

with Installation Instructions

Owner's Manual

Banks Backup Camera

For use with Banks iQ v.2.0 only

THIS MANUAL IS FOR USE WITH SYSTEM 61185

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A large, stylized, grey Banks logo is positioned diagonally in the bottom right corner of the page. The letters are bold and blocky, with a slight shadow effect.

Disclaimer of Liability & Warranty

Do not use this product until you have carefully read the following agreement.

This sets forth the terms and conditions for the use of this product. The installation of this product indicates that the BUYER has read and understands this agreement and accepts its terms and conditions.

DISCLAIMER OF LIABILITY

Gale Banks Engineering Inc., and its distributors, employees, and dealers (hereafter "SELLER") shall in no way be responsible for the product's proper use and service. The BUYER hereby waives all liability claims.

The BUYER acknowledges that he/she is not relying on the SELLER's skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extended beyond the description on the face hereof and the BUYER hereby waives all remedies or liabilities, expressed or implied, arising by law or otherwise, (including without any obligations of the SELLER with respect to fitness, merchantability, and consequential damages) whether or not occasioned by the SELLER's negligence.

The BUYER is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications and agrees to hold the SELLER harmless from any damage resulting from the failure to adhere to such specifications.

The SELLER disclaims any warranty and expressly disclaims any liability for personal injury or damages. The BUYER acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for

this agreement and the BUYER agrees to indemnify the SELLER and to hold the SELLER harmless from any claim related to the item of the equipment purchased. Under no circumstances will the SELLER be liable for any damages or expenses by reason of the use or sale of any such equipment.

The BUYER is responsible to obey all applicable federal, state, and local laws, statutes, and ordinances when operating his/her vehicle, and the BUYER agrees to hold SELLER harmless from any violation thereof.

The SELLER assumes no liability regarding the improper installation or misapplication of its products. It is the Buyer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

The BUYER is solely responsible for all warranty issues from the automotive manufacturer.

The use of this device signifies automatic approval of these conditions.

LIMITATION OF WARRANTY

Gale Banks Engineering Inc. (hereafter "SELLER"), gives Limited Warranty as to description, quality, merchantability, fitness for any particular purpose, productiveness, or any other matter of SELLER's product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights except those expressly written herein. This Warranty shall not be extended or varied except by written instrument signed by SELLER and BUYER.

Please see enclosed warranty information card, or go to **www.bankspower.com/warranty**, for warranty information regarding your product. All products that are in question of Warranty must be returned shipping prepaid to the SELLER and must

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be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Gale Banks Engineering Inc.

Under no circumstance shall the SELLER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expense.

Under no circumstances will the SELLER be liable for any damage or expenses incurred by reason of the use or sale of any such equipment.

In the event that the buyer does not agree with this agreement:

The buyer may promptly return this product, in a new and unused condition, with a dated proof-of-purchase, to the place-of-purchase within thirty (30) days from date-of-purchase for a full refund.

The installation of this product indicates that the buyer has read and understands this agreement and accepts its terms and conditions.

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DISCLAIMER

Banks Engineering reserves the right to make improvements, changes or updates to its software at any time without notice. As such the illustrations, images, and descriptions used in this manual may not match exactly the referenced screens as they appear in the latest release of the application.

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Section 1

SAFETY PRECAUTIONS

Always observe safety precautions!

Gale Banks Engineering urges you to always follow safety precautions. These pages include important information intended to prevent personal injury to yourself and/or others, and property damage.

Always be sure you carefully read and understand each precaution before moving on to the rest of the manual.

Please refer to Safety Precautions section in Banks iQ manual for safe use and carrying of the Banks iQ unit.

BACKUP CAMERA PRECAUTION

This product is intended to provide a view of what is directly behind your vehicle and to safely guide you when vehicle gear is shifted into the reverse position. Please make sure that all persons using this product carefully read these precautions and User's Guide.

Banks cannot accept any responsibility whatsoever for accidents resulting from failure to observe these precautions.

 **Your personal judgement, traffic regulations, and common sense must always take precedence over instructions produced by the software.**

- This product is not a substitute for your driving technique, driving knowledge or especially your personal judgement. Your personal judgement, traffic regulations, and common sense must always take precedence over instructions produced by this product.

