

The Concept



The German Single Trail Scale is among bikers a long-standing and proven reference point for the classification of the difficulty of trails downhill. We have been evaluating difficult and technical passages over and over again, even in uphill. Only those who are not permanently overtaxed on the trail will find themselves in the **flow**. The uphill scale gives handy tips for the next ride and helps to experience the pleasure of flow first hand at every level.



# **Uphill Scale**



## U0↑ (quite simple)



U0 describes wider trails on which no remarkable difficulties are to be expected. In addition to forest paths, wide forest and meadow paths with a **good grip on the ground are to be expected**, which can be driven smoothly and have hardly any obstacles.

The **gradient is usually less than 20%**. No special driving technique is necessary. With a classic mountain bike S0 presents itself as a medium trail.



## **Uphill Scale**

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U1 trails can be slightly narrower and have smaller obstacles such as flat roots and small stones. **Loose ground, coarse gravel and water channels** are to be expected.

### The gradients are up to 25% and curves can be somewhat

**tighter.** Riding technique is no longer trivial here. Basic knowledge of driving technique, especially starting on inclines, is required.



## U2↑ (moderate)

On U2 trails, slightly larger roots, stones and steps of up to 20 cm must be expected. The paths are often narrow, can have 35% gradient and more, as well as inclination. The subsoil becomes more demanding due to loose material, coarse gravel, rock passages and water channels. Narrow

bends are to be expected, but not hairpin bends.



More advanced riding techniques, such as lifting the front wheel briefly and overcoming obstacles by shifting weight, as well as a measured use of force, uphill braking techniques and good pedal management or short cranks are advantageous. The saddle should be lowered slightly.

### U3↑ (difficulty)

U3 trails can have obstacles that make an obvious line and pedal management very difficult. There are more demanding passages with unexpected roots and heels, boulders, loose scree and diagonal rides on narrow paths. Also steps up to **35cm**. These obstacles are also to be expected in tight

curves; hairpin bends are not defined under upS3.



The **gradients can be up to 50% even** on longer passages and have flat stairs.

A rock-solid advanced riding technique is a prerequisite. Raising and shifting the front wheel, weight

A rock-solid advanced riding technique is a prerequisite. Raising and shifting the front wheel, weigh shifting and targeted acceleration and braking to overcome obstacles are just as much a prerequisite as very **good pedal management** and a clean spontaneous line selection. The saddle must be lowered significantly. Individual passages can only be mastered standing up.

### U4↑ (very difficulty)



U4 describes extremely demanding uphills with rough root passages, large stones, rock passages and steps over **40 cm**. Loose scree, narrow diagonal runs as well as very narrow curves and hairpin bends are to be expected, as well as **difficult stairs and inclines of over 60%**.



Passages in which the chainring and especially the pedals touch down are to be expected continuously. In addition to a **well-founded riding technique**,

demanding trial techniques are required. This includes above all the ability to move the front wheel (Front Switch) and the rear wheel (Back Switch). **Pedal management** must be well timed always fit otherwise hardly a chance. Starting off on the mountain must be particularly skilful. Even standing under the known criteria. The saddle must be fully lowered for freedom of movement.

Uphillskala U4 - Schlüsselstelle - Sattel / Känzele



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In U5 passages, the difficulties mentioned above occur in combination and in sequences. Extreme steep turns to the limit of traction, very high steps, narrow hairpin bends can correlate with very difficult ground. Even with sophisticated trail technology many tests are usually necessary before a



trail technology, many tests are usually necessary before an up S5 passage is

In addition, there are extreme difficulties in exposed terrain. Support levels are an important criterion at eMTB's, but it is very difficult to synchronize them with the difficulty levels U0-U5. The dosage of the forces of the bike often correlate with the level of riding technique.

The better a driver drives, the more he wants to use power. Either in the form of maximum support level plus brake management or as intelligent mode a la eMTB mode at Bosch or Trail at Shimano, for example

Extreme eBike Uphill Flow Stefan Schlie Steinegg ePowered by Bo...



## eMTB **U01 - U51**

### The Future

In our opinion, based on many years of experience on various trails, the gradations of the uphill scale give a realistic picture of the challenges that await you in everyday trail life.

Nevertheless, change is the greatest constant of life and also of biking.

Due to ever new approaches in riding technique and technological progress (wheels and tyres, frame geometry, chassis kinematics, cranks and motors with smart assistance modes, etc.) the limits are not fixed. Neither the limits of what is technically possible nor the limits of what is technically possible.

