

# MERCURY IIS AMP



## Features

- Operating Bands 160m – 6m
- RF Auto Band Decoding
- 7-inch Color Touch Screen
- FWD/REF/SWR Meter
- DI Voltage/DI Current Meter
- All Protection
- Selection for 3 Antennas w/Memory.
- 1200 watts SSB/CW
- 700 watts DIGI mode

mercuryIIIS

LDMOS POWER AMPLIFIER KIT

**Designed and Manufactured in the USA**

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# eHAM.net Review

## Review Summary For : Mercury III HF amplifier kit

Reviews: 48

MSRP: 2200

### Description:

This solid state HF amplifier uses a single LDMOS for fully automatic operation from 160m to 6M making 1200W with input power between 50 and 90W depending on your ALC setting. Protected against antenna SWR over 2 to 1 and also against excessive input power. Builtin power supply for 120 or 240 VAC without changing taps in the transformer, just changing the power cable plug. Fans work silent and color front panel display. Output to three antennas selectable in the display with operator finger.

This is a kit that you put together at home but assembly is very easy to do.

Product is **in production**

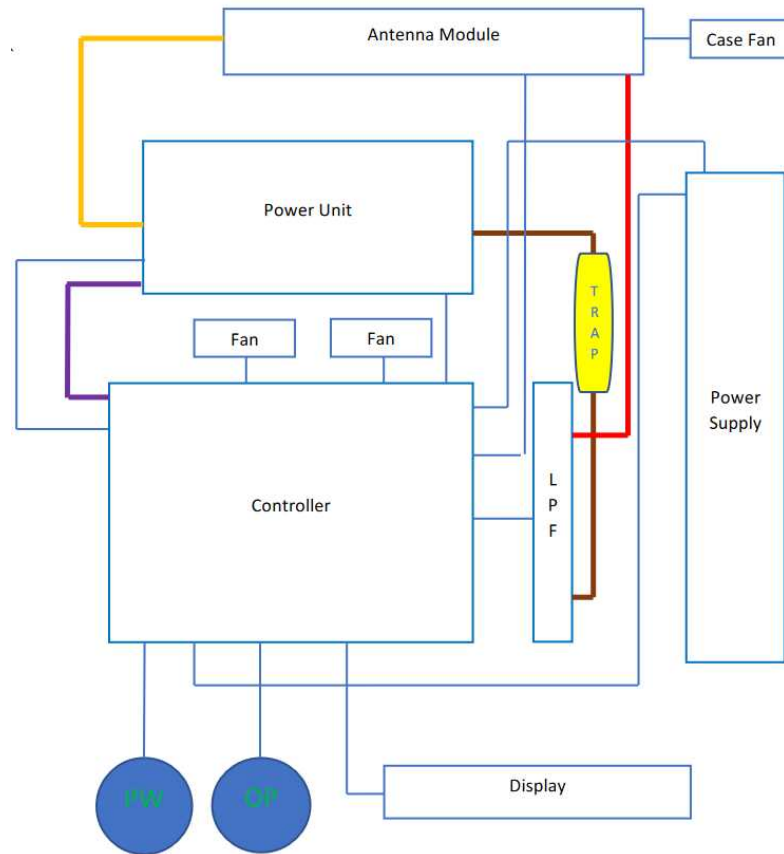


More Info: <http://www.km3km.com>

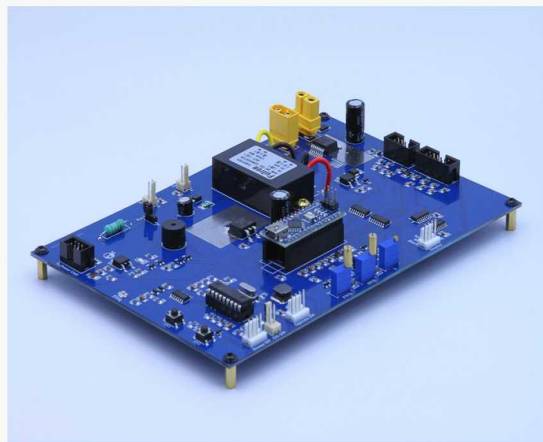
# last 180 days	Avg. Rating last 180 days	Total reviews	Avg. overall rating
21	5	48	5 ★★★★★



