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# ReacTime Firmware 1.40 Release Notes





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ReacTime Firmware 1.40 Release Notes

May 16, 2005

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# Introduction

The firmware for the ReactTime Block Sensor and Command Center has been upgraded with the features described in this document. Please refer to page 31 of the *ReactTime Operator's Manual* for instructions on how to update the firmware on a Block Sensor and on the Command Center.

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## Obtaining Lynx products and information

There are three ways to obtain Lynx products and information:

- Go to the **Lynx website** (<http://www.finishlynx.com/>) and click the **Products** link
- Call (978) 556-9780 and ask to speak with someone in sales, or
- Send an email to our **sales department** (<mailto:sales@finishlynx.com>).

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## Obtaining technical support

There are three ways to obtain technical support for Lynx products:

- Go to the **Lynx website** (<http://www.finishlynx.com/>) and click the **Support** link
- Call (978) 556-9780 and ask to speak with someone in tech support, or
- Send an email to the **technical support department** (<mailto:support@finishlynx.com>).

## CHAPTER 1

# ReacTime Firmware 1.40 Release Notes

This chapter describes the new features in the ReacTime Block Sensor and Command Center firmware version 1.40 since the release of version 1.30.

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## New "Motion" detection setting

There is a new Motion setting for the ReacTime Training System that causes the internal timer to activate when motion is detected. This is particularly helpful when using the ReacTime Training System to test football athletes running the 40 yard dash.

When the Motion setting is enabled, ReacTime uses the first movement detected after the "set" command to start its internal timer. This time is then used to calculate the time to subsequent photoeye breaks.

➤ **To set this feature:**

- 1 Turn on the Block Sensor by pressing and holding the **OFF/ON** key until the LCD reads *ReacTime | Ready To Start*.
- 2 Press the **Menu** key once.
- 3 Use the up or down arrow keys to scroll through the menus until you arrive at the *Main Menu | Training* screen.
- 4 Press the **Menu** key again.
- 5 Scroll through the Training Menu sub-menus using the up or down arrow keys until you arrive at the *Training Menu | Intervals* screen.
- 6 Press the **Menu** key again.
- 7 Scroll to the *Intervals Menu | Ready-->Gun Min* sub-menu using the up or down arrow keys.
- 8 Press the **Menu** key again.

- 9 Scroll to the *Ready-->Gun Min | Motion* sub-menu using the up or down arrow keys.
- 10 Press the **Menu** key again save the changes. You are returned to the *Reactime | Ready To Start* screen.

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## **New improved wireless card**

The wireless ReactTime Championship System now comes with a new wireless card with increased reliability and range.

The new wireless card allows a distance of up to 100 meters between the Command Center and the Block Sensors.

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## **RadioLynx support added**

A RadioLynx™ receiver can now be connected to both the ReactTime Training and ReactTime Championship Systems to enable the receipt of starts and/or photoeye breaks.

➤ ***RadioLynx and the ReactTime Training System***

Use a RadioLynx receiver with the ReactTime Training System, the new ***Motion*** (see "New "Motion" detection setting") setting, and Microgate wireless photoeyes to test football athletes' 40 yard dash times.

➤ ***RadioLynx and the ReactTime Championship System***

Add a RadioLynx receiver to the Command Center to enable it to receive the same start signal as the RadioLynx transmitter starting the FinishLynx® timer. From that signal, the ReactTime Championship System determines reaction times without the use of another sensor or cable stretching from the Command Center to the Starter.



## Using RadioLynx with the ReactTime Training System

- 1 Connect the RadioLynx receiver to the **Serial Cable** port of the Block Sensor using the special cable provided.



- 2 Turn on the Block Sensor by pressing and holding the **OFF/ON** key until the LCD reads *ReactTime | Ready To Start*.
- 3 Press the **Menu** key once. Use the up or down arrow keys to scroll through the menus until you arrive at the *Main Menu | Training* screen.
- 4 Press the **Menu** key again.
- 5 Use the up or down arrow keys to scroll through menus until you arrive at the *Training | RadioLynx* screen.
- 6 Press the **Menu** key again.
- 7 Use the up or down arrow keys to scroll through menus until you arrive at the *RadioLynx | Port* screen.
- 8 Press the **Menu** key again.
- 9 Use the up or down arrow keys to scroll through menus until you arrive at the *Port | Serial Port* screen.
- 10 Press the **Menu** key again save the changes. You are returned to the *ReactTime | Ready To Start* screen.

