



Emit Touch-Free operating principles

emiTag

Each competitor should carry 2 emiTags at international championships for back-up and TV. Then there is no need for another punching back-up systems.

The emiTag should be strapped around the wrist as shown on the picture. In high speed the punching is performed by holding the emiTag 20-50 cm from the control for a short moment. The LED light in the emiTag will start flashing, and keeps flashing for 10 seconds after the punch.

NOTE! It is important to see this flashing, since this is the only feedback telling you that the punch is performed correctly!!!!!!



START

- Touch-Free Start PRO.
- Starting unit to “zero” the emiTags at start. This is also a check that the units are working.
- Nominal start time. It is possible to use start gate in sprint if tenths of second should be used. There is also possibility to use one loop on ground to “zero” the emiTag .

CONTROLS

- The controls are of the type Touch-Free PRO.
- Punching range is 80 cm.
- The range is reduced by punching in high speed. Maximum speed for punching is 30km/h
- Controls must be switched on the evening before or minimum 2 hours before the race for pre-runners.
- Touch-Free PRO control can be placed inside the o-flag fastened on a stick with screws see example on picture or on a wooden plank. See example on next page. We suggest to fasten the control unit with screws on top of a wooden plank.





The picture is from EOC where the Touch Free unit was used for online timing for the GPS-tracking. The control code on the TFP can be used.

- On relays or mass-start events there should always be at least 2 control units on each common control. Minimum 1,60m between the control units

FINISH

In finish there are loops on the ground so you can pass the finish line at full speed. The readout is after the finish line. There are own instructions for finish on this [link](#). Emit Touch-Free system is both a professional timing and punching system

Readout

- The readout is normally performed on a ECU connected to the timekeeping system for time, splittimes and track control.
- If some runner have problems MTR5 can be used to readout both emiTags.
- MTR5 can also be used to give competitors splittimes immediately after the competition.

Software

There are several software in Finland, Norway and Sweden that can be used and eTiming can be used in other countries.

