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Topic: **Maynuo M9711 DC Electronic Load. Any good?** (Read 11394 times)


volvo_nut_v70 and 0 Guests are viewing this topic.

GNU_Ninja

Regular Contributor



Posts: 200

Country: 

Mostly Harmless



 **Maynuo M9711 DC Electronic Load. Any good?**

« on: September 24, 2015, 07:49:36 am »

[Say Thanks](#)
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I'm looking to buy a DC Electronic Load and this is at the top of my shortlist: Maynuo M9711

<http://www.dc-electronic-load.com/Maynuo-M9711-DC-Electronic-Load-150W-30A-150V-p24670607.html?gclid=CKPLhOOUj8gCFWwUwwood3h4IGg>

It looks like a knockoff of the BK Precision units, but quite a bit cheaper (£270 on amazon.uk). I have done a search on the forum, but couldn't find anything on this item.

So, is the M9711 a good buy or a piece of junk to be avoided at all cost?

Thanks in advance. 😊

[Report to moderator](#)  [Logged](#)

Electro Fan

Super Contributor



Posts: 1896



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #1 on: September 24, 2015, 08:01:19 am »

[Say Thanks](#)
[Reply](#)
[Quote](#)

Don't know about the 9711 but the 9712 is an excellent piece of equipment. Very good User Interface and pretty/very accurate. I'm sure if you do some more searching on EEVblog (or just type "Maynuo EEV" into Google) you will find more feedback from Maynuo users - and also feedback on the other brands of electronic loads. It's not something that is likely to be used by most folks as much as a power supply or oscilloscope or DMM but if you need or want an electronic load you will probably enjoy a Maynuo. EF

PS, It's probably easiest to deal with a local distributor but if you call the factory in China they will

probably answer and offer friendly service. Maynuo was pretty attentive at the factory when I called with questions a couple years ago.

<https://www.eevblog.com/forum/testgear/first-use-of-maynuo-m712-electronic-load/>

« Last Edit: September 24, 2015, 08:11:51 am by Electro Fan »


Report to moderator  Logged

Mr.B

Supporter



Posts: 1035

Country: 



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #2 on: September 24, 2015, 08:04:08 am »

Say Thanks Reply Quote

I have a Maynuo M9710.

I am quite impressed with mine.

I have taken it apart and the general construction is of pretty good quality.

I have tested all of the available functions and all perform within spec.

Mine worked out a little more expensive than the one you reference.

If it is only for hobby/enthusiast use, then go for it.

Report to moderator  Logged

Time is the overseer of all things.

H.O

Frequent Contributor



Posts: 613

Country: 



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #3 on: September 24, 2015, 08:09:38 am »

Say Thanks Reply Quote

There's actually quite a bit of info for the Maynuo M97 series electronic loads on the forum, I'm surprised you didn't find any.

I've had the 300W (M9812) model for a couple of years and I'm quite happy with it. (It's the only E-load I've used though so I can't really compare it to anything). I like its display a lot better than the BK version and the general verdict on the PC software seems to go in Maynuos favour.

Make sure you get the dedicated communication cable if you intend to use with a PC (or build one yourself if that's your cup of tea) - it provides level shifting and isolation between the E-load and the PC.

Report to moderator  Logged

Electro Fan

Super Contributor



Posts: 1896



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #4 on: September 24, 2015, 08:21:00 am »

Say Thanks Reply Quote

Yes, like H.O. says, don't forget the communications cable (make sure it's included in the price) if you want it. If you haven't checked prices and suppliers on Amazon it might be worth a look there too.

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D3f1ant

Frequent Contributor



Posts: 344

Country: 

Doing as little as possible, but no less.



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #5 on: September 24, 2015, 08:31:04 am »

Say Thanks Reply Quote

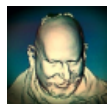
I have one too, its great. There are a few rebrands of them, but I think Maynuo is the OEM. Dave uses a BK Precision, which looks identical in his videos.

The DB9 (that looks like a RS232 port) on the back is TTL level (and has 5V supply on Pin1), ideally you want an isolated converter but if your desperate and have an isolated DUT you can just use a USB TTL converter cable. The software is not very impressive, but its free.


Report to moderator  Logged

GNU_Ninja

Regular Contributor



Posts: 200

Country: 

Mostly Harmless



 **Re: Maynuo M9711 DC Electronic Load. Any good?**

« Reply #6 on: September 24, 2015, 08:32:09 am »

Say Thanks Reply Quote

Quote from: H.O on September 24, 2015, 08:09:38 am

There's actually quite a bit of info for the Maynuo M97 series electronic loads on the forum, I'm surprised you didn't find any.

Just tried using the advanced search options on the Forum, and you're right, quite a bit of stuff on the M9711. The 'simple' search didn't turn up anything. So lesson learned, use advanced search in future



Report to moderator Logged

 GNU_Ninja

Regular Contributor



Posts: 200

Country:

Mostly Harmless

 **Re: Maynuo M9711 DC Electronic Load. Any good?**

Say Thanks

Reply

Quote

« Reply #7 on: September 24, 2015, 08:38:16 am »

Quote from: Electro Fan on September 24, 2015, 08:21:00 am

Yes, like H.O. says, don't forget the communications cable (make sure it's included in the price) if you want it. If you haven't checked prices and suppliers on Amazon it might be worth a look there too.

