

Menüaufbau MiniMod **DVB-T**

Menü-Ebene 1

Current status: standby | | Current status: ON-AIR

Input Settings

- 1) Input Mode (MPEG encoder)
- 0) exit menu

Modulation Settings

- 1) Modulation (DVB-T)
- 2) TX Enable (ON AIR)
- 3) Output Frequency (435000 kHz)
- 4) Spectrum (normal)
- 5) Carrier only (no)
- 6) Output Gain (15)
- 7) Coderate (FEC) (1/2)
- 8) Constellation (QPSK)
- 9) Guard Interval (1/4)
- a) Bandwidth (8 MHz)
- 0) exit menu

Video Settings

- 1) Video Input (enabled)
- 2) Video Source (CVBS)
- 3) Video Format (PAL)
- 4) Video Resolution (D1)
- 5) GOP Mode (IBBP)
- 0) exit menu

Audio Settings

- 1) Audio Input (enabled)
- 2) Audio Mode (stereo)
- 3) Audio Samplerate (44.1 kHz)
- 4) Audio Bitrate (256 kbps)
- 0) exit menu

PSI Settings

- 1) Network ID (0x5555)
- 2) Network Name (DD1KU)
- 3) Stream ID (0xA555)
- 4) Program ID (0x1)
- 5) Program Provider (DD1KU)
- 6) Program Name (DD1KU-DVB-T)
- 0) exit menu

PID Settings

- 1) Video PID (0x31)
- 2) Audio PID (0x21)
- 3) PMT PID (0x21)
- 0) exit menu

Menü-Ebene 2 Modulation

Select Modulation:

- 1) DVB-S
- 2) DVB-T [X]
- 3) GMSK
- 0) abort

Select TX Enable:

- 1) stand by [X]
- 2) ON AIR
- 0) abort

Enter Output Frequency (kHz)
[250000 - 1500000]:

Enter Output Gain [0 - 15]:

Select Coderate (FEC):

- 1) 1/2 [X]
- 2) 2/3
- 3) 3/4
- 4) 5/6
- 5) 7/8
- 0) abort

Select Constellation:

- 1) QPSK [X]
- 2) QAM16
- 3) QAM64
- 0) abort

Select Guard Interval:

- 1) 1/4 [X]
- 2) 1/8
- 3) 1/16
- 4) 1/32
- 0) abort

Select Bandwidth:

- 1) 1 MHz
- 2) 2 MHz
- 3) 3 MHz
- 4) 4 MHz
- 5) 5 MHz
- 6) 6 MHz
- 7) 7 MHz
- 8) 8 MHz [X]
- 0) abort

Select Spectrum:

- 1) normal [X]
- 2) Inverse
- 0) abort

Select Carrier Only:

- 1) no [X]
- 2) Yes [X]
- 0) abort

Menü-Ebene 2 Video

>Select Video Source:

- 1) CVBS [X]
- 2) YC
- 3) YCbCr
- 4) RGB
- 5) SCART
- 6) SDI
- 0) abort

Select Video Format:

- 1) PAL [X]
- 2) PAL-60
- 3) PAL-M
- 4) PAL-N
- 5) NTSC
- 6) NTSC-4.43
- 7) SECAM
- 0) abort

Select Video Resolution:

- 1) D1 [X]
- 2) HD1
- 3) SIF
- 0) abort

Select GOP Mode:

- 1) I
- 2) IP
- 3) IBP
- 4) IBBP [X]
- 0) abort

115,200Baud 8N1

Menü-Ebene 2 Audio

Select Audio Input:

- 1) disabled
- 2) enabled [X]
- 0) abort

Select Audio Mode:

- 1) stereo [X]
- 2) joint stereo
- 3) dual ch.
- 4) single ch.
- 0) abort

Select Audio Samplerate:

- 1) 32 kHz
- 2) 44.1 kHz [X]
- 3) 48 kHz
- 0) abort

Select Audio Bitrate:

- 1) 64 kbps
- 2) 96 kbps
- 3) 112 kbps
- 4) 128 kbps
- 5) 160 kbps
- 6) 192 kbps
- 7) 224 kbps
- 8) 256 kbps [X]
- 0) abort

Menü-Ebene 0

MiniMod Mainmenu

- 1) show status
- 2) Input Settings
- 3) Modulation Settings
- 4) Video Settings
- 5) Audio Settings
- 6) PSI Settings
- 7) PID Settings