For example, the better the driving technology, the more engine power can be applied to the trail, and the better the power can be called up by intelligent engine control, as currently offered by Bosch with the EMTB mode and Schimano with the Trail mode. We are always open and grateful for your comments and ideas, which contribute to a further clarification of the uphill scale. Just write to us!

## Stefan

I have been deeply rooted in the bike scene for several decades now. As a bicycle trialer I was able to celebrate my biking shake har greatest competition successes: many times North riding technically more to the fore Champion and several times Team World Champion came together in the time.

A weakness for in photography and biking shake har riding technically more to the fore statement of the fore the foreign and several times Team World Champion and several times Team World Champion Julius Moosbrug

I used these titles to ride many shows in all possible areas and scenes to be able to exist as a professional.

Long-term partnerships with sponsors have developed as a result: Now Mondraker <25 years Giant> 25 years

UVEX and soon 30 years Magura belong to it.

In addition, over the decades an enormous network of guiding and cycling techniques has developed on La was only a small Palma with Atlantik Cycling, which I can use very well for many activities. Currently the Supertrend eMTB with the new dimensions.

## Julius

A weakness for mountaineering, photography and mountain biking shake hands. Since 1990 the playful aspect of riding technically very difficult trails has come more and more to the fore.

Julius Moosbrugger is one of the pioneers of alpine mountain biking in Vorarlberg. Inspired by Tyrolean friends of the Innsbrucker Vertridern he founded Xitrail in 2004. Today alpine mountain biking is well established thanks to better mountain bikes.

Xitrail's code of conduct, which regulates the behaviour of bikers towards hikers and nature, is widely regarded as standard. Thanks to the heavy photo equipment it was only a small step to the e-Mountainbike. It soon follows that the E-Mountainbike opens up completely new dimensions.

### Alex

Publicaion: <u>Bike Guide 1 + 2</u>
eBike: Simplon Rapcon PMAX
Favourite mountain: Sulzfluh
Home: Göfis, Vorarlberg, Austria
Hobbies: biking, mountains, diving, sailing
Height difference last year: 400.000Hm
Height difference last year: 400.000Hm
Motto: Battery is half full and not half empty!
Favourite alp: Alpe Laguz
Profiles / Info: <u>www.tourenspuren.at</u>, <u>www.xitrail.com.www.kombinat.at</u>

If you like to stay in the Vorarlberger mountains you have probably already met Alexander Sonderegger.

Either personally on any mountain with a mountain bike on a demanding trail with the touring skis in a via ferrata or just on foot.

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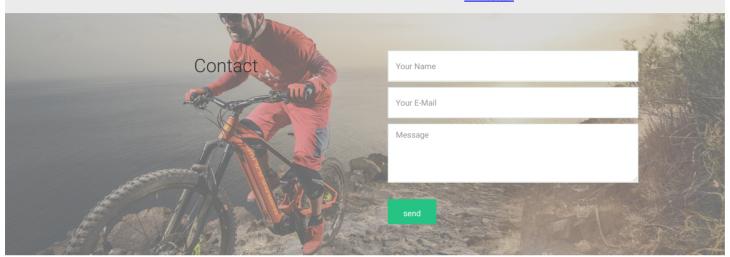
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www.xitrail.com

Or certainly on the internet portal "Tourenspuren" which Alex has been running since 2007 with a lot of meticulousness and fervor in order to present numerous ideas for unforgettable experiences on the mountain for every taste. His special love is mountain biking in all its facets. At the beginning on the BMX and then at racing speed up the mountain later as a "Xitrailer" with the bike on the back to the summit and down on technically tricky trails. Always with a smile on his face. Rooted in tradition but always open to new ideas, the e-Mountainbike has quickly acquired its interest and favour as a fully-fledged mountain bike of the first

#### www.xitrail.com

choice.



Write us - We are looking forward to your feedback and suggestions!

Stefan - stefan.schlie@me.com
Julius - julius@lampertmail.at
Alex - alexander.sonderegger@kombinat.at

### Imprint:

Trial Action Show | Stefan Schlie, In der Hegge 12, 49134 Wallenhorst, Germany Julius Moosbrugger Grißstraße 29 b, 6800 Feldkirch, Austria collective-a | Alexander Sonderegger, Steinebach 18, 6850 Dornbirn, AustriaWeb and

### Implementation

Alexander Sonderegger (www.kombinat.at)

### Fotografie:

 ${\it Markus\ Greber, Kirsten\ S\"{o}rries, Alexander\ Sonderegger, Julius\ Moosbrugger}$ 

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