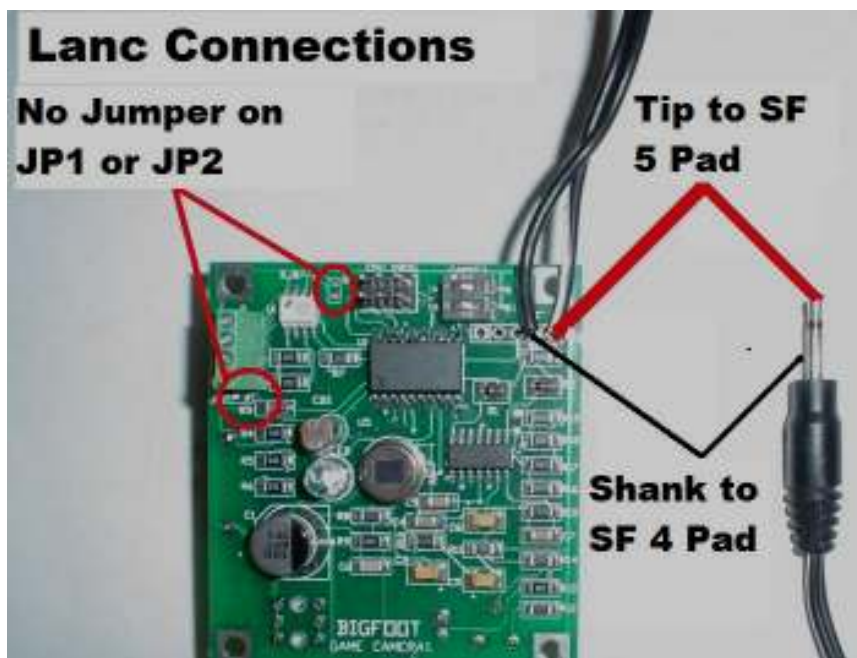


# Bigfoot Lanc

REV 1 8/3/2008

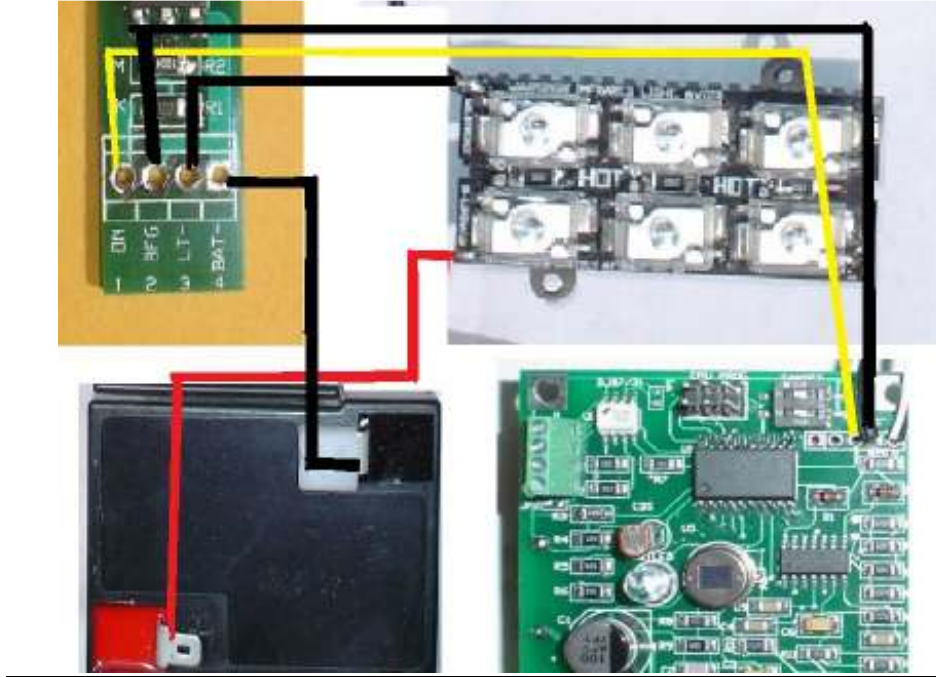
This is a operation and also the modification document all in one

1. The Bigfoot lanc can support any camcorder that has a WORKING lanc port.
2. It also will control the light /array so that it will only be powered on at night when needed. (1 Sister board is required )
3. It also can control a Futaba 3003 Servo motor rotating the nightshot switch on and off when it measures the light when motion is sensed.



**This picture will show just the basic lanc connection.**

The tip of the lanc cable will be connected to the SF 5 pad and the shank or inner most contact will connect to the SF 4 pad. If you intend to run a servo a array or both The common to the sister boards will also connect to the SF 4 pad so I would solder on one lead and jumper the lanc common(shank) the array sister board BFG pad and the servo sister boards BFG pad to the one lead soldered into SF4)



## Array Connections

When using a array you will need to connect a BF sister board to control the array so it will turnoff in the day and on at night.

