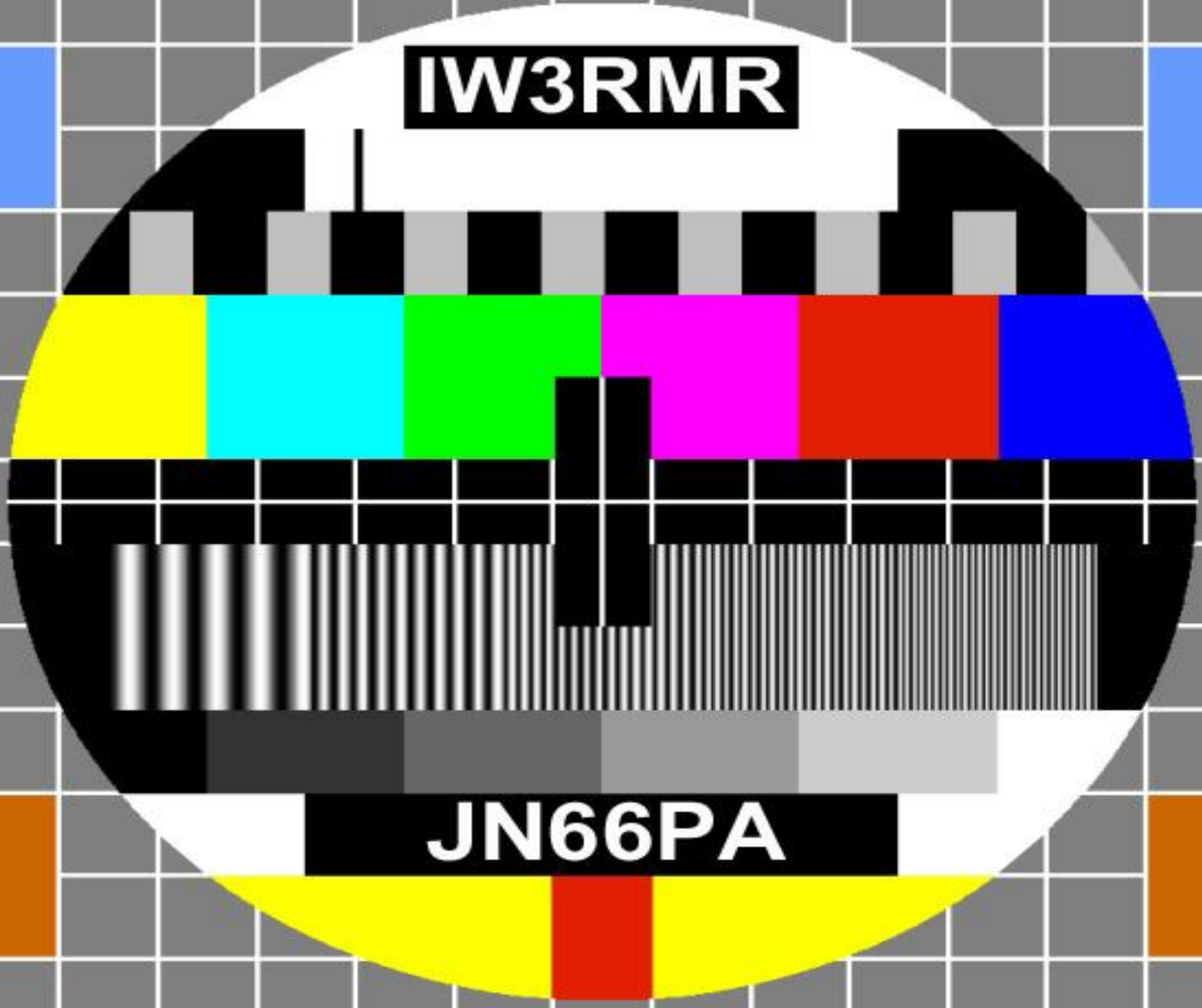


IW3RMR

JN66PA



OSCAR 100

UN SATELLITE PER I RADIOAMATORI

PIU ESIGENTI



**SPONSORIZZAZIONE
E REALIZZAZIONE**

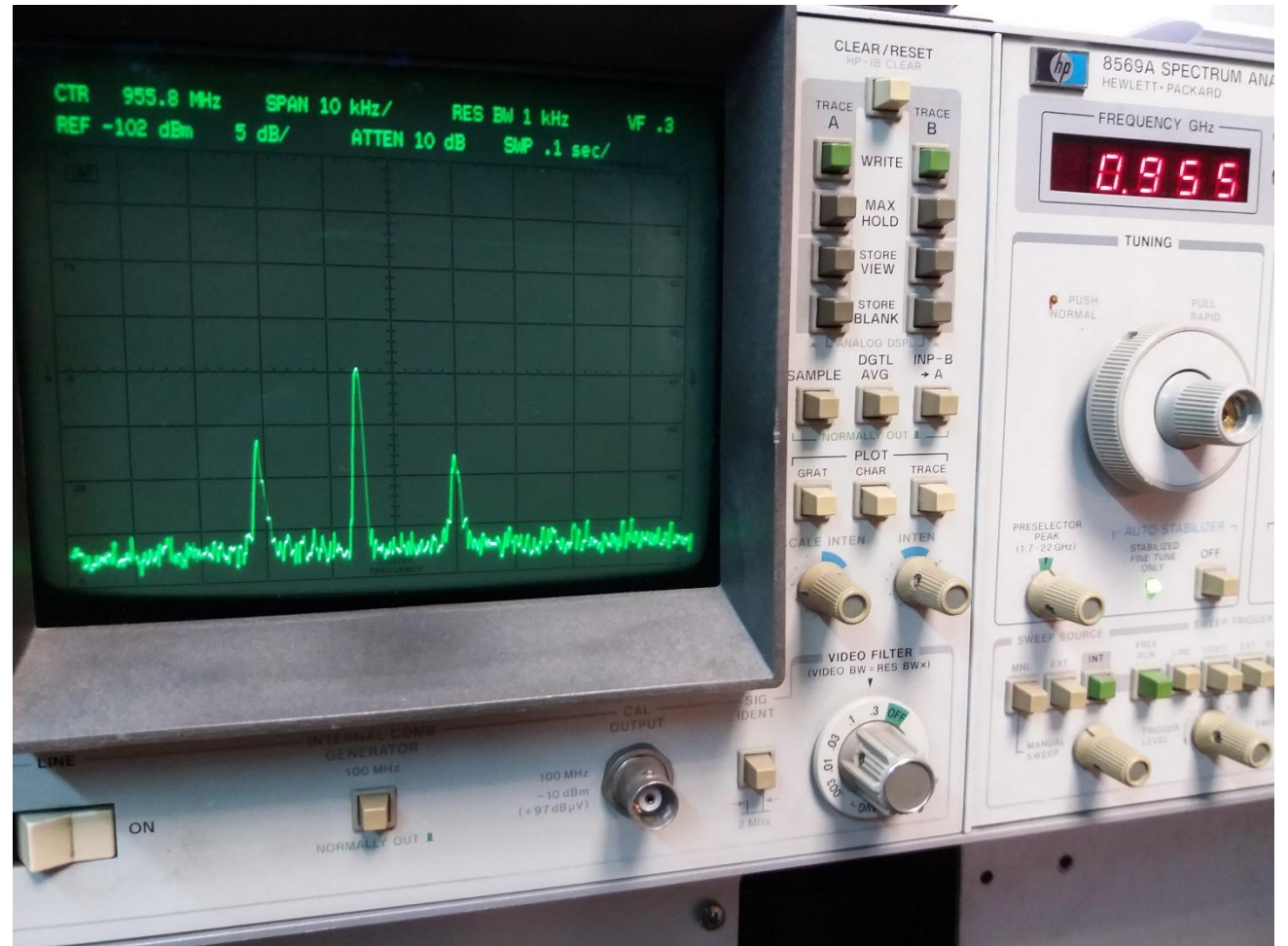
**ACCENSIONE E
PERIODO DI PROVA**

**INIZIO ATTIVITA PER I
RADIOAMATORI**

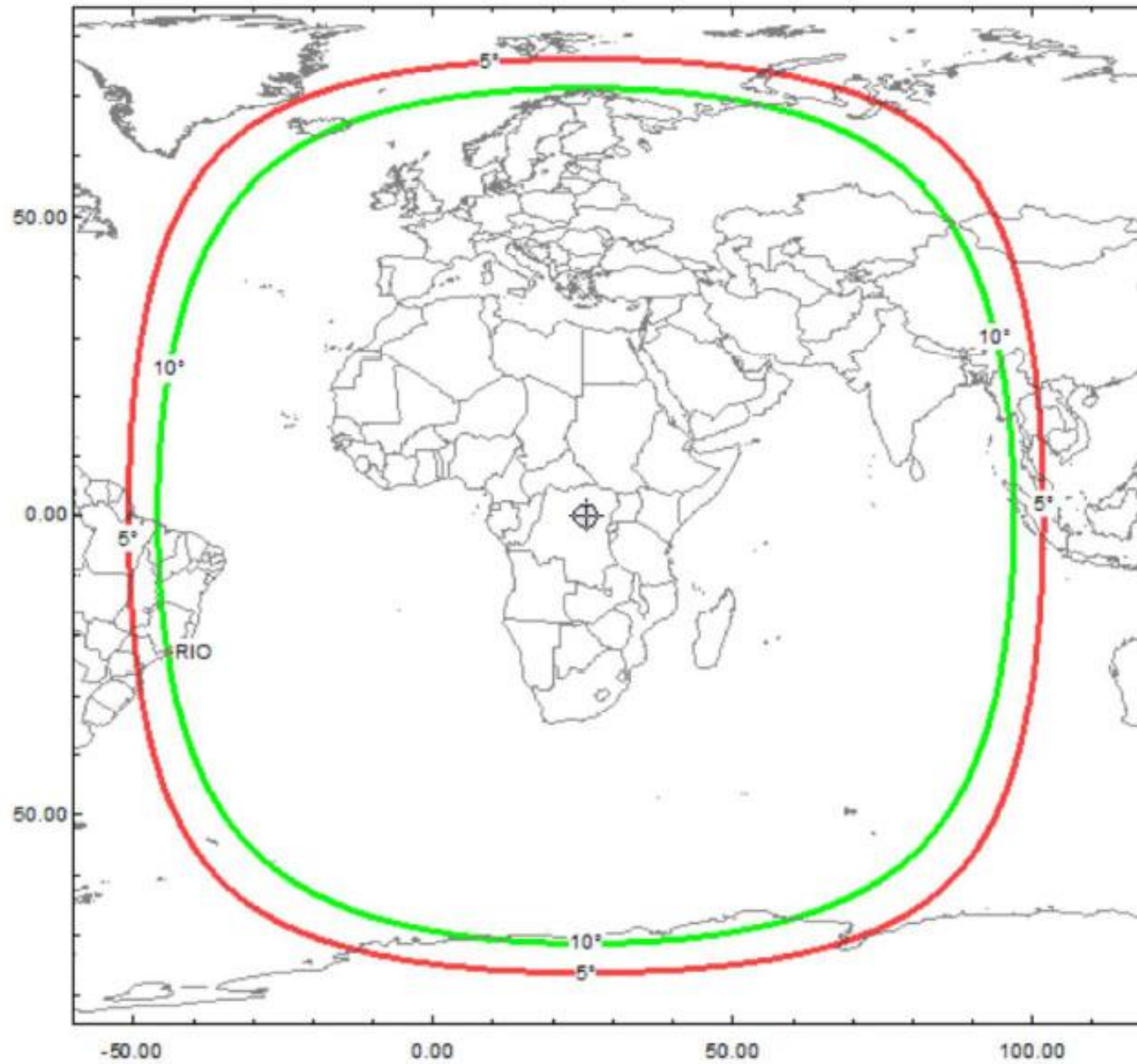
The image shows a banner for the Qatar-Oscar 100 satellite project. At the top, the AMSAT-DL logo is visible with the tagline "Satellites for Communication and Science". Below the logo, there is a navigation menu with items: "Es'hail-2 (P4-A)", "GO-Mars!", "ESA Deep Space Gateway", "Satellites", "Projects", and "Observatory". The main banner features a satellite in space with blue solar panels. Text on the banner includes: "Es'hailSat ساهيل سات Qatar Satellite Company الشركة القطرية للأقمار الصناعية", "AMSAT-DL", "Q.A.R.S. QATAR AMATEUR RADIO SOCIETY", "P4-A / Es'hail-2", "QO-100", and "Qatar-OSCAR 100". In the bottom right corner, it says "Peter Gülzow, DB2OS 2019 © AMSAT-DL".

