



# *RMonitor*

Version 3.2

# *User Manual*

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AMB i.t. B.V.

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# 1. GETTING STARTED

## 1.1. Introduction

The RMonitor program can be used to display the current results in races, qualifying and practices, and allows you to spot the changes in race or practice order immediately as the event progresses. Different columns can be selected in the program to display the information you want.

The result layout can be displayed in any font or color you like. It is also possible to show a layout full screen, so that it can be displayed on a TV or video screen (using a VGA to TV/video converter).

The RMonitor program is a Windows-based program and runs on a separate computer. Since the RMonitor program is a Windows program, all Windows functions can be used in the RMonitor program.

The main timing computer running Orbits, Orbits 2 or Orbits Oval and the computer(s) running RMonitor must be connected over a Wired or Wireless network. Depending on distances, repeaters may be necessary for reliable network connections. Another computer in the tower can be connected via a NULL modem cable from the COM2 port of the main timing computer to one of the COM ports of the in-tower RMonitor computer.

The screenshot shows the RMonitor v3.2 application window with the title "[Current Race results]". The window contains a table with the following data:

Pos	Car	Name	Laps	Last Spd	Class	Best Lap	Total time	Best Spd	Diff
1	34	Johnny Speedster	13	62.512	GT3	12	0:13:29.287	62.855	>> 13 <<
2	46	IDrive Fast	12	61.418	GT3	11	0:13:15.350	62.029	>> 12 <<
3	21	Notso Fast	12	59.603	Rookie	1	0:13:21.537	60.770	6.187
4	56	Desirable One	12	58.862	Rookie	11	0:13:28.162	59.778	12.812
5	55	TooFast ForYou	11	57.682	Challenge	11	0:13:11.897	57.682	>> 11 <<
6									
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21									

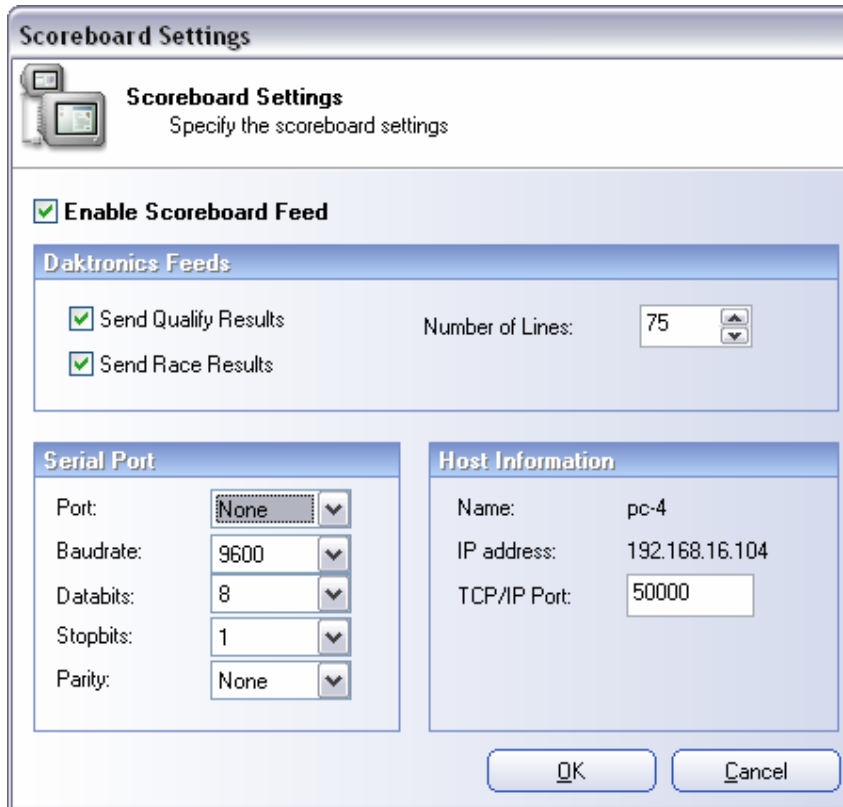
At the bottom of the window, there is a status bar with the following information: Run: Race #1, Best lap: 12, Racetime: 13:31, and the TRACK TIMING SOFTWARE SOLUTIONS logo.

## 1.2. System requirements

To run the RMonitor program you need:

- An IBM PC or compatible computer with a Pentium 2 or better;
- Running at minimum processor speed of 333 MHz;
- Windows 98 Second Edition or higher (Preferably XP or Windows 2000);
- 8MB memory minimum.

