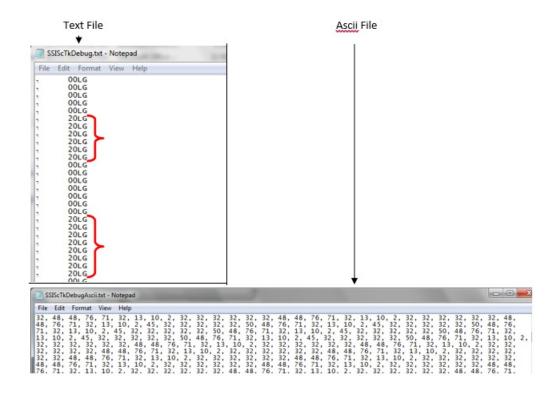
Reading a Scale Interface Debug Report

Last Modified on 03/01/2022 2:56 pm CS

Overview

Reading a debug file for scale interface is not as complicated as it looks. Once the debug has run, it will create two files in the selected directory, called SSIScTkDebug.txt and SSIScTkDebugAscii.txt. The first file will list all of the weights showing on the indicator. The second is the Ascii format of the weights being sent to Agvance.

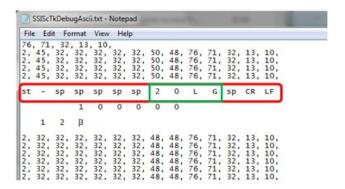


Setup

The first step to reading the debug file is finding the beginning of the text in the Ascii file. Many systems send the number 2 to indicate start of text. If a 2 is not in the string, another character will have to be found that is "unique" in the string. The string may be between 10 and 15 characters long. The sample file here uses a 2 to indicate start of text. If a 2 isn't used, the number 71 is a viable alternative. (It is best to avoid using 13 or 10 as the beginning number.) This number will become the "Scale Char" on the scale setup screen.

The next step in reading the debug file is to break the Ascii file into individual strings, each beginning with the Scale Char (in this example number '2') to signify the beginning of a new line of text. To do this, place the cursor before the next '2' in the string and press the Enter key on your keyboard. Each number '2' starts another string of text. The block of numbers inside the red box represents character strings already separated. The next '2' that should be broken out is highlighted in green.

Now use an Ascii table (available online, see last image below) to decipher what each number stands for. (Ex 32=space, 50=2, 48=0, 76=L, 71=G, etc.) Write or type these below the string for reference as was done in the following image. In this case, there is a reference to 20 LG, highlighted in green.



After looking at the SSIScTkDebug.txt file sent during debug, "20 LG" was part of the string captured in the text file. Most scales will read up to 100,000 lbs. In this case, enter the number 100000 below the actual string as you would expect to see that weight shown in a debug file. To get the "Start Char", count how many places to the right of the Scale Char are needed to pick up the first number of the weight 100000. In the case above, move 3 spaces to the right to get to the "1" in 100000. The "Num Char" is the number of characters needed for the scale to read from the Start Char. Since 100,000 has 6 digits, use 6. If the scale maximum weight was 90,000, the Num Char would be 5 and the Start Char would be 4.

The only thing left to look at is the length of the string. In this case it is 14 characters from the 2 to 10 (each character is represented by 2 digits in the file). The "Min Buffer" defaults in Agvance to 15. This is the number of characters the buffer will hold while trying to find a weight. In most cases 15 is fine. However, a few scale systems exist that send nearly double the amount of characters in a string. The Min Buffer needs to be set to a number at least as long as the string and up to twice the length, usually around 25.

