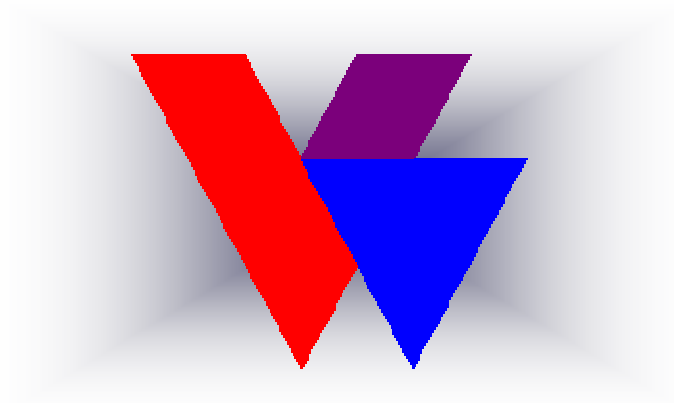
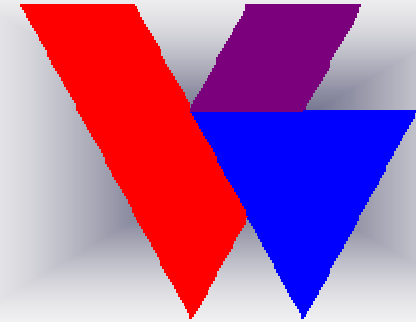


VD PactorDemod



The Virtual Device PactorDemod

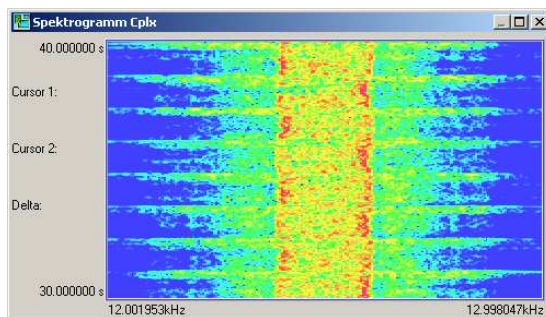
- PACTOR transmission modes
- ROBUST_FEC transmission mode
- Stand alone demodulator and decoder solution
- Virtual Device PactorDemod



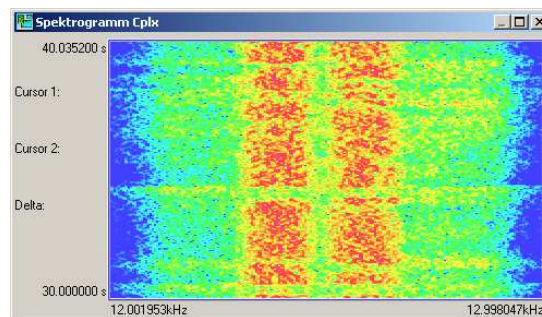
PACTOR transmission modes

PACTOR (Packet Teleprinting Over Radio) transmission mode is a radio modulation mode for sending digital data via radio waves. It is most commonly used on short wave frequencies between 1MHz and 30MHz. This mode has been developed by radio amateurs within the framework of an experimental radio system. PACTOR transmission splits up in three different modes:

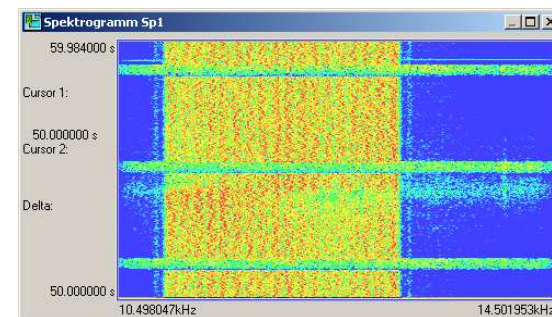
PACTOR_1



PACTOR_2



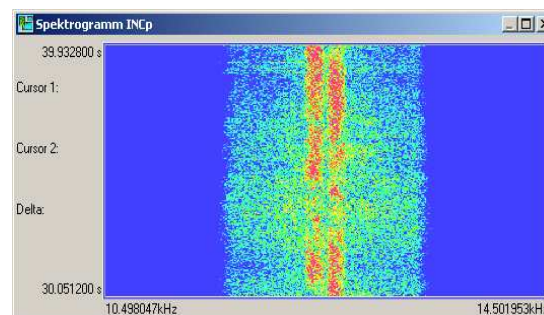
PACTOR_3



ROBUST_FEC transmission mode

ROBUST_FEC (RFEC) is a broadcast system which was developed in the mid-nineties. Robust-FEC is an independent system, although modulation and coding scheme are similar to PACTOR_2. The frame structure is considerably different from PACTOR_2. Signals may look like PACTOR_2-FEC-signals on the first glance. Distinguish ROBUST_FEC signals from PACTOR_2 signals requires a deeper look into the signal or a special demodulator device with the ability of automatic transmission detection.

