DAKTRONICS

Daktronics Hockey TV Feed Specification
ED-16092, Rev 0

Baud Rate = 9600
Data Bits = 8
Stop Bits = 1
Parity = None

Field	Length	Description	Justification	Type
1	1	SOH (0x01)		Header
2	7	Game Clock Time	'MM:SS.T'	Data
3	1	Game Clock Status	Right	Data
4	2	Home Team Score	Right	Data
5	2	Guest Team Score	Right	Data
6	1	Home Time Outs Left	Right	Data
7	1	Guest Time Outs Left	Right	Data
8	2	Home Shots On Goal	Right	Data
9	2	Guest Shots On Goal	Right	Data
10	2	Period	Left	Data
11	2	Home Penalty #1 - Player Number	Right	Data
12	5	Home Penalty #1 - Penalty Time	'MM:SS'	Data
13	2	Home Penalty #2 - Player Number	Right	Data
14	5	Home Penalty #2 - Penalty Time	'MM:SS'	Data
15	2	Guest Penalty #1 - Player Number	Right	Data
16	5	Guest Penalty #1 - Penalty Time	'MM:SS'	Data
17	2	Guest Penalty #2 - Player Number	Right	Data
18	5	Guest Penalty #2 - Penalty Time	'MM:SS'	Data
19	2	Checksum	MS,LS	Footer
20	1	EOT (0x04)		Footer

All Fields
All data characters and the checksum are ASCII printable characters. Leading characters and fields that are blank will be filled with ASCII spaces (0x20).

Field 2
The decimal point and tenths of a second value will only be transmitted for the last minute of the period. The field will be padded with ASCII spaces (0x20) for the remainder of the period.

Field 3
An ASCII space (0x20) will be sent in the data stream to indicate that the game clock is running. An lower case 's' (0x73) will be sent in the data stream to indicate that the game clock is stopped.

Field 10
The first three periods will be transmitted with the corresponding ASCII value for the period number followed by a trailing ASCII space (0x20). Any overtime periods will be transmitted with the ASCII characters of 'OT'.

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Field 19

The checksum includes only the data bytes and is calculated by adding all of the data bytes together. A corresponding ASCII character for the hex value in each nibble of the calculated checksum is then transmitted to make the two (2) byte ASCII checksum. The Most Significant byte is sent first and then the Least Significant byte next.

Notes:
- The data stream will be transmitted every time that any data field changes. If nothing is changing and the game clock is stopped, the data stream will be retransmitted approximately once a second.

Revision History
0   3 February 2006   Original Document

Game Clock Over 1 Minute
```
<SOH>15:00   s 0 011    1                               06<EOT>
<SOH>15:00     0 011    1                               B3<EOT>
<SOH>14:59     0 011    1                               C0<EOT>
<SOH>14:58     0 011    1                               BF<EOT>
<SOH>14:57     0 011    1                               BE<EOT>
<SOH>14:56     0 011    1                               BD<EOT>
<SOH>14:55     0 011    1                               BC<EOT>
<SOH>14:54     0 011    1                               BB<EOT>
<SOH>14:53     0 011    1                               BA<EOT>
<SOH>14:53   s 0 011    1                               0D<EOT>
```

Game Clock Under 1 Minute
```
<SOH> 1:00   s 0 011    1                               F1<EOT>
<SOH> 1:00     0 011    1                               9E<EOT>
<SOH> 0:59.9   0 011    1                               D2<EOT>
<SOH> 0:59.8   0 011    1                               D1<EOT>
<SOH> 0:59.7   0 011    1                               D0<EOT>
<SOH> 0:59.6   0 011    1                               CF<EOT>
<SOH> 0:59.5   0 011    1                               CE<EOT>
<SOH> 0:59.4   0 011    1                               CD<EOT>
<SOH> 0:59.3   0 011    1                               CC<EOT>
<SOH> 0:59.2   0 011    1                               CB<EOT>
<SOH> 0:59.1   0 011    1                               CA<EOT>
<SOH> 0:59.0   0 011    1                               C9<EOT>
<SOH> 0:58.9   0 011    1                               D1<EOT>
<SOH> 0:58.8   0 011    1                               D0<EOT>
<SOH> 0:58.7   0 011    1                               CF<EOT>
<SOH> 0:58.6   0 011    1                               CE<EOT>
<SOH> 0:58.5   0 011    1                               CD<EOT>
<SOH> 0:58.4   0 011    1                               CC<EOT>
<SOH> 0:58.3   0 011    1                               CB<EOT>
<SOH> 0:58.2   0 011    1                               CA<EOT>
<SOH> 0:58.1   0 011    1                               C9<EOT>
<SOH> 0:58.0   0 011    1                               C8<EOT>
```

