

# OTC 10 GHz (and above)

Philip Theis K3TUF

September 19, 2024

# Plan for Tonight

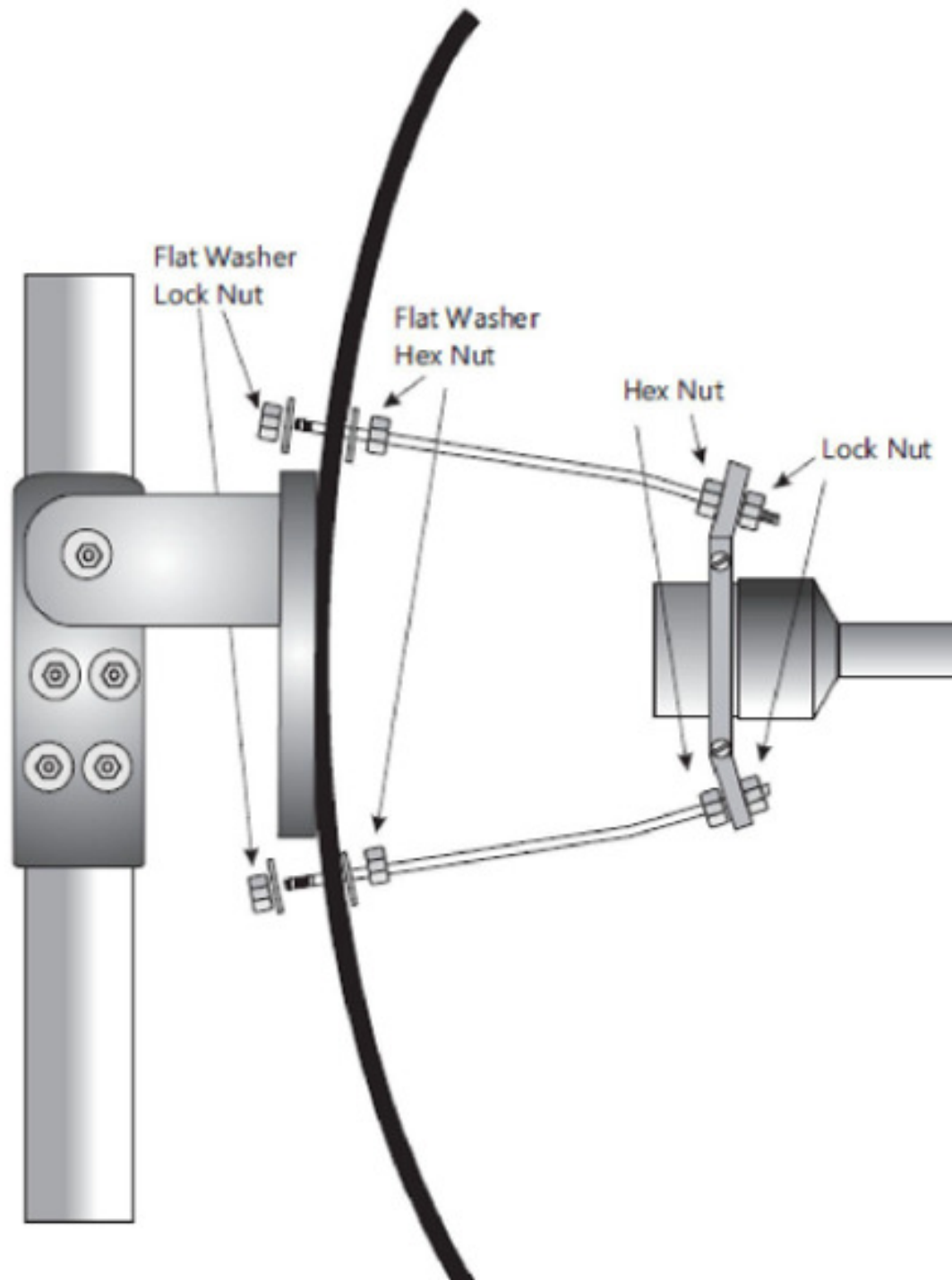
- Take you through my journey in selecting equipment
- Show all known possible choices TODAY
- Sprinkle a little from our 10GHz operating site
- Reintroduce the W2PED Triplexer
- Show websites to purchase 10GHz gear
- Show some 24GHz