### 1.3. RMonitor settings in the Orbits 2, Orbits or Orbits Oval program



To be able to send the information from the Orbits software to the RMonitor program, the following settings should be made in the Orbits software on the main timing computer: [Scoreboard] - [Scoreboard Settings] :

**Enable Scoreboard Feed:** Check this box if not already checked.

**Send Qualify Results:** Check this box if not already checked.

**Send Race Results:** Check this box if not already checked.

**Number of Lines:** The number of competitors to display in the RMon screen.

For wired or wireless networking configurations, please take note of the HOST INFORMATION box. The IP Address and TCP/IP Port info shown in this box on the main timing computer are necessary to connect the remote computers running RMonitor.

For local in-tower computers or digital scoreboards connected to the main computer, select the correct COM (Serial) Port from the drop-down menu. The default data show above is set and should not need to be changed.

### 1.4. Start RMonitor on a Remote Computer

Double click the RMonitor icon.

The program starts-up and shows a default result layout.

### 1.5. Creating and editing a result layout

Select in menu [FILE] item and choose a result layout [Current Race Results]. After this a dialog will pop-up with the different columns that you can add to the result window. Select the result columns you want to display and click OK.

You can change the column width by dragging the right outside line of the column header. Several results layouts can be opened at the same time and by dragging they can be placed every where on the screen. The dimensions of the results window can be changed by dragging the outside lines of the window.

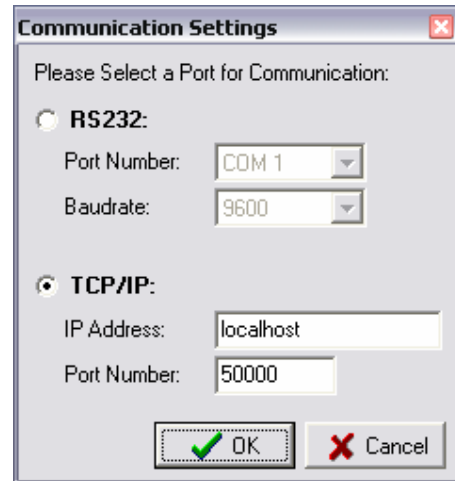
A logo can be displayed in a window by choosing item [LOGO] in menu [FILE]. Enter the filename of a picture (Bitmaps or Window meta files) you want to display and click OK

### 1.6. Communication Settings

Select Settings > Communication and this window appears.

Input the IP Address from the HOST INFORMATION of the main timing computer. Port 50000 is a default.

To monitor the connection between the main timing computer and the remote computer, select Settings > General Info. Check one of the boxes to display the footer in RMon.



You'll know the connection is working when you see the green and red lights flashing in the bottom corner of the footer. This indicates a sync with the Orbits software.



## 2. MENU REFERENCE

### 2.1. Main

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**New Result Window** With this function a new result layout may be designed by choosing a result layout and the columns to be shown.

**Completed lap results**

This result layout shows the results of the last completed lap. The order is updated when the leader passes the detection loop.

**Current Race results**

This result layout shows the current race results, sorted on number of laps and total time. The screen is updated at every passing.

**Practice results**

This result layout shows the practice results, sorted on best lap time.

**Track position**

This result layout shows the order in which the competitors have passed the detection loop in the last completed lap. The order is updated when the leader passes the detection loop.

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**Position**

In this column the position of the competitor is shown.

**Marker**

In this column the following markers may be shown:

- = green dot : competitor passed in current lap.
- = gray square : competitor missed one lap.
- = black square : competitor missed 2 or more laps.
- ↑ = green arrow : competitor moved to a better place in the order.
- X = black cross : track position only, competitor lost one or more track positions in the current lap.

**Car number**

In this column the car number related to the transponder is shown.

**First name**

In this column the first name of the competitor is shown.

**Last name**

In this column the last name of the competitor is shown.

**Combined name**

In this column the first and last name of the competitor are shown.

**Class**

In this column the class of the competitor is shown.

**Nationality**

In this column the nationality of the competitor is shown.

**Additional data**

In this column some additional data on the competitor is shown.

**Laps**

In this column the number of laps for each competitor is shown.

**Total time**

In this column the total time of the last passing is shown.