Good point. Cable not mentioned on amazon. I could probably knock up an isolated serial cable, so not really a major problem 😊

Report to moderator Logged

 Electro Fan

Super Contributor



Posts: 1896

 **Re: Maynuo M9711 DC Electronic Load. Any good?**

Say Thanks

Reply

Quote

« Reply #8 on: September 24, 2015, 09:00:00 am »

No doubt you could make a cable but you might contact the sellers and ask; it might be included with some offers and not with others - it will help you compare the prices. (Or you could contact Maynuo and ask them if it is generally included with a DC load and then confirm with your preferred seller.)

Two models, various prices:

<http://www.ebay.com/itm/M133-USB-R232-Cable-for-MAYNUO-M97-M98-series-Programmable-DC-Electronic-Load-/231457665117?hash=item35e3f3b05d>

<http://www.ebay.com/itm/M131-R232-R232-Cable-for-Maynuo-M97-M98-series-Programmable-DC-Electronic-Load-/371143612185?hash=item5669e21719>

<http://www.ebay.com/itm/M133-USB-R232-Cable-for-Maynuo-M97-M98-series-Programmable-DC-Electronic-Load-/221550539378?hash=item339570f272>

« Last Edit: September 24, 2015, 09:03:15 am by Electro Fan »

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 Pinkus

Frequent Contributor



Posts: 602

 **Re: Maynuo M9711 DC Electronic Load. Any good?**

Say Thanks

Reply

Quote

« Reply #9 on: September 24, 2015, 01:29:51 pm »

I have one too 9712 with 300 Watt (from Maynuo which is the manufacturer, BK Precision is just adding their label on it and adding \$100) and I can highly recommend it. The UART/USB cable can be produced by yourself easily. There are some schematics around (I think even at this forum). If I were you I would purchase the 300 Watt version 9712 instead the 150 Watt 9711.

Report to moderator Logged

 GNU_Ninja

Regular Contributor



Posts: 200

Country:

Mostly Harmless

 **Re: Maynuo M9711 DC Electronic Load. Any good?**

Say Thanks

Reply

Quote

« Reply #10 on: September 24, 2015, 02:11:18 pm »

Quote from: Pinkus on September 24, 2015, 01:29:51 pm

The UART/USB cable can be produced by yourself easily.

Have downloaded and read the user manual and confirmed that the cable is an optional extra. So I'll certainly build my own as I'm not ponying up an extra £50 for a mere isolated TTL/USB level converter (or dongle, as the manual calls it). I'm from Yorkshire 😊. Also, it seems the thing uses Modbus protocol 🤖 I can live with that too as I dabble in Modbus at work.

Will probably order one next payday 😊

Report to moderator Logged

 zapta

Super Contributor



Posts: 6004

Country:

 **Re: Maynuo M9711 DC Electronic Load. Any good?**

Say Thanks

Reply

Quote

« Reply #11 on: September 24, 2015, 02:49:58 pm »

The 97xx are of lower quality and are intended for the Chinese market only. The 98xx are of better quality are exported by Maynuo to western markets.

I learned this when I purchased my 9811 directly from Maynuo. Got a good price for 9811 + USB cable + 48h DHL shipping. Didn't have to pay any tax on this end. Am very happy with it.

[Report to moderator](#)  Logged

Drain the swamp.

H.O

Frequent Contributor



Posts: 613

Country: 



 **Re: Maynuo M9711 DC Electronic Load.**
Any good?

[Say Thanks](#)

[Reply](#)

[Quote](#)

« **Reply #12 on:** September 24, 2015, 04:07:31 pm »

Quote

The 97xx are of lower quality and are intended for the Chinese market only.

I wonder if that is really the case.... If Maynuo told you that *my* guess is they had plenty of the M98 series in stock 😊

As far as I can see the only difference in the specifications is that the M97 has a 35mOhm short circuit resistance while the M98 has 28mOhm. Featurewise the M98xx has a dedicated mode for testing LED drivers (however that works, I don't know anything about it).

I'd be surprised if there is any actual differences in build quality and/or component selection internally.

Why don't we open up our M9712 and M9812 and do a side by side comparison? It could be interesting to see what the differences actually are (if any).


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zapta

Super Contributor



Posts: 6004

Country: 



 **Re: Maynuo M9711 DC Electronic Load.**
Any good?

[Say Thanks](#)

[Reply](#)

[Quote](#)

« **Reply #13 on:** September 24, 2015, 04:54:19 pm »

Quote from: H.O on September 24, 2015, 04:07:31 pm

Why don't we open up our M9712 and M9812 and do a side by side comparison? It could be interesting to see what the differences actually are (if any).

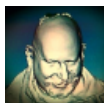
Since you have a M9812, anybody is willing to post internal pictures of a M9712?