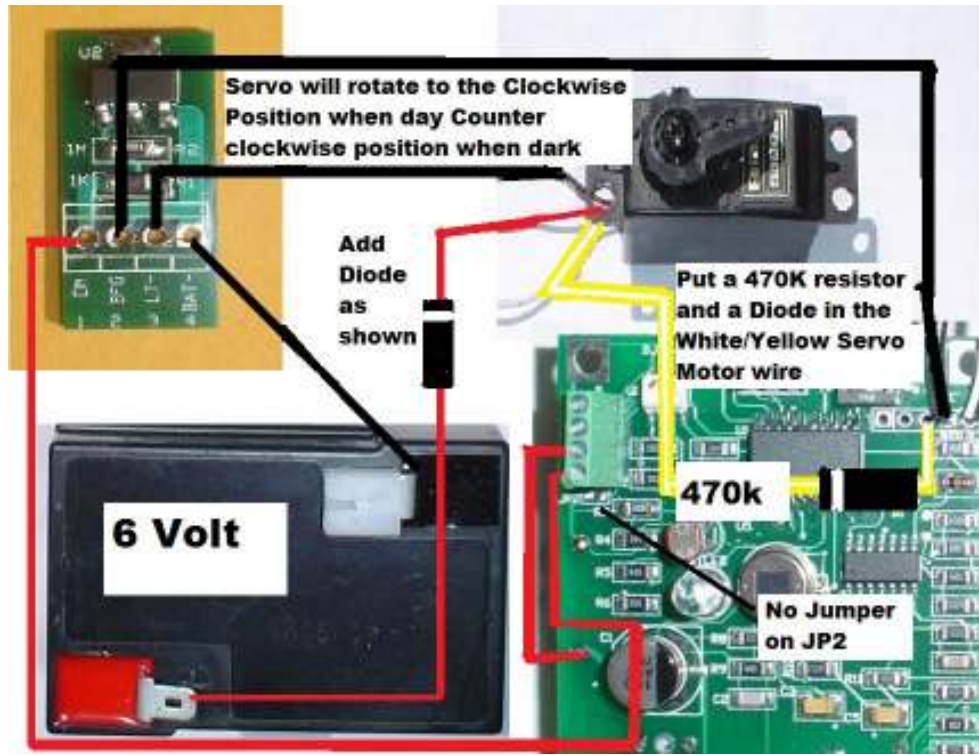
First to remember The Array Battery Positive will **NEVER** be connected to the BF sister board or the Bigfoot board but instead be connected directly to the Array Positive.

The Array Battery Common will connect to the BF sister boards BAT pad

The Array Common will connect to the LT pad of the BF Sister Board

The Yellow wire is connected from the Bigfoots SF 3 Pad to the BF Sister Boards ON Pad.

The Bigfoot Common from the SF 4 pad will be connected to the BF Sister Boards BFG Pad.



## Servo connections

The Servo Connections are a little more complicated and needs to be done in the exact shown fashion for the servo motor to work correctly. I have always used a Futaba 3003 servo motor and they will have 3 wires connected to them Red, Black and usually White but sometimes this one is Yellow.

You will need a second BF Sister board to control that the servo power is disconnected when not needed.

You will also need 2 Diodes and a 470 k Resistor to add in the servo wiring. I will include these in a board ordered with Lanc programming.

**6 Volts Only** The servo can run off the same 6 volt Battery as the array. Never connect the Servo motor to 12 volts.

## **Wiring it all up**

This isn't a complicated job but requires that you do this almost step by step. One of the hardest things is keeping it all neat and orderly but by taking your time it can be done nice and neat.

**First Make sure there is no jumper on JP1 or JP2**

**Now lets connect the Bigfoot board as needed**

1. Connect the white or yellow wire from the Servo motor to the Bigfoot Boards SF 3 Pad. You will need to add the included 470K resistor in this wire. The resistor can go in either way as it is not polarity sensitive. Next also in this same white or yellow wire you need to solder in one of the included diodes between the resistor and the SF 4 pad. The Banded end of the diode must be towards the 470K resistor.
2. You will need to solder a jumper on the Bigfoot board to the Lower Battery contact (Next to the Large cap on the bottom left side of the Bigfoot board ) This will then be connected to the SHUT pad on the Bigfoot Board Screw Terminal.
3. Connect a wire from The Bigfoot Boards Com Pad of the screw terminal to the ON pad of the BF Sister Board.
4. Connect the Common from the SF 4 Pad to the BF sister Boards BFG pad.
5. The Black wire from the Futaba Servo motor will connect to the BF Sister Boards BFG Pad.
6. Connect the Servo Battery Positive to the Red wire of the Futaba Servo Motor. You will need to add one diode in this wire with the banded end towards the servo side of the wire.
7. Connect the Servo Battery Common to the BF Sister Board BAT Pad.