch Functions, continued

Power Switch: This switch has three functions:

Lo: The EL will be low intensity. Low power is intended to be used for very low ambient light conditions. When combining low power with Continuous mode, the *Bright Box* functions as a nightlight switch. This is especially convenient for sensory rooms or at one's bedside when a non-lighted switch is difficult to locate.

Hi: The EL will be high intensity. High power is intended for use under normal room lighting. This is the brightest mode of operation, but also uses the most power, and most affects the life of the EL. When combining high power with Continuous mode, a two-minute time-out will be used. See the section, Electroluminescent Lamp (EL) Life & Power Saver Mode, p. 9.

Flash: The EL will flash two quick flashes per second. Because the EL flashes between off and high power, this is the mode that is easiest to see. Use flashing when the other power settings are not satisfactory for gaining the user's attention. When combining flash with Continuous mode, a two-minute time-out will be used. See the section, Electroluminescent Lamp (EL) Life & Power Saver Mode, p. 9.

Electroluminescent Lamp (EL) Life & Power Saver Mode

The EL is a light source that fades as it ages. The more it is used, the more it fades. This fading is normal to how ELs function, and is not reversible. It is very difficult to predict the life of an EL because it depends on how heavily it is used. In addition, because the EL fades over time, it is hard to notice the change. The EL will fade more quickly when using High Power vs. Low Power or Flashing. Continuous operation has significantly more effect on EL life than does Momentary operation. This is because during Momentary operation, the EL is typically on for a very short period of time compared to that of Continuous mode.

In an effort to conserve both battery life and EL life, the *Bright Box* will automatically switch the EL off after two minutes, and go into Power Saver mode when combining Continuous mode with high power or with flashing. This simply means that the EL turns off, and the *Bright Box* is idle. During Power Saver mode, the device into which the *Bright Box* is plugged will not be activated. To exit Power Saver mode, press the EL surface of the *Bright Box*, or switch the *Bright Box* off then on again.

The brightness of the EL is also a function of the freshness of the battery. As the battery gets low, the EL will not be as bright as it was when the battery was new. As the battery gets low, your *Bright Box* may continue to function, but the EL could be quite dim. A new battery will return the EL to its normal brightness.

When the *Bright Box* is used in Continuous mode with low power, the EL will remain on until the device is switched off. Because the EL is powered at a very low level, the life of the EL is affected but not much. Gradual aging of the EL occurs, but because the EL is driven at such a low level, the aging is minimal compared to that at high power.

Bright Box Trouble-Shooting

The *Bright Box* doesn't do anything.

- Make sure slide switches are set in proper positions. See p. 7-8.
- Make sure battery is fresh.

The *Bright Box* works but it doesn't activate adapted toy or other device.

- Make sure that the *Bright Box* plug is fully seated into toy jack.
- Toy may not be functioning properly. Test it with another switch.

The *Bright Box* activates toy but the EL is dim.

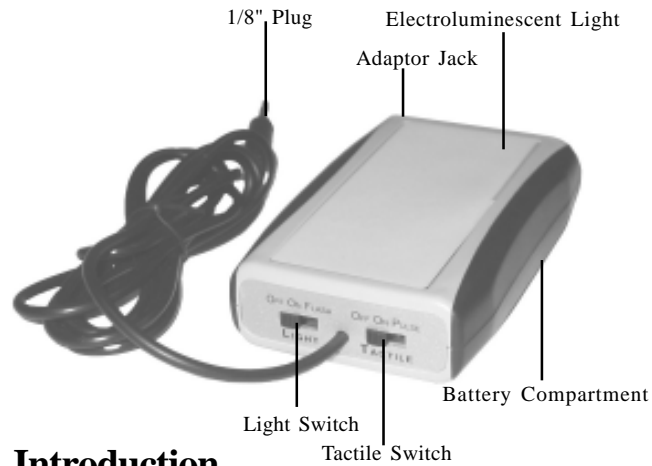
- Install fresh battery.
- If the battery is fresh, but the EL still seems dim, the EL may be experiencing normal aging.

The *Bright Box* makes a buzzing sound when the EL is on high setting.

- The EL can generate a buzzing sound that should be able to be heard only when the device is held very close to your ear. This slight buzzing is normal for EL displays.

Bright Box Tactile

(Figure-2)



Introduction

Your *Bright Box Tactile* switch was designed with a large-display visual feedback and with tactile feedback that are activated when the user presses the top surface of the switch. The visual feedback is comprised of a large, flat electroluminescent lamp (EL) that glows a bright bluish, green color. The tactile feedback is a vibration much like that of a cell phone or pager.

The visual feedback and tactile feedback can be employed independently of each other. Each can be off, on or in a flashing/pulsing mode.

Battery Installation

The *Bright Box Tactile* switch operates on a single 9-volt battery. To install the battery, open the sliding battery cover on the underside of the device. Attach the battery securely to the battery clip. Place the battery in the battery compartment, and return the battery cover to its fully locked position.

