Pro-Built Tools

PB2400 User’s Guide

- STANDARD FIXED HEAD [250']
- SELF LEVELING HEAD [300']
- 100' [350']
- 150' [400']
- 200' [512hz Built in Sonde]
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TABLE OF CONTENTS

Diagram & Equipment Specifications .......... 4
Equipment Specifications & Safety Instructions ........................................... 5
Control Panel ................................................................................. 6
Control Panel cont. with Diagram .......... 7
Pro-Built ....................................................................................... 8
Pro-Built with Diagram ......................................................... 9
Tips in the Field ........................................................................ 10-11
Trouble Shooting ..................................................................... 12-18
Removing Camera Head ......................................................... 19
Warranty Information ............................................................... 20
A. Camera Head
B. Patch Cord Input (Reel Side)
C. Cable Guide
D. Powder Coated Frame
E. Heat Treated Epoxy Sealed SV Cable
F. Rubber Feet

Included Not Pictured
- Control Box - See Page 7 Diagram
- CAT-6 Patch Cord.
EQUIPMENT SPECIFICATIONS

- **Pro-Built Standard Fixed Head**
  Dimension: 1.29” Diameter
  Pipe Size: 2” Pipe + (2” Pipe Depends on Condition of Pipe)

- **Pro-Built Self Leveling Head**
  Dimension: 1.95” Diameter
  Pipe Size: 3” Pipe + (3” Pipe Depends on Condition of Pipe)

- **High Tension Pro-Built Inspection Cable**
  Push Capacity: 100’ – 500’ (depending on condition of line)

- **Steel Reel**
  16” -24” in Diameter Depending on Model Purchased

- **Camera Material**
  Air Craft Aluminum

- **Depth Rated**
  Submersible to 500’

SAFETY INSTRUCTIONS

1.) Keep all buttons, handles, switches clean of oils & grease. Please avoid setting monitor directly in water.

2.) Prior to use inspect all buttons, handles, switches to make sure they are in working order. If equipment is malfunctioning please do not operate. See trouble shooting guidelines in back of manual.
CONTROL PANEL

Please view diagram 1.a on page 7 for control panel.

Main Controls:

Power – On/Off Switch

Dimmer Control – Dim LED Lights as Needed

Connection to Reel – Input Cat 6 Patch Cord

Video Out Put – Input any monitoring device

Sonde – Turn on to activate 512 Hz Sonde (optional)

Power Cord – Plug into 110 Volt grounded outlet

Inductive Locator Connection – Used to energize high tension inspection cable – see locator manual if applicable.

Digital Footage Counter Controls (optional depending on model purchased)
CONTROL PANEL

DIGITAL FOOTAGE COUNTER
- HIDE NAME
- SET/MOVE
- RESET
- HIDE DISPLAY
- INCREMENT

MAIN CONTROLS
- CONNECTION TO REAL
- VIDEO OUT
- DIMMER CONTROL
- SONDE
- POWER

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PB 2400 Inspection Camera

Once you have inspected all components to make sure that they are not damaged or broken plug in the 110 volt power supply into a grounded outlet.

Next you will plug the provided CAT-6 patch cord into your Reel and the control box. (see diagram 1.a on page 7)

Hit the POWER Switch into the ON position. Check to see if the lights on your camera head are on. If they are proceed to the next step. If they are not check your power receptical and refer to the trouble shooting section of your manual.
At this point you will plug the free end of your video cable into the monitor that you are using to view the camera with. Please refer to monitor manual for any further instruction.

If your camera model came equipped with a 512 Hz transmitter built inside the camera head please see the diagram below to activate the built in transmitter.
TIPS IN THE FIELD

1.) Run water down line to keep sapphire window clean and clear. Jiggle the head a little bit in the water for best clarity.

2.) If you stand too far back while pushing cable it may cause the cable to kink. Give your self enough room to push but not too much slack.

3.) DO NOT FORCE camera or cable down line. If you feel it just doesn’t want to push stop pushing. It is for this reason cable will snap or fail.

4.) In some cases it is necessary to give the camera a little more momentum to go through certain areas of a pipe. Back up the camera holding one hand at the entry point and gathering up slack with the other as it feeds from the reel. With the slack make a figure eight with cable and twist back and forth. This will pop the camera through. Please see diagram below.
5.) DO NOT hammer or slam the camera into pipe where it is just not pushing through. Use the technique described on tip 4. After you are comfortable with your system it may be easier to push thru the pipe fast and slowly pull back for your actual inspection. Pulling the camera back is always easier than pushing it through.

6.) Pro-Built Tools Camera Systems have an automatic light adjustment. If the automatic light adjustment is not enough due to unusual circumstances in different or difficult pipe use your dimmer control knob to adjust for better picture quality.

7.) This camera is made to function through several bends and 90 degree angles. If it is resisting in any T or P-Trap do not force the unit. If you do manage to get through a tough T be careful not bend the camera head back on itself, as it may cause damage to the unit.

8.) After using your camera in a pipe pull it out and wipe the cable and head down with a moist warm towel and regular household detergent or soap. This will keep your equipment functioning longer.
TROUBLE SHOOTING

The trouble shooting guide lines below are designed to help you out in the field. If you cannot figure out the problem or fix it without voiding your warranty, please call the number listed in the back of your manual to speak with a repair technician.

LIGHTS TURN ON – NO VIDEO
Possible problems:
- Monitor Not Functioning
- Faulty Video Cable
- Broken or loose connection in Camera Head

TRY THIS:

First plug the camera system into another monitor or standard television that accepts standard RCA connections. If you get a picture then you know the problem is located in your monitor.

