

## VPS Data Evaluation with the MSK200

The meter allows one to evaluate the VPS data for **analogue TV and analogue SAT-TV signals**. VPS evaluation for digital cable (QAM) or digital SAT-TV signals (QPSK) is not possible!

The VPS data are 15 byte long and are transmitted in line 16 of the blanking interval.

**Professional headend signal processing modules** are, as opposed to **end-user digital receivers** able to generate the VPS signal from the digital SAT data stream – if this is transmitted by the programme provider.

The **Austrian and German public transmission services** both transmit the full VPS data. „**Non public transmission services**“ usually limit the transmitted data to just the **national code** and the **programme recognition code**.

One can have the VPS evaluation displayed on the MSK 200 using the following navigation:

[SOURCE] [ANA CAB] or [ANA TERR] or [ANA SAT]  
[ANALYSE] [TV-PICT.]

The transmitted VPS data being transmitted at any moment can be read off in the displayed headings.



Figure 1: VPS line

### Explanation:

- |            |   |                                   |  |
|------------|---|-----------------------------------|--|
| 1. Number: | Day. Month:   | Start date of running programme   |  |
| 2. Number: | Hr:Min:   | Start time of running programme   |  |
| 3. Number: | Nation:   | 1. Byte of the CNI code (decimal) | 10 (= Hex A) for Austria<br>13 (= Hex D) for Germany |
| 4. Number: | Address section (evaluated by VCR!)                                       |                                   |  |
| 5. Number: | Source – see 1. column „Number“ of the annexe „Register of VPS CNI codes“ |                                   |  |
| 6. Number: | Dual/Stereo/Mono  |                                   |  |
| 7. Number: | Youth free yes/no   |                                   |  |

The 3rd. and 5th. number give the CNI code assigned to the programme in decimal form (1st. and 3rd. Byte). The 4th. number (Address section) is NOT IDENTICAL with the 2nd. Byte of the CNI code and is used internally by the VCR to assign the programme source. This, as some programmes use the same source code – e.g. ORF2 = „2“ and ZDF = „2“

**CNI-Code** (Country and Network Identification):

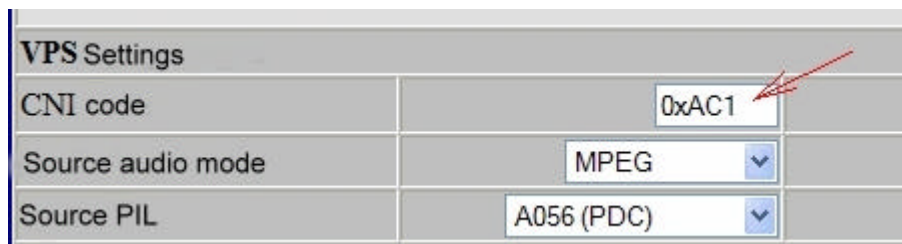
**See also the annexe „Register of VPS CNI codes“:**

This is the country and programme code of the TV programme in hexa-decimal form, and is transmitted with the VPS data so that e.g. a VCR can recognise which programme is to be recorded.

Some transmission agencies e.g. the **ORF** and the **WDR-TP 101 (Astra)** transmit this CNI code in a different section of the data stream than otherwise tsandardly used.

In such a case the QPSK/PAL transcoder in the headend must allow that the programme assigned CNI code also be separately programmed.

**In such a case the VPS evaluation by the MSK200 is naturally especially helpfull, so that errors in entering the CNI code be avoided!**



VPS Settings	
CNI code	0xAC1
Source audio mode	MPEG
Source PIL	A056 (PDC)

**Figure 2: Entering the CNI code in the Blankom QPSK/PAL-Demodulator SDB209**

### Example:

In the screenshot above (**Figure 1**) one can see that the programme **ARTE** (CNI code hex **D85**) is being received:

VPS data: **22.2 9:00 13 2 5 1 2**  
 Start date of the programme: **22.2** (22. February)  
 Start time of the programme: **9:00**  
 Country recognition: **13** = Hex „D“ (Germany) = **1st. Byte of the CNI codes!**  
 Address section: **2** (Address section)  
 Programme source: **5** = ARTE = **3rd. Byte of the CNI codes! \*)**  
 Dual/Stereo/Mono: **1** = Stereo transmission  
 Youth free yes/no: **2** = YES

\*) The programme source code can be found in the column „Source“ in the following table!



Some important VPS programme recognition codes:

National code	Address section	Source	Programme
10	1	1	ORF1
10	1	2	ORF2
10	1	10	ATV
10	1	7	TW1
13	1	1	Das Erste
13	1	2	ZDF
13	1	11	BR
13	1	20	NDR
13	1	38	WDR (landesweit)
13	1	15	HR
13	1	62	MDR
13	1	33	SWR BW
13	1	7	3-SAT
13	3	4	BRAalpha
13	2	5	ARTE
13	1	9	KIKA
13	2	43	RTL
13	2	15	RTL2
13	2	10	S-RTL
13	2	57	SAT1
13	2	18	Kabel1
13	2	20	PRO7
13	2	14	VOX
13	2	8	VIVA
13	2	12	N-TV
13	3	54	Das Vierte
13	3	58	N24
13	3	52	NICK
13	3	63	HSE24

If in the respective line on the MSK200 the numbers 0,9 or 15 are listed as national codes, then no evaluable VPS recognition code can be generated!

This means that either the transmitting agency is not transmitting a VPS recognition code or that the QPSK/PAL transcoder in the headend is unable to generate a VPS signal.

Analogue SAT receiver will always proffer the VPS signal as this is part of the video signal. That is, if the transmitting agency actually transmits the signal!.

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