[Report to moderator](#)  Logged


Drain the swamp.

GNU_Ninja

Regular Contributor



Posts: 200

Country: 

Mostly Harmless



 **Re: Maynuo M9711 DC Electronic Load.**
Any good?

[Say Thanks](#)

[Reply](#)

[Quote](#)

« **Reply #14 on:** September 24, 2015, 05:19:47 pm »

Quote from: zapta on September 24, 2015, 04:54:19 pm

Quote from: H.O on September 24, 2015, 04:07:31 pm

Why don't we open up our M9712 and M9812 and do a side by side comparison? It could be interesting to see what the differences actually are (if any).

Since you have a M9812, anybody is willing to post internal pictures of a M9712?

I'm getting the M9711 so when it arrives I'll certainly void the warranty and post some pictures of its internals 😊


[Report to moderator](#)  Logged

darrylp

Regular Contributor



Posts: 127

Country: 



 **Re: Maynuo M9711 DC Electronic Load.**
Any good?

[Say Thanks](#)

[Reply](#)

[Quote](#)

« **Reply #15 on:** September 24, 2015, 05:27:04 pm »

My 9811 is actually 200 watts 150 volts Max.

Sent from my HTC One using Tapatalk 2

[Report to moderator](#)  Logged

IanJ

Supporter



Posts: 992

Country:

Pro EE guy many years ago, now a hobby/home biz.



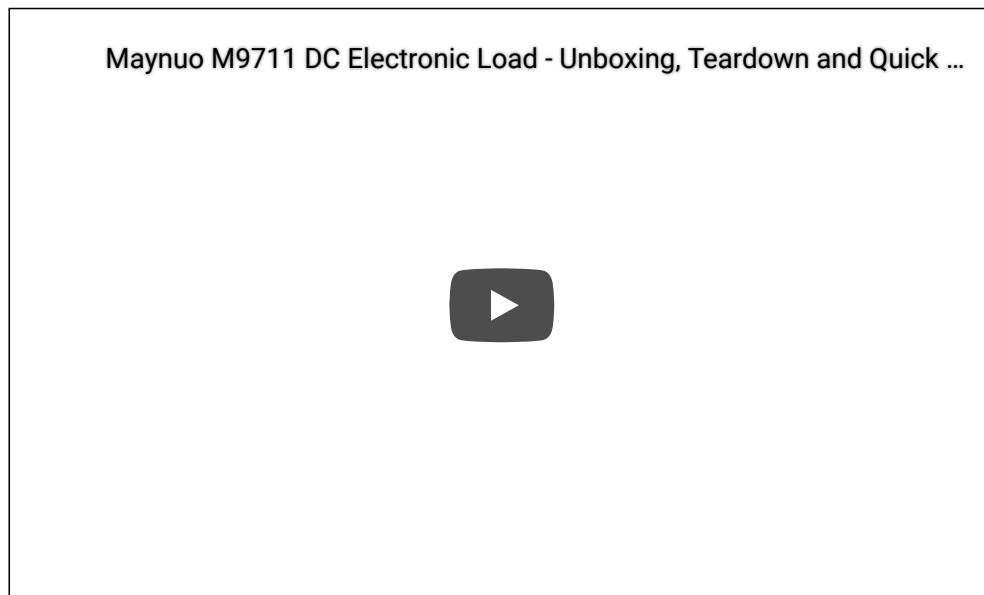
Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #16 on: September 24, 2015, 06:14:35 pm »

Hi all,

Gerry Sweeney did a teardown of his M9711. I looked inside my M9811 and it's about identical as I can see a quick look at Gerry's video.



Interestingly, there is an unpopulated bank on both the 9711 & the 9811.....so at least the PCB looks easily upgraded.....not sure about the firmware differences though.

NB. 8051F34 microcontroller looks to be at the heart of the unit.

Ian.

« Last Edit: September 24, 2015, 06:18:51 pm by IanJ »

Report to moderator Logged

Ian Johnston
www.ianjohnston.com
Manufacturer of the PDVS2 & PDVS2mini

bson

Supporter



Posts: 1554

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #17 on: September 24, 2015, 07:09:43 pm »

Any of you who have the USB cable that might be able to check what chip they use? Wondering if there's a stock Linux driver for it.

Report to moderator Logged

zapta

Super Contributor



Posts: 6004

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #18 on: September 24, 2015, 08:07:52 pm »

Quote from: bson on September 24, 2015, 07:09:43 pm

Any of you who have the USB cable that might be able to check what chip they use? Wondering if there's a stock Linux driver for it.

Mine has the two ICs scraped (got it directly from Maynuo) but the DB9 connector on the back of load says Com (TTL).