Ascii Table

```
Dec Hx Oct Char
                                     Dec Hx Oct Html Chr Dec Hx Oct Html Chr Dec Hx Oct Html Chr
 0 0 000 NUL (null)
                                      32 20 040   Space
                                                            64 40 100 @#64; 0
                                                                               96 60 140 @#96;
                                      33 21 041 @#33; !
                                                            65 41 101 @#65; 🗛
                                                                               97 61 141 6#97;
   1 001 SOH (start of heading)
    2 002 STX (start of text)
                                      34 22 042 @#34;
                                                            66 42 102 B B
                                                                               98 62 142 b b
                                                                               99 63 143 @#99; <mark>c</mark>
                                                            67 43 103 C C
    3 003 ETX
              (end of text)
                                      35 23 043 4#35; #
    4 004 EOT
              (end of transmission)
                                      36 24 044 4#36; $
                                                            68 44 104 D D
                                                                               100 64 144 d d
                                                            69 45 105 @#69; E
                                                                              101 65 145 @#101; e
    5 005 ENQ
              (enguiry)
                                      37 25 045 4#37; %
    6 006 ACK
                                      38 26 046 4#38; 4
                                                            70 46 106 @#70; F
                                                                               102 66 146 @#102; f
              (acknowledge)
                                                                              103 67 147 @#103; g
    7 007 BEL
                                      39 27 047 4#39;
                                                            71 47 107 6#71: 6
              (bell)
                                                            72 48 110 @#72; H
                                      40 28 050 ( (
                                                                              104 68 150 a#104; h
    8 010 BS
              (backspace)
    9 011 TAB
              (horizontal tab)
                                      41 29 051 6#41; )
                                                            73 49 111 6#73; I
                                                                               105 69 151 @#105; i
                                      42 2A 052 @#42; *
                                                            74 4A 112 @#74; J
                                                                              106 6A 152 @#106; j
10 A 012 LF
              (NL line feed, new line)
                                       43 2B 053 + +
                                                            75 4B 113 4#75; K
                                                                              107 6B 153 k k
11 B 013 VT
              (vertical tab)
                                                                              108 6C 154 l 1
   C 014 FF
              (NP form feed, new page)
                                      44 2C 054 @#44: .
                                                            76 4C 114 L L
                                                            77 4D 115 @#77; M
                                                                              |109 6D 155 @#109; m
13 D 015 CR
              (carriage return)
                                       45 2D 055 6#45: -
14
   E 016 SO
              (shift out)
                                       46 2E 056 . .
                                                            78 4E 116 @#78; N
                                                                              110 6E 156 n n
                                                            79 4F 117 @#79; <mark>0</mark>
                                      47 2F 057 / /
                                                                              111 6F 157 o 0
15 F 017 SI
              (shift in)
16 10 020 DLE
              (data link escape)
                                      48 30 060 @#48; 0
                                                            80 50 120 @#80; P
                                                                              112 70 160 p p
                                      49 31 061 4#49; 1
                                                            81 51 121 4#81; 0
                                                                              113 71 161 q q
17 11 021 DC1
              (device control 1)
                                      50 32 062 @#50; 2
                                                            82 52 122 6#82; R
                                                                              114 72 162 @#114; r
18 12 022 DC2
              (device control 2)
19 13 023 DC3
              (device control 3)
                                      51 33 063 3 3
                                                            83 53 123 6#83; $
                                                                              115 73 163 @#115; 3
20 14 024 DC4 (device control 4)
                                       52 34 064 4#52; 4
                                                            84 54 124 @#84; T
                                                                              116 74 164 @#116; t
                                                            85 55 125 @#85; U
21 15 025 NAK (negative acknowledge)
                                      53 35 065 4#53; 5
                                                                              117 75 165 u u
22 16 026 SYN (synchronous idle)
                                      54 36 066 @#54; 6
                                                            86 56 126 V V
                                                                              118 76 166 v V
                                                            87 57 127 6#87; ₩
                                      55 37 067 4#55: 7
                                                                              | 119 77 167 &#119: ₩
23 17 027 ETB (end of trans. block)
24 18 030 CAN
              (cancel)
                                      56 38 070 4#56; 8
                                                            88 58 130 X X
                                                                              120 78 170 @#120; X
25 19 031 EM
              (end of medium)
                                      57 39 071 4#57; 9
                                                            89 59 131 Y Y
                                                                              121 79 171 y Y
26 1A 032 SUB
              (substitute)
                                      58 3A 072 ::
                                                            90 5A 132 @#90; Z
                                                                              122 7A 172 @#122; Z
27 1B 033 ESC
                                      59 3B 073 &#59;;
                                                            91 5B 133 [ [
                                                                              123 7B 173 @#123; {
              (escape)
                                      60 3C 074 < <
                                                            92 50 134 6#92: \
                                                                              |124 7C 174 | |
28 10 034 FS
              (file separator)
                                                                              |125 7D 175 } }
29 1D 035 GS
              (group separator)
                                      61 3D 075 = =
                                                            93 5D 135 6#93; 1
30 1E 036 RS
              (record separator)
                                      62 3E 076 @#62;>
                                                            94 5E 136 @#94; ^
                                                                              126 7E 176 ~ ~
31 1F 037 US
                                      63 3F 077 ? ?
                                                            95 5F 137 6#95; _ 127 7F 177 6#127; DEL
              (unit separator)
                                                                         Source: www.LookupTables.com
```