**Last laptime**

In this column the lap time of the last completed lap for each competitor is shown.

**Best lap**

In this column the number of the lap with the best lap time for each competitor is shown.

	<p><b>Best laptime</b> In this column the best lap time for each competitor is shown.</p> <p><b>Last speed</b> In this column the average speed of the last completed lap for each competitor is shown when the track length is specified.</p> <p><b>Best speed</b> In this column the best speed of this competitor is shown when the track length is specified.</p> <p><b>Different</b> In this column the difference with the lap time of the leader is shown.</p>
<b>Logo</b>	<p>With this function a logo may be displayed on the screen. Enter the file name of a picture (Bitmap or Window meta file) you want to display. Make sure the logo check button is enabled. To remove the logo disable the logo check button.</p>
<b>General info</b>	<p>With this function general information can be displayed at the bottom of the screen. The indicator on the right side indicates the data flow send by the RTS program to the RMonitor program.</p> <p><b>Red</b> Indicates data is being received.</p> <p><b>Green</b> Indicates waiting for data.</p> <p><b>Flag</b> This shows a green, yellow, or red flag, indicating the status of the race.</p> <p><b>Laps to Go</b> This shows the number of laps to go before the end of the race.</p> <p><b>Current race time</b> This shows the current race time</p> <p><b>Best lap</b> This shows the lap in which the best overall lap time was set.</p> <p><b>Best laptime</b> This shows the best overall lap time.</p> <p><b>Best speed</b> This shows the best overall speed when the track length is specified.</p> <p><b>Best name</b> This shows the name of the competitor with the best lap time overall.</p> <p><b>Length track</b> This shows the length of the track. The track length can be specified under [SETTINGS] - [MISCELLANEOUS].</p> <p><b>Name track</b> This shows the name of the track. The track name can be specified under [SETTINGS] - [MISCELLANEOUS]</p> <p><b>Run description</b> This shows the name of the current session.</p>
<b>Clear Layout</b>	With this function the current layout can be cleared.
<b>Open layout</b>	With this function a previous layout that has been saved can be opened.
<b>Save layout</b>	With this function the current layout can be saved.
<b>Exit</b>	With this function you can exit the RMonitor program.

## 2.2. Settings

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**Communication** With this function the communication settings can be changed. Click on button [Settings > Communication] to change the settings of the selected channel.

The settings when using Wired or Wireless Networks:

**IP Address** : Input IP Address Found in section 1.3 of this manual

**Port** : Typically 50000

The settings when using the COM Port are:

**Channel** : RS232

**COM** : 1

**Bits per second** : 9600

**Data bits** : 8

**Parity** : none

**Stop bits** : 2

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**Miscellaneous** **Marker delay** [1-30]  
Enter the number of seconds that the marker in the practice screen must be shown.

**Speed decimals** [0-3]  
Enter number of decimals for speed results.

**Track name**  
Enter the track name. The track name can be shown in the general info row.

**Track length**  
Enter the length of track. The length of the track can be shown in the general info row and is used to calculate the speed results. RTS 3.26 and up shall overwrite this setting by starting a new run.

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**Layout** With this function the color and fonts of the text and background color of the different layouts can be changed. First select the object of which you want to change the colour. Press the left mouse button in the colour grid to change the text colour. Use the right mouse button to change the background colour. Use the button [RESET] to reset all colours to default colours.

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**Follow** With this function one or more competitors can be selected to follow. These competitors will be shown in a different colour in the results window. This color can be changed with Font or Color settings.



## 2.3. Layout

<b>Font</b>	With this function Font, Font style and Size of all text can be changed.
<b>Column settings</b>	With this function columns can be added and deleted. Columns will always be added on the right side of the result window. Header text changes can also be made in this dialog window.
<b>Scroll bars</b>	With this function the scroll bars at the bottom and on the right side of each result layout can be enabled or disabled.
<b>Sizeable</b>	With this function the result window can be made sizeable or fixed.
<b>Grid</b>	With this function the grid in the result window can be shown or hidden.
<b>Print Results</b>	With this function the current result layout can be printed.
<b>Full screen</b>	With this function the current result window can be shown full screen. When the result window is displayed full screen, all window borders and headings are disabled. To return to the RMonitor menu screen press [ESC].

### IMPORTANT NOTE:

AMB will not troubleshoot wired or wireless network problems. Please contact your network administrator, computer manufacturer or Microsoft for support.

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