PRIMA FASE TX

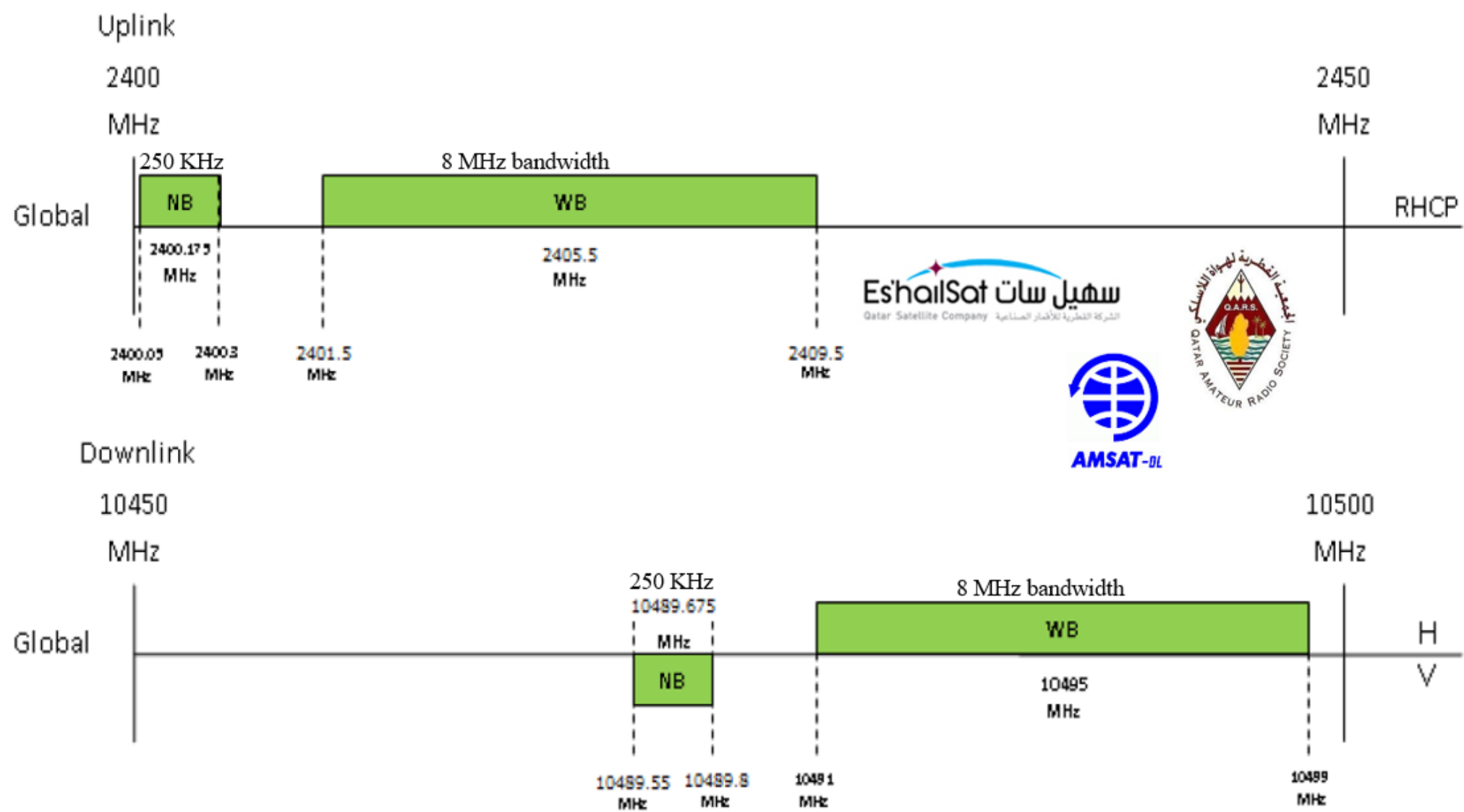
10705 MHZ BEACON



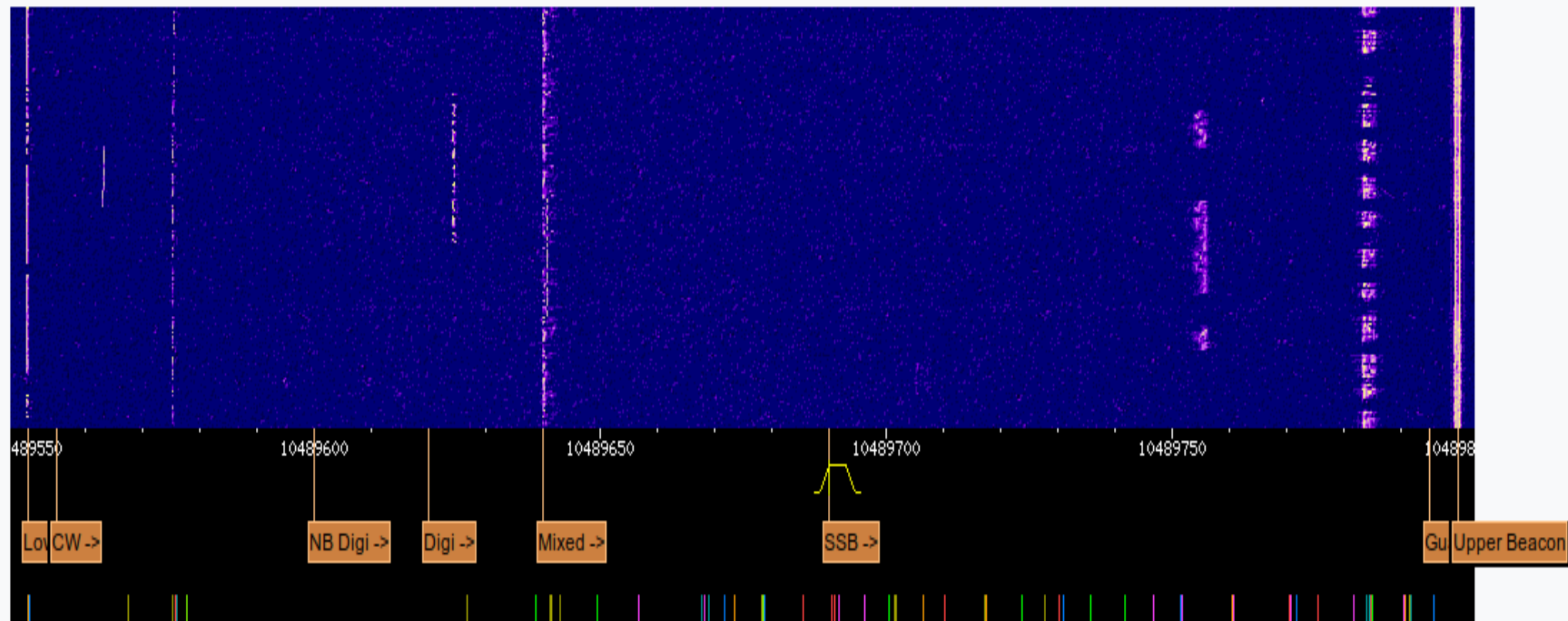
Coverage from orbital position of 26 deg East







Xpdr	U/L FREQUENCY (MHz)				D/L FREQUENCY (MHz)				LO (MHz)	BW (MHz)
	Pol	Begin	Center	End	Pol	Begin	Center	End		
NB	RHCP	2400.05	2400.175	2400.3	V	10489.55	10489.675	10489.8	8089.5	0.25
WB	RHCP	2401.5	2405.5	2409.5	H	10491	10495	10499	8089.5	8



10489690.00 kHz labels

--- -- - + ++ +++

CW LSB USB

Memories:

recall erase store (new)

Filter: 2.70 kHz - +

squelch autonotch

Audio recording

start

\$1 \$3 \$5 \$7 \$9 +20dB +40dB +60dB

-89.1 dB; peak -88.8 dB;

Volume: mute

Signal strength plot: none

Waterfall zoom

- +

<>

Speed: slow

Size: large

View: waterfall

PER RICEVERE :