Report to moderator Logged

Drain the swamp.

georges80

Frequent Contributor



Posts: 806

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

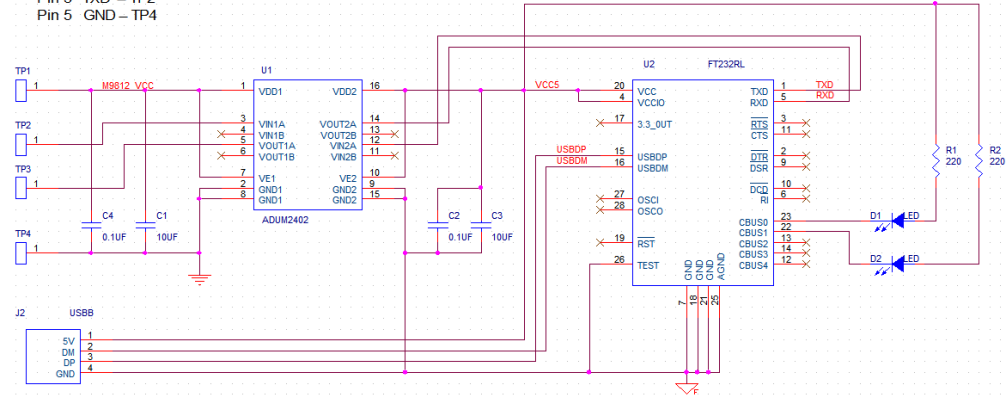
« Reply #19 on: September 24, 2015, 09:24:52 pm »

Easy to make your own. Here's the schematic of the one I built for myself. Direct plug-n-play with the Maynuo software.

Put it on a PCB. The USB is on the PCB and then I just used a short cable to go to a D connector to plug into the back of the box.

cheers,
george.

DB9 Connections to M9812
Pin 1 +5V - TP1
Pin 2 RXD - TP3
Pin 3 TXD - TP2
Pin 5 GND - TP4



ScreenShot003.gif (25.87 kB, 1164x560 - viewed 846 times.)

Report to moderator

H.O

Frequent Contributor



Posts: 613

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #20 on: September 25, 2015, 05:55:48 am »

Quote

Since you have a M9812, anybody is willing to post internal pictures of a M9712?

Actually, what I've got is the M9712 - not M9812 as I wrote earlier. I wasn't at home and took the number out of memory, I was wrong. Sorry about that.

I'll be happy to post pictures of my M9712 but it'll have to wait a couple of days.

Report to moderator

H.O

Frequent Contributor



Posts: 613

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #21 on: September 28, 2015, 04:04:28 pm »

Hi,

So I opened up my M9712 and took some photos. I'll be showing what I think is interesting for comparing it against the "better quality" M9812 to see if there really is any difference in build quality and/or component selection.

1 - Overview.

Simply an overview of the inside of instrument.

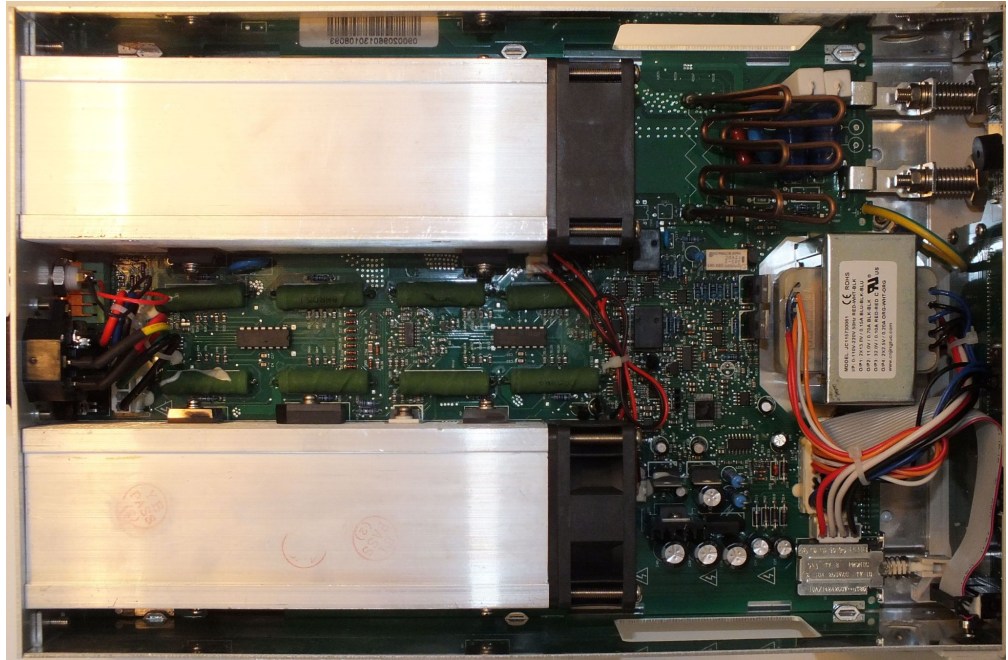
2 - Power input.

Nice heatshrinking, cable ties (though I don't like to cut my hands on the sharp/pointy ends of them when not clipped properly (personal pet peeve of mine)). Connectors "glued" in place. Shake proof washers on the semiconductors.