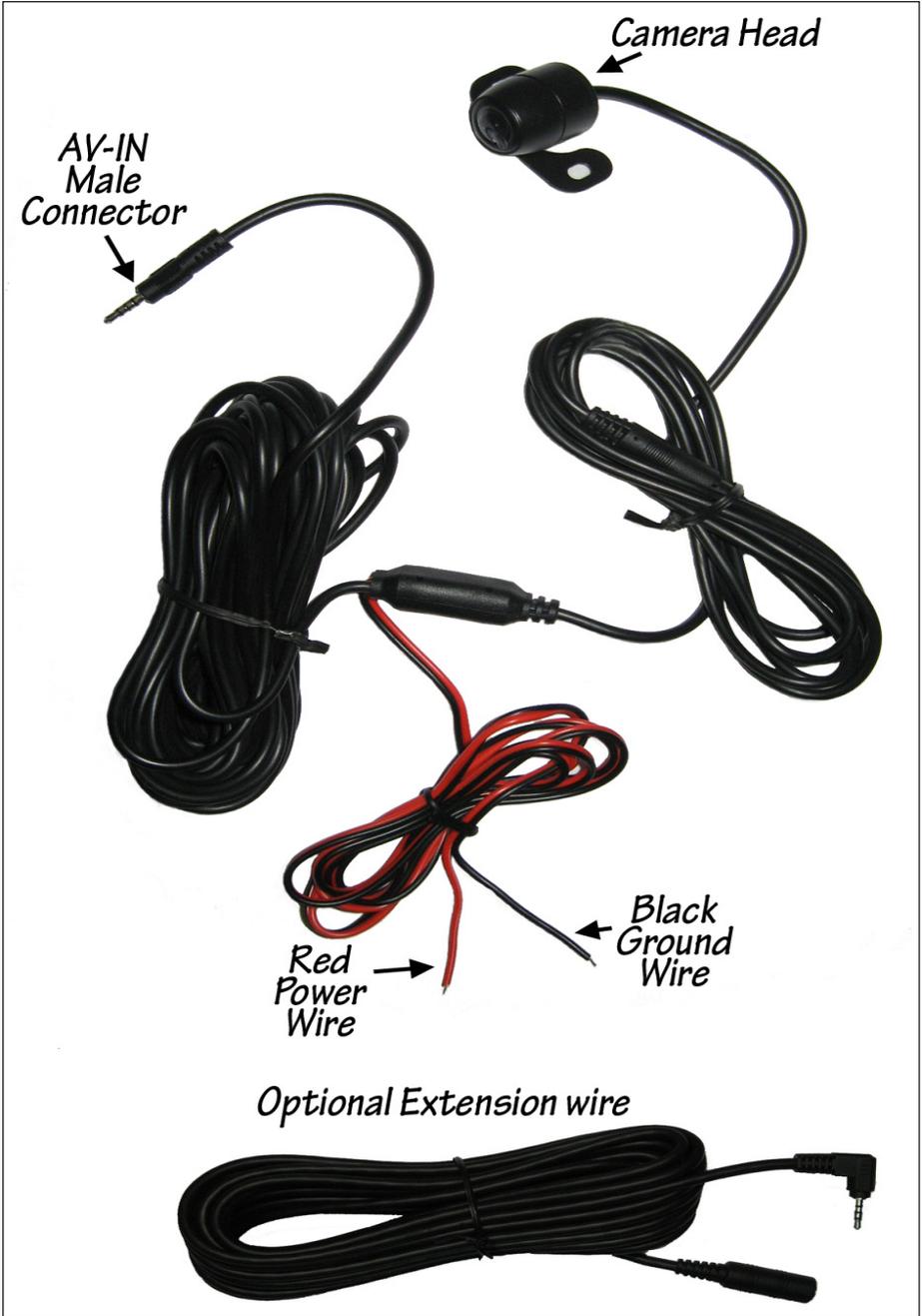
- Never take your eyes off the road to adjust Banks iQ settings or change screens while driving vehicle. Doing so can result in a traffic accident. Always stop your vehicle in a safe place before operating the unit.

- Only look briefly at Banks iQ screen images while operating your vehicle. Doing otherwise can take your mind off the road and create the risk of a traffic accident and injury to yourself and/or others.

- Objects in view on the iQ screen are closer than they appear. Proceed with caution when vehicle is in reverse gear and note the distances of objects as they appear on the screen.

-END, SECTION 1-

Figure 1 Backup Camera Wiring



Section 2

INSTALLING BACKUP CAMERA

IMPORTANT! Before installing Banks Backup Camera, make sure your Banks iQ is updated to the latest version.

To update Banks iQ Software

1. For Windows XP users, make sure that microsoft ActiveSync is installed on your computer and that you have an active internet connection.

For Windows 7 and Vista users, make sure that Microsoft Mobile Device is installed on your computer.

NOTE: If you do not have Microsoft ActiveSync or Mobile Device visit www.microsoft.com/windowsmobile or visit Banks website for direct links and detail update instruction at www.bankspower.com/iqupdate.

2. Install the Banks iQ Update Utility on your computer by visiting www.BanksPower.com/Downloads.

3. Turn the Banks iQ on and allow it to complete its booting process (about a minute). In the 'Environment Select' menu press on the 'Productivity' Environment. Then press on 'Desktop' tab to open the Windows desktop. Then plug the Banks iQ into your PC using the supplied USB cable.

