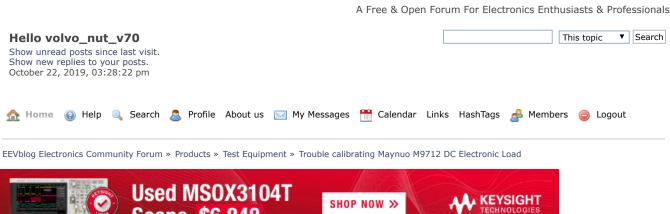
Part #: Low Profile High Current SMT Power Inductors Description: Complete line of helically wound inductors from 13mm - 25mm. AEC-Q200 options available. Download Datasheet

EEVblog Electronics Community Forum





Pages: [1] Go Down REPLY NOTIFY MARK UNREAD SEND THIS TOPIC PRINT SEARCH

Topic: Trouble calibrating Maynuo M9712 DC Electronic Load (Read 438 times)

volvo_nut_v70 and 0 Guests are viewing this topic.





🚇 🧼 🖂 📿

Author



« on: July 06, 2019, 01:21:33 am »

Hi All,

I finally got tired of the small voltage and current error on my M9712 load, so I started doing calibration on it, I did the voltage just fine, then when I went to do current it was fine until it got to the final step, the 4.5A calibration, it is maxing out my power supply at 10A, so I entered the actual current and finished the cal, it is displaying the correct current, but it does not set to the correct current!

If I set it to 1A it actually runs at 1.7A (and shows this on the display), if I try and set anything less than 0.5A it doesn't load up at all... if I set to 3A I get 7A actual and if I set to 4.5A (the set point of calibration) I get in excess of 10A.

Very odd, has anyone else come across this and know how to rectify it?

I have attached the only calibration info I could find, if you have something better then please post it!

Another interesting error is that if I set it to resistance mode instead, it gives the same results as setting the current, IE 10 Ohms on a 10V supply is giving me 1.7A.

Note that this calibration sheet is a bit mixed up and is based on the M98xx but also shows the M97xx.

I am just wondering if I need an even bigger power supply to see if it needs more Amperage to be able to set it correctly, I do have a 35A Astron supply here, but I am not sure that is the issue at this point.

« previous next »

Quote

Reply

Say Thanks

■ TheDefpom

Frequent Contributor

Posts: 272

Country:

YouTuber Nerd

🚇 🧼 🖂 📿

□ 2N3055

Posts: 2090

Country: 3

Super Contributor

☐ HighVoltage

☐ TheDefpom

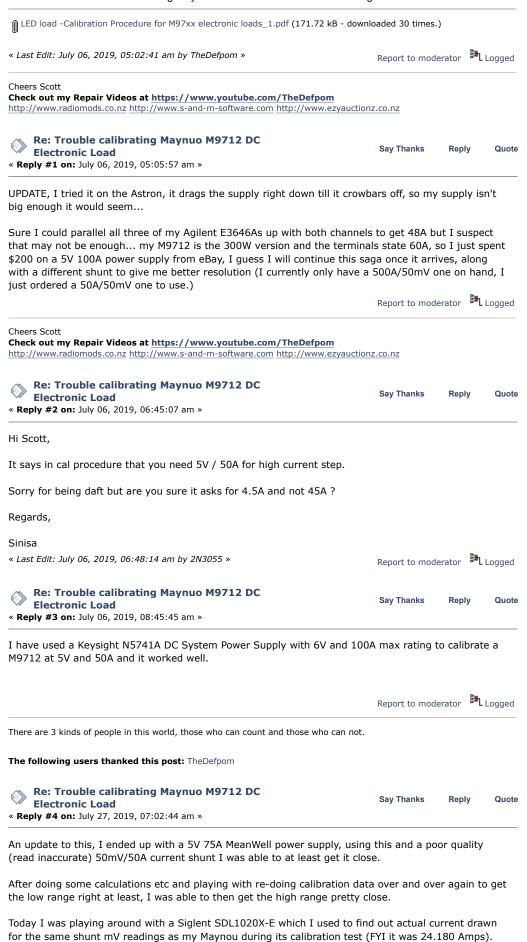
Frequent Contributor

Super Contributor

DANGER

HIGH VOLTAGE Posts: 4252 Country:

<u>...</u> Q



Posts: 272 Country:

YouTuber Nerd Quad Nerd

As the first three calibration points are all below 10A I was able to use my Siglent SDM3065X to measure the actual currents, making those easy, the hard part was my shunt not being the 1.0mOhm

(0.001 Ohm) it was supposed to be, it was more like 1.12857mOhm, BUT it also changed resistance noticeably with temperature, I measured it as high as 1.15027mOhm after I had about 30 amps running through it for 5 minutes (even though it didn't feel warm to the touch).