# Dual Band 60cm Dish w/strut kit & feed horn, Model DSEDBDH6









**DIRECTWAY SP**

**HUGHES**





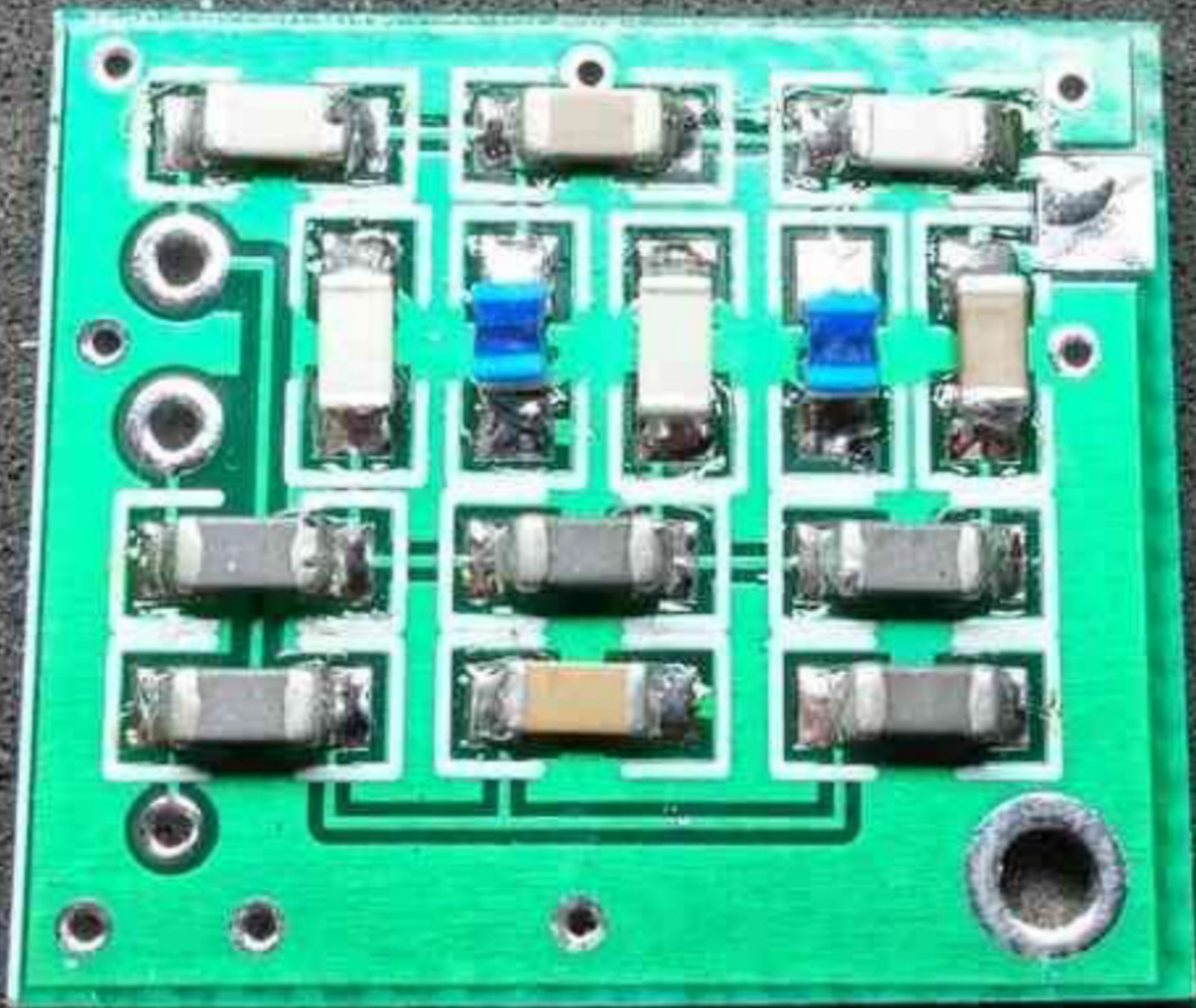






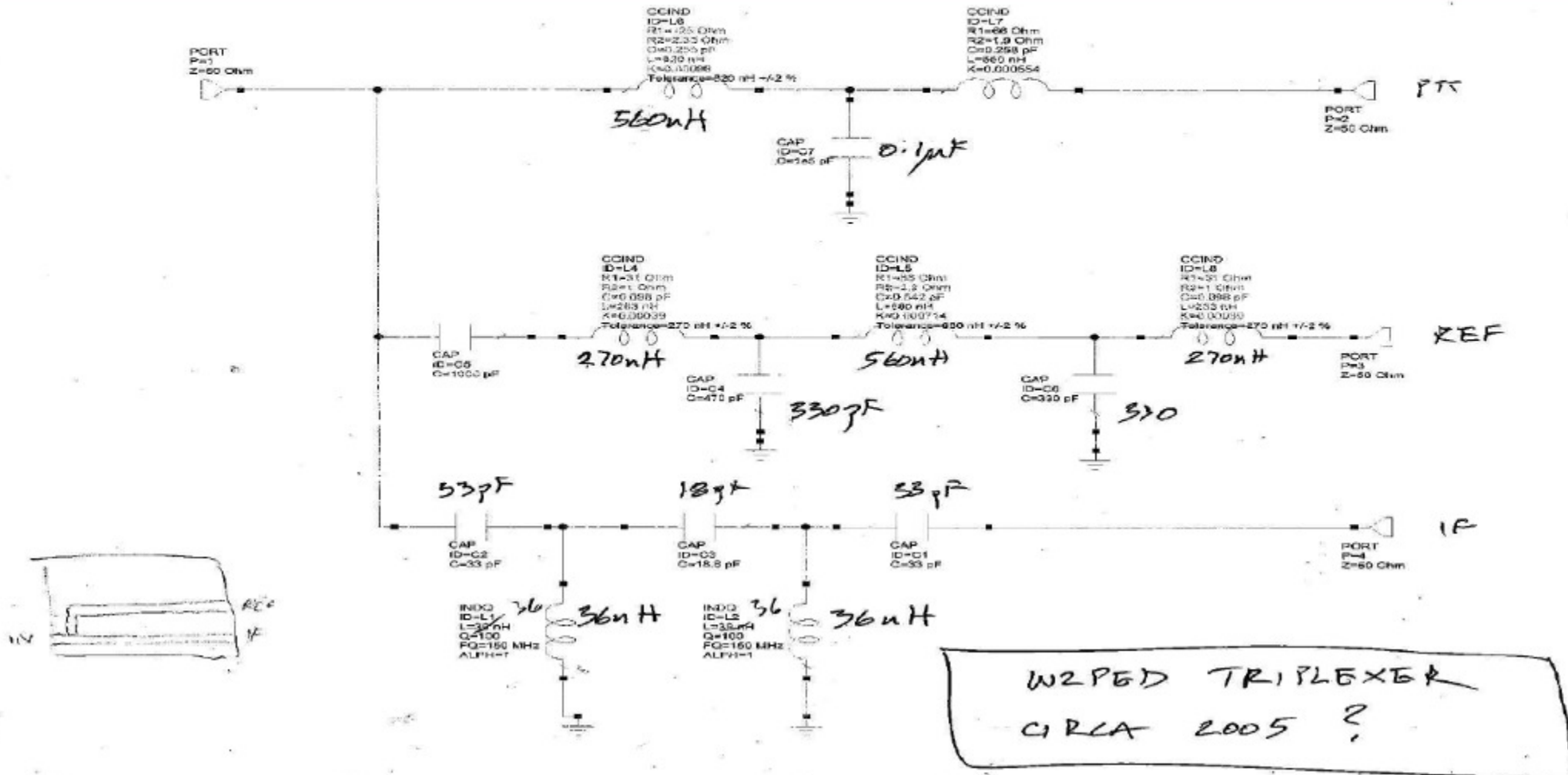
- Triplexer
- W2PED Design
  
- Single Cable Shares
  - 144MHz IF
  - 10MHz Discipline
  - PTT

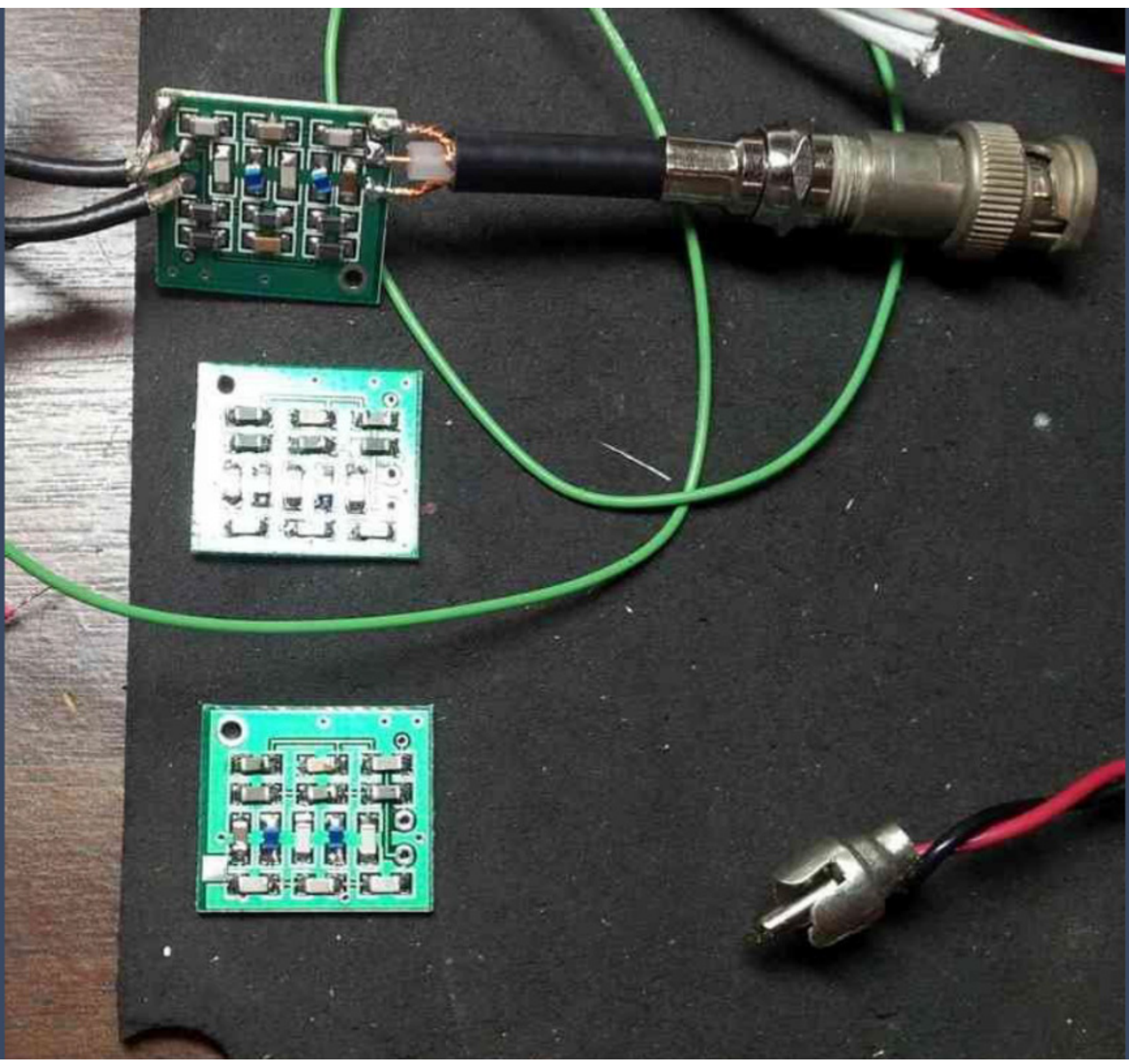


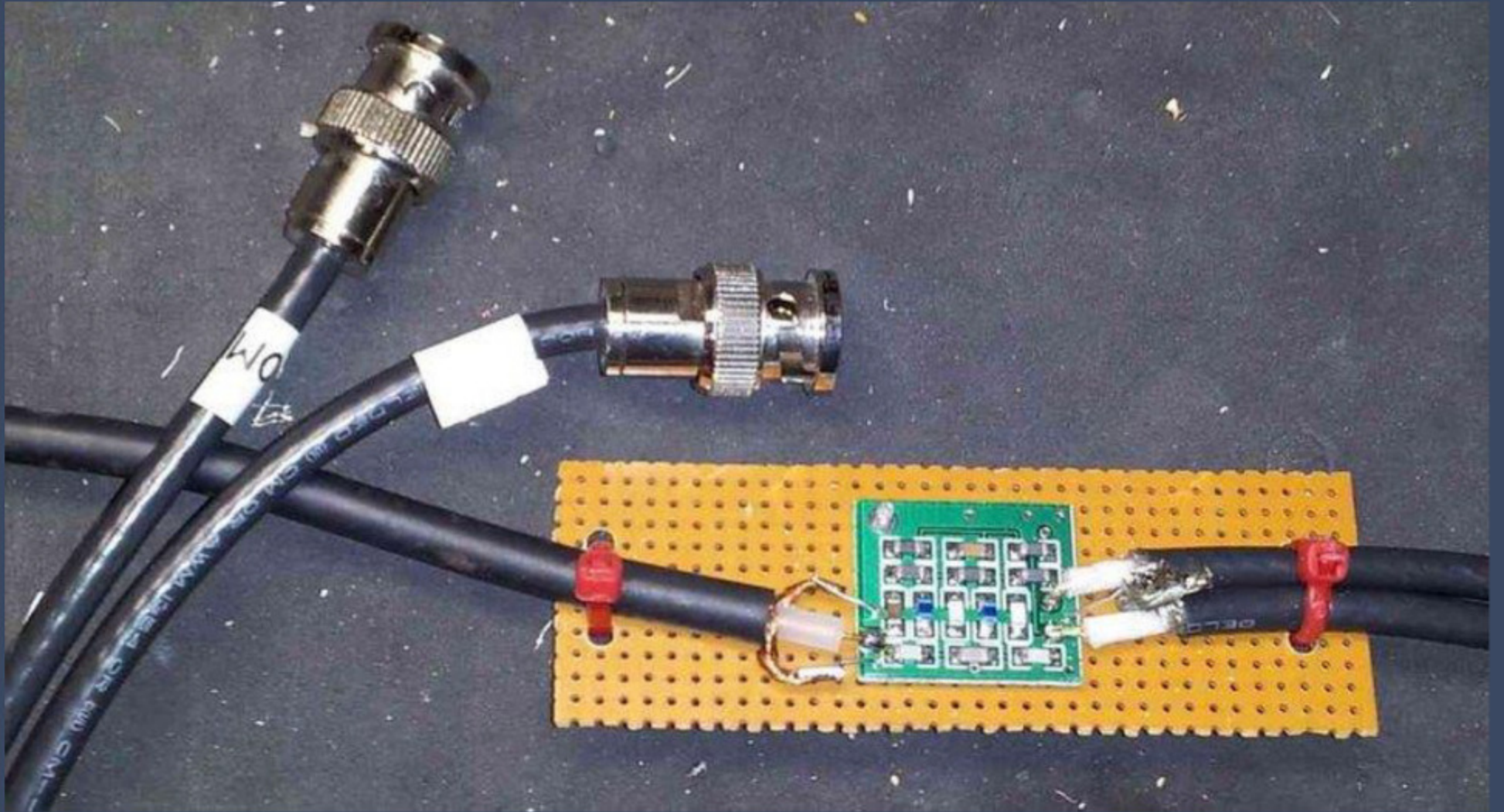




# Triplexer: 144 MHz IF; 10 MHz Ref; PTT DC







# K3TUF Ethernet Relay Control

Click On Relay Buttons To Change State

GET STATUS

6M Amp OFF  6M Amp is ON

Tower 110V OFF  Tower 110V is ON

Tower 28V OFF  Tower 28V is OFF

Tower 50V OFF  Tower 50V is OFF

