



DVDXPRESS **User Manual**

TABLE OF CONTENTS

Warranty.....Page 3

Command Module.....Page 6

Baseframe.....Page 15

Camera.....Page 17

1 YEAR WARRANTY

Alliance Technology, LLC warrants to the first purchaser that should any of its products prove to be defective in material or workmanship in normal use, within one (1) year from the date of delivery, Alliance Technology, LLC will, at its exclusive option, repair, replace or exchange the product or any of its parts.

THIS WARRANTY IS SUBJECT TO THE FOLLOWING LIMITATIONS:

1. This warranty does not apply to any product which has been subject to accident, negligence, alteration, abuse, misuse, overload, repair by anyone other than Alliance Technology, LLC or its authorized representatives, or not maintained in accordance with the manufacturer's suggested maintenance schedule.
2. This warranty applies only to components manufactured by Alliance Technology, LLC. The appropriate manufacturer's warranty, if any, shall apply to components not manufactured by the company.
3. This warranty does not apply to flex-link connectors, rod, LED light rings, cable, rollers, o-rings, and skids, or other parts, which are considered consumable. The replacement of these items is part of normal product maintenance.
4. This warranty shall not apply if the products are used or operated in any manner not consistent with their intended purpose.
5. This warranty is limited to repair or replacement of defective products and parts during the warranty period, and shall be the exclusive remedy. Alliance Technology, LLC shall in no event have any other obligation or liability of any nature arising from the breakdown, malfunction, defect or other failure of the product, including, without limitation, any liability for service, maintenance, repairs, personal injury, property damage, loss of profits, loss of use or other consequential damages.
6. Any action for any claimed breach of this warranty shall be brought within one (1) year from the date of delivery of the product.
7. The purchaser must return the defective product, part or component to the Alliance Technology, LLC factory in Saukville, WI 53080 at the purchaser's expense, properly and adequately packaged, with insurance and transportation pre-paid. Alliance Technology, LLC will either repair or replace the defective product, part or component, at its option, and will return it to the purchaser at the customer's expense. In no event shall Alliance Technology, LLC be liable for delay in repair or replacement and return under this warranty. Alliance Technology, LLC will endeavour to effect appropriate repairs in the shortest time practical, with respect to the customer having beneficial use of their equipment.
8. Alliance Technology, LLC neither assumes nor authorizes any person to assume any other liability or make any other warranty in connection with the products.
9. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. ALLIANCE TECHNOLOGY, LLC EXPRESSLY DISCLAIMS ANY OTHER WARRANTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

SYSTEM MAINTENANCE REQUIREMENTS

The following maintenance procedures are recommended for all Insight-Vision Xpress systems. Standard warranty policy dictates that components and accessories subject to wear and tear are not covered under the One (1) year warranty. Therefore we are strongly recommending that all systems be maintained according to the following procedures. Please be advised that Insight-Vision will not allow warranty coverage for these items if these procedures are not followed.

DVDXpress Command Module Recorder: Due to the adverse conditions that the DVDX experiences during use, Insight Vision strongly recommends that the cleaning procedure described below be performed for every 5 or 6 hours of use.

WARRANTY REPAIRS WILL NOT BE GRANTED FOR DAMAGE CAUSED BY DIRTY DVD PLAYERS AS THIS IS A RESULT OF USE AND NOT MANUFACTURERS DEFECTS.

Cleaning Procedure: Insert a DVD Laser Lens Cleaner disc into the DVDX Command Module and run the cleaning process once or twice to clean the recorder.

Please note that the DVD disc that was originally experiencing problems may have permanent errors as a result of the dirty recorder. Starting a new disc may be necessary.

These cleaning DVDs are available at Wal-Mart for \$6 - \$7. Phillips, Memorex, and Maxell are some of the brands that Insight Vision recommends.

