

BAD BOY Express

Installation Guide

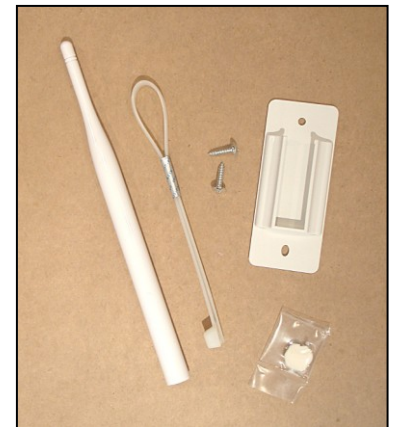
Step 1 - Before beginning, check that the following items are present:

Qty	Item
1	BAD BOY Express Wi-Fi device including:
1	Antenna, 6dBi, white
1	Grease, dielectric, packet (inside end cover)
1	Wall (flat surface) holster mount, white including:
2	Screws
1	Tie wrap, white
1	Optional Cable Assembly including fuse and holder
1	Optional Junction Box consisting of:
1	Case with cover, black plastic, 2 screws
2	Grommet, black plastic
1	Terminal strip, screw, 6 position
5	Tie wrap, black
1	Bitstorm Contact Info Card



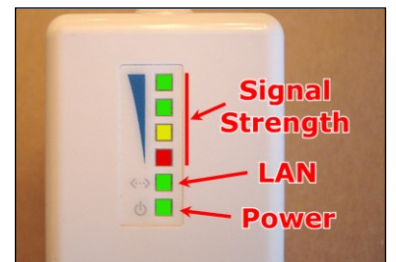
Step 2 - Device Test and Verification – Doing this prior to installation can save time and effort.

- Check off items when completed.
- Remove the black protective cap from BAD BOY device SMA Antenna connector and attach antenna by screwing together. Finger tight snug is adequate. **Do not over tighten.**
- Slide off the white cover from the other end of the BAD BOY Express and plug a male cable end into the device's female connector. With the optional cable assembly, it does not matter which cable end you use.
- For the optional cable assembly, attach a 12-20Vdc power source, red wire to positive, black wire to negative.
- Verify that the green power LED on the BAD BOY Express illuminates.
- Plug in the Ethernet cable into the computer's ethernet port. Observe that the green LAN LED on the BAD BOY Express illuminates.
- Ensure the computer is set to use DHCP (typical) and verify that an IP address has been assigned. Refer to the BAD BOY Quick Start Guide.
- Surf the web to verify your BAD BOY Express is operating correctly. Proceed with installation only after correct operation has been determined.



Step 3 - Installation and Cable Routing

- Determine the best location for the unit. Can be any place convenient or suitable with higher locations being better.
- Mount the Bad BOY Express with the antenna attached such that the antenna will be vertical. If mounting to a rail, the wall mount holster will not be needed and the shape of the BAD BOY's integrated mount should be used. A tie wrap (included) can then be used to secure the device into place. Alternatively, a velcro strap (not included) can be used for temporary installation.



Note: Some of the following steps may be optional for your installation

- Estimate the amount of cable needed to get from the mounting location to the deck transit location (the place where the cable will go through the deck) and then to a convenient place for splicing below deck. Ensuring that sufficient cable length is remaining for the distance to where the computer is to be located cut the cable. If no through deck fitting will be used or if it is large enough to allow the cable connector to pass through, no cable cutting may be required. **Note: Do not use excessive force when pulling the cable through conduits, etc. Avoid pulling the cable's connector end through conduit. Do not pull the cable's power connection point through conduit to prevent strain to the splice. Although permitted, there is no need to remove excess cable. It is recommended to simply coil and secure any extra cable. Do not make sharp bends in the cable. When changing direction, bends should never be sharper than the round edge of a standard screw driver handle. Avoid the use of a staple gun – if the insulation is pierced, the cable can be rendered useless.**
- If possible, do NOT plug the connector into the BAD BOY Express yet. This will be done later.
- Route the remaining cable from the location where the computer will be to the transit location leaving the hooded connector where the computer will be.
- Retrieve the Junction Box parts. If not already inserted, locate the black plastic grommets and insert into the holes from the outside on either end of the box.
- Feed the cable ends through the grommets in the Junction Box.
- Strip back about 2 inches (5cm) of the outer jacket from both cable ends.
- Strip about 1/4 to 3/8 inch (5-10mm) of insulation from each of the wires.
- Electrically connect the Blue and Blue/White wire pair to each other in both cable ends. Do the same for the Brown and Brown/White wire pair. Refer to photo.
- Locate the 6 position white terminal strip that came as part of the Junction Box kit. Connect the wires to the terminals matching wire colours. If possible, keep the Orange and Orange/White and Green and Green/White pairs twisted together right to the terminal block. Refer to photo. Dielectric grease can be applied to prevent corrosion. A suggested order for the wires is:

1 - Blue and Blue/White	4 - Green
2 - Orange	5 - Green/White
3 - Orange/White	6 - Brown and Brown/White
- With cable ends unconnected and no power applied, use an ohm meter to verify that all 6 electrical terminals show infinite resistance to each other at the Junction Box. Any conductance between wires should be corrected before continuing.
- Connect power to the red (positive) and black (negative) wires. The voltage source can be 10 to 20 Vdc.
- Using a volt meter, measure the voltage between the Blue and Blue/White pair (positive) and the Brown and Brown/White pair (negative) at the Junction Box. If no voltage is measured, check that the fuse is inserted in its holder and that the wiring is connected correctly. If positive is found on the Brown & Brown/White pair, the polarity is reversed.
- To prevent corrosion, apply dielectric grease (included) to the contacts of the device cable end connector (non-hooded end of optional cable assembly).
- Plug the cable into the bottom of the BAD BOY Express. Observe that the power LED illuminates. Investigate if it does not. If OK, slide the BAD BOY Express bottom cover into position until it clicks into place.
- If using the optional cable assembly, plug the hooded end of the cable into the ethernet port of the computer. Refer to the BAD BOY Quick Start Guide for operation.
- Once everything checks out, screw on the Junction Box's cover and complete any remaining tasks such as tie wrapping cable (if required), silicone sealing transits (if required), etc.