EME 50V OFF  EME 50V is OFF

Relay 6 OFF  Relay 6 is OFF

Radio 1 OFF  Radio 1 is OFF

Radio 2 OFF  Radio 2 is OFF

Relay 9 OFF  Relay 9 is OFF

Bench 50V OFF  Bench 50V is OFF

Relay 11 OFF  Relay 11 is OFF

Relay 12 OFF  Relay 12 is OFF

Relay 13 OFF  Relay 13 is OFF

Relay 14 OFF  Relay 14 is OFF

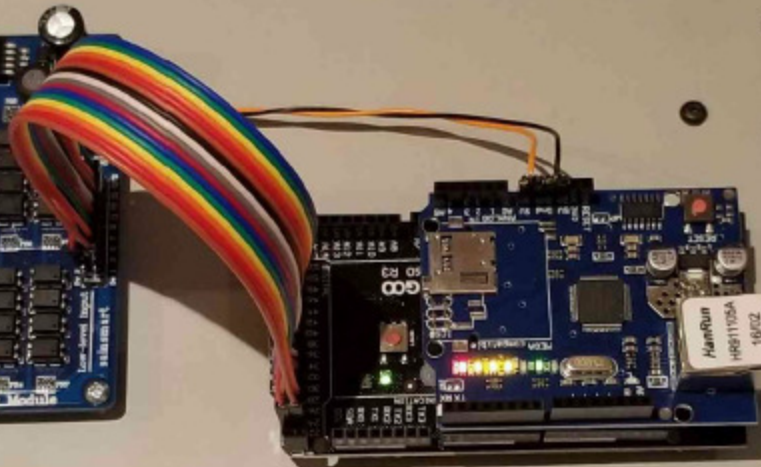
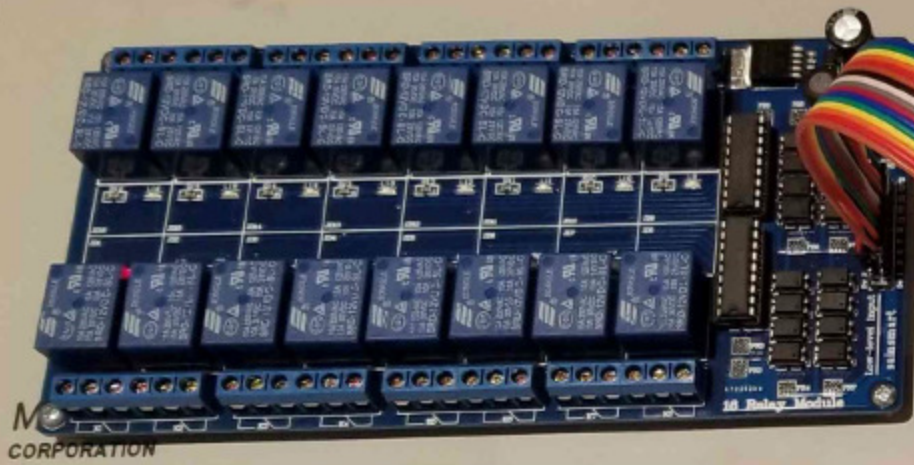
Relay 15 OFF  Relay 15 is OFF

Relay 16 OFF  Relay 16 is OFF

# PstRotator

AZ = 43.8 EL =	<input type="button" value="Refresh"/>	<input type="button" value="Stop"/>
AZ: <input type="text"/>	EL: <input type="text"/>	<input type="button" value="GO"/>