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```
<SOH> 0:57.9  0 011    1                         D0<EOT>
<SOH> 0:57.8  0 011    1                         CF<EOT>
<SOH> 0:57.7  0 011    1                         CE<EOT>
<SOH> 0:57.7s 0 011    1                         21<EOT>
```

Home and Guest Team Scores Incrementing by 1

```
<SOH>19:40   s 0 011    1                         0E<EOT>
<SOH>19:40   s 1 011    1                         0F<EOT>
<SOH>19:40   s 1 111    1                         10<EOT>
<SOH>19:40   s 2 111    1                         11<EOT>
<SOH>19:40   s 2 211    1                         12<EOT>
<SOH>19:40   s 3 211    1                         13<EOT>
<SOH>19:40   s 3 311    1                         14<EOT>
```

Home Timeouts Left Decrementing by 1

```
<SOH>19:40   s 0 011    1                         0E<EOT>
<SOH>19:40   s 0 001    1                         0D<EOT>
```

Home and Guest Shots On Goal Incrementing by 1

```
<SOH>19:40   s 3 311      1                       14<EOT>
<SOH>19:40   s 3 311 1    1                       25<EOT>
<SOH>19:40   s 3 311 1 11                         36<EOT>
<SOH>19:40   s 3 311 2 11                         37<EOT>
<SOH>19:40   s 3 311 2 21                         38<EOT>
<SOH>19:40   s 3 311 3 21                         39<EOT>
<SOH>19:40   s 3 311 3 31                         3A<EOT>
<SOH>19:40   s 3 311 4 31                         3B<EOT>
<SOH>19:40   s 3 311 4 41                         3C<EOT>
<SOH>19:40   s 3 311 5 41                         3D<EOT>
<SOH>19:40   s 3 311 5 51                         3E<EOT>
```

Period Number Incrementing by 1

```
<SOH>19:40   s 0 011    1                         0E<EOT>
<SOH>19:40   s 0 011    2                         0F<EOT>
<SOH>19:40   s 0 011    3                         10<EOT>
<SOH>19:40   s 0 011    OT                        60<EOT> (period 4)
<SOH>19:40   s 0 011    OT                        60<EOT> (period 5)
<SOH>19:40   s 0 011    OT                        60<EOT> (period 6)
<SOH>19:40   s 0 011    OT                        60<EOT> (period 7)
<SOH>19:40   s 0 011    OT                        60<EOT> (period 8)
<SOH>19:40   s 0 011    OT                        60<EOT> (period 9)
<SOH>19:40   s 0 011    0                         0D<EOT>
<SOH>19:40   s 0 011    1                         0E<EOT>
```

Home Penalty #1 then Guest Penalty #1 Decrementing Over 1 Minute

```
<SOH>20:00   s 0 011    1                         02<EOT>
<SOH>20:00     0 011    1                         AF<EOT>
<SOH>19:59     0 011    1                         C5<EOT>
<SOH>19:58     0 011    1                         C4<EOT>
<SOH>19:57     0 011    1                         C3<EOT>
```

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```
<SOH>19:56    0 011    1                                C2<EOT>
<SOH>19:56    0 011    1    1 2:00                       1F<EOT>
<SOH>19:55    0 011    1    1 2:00                       1E<EOT>
<SOH>19:55    0 011    1    1 1:59                       2B<EOT>
<SOH>19:54    0 011    1    1 1:59                       2A<EOT>
<SOH>19:54    0 011    1    1 1:58                       29<EOT>
<SOH>19:53    0 011    1    1 1:58                       28<EOT>
<SOH>19:53    0 011    1    1 1:57                       27<EOT>
<SOH>19:52    0 011    1    1 1:57                       26<EOT>
<SOH>19:52    0 011    1    1 1:56                       25<EOT>
<SOH>19:51    0 011    1    1 1:56                       24<EOT>
<SOH>19:51    0 011    1    1 1:55                       23<EOT>
<SOH>19:50    0 011    1    1 1:55                       22<EOT>
<SOH>19:50    0 011    1    1 1:55       2 2:00          80<EOT>
<SOH>19:50    0 011    1    1 1:54       2 2:00          7F<EOT>
<SOH>19:49    0 011    1    1 1:54       2 2:00          87<EOT>
<SOH>19:49    0 011    1    1 1:54       2 1:59          94<EOT>
<SOH>19:49    0 011    1    1 1:53       2 1:59          93<EOT>
<SOH>19:48    0 011    1    1 1:53       2 1:59          92<EOT>
<SOH>19:48    0 011    1    1 1:53       2 1:58          91<EOT>
<SOH>19:48    0 011    1    1 1:52       2 1:58          90<EOT>
<SOH>19:47    0 011    1    1 1:52       2 1:58          8F<EOT>
<SOH>19:47    0 011    1    1 1:52       2 1:57          8E<EOT>
<SOH>19:47    0 011    1    1 1:51       2 1:57          8D<EOT>
<SOH>19:46    0 011    1    1 1:51       2 1:57          8C<EOT>
<SOH>19:46    0 011    1    1 1:51       2 1:56          8B<EOT>
<SOH>19:46    0 011    1    1 1:50       2 1:56          8A<EOT>
<SOH>19:45    0 011    1    1 1:50       2 1:56          89<EOT>
<SOH>19:45    0 011    1    1 1:50       2 1:55          88<EOT>
<SOH>19:45    0 011    1    1 1:49       2 1:55          90<EOT>
<SOH>19:44    0 011    1    1 1:49       2 1:55          8F<EOT>
<SOH>19:44  s 0 011    1    1 1:49       2 1:55          E2<EOT>
```