# Block diagram

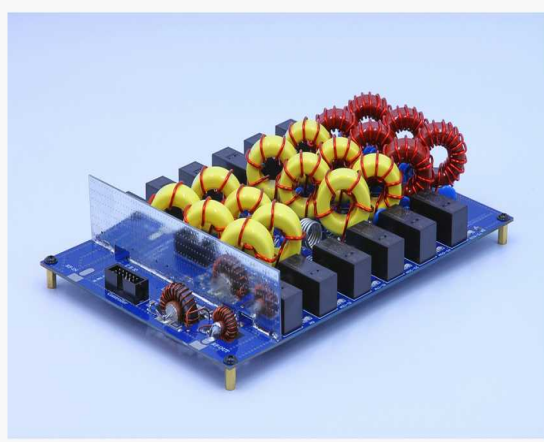


# AMP Modules



## Controller

RF Band Decoder. SWR/FWD Meters. V/C Meters. ALL Protections for LDMOS. Relays and Fans Driver.



## Low Pass Filter

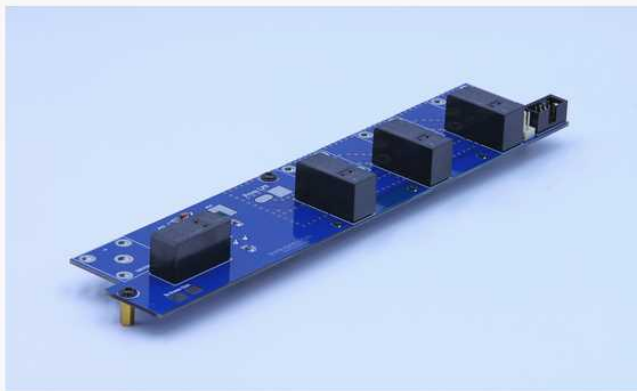
1.8 – 54 MHz Ham Radio Segments  
Chebyshev Filters. 1500 Watts SSB. SWR  
Coupler on Board.



## Power Unit

1200 Watts HF. BLF189 LDMOS .0.5 Inch  
Copper Spreader. Temperature sensor on  
Board.

# AMP MODULES



## Antenna Module

1500 Watts HF. 3 Antenna  
Switches. ALC Circuit.



## Display

7 Inch Resistive Touch Color  
Screen. 800×480 pixel.  
Touches >1 million . Backlight  
lifetime >30,000 Hours

# AMP MODULES



## Case

L13.5 x W12 x H5.5 Inch's.  
18GAGE, COLD ROLLED  
STEEL. Paint Federal  
Standard 595 FLAT BLACK

