iBall Instruments LLC

Innovative Digital Solutions for Remote Monitoring & Measurement



Bloodhound Quick Setup Instructions and Checklist

- 1. Place Bloodhound case on horizontal surface, with ports and connectors to the left when facing the case.
- 2. Run the power cord from the bloodhound to the nearest 120V AC (mains) outlet. The Bloodhound should power up and start running. This will allow the Bloodhound to warm up. Operating temperature of the Bloodhound is 90 degrees F. Make sure there is good airflow and clean filters before each well.
- 3. Make sure the USB jump drive is installed into the faceplate of the Bloodhound panel.
- 4. If the Bloodhound is to transmit real-time data to the Internet through the internal modem, place the magnetic mount antenna outside on a horizontal (flat) ferrous metal surface and run the attached coaxial cable to the antenna port on the Bloodhound and attach firmly. If a Rig network is available, you can turn the modem off and connect using the Ethernet cable to a Rig router. To turn Bloodhound internal modem off you would set register 55 to 0.
- 5. If a personal computer with the Microsoft Windows operating system is to be used for gas charting, attach the USB or 9 pin serial cable provided from the Bloodhound's Connector to the computer's USB or 9 pin serial port. Note: The iBall Gas Chart software program must be installed on computer (Be sure to check our website regularly for Gas Chart updates...https://www.iballisnt.com). NOTE: Separate connectivity steps are required if using Mainlog.
- 6. If using the Geolograph input, Run geolograph wire (minimum 1 pair or 2-conductor) from the Bloodhound spring connector ports to the geolograph input source. This may be a micro-switch at the geolograph, or from a normally open WITS box at the rig.
- Attach the 1/2 inch exhaust tubing to the Bloodhound and run the exhaust outside of the trailer or building. The exhaust line must run down and out. Never up. This allows for condensate to be expelled from the instrument.
- 8. Run both the low Cavitator extractor sample tubing (1/4 inch) and low voltage power line from the trailer to the shaker or possum belly. If using an AC voltage extractor, supply AC voltage to it.
- 9. Place and secure the Cavitator (extractor) at the shaker or possum belly using the clamping system and adjust the height to be certain that the large column is inserted into the mud a minimum of 3 inches or 76 mm and a maximum depth of 8 inches or 203 mm.
- 10. At the Cavitator, electrically connect the two (2) wires from the trailer or Bloodhound location to the Cavitator's 12 Volt DC motor.

Warning: Connecting the 12VDC Cavitator Motor to a 110/220 Volt AC source will permanently damage the motor and may cause sparks or a fire.

- 11. At the Cavitator, connect the sample line to the Cavitator housing.
- 12. Install a mud filter into the short piece of tubing and then connect the tubing placed in Step#8.

Note: A mud filter (automotive style fuel filter) MUST be placed at the Cavitator end. Failure to do so could introduce particulate material into the sample line. The filter will stop any mud being pulled into the sample line in the event that the Cavitator falls into the drilling mud.

- 13. At the trailer or Bloodhound location, connect the Cavitator tubing to a bubble jar. This will allow line condensation to collect in the jar instead of traveling through the Bloodhound.
- 14. At the trailer or Bloodhound location, connect the Cavitator tubing from the bubble jar to the Bloodhound's

Sample Input barbed connector. Another filter must be inserted in the tubing at the Bloodhound end.

15. Connect the DC Cavitator power leads to the Cavitator power supply or to the side of the Bloodhound using paired copper cable and then plug in the power supply. Observe the green light on the power supply to be certain it is illuminated. If using the DC Cavitator, we recommend 10 gauge copper wire.

Note 1: Be certain that the Cavitator cable is connected to one (1) plus and one (1) minus terminal as there are two screw connections for each polarity on the Bloodhound.

Note 2: Refer to Wire Gauge vs. Distance Table provided near the end of this checklist.

- 16. Connect the WITS cable to the Bloodhound system. If there is no WITS system available, obtain the present drill depth and set the depth counter in the Bloodhound's. Press the UP and DOWN Arrows simultaneously. This action will cause a Menu to appear on the Bloodhound's LCD Screen. Press the down arrow until "Set Date" is highlighted, then Press the [<-] Mute key one time. Increase or decrease this number by using the UP or DOWN Arrow keys until the correct depth appears. Pressing the [<-] Mute key will store the depth. To Exit the Menu Function, press any of the Red Keys.</p>
- 17. To set the Job Number, press the Arrow Keys simultaneously to bring up the Menu Screen. Using the DOWN Arrow, highlight "Set Job Number" and press the [<-] Mute key one time. Using the UP or DOWN Arrows, set the Job Number as provided. When this number is correct, press the [<-] Mute Key to store this information. To Exit the Menu Function, press any of the Red Keys.

CAUTION:

Failure to set a new job number will cause the Bloodhound data to co mingle with the data from the last job but only on the server system and the raw data stored on the USB key (BH_DATA>IBD), not the local Gas Chart.

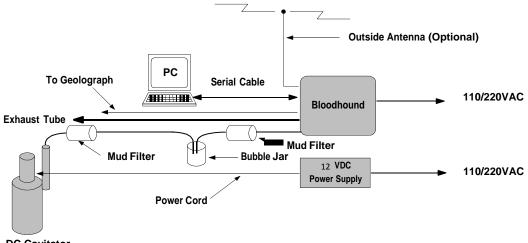
WARNINGS:

Placing a cell phone or other radio transceiver device in close proximity may cause erratic readings because of the RF radiation. Sudden movement of the bloodhound while in operation will cause the thermopile detectors to give a false gas spike.

Gauge vs. Distance Table (Used to calculate the wire gauge for connecting the Cavitator Power from the Bloodhound) Distance from Power Supply to Bloodhound Wire Gauge Required

Distance from Power Supply to Bloodhound	Wire Gauge Required
Less than 200 feet	#14 AWG
Greater than 200 feet but Less than 500 feet	#12 AWG
Greater than 500 feet	#10 AWG

Note: If smaller gauge wire is used over long distances, the voltage to the Cavitator will diminish and the high speed forks will not run at the desired RPM.



DC Cavitator