

300mw diode - Pioneer dvd burner

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This is a Pioneer-115D DVD burner, purchased on ebay

<http://cgi.ebay.co.uk/ws/eBayISAPI.dll?ViewItem&rd=1&item=120222024958&ssPageName=STRK:MEWN:IT&ih=002>

This drive contains a 5.6mm open can red diode, probably around the 650nm mark.

first unscrew the 5 screws arrowed red and unclip the 4 clips holding the front on. two of the clips are on the side

take the top/lid off

remove the 3 connection wires to the top board, they unclip from the back

remove the board

take the whole unit out of the bottom part of the metal box

push the open tray button, which is now a white bit of plastic sticking out the front of the drive and remove the tray

undo the two screws arrowed green, then remove the laser unit arrowed red

undo every screw you can find on the laser unit, theres about 5 or 6 and unclip all the metal covers

you should be left with something that looks like this. The red diode is arrowed green.

it should just pop out with a screw driver

cut the diode free

get a hacksaw and cut the diode as shown with the green arrow below. once cut prize the diode out, it shouldnt be that hard

once a cut has been made right down to the diode, get a flat head screw driver put it into the cut and turn. This will break the metal and the diode should pop out.

Wiring the diode

Un-solder the wire pad on the back

this photos shows which is + and -

once wired bingo

Testing

I am running the diode at 420ma - 300mw

After 10 mins in the gold case below the diode was warm (not hot) luke warm and the power went down the 285mw.

So i took some aluminium blocks and just placed them on top of the gold case. These acted as a heat sink and the power went up to 290mw. With the aluminium blocks on top the power stayed at 290mw for an hour.

Laser-Man
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