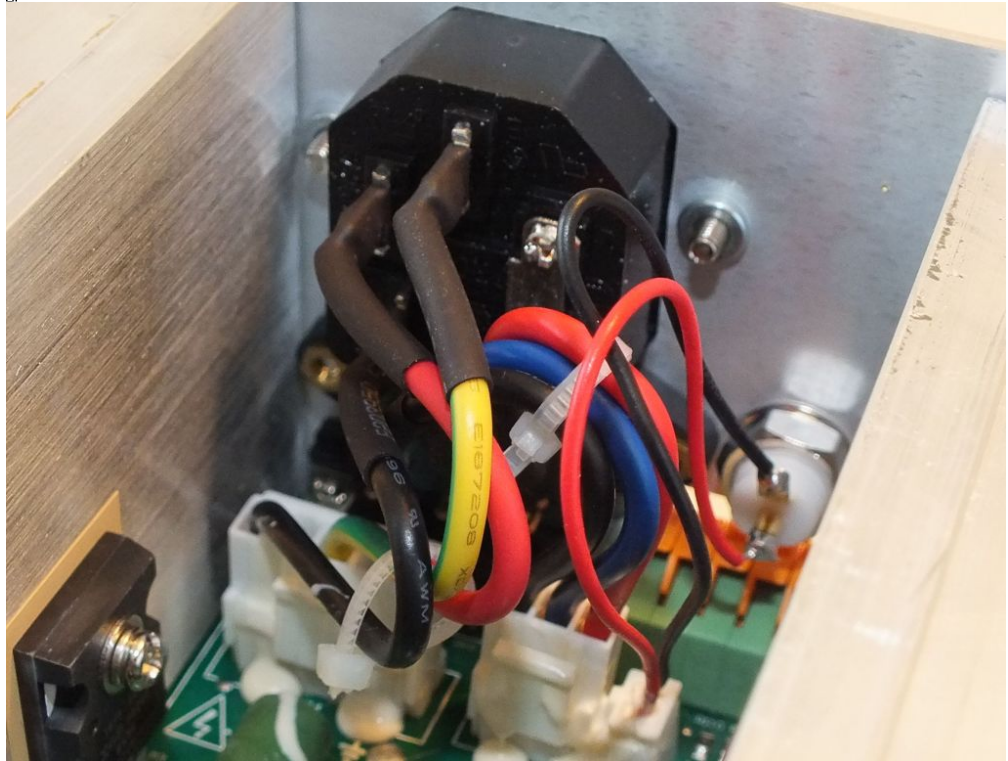
3 - Current shunt. Excess solder and I don't really like the fact that one of the shunts is in direct contact with one of the capacitors. I'll rectify that.

4 - Input jacks. Looks alright to me.

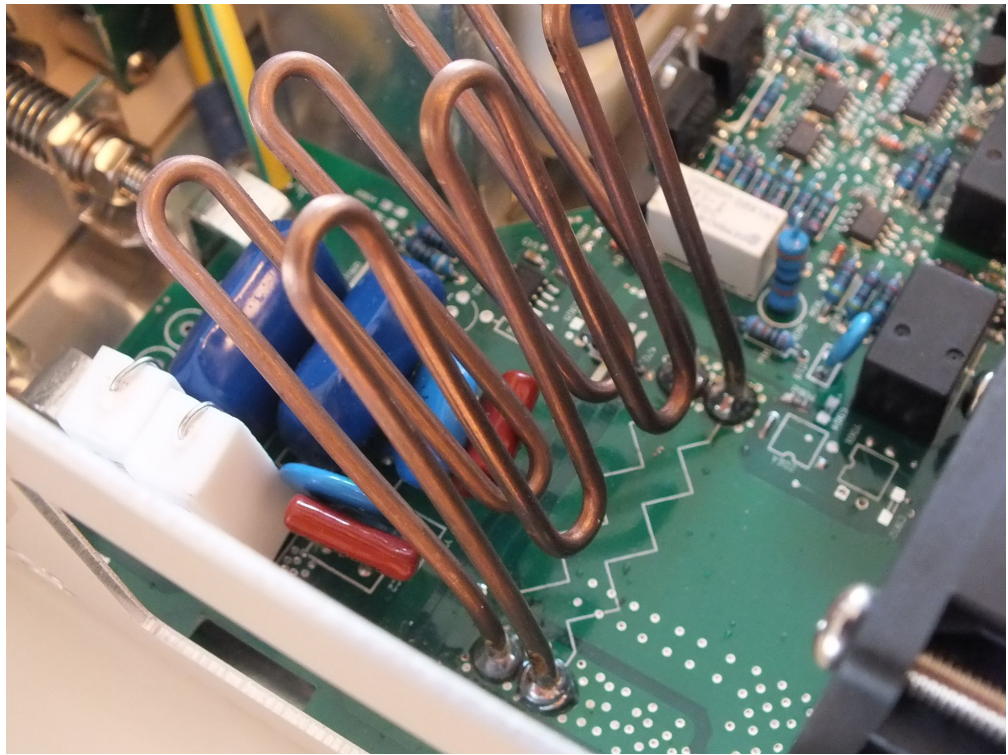
More in next post.