Both Home and Guest Penalties Decrementing Over 1 Minute

```
<SOH>19:44  s 0 011    1    1 1:49 3 2:00 2 1:55 4 2:00A1<EOT>
<SOH>19:44    0 011    1    1 1:49 3 2:00 2 1:55 4 2:004E<EOT>
<SOH>19:44    0 011    1    1 1:49 3 2:00 2 1:54 4 2:004D<EOT>
<SOH>19:44    0 011    1    1 1:48 3 2:00 2 1:54 4 2:004C<EOT>
<SOH>19:43    0 011    1    1 1:48 3 2:00 2 1:54 4 2:004B<EOT>
<SOH>19:43    0 011    1    1 1:48 3 1:59 2 1:54 4 2:0058<EOT>
<SOH>19:43    0 011    1    1 1:48 3 1:59 2 1:54 4 1:5965<EOT>
<SOH>19:43    0 011    1    1 1:48 3 1:59 2 1:53 4 1:5964<EOT>
<SOH>19:43    0 011    1    1 1:47 3 1:59 2 1:53 4 1:5963<EOT>
<SOH>19:42    0 011    1    1 1:47 3 1:59 2 1:53 4 1:5962<EOT>
<SOH>19:42    0 011    1    1 1:47 3 1:58 2 1:53 4 1:5961<EOT>
<SOH>19:42    0 011    1    1 1:47 3 1:58 2 1:53 4 1:5860<EOT>
<SOH>19:42    0 011    1    1 1:47 3 1:58 2 1:52 4 1:585F<EOT>
<SOH>19:42    0 011    1    1 1:46 3 1:58 2 1:52 4 1:585E<EOT>
<SOH>19:41    0 011    1    1 1:46 3 1:58 2 1:52 4 1:585D<EOT>
<SOH>19:41    0 011    1    1 1:46 3 1:57 2 1:52 4 1:585C<EOT>
```

```
<SOH>19:41    0 011   1  1 1:46 3 1:57 2 1:52 4 1:575B<EOT>
<SOH>19:41    0 011   1  1 1:46 3 1:57 2 1:51 4 1:575A<EOT>
<SOH>19:41    0 011   1  1 1:45 3 1:57 2 1:51 4 1:5759<EOT>
<SOH>19:40    0 011   1  1 1:45 3 1:57 2 1:51 4 1:5758<EOT>
<SOH>19:40    0 011   1  1 1:45 3 1:56 2 1:51 4 1:5656<EOT>
<SOH>19:40  s 0 011   1  1 1:45 3 1:56 2 1:51 4 1:56A9<EOT>
```