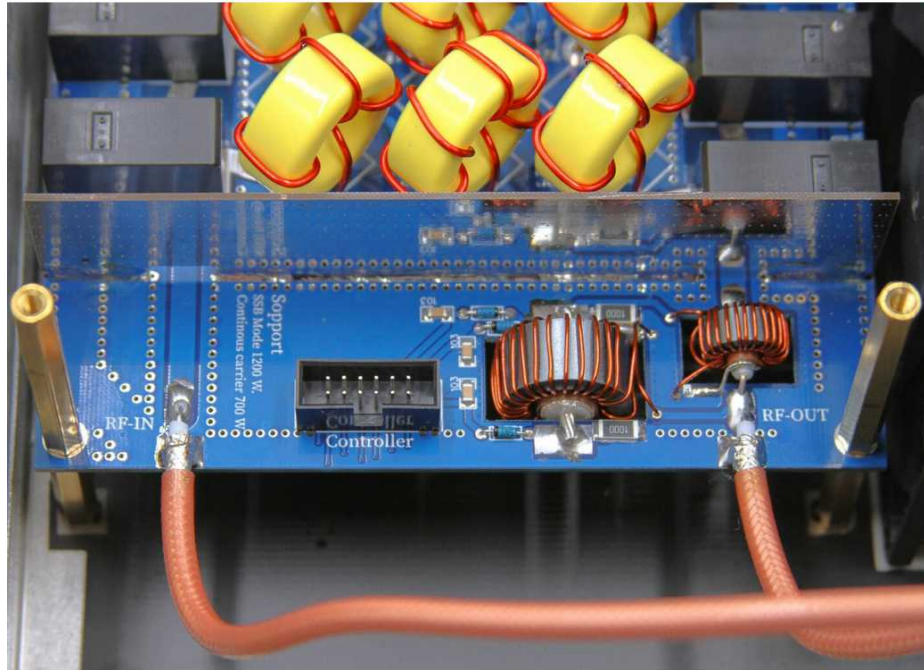


## Power Supply

120-240v Auto-sensing  
Voltage. 53V/65A DC output.  
MTBF >500.000 Hours.

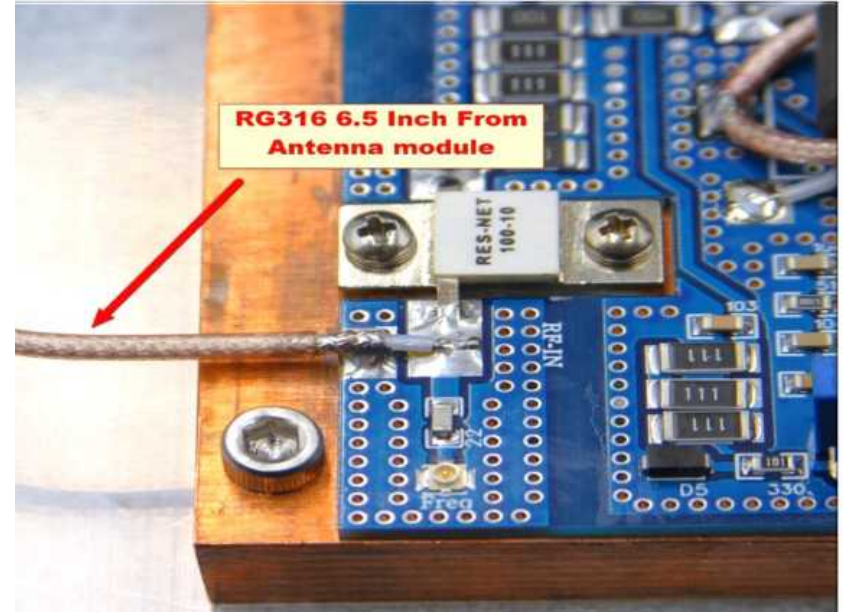
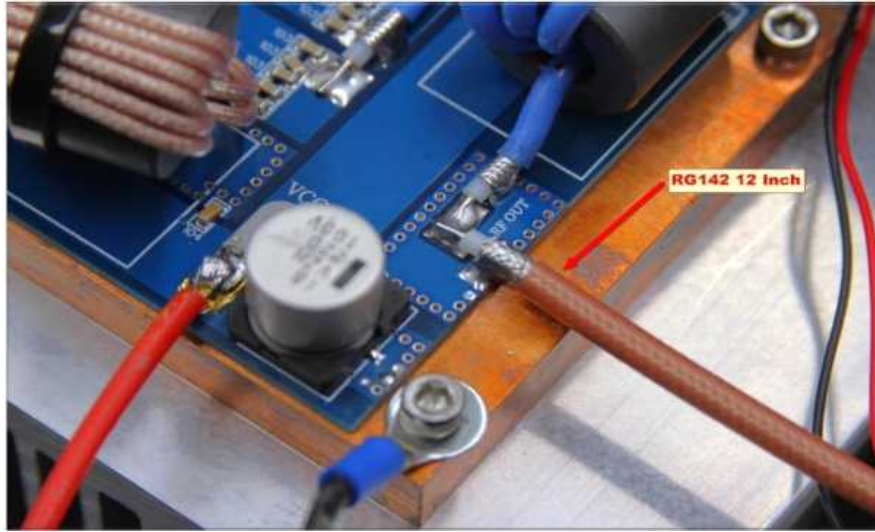