So as a starting point to at least get you up and running if you completely lose your calibrating data, try using these values for your current calibration:

Step 1: 0.21328 Step 2: 2.4180 Step 3: 0.5207 Step 4: 24.1800

Note, you MUST still have a high current 5V supply connected at all times, as it seems to check for the actual value at the time of entering the calibration data at each step, failing to have a current/voltage present will result in "Unreg" showing on the display when trying to use the load (even if you have a supply going to it).

And I also found one other interesting point on my unit, I was expecting it to go up to 60A (as marked on the front panel), it doesn't it can only go up to 30A... I have never tried using that high a current so this finding surprised me, I thought it could do it... oh well.

« Last Edit: July 27, 2019, 07:07:16 am by TheDefpom »

Report to moderator Logged



Cheers Scott

Check out my Repair Videos at https://www.youtube.com/TheDefpom

http://www.radiomods.co.nz http://www.s-and-m-software.com http://www.ezyauctionz.co.nz

Re: Trouble calibrating Maynuo M9712 DC **Electronic Load**

Say Thanks Reply Quote

« Reply #5 on: July 27, 2019, 08:02:55 am »

Quote from: TheDefpom on July 27, 2019, 07:02:44 am

And I also found one other interesting point on my unit, I was expecting it to go up to 60A (as marked on the front panel), it doesn't it can only go up to 30A... I have never tried using that high a current so this finding surprised me, I thought it could do it... oh well.

Mine is the M9712 (not the B or C variant), I was thrown as the output terminals have "60A Max"

The menu system only allows a maximum current of 30A so definitely not a problem with that.

HI Scot,

Good to hear you were successful and thanks for sharing the details.

As for max current, which exact version do you have?

Re: Trouble calibrating Maynuo M9712 DC

9712 is 30A/150V, 9712B is 15A/500V and 9712C is 60A/150V. All are 300W.

Regards, Sinisa

Report to moderator Logged

Report to moderator Logged

Reply

Sav Thanks

Say Thanks



Quote

Quote

□ TheDefpom

■ 2N3055

Posts: 2090

Country: 🔔 🖂 💭

Super Contributor

Frequent Contributor





Country:





Cheers Scott

Electronic Load

marked below them!

« Reply #6 on: July 27, 2019, 08:09:29 am »

Check out my Repair Videos at https://www.youtube.com/TheDefpom

http://www.radiomods.co.nz http://www.s-and-m-software.com http://www.ezyauctionz.co.nz

The following users thanked this post: 2N3055

☐ HighVoltage

Super Contributor



HIGH VOLTAGE Posts: 4252

Country:



Re: Trouble calibrating Maynuo M9712 DC **Electronic Load**

« Reply #7 on: July 27, 2019, 08:27:52 am »

Nice calibration job!

My M9712 goes to 60A, so I guess I have the M9712C, although the screen print says M9712. Another interesting fact about a China made instrument.

Actually I am surprised how good the M9712 works and I have mine for several years already.

Report to moderator Logged

There are 3 kinds of people in this world, those who can count and those who can not.

Re: Trouble calibrating Maynuo M9712 DC

■ 2N3055

Super Contributor



Posts: 2090 Country: <u>₽</u> 🖂 🗘

Quote from: HighVoltage on July 27, 2019, 08:27:52 am Nice calibration job!

Electronic Load

« Reply #8 on: July 27, 2019, 09:27:37 am »

My M9712 goes to 60A, so I guess I have the M9712C, although the screen print says M9712. Another interesting fact about a China made instrument.

Actually I am surprised how good the M9712 works and I have mine for several years already.

Same here, i have M9812 LED that has two loop response types, so it works better with sources that are sensitive to difficult loads..

No problems so far...

Report to moderator Logged

Pages: [1] Go Up

REPLY

NOTIFY

MARK UNREAD

SEND THIS TOPIC

Say Thanks

Reply

Quote

PRINT SEARCH

« previous next »

Share me

















EEVblog Electronics Community Forum » Products » Test Equipment » Trouble calibrating Maynuo M9712 DC Electronic Load

LINK TO CALENDAR

Jump to: | => Test Equipment ▼ | go

Quick Reply

Order PCB, get components free! Order PCBA,get PCB free!







BUDGET MULTIMETERS!!

ANENG, UNI-T and more...





EEVblog Main Site

EEVblog on Youtube

EEVblog on Twitter

EEVblog on Facebook

SMF 2.0.15 | SMF © 2017, Simple Machines Simple Audio Video Embedder SMFAds for Free Forums XHTML RSS Mobile WAP2