Battery life of the *Bright Box Tactile* switch varies greatly depending on the mode being used. During typical operation, the battery can be expected to last from seven weeks to over one year, depending on the mode. Tactile operation consumes significantly more energy than EL operation. For EL use alone, typical battery life should be about one year. For tactile use only, typical battery life should be about ten weeks. For both EL and tactile operation simultaneously, battery life should be about eight weeks. For maximum battery life, Adaptation recommends using an Alkaline battery.

To conserve battery life, turn your *Bright Box Tactile* switch off when not in use. This means both slide switches must be in the off position. When storing for long periods of time, it is best to remove the battery completely.

AC Operation

The *Bright Box Tactile* switch has a jack that accepts power from an external adaptor, sold separately (Adaptation catalog # AC9V). This adaptor plugs into a standard 120-volt AC outlet, and provides 9-volts, DC power at 300m Amps. When the AC adaptor is used, the *Bright Box Tactile* will not draw power from the battery. Please note that if a battery is installed, the AC adaptor will not charge it. When the AC adaptor is unplugged, the *Bright Box Tactile* will automatically switch to drawing power from the battery. A battery is not necessary when operating with an AC adaptor. The primary advantage of the AC adaptor is that battery life is not a factor. ***Do not use an AC adaptor other than the one described above, or permanent damage to your Bright Box Tactile switch could result.***

Using Your Bright Box Tactile Switch

As can be seen in Figure-2, there are two slide switches that are used to control the operation of the *Bright Box Tactile*, the Light Switch and the Tactile Switch.

Attached to the *Bright Box Tactile* switch is a 3-foot cord with a standard 1/8-inch (3.5mm), plug. This plug attaches to most communication devices, mouse interfaces or switch-adapted toys.

Switch Functions

Light Switch: This switch has three functions:

Off: The EL function is off. To conserve power and to avoid false activations, always turn off your *Bright Box Tactile* when not in use.

On: In this mode, the top surface will light as it is pressed. Also, any device that the cord is plugged into will be activated. The device will remain activated as long as the top switch surface continues to be pressed.

Flash: Flash mode. The EL will flash (twice per second) while the top surface is pressed. Also, any device that the cord is plugged into will be activated. The device will remain activated as long as the top switch surface continues to be pressed.

Switch Functions, continued.

Tactile Switch: This switch has three functions:

Off: The tactile feedback (vibration) function is off. To conserve power and to avoid false activations, always turn off your *Bright Box Tactile* when not in use.

On: In this mode, the tactile feedback (vibration) will be activated while the top surface is pressed. Also, any device that the cord is plugged into will be activated. The device will remain activated as long as the top switch surface continues to be pressed.

Pulse: Tactile feedback (vibration) will pulse while the top surface is pressed. Also, any device that the cord is plugged into will be activated. The device will remain activated as long as the top switch surface continues to be pressed.

Electroluminescent Lamp (EL) Life

The EL is a light source that fades as it ages. The more it is used, the more it fades. This fading is normal to how ELs function, and is not reversible. It's very difficult to predict the life of an EL because it depends heavily on how it is used. The EL will fade more quickly when using normal (On) setting vs. flashing.

The brightness of the EL is also a function of the freshness of the battery. As the battery approaches a discharged state, the EL will not be as bright as it was when the battery was new. As the battery gets low, your *Bright Box Tactile* may continue to function, but the EL could be quite dim. A new battery will return the EL to its normal brightness.

Bright Box Tactile Trouble-Shooting

The *Bright Box Tactile* doesn't do anything.

- Make sure slide switches are set in proper positions. See p. 15-16.
- Make sure battery is fresh.

The *Bright Box* works but it doesn't activate adapted toy or other device.

- Make sure that the *Bright Box Tactile* plug is fully seated into toy jack.
- Toy may not be functioning properly. Test it with another switch.

The *Bright Box* activates toy but the EL is dim.

- Install fresh battery.
- If the battery is fresh, but the EL still seems dim, the EL may be experiencing normal aging.

The *Bright Box* makes a buzzing sound when the EL is on high setting.

- The EL can generate a buzzing sound that should be able to be heard only when the device is held very close to your ear. This light buzzing is normal for EL displays.

The *Bright Box Tactile* activates toy but vibration is sluggish.

- Install fresh battery.

Notes

Bright Box/Bright Box Tactile
1 Year Limited Warranty

Your Adaptation *Bright Box/Bright Box Tactile* was carefully tested and inspected before it was shipped from the factory. We warrant this product to be free from defects in materials and workmanship under normal use and service for one (1) year from the date of purchase. In the event of a defect in materials or workmanship, we will either repair or replace without charge, at our option, any part which in our judgment shows evidence of such defect within one (1) year of purchase.

This warranty does not apply if the *Bright Box/Bright Box Tactile* has been misused, abused, altered, or tampered with. At the end of the warranty period, Adaptation shall be under no further obligation expressed or implied.

This warranty gives you specific rights, and you may also have other rights which vary from state to state.

For repair service, contact Adaptation's technical support to receive a required RMA# (return material authorization number) prior to the return of the device.

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Please insure your *Bright Box or Bright Box Tactile* is clean before returning it to Adaptation for service.

10/2008