Introduction

The *FarmTek Timer Interface* makes it easy to interface your FarmTek timer to popular Windows applications. If you have designed a record keeping spreadsheet, database, or other application that has a spot to type in a rider's time, the timer interface software will automatically "type" in riders' times for you as they come in from the timer. No programming or changes to your application are required.

Hardware Requirements

To use the FarmTek Timer Interface, connect your timer console to a serial or USB port on your computer using a "Timer to PC Interface Cable" (available from FarmTek). The cable connects to the **Output**, **Display** or **Printer** jack on your timer (depending on your timer model).

If connecting to a USB port, always connect the USB cable to your computer *before* starting the Timer Interface software. This is because the COM port that the Timer Interface tries to read does not exist until the USB cable is connected. Also, connect to the same USB port on your computer each time. If you connect to a different USB port, your computer will assign a different COM port number to your cable than it had previously.

Operational Overview

The FarmTek Timer Interface receives times from the timer console via a serial or USB port on your PC. The software formats the data from the timer and sends the rider's time to your application as a series of keystrokes – exactly as if you had typed them in on the keyboard. Since the time is sent as keystrokes, virtually any spreadsheet, database, or similar application can receive times from a FarmTek timer without any special programming.

The FarmTek Timer Interface must be started and remain running while you are using your record keeping application. Other than setting some initial parameters the first time you run the program, you do not interact with the timer interface during normal operation.

Initial Configuration

Set-up of the FarmTek Timer Interface is easy. Three primary settings are required: (1) The mode of operation (generally "Normal"), (2) the serial port to which your timer is connected, and (3) the name of the application to which the times should be sent.

To set these items, make sure your cable is connected to the computer, then start your record keeping application (spreadsheet, database, etc.), then finally,
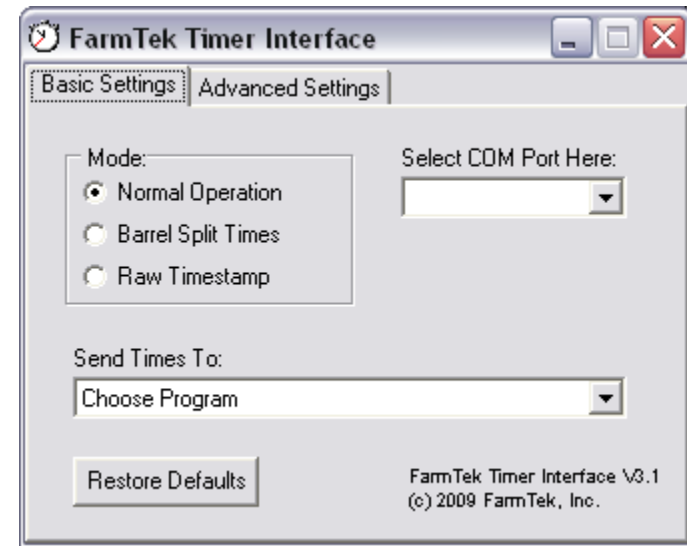
start the FarmTek Timer Interface from the Windows Start menu. The screen illustrated above is displayed.

Under the **Mode** prompt, select the mode of operation: Pick **Normal** except when using the *Time Stamp* event on the Polaris timer. The *Time Stamp* event on the Polaris timer can be used to measure split times around barrels (select the **Barrel Split Times** option) or to obtain raw times from the electric eyes for custom applications (select **Raw Timestamp**).

Under the **Select COM Port Here** prompt, select the COM port to which your FarmTek timer is connected.

Select the name of the application to which times should be sent from the drop-down list under the **Send Times To** prompt. When you click on the down-arrow, the names of all open windows on your computer are listed. Pick the name of your spreadsheet, database or other application.

That's it! These settings are automatically saved and will remain in effect each time you run the timer interface program.

Normal Operation

Start your record keeping application (spreadsheet, database, etc.) and the FarmTek Timer Interface from the Windows Start menu (it does not matter which is started first). If no changes to the settings are needed, click the minimize icon on the timer interface window to move it down to the task bar, out of the way. You must leave the timer interface running until you are no longer using your record keeping application. (Note: If you change any settings, the

changes take effect immediately – you do not have to restart any applications.)

Operate your record keeping application normally. When a rider is on course, click on the spreadsheet cell or database field as if you were about to type in the rider's time. When the timer stops at the end of the rider's run, the rider's time will be typed in for you! You can even have the timer interface press the *Enter* key for you, tab to the next field, etc. (see "Advanced Settings").

Advanced Settings

The **Advanced Settings** tab on the timer interface screen provides access to additional settings to control the output that is sent to your application.

The **Follow Times With** section allows you to choose the keystrokes that should be sent after the rider's time is sent to your application. Check the **ENTER key** button if you want the *Enter* key automatically pressed for you after the time is sent to your application. Check the **TAB key** button if you want the *Tab* key automatically pressed following a time. If both **ENTER key** and **TAB key** are selected, then the *Tab* key is sent first followed by the *Enter* key.