O-Rings: O-rings are critical to insure watertight integrity of the camera and connection areas. O-rings are subject to wear and tear and can also suffer failure due to age and other factors. They should be inspected regularly and replaced whenever needed.

When O-rings are working properly, a small amount of water and sometimes fine particles of grit will build up behind them. Any time the camera or sonde connection is taken apart and exposed, there exists the risk of grit wearing down or possibly even tearing the o-ring. It is also possible for water to then enter the slip-ring area once exposed. All connections, once opened or exposed, **MUST** be thoroughly cleaned and dried before re-connecting. We recommend using an old toothbrush or other soft bristled brush to clean the o-ring areas and remove the grit or fine debris. Then, dry the area around the o-ring and pogo pins and slip area completely before re-connecting.

Camera Head: The camera head area, especially around the front light window, is an area that is subject to wear and tear. Insight-Vision has provided a small and large protective skid that **MUST** be used at all times. These skids are designed to aid in the centering of the camera head and have the added benefit of helping to protect the camera head from extreme wear. Failure to use the provided skids will result in direct wear to the front light ring area of the camera, resulting in the eventual cracking of the light ring protective cover and allowing water to ingress into the camera head. This is not a warranty repair.

Push Rod: The design of the horizontal push reel/coiler and the counter mechanism allows for the push rod and camera head to be stored inside the coiler. The proper storage technique is to store the camera head inside the basket.

At Insight-Vision our goal continues to be focused on providing one of the highest quality, best designed and user-friendly systems offered on the market. We also realize that all we do will amount to nothing without satisfied customers. We ask that you continue to work with us to help evolve our product into one of the absolute best portable systems available. We are always open to constructive ideas that will help us move forward with any or all of our products.

We also ask that you do your part in this relationship by striving to properly maintain and take care of your camera system just as you would an automobile or any other tool. It is a proven fact that any item that is properly maintained will last much longer and provide a much greater opportunity for a good return on investment.

Sincerely,

The Management at Insight-Vision

DVD Xpress Command Module

The DVD Xpress Command Module allows real time viewing of a camera image on an LCD flat panel screen. The advanced features of the DVD Xpress Command Module provide internal DVD recording and playback of camera images and audio commentary, and text writer capabilities using optional exterior text writer.



System Capabilities:

The DVD Xpress Command Module features an on-screen display for deployed cable length in feet and meters with the standard digital precision distance counter.

CAMERA illumination controls are featured prominently on the operator keypad for easy operator access.

Integral MICROPHONE for audio commentary on the internal DVD is conveniently integrated into the operator keypad.

An integral SPEAKER with 5 volume settings for audio playback from the internal DVD is featured on the operator keypad.

Connections for an optional text writer are included on the front of the Command Module.