North	<input type="button" value="0"/>
East	<input type="button" value="90"/>
South	<input type="button" value="180"/>
West	<input type="button" value="270"/>
345	<input type="button" value="GO"/>
325	<input type="button" value="GO"/>
300	<input type="button" value="GO"/>
270	<input type="button" value="GO"/>
235	<input type="button" value="GO"/>
205	<input type="button" value="GO"/>
20	<input type="button" value="GO"/>
45	<input type="button" value="GO"/>
65	<input type="button" value="GO"/>
90	<input type="button" value="GO"/>
130	<input type="button" value="GO"/>
170	<input type="button" value="GO"/>



MORNING CORPORATION









- Microwave Lunch

- MWL





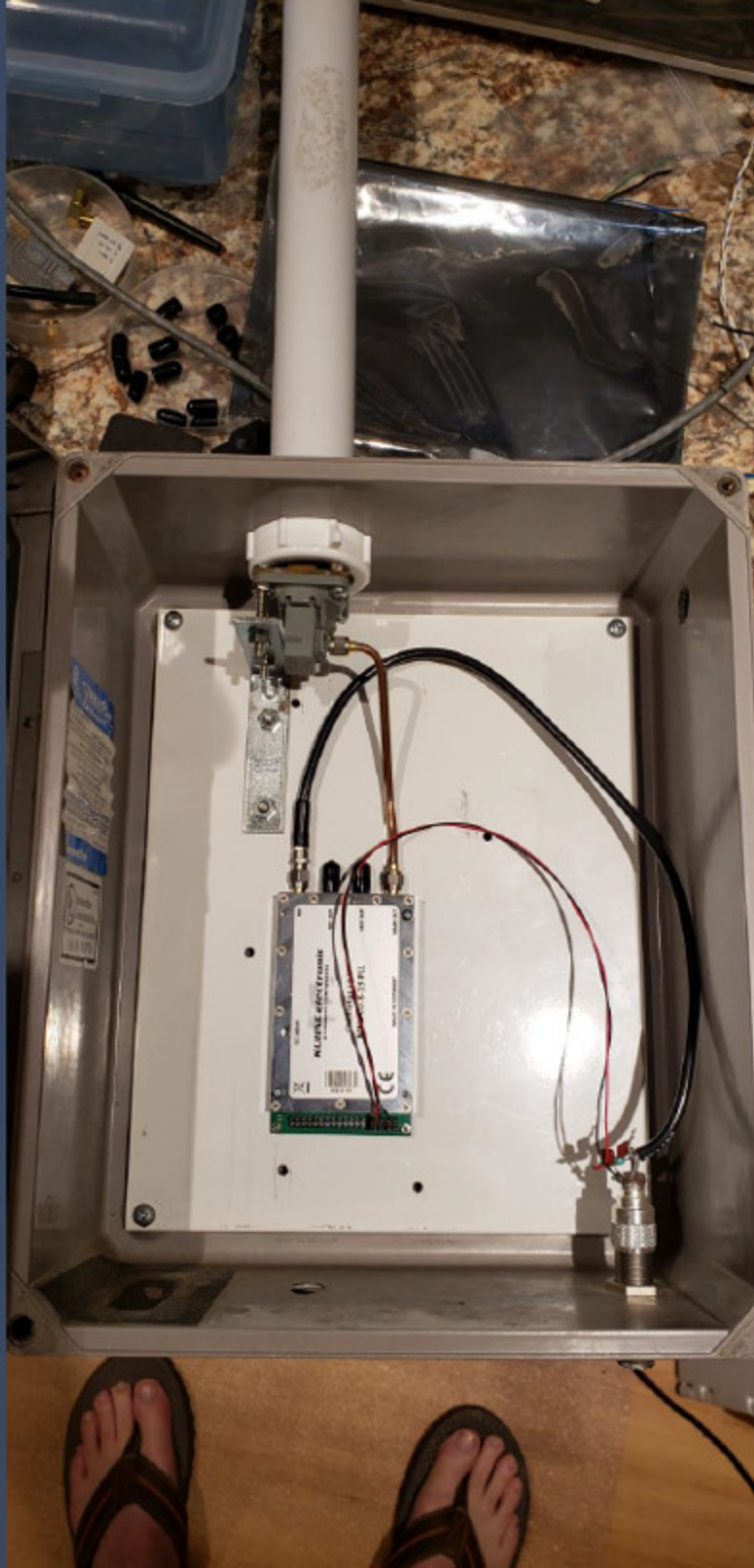


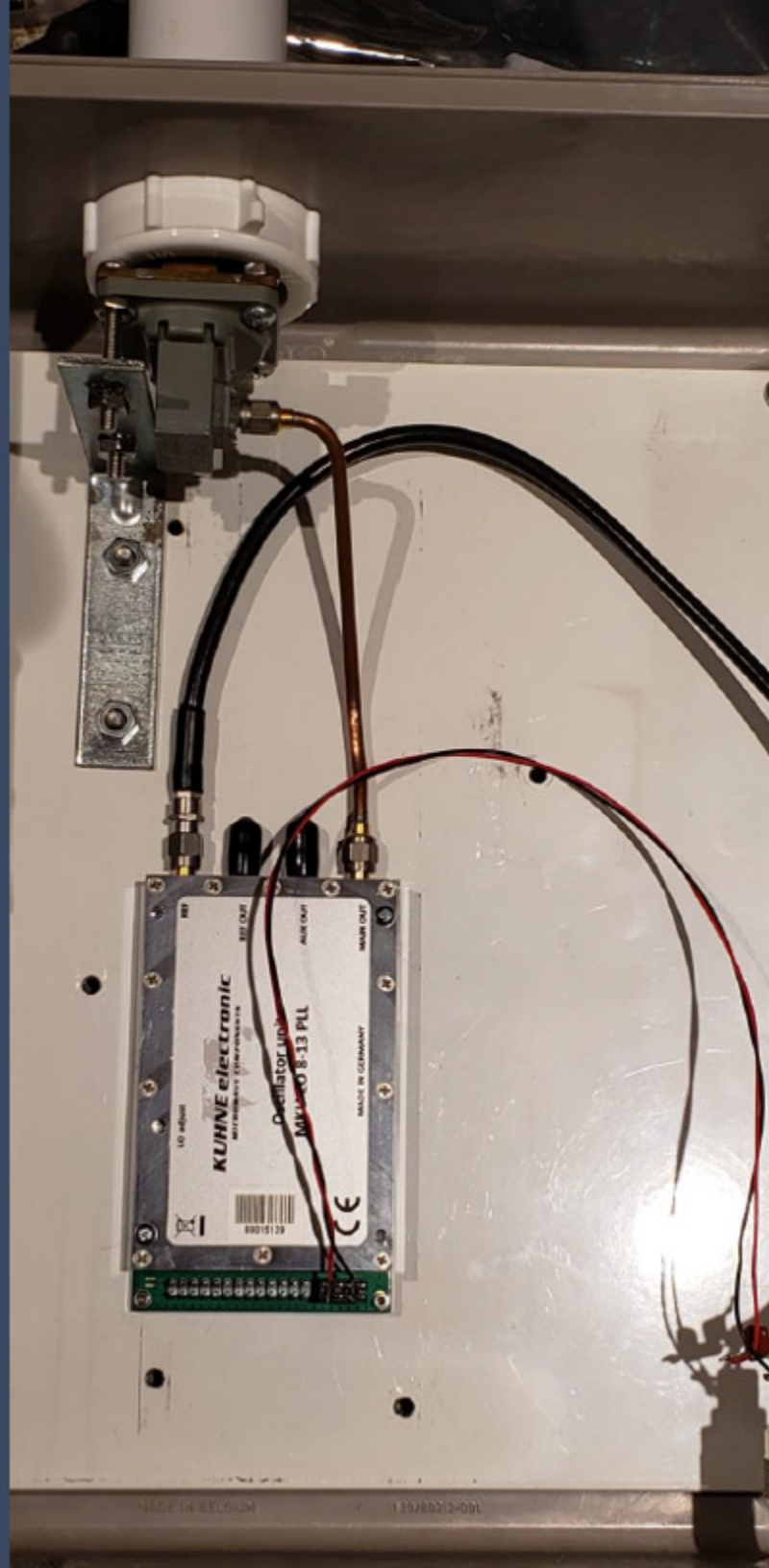




- Low Power Beacon for 10GHz









- Attempts at a 4 foot Dish







- Here I decided to work off the shelf



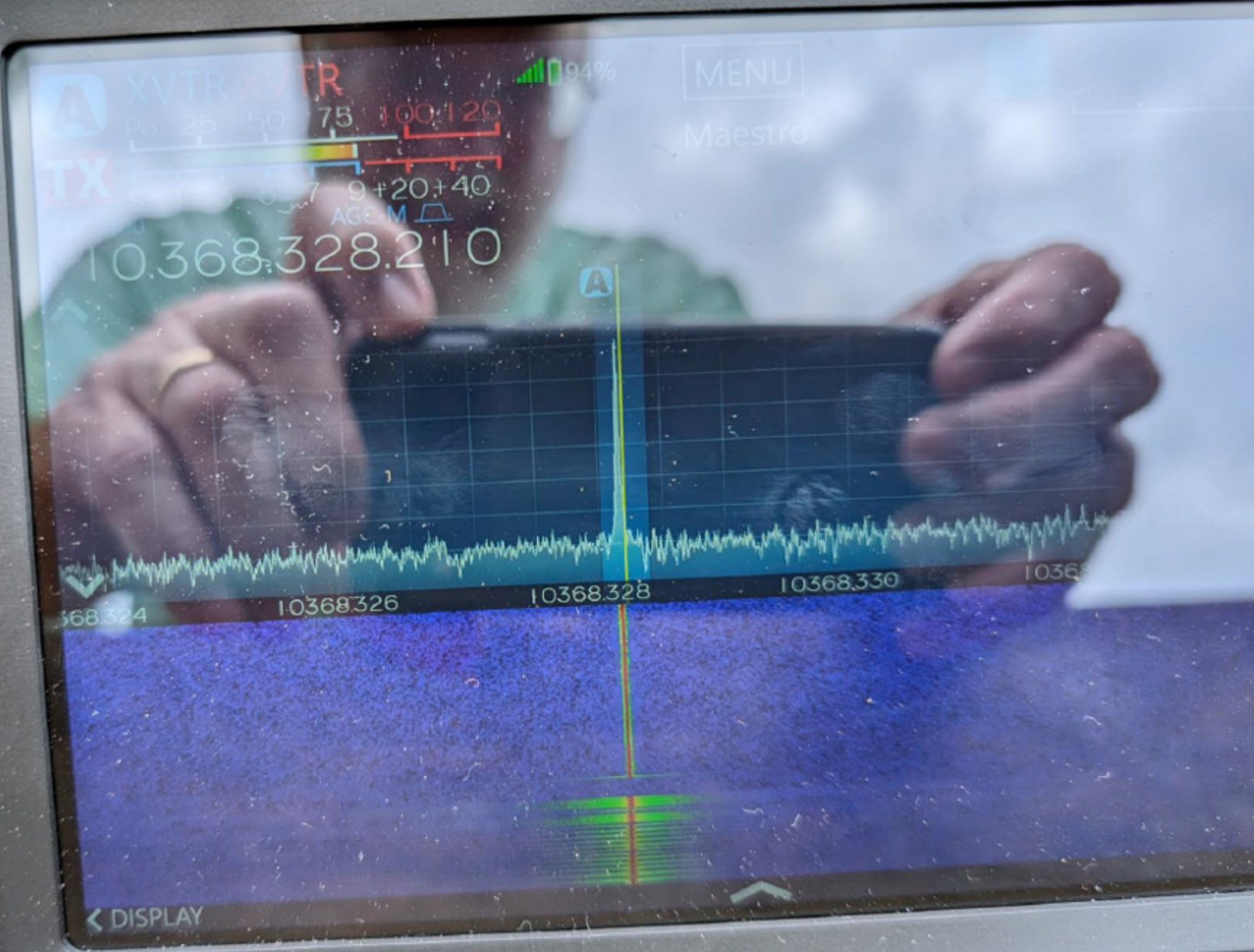








FlexRadio



< DISPLAY







# Beacon Site and 10GHz Operating

FN21be54xb

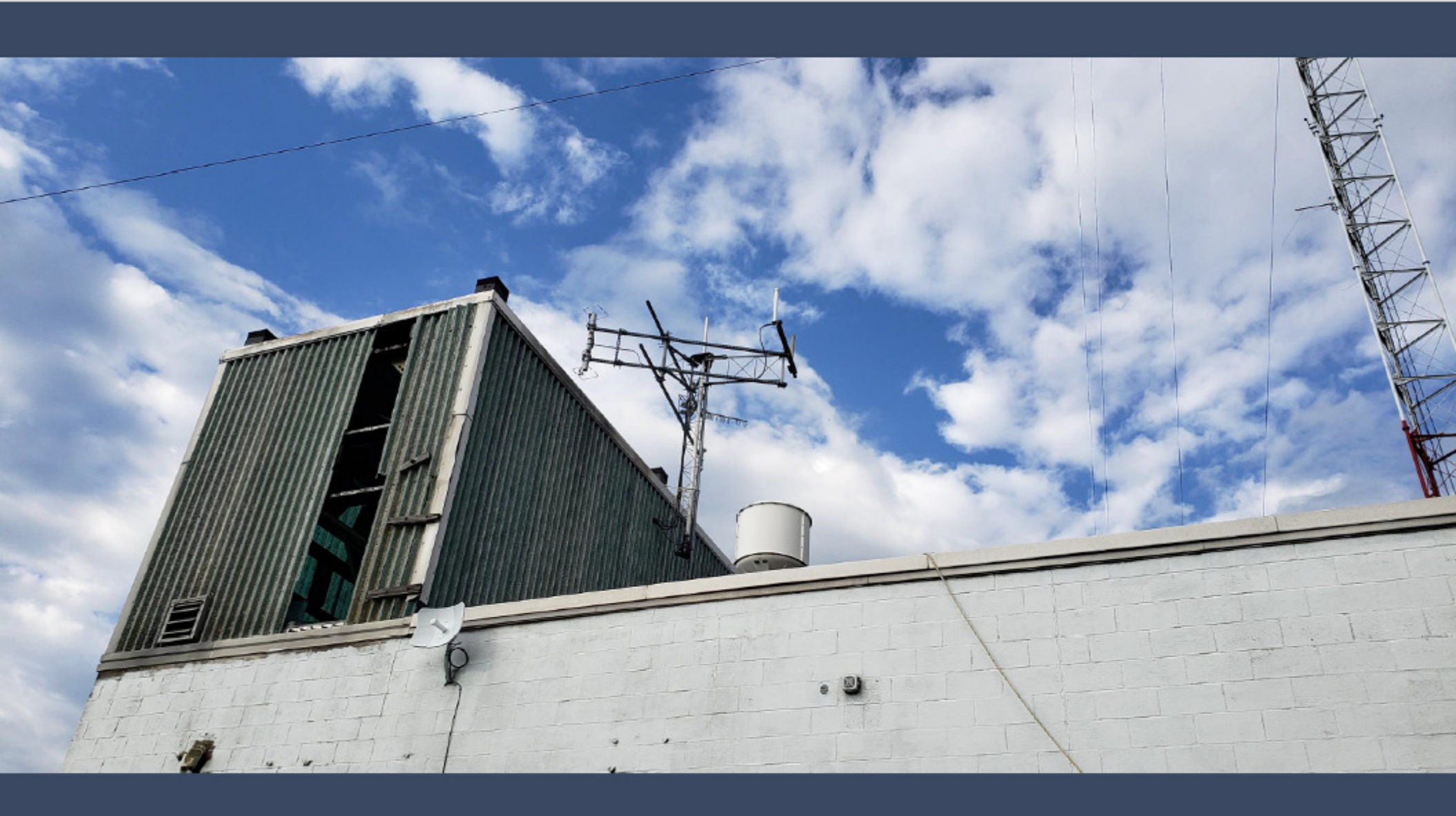










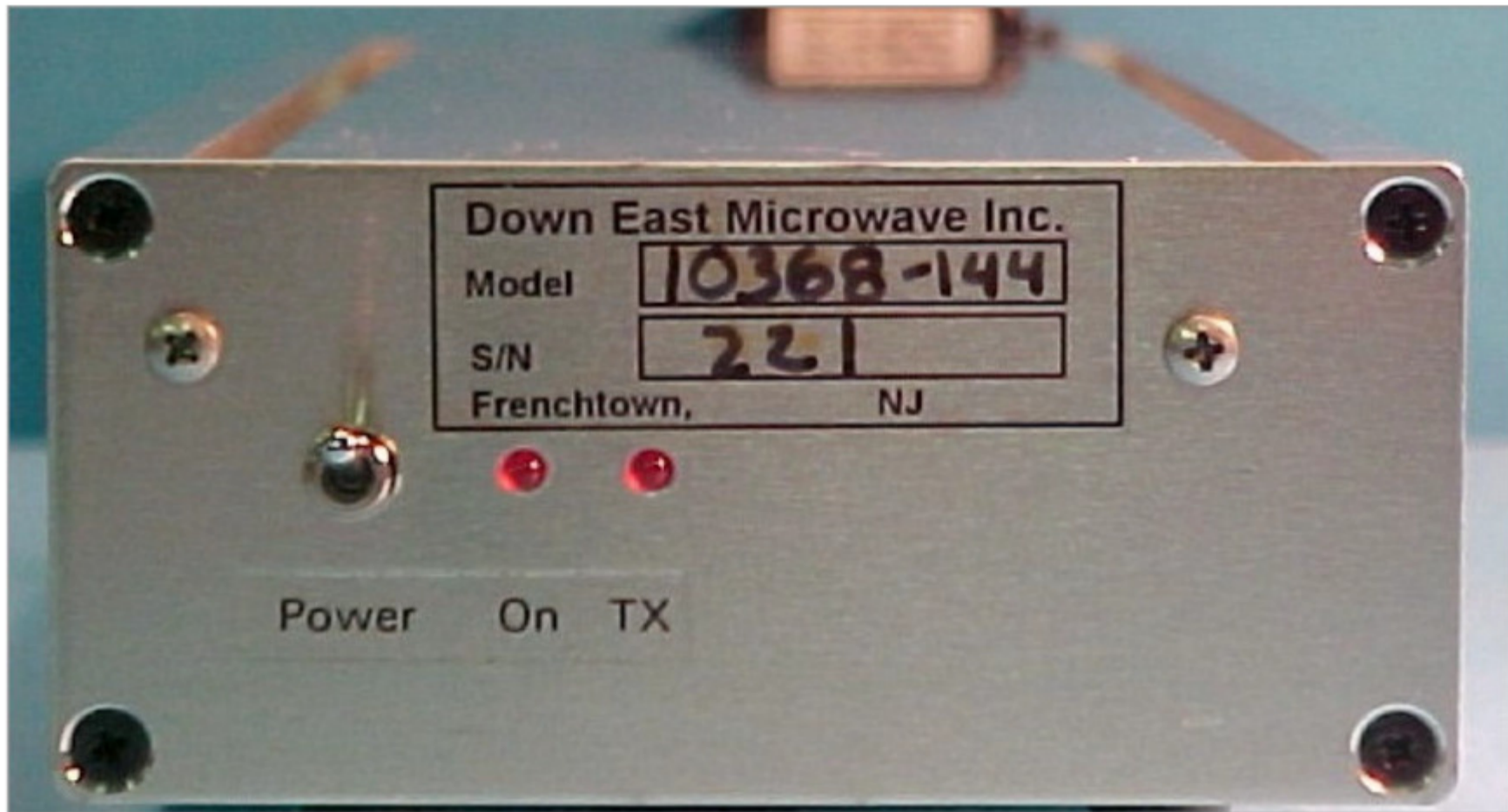






- 10GHz Off the Shelf Gear

10368-144





10368CK



atalog > 10368MHz >

### L3-2ULNACK



os in 3 to 5 Business D