The **Send Extended Data** section gives you access to extended data the timer provides following the rider's time. This extended data varies depending on the event type.
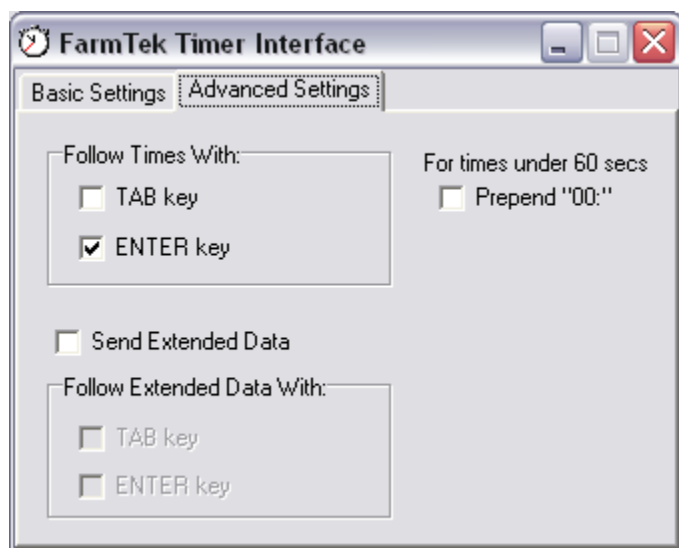
Barrel Racing: Normally, the timekeeper should not manually start or stop the timer during a barrel race run. If the timekeeper manually starts or stops

the timer, extended data of "(M)" is sent. Otherwise, the extended data is empty.

Roping: In addition to flagging a manual start by the timekeeper (the timer should be started by the cattle electric eye at the score line), breakout information is passed as extended data. If the header breaks out, "HDR" is sent. If the heeler breaks out, "HLR" is sent. If both the header and heeler break out, "H+H" is sent. If it is a clean run, the extended data is empty.

Team Penning: In addition to flagging a manual start by the timekeeper (if the electric eyes are being used to start the timer), the cattle number assigned to the current team is passed as extended data. For example, a cattle number of 3 is passed as "#3".

Lap Timing: The lap number is sent as extended data. The format is "Lxx" where xx is the lap number.

The **Follow Extended Data With** section allows you to choose the keystrokes that should be sent after the extended data is sent to your application. Check the **ENTER key** button if you want the *Enter* key automatically pressed for you after the extended data is sent to your application. Check the **TAB key** button if you want the *Tab* key automatically pressed following the extended data. If both **ENTER key** and **TAB key** are selected, then the *Tab* key is sent first followed by the *Enter* key.

The **Prepend "00:"** option should be checked if your timer and spreadsheet are using minute and second formats. For example, 24.356 does not import properly if a cell is formatted for minutes and seconds. However, prepending "00:" to the time gives "00:24.356" which does import properly.

Barrel Split Times Operation

Comprehensive split-time information about a barrel run can be obtained when using the *Time Stamp* event on the Polaris wireless timer along with four sets of wireless electric eyes and this software. Split times available are:

- Time from start line to 1st barrel.
- Time around 1st barrel.
- Time from 1st barrel to 2nd barrel.
- Time around 2nd barrel.
- Time from 2nd barrel to 3rd barrel.
- Time around 3rd barrel.
- Time from 3rd barrel to finish.
- Total time.

To use the FarmTek Timer Interface to obtain barrel split times, choose the **Barrel Split Times** option under the **Mode** prompt. As the rider breaks the

beams in the succession listed above, the split times are "typed" into your spreadsheet or database. A *Tab* key follows each time with the exception of the final time which is followed by the *Enter* key.

For your reference, two spreadsheets were placed in the installation directory where this software was installed. Make a copy of the "Barrel Split Times.xls" spreadsheet to use as a template or starting point for your use. The "Sample Times.xls" spreadsheet shows this template with a few times filled in.

Raw Time Stamp Operation

You can use the FarmTek Timer Interface to retrieve time stamp data from the Polaris timer and place it into your spreadsheet. The Polaris timer must be running the *Time Stamp* event, and the **Raw Timestamp** option selected under the **Mode** prompt on your computer. Any time an electric eye beam is broken or restored, the following information is "typed" into your application:

1) A single character event code ("S", "F", "B" or "R") followed by the *Tab* key. Event codes are as follows:
   S – Beam break which started the timer.
   F – Beam break which stopped the timer ("F"inished timing).
   B – Beam break which did not affect the timer.
   R – Beam restored

2) A single character eye number in ASCII ("1", "2", "3" or "4") followed by the *Tab* key.

3) A ten digit time stamp in ASCII. Leading zeros are not suppressed. The least significant digit has a resolution of 125us. The time stamp is followed by a *Tab* and/or *Enter* as selected on the **Advanced** options tab of the FarmTek Timer Interface.

Questions / Support

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