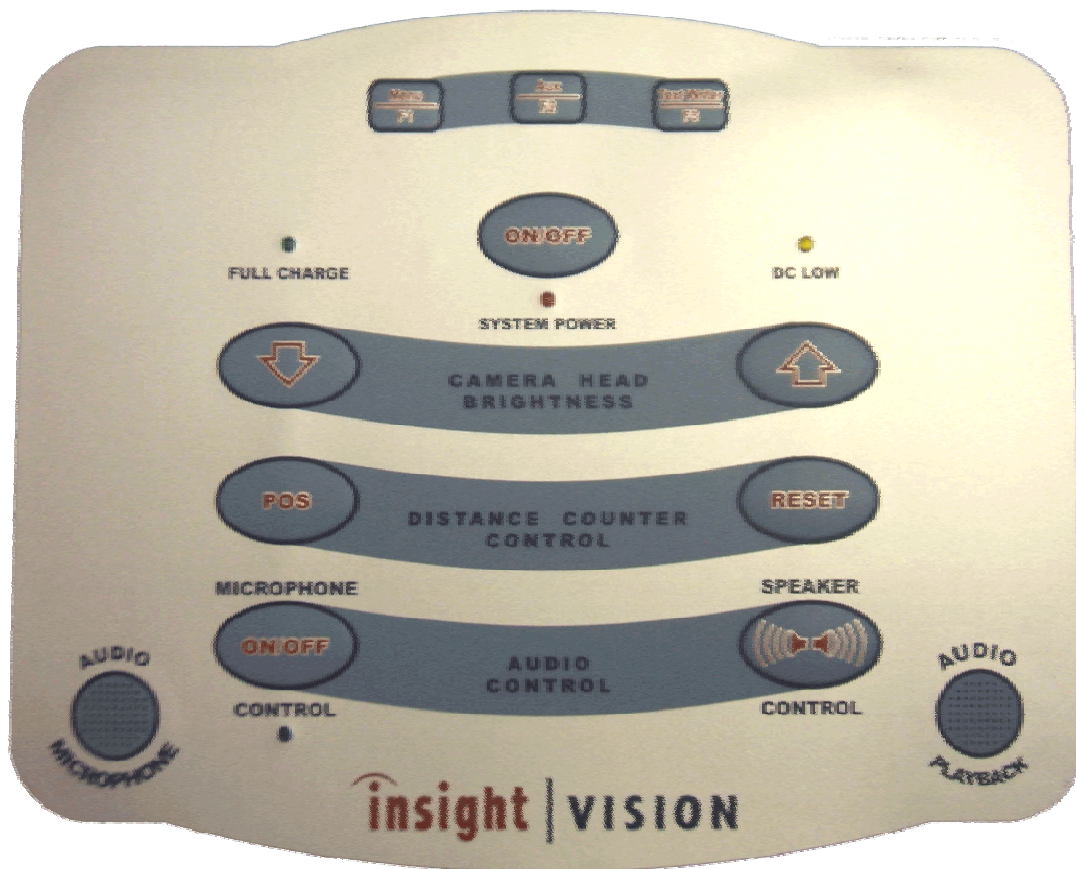
External video and audio output jacks are included for connection to optional display or recording devices.

Power options include a DC POWER input from 13.8-15VDC vehicle accessory socket (cigarette lighter socket) or 110/220VAC 50/60Hz power supply. This main power input will charge the internal batteries. A fully charged battery may run the system up to 4 hours

Aux. DC input NOT for charging system. Only for powering or running system.

System Operation

Open the LCD Flat Panel Lid on the 1200 Command Module and position the screen for best viewing angle. The Lid is used to protect the operator control area when not in use. The Operator Control Buttons are prominently featured and are easily accessible on the large water resistant keypad.



To turn the unit on, press the POWER button. Unit is on when the RED LED light is illuminated. Video will be displayed on the LCD Flat Panel screen.

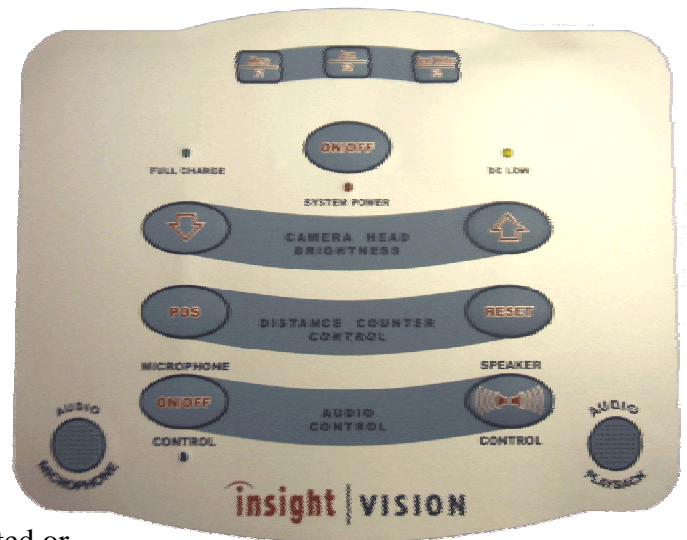
System Configuration:

System configuration information is saved automatically from one session to the next. However, the system can be reconfigured at any time. If the system is reconfigured, the distance counter is zeroed. Since system configuration also affects the size of the voltage steps made in controlling camera brightness, camera head brightness keypad buttons will not function unless the system is first configured.