# Solder welds



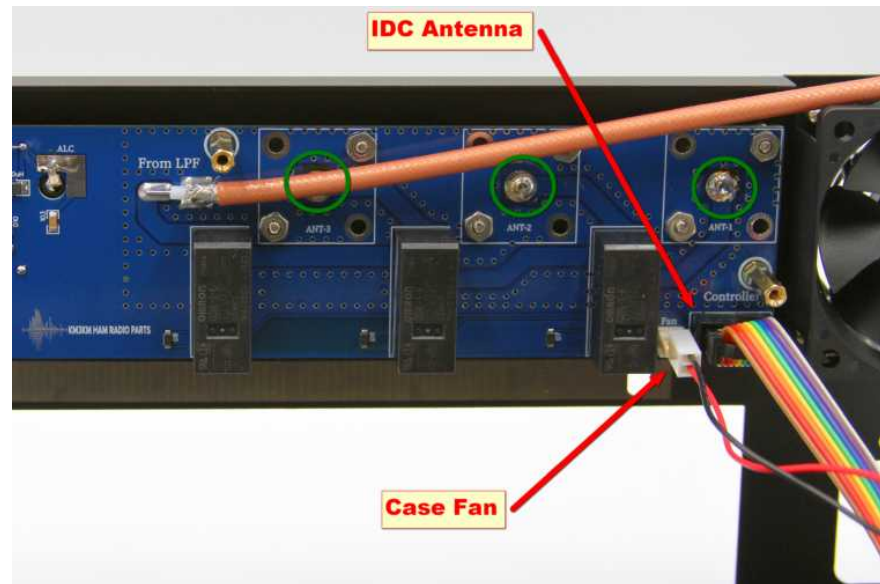
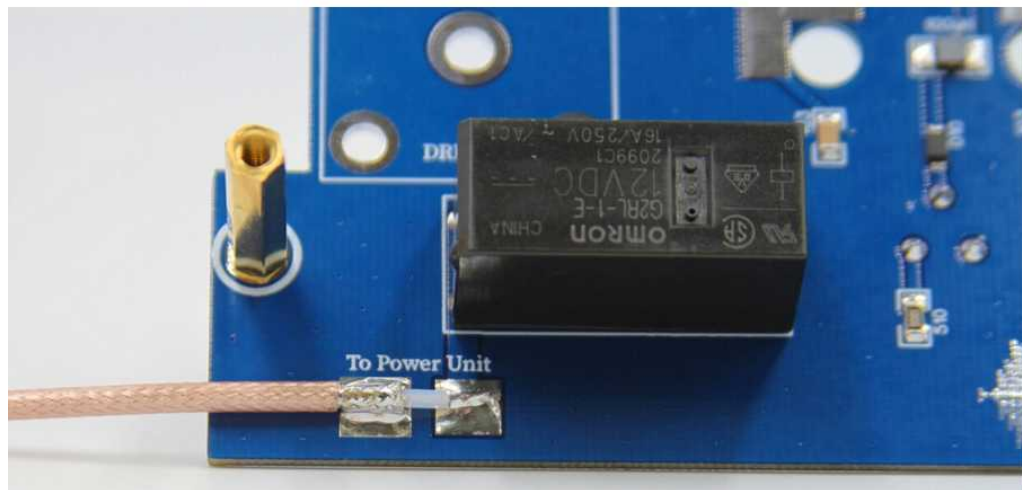
Low pass filter board