If you still have no picture on another monitor try changing the video cable that goes from your reel to your monitor. Any standard RCA adapter will work with your camera system.

If you have no picture with a new cable and another monitor then the problem is located with the camera system. Call the repair department to get the proper instructions on how to have the equipment diagnosed.
TROUBLE SHOOTING

VIDEO WORKS–LIGHTS DON’T TURN ON
Possible Problems:
- Lights Burnt out
- Dimmer Control Switch Turned Down
- Dimmer Control Switch Broken
- Broken or loose connection in Camera Head.

TRY THIS:
Turn dimmer control all the way down and then all the way back up. Check to see if GFCI is working properly with the camera system. If problem still persists please contact the repair department to have unit diagnosed.

NO LIGHTS - NO VIDEO
Possible Problems:
- Faulty GFCI
- Ground Fault Interruption
- Broken or damaged control box.
- Damaged or faulty connection with in camera head
TRY THIS:
First check to see if your GFCI is tripping. Try to plug the unit into another location with different electricity. If GFCI will not re-set it is not working and will prevent the camera system from turning on. **IF GFCI IS REMOVED FROM UNIT AND THEN CAMERA SYSTEM IS USED WITHOUT IT, WARRANTY WILL BE VOID.** The GFCI is designed to protect your camera system from bad power. If it no longer works please call Pro-Built Tools for a replacement. IF GFCI is functioning fine, and you still have no lights and no video the problem is within the control box or camera head assembly. Please call the repair department for instructions on how to have the equipment diagnosed.

HORIZONTAL WAVY LINES ACROSS SCREEN
Possible Problems:
- 512 Hz Transmitter Built in Head is in the ON position.
- Faulty Video Cable
- Dirty Monitor
TROUBLE SHOOTING

TRY THIS:

If the transmitter that is built inside the camera head is in the ON position, the frequency that it puts out interferers with the camera head frequency, and will create wavy lines across your monitor. Inspect your pipe and then locate to avoid picture distortion.

If your equipment is not equipped with a transmitter built in the head or you have lines across your screen while it is in the OFF position try changing the video cable that goes from your reel to your monitor. Any standard RCA adapter will work with your camera system.

If the suggestions above have not eliminated the problem there is a possibility that your MONITOR or RECORDING DEVICE is dirty and needs to be cleaned. See Monitor Instruction Booklet for cleaning instructions. If problem persists please contact a repair technician at Pro-Built Tools.

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“NO SIGNAL” FLASHING ON MONITOR

Possible Problems:
- Wrong setting set on Monitor or Recording Device
- Faulty Video Cable
- Broken or damaged monitor or recording device
- Broken or loose connection in camera head or control box.

TRY THIS:

Read Monitor or Recording Device instruction manual to make sure you are on the proper settings. Be sure to check the batteries in all remote controls.

If you are on the proper settings plug the camera system into another monitor or standard television that accepts standard RCA connections. If you get a picture then you know the problem is located in your monitor.

If you still have no picture on another monitor try changing the video cable that goes from your reel to your monitor. Any standard RCA adapter will work with your camera system.

If you can play back on the Monitor or Recording Device and none of the solutions above have worked, the equipment will need to be diagnosed by a technician please call the repair department at Pro-Built Tools.
TROUBLE SHOOTING

BLURRY OR SCRAMBLED PICTURE
Possible Problems:
- Monitor Broken or Damaged
- Seal broken or compromised
- Moisture in head
- Camera Head Fried
- Faulty Video Cable

TRY THIS:

First plug the camera system into another monitor or standard television that accepts standard RCA connections. If you get a clear picture then you know the problem is located in your monitor. (See monitor instructions).

If you still have a blurry or scrambled picture on another monitor try changing the video cable that goes from your reel to your monitor. Any standard RCA adapter will work with your camera system.

Look at camera head and check for any type of moisture. If head has been tampered with or abused a seal may have broken and allowed moisture into the head. This would cause a blurry or scrambled picture. Camera System should then be diagnosed by a repair technician.

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TROUBLE SHOOTING

COLORFUL IMAGES DISTORTED COLORS
Possible Problems:
- Monitor Broken or Damaged
- Seal broken or compromised
- Moisture in head
- Camera Head Fried
- Faulty Video Cable

TRY THIS
First plug the camera system into another monitor or standard television that accepts standard RCA connections. If you get a clear picture then you know the problem is located in your monitor. (See monitor instructions)

If you still have a distorted or bright colorful images on another monitor try changing the video cable that goes from your reel to your monitor. Any standard RCA adapter will work with your camera system.

Look at camera head and check for any type of moisture. If head has been tampered with or abused a seal may have broken and allowed moisture into the head. This would cause the camera head to fry and create strange distorted colors to form on the screen. Camera System should then be diagnosed by a repair technician.
REMOVING CAMERA HEAD

Instructions for removing **PB2400 Standard Fixed Head and Self Leveling**

1.) Remove the 6 set screws shown in diagram 2.a. Be careful with all components and parts.

2.) Turn pin connector round nut counter clockwise within head base. Then pull out. See diagram 2.b

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**Diagram 2.a**

**Diagram 2.b**

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*NOTE: Pro-Built Tools recommends that you send your equipment to an authorized service center and have an authorized Pro-Built Tools repair technician work on the product. Please contact the service department for further diagnosis and instructions regarding your product.*
WARRANTY INFORMATION

For warranty or service work please contact manufacture ProBuilt Tools. Read following information for contact details.

Pro-Built Tools service center
11711 Coley River Circle, Ste #11
Fountain Valley, CA 92708
Phone: (714) 437-1255