If the unit does not turn on, please verify that the internal battery has been charged or connect the unit to a 13.8-15Vdc or 110/220Vac power source or aux battery.

If the unit does not turn on after charging the unit or connecting the unit to a 13.8-15Vdc or 110/220Vac power source, please contact an Authorized InsightVision Service Center.

Verify that the DVDXpress Command Module is receiving adequate power by verifying the YELLOW LED is not illuminated or flashing. If the YELLOW LED lights up it may mean the system is indicating a low power condition of either the built-in internal batteries or an external power source (i.e. low battery on a vehicle).



YELLOW LED is illuminated or flashing *without* an external power source being connected.

A flashing YELLOW LED indicates the internal battery is low and will need to be plugged in or recharged within ½ hour.

As soon as is convenient, connect the unit to a 13.8-15Vdc or 110/220Vac power source. When connected to an external supply, the batteries will recharge and the GREEN LED will flash indicating the batteries are charging. BATTERIES ARE FULLY CHARGED WHEN GREEN LED IS ILLUMINATED AND NO LONGER FLASHING.

An illuminated YELLOW LED indicates the internal battery is extremely low and will shut down within 30 seconds.

Immediately connect the unit to a 13.8-15Vdc or 110/220Vac power source. When connected to an external supply, the batteries will recharge and the GREEN LED will flash indicating the batteries are charging. BATTERIES ARE FULLY CHARGED WHEN GREEN LED IS ILLUMINATED AND NO LONGER FLASHING

YELLOW LED is illuminated or flashing *with* an external power source being connected.

A flashing YELLOW LED indicates the external power source is low. The advanced Xpress Command Module may continue operating indefinitely in this state as long as the power level does not decrease further.

An illuminated YELLOW LED indicates the external power source is low and the Xpress Command Module will shut down within 30 seconds.

Immediately disconnect the Command Module for the external power source. Reconnect the unit to an adequate 13.8-15Vdc or 110/220Vac power source.

The yellow DC low LED is utilized as a short circuit indicator. When system power levels are nominal, a slow flash is used to indicate that a short has been detected. If the system is in low power mode and the DC low LED is already flashing quickly, a short circuit condition is indicated by blanking approximately every fifth blink. The combination situation will thus evoke the pattern: blink, blink, blink, blink, off, blink....This cycle will repeat approximately every two and a half seconds

DC low (yellow)

Off - power levels normal

Slow Blink – short circuit detection

Fast Blink – low power

Interrupted fast blink – low power and short circuit detection

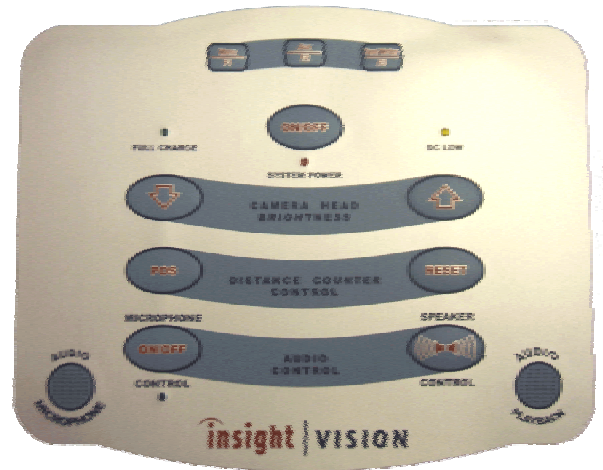
On (steady) – shutdown condition (shutdown will occur in 30 seconds)

When connected to an external supply, 13.8-15Vdc or 110/220Vac power source, the batteries will recharge and the GREEN LED will flash indicating the batteries are charging. **BATTERIES ARE FULLY CHARGED WHEN GREEN LED IS ILLUMINATED AND NO LONGER FLASHING.** We recommend leaving the 1200 Command Module plugged in overnight for a full charge.