Menüaufbau MiniMod **DVB-S**

115,200Baud 8N1

Menü-Ebene 1

Current status: standby | | Current status: ON-AIR

Input Settings

- 1) Input Mode (MPEG encoder)
- 0) exit menu

Modulation Settings

- 1) Modulation (DVB-S)
- 2) TX Enable (ON AIR)
- 3) Output Frequency (435000 kHz)
- 4) Spectrum (normal)
- 5) Carrier only (no)
- 6) Output Gain (15)
- 7) Symbolrate (4167 ksym/s)
- 8) Coderate (FEC) (7/8)
- 0) exit menu

Video Settings

- 1) Video Input (enabled)
- 2) Video Source (CVBS)
- 3) Video Format (PAL)
- 4) Video Resolution (D1)
- 5) GOP Mode (IBBP)
- 0) exit menu

Audio Settings

- 1) Audio Input (enabled)
- 2) Audio Mode (stereo)
- 3) Audio Samplerate (44.1 kHz)
- 4) Audio Bitrate (256 kbps)
- 0) exit menu

PSI Settings

- 1) Network ID (0x5555)
- 2) Network Name (DD1KU)
- 3) Stream ID (0xAAAA)
- 4) Program ID (0x1)
- 5) Program Provider (DD1KU)
- 6) Program Name (DD1KU-DVB-S)
- 0) exit menu

PID Settings

- 1) Video PID (0x31)
- 2) Audio PID (0x21)
- 3) PMT PID (0x21)
- 0) exit menu

Menü-Ebene 2 Modulation

Select Modulation:

- 1) DVB-S [X]
- 2) DVB-T
- 3) GMSK
- 0) abort

Select TX Enable:

- 1) stand by [X]
- 2) ON AIR
- 0) abort

Enter Output Frequency (kHz)
[250000 - 1500000]:

Enter Output Gain [0 - 15]:

Select Coderate (FEC):

- 1) 1/2 [X]
- 2) 2/3
- 3) 3/4
- 4) 5/6
- 5) 7/8
- 0) abort

Select Spectrum:

- 1) normal [X]
- 2) Inverse
- 0) abort

Select Carrier Only:

- 1) no [X]
- 2) yes
- 0) abort

Enter Symbolrate [ksym/s]
[1000 - 50000]

Menü-Ebene 2
Video

>Select Video Source:

- 1) CVBS [X]
- 2) YC
- 3) YCbCr
- 4) RGB
- 5) SCART
- 6) SDI
- 0) abort

Select Video Format:

- 1) PAL [X]
- 2) PAL-60
- 3) PAL-M
- 4) PAL-N
- 5) NTSC
- 6) NTSC-4.43
- 7) SECAM
- 0) abort

Select Video Resolution:

- 1) D1 [X]
- 2) HD1
- 3) SIF
- 0) abort

Menü-Ebene 2
Audio

Select Audio Input:

- 1) disabled
- 2) enabled [X]
- 0) abort

Select Audio Mode:

- 1) stereo [X]
- 2) joint stereo
- 3) dual ch.
- 4) single ch.
- 0) abort

Select Audio
Samplerate:

- 1) 32 kHz
- 2) 44.1 kHz [X]
- 3) 48 kHz
- 0) abort

Select Audio Bitrate:

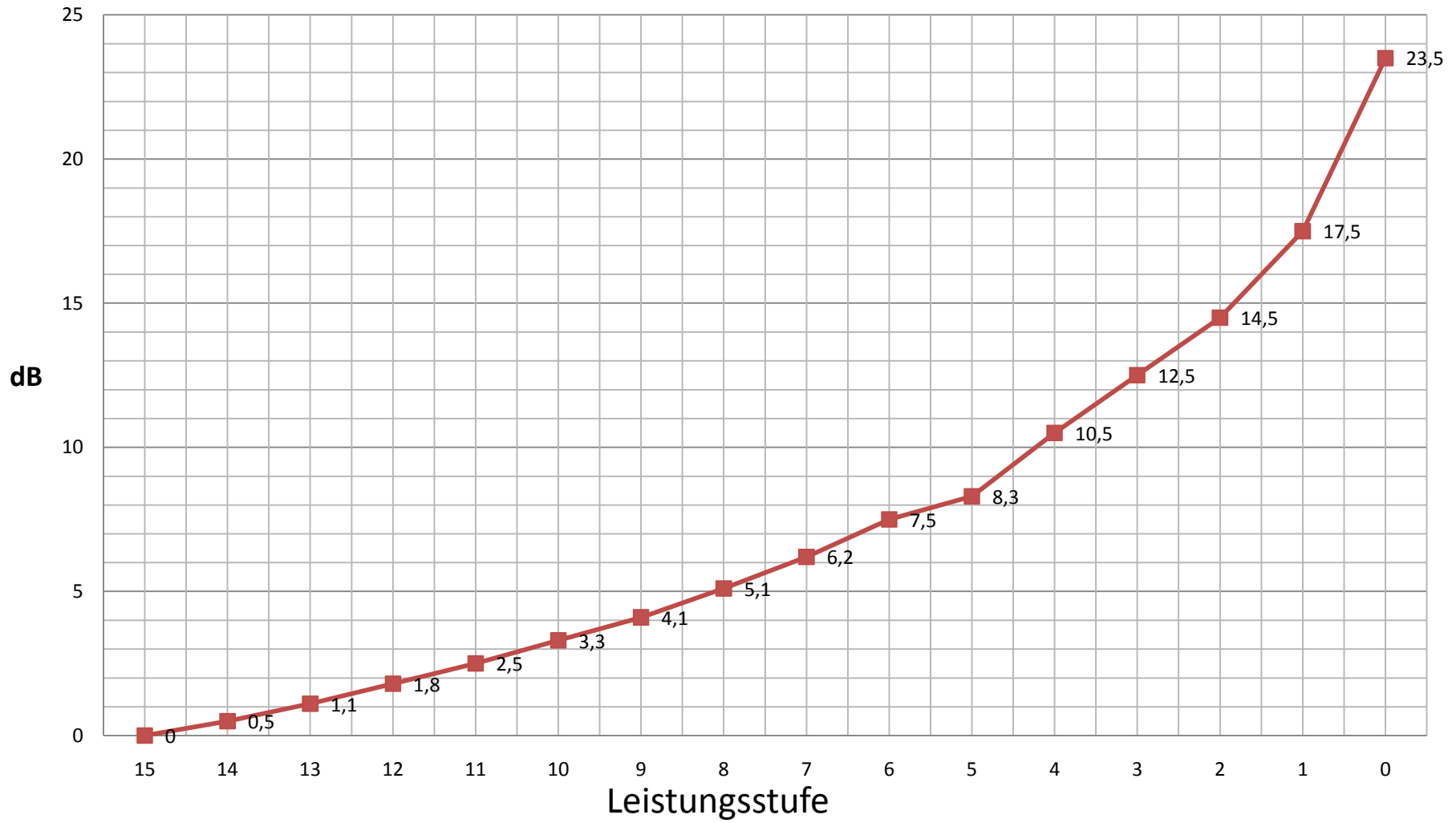
- 1) 64 kbps
- 2) 96 kbps
- 3) 112 kbps
- 4) 128 kbps
- 5) 160 kbps
- 6) 192 kbps
- 7) 224 kbps
- 8) 256 kbps [X]
- 0) abort