LNB MODIFICATI

**LNB UNIVERSALI CON
CONVERTITORE**

**LNB WIDEBAND CON
CONVERTITORE**



PER LA BANDA

STRETTA – FONIA –

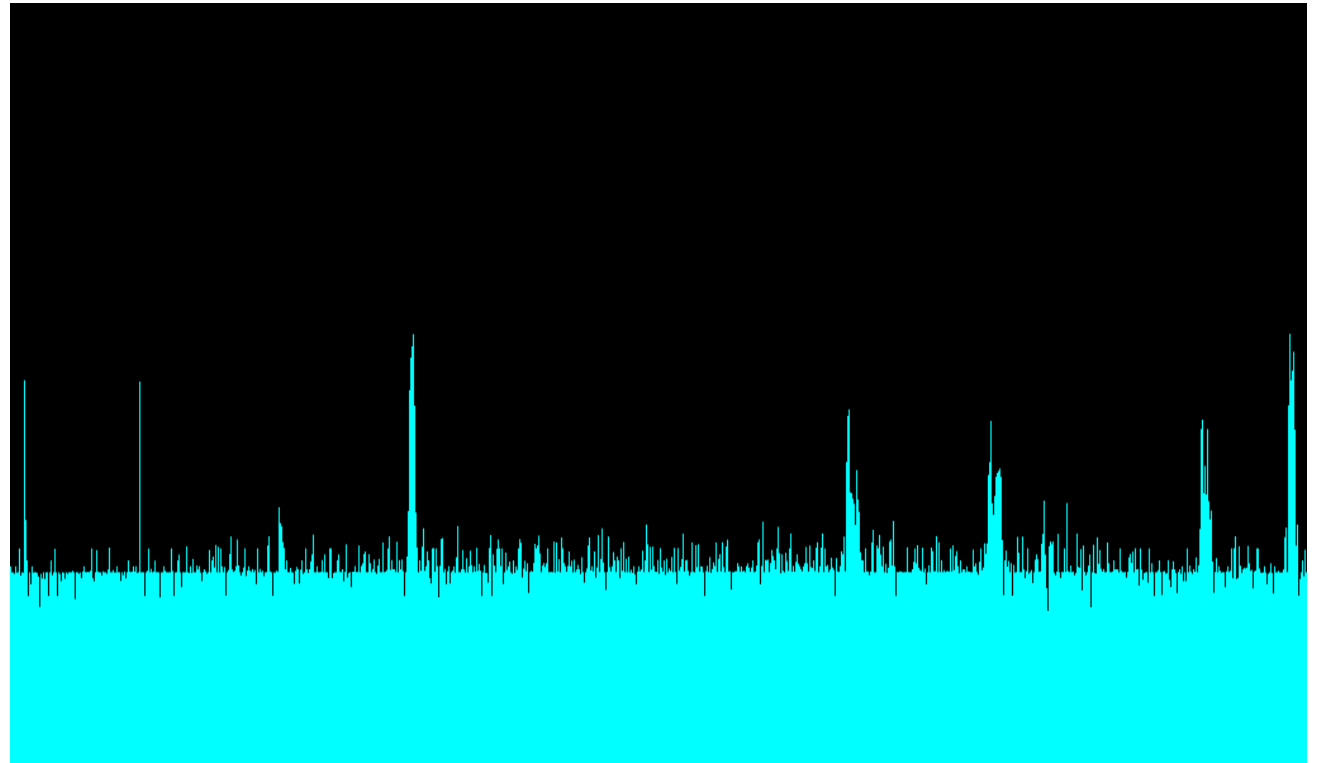
PROBLEMI

LEGATI

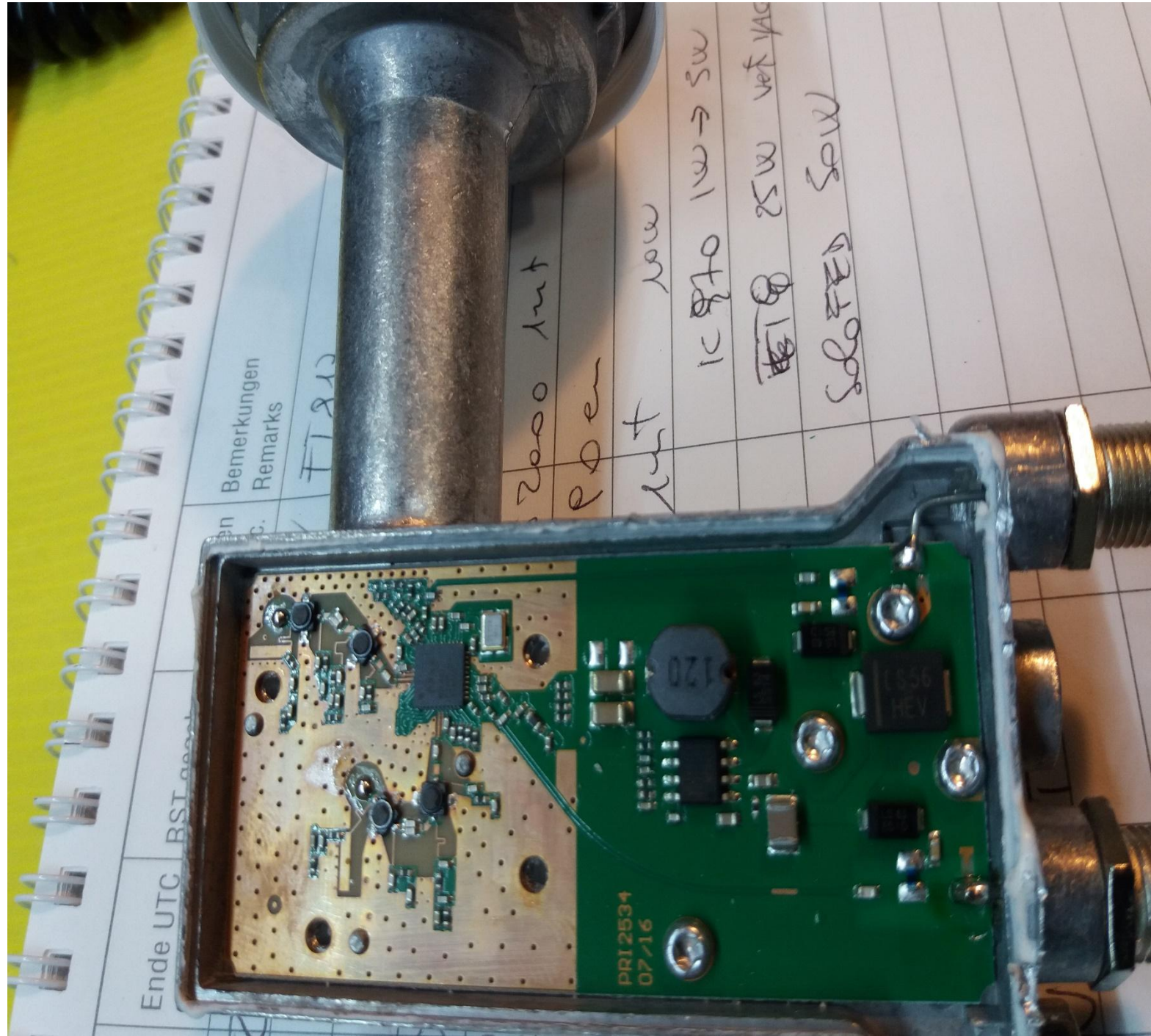
ALLA STABILITA' IN

FREQUENZA DEL

CONVERTITORE



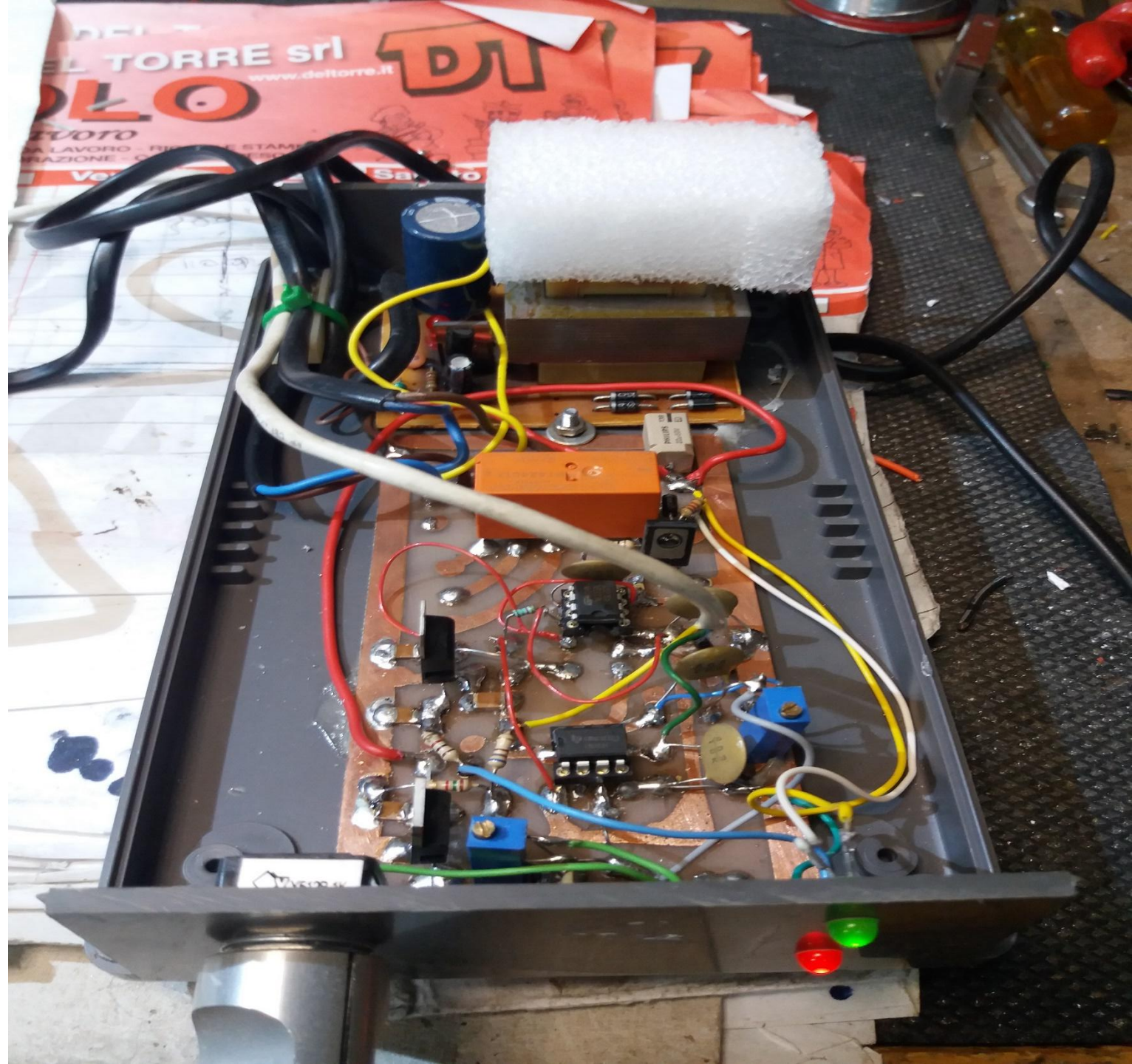
LNB WIDEBAND



TENTATIVI.....



ANCORA PROVE.....



CONVERTITORE

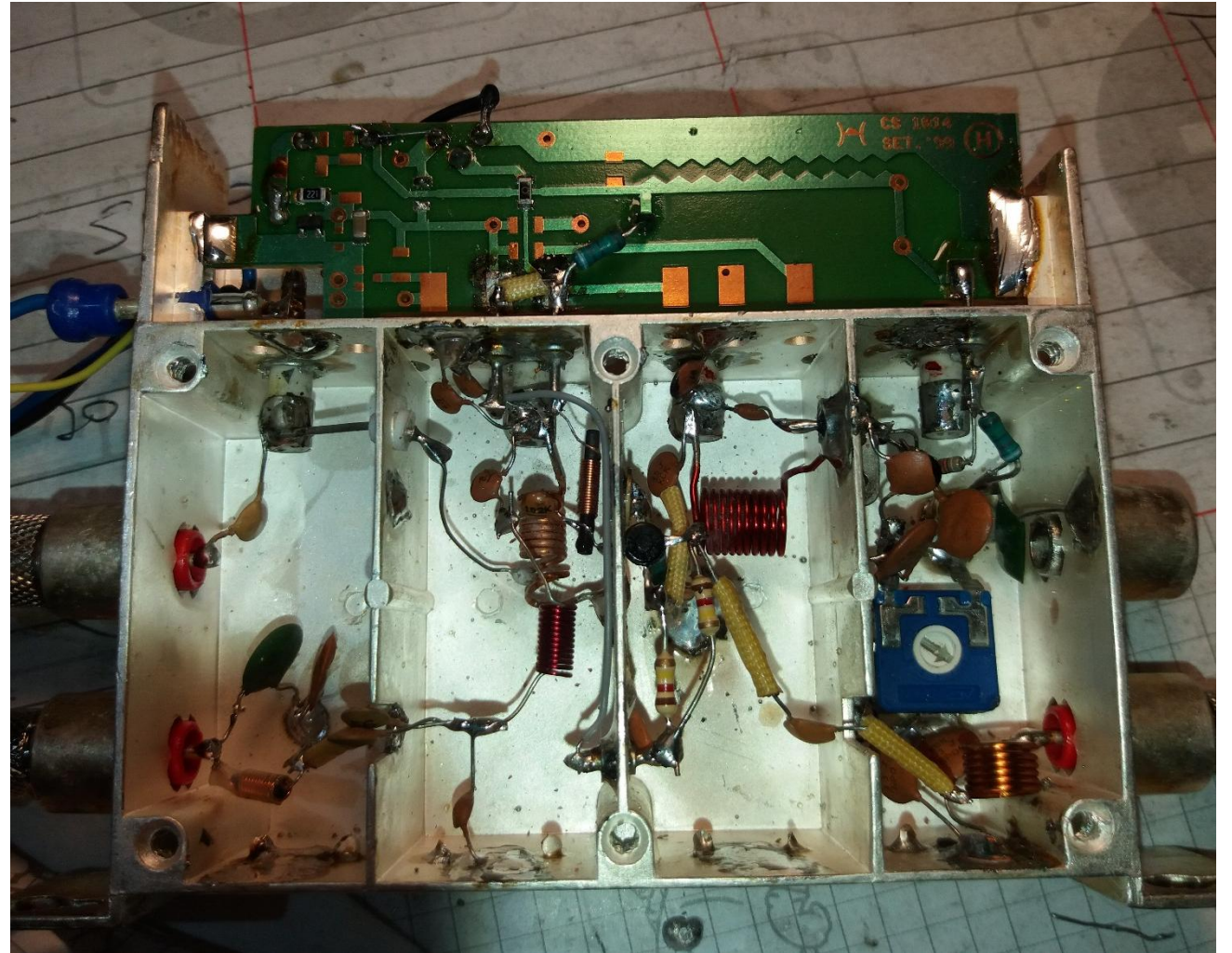
750MHZ / 1100MHZ



CONVERTITORE

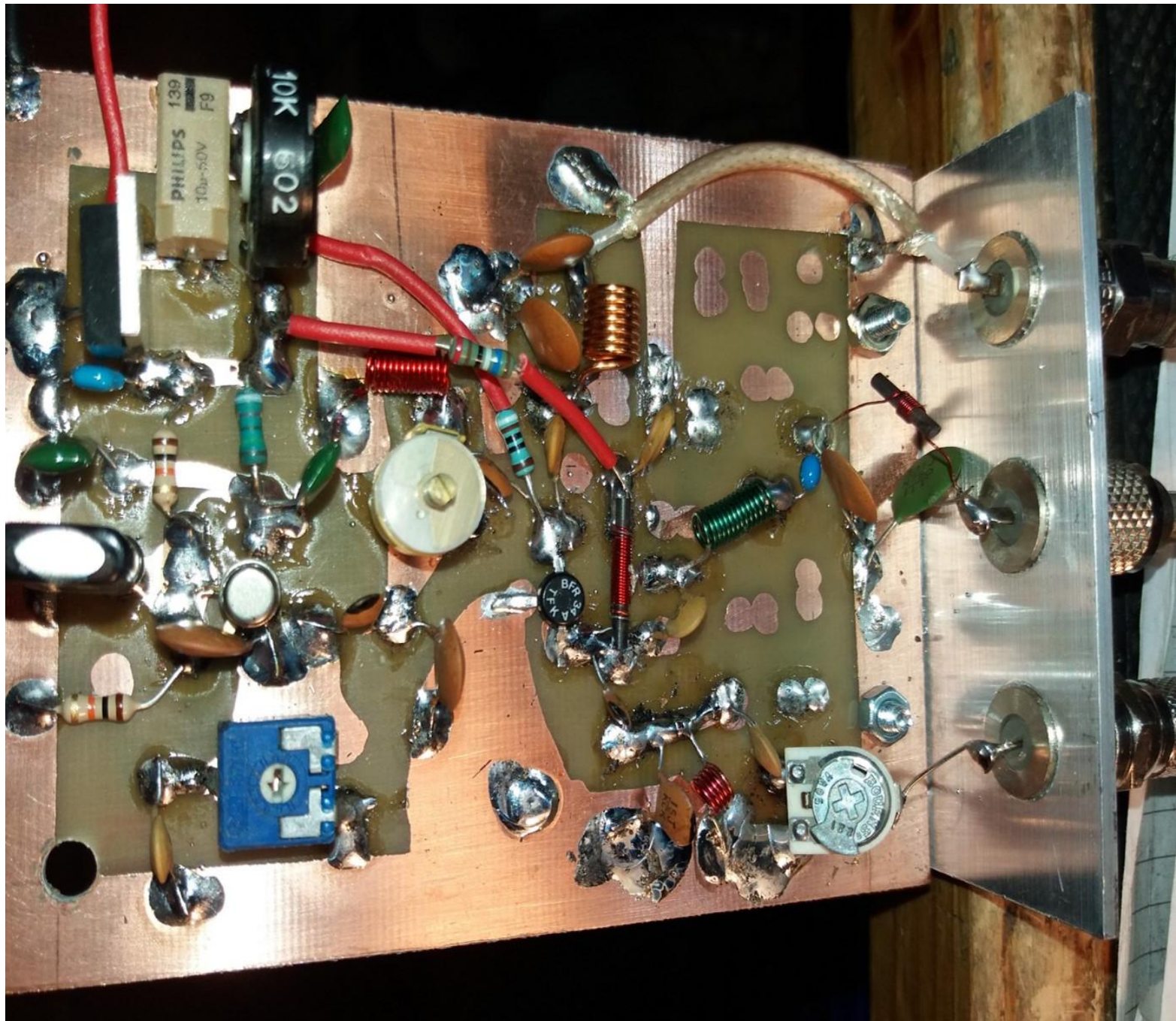
In 80 Mhz

Out 144Mhz e 14 Mhz



**CONVERTITORE
IN 80MHZ**

OUT145 E 14MHZ



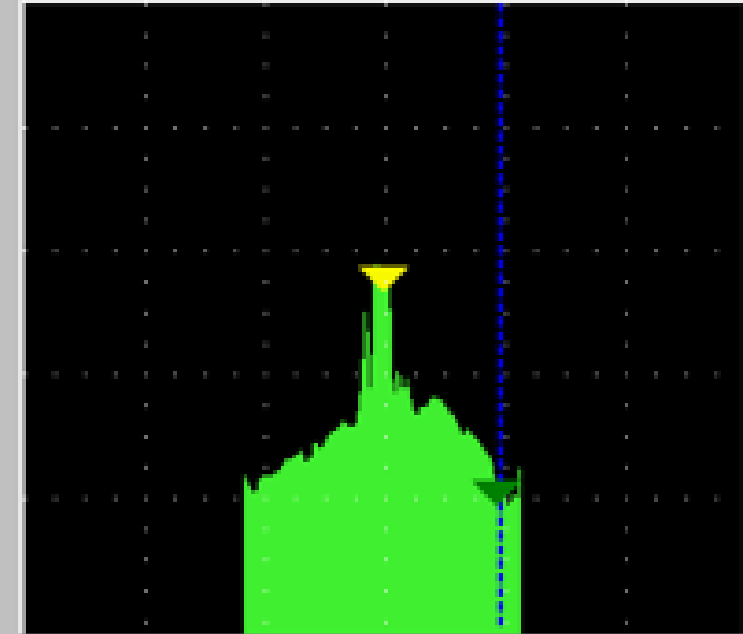
-Spettro (AUTOSET)

1339 MHz

1500 kBd

verticale

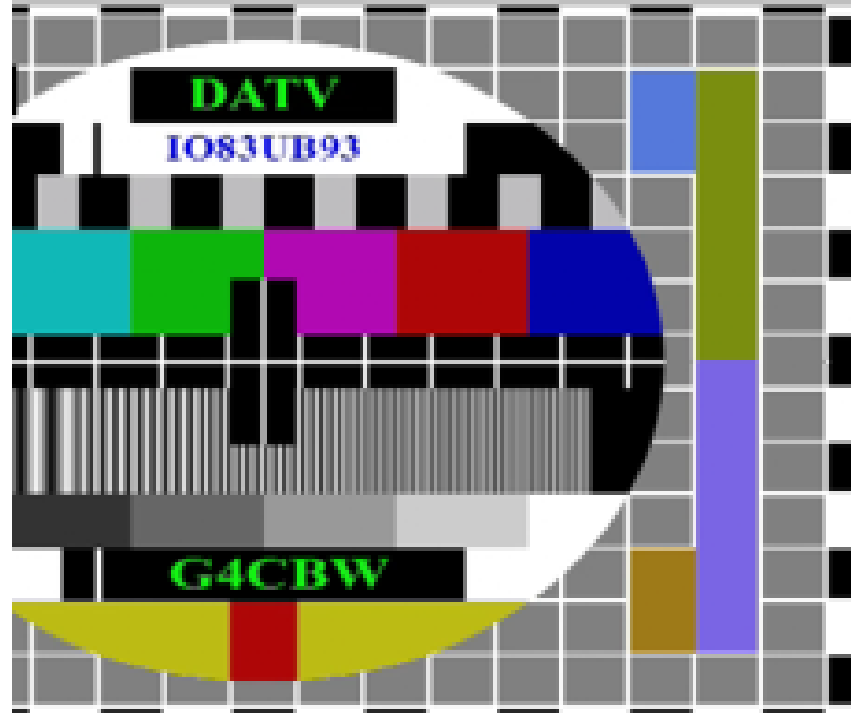
0 dBμV	20	40	60	80	100	120
8.9 dB	0	10	20	30	40	50
4.0E-3	1E-1	1E-3	1E-5	1E-7	1E-9	
< 1E-8	1E-1	1E-3	1E-5	1E-7	1E-9	
< 3E-5	1E-1	1E-3	1E-5	1E-7	1E-9	
7.1dB	0	5	10	15	20	25
7.1dB	0	10	20	30	40	50



PER IL VIDEO.....E
FONIA.....

