

# TELEMETRY STRUCTURE

The following table documents the structure of the PC-TCS telemetry stream broadcast on all active serial channels during PC-TCS operation. This telemetry stream is applicable to the COMSOFT "native" communications protocol and is not available with PC-TCS "TheSky" communications protocol.

<i>Column</i>	<i>Format</i>	<i>Description</i>
1	Number	Motion Status of Telescope, 0= stable, 1= Declination motion, 2= Right Ascension Motion, 3= Both axes in motion.
2	Number	Current Wobble Beam, blank= Not on a Beam, 1= at Beam 1, 2= at Beam 2.
4-12	HHMMSS.ss	Current Telescope Right Ascension.
14-22	±DDMMSS.s	Current Telescope Declination.
25-33	±HH:MM:SS	Current Telescope Local Hour Angle.
35-42	±HH:MM:SS	Current Local Sidereal Time.
44-48	±DD.d	Current Telescope Elevation in degrees.
50-55	±DDD.d	Current Telescope Azimuth in degrees. - implies west + implies east.
57-61	DD.dd	Current Secant of the Zenith distance (Secz).
63	Number	COM1 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
64	Number	COM2 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
65	Number	COM3 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
66	Number	COM4 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
67	Number	COM5 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
68	Number	COM6 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
69	Number	COM7 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
70	Number	COM8 Remote command execution code. E,e= executed, 1= Bogus Request, 2= Bogus Data, 3= Unrecognized Command, C= checksum error.
72	Number	RA Limit. R=in Limit, blank= not in limit.
73	Number	DEC Limit. D=in Limit, blank= not in limit.
74	Number	Horizon Limit. H=in Limit, blank= not in limit.
75	Number	Drive Disable. D=disabled, blank= enabled.
76-83	YYYY.YY	Display Equinox.
85-93	JJJJJJJ.JJ	Julian Date.
95	Number	Current com channel number.
97	±nnnnn	Focus Position

104-109	±DDD.d	Dome Error in degrees. - implies west, + implies east.
111-120	HH:MM:SS.s	UT Time.
121-148		Reserved for expansion.
149-150	terminator	CR,LF