# More solder welds



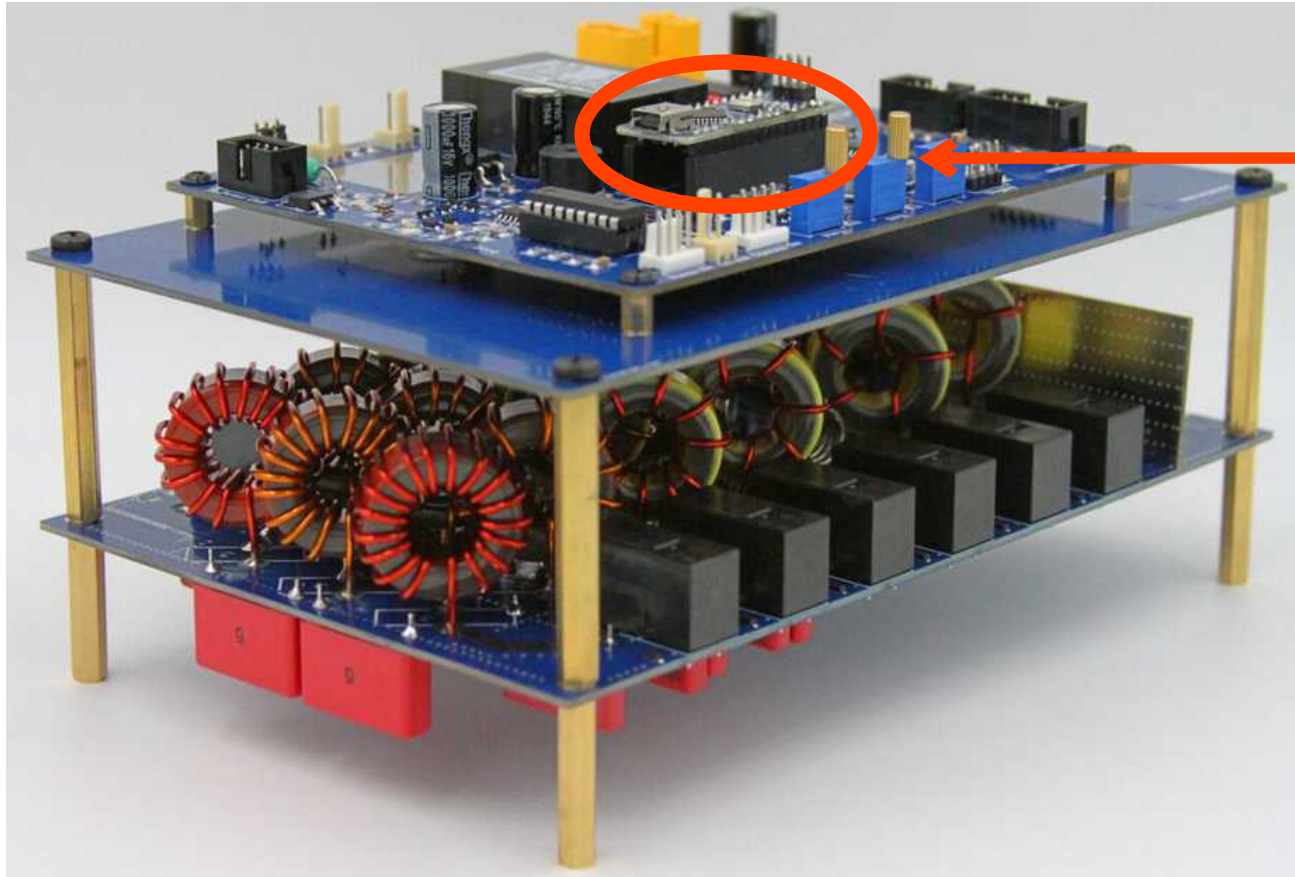
**Power Unit**

# Solder welds cont.



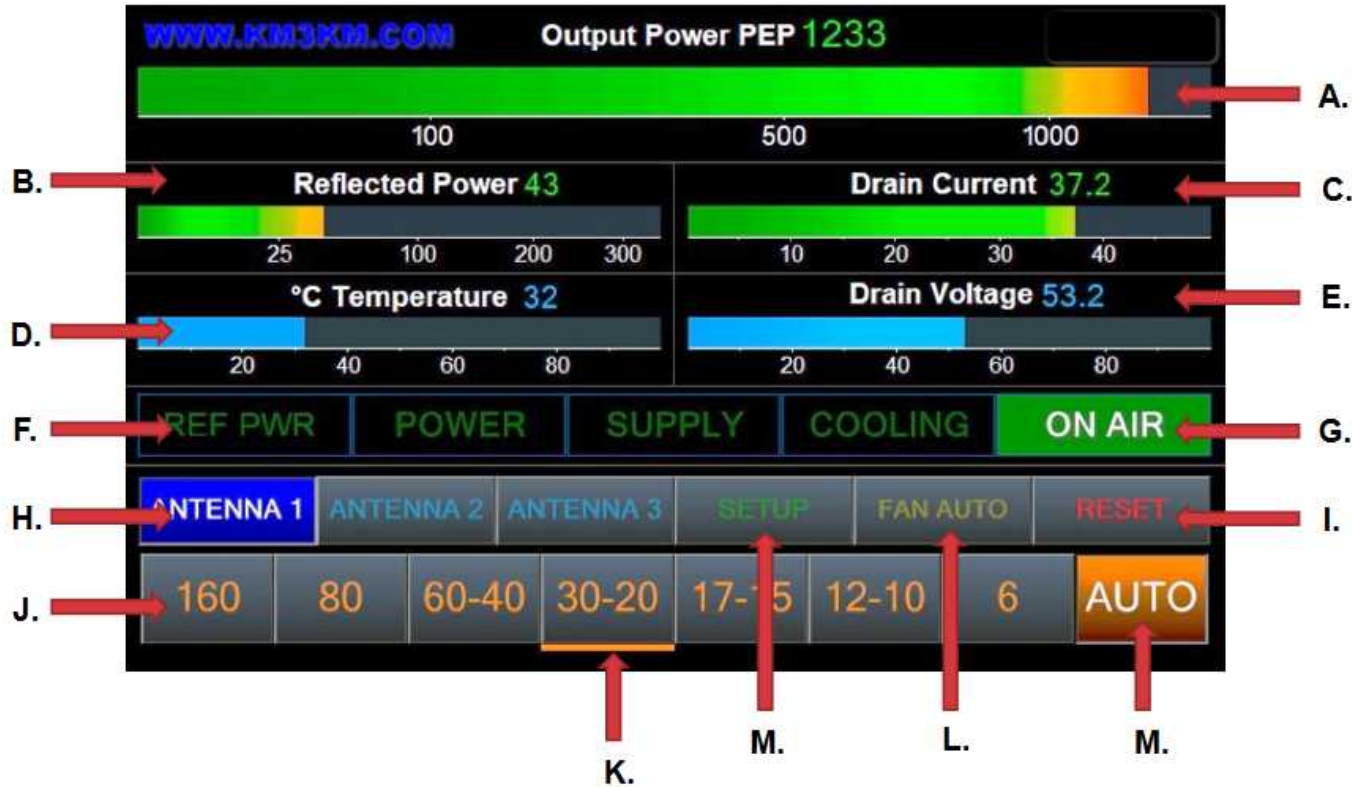
Antenna module

# Controller and Low pass filter



Arduino  
NANO

# Display



- A. FWD Power Meter Output (pep)
- B. SWR/REF Meter Output
- C. Drain Current Meter
- D. Temperature Indicator °C
- E. Drain Voltage Meter
- F. Alarm Indicators Zone
- G. Transmission Indicator
- H. Antenna Switch zone
- I. Protections and Alarms Reset Button
- J. Manual Band Select Buttons zone
- K. Automatic Segment Indicator
- L. Automatic or Manual Fan Control Button
- M. Configuration

# Antenna configuration display

## Configuration Antenna 1

160	80	60-40	30-20	17-15	12-10	6
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## Configuration Antenna 2

160	80	60-40	30-20	17-15	12-10	6
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## Configuration Antenna 3