The green flashing or steady light will only be visible when the unit is on. However, the unit does charge if plugged in with the unit off.

The unit will charge when plugged in while operating the unit.

Verify the camera image is displayed on the LCD screen.



If the camera image is not displayed on the screen, please verify all connections are made and are tight or turn to the “USER TROUBLESHOOTING GUIDE” in this manual.

Verify the distance counter is at “0000.0f”. If necessary, press the RESET button to zero out the counter. Press the POS button to position counter in desired screen location.

Verify the operation of the camera led light intensity controls by pressing the UP and DOWN arrows.

Due to the advanced auto-iris feature, we recommend setting the light intensity controls to maximum.

If the LED’s are not illuminated or are otherwise malfunctioning, please reference the “USER TROUBLESHOOTING GUIDE” in this manual.

Remove the camera from baseframe basket, feed through the camera loop and insert into the pipe to be inspected.

Store camera in basket when not in use.

Install skids whenever possible for camera protection.

Skids will help in the operation of the camera as well as increase the durability of the system.

Verify the distance counter increases as the cable is advanced.

Powering DVD-Video Disc.

Note: When the DVD Player is operating the system battery time will be cut in half. This limits operation to approximately 2 hours when fully charged.

After the COMMAND MODULE is initially powered on the front indicator will turn Green for approximately 5 seconds.

This light will then turn Red. This is the standby mode for the DVD recorder.

Press the “Power” button on the remote control to bring the DVD recorder out of standby mode.

The screen will display a splash screen indicating the DVD is being initialized.

Following initialization the screen will display camera video.

If the video is not displayed press the “Source” button and Press ▲ ▼ to select “AV2-REAR”, then press **ENTER**. This is the video input for proper operation of the unit. Camera video will be displayed at this time.



Recording DVD-Video Disc.

Note: If power is removed or the system is powered off while the system is recording all information on the disc will be lost. The **■ STOP** button must be pressed and the icon AV2 rear displayed prior to shutdown of the system.

Check whether you selected and inserted a blank recordable DVD disc.

Use only DVD+R recordable disc for recording

Press **● RECORD** to start recording.

Press **|| PAUSE/STEP** to pause recording.

Press **■ STOP** to stop recording.

Press **● RECORD** again to start another recording session.

Proceed to Disc Finalize if no other Recording or Naming Titles are to be done.

Buttons

F1: main menu page

F2: aux spotlights (on/off)

F3: textwriter page scroll (repeated press will scroll through each of the textwriter pages)

Keyboard Operation

Special Function Keys

F1: main menu page

F2: aux spotlights (on/off)

F3: textwriter page scroll (repeated press will scroll through each of the textwriter pages)

F4: page 1: textwriter – camera page

F5: page 2: textwriter – header form

F6: page 3: textwriter – location form

F7: page 4: textwriter – notes page

F8: page 5: menus – main menu page

ESC: clean screen (can also be accomplished using function key for that particular page)



Naming Titles

Press **OPEN/CLOSE** to open disc tray.

Carefully place the disc on the tray with the label side facing up, and then press **OPEN/CLOSE**.

A disc menu will appear. Press **▲ ▼ ◀ ▶** to select the title you would like to edit, and then press **ENTER**.

Playback will then start.

Press **EDIT** to display the Edit menu.

On the Edit menu, press **▲ ▼** to select “Rename”, then press **ENTER**.

The on-screen input keypad will be displayed.

Press **▲ ▼** to select the “Clear” first, then press **ENTER** before starting to enter the new title.

Press **▲ ▼ ◀ ▶** to select desired letters, numbers or punctuation marks, then press **ENTER**.