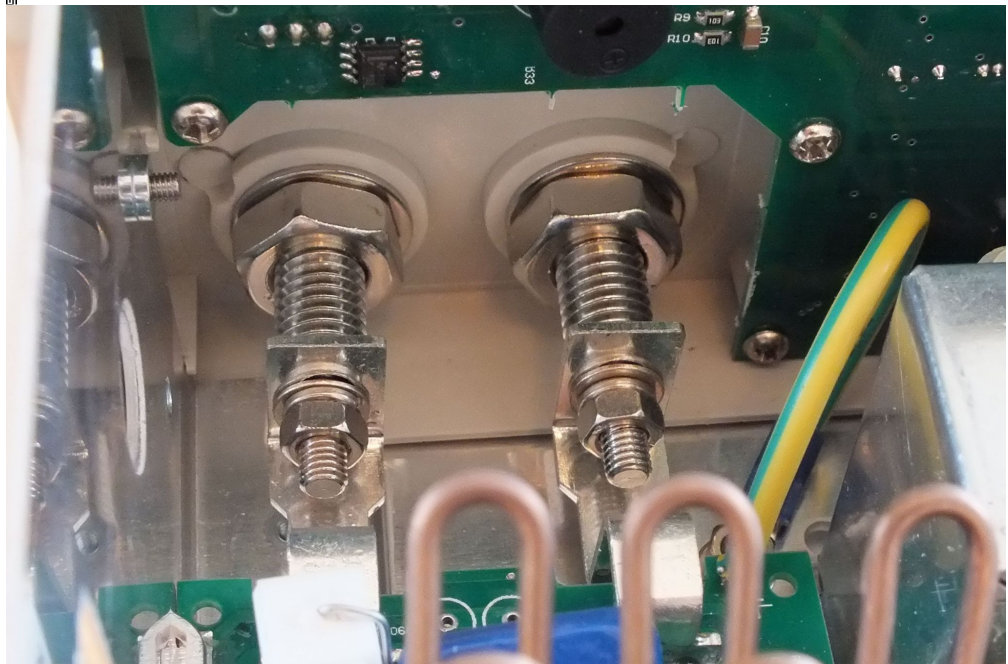
1 - Overview.jpg (480.02 kB, 2048x1351 - viewed 690 times.)



2 - Power input.jpg (164.12 kB, 1024x776 - viewed 588 times.)



3 - Current shunt.jpg (452.85 kB, 2048x1536 - viewed 701 times.)



4 - Input jacks.jpg (397.88 kB, 2048x1347 - viewed 605 times.)

« Last Edit: September 28, 2015, 04:39:22 pm by H.O »

Report to moderator Logged

zapta
 Super Contributor

 Posts: 6004
 Country:

Re: Maynuo M9711 DC Electronic Load. Any good?
 « Reply #22 on: September 28, 2015, 04:09:47 pm »

Say Thanks Reply Quote

Can you take a picture of the caps? Showing their brand, etc. Also, agency certification labels, if any.

Report to moderator Logged

Drain the swamp.

The following users thanked this post: mig_skyfighter

H.O
 Frequent Contributor

Re: Maynuo M9711 DC Electronic Load. Any good?
 « Reply #23 on: September 28, 2015, 04:12:34 pm »

Say Thanks Reply Quote



Posts: 613

Country:



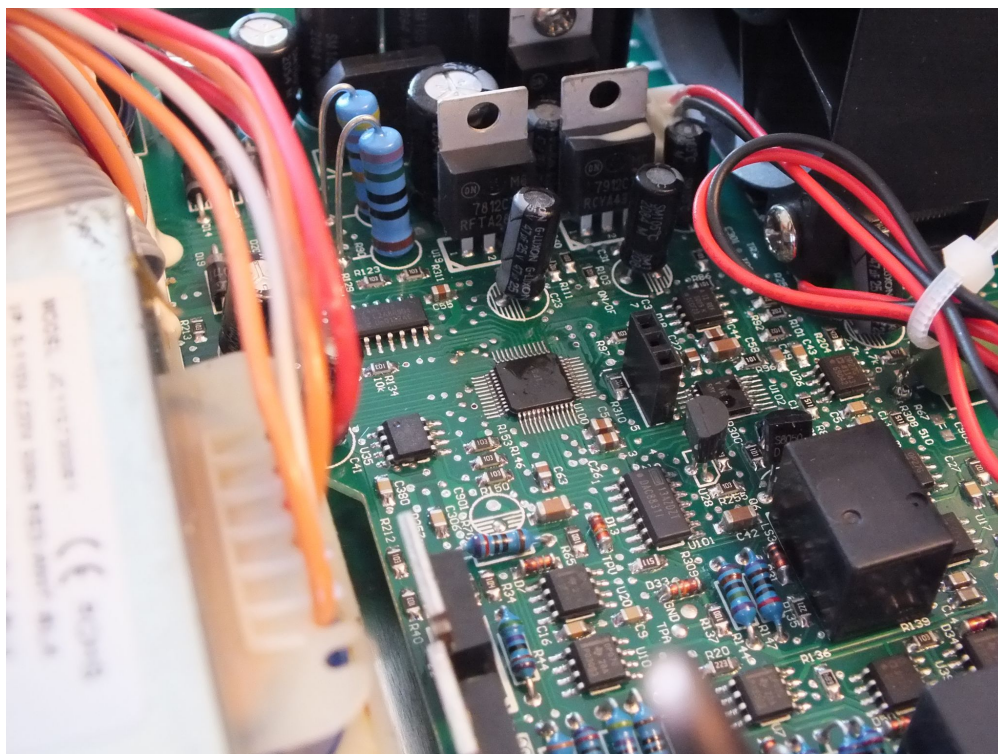
Continued from previous post.