DIAMETRO DELLA
PARABOLA

POTENZE



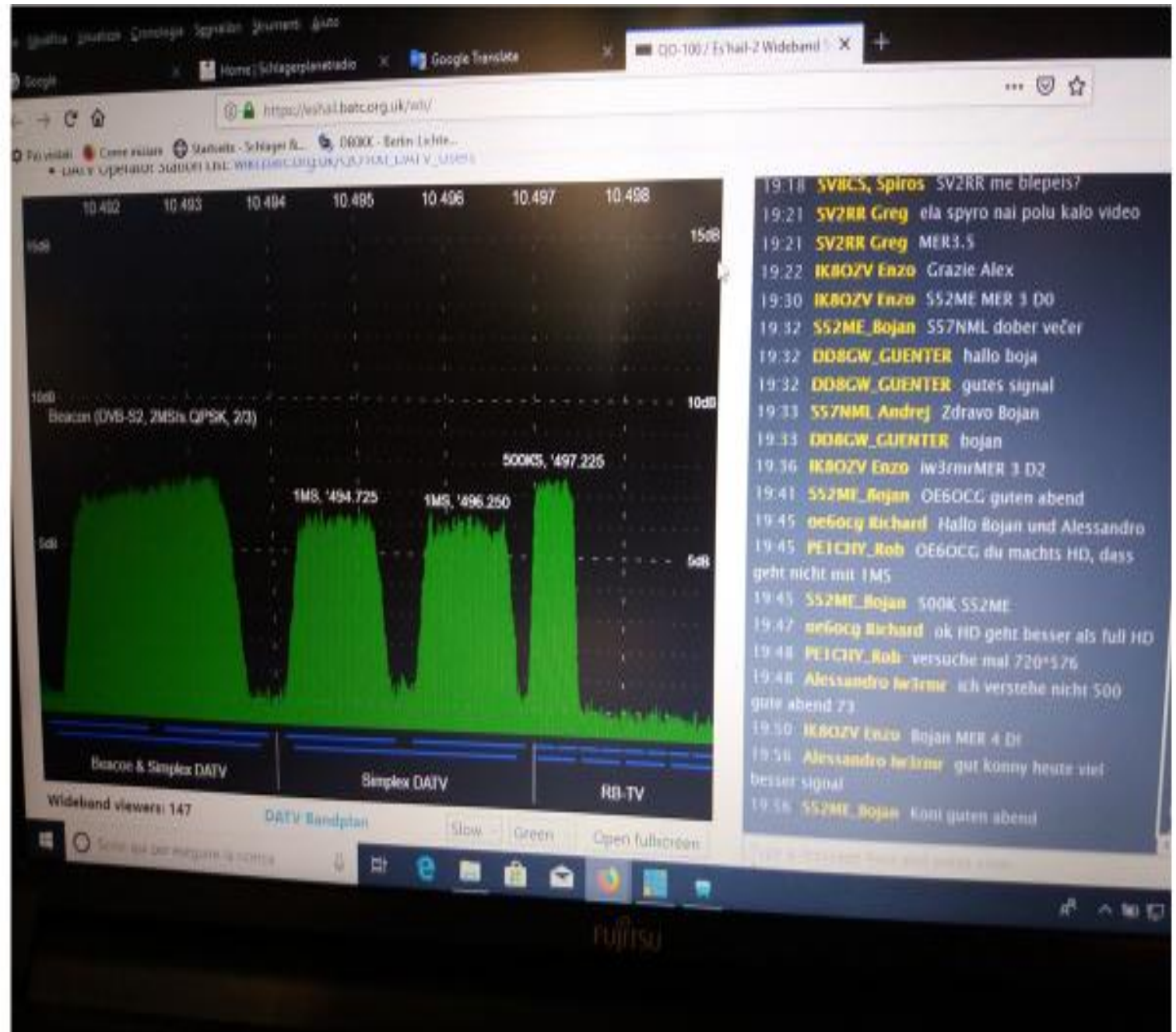
Digital TV
720x576p 100 Hz H.264
Video Rate 1.134 Mbit/s
Audio AAC

**TRASMISSIONE IN VARIE
LARGHEZZE DI BANDA**

**POTENZE IN BASE ALLA
LARGHEZZA DI BANDA**

**STANDARD DI
TRASMISSIONE**

**POSSIBILITA DI
COLLEGAMENTI IN
DUPLEX**



RICEVITORI SAT

RICEVITORI DEDICATI

RICEVITORI DA PC



4K
ULTRA HD



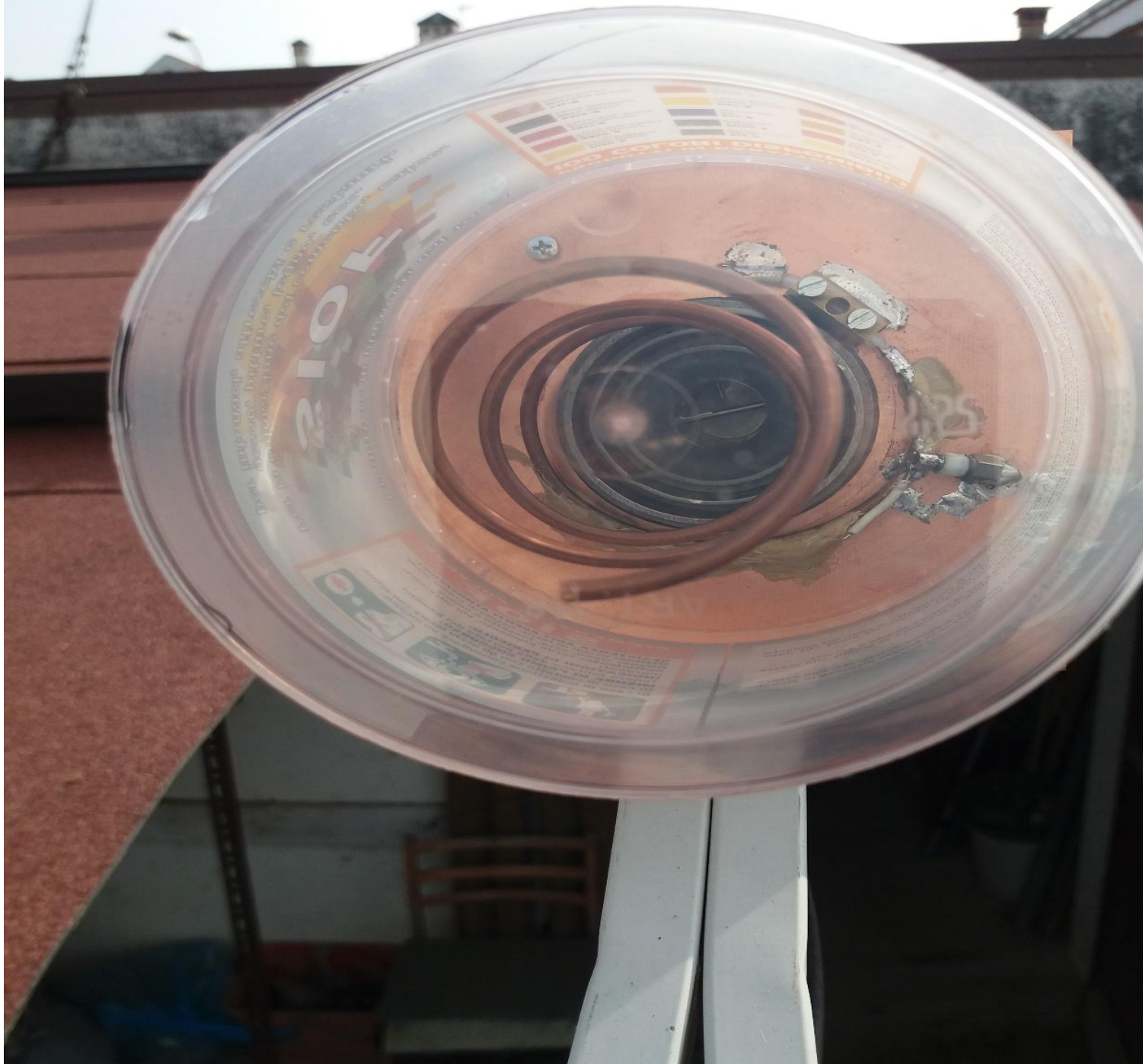
FEED PER PARABOLE:

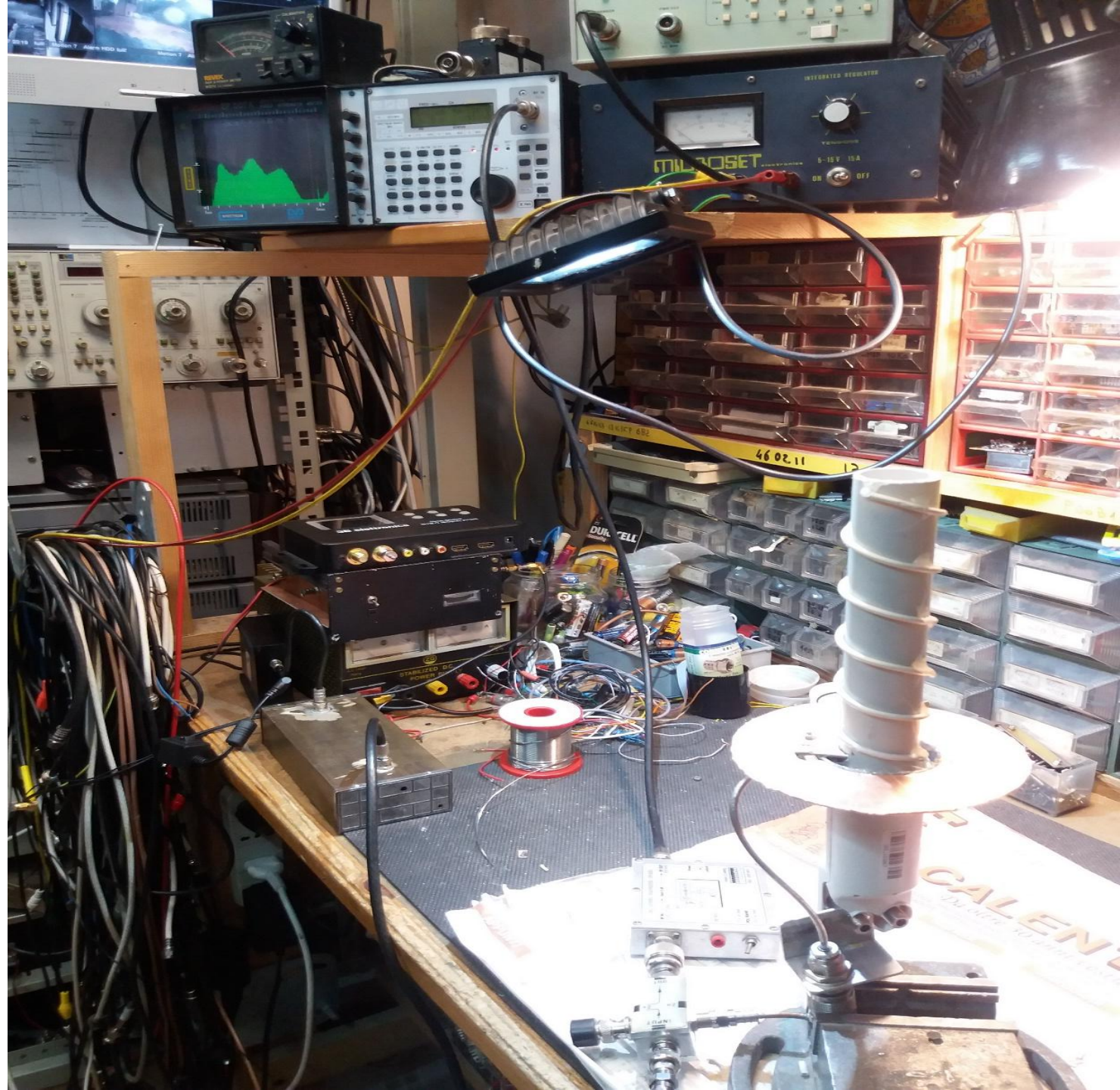
ELICHE

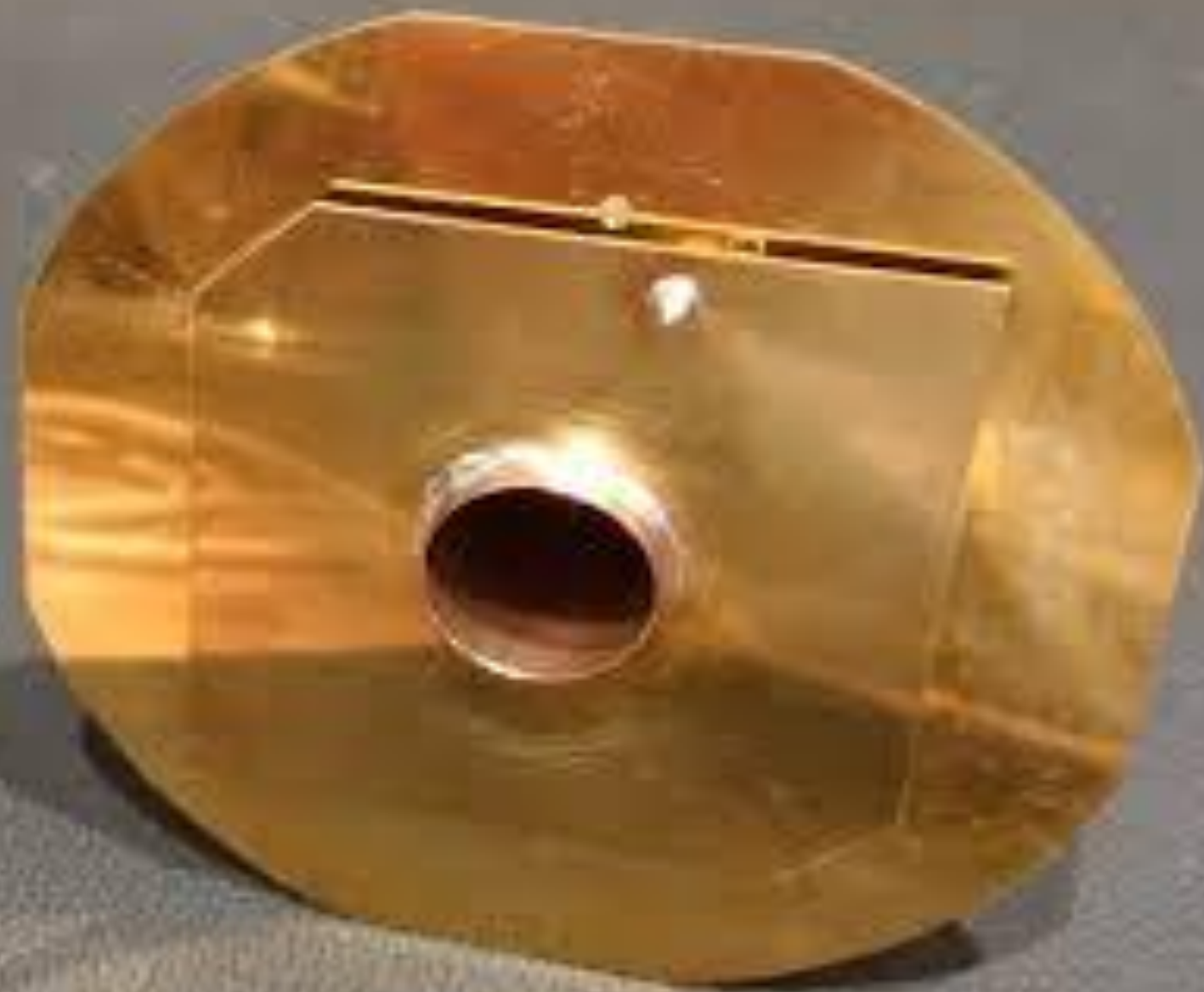
PACH

DUAL BAND





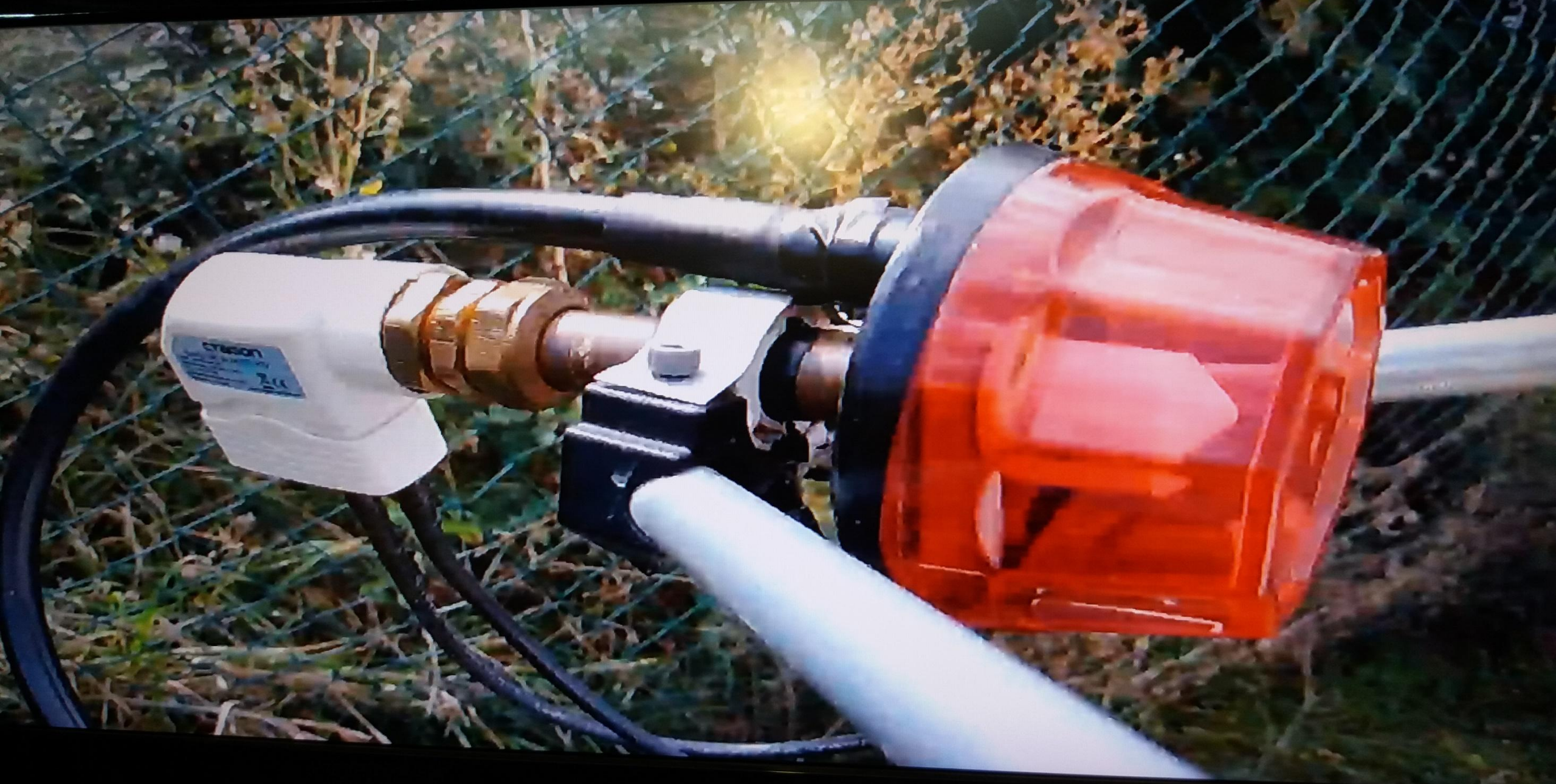




PELASH THE NETHERLAND



Dishfeed 13/3 cm patch ante



SHARP

2019/09/29 18:19:15 SUN

F6FCE

19/09/20 18:19:14

Surge ID: 1000459959 7L

SHARP









Tx



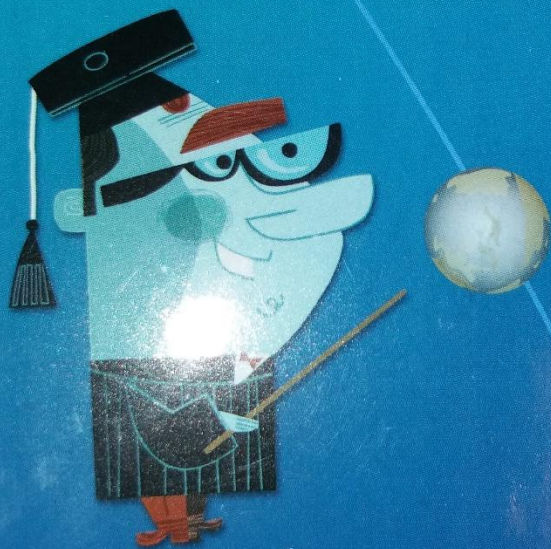
Rx



AHEAD OF WHAT'S POSSIBLE™

ADALM-PLUTO

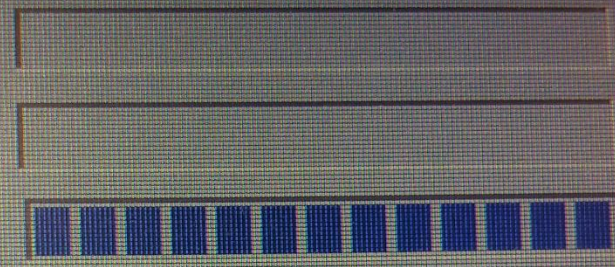
SDR Active Learning Module



LED1 Ready



- TS Record
- Carrier Only
- Video Ident



Tx Queue 0 %
NULL 0 %
Tx Level 47

Tx Mode DVB-S2 0.35 NP
Tx Constellation QPSK
Tx Frequency 439.0000 MHz
Tx Symbolrate 1.000 MSps
Tx FEC 1/2
Tx Bitrate 965.848 Kbps
Video Bitrate 867.090 Kbps
Video Codec H.264
Audio Bitrate 64.000 Kbps

Tx Level



STANDBY

PTT

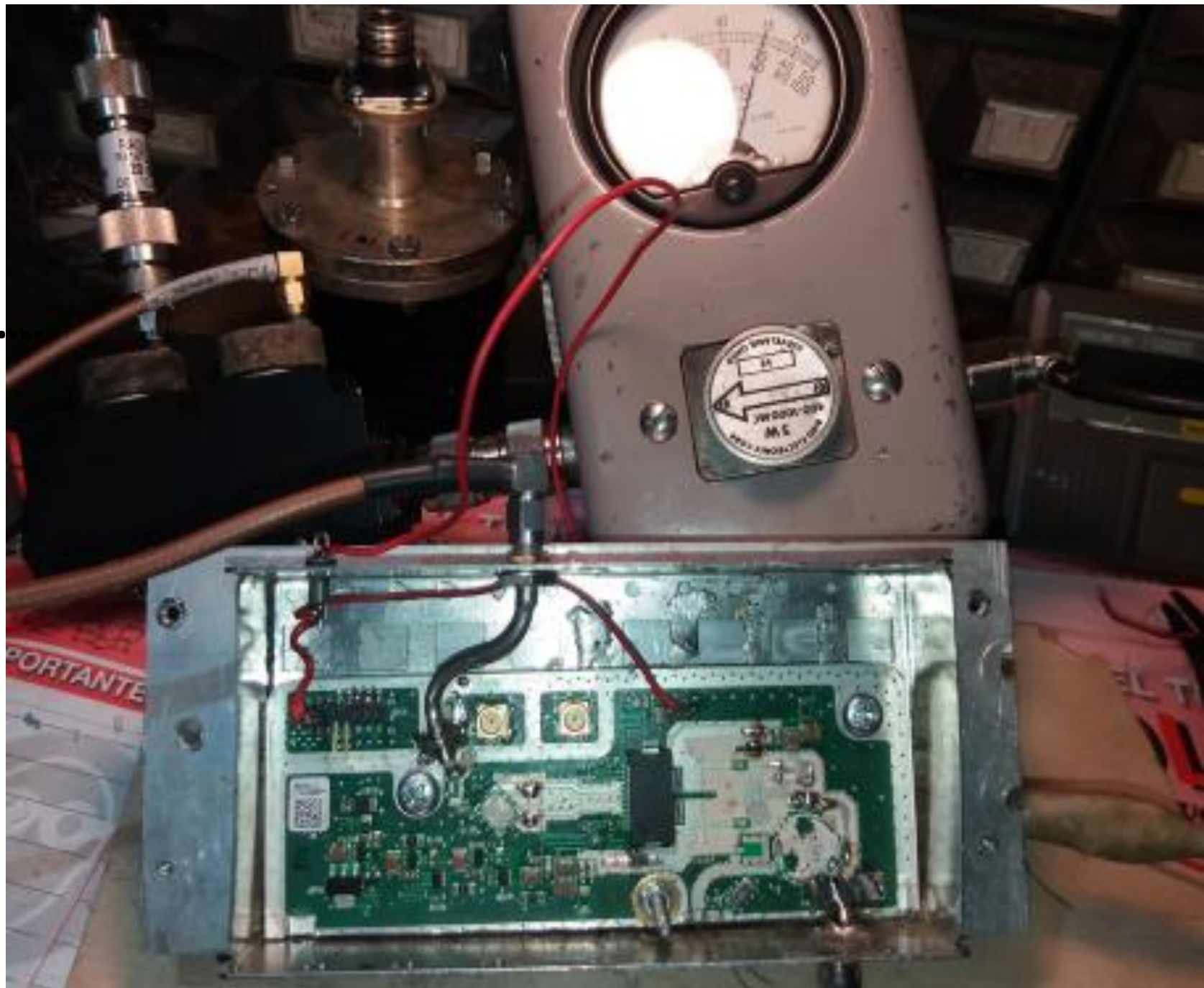


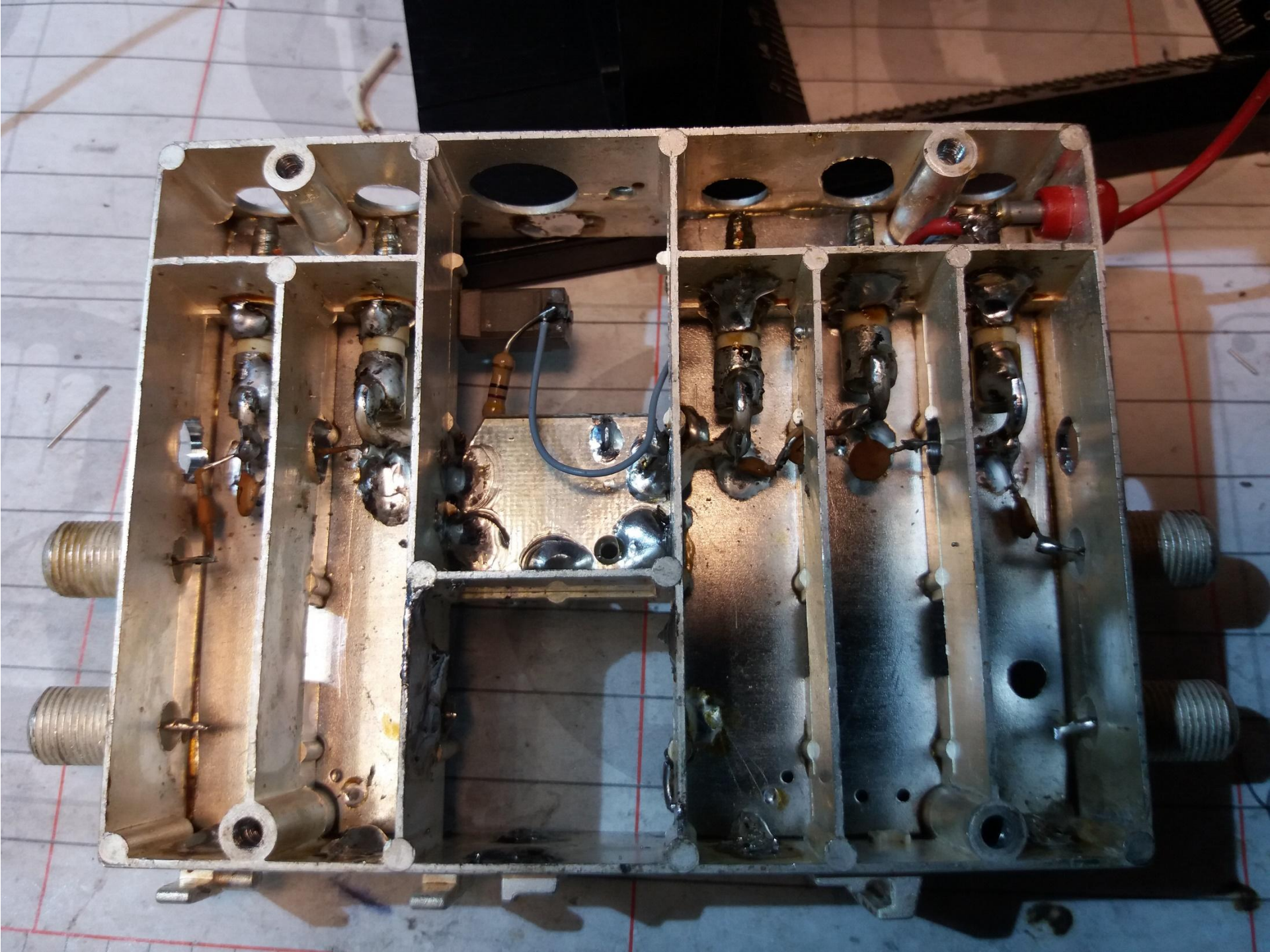
PLUTO PREGI E DIFETTI.