You can enter up to 30 characters for a title name.

If you want to make changes during the entering process, press **▲ ▼ ◀ ▶** to select “Back”, which allows you to delete character by character in a backward direction, then press **ENTER**.

If you want to delete all characters you have entered, press **▲ ▼ ◀ ▶** to select “Clear”, then press **ENTER**. If you decide not to change the original title name, press **▲ ▼ ◀ ▶** to select “Cancel” then press **ENTER**.

When complete, press **▲ ▼ ◀ ▶** to select “Finish” then press **ENTER**.

Note: The entry bar **CANNOT** be left blank. If such a condition occurs, you will not be able to exit the keypad screen. Please follow the instructions given in the pop-up dialogue box, and go back to complete the process.



Disc Finalize.

Note: Finalizing a disc is a necessary step when you want to share certain types of digital content with others. Once a disc is finalized, it can be played back on other DVD players.

Once a disc is finalized, no other data may be stored on it.

Press **GUIDER** to display the Easy Guider Menu.

On the Easy Guider menu, press **▲ ▼** to select “Finalize (make Compatible)”.

Press **◀ ▶** to select “Go”, and then press **ENTER** to start finalizing.

The Finalizing will begin.

When Complete, select “Exit”, then press **ENTER**.

Playing DVD-Video Disc.

Press **OPEN/CLOSE** to open disc tray.

Carefully place the disc on the tray with the label side facing up, and then press **OPEN/CLOSE**.

If playback does not start automatically, press **▶ PLAY** to begin playback.

A menu might appear when the disc is in playback mode.

Press **▲ ▼ ◀ ▶** to select an item and confirm with **ENTER**.

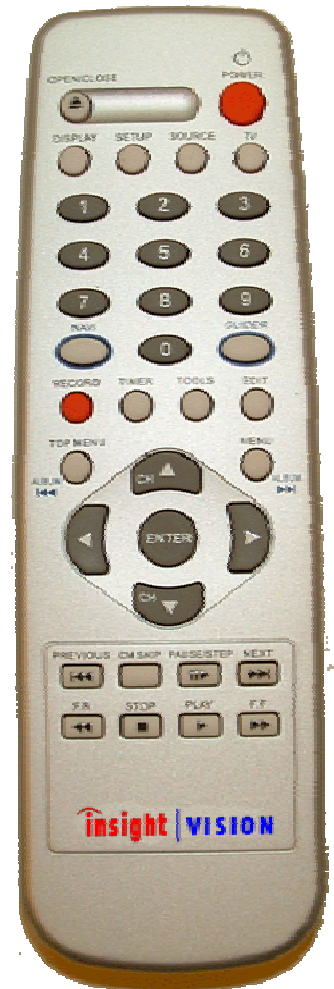
Press **■ STOP** to stop playback at a marked stop.

Press **▶ Play** to resume playback from a marked stop.

Press **■ STOP** again to bring the playback to a full stop.

To remove the disc, press **OPEN/CLOSE** to open disc tray.

Note: If you would like to bring up the DVD menu, Press **Menu** on the remote control to display it.



Xpress Large Base Frame Reel

The large base frame is a ruggedized aluminum reel designed to house 200' or 300' of the rigid (A) type rod or semi-rigid (B) type rod.