5 - Control section. Just a general overview. G-Luxeon brand electrolytics....

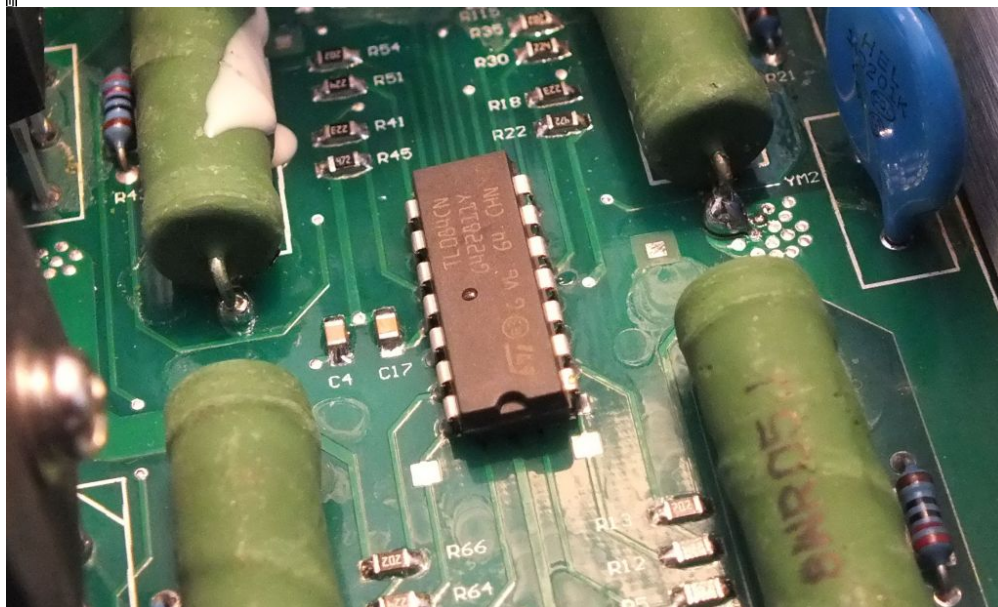
6 - Power section. Again the soldering doesn't look that great and there's some flux residue left on the PCB (which is the case in several places).

7 - Power section. Another view, a bit of misalignment on the TO220 device.

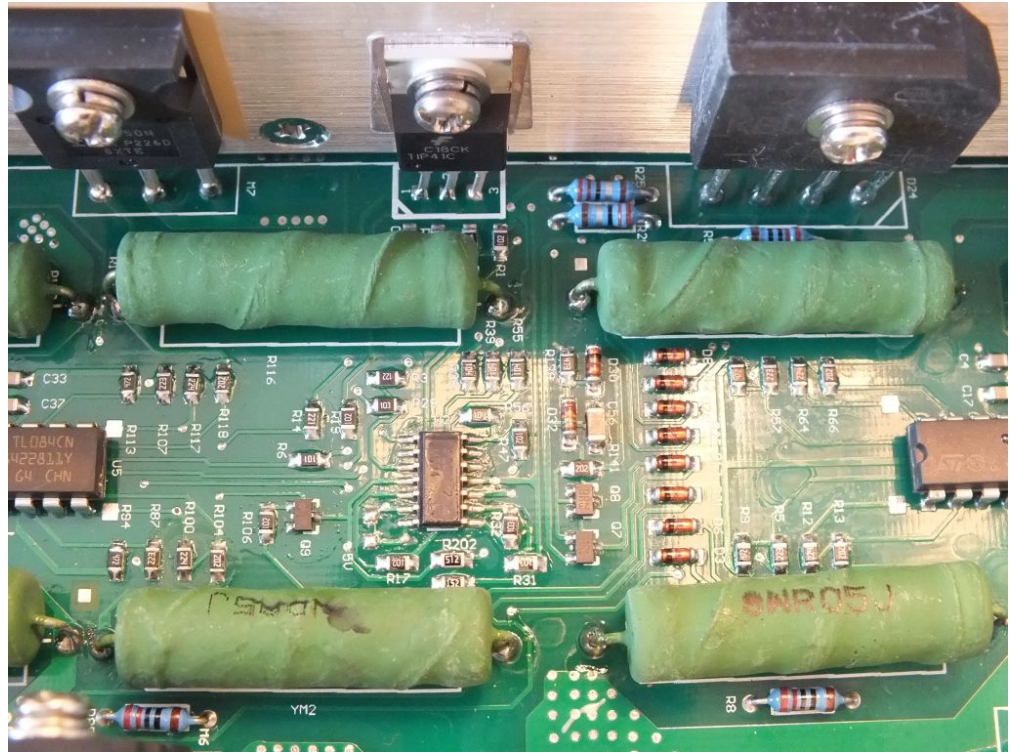
So, this is what MY M9712 looks like inside. Is it on par with other M9712 units and how does it look compared to a M9812 which is supposedly of "better quality"?