Menü-Ebene 0

MiniMod Mainmenu

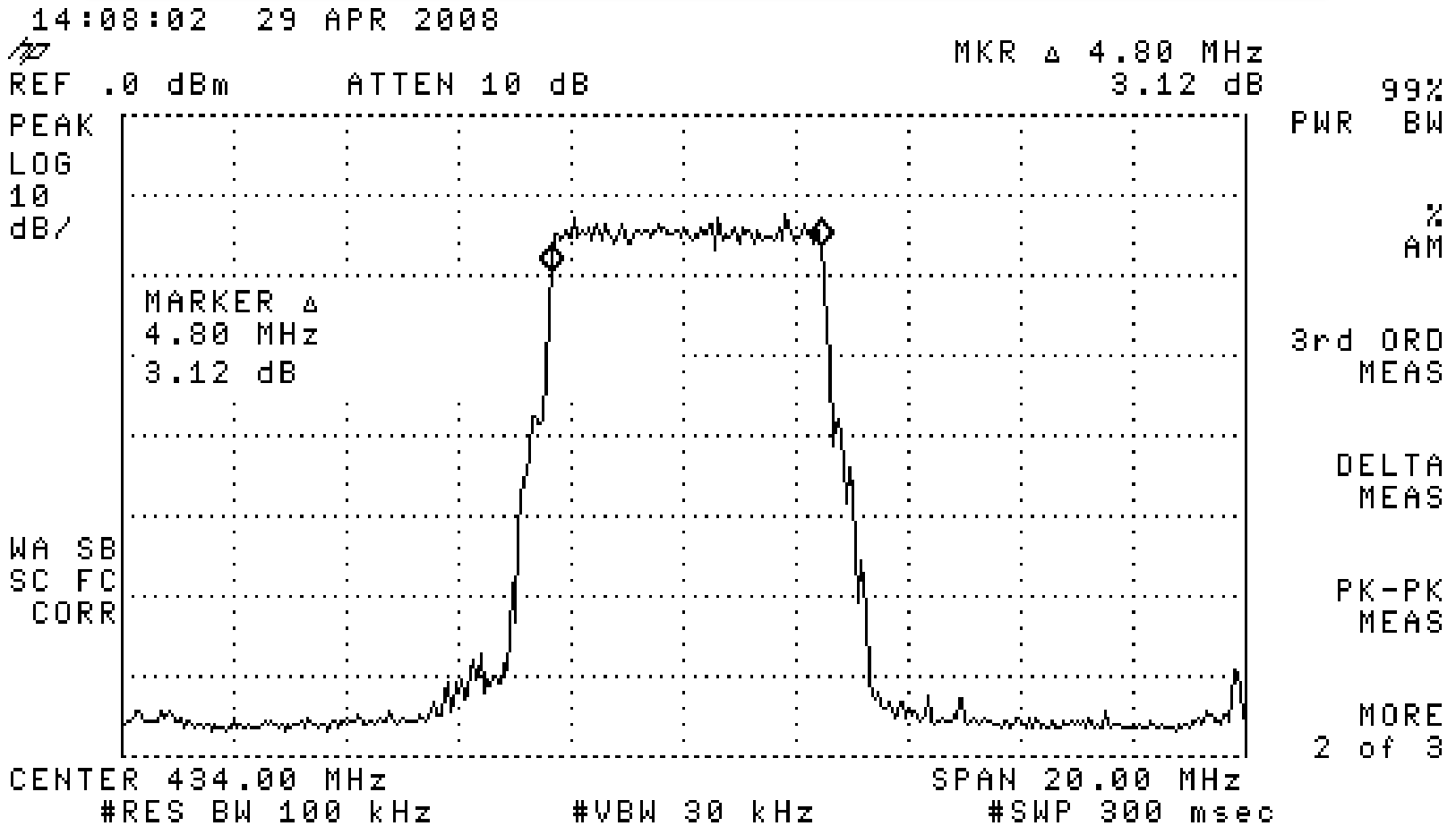
- 1) show status
- 2) Input Settings
- 3) Modulation Settings
- 4) Video Settings
- 5) Audio Settings
- 6) PSI Settings
- 7) PID Settings

