

Applies to:

- Message: **No heads found** or **No camera found**
- All software versions
- Magma CB1H, Notebook PC connected systems. [Before following this Application Note, first double-check for correct installation using the Magma CB1H Application Note at the website.]
- BeamMap, BeamMapC, BeamMap Collimate, Beam'R - termed below the '**BeamMap series**'
- BeamScope-P7
- WincamD and TaperCamD series - termed below the '**WinCamD series**'

Does not apply to:

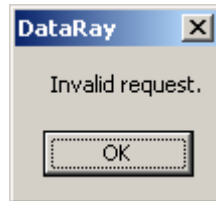
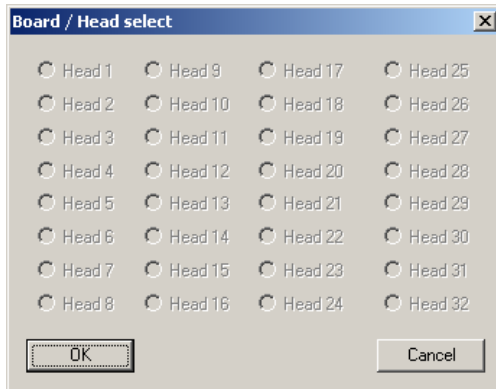
- The message: **No board found**.
 See the **No board found** Application Note at the FAQ section of the website.

Symptom:

When the software is started, you see the message **No heads found** or **No camera found** in the Status box on the screen.

With Version 3.06K2 and earlier versions of the software, you will also see the **Board/Head select** box below, click **OK**, followed by the **Invalid Request** box, click **OK** again. These boxes do not appear in Version 4.00H and later.

Clip[a]	13.54%
Clip[b]	50.00%
No heads found	



Diagnosis: There are four main possibilities that you can cure yourself. This Application Note addresses them in the order of their probability.

- The wrong device has been selected in the **Device** menu.
- The head is not properly plugged in.
- The software requires resetting to its defaults, updating or reinstallation.
- The EEPROM values in the head have been corrupted. [Plugging or unplugging a BeamMap series or BeamScope head while the software is on can lead to a corrupted EEPROM.]

Solutions. Try the steps below *in the order given*:

- 1) **Has the correct Device been selected** in the **Device** pull-down menu. Particularly with a new software installation, the default **Device** setting may not be the head that you have connected. Verify/correct the choice. Press **Go** and see if the problem is cured. If not, go to step 2).
- 2) **Is it plugged in!** Sometimes the problem is simply that you omitted to plug the head in, or it has come loose at the back of the PC. [We have done this ourselves, What we call a ‘Duh!’ moment]:
WinCamD series: Verify that the camera cable is plugged in at both ends. You **may** plug and unplug the head while the software is on. Allow a few seconds for data collection to start. If this does not cure the problem, go to step 3).
BeamMap series: You must not plug and unplug the cable while the software is on. Turn off the software and then verify that the head cable is plugged in at both ends. Start the software again and see if the problem is cured. If not, go to step 3).
BeamScope-P7: You must not plug and unplug the cable while the software is on. Turn off the software and then verify that the head cable is plugged in at both ends. Start the software again and see if the problem is cured. If not, go to step 3).
- 3) **Load the software defaults.** In the pull-down menu, go **File, Load defaults**. Press **Go** and see if the problem is cured. If not, go to step 4).
- 4) **Install the latest software version.** Check the blue line at the top of the screen to determine the software rev. that you are using.

DataRay version 3.06K2, Beam'R 0 of 0 Filter = 0.2 %

At www.dataray.com, click on Software Upgrades, found under **Sales and Support**. If an upgrade exists for your product, download it to your computer, together with any instructions required (noted on the webpage). Install it in accordance with the instructions, start the software, and see if the problem is cured.

WinCamD series: If the software upgrade does not cure the problem, download the RMA form from the website, fill it in, and return the camera head, the PCI card and the cable for servicing.

BeamMap series: If the software upgrade does not cure the problem, go to step 5).

BeamScope-P7: If the software upgrade does not cure the problem, go to step 6).



- 5) **BeamMap series:** If you have a *.bcf, *.bmf, or *.brf file saved when the head was working, with the head connected, open the file in the software. From the pull-down menu, choose **Hardware, Program head (read) eeprom**, to open the screen (example is Beam'R) shown below.

Press **Save to eeprom** to reprogram the head. Press **OK** once the hourglass disappears, and then click **OK** again. Close and then restart the software. Has this cured the **No heads found** problem?

If the problem persists, send the previously saved file (if available) and the head Serial # found on the back of the head (required) to support@dataray.com. We will send you the Calibration file for your head. The filename will be **NNNNN ABC.txt**, where **NNNNN** is the Serial # and **ABC** is the purchasing organization's initials.

Once you receive a *.txt calibration file for your head from DataRay, move the file to **c:\Program Files\DataRay**.

From the pull-down menu, choose **Hardware, Program head (read) eeprom**, to open the screen (example) shown above.

Press **Read from file** to open the *.txt calibration file from **c:\Program Files\DataRay**. Press **Save to eeprom** to reprogram the head. Press **OK** once the hourglass disappears, and then click **OK** again at the **Prompt** box. Close and then restart the software.

Has this cured the **No heads found** problem? If the problem persists, download the RMA form from the website, fill it in, and return the head, the PCI card and the cable for servicing.

- 6) **BeamScope-P7**: Right-click on the profiles area and choose **P7 Head Setup...** at the bottom of the right hand column, to open the **BeamScope P7 Head Setup** dialog box shown right.

If you see the ***(reset to default)** message in one or more of the boxes, as shown right, reset them to the values shown below.

Gain Method
Default = 0 0

Step Size in Microns
Default = 0.187 μM 0.1870

Maximum Span in Millimeters
Default = 32.5 mm 32.5

Click **OK**. Close and then restart the software.

Has this cured the **No heads found** problem? If the problem persists, download the RMA form from the website, fill it in, and return the head, the PCI card and the cable for servicing.

BeamScope P7 Head Setup

Detector Type
 Silicon InGass II-VI
 Germanium InAs Other

Gain Method
Default = 0 0*(reset to default)

Step Size in Microns
Default = 0.187 μM 0.1870*(reset to default)

Maximum Span in Millimeters
Default = 32.5 mm 32.5*(reset to default)

Maximum motor speed = 100 %
[Slider]

Multiplication factors for magnification or correction
Slit 1 1.000 Slit 2 1.000

Select Slit Type and Width(s)
 [Single Slit] [Double Slit]
 [Diverging Slits] [Point Slit]

First Slit Width = 5.00 μM
Second Slit Width = 0.00 μM
Setup slit orientation

OK Cancel