5 - Control section.jpg (506.97 kB, 2048x1536 - viewed 640 times.)



6 - Power section.jpg (168.58 kB, 1024x618 - viewed 671 times.)



7 - Power section.jpg (219.76 kB, 1024x768 - viewed 1262 times.)

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H.O

Frequent Contributor



Posts: 613

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

« Reply #24 on: September 28, 2015, 04:47:00 pm »

Say Thanks Reply Quote

Hi,

The caps are G-Luxeon as shown in picture 5.

I can't seem to find any certification labels, stickers or markings anywhere on the PCB - I haven't taken the PCB out to look at the bottom though.

One thing I forgot to mention, some of the thru hole parts are mounted flush with the boards while others are at an angle as if the leads wasn't bent with the correct distance. It can be seen towards the bottom of picture 5. Not really a problem but since we're comparing build quality I wanted to mention it.

Report to moderator Logged

zapta

Super Contributor



Posts: 6004

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

« Reply #25 on: September 29, 2015, 02:39:26 am »

Say Thanks Reply Quote

I looked at my 9811. It has only one of the two load blocks populated (a fan + a big long heatsink) but overall looks very similar to your picture.

On the back it says CE CAT II.

The label of the transformer seems identical to the 9712 in the pictures.

The caps are also marked with G-Luxon.

However, it has Y901, Y902 and C901 populated which I don't think are populated in the 9712 above. Am not sure what they are for.

My 9811 is about 1y old, I got it directly from Maynuo so probably it was manufactured about that time.

So far I didn't see any indication that the 91xx are of lower quality. It may be an emerging market specific product, like the fluke 107 I am using.

« Last Edit: September 29, 2015, 02:41:03 am by zapta »

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Drain the swamp.

jitter

Frequent Contributor



Posts: 804

Country:



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #26 on: November 13, 2015, 06:04:48 am »

Quote from: H.O on September 28, 2015, 04:04:28 pm

Hi,
So I opened up my M9712 and took some photos. I'll be showing what I think is interesting for comparing it against the "better quality" M9812 to see if there really is any difference in build quality and/or component selection.

I recently acquired a M9812, and keeping in line with this site's creator's slogan, I took it apart. Well, only took off the cover to have a peek inside.

"Better quality"? No way, it looks identical to your pictures, apart from one wire modification around the 74HC... (I forget the refdes, next to C55).
A trace seems to be cut and a wire fix is installed. Will take a pic soon when I'm not using it (reconditioning some relatively new but already tired NiCd battery packs right now, a very slow process when done the right way).

It would be interesting to compare the pcb version. It is not the same as the BK Precision 8500 that Dave did a tear down on (#281). The Maynuo board has no isolation slots and the layout is slightly different. It does look the same as the pics presented here and Gerry Sweeny's teardown of the M9711 already linked to in this thread.

The upper right corner of the pcb of my unit carries this version: MN9711-1.7).

What is remarkable on my unit is that clearly visible rework was done on the uP and the ADC. The datecodes on some of the components are quite old (e.g. 2009 for the power FETs), but on some others recent, so no doubt this is not a refurbished unit, but it did undergo repair or modification at the factory (BTW, not that strange, I am in industrial electronics, and repairing stuff that comes off the assembly line is almost a daily routine for me, so I don't really think anything of it unless this unit were to fail within a short time).

If people are interested I might take some more pics and post them here or start a M9812 thread. Not that they will be very (or any?) different from the M9711/9712/9811 already presented here, apart from that wire fix, that is.

« Last Edit: November 13, 2015, 06:20:56 am by jitter »

Report to moderator

metalphreak

Frequent Contributor



Posts: 815

Country:

<http://d.av.id.au>



Re: Maynuo M9711 DC Electronic Load. Any good?

Say Thanks Reply Quote

« Reply #27 on: November 13, 2015, 07:58:51 am »

M98xx series has some LED driver testing features over the M97xx series, that's it.

The M9710 is a lower-accuracy version of the M9711 for the Chinese market only. Both are 150W and go to 30A/150V.

I have an M9712 which I've had for a while. It's quite good and has the dual line display over the BK precisions, so you get 4 quadrants of data instead of just two.

The Serial comms uses MODBUS encoding. The manual lists the registers. I started a python module for it but never bothered to go much further: <https://github.com/MetalPhreak/pyMaynuo>

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<http://d.av.id.au/blog>

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