Leistungsreduzierung [dB] MiniMOD DVB-T/DVB-S



MiniMod DVB-T

5 MHz Bandbreite Output Gain: 15



MiniMod DVB-T

2 MHz Bandbreite Output Gain: 15

14:11:12 29 APR 2008

~~17~~

REF .0 dBm

ATTEN 10 dB

MKR Δ 1.98 MHz

-1.41 dB

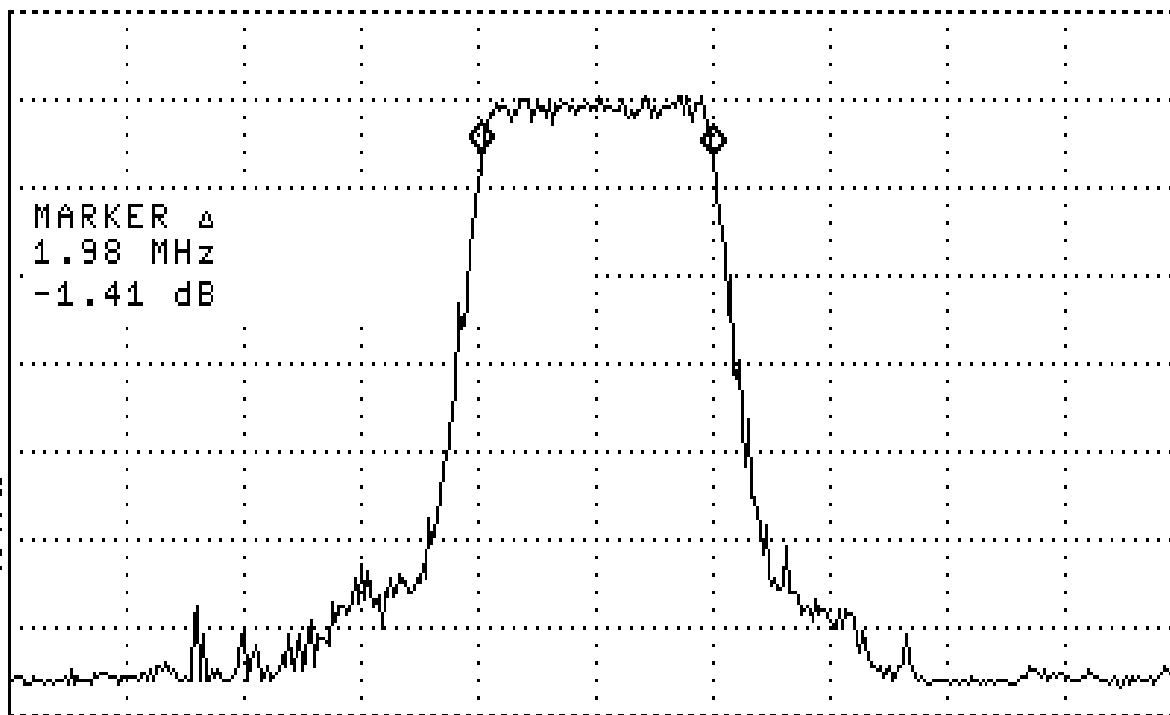
99%

PEAK

LOG

10

dB/



PWR BW

%

AM

3rd ORD

MEAS

DELTA

MEAS

PK-PK

MEAS

MORE

2 of 3

MiniMod DVB-S

4167 kSym/s Output Gain: 15

14:21:54 29 APR 2008

~~Hz~~

REF .0 dBm

ATTEN 10 dB

MKR Δ 4.90 MHz

-.82 dB

PEAK
LOG
10
dB/

99%
PWR BW

