

TAG Heuer CP 705: Data Transmission – Technical Description

1. General

ON-LINE and OFF-LINE data transmissions from the **COMPUTER port** of the PTB 705 respect the following transmission format. This format always comprises **30** characters + CR under the RS232 protocol at **9600 bds.**

1 or 2	Characters for Data String Identification
3	Characters for ranking or the Nr. or the speed measurement
1	Space
5	Characters for Competitor Number
1	Space
2	Characters for Timing Input Channel
1	Space
15	Characters for Time
1	<CR> = End of Data String

Characters not used in the transmission of any value are replaced with a space.

2. Data String Identification Characters

S	Creation of a new RUN
T	Time recorded on one of the input channels
R	Calculated Net Time for a Competitor
G	Cumulative Net Time for a Competitor after multiple runs
V	Speed
T-	False Start or False Finish (time disassociated)
T*	Any time modified through manipulation of start number
T+	Any time used if manually input using RECALL - INSERT
T=	Any duplicated time using FUNCTION - DUPLICATE
TA	DNF (Did not Finish)
TD	DSQ (Disqualified)
TC	Any discarded time rejected using FUNCTION-RECALL-CANCEL or "0# in RECALL

3 Examples of Data Strings produced by the CP 705

Example below: Start of Run 4 under Alpine Ski. The last 3 characters to the right of "ALPINE SKI" show which preceding run is being used to add to net times being generated in this Run #4. In our example here, Run #3 is used. This indication occurs only in OFF-LINE data transmission mode.

```
S 004    ALPINE SKI 003<CR>
```

Times taken for Competitor #2 on input channels 1 and 4 (Manually)

```
T  2 M1 09:09:15.608778<CR>
T  2 M4 09:09:27.277816<CR>
```

Net time for Competitor #2, ranked in position 1 for run number 4 at 11.67 seconds.

Followed by a cumulative time for run#3 and #4 of 2:41.39

```
R  1 2          11.670000<CR>
G  1 2          2.41.390000<CR>
```

Speed Calculation for Competitor #1

```
V  1          317.903 [km/h]<CR>
```

1. Distinctive Characters Placed at the Start of Times Printed or Transmitted to PC

- False Start or False Finish (disassociated times)
- * Competitor Number Modified with this time
- + Manually Entered Time using RECALL-INSERT
- = Duplicated Time using FUNCTION-DUPLICATE
- A DNF, Did not Finish
- D DSQ, Disqualified
- C Any discarded time rejected using FUNCTION-RECALL-CANCEL or "0#" in RECALL

2. Keyboard Shortcuts

General

- F + ON Rapid Start-Up
- F FUNCTION menu call-up
- F again Returns to the previous menu when in any FUNCTION mode
- M Switches between MANUAL or AUTO(matic) finish numbering
- ↑ ↓ Keys to move through the data screens, up or down
- F + R Quickly calls-up the RECALL menu.

Left Keyboard

- C # False Start
- No. C # Disassociates start time from selected bib number
- C * Selects the next starting number in the start list by eliminating the one proposed
- N # Selects the Competitor Number being input
- R Accesses file of non-associated start times in a Fin – Fout file
- R again Returns to the previous menu or function when in the start time file
- * Error Correction

Right Keyboard

- C # False Finish
- No. C # Disassociates finish time from selected bib number
- C * Selects the next Finishing number of those on course by eliminating the one proposed
- N # Selects the Competitor Number being input
- R Accesses file of non-associated finish times in a Fin – Fout file
- R again Returns to the previous menu or function when in the Finish time file
- * Error Correction
- 0 # Discards times selected under RECALL