Both Home and Guest Penalties Decrementing Under 1 Minute

```
<SOH> 0:43.2 0 001   1  1 1:47 3 1:52 2 1:49 4 1:5562<EOT>
<SOH> 0:43.1 0 001   1  1 1:47 3 1:52 2 1:49 4 1:5561<EOT>
<SOH> 0:43.0 0 001   1  1 1:47 3 1:52 2 1:49 4 1:5560<EOT>
<SOH> 0:42.9 0 001   1  1 1:47 3 1:52 2 1:49 4 1:5568<EOT>
<SOH> 0:42.8 0 001   1  1 1:47 3 1:51 2 1:49 4 1:5566<EOT>
<SOH> 0:42.7 0 001   1  1 1:47 3 1:51 2 1:49 4 1:5565<EOT>
<SOH> 0:42.7 0 001   1  1 1:47 3 1:51 2 1:49 4 1:5464<EOT>
<SOH> 0:42.6 0 001   1  1 1:47 3 1:51 2 1:48 4 1:5462<EOT>
<SOH> 0:42.5 0 001   1  1 1:47 3 1:51 2 1:48 4 1:5461<EOT>
<SOH> 0:42.4 0 001   1  1 1:47 3 1:51 2 1:48 4 1:5460<EOT>
<SOH> 0:42.3 0 001   1  1 1:47 3 1:51 2 1:48 4 1:545F<EOT>
<SOH> 0:42.3 0 001   1  1 1:46 3 1:51 2 1:48 4 1:545E<EOT>
<SOH> 0:42.2 0 001   1  1 1:46 3 1:51 2 1:48 4 1:545D<EOT>
<SOH> 0:42.1 0 001   1  1 1:46 3 1:51 2 1:48 4 1:545C<EOT>
<SOH> 0:42.0 0 001   1  1 1:46 3 1:51 2 1:48 4 1:545B<EOT>
<SOH> 0:41.9 0 001   1  1 1:46 3 1:51 2 1:48 4 1:5463<EOT>
<SOH> 0:41.9 0 001   1  1 1:46 3 1:50 2 1:48 4 1:5462<EOT>
<SOH> 0:41.8 0 001   1  1 1:46 3 1:50 2 1:48 4 1:5461<EOT>
<SOH> 0:41.7 0 001   1  1 1:46 3 1:50 2 1:48 4 1:5460<EOT>
<SOH> 0:41.6 0 001   1  1 1:46 3 1:50 2 1:48 4 1:535E<EOT>
<SOH> 0:41.6 0 001   1  1 1:46 3 1:50 2 1:47 4 1:535D<EOT>
<SOH> 0:41.5 0 001   1  1 1:46 3 1:50 2 1:47 4 1:535C<EOT>
<SOH> 0:41.4 0 001   1  1 1:46 3 1:50 2 1:47 4 1:535B<EOT>
<SOH> 0:41.3 0 001   1  1 1:45 3 1:50 2 1:47 4 1:5359<EOT>
<SOH> 0:41.2 0 001   1  1 1:45 3 1:50 2 1:47 4 1:5358<EOT>
<SOH> 0:41.1 0 001   1  1 1:45 3 1:50 2 1:47 4 1:5357<EOT>
<SOH> 0:41.0 0 001   1  1 1:45 3 1:50 2 1:47 4 1:5356<EOT>
<SOH> 0:40.9 0 001   1  1 1:45 3 1:50 2 1:47 4 1:535E<EOT>
<SOH> 0:40.9 0 001   1  1 1:45 3 1:49 2 1:47 4 1:5366<EOT>
<SOH> 0:40.8 0 001   1  1 1:45 3 1:49 2 1:47 4 1:5365<EOT>
<SOH> 0:40.7 0 001   1  1 1:45 3 1:49 2 1:47 4 1:5364<EOT>
<SOH> 0:40.6 0 001   1  1 1:45 3 1:49 2 1:47 4 1:5262<EOT>
<SOH> 0:40.6 0 001   1  1 1:45 3 1:49 2 1:46 4 1:5261<EOT>
<SOH> 0:40.5 0 001   1  1 1:45 3 1:49 2 1:46 4 1:5260<EOT>
<SOH> 0:40.4 0 001   1  1 1:45 3 1:49 2 1:46 4 1:525F<EOT>
<SOH> 0:40.3 0 001   1  1 1:44 3 1:49 2 1:46 4 1:525D<EOT>
<SOH> 0:40.2 0 001   1  1 1:44 3 1:49 2 1:46 4 1:525C<EOT>
<SOH> 0:40.1 0 001   1  1 1:44 3 1:49 2 1:46 4 1:525B<EOT>
<SOH> 0:40.0 0 001   1  1 1:44 3 1:49 2 1:46 4 1:525A<EOT>
<SOH> 0:39.9 0 001   1  1 1:44 3 1:49 2 1:46 4 1:526B<EOT>
<SOH> 0:39.9 0 001   1  1 1:44 3 1:48 2 1:46 4 1:526A<EOT>