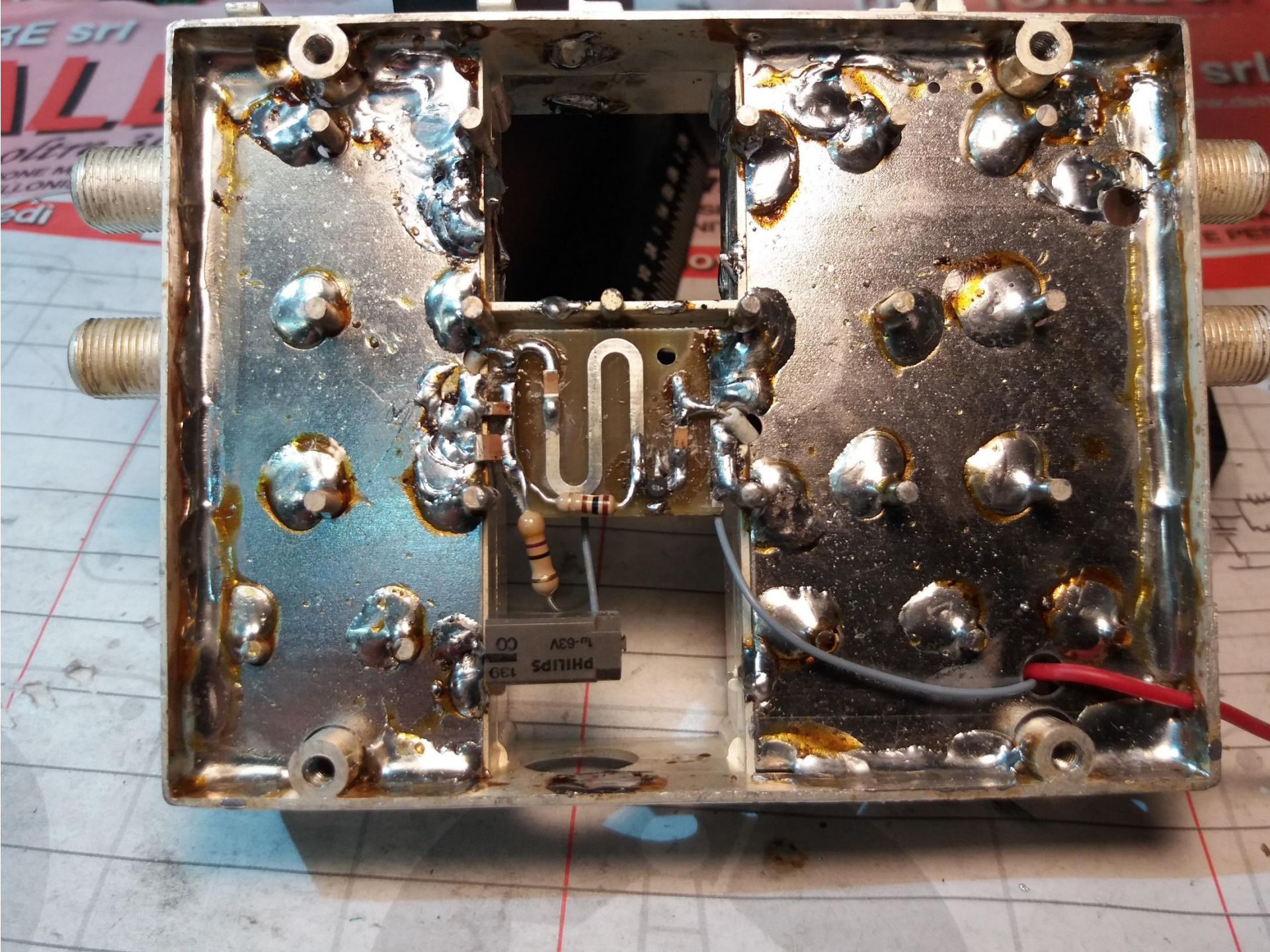
UP CONVERTER

**PILOTI E FINALI DI
POTENZA**

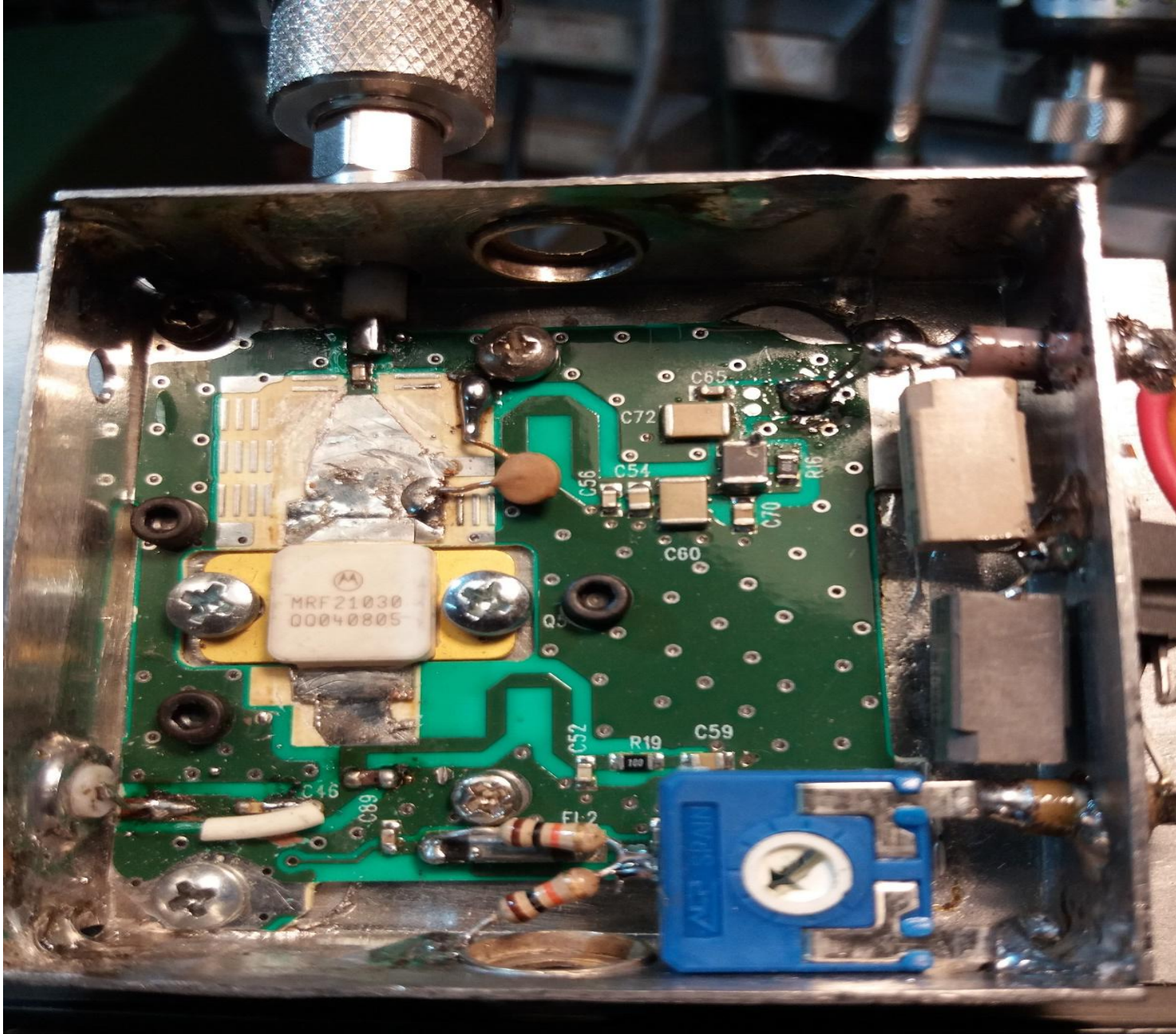
**POSSIBILITA DI TX
CONTEMPORANEO 2
PORTANTI**