1

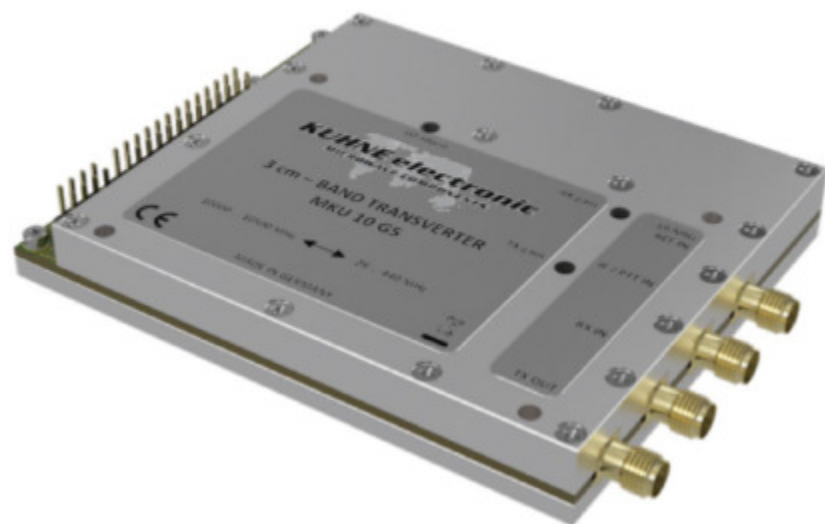
Add To Cart

Add To Wishlist

L3-3PA



NEW



## MKU 10 G5, 3 cm Transverter

NEW - NEW - NEW

- Covering full 3 cm amateur radio band from 10000 MHz to 10500 MHz
- Flexible IF choice from 28 MHz to 440 MHz
- Very high spurious and harmonic rejection even at 28 MHz IF
- Low power IF mode
  
- Easy configuration of the transverter with our [Kuhne Suite](#) (works with Firmware V1.1)



net: 600,84 €

715,00 €

incl. 19% Vat. plus shipping

Available from stock

- 1 +

ADD TO BASKET



## MKU PA 3CM-8W A, GaAs-Fet Power Amplifier

10300 ... 10400 MHz • 8 W

Power Amplifier for the Amateur Radio Band 3 cm

net: 999,16 €

**1.189,00 €**

incl. 19% Vat. plus shipping

Lead time on request

- 1 +

ADD TO BASKET



## MKU LNA 101 A2, Low Noise Amplifier

10368 MHz

net: 288,24 €

**343,00 €**

incl. 19% Vat. plus shipping

Available from stock

- 1 +

ADD TO BASKET

Technical specifications

Features

Important notes

Downloads

Accessories

# MKU 24 G3 USA, Transverter

NEW - NEW - NEW - NEW

24192 ... 24194 MHz

The new design of our transverter for 24 GHz features better performance and many new functions.

Built-in 2 W Power Amplifier



net: 878,15 €

**1.045,00 €**

incl. 19% Vat. plus shipping

Available from stock

- 1 +

ADD TO BASKET

## MKU LO 8-13 PLL-2, Oscillator

54 ... 13600 MHz

- Frequency freely configurable
- Remote control
- Intuitive operation
- High Resolution
- Synchronisable also with other modules
- 1 Hz accurate setting

Can also be used as a stand-alone beacon



net: 528,57 €

**629,00 €**

incl. 19% Vat. plus shipping

Available from stock





## LENS HORN ANTENNAS SERIES 810/820/880

[Home](#) / [Product Categories](#) / [Antennas](#) / [Lens Horn Antennas Series 810/820/880](#)



[Click here to download PDF](#)

### Features

- 4 – 140 GHz
- High Radiation efficiency (20% smaller aperture than equivalent parabolic antenna)
- Superior sidelobe and crosspolar performance
- Linear and circular feed
- Weatherproofing on Series 820 / 880
- Low wind loading



### Contact Form

Your Name (required)

Your Email (required)



- Security

From the company's inception in 1956, Flann has and continues to be a family run business. We employ around 65 highly skilled engineers and professionals who have supported us as the company's global reputation for quality, reliability and performance has grown.

