

2.2. OUTPUT DATA FORMAT (TX1)

(1) IN CASE NO EXTEND OUTPUT

| NO. | MSB BIT LSR 7 6 5 4 3 2 1 0 | CONTENTS | EXAMPLE | |
|-----|--------------------------------|--|----------------------|----------------------|
| | | | SET VALUE | INSIDE VALUE(HEX) |
| 1 | 1 1 0 0 0 1 1 0 | 'F' +80H HEADER | - | C6 |
| 2 | MSB 0 X X X X X X X | MEASURED LATITUDE 28 BITS BINARY DATA RESOLUTION : 0.001 min. SOUTH : 2'S COMPLEMENT The DATUM is depends on inputted comand | N 35° 41. 286' | 01 02 58 66 |
| 3 | 0 X X X X X X X | | | |
| 4 | 0 X X X X X X X | | | |
| 5 | LSB 0 X X X X X X X | | | |
| 6 | MSB 0 X X X X X X X | MEASURED LONGITUDE 28 BITS BINARY DATA RESOLUTION : 0.001 min WEST : 2'S COMPLEMENT The DATUM is depends on inputted comand | W139° 34. 286' | 7C 00 6F 72 |
| 7 | 0 X X X X X X X | | | |
| 8 | 0 X X X X X X X | | | |
| 9 | LSB 0 X X X X X X X | | | |
| 10 | MSB 0 X X X X X X X | MEASURED SEA LEVEL 21 BITS BINARY DATA RESOLUTION : -1m - ALTITUDE : 2'S COMPLEMENT | 1234 m | 00 09 52 |
| 11 | 0 X X X X X X X | | | |
| 12 | LSB 0 X X X X X X X | | | |
| 13 | MSB 0 X X X X X X X | MEASURED SPEED 14 BITS BINARY DATA RESOLUTION : 0.1m/s | 12.3 m/s | 00 7B |
| 14 | LSB 0 X X X X X X X | | | |
| 15 | MSB 0 X X X X X X X | MEASURED COURSE 14 BITS BINARY DATA RESOLUTION : 0.1° VALID AREA : 0.0 ~ 359.9° | 123.4 | 09 52 |
| 16 | LSB 0 X X X X X X X | | | |

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|-----|--------------------------------|--|-----------|-------------------|
| | | | SET VALUE | INSIDE VALUE(HEX) |
| 31 | 0 X X X X X X X | SELECTED SATELLITE 1 SATELLITE NAME(PRN) VALID VALUE : 0 ~ 32 0 : NOT SELETED | 14 | 0E |
| 32 | MSB 0 X X X X X X X | COURSE 14 BITS BINARY DATA RESOLUTION : 1' VALID VALUE : 0 ~ 359' | 123° | 00 7B |
| 33 | 0 X X X X X X X LSB | | | |
| 34 | 0 X X X X X X X | ELEVATION ANGLE RESOLUTION : 1' VALID VALUE: 0 ~ 90° | 23° | 17 |
| 35 | 0 X X X X X X X | RECEIVING STATUS BIT0~1 0 : SEARCH , 1 : TRACKING 2 : TRACKING & COLLECTION BITS 1:USED FIX 0:NO USED FIX | 2 | 2 |
| 36 | 0 X X X X X X X | SIGNAL LEVEL RESOLUTION : 1 VALID VALUE: 1 ~ 127 | 65 | 41 |
| 37 | 0 X X X X X X X | SELECTED SATELLITE 2 (SAME AS SELECTED SATELLITE 1) | | |
| 38 | 0 X X X X X X X | | | |
| 39 | 0 X X X X X X X | | | |
| 40 | 0 X X X X X X X | | | |
| 41 | 0 X X X X X X X | | | |
| 42 | 0 X X X X X X X | | | |
| 43 | 0 X X X X X X X | SELECTED SATELLITE 3 (SAME AS SELECTED SATELLITE 1) | | |
| 44 | 0 X X X X X X X | | | |
| 45 | 0 X X X X X X X | | | |
| 46 | 0 X X X X X X X | | | |
| 47 | 0 X X X X X X X | | | |
| 48 | 0 X X X X X X X | | | |

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|-----|----------------------------|-----|----------|--------------|-----------------------|---|---|--|--|--|
| | | | | SET VALUE | INSIDE VALUE (HEX) | | | | | |
| 49 | 0 | X | X | X | X | X | X | SELECTED SATELLITE 4 (SAME AS SELECTED SATELLITE 1) | | |
| 50 | 0 | X | X | X | X | X | X | | | |
| 51 | 0 | X | X | X | X | X | X | | | |
| 52 | 0 | X | X | X | X | X | X | | | |
| 53 | 0 | X | X | X | X | X | X | | | |
| 54 | 0 | X | X | X | X | X | X | | | |
| 55 | 0 | X | X | X | X | X | X | SELECTED SATELLITE 5 (SAME AS SELECTED SATELLITE 1) | | |
| 56 | 0 | X | X | X | X | X | X | | | |
| 57 | 0 | X | X | X | X | X | X | | | |
| 58 | 0 | X | X | X | X | X | X | | | |
| 59 | 0 | X | X | X | X | X | X | | | |
| 60 | 0 | X | X | X | X | X | X | | | |
| 61 | 0 | X | X | X | X | X | X | SELECTED SATELLITE 6 (SAME AS SELECTED SATELLITE 1) | | |
| 62 | 0 | X | X | X | X | X | X | | | |
| 63 | 0 | X | X | X | X | X | X | | | |
| 64 | 0 | X | X | X | X | X | X | | | |
| 65 | 0 | X | X | X | X | X | X | | | |
| 66 | 0 | X | X | X | X | X | X | | | |
| 67 | 0 | X | X | X | X | X | X | SELECTED SATELLITE 7 (SAME AS SELECTED SATELLITE 1) | | |
| 68 | 0 | X | X | X | X | X | X | | | |
| 69 | 0 | X | X | X | X | X | X | | | |
| 70 | 0 | X | X | X | X | X | X | | | |
| 71 | 0 | X | X | X | X | X | X | | | |
| 72 | 0 | X | X | X | X | X | X | | | |
| 73 | 0 | X | X | X | X | X | X | SELECTED SATELLITE 8 (SAME AS SELECTED SATELLITE 1) | | |
| 74 | 0 | X | X | X | X | X | X | | | |
| 75 | 0 | X | X | X | X | X | X | | | |
| 76 | 0 | X | X | X | X | X | X | | | |
| 77 | 0 | X | X | X | X | X | X | | | |
| 78 | 0 | X | X | X | X | X | X | | | |

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| | | | SET VALUE | INSIDE VALUE(HEX) |
| 79 | 0XXX1XXX | STATUS 1 BIT 0 : NON FIXING FLAG 0 : FIXING 1 : NON FIXING BIT 1 : 2D FIXING FLAG 0 : NOT 2D FIXING 1 : 2D FIXING BIT 2 : 3D FIXING FLAG 0 : NOT 3D FIXING 1 : 3D FIXING BIT 3 : ALL IN VIEW FIX FLAG BIT 4 : 2 SATELLITES FIXING FLAG 0 : NOT FIXING 1 : FIXING BIT 6 : COLD START FIX FLAG 0 : NOT COLD START FIX 1 : COLD START FIX | 0 1 0 1 0 | 06 |
| 80 | 0XXXXXXXX | BIT : 0~1:PREAMP CHECK 0:NORMAL 1:OPEN 2:SHORT Receivers without preamp check function output 0 always. | 0 | 00 |
| 81 | 11000110 | "Z" + 80 H : TERMINATOR | - | DA |