ROBUST_FEC



Demodulator and decoder solutions

In common hardware based solutions for decoders and demodulators are available.

MEDAV already offers software based demodulators and decoders solutions running as Virtual Devices on PC for PACTOR transmission modes:

- VD PactorIDemod
- VD PactorIIDemod with additional special ROBUST_FEC license
- VD PactorIIIDemod

NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW

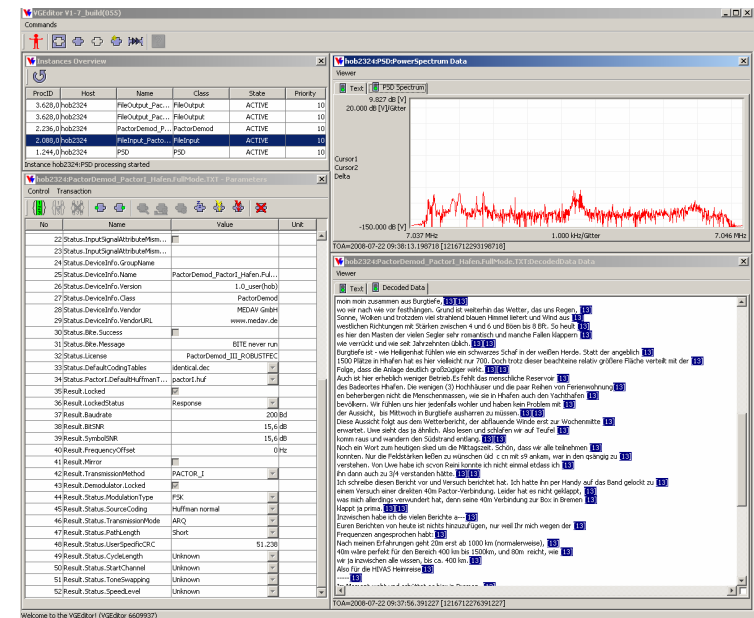
- VD PactorDemod
combined device for demodulation and decoding of all PACTOR transmission modes including ROBUST_FEC transmission mode.

Virtual Device PactorDemod

In contrast to the stand alone applications for the different transmission modes Virtual Device of Class PactorDemod is a demodulator and decoder for ALL transmission modes PACTOR_1, PACTOR_2 and PACTOR_3 and it has the ability to demodulate and to decode ROBUST_FEC signals. The VD PactorDemod combines all simple stand alone devices in one device with the main advantage of automatic detection of switches between transmission modes.

Incoming signals are demodulated and decoded.
Processing parameters are detected automatically and visible as result parameters, e.g.

- Locked
- LockedStatus
- FrequencyOffset
- BitSNR
- Mirror
- ...



The screenshot displays the PactorDemod software interface. On the left, the 'Instances Overview' table lists several instances:

ProcID	Host	Name	Class	State	Priority
3.629.0	hob324	PacOutput_Pac...	PacOutput	ACTIVE	10
3.629.0	hob324	PacOutput_Pac...	PacOutput	ACTIVE	10
2.236.0	hob324	PactorDemod_P...	PactorDemod	ACTIVE	10
2.089.0	hob324	PacInput_Pacto...	PacInput	ACTIVE	10
1.044.0	hob324	P50	P50	ACTIVE	10

Below the table, the 'Control' and 'Transaction' sections show various parameters and their values, such as 'Status_SigAltkrit', 'Status_DevochInfo', and 'Result_Locked'.

On the right, the 'Power Spectrum Data' window shows a plot of power spectral density with a peak at approximately 7.037 MHz. The 'Decoded Data' window displays the decoded text, which appears to be a message in German, with some characters highlighted in red.