Located in Bodmin, Cornwall, our purpose-built factory and business premises occupy an area of 1800m<sup>2</sup> situated in attractive grounds with views over the rolling Cornish countryside.

Since 1993 Flann has held a quality system status with the accreditation ISO9001:2015 which we continue to comply with

Flann's on-going policy of maintaining the highest standards ensures that the Company's global reputation for quality, reliability and performance will continue into the future.

## Business Highlights

- Export sales are in excess of 80% of total production.
- Technical sales and service support operating from offices in the UK.
- Global customer base including many leading companies in Communications, Research & Development, and Aerospace & Defence
- Worldwide distribution network dedicated to the supply and service of our products in a global market.
- Dynamic R&D initiative developing the next generation of passive microwave components.
- Project management, consultancy and customised product manufacture.

If you have a query don't hesitate to contact us.

Name (required)

Email (required)

Company Name

Address

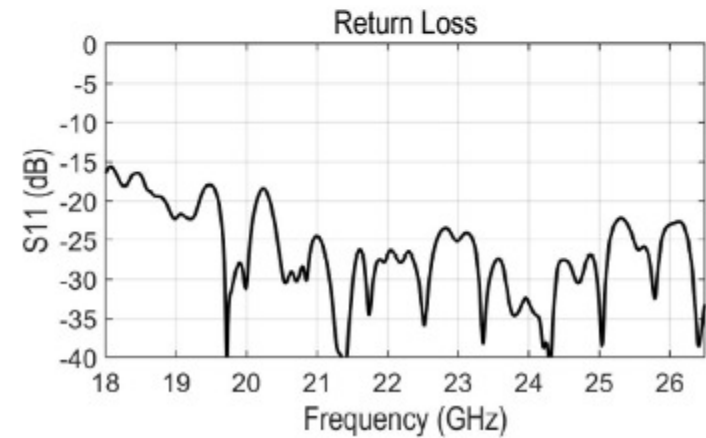
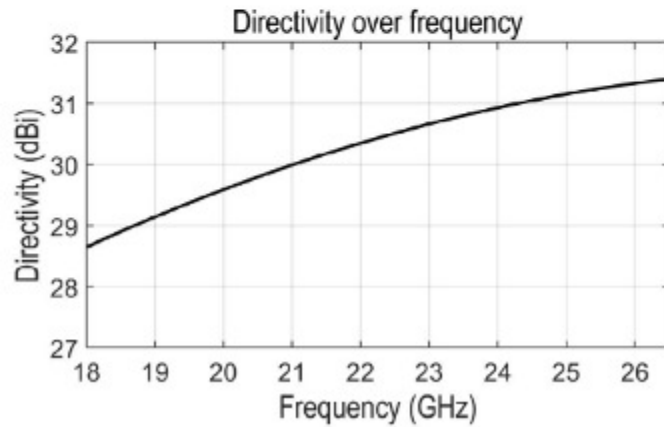
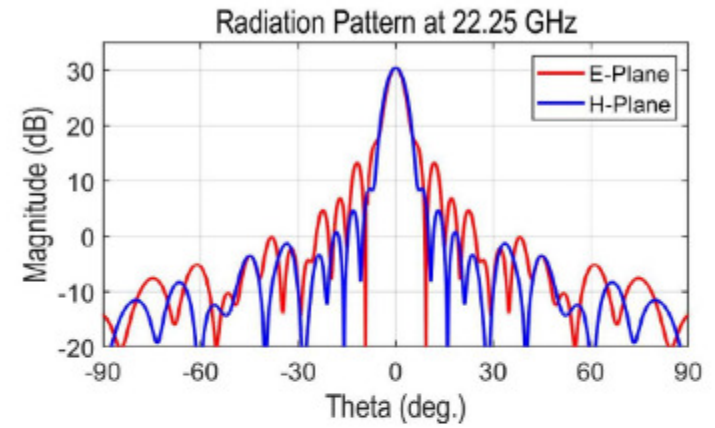
County/State

Postcode/Zip Code



## ELECTRICAL SPECIFICATIONS

Parameter	Typical value
Frequency	18 -26.5 GHz
Gain	30 dBi
3 dB Beamwidth, E-plane	4.8 deg
3 dB Beamwidth, H-plane	5.5 deg
Sidelobe, E-plane	-18 dB
Sidelobe, H-plane	-18 dB
S11	-18 dB



Anteral

LHA-30-WR42

[www.antal.com](http://www.antal.com)

[contact@antal.com](mailto:contact@antal.com)  
+34 948 488458

## K-Band Lens Horn Antenna

18 to 26.5 GHz, WR42, 30 dBi Gain

### DESCRIPTION

Anteral's Lens Horn Antennas are conical horn antennas with a **plano-convex** high-density polyethylene (HDPE) lens added in the aperture, in order to apply phase correction and achieve high gain, low VSWR and low side-lobes, with minimum size.

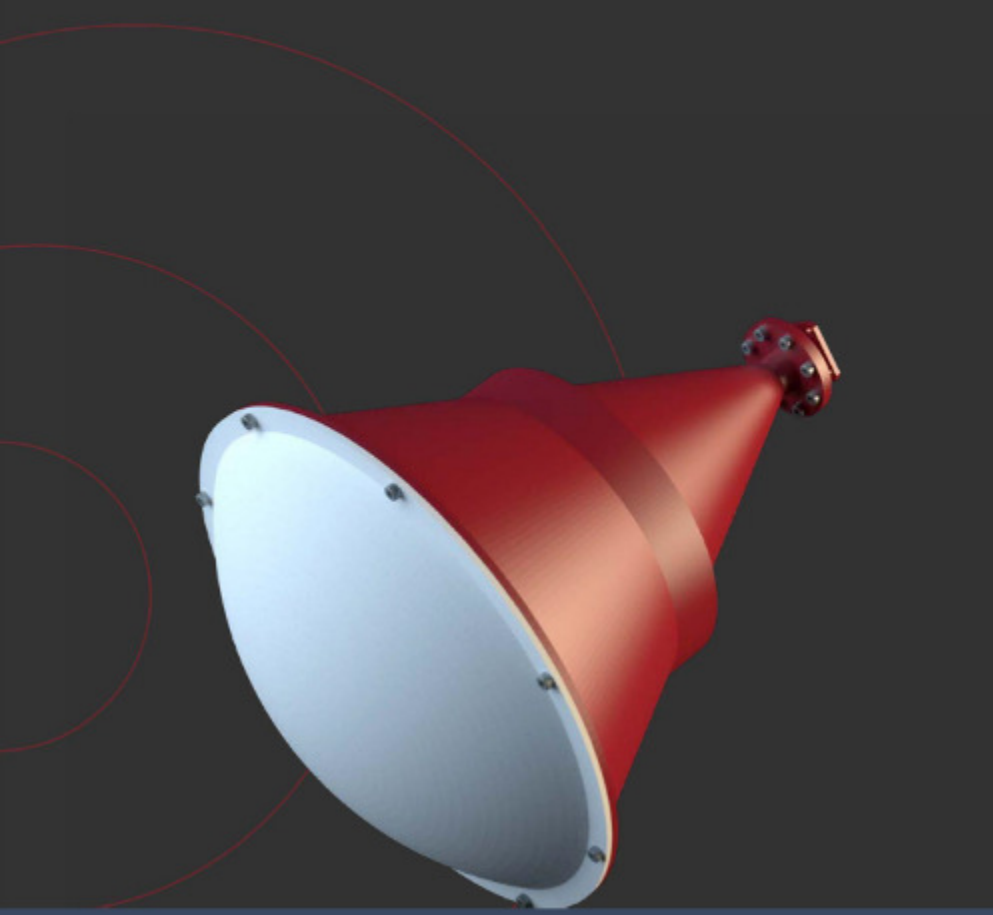
The LHA-30-WR42 model operates at the K-band between 18 and 26.5 GHz with 30 dBi nominal mid-band gain and a typical VSWR of 1.25.

