

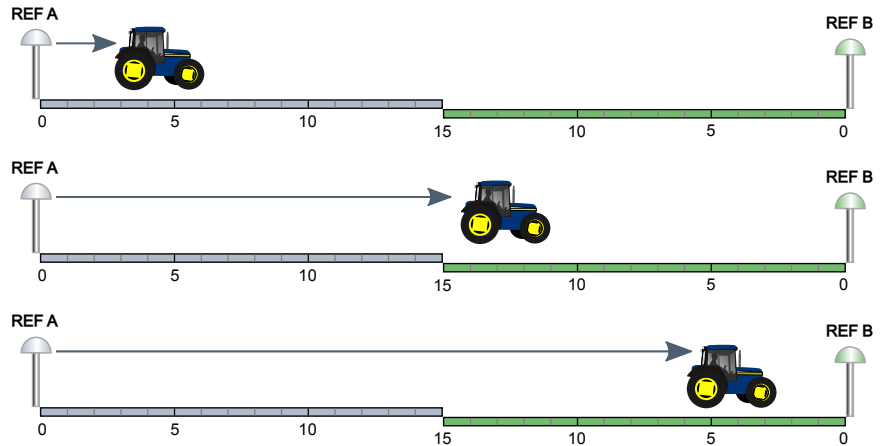
### Single Station

Users can manually select individual GNSS reference stations (e.g. REF A) based on their Ntrip mountpoint name.

If the Ntrip client is connected to such a single-station mountpoint, the user receiver will always get the corrections of station REF A, independent of the distance to this or other stations.

This kind of operation has several disadvantages:

- The growing separation distance between the reference station and the user results in excessive residual errors (e.g. atmospheric errors) and the RTK fixed status will eventually be lost.
- This solution is not reliable enough - the outage of the selected reference station will leave the user without corrections. Until a different Ntrip mountpoint is selected manually the rover will not be able to work.



### Nearest Station

The Alberding Ntrip Caster has an optional software feature that can automatically select the nearest healthy reference station to the user.

This enables the user receiver to always connect to the reference station with the most valuable correction data. Residual atmospheric errors can be greatly reduced this way. In addition, the system reliability will also improve: if the station in use becomes unavailable the Alberding Ntrip Caster will detect this and will switch the user to the next healthy station.

If the user moves from station A towards station B an auto-switch mountpoint will first connect the user to station A and then will switch to station B. This automatic switch during connection time is especially useful in kinematic applications, e.g. precise farming.

The Alberding Ntrip Caster enables service operators to define a so-called 'overlap zone' between the stations. This is to prevent frequent and unnecessary station switches for users working close to the halfway border. If an overlap zone is defined the user receiver will stay connected to station A, even after passing the halfway line between stations A and B. Only when reaching the opposite edge of the overlap zone will the client be switched to station B. Similarly, on the way back the user will stay connected longer to station B before switching to station A.

