



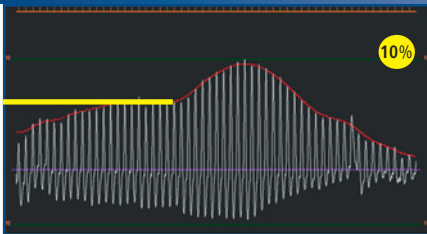
Normal distribution of pulse wave in a healthy dog

- linearity line (red):**
linear deflation
- bell shape curve:**
arterial opening behaviour
- base line**



- measurement results:**
- Sys, Dia, MAP, Pulse
- parameters:**
- P-Max / P-Min
- mm/s
- Gain
- Cuff

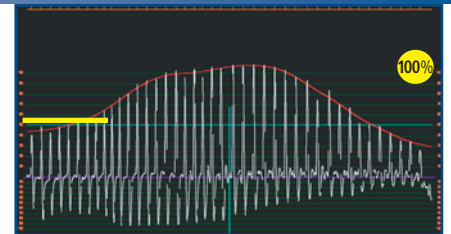
PW Analysis



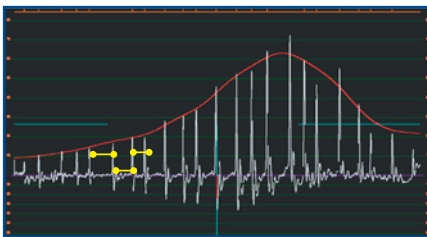
high presystolic amplitudes, low CO (10 %) in a giant Schnauzer with DCM



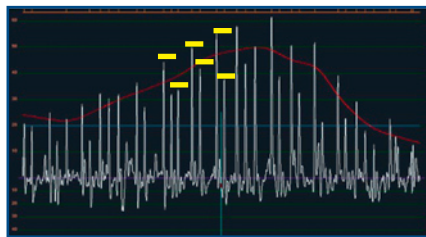
low presystolic amplitudes due to vasodilation (e.g. septicemic shock)



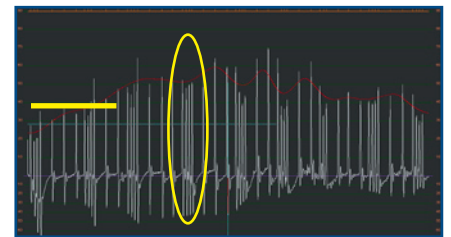
a hypertensive dog with CKD; Gain ⚠ too high >100%



distance between amplitudes = rhythm
Dog with respiratory sinus arrhythmia



height of amplitude: stroke volume
Stroke Volume Variances (SVV) and arrhythmia due to extra beats (frayed pattern)

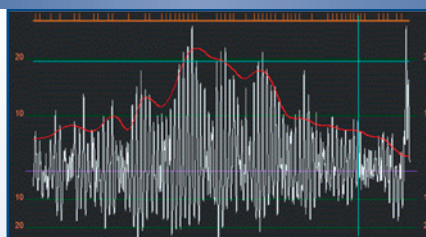


high presystolic amplitudes and arrhythmia during anesthesia with Ketamine, Rompun and Isoflurane

Trouble Shooting



trembling artefacts only (no pulse amplitudes)



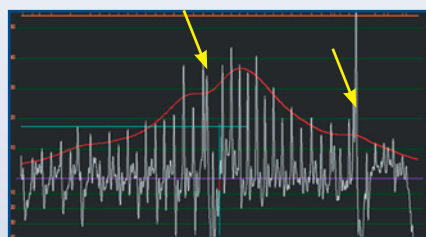
severe breathing pattern due to stress



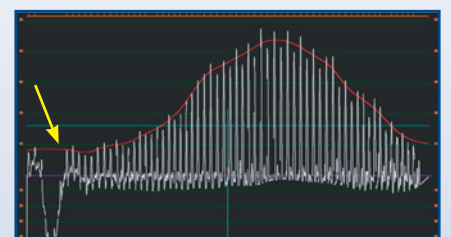
cuff too tight



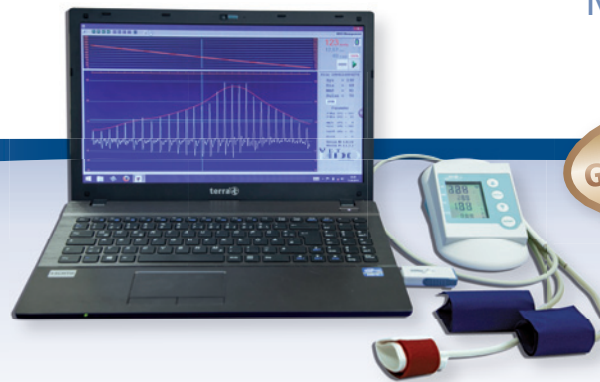
cuff too loose



movement artefacts



artefact due to change in position

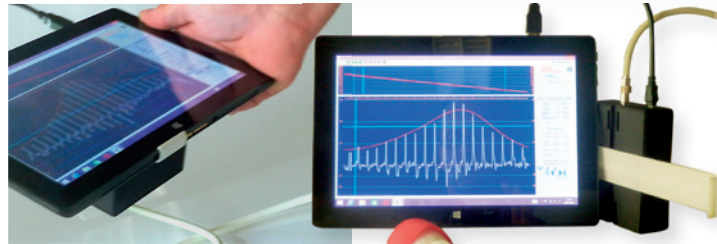


EQUIPMENT

- VET HDO MD PRO/USB
- VET HDO MD PRO/USB/
BT (Bluetooth)
- VET HDO MD Equine/USB/BT
- VET HDO Tablet

Includes:

- 3 cuffs: C1 D1 D2
- USB 2.0 cable
- Manuals HDO / MDSWIN
- MDSWIN Analyse Software (windows)



HDO - Evidence based!

- 1 - First and only NIBP Gold Standard
- 2 - Real time analysis
- 3 - The only true pulse wave representation**
- 4 - BP and cardio-vascular parameters

Typ of Hypertension	SAP	DAP	Risk of Target Organ Damage
mildly elevated BP	> 150 mmHg	> 95 mmHg	mild
medium	> 160 mmHg	> 100 mmHg	medium
severe	> 180 mmHg	> 120 mmHg	severe

ACVIM Consensus Statement 2007

Therapy YES / NO?

ACVIM Consensus Statement 2007
www.vbps-online.org