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**Note:** To send a *start signal* to the Block Sensor, set the Signal Type on the RadioLynx transmitter to **0**. To send a *photoeye break* to the Block Sensor, set the Signal Type on the RadioLynx transmitter to **1**.

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## Using RadioLynx with the ReactTime Championship System

- 1 Connect the RadioLynx receiver *either* to the **Serial Cable** port *or* to the **Line Printer** port of the Command Center using the special cable provided.



- 2 Turn on the Command Center by pressing and holding the **OFF/ON** key until the LCD reads *ReactTime | Ready To Start*.
- 3 Press the **Menu** key once. Use the up or down arrow keys to scroll through the menus until you arrive at the *Main Menu | System* screen.
- 4 Press the **Menu** key again.
- 5 Use the up or down arrow keys to scroll through menus until you arrive at the *System | RadioLynx* screen.
- 6 Press the **Menu** key again.
- 7 Use the up or down arrow keys to scroll through menus until you arrive at the *RadioLynx | Port* screen.
- 8 Press the **Menu** key again.
- 9 Use the up or down arrow keys to scroll through menus until you arrive at the *Port | Printer Port* screen.
- 10 Press the **Menu** key again save the changes. You are returned to the *ReactTime | Ready To Start* screen.

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**Note:** To send a start signal to the Command Center, set the Signal Type on the RadioLynx transmitter to **0**.

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## CHAPTER 2

# ReacTime Firmware 1.30 Release Notes

This chapter describes the new features in the ReacTime Block Sensor and Command Center firmware version 1.30 since the release of 1.20.

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## Internal gun outputs external signal

There is a new setting in the Block Sensor Training Menu called **12V Mode**. It can be set to *either*:

- **Always On:** this is the default setting, and it is how it has worked in the past; *or*
- **Pulse:** causes the 12V connected to the gun and photoeye ports to turn off for 100 ms when the internal gun fires, allowing an external signal to be released.

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## Max headset volume

The maximum headset volume is now 7 instead of 10. It was reported that values above 7 caused too much cross-talk between the headset speaker and the headset microphone.

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## "Idle Error" now includes offending lane

When an **Idle Error** is reported, it now displays the offending lane.

**Note:** The lane reported here as well as the lane reported when an error occurs going into the **Ready** state is the *highest* numbered lane that did not work. It is possible that a lower numbered lane also did not work.

**Tip:** If a Block Sensor in one lane is reporting an error, find out whether other Block Sensors in the lanes below it are also reporting errors by moving the suspect unit to Lane 1. If you never get lane errors higher than 1, then you know that Lane 1 is the only bad Block Sensor.

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## New "Headset Tones" Command Center option

The new **Headset Tones** option in the Command Center contains two sub-menus:

- **All:** this is how the previous firmware version worked;
- **Recall:** choose this setting if you want only the recall tone to play in the Starter's headset. The other tones, including **Ready**, **Set**, and **Error**, are not heard.

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## Improvements in battery charge

Various changes have been made to more effectively charge the batteries in the Block Sensor. These changes include:

- The voltage drop required to terminate charging has been increased to help prevent premature termination.
- You must now allow the Block Sensor to fast-charge for 4 hours instead of 3 to ensure that higher capacity batteries are fully charged.
- The slow-charge that follows the fast-charge has been lowered from 1 hour to 30 minutes.
- The minimum battery voltage to begin charging has been eliminated, allowing batteries that go unused for a long time to be charged.
- Block Sensors no longer charge when external power is used to turn them on. To turn charging on, go to the **Settings | Change Battery** menu in the Block Sensor.
- When the Block Sensor is running off of battery, the battery symbol is always solid, unless the battery is low. When low, the battery symbol is hollow. As before, tap the power button to update the battery status.

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## Normal detection setting less sensitive

The **Normal** detection setting is now less sensitive than the previous firmware version's setting. After you load the new firmware, be sure to restore the Block Sensor to the factory defaults so that the new **Normal** detection setting is used.





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