CAUTION: The iQ must be in the Windows desktop before connecting the iQ to a PC. The iQ will either ignore the connection or register an error if the iQ is not in the 'Desktop' mode.

4. Start the Banks iQ Update Utility and follow the on-screen directions on your PC to update your Bank iQ with the latest software updates.

For more detail instruction to update your Banks iQ please go to www.bankspower.com/iqupdate.

Installing backup camera

1. Mount the camera head at the rear of the vehicle, as close to center as possible.

CAUTION: Mount the camera away from locations where possible damage can occur due to objects hitting or striking the camera.

2. An adhesive backing is provided on the mount to simplify initial mounting location of the camera, but final installation with the supplied sheet metal screws is recommended.

3. Route the cable forward along the frame rail of the vehicle and use the supplied cable ties to secure the wire away from any heat source or moving components.

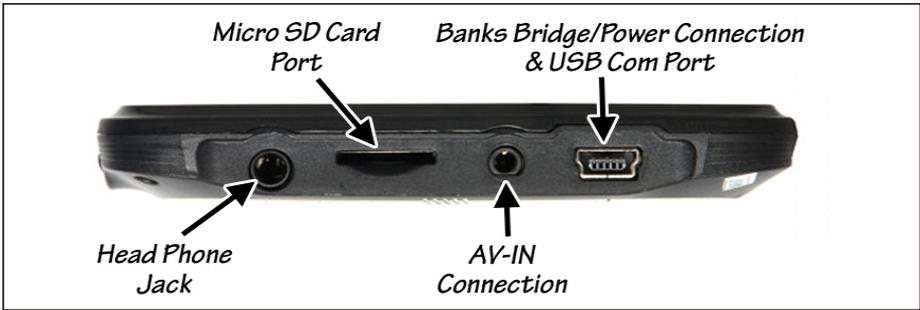
4. Route the male AV-IN connector end of the wire through the firewall at an appropriate location and up to the iQ. Plug the AV-IN connector into the AV-IN port on the left side of the iQ. See **Figure 2**.

NOTE: The overall length of the camera cable is about 25 feet. This is sufficient for most applications, but if your vehicle is a crew cab truck, a motorhome, or you would like to install the camera at the back of a trailer, you may need an extension cable. Extensions cables are available separately in lengths of 20 feet, and may be daisy chained to increase the length up to 85 feet (3 extensions). Trailers may be accommodated by placing the junction between two extensions at the rear of the tow vehicle and the front of the trailer.

5. Locate a power source that is active when the Reverse gear is selected. This may be most easily done with the backup lamp on the vehicle or from a trailer wiring connector.

6. Locate the supplied t-tap and male spade connector. Use the t-tap to tap into the power source. Cut or add wire

Figure 2 Left Side Edge



length if necessary on the Red wire to reach the power source. Crimp the spade connector to the Red wire and plug it into the t-tap power source.

7. Locate a place on the vehicle chassis where a good ground connection can be made. Use the supplied ring terminal, serrated washer and sheet metal screw to connect the Black wire to ground. Once the ground connection is made, it is recommended to cover the connection with RTV Silicone or similar to prevent corrosion.

WARNING: Do not reverse the polarity of the wires! Damage to the iQ may occur. Make sure to connect the Red wire to the power source and the Black wire to ground.

-END, SECTION 2-

Section 3

SETUP & USE

Setup

1. Make sure that the wheels of the vehicle are blocked so that the vehicle cannot move. Engage the parking brake on the vehicle and turn the key to the RUN position without starting the vehicle. Move the shifter to the Reverse position.

2. The backup camera should automatically display an image on the iQ. See **Figure 3**.

NOTE: Allow up to 10 seconds for the image to appear. This process can be delayed during initial startup of the iQ.

3. The image will show a colored grid in the bottom half of the screen. If the grid is not at the bottom half of the screen, tap the left side of the iQ screen to rotate the image until it is in the proper position. Tapping the right hand portion of the screen will invert the image from True to Mirror.

4. With the image on the iQ screen, adjust the camera position by slightly loosening the bezel and rotating the camera in its mount until the image is level, then retighten the bezel.

5. When satisfy with the image position, go over the installation and secure any loose wiring away from any

heat source or moving components using supplied cable ties. Secure the camera head to the mounting location using the supplied sheet metal screws.

Use

The backup camera is an extreme wide angle lens, allowing you to view out to the sides of your vehicle. However, a wide angle lens can also make the range to an object difficult to distinguish.

Make sure that the wheels of the vehicle are blocked so that the vehicle cannot move. Engage the parking brake on the vehicle and turn the key

to the RUN position without starting the vehicle. Move the shifter to the Reverse position.

Have an assistant stand at the back of the vehicle and gradually move towards the rear of the vehicle. As they approach the grid, note the distance from the vehicle and keep this information as a reference.

The Backup camera will now display when the shifter is position in the reverse gear.

-END, SECTION 3-

Figure 3



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