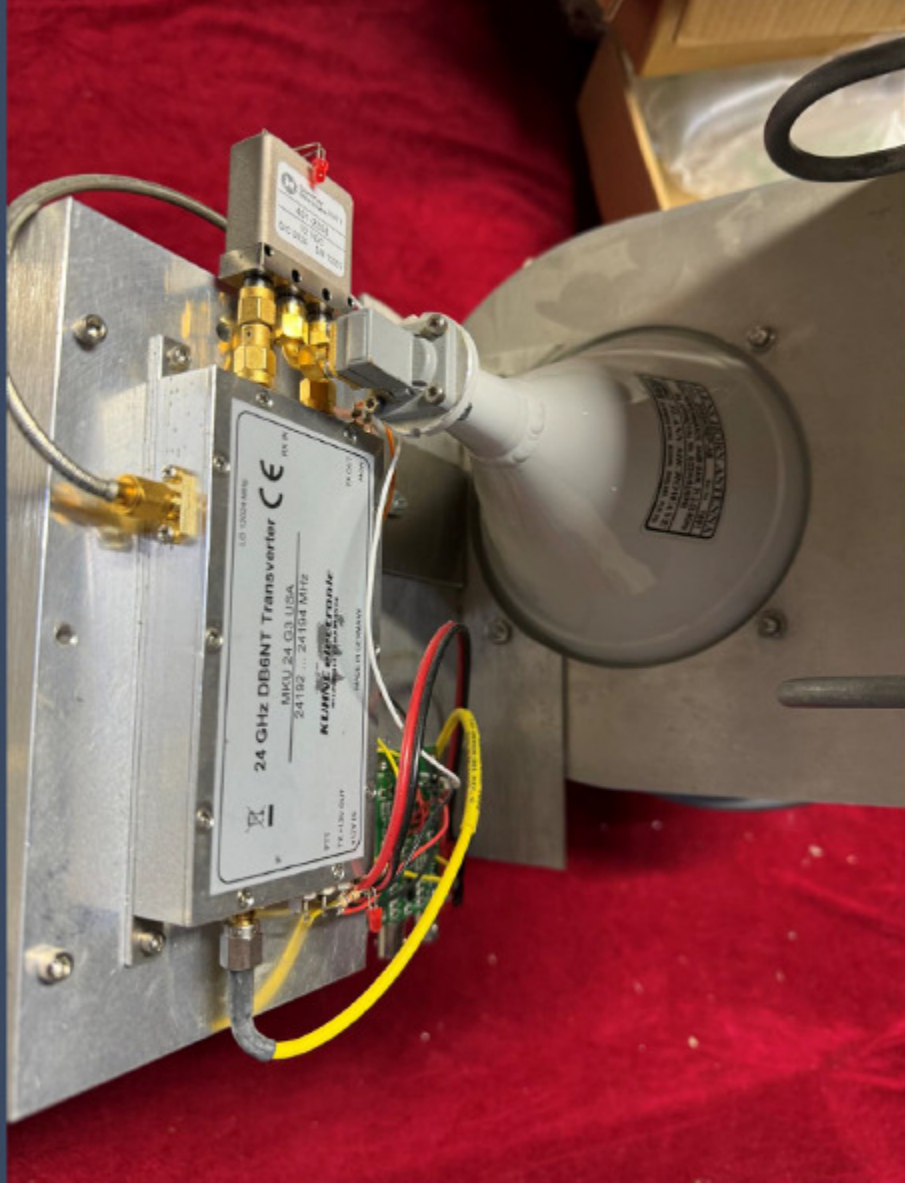
### APPLICATIONS

Lens Horn Antennas are especially useful when high gain is required with the minimum size. Therefore, these antennas are widely used in radar applications, communication links and meteorological systems among others.

Anteral also offers their **Focusing Lens Horn Antennas** with double-convex lenses to exhibit very well define focusing beams with short focal distances which makes them optimal for testing and material characterization.

 Plane-wave





New

144, 430/440, 1200, 2400, 5600 MHz +10 GHz

ALL MODE TRANSCEIVER

# IC-905

## Aim Higher!

## VHF, UHF, and Explore the World of Microwave

Aim higher and enter the world of SHF. The IC-905 is an industry-first all-mode transceiver with 144/440/1200/2400/5600 MHz coverage. Add 10 GHz with the optional CX-10G transverter.



 ZOOM



ICOM®



New

144, 430/440, 1200, 2400, 5000 MHz  
ALL MODE TRANSCEIVER

# IC-9000

Aim Higher!  
VHF, UHF, and Extended  
Microwave

Aim higher and enter the world of  
transceivers with 144/440/1200/2400/5000 MHz  
optional CX-10G transverter.



English

Dealer Log in

ZOOM



Aim higher and enter the world of 5GHz. The IC-900 is an industry first airmode transceiver with 144/440/1200/2400/5600 MHz coverage. Add 10 GHz with the optional CX-10G transverter.



ZOOM



## Optional 10 GHz Transverter, CX-10G

The CX-10G transverter provides 10 GHz operation by converting to a 2400 MHz IF signal. 10 GHz operation becomes more approachable and easier to work. The CX-10G is in bypass mode when the use of the 2400 MHz band.

[CX-10G >](#)



CX-10G



**SEARCH BY:**

**Availability**

- Currently in stock! (4)
- Out of Stock (1)

**Manufacturer**

- Icom (4)
- Comet Antennas (1)

**Type**

- Amateur Radio Transceivers (1)
- Antennas (3)
- Transceiver Acc (1)

**Filter By:**

- Antenna Tuners (2)
- Base Antennas (1)
- Base Station Acc (1)

15  Relevance



**Icom IC-905 10W VHF/UHF/SHF**

IC-905  
\$3199.95 regular price  
-\$500.00 discounts

**\$2,699.95**

[More Info](#)



**Icom CX-10G 10GHz Transverter for IC-905**

CX-10G

**\$999.95**

[More Info](#)



**ICOM OPC-2509 Controller Cable for OPC-2509**

**\$184.95**

[More Info](#)



**ICOM OPC-2513 Controller Cable for OPC-2513**

**\$149.95**

[More Info](#)

**EXPERT CHAT**

4.8 ★★★★★  
Google  
Customer Reviews

**buysafe**  
GUARANTEED  
9/1/2024

## GEOSATPRO - 90CM / 36IN OFFSET SATELLITE DISH

GEOSATpro

★★★★★ (No reviews yet) [Write a Review](#)

**\$179.00**

Availability: In Stock

LNBF Option:

- No LNBF Included
- Add Single LNBF - SL1PLL
- Add Quad LNBF - SL4PLL

Quantity:

▾ 1 ▴

**ADD TO CART**

Add To Wish List





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# GeoSatpro 1.2 Meter KU OFFSET Satellite Dish

GEOSATpro

★★★★★ (No reviews yet) [Write a Review](#)

\$249.00

Quantity:

Quantity selector with dropdown arrows and the number 1 in the center.

ADD TO CART

Add To Wish List





## IOJXX 10 GHz Feed, offset/prime focus

As low as: **€120.00**

incl. VAT, plus shipping  
€100.84 VAT excl.

Parabolic antenna, type

- Offset
- Prime Focus

Quantity:

IF you are in the northern Virginia, southern Maryland, or southern Pa. , anyone is welcome to my shop just west of Winchester Va., FM09TE, easy access off I-81 I have two test benches both set up fairly well, one through 10GHz, the other through 24 GHz with a signal generator through 50 GHz. While maybe not to NIST standard, everything is pretty accurate..

The more activity we get the better for all of us. I know the lack of good test equipment slows folks down and is frustrating, one of the reasons I'm in favor of the ICOM IC-905.

Just give me a couple days notice, I'm still commuting between the new place and my old house in Haymarket trying to get it on the market to sell.

Terry Price - W8ZN  
Directive Systems and Engineering  
703-754-3876