



## ***iCardUSB*** User Manual

Thank you for your purchase of *iCardUSB*. Every effort has been made to make the receiver a reliable, easy-to-use, tool to enhance your experience at a racing event. By following the simple instructions outlined in this manual, you should be able to easily setup and use *iCardUSB* at circle track, road course, and drag racing events. Included on the installation CD are two programs, *iView* and *iCardRX*. *iView* is the program that should be used at circle track and road course events that are scored using the AMB timing system, and *iCardRX* is the program that should be used at drag racing events.

Before installing the software, the USB drivers should be installed. To do this, insert the CD and then connect the receiver to the PC with the supplied cable. At this point the "Install New Hardware Wizard" should start. After instructing the Wizard not to search the Internet for new drivers, click the "Install Automatically" option, and click "next". The drivers should be automatically installed from the "USBDrivers" folder on the CD, and the receiver should now be recognized by the PC.

At this point you can install either, or both, aforementioned programs. To install *iCardRX*, simply double-click on the file "*iCardDragRace.exe*". The program will be automatically installed and an icon placed on your desktop. To install *iView*, double-click on the file "*iCardRacing\_vXX.exe*". "*iCardRacing*" is also a self-installing setup file, and an icon will be placed under "Programs" on the Start Menu.

This completes the setup process for the receiver and software. If you've installed both programs, you will be able to use the *iCardUSB* receiver at any motorsports event supported by the *iCard* System. To use the receiver at an event, simply double click the appropriate icon to open the proper program after connecting the receiver to the PC with the USB cable. If the *iCard* transmitter is within range, the program will automatically begin to collect and display the information without further user input. The following pages will outline various features of each program that will allow the user to tailor the displays to suit their needs.

## iView

Upon opening the program, a screen similar to that shown below will appear:

P	Car	Class	Driver	Laps	Time	Speed	FLap	FTime	FSpeed	ElapsedTime	Gap	Interval	Status
1	33		Ryan Briscoe	52	1:29.084	89.309	51	1:11.453	1:11.453	5:11:41.3238	0.000		
2	7		Bryan Herta	25	1:27.483	90.944	24	1:11.476	1:11.476	5:08:37.4571	0.024	0.024	
3	3		Helio Castroneves	54	1:12.484	109.762	51	1:11.492	1:11.492	5:07:50.2377	0.039	0.015	
4	2		Tomas Enge	33	1:19.516	100.055	32	1:11.593	1:11.593	3:02:10.5144	0.141	0.102	
5	27		Dario Franchitti	25	1:28.782	89.613	20	1:11.709	1:11.709	2:54:31.2263	0.257	0.116	
6	9		Scott Dixon	31	1:23.629	95.135	10	1:11.719	1:11.719	5:10:33.6309	0.267	0.010	
7	6		Sam Hornish Jr	48	1:12.165	110.248	42	1:11.910	1:11.910	5:10:00.9830	0.458	0.191	
8	15		Buddy Rice	41	1:12.044	110.432	38	1:11.948	1:11.948	5:08:54.5090	0.495	0.037	
9	26		Dan Wheldon	30	1:22.783	96.106	15	1:11.979	1:11.979	3:01:50.8977	0.527	0.032	
10	16		Danica Patrick	38	1:11.980	110.531	38	1:11.980	1:11.980	5:07:32.4890	0.527	0.000	
11	55		Kosuke Matsuura	30	1:12.218	110.167	24	1:11.997	1:11.997	2:55:50.0468	0.544	0.017	
12	17		Vitor Meira	33	1:12.007	110.490	33	1:12.007	1:12.007	5:04:29.4886	0.554	0.010	
13	10A		Scott Dixon	5	1:21.005	98.216	3	1:12.175	1:12.175	2:40:02.9093	0.723	0.169	
14	10*		Scott Dixon	5	1:21.005	98.216	3	1:12.175	1:12.175	2:40:02.9093	0.723	0.000	
15	9*		Darren Manning	8	1:26.097	92.408	7	1:12.244	1:12.244	2:43:58.5439	0.791	0.068	
16	9A		Darren Manning	8	1:26.097	92.408	7	1:12.244	1:12.244	2:43:58.5439	0.791	0.000	
17	8		Scott Sharp	44	1:13.148	108.765	35	1:12.298	1:12.298	5:02:48.1590	0.846	0.055	
18	83		Patrick Carpentier	41	1:27.145	91.296	39	1:12.639	1:12.639	5:10:15.6495	1.187	0.341	
19	4		Tomas Scheckter	16	1:12.708	109.424	16	1:12.708	1:12.708	1:13:59.2728	1.256	0.069	
20	51		Alex Barron	16	1:14.034	107.465	13	1:13.841	1:13.841	4:06:17.9610	2.389	1.133	
21	24		Roger Yasukawa	27	1:14.510	106.777	27	1:14.510	1:14.510	2:56:21.7930	3.058	0.669	
22	11		Tony Kanaan	21	1:20.086	99.343	7	1:20.086	1:20.086	2:57:54.3880	8.634	5.576	
23	10		Darren Manning	48	1:20.180	99.227	44	1:20.180	1:20.180	5:10:32.5944	8.727	0.093	