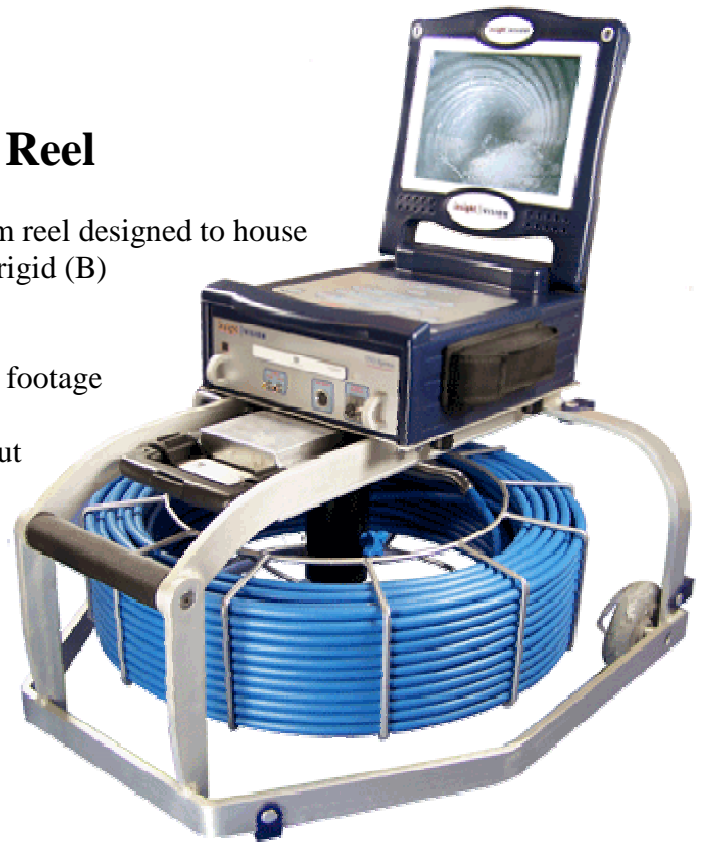
This base frame comes with an integral digital footage counter.

The design of this frame brings the push rod out from the front to allow for easy operation.

When camera is not in use please store in basket.

This frame has been designed with a pull out luggage style handle and wheels for easy transport. All anti-slide supports are made with a non-marring material safe for all floor surfaces.

The top part of the base frame includes a mounting bracket for any of the Xpress command modules.



Stiff Rod (A)

The letter A following the rod length indicator designates the Insight Vision rigid push rod. Example: 200A = 200' of stiff rod.

This push rod is .475" in diameter and has been specifically designed for longer pushing distances in 2"-12" pipe.

Attempts should not be made to push this rod type through 2" 90 degree bends as rod breakage may occur. This rod type is only available in 200' and 300' lengths on the large horizontal base frame.

Semi-rigid Rod (B)

The letter B following the rod length indicator designates the Insight Vision semi-rigid push rod. Example: 150B = 150' of semi-rigid rod.

This push rod is .365" in diameter and has been specifically designed for pushing normal distances in 2" through 4" pipe and achieving multiple 90-degree bends.

This rod type is available in the standard 100', 150' length. 200' lengths are by special order only.

Debris Bag

This optional item comes in two sizes, one for each size of base frame reels.

It is intended to minimize drippings while working indoors.

It is easily removable for cleaning.

Self Leveling Camera

This camera has a self-leveling feature that will position the camera so that the top of the pipe will appear on the top of the display.

This is a color camera with LED's for illumination of the pipe being inspected.

The camera module has an integrated auto iris feature, which will automatically adjust for varied light levels.

The Sonde is not built into the camera.

This camera is intended for operation in pipes 2-12" I.D.

This camera will function with any of our Xpress command modules as well as our Silver Bullet or Universal Jetcam systems.

Diameter is 1.30"

Sonde/Spring Assembly

The removable sonde is located inside the spring assembly

It continually transmits a signal at 512Hz and can be located with any locator capable of picking up a 512Hz signal.

Skid Set

The skids are intended to protect the camera from damage due to debris in the pipe being inspected.

The standard skids come in two sizes.

The small skid is for use in 3-4" diameter pipes.

The large skid is for use in 4-6" diameter pipes.



Installation and removal of skids.

The skid is a two-piece device that must be unscrewed for installation.

Slide the rear half over the pushrod and slid forward to the rear of the camera.

Slide the front half over the camera to meet the rear half.

Screw the two pieces together to hold the skid in place.

Removal is the reverse of the installation steps.