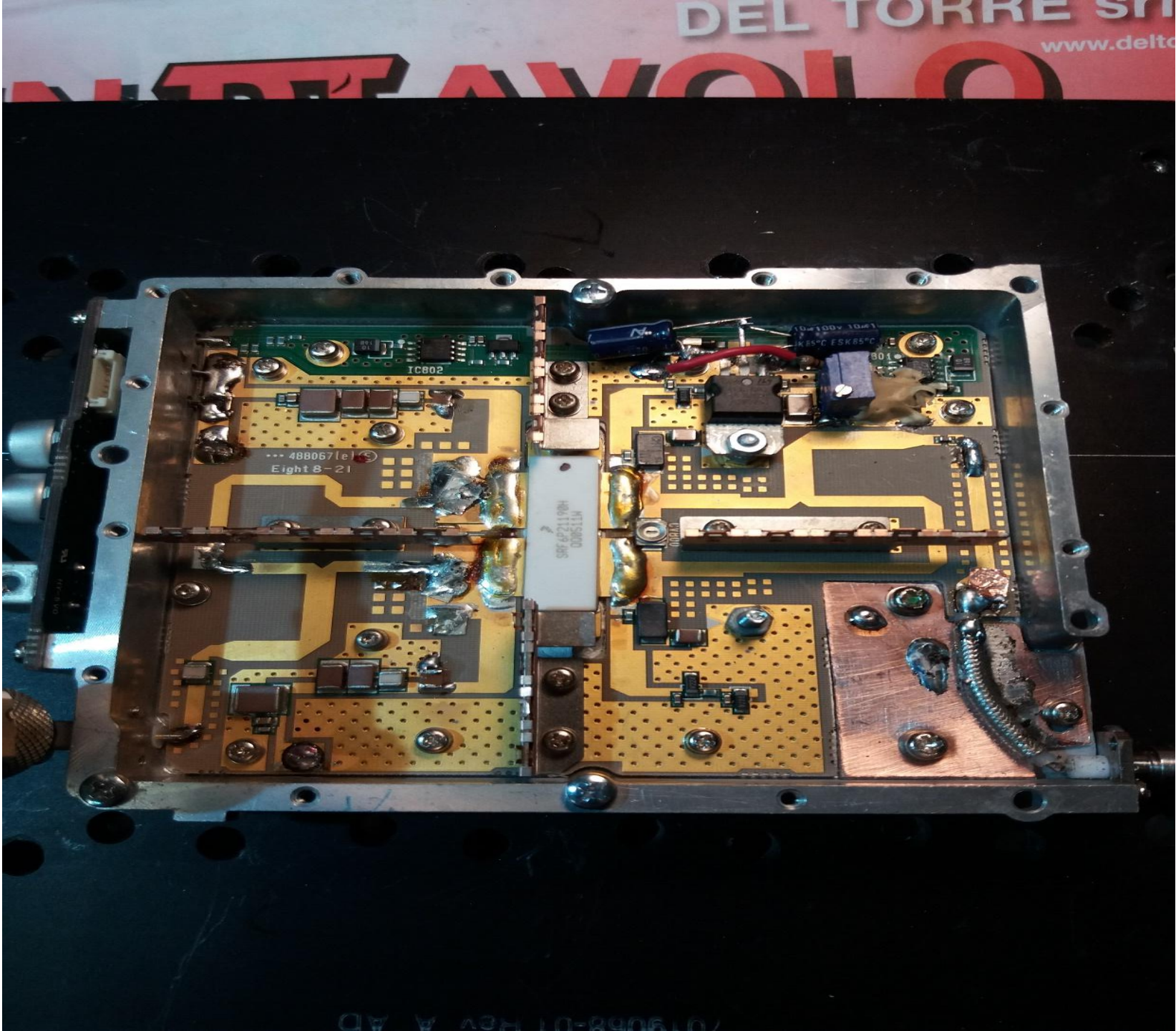












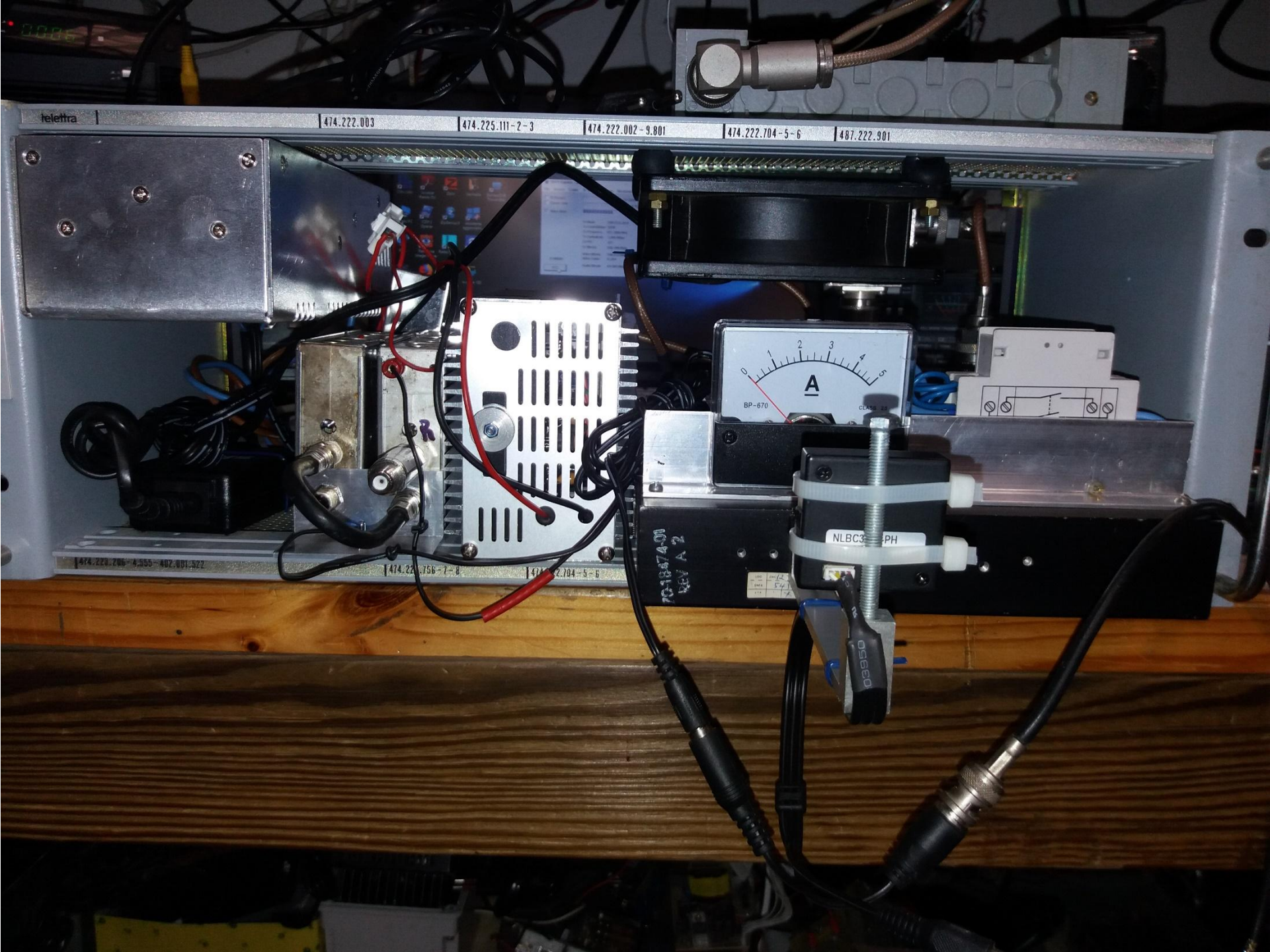
DEL TORRE S.P.A.
www.delt...

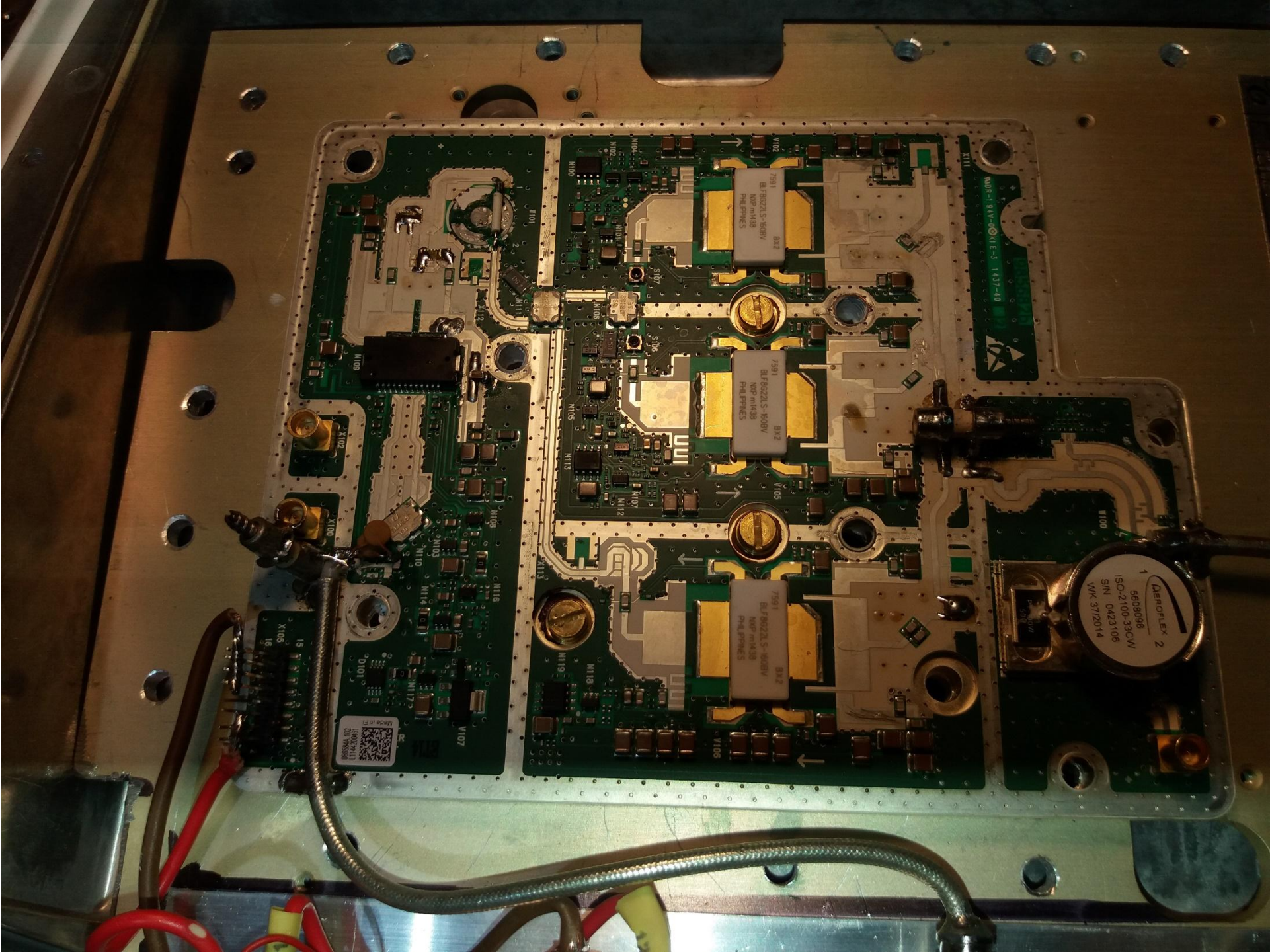
DEL TORRE S.P.A.

--- 4880671e
Eight 8-21

SE 021170H
008311A

7019088-01 Rev. A AD





W03-1.94V-00H1 E-3 1A37-40

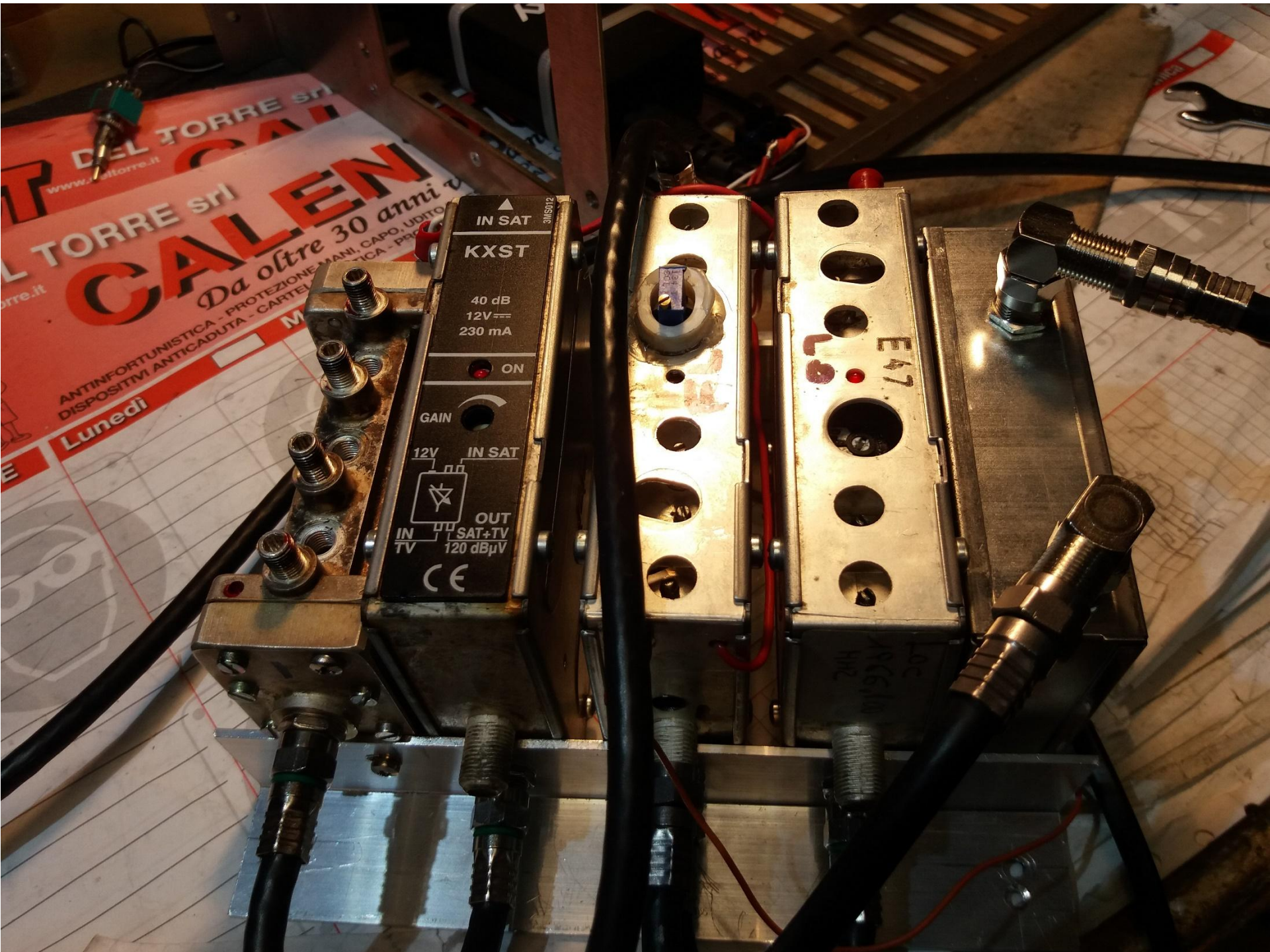
DOROLEX 2
5608098
ISO-2:100-330W
S/N 0423106
WK 372014

Made in FI
111747111
010 1785800

7591
BI-FR022L-S-400V
N0P m1438
PAL-FR02ES
B32

7591
BI-FR022L-S-400V
N0P m1438
PAL-FR02ES
B32

7591
BI-FR022L-S-400V
N0P m1438
PAL-FR02ES
B32



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CALENI
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ANTINFORTUNISTICA - PROTEZIONE MANI, CAPO, UDT
DISPOSITIVI ANTICADUTA - CARTELLI
Lunedì

IN SAT 3N5872
KXST
40 dB
12V
230 mA
ON
GAIN
12V IN SAT
OUT SAT+TV
TV 120 dB μ V
CE

E47



out 00 - 2410

input 04 - 444

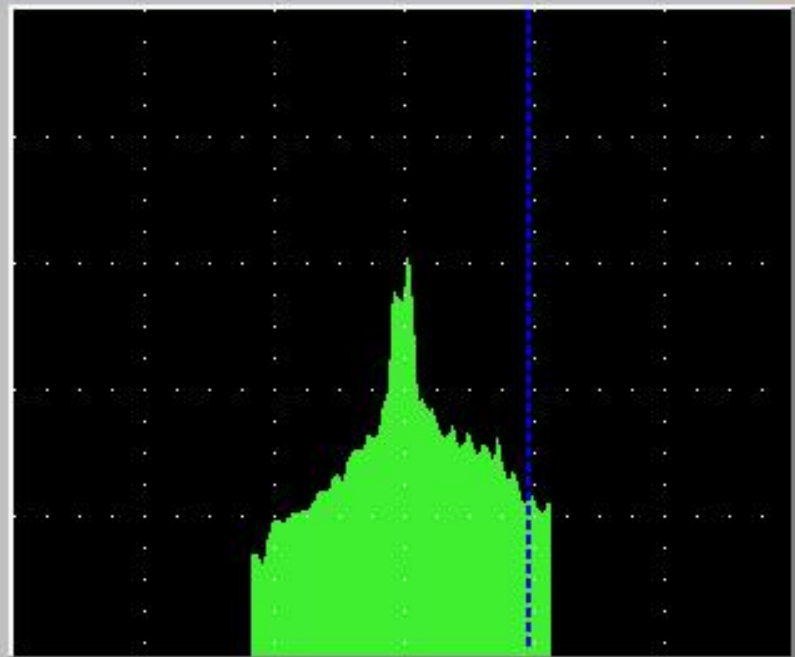
Misura-TV-Spettro (AUTOSSET)

VDC=17.8V
IDC= 0mA



Segnale 11089 (1339) MHz
DVB-S2 1000 kBd
Bassa Orizzontale
8PSK 3/4

RF	50.2 dB μ V	20	40	60	80	100	120
C/N	13.6 dB	0	10	20	30	40	50
BERi	2.4E-2	1E-1	1E-3	1E-5	1E-7	1E-9	
BERo	< 5E-8	1E-1	1E-3	1E-5	1E-7	1E-9	
PER	< 9E-5	1E-1	1E-3	1E-5	1E-7	1E-9	
MER	10.9dB	0	5	10	15	20	25
LKM	3.2dB	0	10	20	30	40	50