Running Time:0:04:55.250 Transfer Rate: 0/s [0 bps]

If the receiver is within range of an iCard transmitter, then the red circle shown in the upper left corner of the screen should turn dark green, flashing to light green as data is received. After a short period of time, the upper portion of the screen, currently shown as grey, will change color to indicate track condition: Green if the track is hot, Yellow if there is a full course caution, Red if the session has been red-flagged, and Blue if the session is either checkered, or waiting to begin.

The columns shown are those that are available. An explanation of the headings shown follows: **P**=track position during a race, or qualifying order during qualifying or practice. **PRank**=Rank on the prior track(not shown). **Car**=Car number. **Class**=The class the entrant is competing under. **Driver**=The name(s) of all drivers. **Laps**=Number of laps completed during this session. **Time**=The ET of the last lap. **Speed**=The average speed of the last lap. **FLap**=the lap number of the car's fastest lap. **FTime**=The ET of the car's fastest lap. **FSpeed**=The average speed of the car's fastest lap. **ElapsedTime**=Time since the beginning of the session when the last lap was completed. **Gap**=Time interval to the leader.(the default name for this column is "**BehindLeader**") **Interval**=Time interval to the previous car(Default name is "**BehindPrev**"). **Status**="Active", if the car has completed a lap, "No time" if the car has not completed one lap.

The green highlighted portion of the screen indicates that the last lap was the fastest lap of that session, for that competitor, thus far. As each competitor crosses the start/finish line, their name will be highlighted in the same green for ten seconds. The red portion indicates a driver that is being "Followed" by the user.

“Right-Clicking” on the screen will bring up the following menu:

The screenshot shows the iCardUSB V0.80 application window. At the top, there is a menu bar with 'File', 'Settings', and 'Commands'. Below the menu bar, a status bar displays 'Session: UNKNOWN' and 'Elapsed: UNKNOWN'. The main area contains a table with columns: P, Car, Class, Driver, Laps, Time, Speed, FLap, FTime, and FS. Row 7 is highlighted in red. A context menu is open over row 7, listing options: Add Field (Ins), Cell Padding (Ctrl+P), Change Title (Ctrl+T), Colors, Delete Field (Del), Edit Field (Ctrl+E), Follow [6] (Ctrl+C), Font (Ctrl+F), Hide Borders (Ctrl+B), and Hold Time (Ctrl+H).

P	Car	Class	Driver	Laps	Time	Speed	FLap	FTime	FS
1	33		Ryan Briscoe	52	1:29.084	89.309	51	1:11.453	1:1
2	7		Bry...	5	1:27.483	90.944	24	1:11.476	1:1
3	3		Hel...	4	1:12.484	109.762	51	1:11.492	1:1
4	2		Tom...	3	1:19.516	100.055	32	1:11.593	1:1
5	27		Dar...	5	1:28.782	89.613	20	1:11.709	1:1
6	9		Sc...	1	1:23.629	95.135	10	1:11.719	1:1
7	6		Sar...	3	1:12.165	110.248	42	1:11.910	1:1
8	15		Buc...	1	1:12.044	110.432	38	1:11.948	1:1
9	26		Dar...	0	1:22.783	96.106	15	1:11.979	1:1
10	16		Dar...	3	1:11.980	110.531	38	1:11.980	1:1
11	55		Kosuke Matsuda	0	1:12.218	110.167	24	1:11.997	1:1
12	17		Vitor Meira	33	1:12.007	110.490	33	1:12.007	1:1
13	10A		Scott Dixon	5	1:21.005	98.216	3	1:12.175	1:1
14	10*		Scott Dixon	5	1:21.005	98.216	3	1:12.175	1:1
15	9*		Darren Manning	8	1:26.097	92.408	7	1:12.244	1:1
16	9A		Darren Manning	8	1:26.097	92.408	7	1:12.244	1:1
17	8		Scott Sharp	44	1:13.148	108.765	35	1:12.298	1:1
18	83		Patrick Carpentier	41	1:27.145	91.296	39	1:12.639	1:1