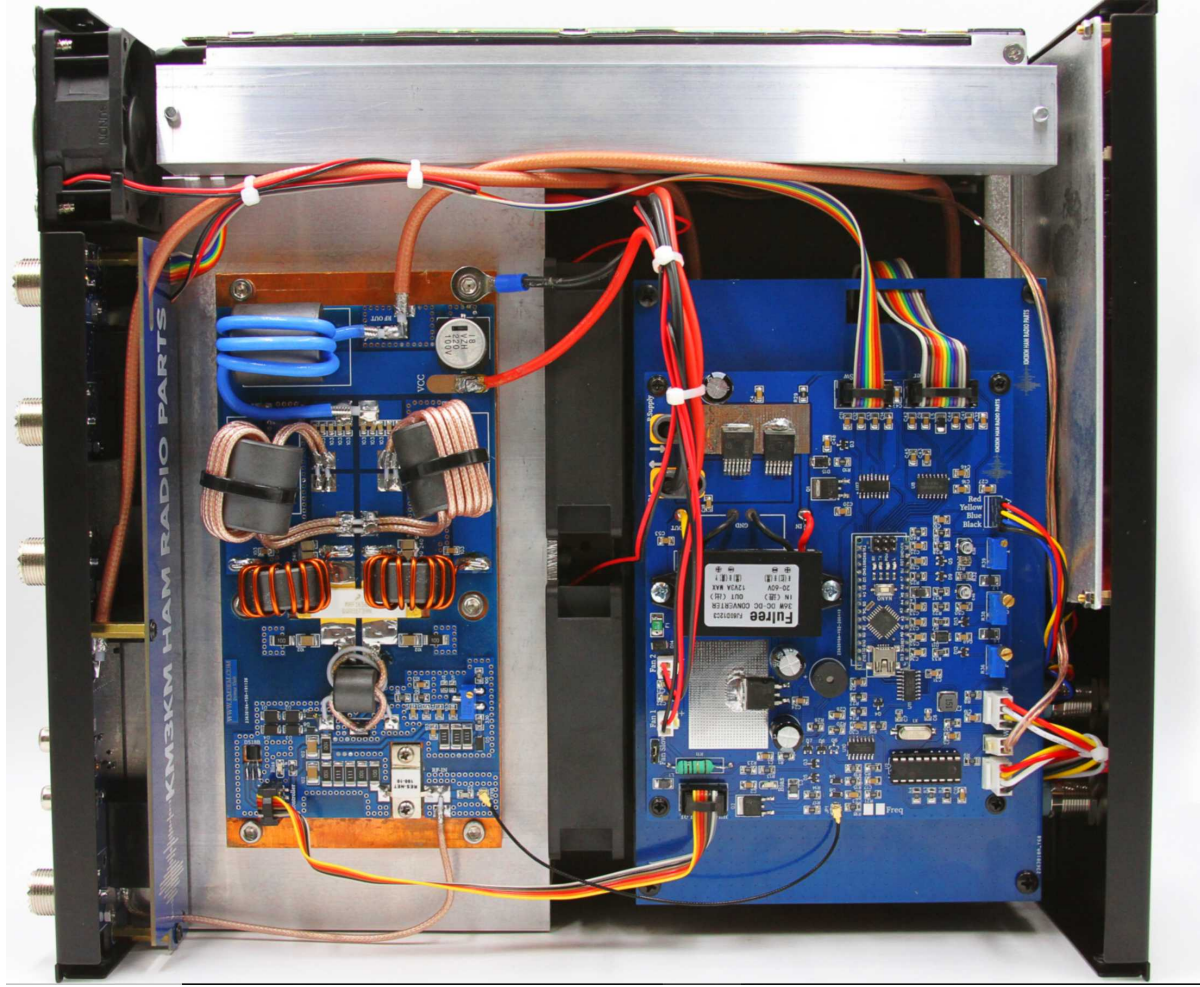
160	80	60-40	30-20	17-15	12-10	6
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RESET

Copyright









ANT-1

ANT-2

ANT-3

RF IN - (MAX 80W)

ALC

PTT

ALC-ADJ

RF OUT - (1200W)

120-240v

GND

# Website

<https://www.km3km.com/elementor-1915/>