<SOH> 0:39.8 0 001   1  1 1:44 3 1:48 2 1:46 4 1:5269<EOT>
```

```
<SOH> 0:39.7  0 001    1   1 1:44 3 1:48 2 1:46 4 1:5268<EOT>
<SOH> 0:39.7  0 001    1   1 1:44 3 1:48 2 1:46 4 1:5167<EOT>
<SOH> 0:39.6  0 001    1   1 1:44 3 1:48 2 1:45 4 1:5165<EOT>
<SOH> 0:39.5  0 001    1   1 1:44 3 1:48 2 1:45 4 1:5164<EOT>
<SOH> 0:39.4  0 001    1   1 1:44 3 1:48 2 1:45 4 1:5163<EOT>
<SOH> 0:39.3  0 001    1   1 1:43 3 1:48 2 1:45 4 1:5161<EOT>
<SOH> 0:39.2  0 001    1   1 1:43 3 1:48 2 1:45 4 1:5160<EOT>
<SOH> 0:39.1  0 001    1   1 1:43 3 1:48 2 1:45 4 1:515F<EOT>
<SOH> 0:39.0  0 001    1   1 1:43 3 1:48 2 1:45 4 1:515E<EOT>
<SOH> 0:38.9  0 001    1   1 1:43 3 1:48 2 1:45 4 1:5166<EOT>
<SOH> 0:38.9  0 001    1   1 1:43 3 1:47 2 1:45 4 1:5165<EOT>
<SOH> 0:38.8  0 001    1   1 1:43 3 1:47 2 1:45 4 1:5164<EOT>
<SOH> 0:38.7  0 001    1   1 1:43 3 1:47 2 1:45 4 1:5163<EOT>
<SOH> 0:38.7  0 001    1   1 1:43 3 1:47 2 1:45 4 1:5062<EOT>
<SOH> 0:38.6  0 001    1   1 1:43 3 1:47 2 1:44 4 1:5060<EOT>
<SOH> 0:38.5  0 001    1   1 1:43 3 1:47 2 1:44 4 1:505F<EOT>
<SOH> 0:38.4  0 001    1   1 1:43 3 1:47 2 1:44 4 1:505E<EOT>
<SOH> 0:38.3  0 001    1   1 1:42 3 1:47 2 1:44 4 1:505C<EOT>
<SOH> 0:38.2  0 001    1   1 1:42 3 1:47 2 1:44 4 1:505B<EOT>
<SOH> 0:38.1  0 001    1   1 1:42 3 1:47 2 1:44 4 1:505A<EOT>
<SOH> 0:38.0  0 001    1   1 1:42 3 1:47 2 1:44 4 1:5059<EOT>
<SOH> 0:37.9  0 001    1   1 1:42 3 1:47 2 1:44 4 1:5061<EOT>
<SOH> 0:37.9  0 001    1   1 1:42 3 1:46 2 1:44 4 1:5060<EOT>
<SOH> 0:37.8  0 001    1   1 1:42 3 1:46 2 1:44 4 1:505F<EOT>
<SOH> 0:37.7  0 001    1   1 1:42 3 1:46 2 1:44 4 1:505E<EOT>
<SOH> 0:37.7  0 001    1   1 1:42 3 1:46 2 1:44 4 1:4966<EOT>
<SOH> 0:37.6  0 001    1   1 1:42 3 1:46 2 1:43 4 1:4964<EOT>
<SOH> 0:37.5  0 001    1   1 1:42 3 1:46 2 1:43 4 1:4963<EOT>
<SOH> 0:37.4  0 001    1   1 1:42 3 1:46 2 1:43 4 1:4962<EOT>
<SOH> 0:37.3  0 001    1   1 1:41 3 1:46 2 1:43 4 1:4960<EOT>
<SOH> 0:37.2  0 001    1   1 1:41 3 1:46 2 1:43 4 1:495F<EOT>
<SOH> 0:37.1  0 001    1   1 1:41 3 1:46 2 1:43 4 1:495E<EOT>
<SOH> 0:37.0  0 001    1   1 1:41 3 1:46 2 1:43 4 1:495D<EOT>
<SOH> 0:36.9  0 001    1   1 1:41 3 1:46 2 1:43 4 1:4965<EOT>
<SOH> 0:36.9  0 001    1   1 1:41 3 1:45 2 1:43 4 1:4964<EOT>
<SOH> 0:36.8  0 001    1   1 1:41 3 1:45 2 1:43 4 1:4963<EOT>
<SOH> 0:36.7  0 001    1   1 1:41 3 1:45 2 1:43 4 1:4962<EOT>
<SOH> 0:36.7  0 001    1   1 1:41 3 1:45 2 1:43 4 1:4861<EOT>
```