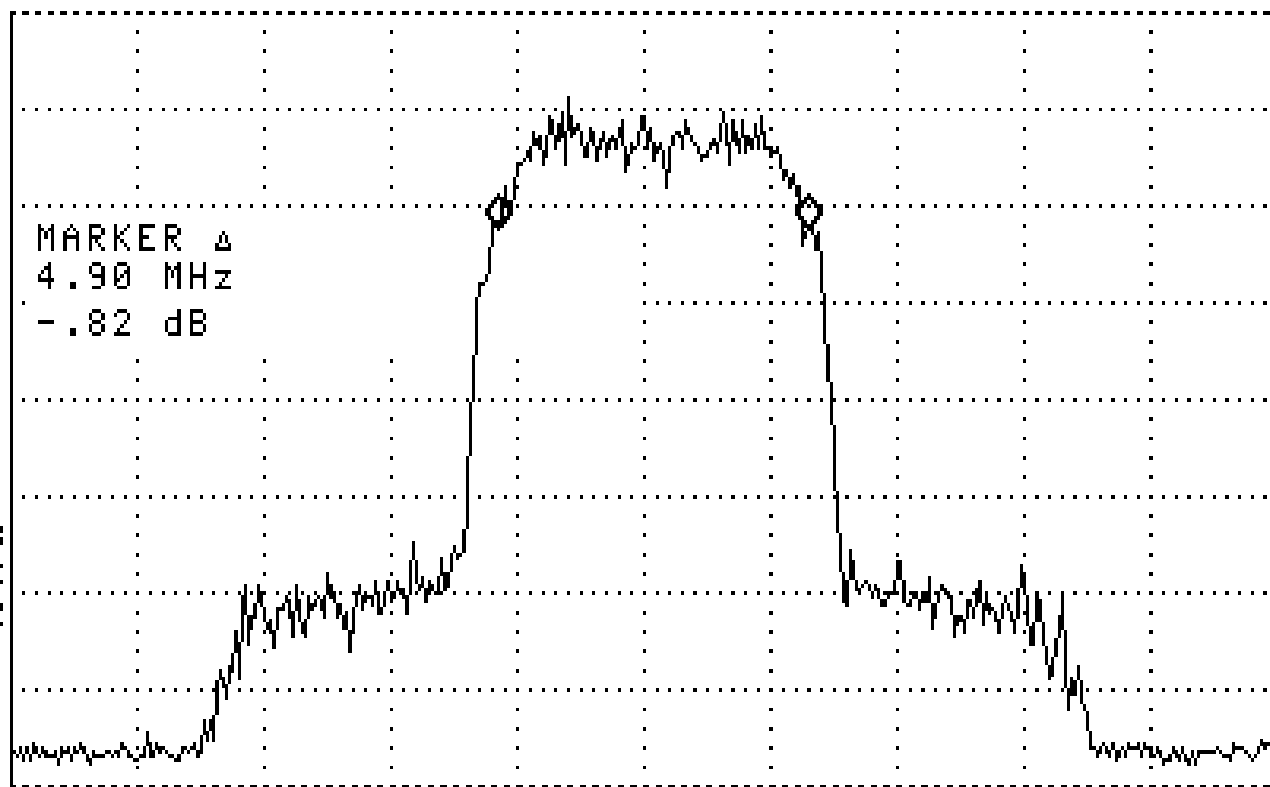
%
AM

3rd ORD
MEAS

DELTA
MEAS

PK-PK
MEAS

MORE
2 of 3



CENTER 434.00 MHz

RES BW 100 kHz

VBW 30 kHz

SPAN 20.00 MHz

SWP 20 msec

MiniMod DVB-S

1000 kSym/s Output Gain: 15

14:17:37 29 APR 2008

~~HP~~

MKR Δ 1.23 MHz

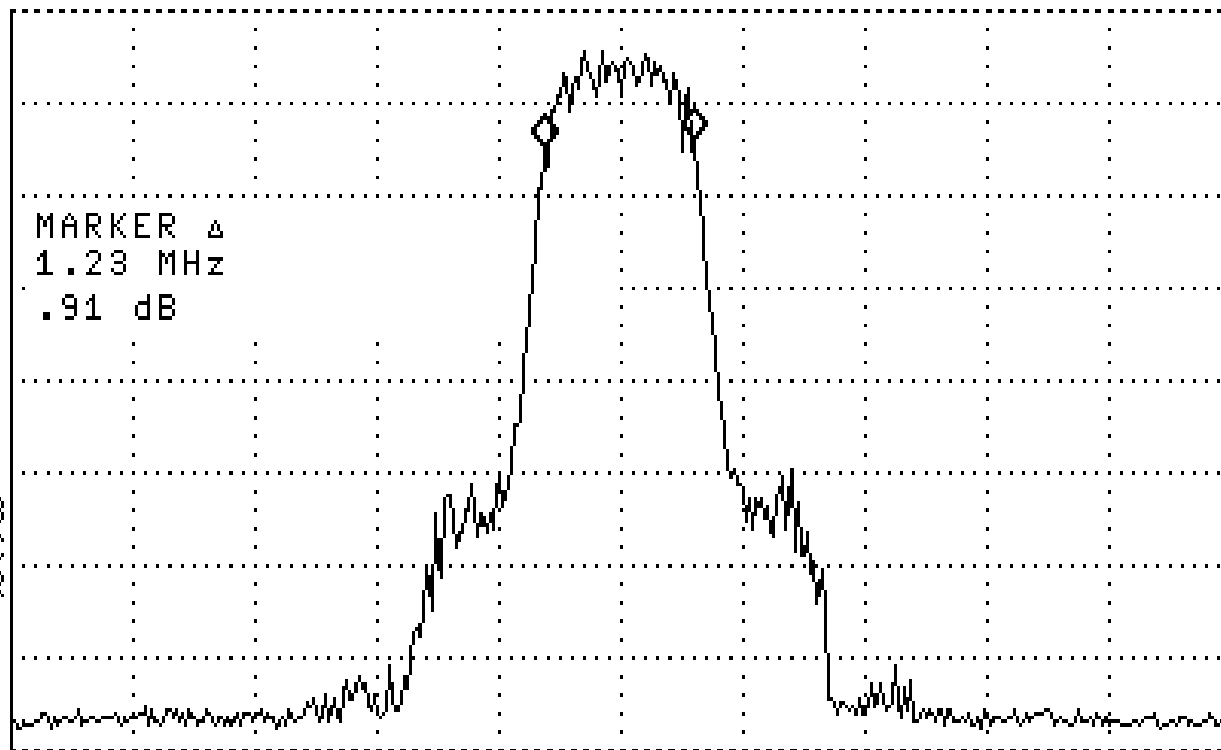
REF .0 dBm

ATTEN 10 dB

.91 dB

99%
PWR BW

PEAK
LOG
10
dB/



%
AM

3rd ORD
MEAS

DELTA
MEAS

PK-PK
MEAS

MORE
2 of 3

CENTER 434.00 MHz

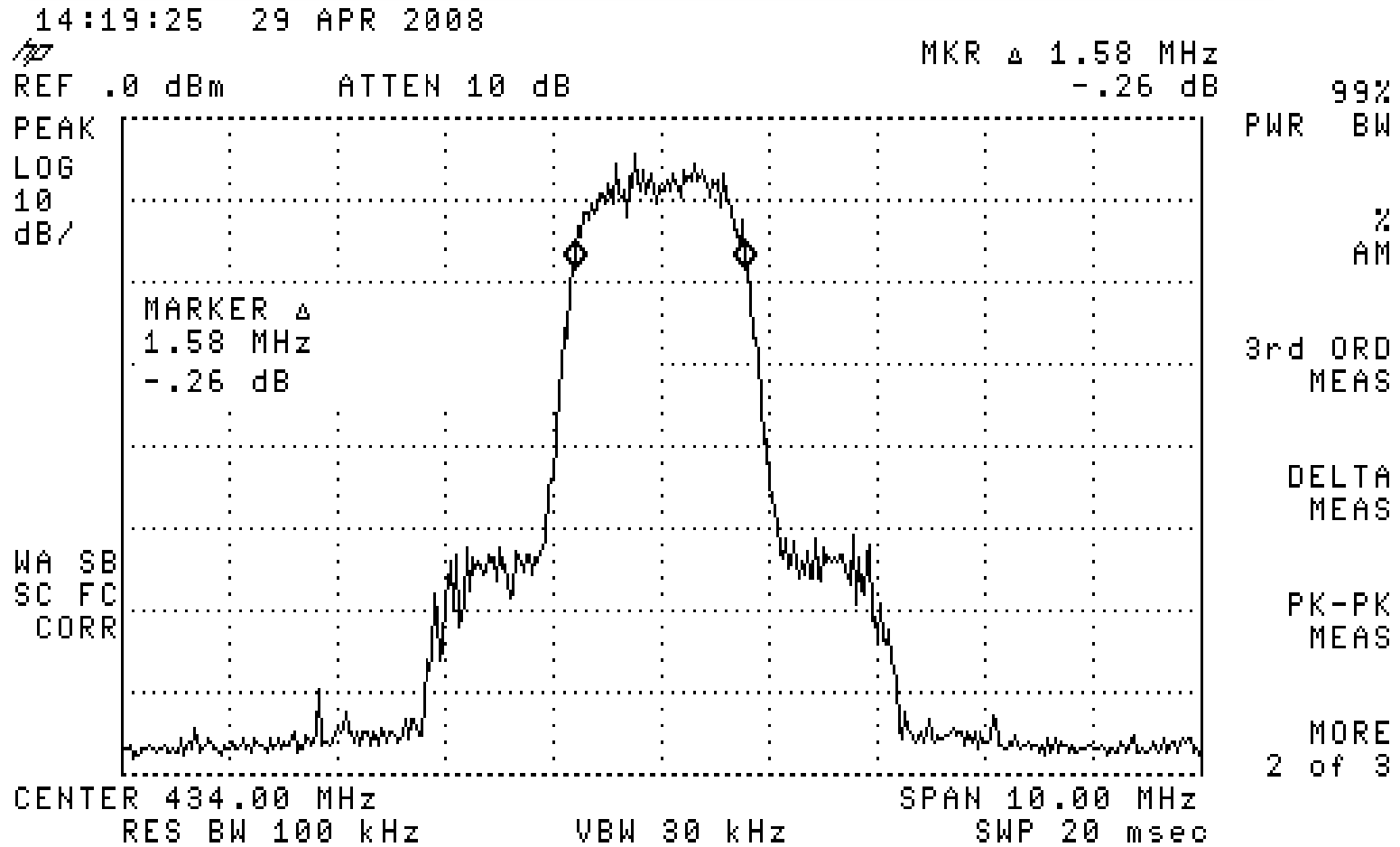
RES BW 100 kHz

VBW 30 kHz

SPAN 10.00 MHz

SWP 20 msec

