EXAMPLE REAL TIME REPORT (RTR) STRIP

2005-01-13,18:25:15,122,1001,000000.286,00.012,25

An RTR strip consists of a timestamp, which bar# poured, PLU# of brand/size,
PLU total since last reset, actual amount poured and a sequence number
followed by a carrage return and line feed (not visible)

2005-01-13, = 4 digit year(2000-2099) "-" 2 digit month (01-12) "-" 2 digit day (01-31)","

18:25:15, = 2 digit hour (00-23) ":" 2 digit minutes (00-59) ":" 2 digit seconds (00-59) ","

122, = 3 digit serving bar number (1-255) ","

1001, = 4 digit PLU number (0001-9999) ","

000000.286 , = 9 digit PLU total in liters (000000.000-999999.999) ","

00.012 , = 5 digit amount poured in liters (00.000-99.999)","

25 = 2 digit sequence number (00-99)

Followed by **0x0d,0x0a = CR LF** (not visible)

This is a total of 51 bytes sent by the Trish RTR host including the CR and LF.

Commas are used to separate the strip into data groups for CSV style parsing
The sequence number is incremented for each strip, it is used to check if a strip has been missed
The CR+LF marks the end of the strip.

TYPICAL RTR SETUP PROCEEDURE

Installer should have correct serving bar numbers and PLU numbers before starting RTR. A Brand and PLU listing is recommended

Setup your PC's RS232 comm port for 9600 baud, 8 data bits, no parity, 1 stop bit (9600,8,n,1) and no flow control. Connect a standard 9 pin male to Trish's RS232 connector and the other end to the comm port that was setup on the PC. The cable should be a regular RS232 extension and not a null modem cable.

All commands to Trish require a CR (**0x0d**) followed by LF (**0x0a**) after any command string.

Send the command "**RTR_F002**"+CR+LF, this enables RTR mode with zero totals skipping

Trish will reply with "OK"+CR+LF or "Command Unknown"+CR+LF if error was made

Poll_

This command instructs Trish to send only one RTR strip
The strip sent will be the oldest since the last time it was polled. If there are no new strips Trish will reply with the string "Empty"+CR+LF. This command has only a 51 byte buffering requirement and is probably the easiest to use.
When using the command allow one second for Trish to reply before repeating the command. Normally she will reply within a few milliseconds but may be busy with other tasks.
If the strip sent was unreadable, send the repeat last poll command "RPoll_"+CR,LF, and Trish will resend the strip.

Poll10_

This is the same as Poll_ except it will send 10 strips instead of one. Use "RPoll10_" to repeat
If there are less than 10 strips, Trish will send "Empty" after the last one

Example:

Poll10_

2005-01-17,17:30:58,121,1001,000000.199,00.021,00
2005-01-17,17:30:59,122,1002,000000.227,00.021,01
2005-01-17,17:30:59,123,1003,000000.250,00.021,02
2005-01-17,17:30:59,124,1004,000000.183,00.011,03
2005-01-17,17:31:01,122,1001,000000.208,00.008,04
2005-01-17,17:31:02,122,1004,000000.193,00.010,05
2005-01-17,17:31:02,124,1003,000000.261,00.010,06
2005-01-17,17:31:04,121,1002,000000.238,00.010,07
2005-01-18,07:54:28,124,1004,000000.201,00.007,08
2005-01-18,07:54:28,126,1003,000000.269,00.008,09

Poll100_
This is the same as **Poll10_** (above) except it sends 100 strips
If there are less than 100 strips, Trish will send "Empty" after the last one

PollAll_
This command instructs Trish to send all strips since the last time it was polled.
The strips sent will be from the oldest to the newest
If there are no new strips Trish will reply with the string "Empty"+CR+LF. This command can have large
buffering requirement if the bars are busy and Trish has not been polled for a long time.
When using the command allow one second for Trish to reply before repeating the command.
Normally she will reply in a few milliseconds but may be busy with other tasks.
If any strip sent were unreadable, send the repeat last poll command "RPollAll_"+CR+LF, and Trish will resend the strips.

TimeStamp_
Sets Trish's onboard clock to the time you specify.
To use, send the string "TimeStamp_" followed by a timestamp in the exact same format that's used in RTR strips ie "2005-01-13,18:32:42"+CR+LF
Trish will reply with "Clock_Set:" and the clocks new time
Example:
TimeStamp_2005-01-13,18:32:42
Clock_Set:2005-01-13,18:32:42

Time_
This command simply replies with the current time
To use, send the string "Time_"+CR+LF
Trish will reply with CR+LF+"Time:" and a timestamp
in RTR format +CR+LF

Example
Time_
Time:2005-01-13,18:46:30

ResetNow_
Performs a network wide totals resets
Trish will reply with "OK"
The RTR squence number will restart at zero
NOTE: Trish can be program to self-reset up to 7 times per day, week or month, if you plan to do you own resets, disable any scheduled reset (default is daily at 4:00 am)

To use, send the string "ResetNow_"+CR+LF (**ResetNow_ 0x0d,0x0a_)**
Example
ResetNow
OK

"**DumpRTR_**" ; Play back all 200 RTR strips, from 0 to 199
; sends RTR pointers at end (pointers are not affected)

"**RTR_**" ; Sends Read, Write and Missing strips counter

R069,W185,F032,M000 ; reply from command
; R069 is the Read pointer position
; W185 is the Write pointer position
; M000 if 000 = no strips missing, if nozero at least 200 strips have been missed
; nonzero = Write pointer has passed (lapped) the Read
; pointer (each count is a loss of 200 strips)

"**RTR_R123**" ; Set Read pointer at 123 , Range is 000 to 199
R123,W185,F032,M000 ; reply from command

"**RTR_W001**" ; Set Write pointer at 1 ,
; Range is 000 to 199 , leading zeros
; are required
R123,W001,F032,M000 ; reply from command

"**RTR_M**" ; Clears the Missing strips counter
R123,W001,F032,M000 ; reply from command

"**RTR_F096**" ; set RTR mode to 96 (default mode), allows various modes of RTR operation
;
; Bit Hex Dec
; 0 = 01 = 1 = batch mode, all data sent including totals of zero
; 1 = 02 = 2 = batch mode, skips pour totals of zero
; 2 = 04 = 4 = use 3 digit pointer number 000-199 instead of 00-99
; 3 = 08 = 8 = skip date areas
; 4 = 10 = 16 = skip pour total
; 5 = 20 = 32 = use brand number instead of PLU
; 6 = 40 = 64 = send Keylock and other event strips
; 7 = 80 = 128 = unused
; b'01100000' = 96 = send brand number and keylock strips (for Monitor Mode)

"**RSTmode_000**" ; Disables Trish's reset timer, use "ResetNow_" to reset all bars at any time

For RTR pooling, I would recommend:

Set your program's polling time interval between 1 minute and 30 minutes

Send "**RTR_**" to read the current RTR state (RTR is now always active because it is used by Monitor mode)

Trish will respond with something like "R069,W185,F002,M000"

The "F002" is Format 2 and is the most common mode for Variance reports mode.

If it reads as F002 then all is well, go ahead and "**PollAll_**"

If it reads anything else

Send "**RTR_F002**"

Send "**RTR_M**" (optional) to clear the missing poll counter, this can be handy,
if your program got disconnect from Trish, for any reason, for long enough
to be missing strips it will be non-zero. A count of 1 means you have lost at least 200 strips.
The counter increments each time the write pointer writes to the same location as
the read pointer (a buffer wraparound has occurred)

Send "**PollAll_**" to resume normal operation

BatchRTR_ -- you would run this at end of day for total amount poured