

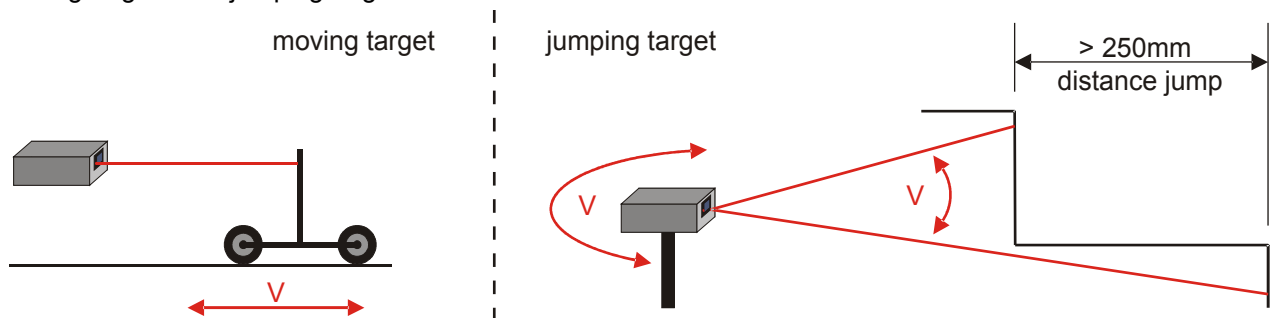


MRL-2 Application Note A1002

This application note describes the configuration for the fastest possible measurement rates. It includes a description of the necessary configuration commands.

Moving Target Tracking Mode

This measurement mode is optimized for measuring moving targets, where the measured distance will only change gradually and an immediate change in the distance (distance jump) will never happen. This situation is often seen on cranes, in automatic warehouses etc. The following illustration shows the difference between moving targets and jumping targets.



The Moving Target Tracking Mode requires a reduced measurement algorithm, which uses a previous measured distance for the distance calculation to reduce the measurement time. To obtain the first distance at the start of the Moving Target Tracking Mode, a complete measurement is automatically executed.

As this mode uses incremental measurements, complete measurements should be programmed whenever the fast measurement speed is not needed. To change from the fast tracking mode to the normal tracking mode, an 'n' character is sent and to activate the fast tracking mode again an 'f' character is sent. The 'n' and 'f' characters must not be terminated.

Further, automatic changes between fast and normal tracking are possible with the DeltaDistance parameter. If the distance change between two subsequent measurements is less than the programmed DeltaDistance, the normal tracking mode is activated automatically, while the fast tracking mode is automatically activated if the distance change is more than the programmed DeltaDistance.

The target speed cannot be greater than 250mm per 0.6 seconds.