MiniMod DVB-S 1300 kSym/s Output Gain: 15



MiniMod DVB-T

Nebenaussendungen Output Gain: 15

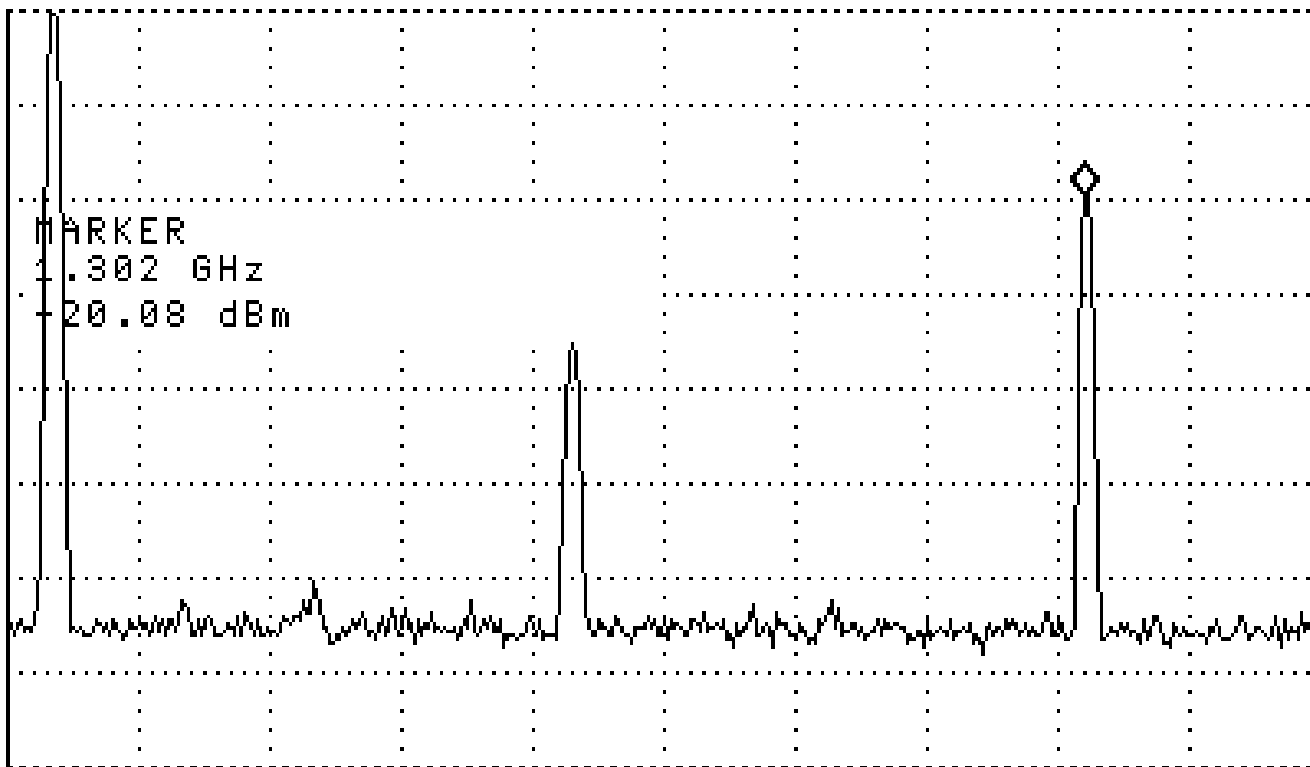
14:14:47 29 APR 2008

REF .0 dBm ATTEN 10 dB

MKR 1.302 GHz
-20.08 dBm

MARKER
NORMAL

PEAK
LOG
10
dB/



MARKER
DELTA

MKR CNT
ON OFF

MKNOISE
ON OFF

MARKERS
OFF

MORE
1 of 2

WA SB
SC FC
CORR

START 400 MHz

RES BW 3.0 MHz

VBW 1 MHz

STOP 1.500 GHz

SWP 20 msec

MiniMOD- DVB-T / DVB-S

Anmerkungen von DD1KU

Zwischen den beiden Betriebsarten DVB-T und DVB-S kann problemlos umgeschaltet werden.

Spektrumumschaltung normal /invers jetzt möglich

PID-Eingaben jetzt möglich

Umschaltung zwischen CW-Träger und moduliertem Träger möglich

DVB-T Bandbreite bis 1 MHz reduzierbar . Es fehlt nur noch der passende RX!

DVB-S sehr kleine Symbolraten (min. 1000 kSymbole/s) einstellbar.

Software läuft sehr stabil! Bei groben Falscheingaben kann es zum Absturz kommen!

Der Skymaster DS55 verarbeitet alle (auch sehr kleine) Symbolraten problemlos.

Weitere Untersuchungen, z.B. Schmalband DATV auf 70cm, werden folgen.