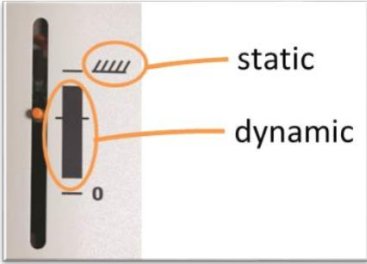
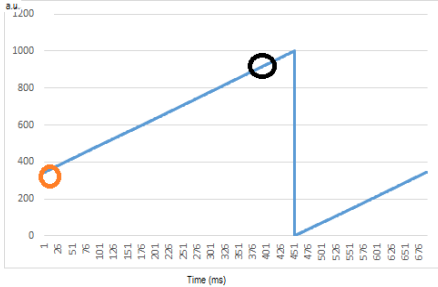
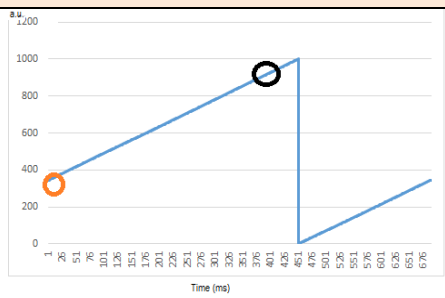


## Overview of Recorded Signals in Lokocontrol V6.5

Signal	Unit	Column title	Explanation
Time	S	Time	Time since start of recording
Left Hip Joint Angle	Rad	Hip joint angle left [Radians]	Angle of the Lokomat left hip joint. A value of zero means the Lokomat is in neutral position (upper leg pointing vertically down). Positive values correspond to flexion, negative values to extension. Please note that maximum flexion and extension values are limited by the mechanics of the orthoses. Lokomat hip motion goes from -22° extension to 44° flexion.
Left Knee Joint Angle	Rad	Knee joint angle left [Radians]	Angle of the Lokomat left knee joint. A value of zero means full extension of the knee (Lokomat lower leg relative to the Lokomat upper leg). Positive values correspond to flexion; negative values to extension. Please note that maximum flexion and extension values are limited by the mechanics of the orthoses. Lokomat knee joint motion allows movement between -2° extension to 82° flexion.
Right Hip Joint Angle	Rad	Hip joint angle right [Radians]	Angle of the Lokomat right hip joint. A value of zero means the Lokomat is in neutral position (upper leg pointing vertically down). Positive values correspond to flexion, negative values to extension. Please note that maximum flexion and extension values are limited by the mechanics of the orthoses. Lokomat hip motion goes from -22° extension to 44° flexion.
Right Knee Joint Angle	Rad	Knee joint angle right [Radians]	Angle of the Lokomat right knee joint. A value of zero means full extension of the knee (Lokomat lower leg relative to the Lokomat upper leg). Positive values correspond to flexion; negative values to extension. Please note that maximum flexion and extension values are limited by the mechanics of the orthoses. Lokomat knee joint motion allows movement between -2° extension to 82° flexion.
Left Hip Torque	Nm	Hip joint torque left [Nm]	Current torque acting on the corresponding Lokomat joint. This is calculated from the force and position sensors in the drives. Positive values correspond to the patient flexing the hip or knee and negative values correspond to the patient extending the hip or knee.
Left Knee Torque	Nm	Knee joint torque left [Nm]	
Right Hip Torque	Nm	Hip joint torque right [Nm]	
Right Knee Torque	Nm	Knee joint torque right [Nm]	
Target BWS	Kg	Target BWS	
Actual BWS Unloading	Kg	Actual BWS	50% of the patient body weight that will be set when entering the training.
			Value of the unloading set at the column.

BWS Dynamic Loading Mode status	a.u.	Levi actual dynamic position	<p>Actual dynamic position (between 0 and 1) of the BWS system (indicator of dynamic range). 0 is the bottom dynamic position (0) while 1 is the upper dynamic position (static position). Horizontal line within the dynamic range equals a value between 0.6 and 07.</p> 
Patient BWS force	N	BWS force sensor patient [N]	Measured force on the BWS patient rope.
Orthosis BWS force	N	BWS force sensor orthosis [N]	Measured force on the BWS Lokomat rope. The sum of this value and the patient BWS force is what is shown on the therapist screen as real body weight support.
Gait index Left	a.u.	Gait index left (0-1000)	<p>Numerical indicator to identify the position within the gait cycle. Division of the gait cycle of the left leg into 1000 units of equal size. Heel strike is approximately at 345 (orange), toe off at approx. 900-945 (black). The image represents a whole gait cycle.</p>  <p>These values may vary slightly according to the settings of the guidance force and the ranges of motion.</p>
Gait index Right	a.u.	Gait index right (0-1000)	Numerical indicator to identify the position within the gait cycle. Division of the gait cycle of the right leg into 1000 units of equal size. Heel strike is approximately at 345 (orange), toe off at approx. 900-945 (black). The image represents a whole gait cycle.

			
			<p>These values may vary slightly according to the settings of the guidance force and the ranges of motion.</p>
Left Hip Desired Joint Angle	Rad	Ref. angle hip joint left [°]	Desired left hip range of motion. Used as reference for the gait pattern. (Range of motion on the therapist screen).
Left Knee Desired Joint Angle	Rad	Ref. angle knee joint left [°]	Desired left knee range of motion. Used as reference for the gait pattern. (Range of motion on the therapist screen).
Right Hip Desired Joint Angle	Rad	Ref. angle hip joint right [°]	Desired right hip range of motion. Used as reference for the gait pattern. (Range of motion on the therapist screen).
Right Knee Desired Joint Angle	Rad	Ref. angle knee joint right [°]	Desired right knee range of motion. Used as reference for the gait pattern. (Range of motion on the therapist screen).
Left Hip Deviation	Rad	Hip joint angle dev. left [°]	Difference between desired and measured angle for the left hip.
Left Knee Deviation	Rad	Knee joint angle dev. left [°]	Difference between desired and measured angle for the left knee.
Right Hip Deviation	Rad	Hip joint angle dev. right [°]	Difference between desired and measured angle for the right hip.
Right Knee Deviation	Rad	Knee joint angle dev. right [°]	Difference between desired and measured angle for the right knee.
Treadmill Velocity	m/s	Treadmill filtered velocity [m/s]	Measured treadmill velocity.
Patient Coefficient	a.u.	Patient Coefficient	Orthosis speed value.
Pelvic Force*	N	Pelvis force sensor	Measured lateral pelvic force.
Pelvic position*	Mm	Pelvic lateral position	Measured lateral pelvic position.
BWS lateral position*	Mm	BWS lateral position	Measured lateral BWS position.

\* Only available with FreeD module; a.u. stands for arbitrary units