Home icon
Pencil icon
LNB DISEqC button
TV icon



ON4BHM
1920x1080i 25 Hz H.264
Video Rate 1.671 Mbit/s
Audio MPEG Layer II

Segnale button
Canale button

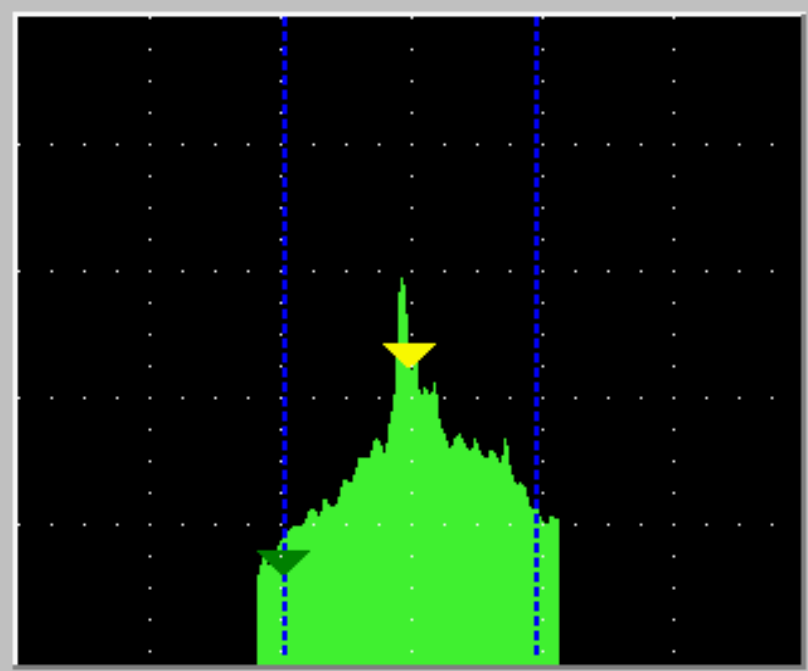
Misura-TV-Spettro (AUTOSET)

VDC=17.8V
IDC= 0mA

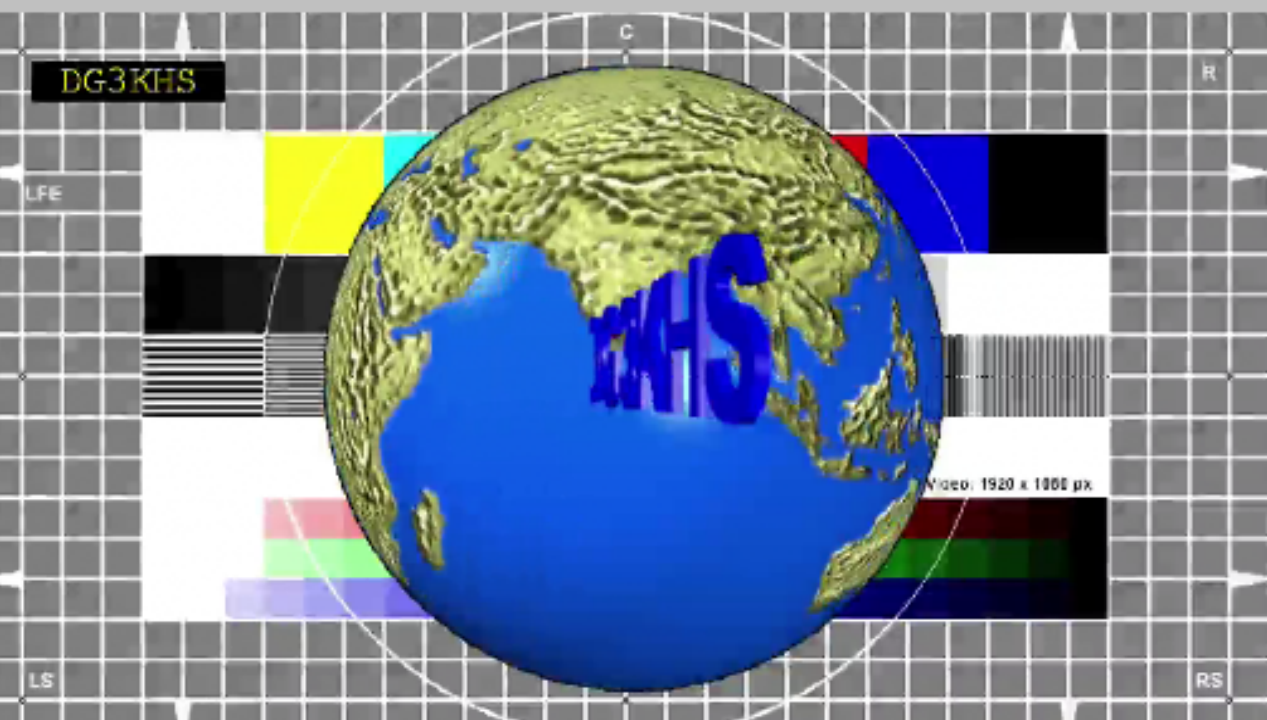


Segnale 11089 (1339) MHz
DVB-S2 1000 kbd
Bassa Orizzontale
QPSK 1/2

RF	49.1 dBμV	20	40	60	80	100	120
C/N	11.8 dB	0	10	20	30	40	50
BERi	8.5E-2	1E-1	1E-3	1E-5	1E-7	1E-9	
BERo	< 1E-7	1E-1	1E-3	1E-5	1E-7	1E-9	
PER	< 1E-4	1E-1	1E-3	1E-5	1E-7	1E-9	
MER	3.0dB	0	5	10	15	20	25
PKM	3.0dB	0	10	20	30	40	50



Home icon
Pencil icon
LNB DISEqC button
TV icon



DG3KHS@JO30Is
1280x720p 50 Hz H.264
Video Rate 0.838 Mbit/s
Audio MPEG Layer II

Segnale button
Canale button

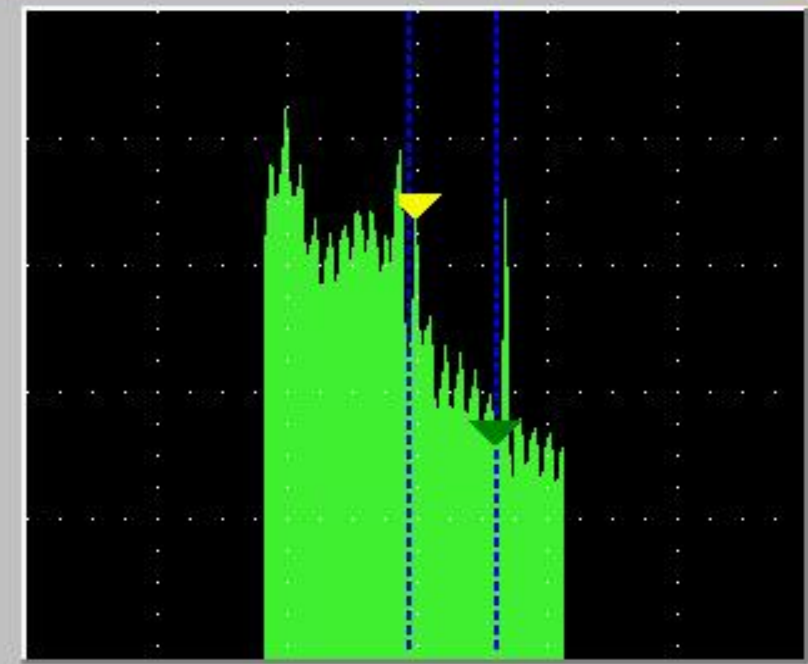
Misura-TV-Spettro (AUTOSET)

VDC=17.8V
IDC= 0mA



Segnale 1022 MHz
DVB-S 1000 kb/d
Alta Orizzontale
QPSK 3/4

RF	69.9 dB μ V	20	40	60	80	100	120
C/N	7.8 dB	0	10	20	30	40	50
BERi	4.2E-2	1E-1	1E-3	1E-5	1E-7	1E-9	
BERo	2.6E-3	1E-1	1E-3	1E-5	1E-7	1E-9	
PER	< 5E-5	1E-1	1E-3	1E-5	1E-7	1E-9	
MER	5.0dB	0	5	10	15	20	25
LKM	---dB	0	10	20	30	40	50



Home icon
Save icon
LNB DISEqC icon
TV icon



F5DB
720x576i 25 Hz MPEG-2
Video Rate 0.867 Mbit/s
Audio MPEG Layer II

Segnale
Canale

OE6GKD



SHARP



8 0.14 411

Nessun segnale



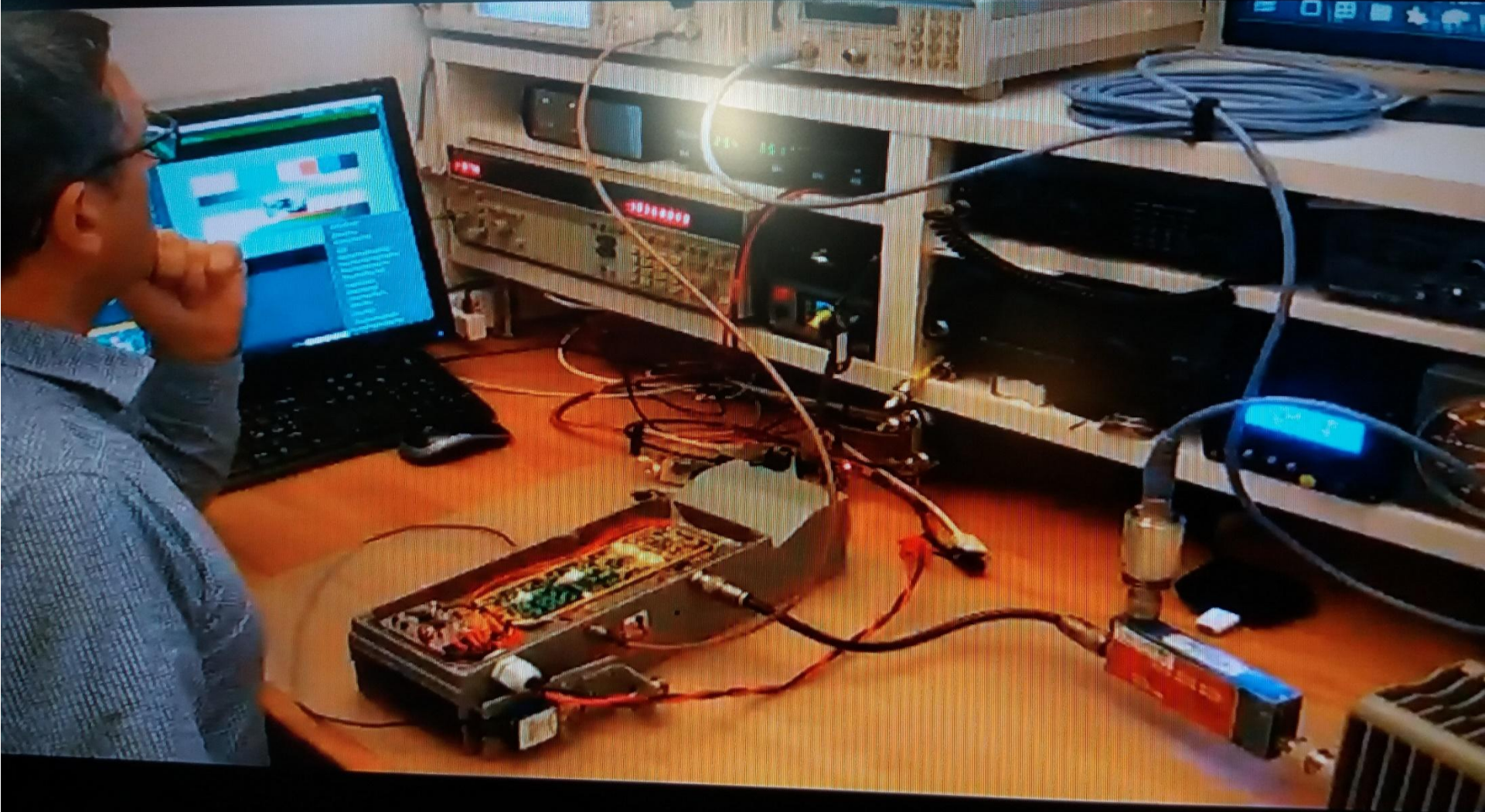
SHARP

EA6WQ - JM190N - Mallorca Island



Nelson's style

SHARP



SHARP



Nessun segnale

SHARP

PELASH THE NETHERLANDS



SHARP

PELASH THE NETHERLANDS



SHARP

CT2GHB



SAMSUNG

WORKER



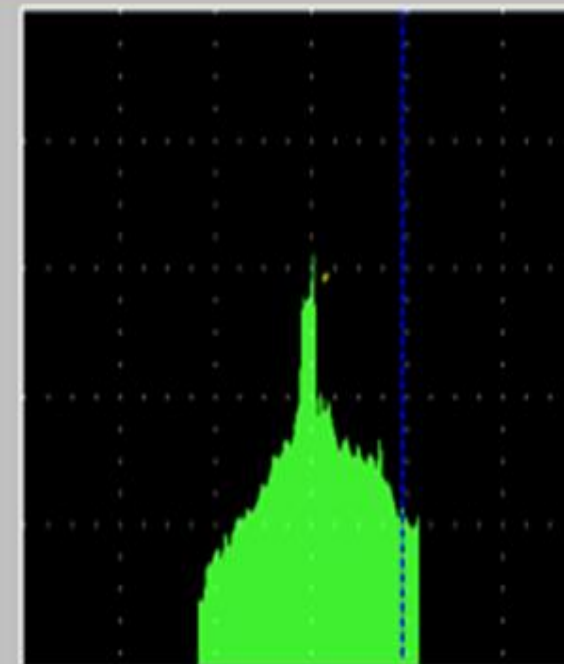
FERGUSON



Misura-TV-Spettro (AUTOSSET)

Segnale 11089 (1339) MHz
DVB-S2 1000 kBd
Bassa Orizzontale
8PSK 3/4

RF	49.9 dB μ V	20	40	60	80	100	120
C/N	14.1 dB	0	10	20	30	40	50
BERI	1.9E-2	1E-1	1E-3	1E-5	1E-7	1E-9	
BERo	< 1E-8	1E-1	1E-3	1E-5	1E-7	1E-9	
PER	< 2E-5	1E-1	1E-3	1E-5	1E-7	1E-9	
MER	11.4dB	0	5	10	15	20	25
LKM	3.7dB	0	10	20	30	40	50



MOLTISSIME POSSIBILITA DI SPERIMENTAZIONE:

ANTENNE

ILLUMINATORI

MODIFICHE LNB

FINALI DI POTENZA

CONVERTITORI RX

UP CONVERTER TX

SOFTWARE



ON4BHM
1920x1080i 25 Hz H.264
Video Rate 1.717 Mbit/s
Audio MPEG Layer II