An explanation of each option is as follows:

- Add Field - Allows the user to add back a column if it has been deleted from this display. When selected, a new column will be added and a drop down menu will appear, allowing the user to select which information will be displayed in that column.
- Cell padding – Adds spacing between cells to make the information easier to read.
- Change title – After a field has been added using the drop down menu, you can change the name of the field to suit your taste.
- Colors – Allows the user to select the color of the background, the highlighted lines, and that used to highlight a car(s) that are being “followed”.
- Delete Field – This will delete the field you had the cursor on when you “right-clicked” the mouse to bring up the menu.
- Edit Field – Used to change the information being displayed in the selected field.
- Follow[] – Allows you to highlight one or more cars to “follow” during the session. Any cars listed will be highlighted as they move up or down the field.
- Font – Allows you to select the font type and size used in the display.
- Hide Borders – Allows you to hide the borders between the cells of the display. As shown, the borders are “Hidden”.
- Hold Time – Allows you to change the time that the driver’s name is highlighted after crossing the Start/Finish line.

Clicking on the “Settings” tab at the upper portion of the screen will bring up the following display:



Available options are explained below:

- Log Laps – When checked, timing data will be logged in a .csv file (shown to the right of the option)
- Calculate Lag – Causes the program to calculate the interval between competitors during a race
- Class Avail – Will be automatically selected if class information is being broadcast from the iCard transmitter.
- Driver Info – Will be automatically selected if driver name information is being broadcast from the iCard transmitter.
- Channel – Beside this option, the channel being monitored will be displayed (either “1” or “2”). Clicking on this option will cause the receiver to be tuned to the other channel. Most events are broadcast on Channel 1. If the circle at the top of the screen is red, and you believe the transmitter is on, try changing the channel to see if the broadcast is on the other channel. Confirm the proper channel with the iCard Operator.
- Close Output – This indicates that an RMON compatible data stream is being broadcast from the program via TCPIP from the output socket listed. Clicking on this option will stop the broadcast.
- Font – Allows the user to change the font type and size used for the display of data.

# iCardRX

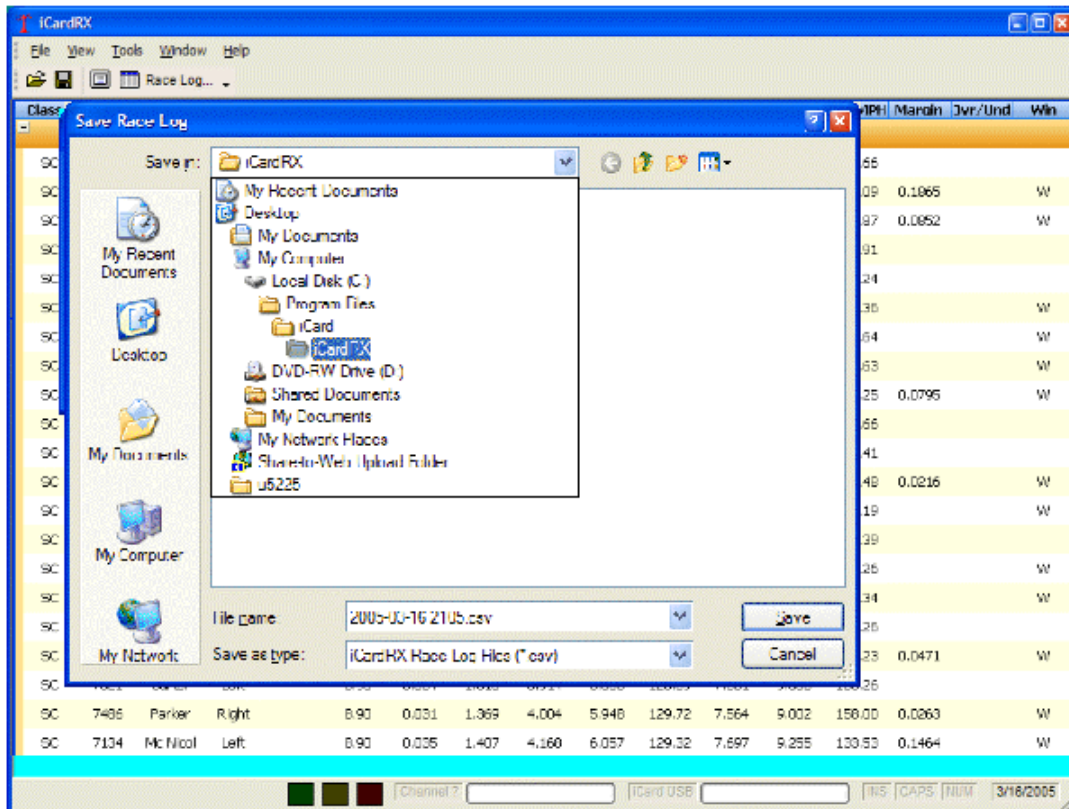
Upon opening the program, a screen similar to that shown below will appear:

Class	Car #	Name	Lane	Bump	Dial	RT	60' ET	330' ET	1/8 ET	1/8 MPH	1000' ET	1/4 ET	1/4 MPH	Margin	Dvr/Und	Win
Category : SUPER COMP E1 E1																
SC	704A	Rubles	Left		0.90	0.322	1.340	4.011	5.926	130.81	7.527	0.077	167.66			
SC	3088	Livesey	Right		0.90	0.102	1.401	3.917	5.824	129.19	7.401	0.911	151.09	0.1065		W
SC	702G	Proctor	Left		0.90	0.030	1.272	3.857	5.840	125.09	7.529	0.965	155.97	0.0652		W
SC	7359	Jeffery	Right		0.90	0.013	1.330	4.043	5.954	132.06	7.546	0.890	168.91			
SC	730	Maass	Left		0.90	-0.004	1.498	4.089	5.923	131.01	7.538	0.921	158.24			
SC	7229	Jeffery	Right		0.90	0.084	1.303	4.124	6.024	133.72	7.583	0.890	173.36			W
SC	9	Hender...	Left		0.90	0.036	1.316	4.185	6.055	134.38	7.608	0.908	170.64			W
SC	5823	Steen	Right		0.90	0.008	1.288	4.161	6.049	134.54	7.594	0.896	167.63			W
SC	7686	Locasck	Left		0.90	0.026	1.375	3.880	5.834	126.48	7.511	0.944	157.25	0.0795		W
SC	5000	Sweetl...	Right		0.90	0.049	1.256	3.895	5.870	125.65	7.564	0.000	156.66			
SC	4176	Costa	Left		0.90	0.057	1.300	4.004	5.904	131.99	7.572	0.912	160.41			
SC	79	Denton	Right		0.90	0.010	1.410	4.109	6.007	129.42	7.569	0.930	166.48	0.0216		W
SC	7470	Will	Left		0.90	0.009	1.001	4.232	6.043	137.26	7.576	0.874	174.19			W
SC	754	Darsow	Right		0.90	-0.012	1.197	3.842	5.816	128.20	7.444	0.907	166.39			
SC	5903	Widmer	Left		0.90	0.003	1.249	3.956	5.919	129.98	7.248	0.910	159.26			W
SC	7388	Traut...	Right		0.90	0.000	1.452	3.908	5.920	130.45	7.534	0.910	159.34			W
SC	7009	Steven...	Left		0.90	0.003	1.461	3.839	5.805	124.38	7.530	0.987	146.26			
SC	5038	Woolk...	Right		0.90	0.019	1.356	3.759	5.737	124.33	7.451	0.924	152.23	0.0471		W
SC	7021	Carter	Left		0.90	0.054	1.310	3.914	5.853	125.89	7.561	0.005	150.26			
SC	7486	Parker	Right		0.90	0.031	1.369	4.004	5.946	129.72	7.564	0.002	158.00	0.0263		W
SC	7134	Mc Nicol	Left		0.90	0.035	1.407	4.160	6.057	129.32	7.697	0.255	130.53	0.1464		W

Although this screen shows data from several runs, when first opening the program, no runs will be shown until received by the transmitter. A brief explanation of the screen elements is as follows:

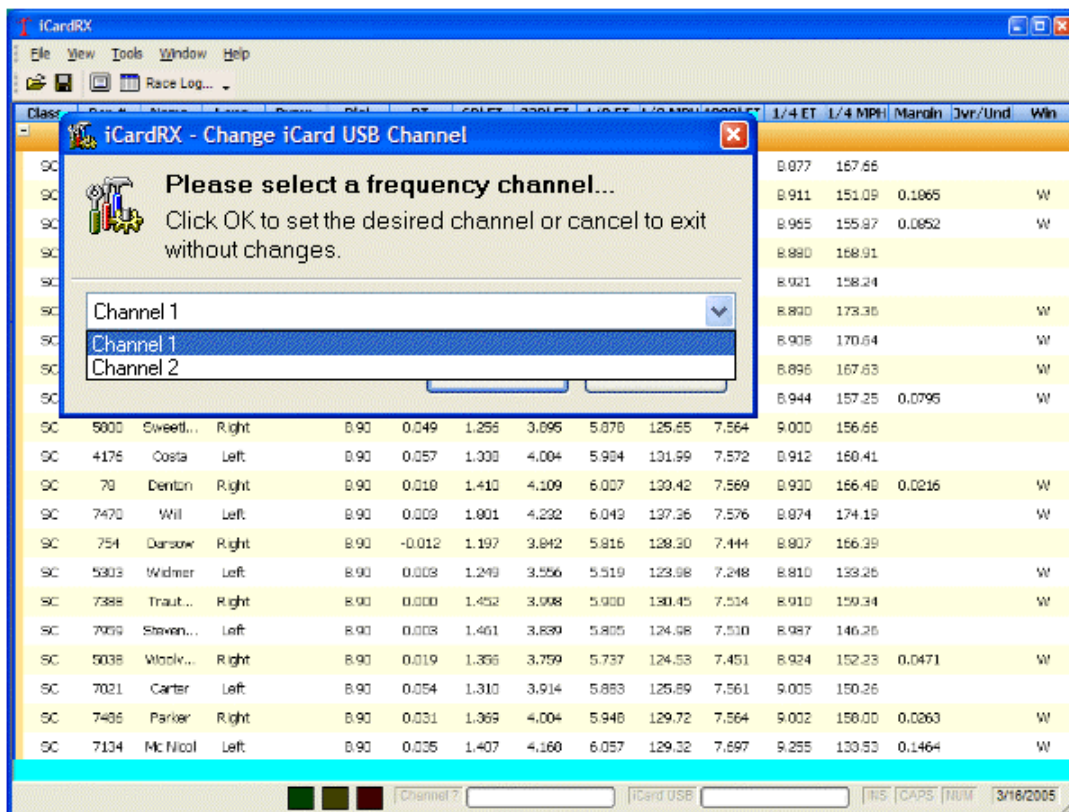
- The columns shown are self-explanatory. They are grouped by Category, and will be cleared when a new Category session has begun.
- The three squares shown in the lower portion of the screen indicate the following:
  - The dark green square will change to light green when the receiver is in-range of the transmitter.
  - The dark yellow square will change to light yellow when data is present in the data buffer of the receiver. In normal operation, this square should be flickering between dark and light yellow.
  - The dark red square will change to bright red when the data buffer on the receiver is full. This indicates that data is being “missed”, and can be caused by having too many programs running at the same time, or by a processor being too slow for this program.
- The “Channel” box indicates which channel the receiver is tuned to, either “1” or “2”. The bar to the right of this box indicates signal strength.
- When “iCardUSB” in the box to the right is shown in dark letters, the PC has recognized that the USB receiver is connected. The box to the right of that indicates data is being downloaded from the receiver when the bar graph is moving.

Clicking on the “Save Log” option under the “File” menu brings up the following screen:



This allows you to select where the run data will be logged. By default, the runs will be stored in a .csv file in the same directory as the program file.

Clicking on the “Change Channels” option under the “Tools” menu brings up this dialog box:



Select the appropriate channel to receive the broadcast. Normally the broadcast will be on Channel 1, but the iCard Operator may use Channel 2 if interference is present.

Right-clicking on the screen will cause an options dialog box to appear, which will allow you to tailor the screen to suit your personal preferences.

If you have any questions about this manual, or the operation of iCardUSB, please do not hesitate to contact us at <http://www.icardus.com>.