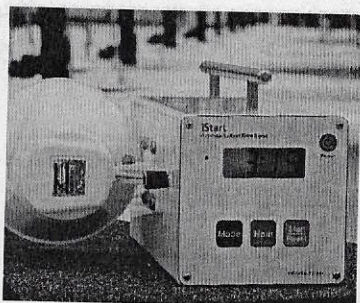
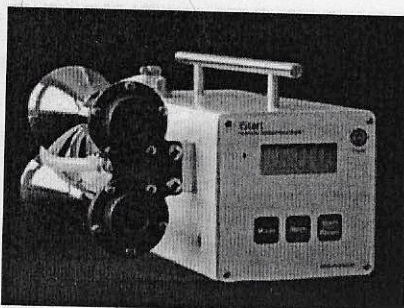


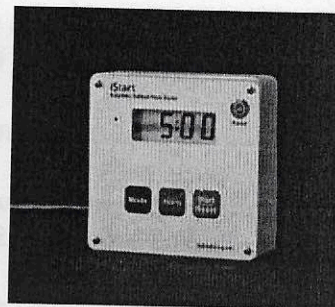
iStart Owner's Manual



iStart Whistle



iStart Pro



iStart Controller

Introduction

Balboa Racing is the leader in automatic sailboat race starters, using the latest in electronics technology for ease of use, excellent reliability and functionality. Whether you're a yacht club sailing director, coach or sailing instructor, one of our models will be your new best friend. Perfectly timed automatic starts every time will allow you to focus your attention on flag changes, coaching and teaching.

Each model is pre-programmed with over 35 starting sequences and features a durable plastic container, large 4-digit LCD timer display, microprocessor board, precise quartz crystal timer and internal flag-change beeper. The iStart Whistle and iStart Pro come with a stainless-steel handle, internal battery and charger.

The **iStart Whistle** uses a powerful audio amplifier to drive a weatherproof loud hailer and is adjustable from loud to quiet. It's perfect for medium to small fleets, harbor, lake, or noise sensitive racing, when air horns are bit too loud. Coaches and yacht clubs really like this model.

The **iStart Pro** controls a pair of loud chrome plated air horns (attached) that can be heard along the longest starting lines, even in very windy conditions (loud). It's perfect for large fleets and harbor or ocean starts. The horns can optionally be located 10-20 feet away from race committee personnel with a bit of inexpensive air hose. Every yacht club needs to own one of these.

The **iStart Controller** is designed to easily connect to your ship's horn or any other electrically operated sounding device for perfect starts. It's small and light weight so can be mounted to your committee boat or can be handheld. It can switch up to 30 amps with the included relay or 20 amps directly. Our support team will be happy to assist with installation advice.

Getting Started

Your iStart is shipped fully charged but it's always a good idea to plug it in overnight just to be sure it's ready for race day. It's best to always keep it plugged in when not in use. You may want to disconnect the iStart Pro air hose while experimenting with settings as the horns are very loud. Once you've practiced and are ready for race day, re-connect the air hose.

Selecting a Starting Sequence

Use the chart below (or on the rear of your iStart) to select the type of start you wish to use. If you wanted a 5:00 Minute Rule 26 Rolling start with a 60 Second Alert, then you want MODE 53.

1. Hold the MODE button down 3 seconds until the screen flashes (and beeps) then release
2. Press the MODE button as needed to select P53
3. Wait 3 seconds to SAVE automatically

Now you're ready to start a race.

Here is a more detailed description.

MODE – This is just a number to identify each of the pre-programmed sequences.

TIME – This is the time between the warning signal and the start.

STYLE – *Dinghy, Rule 26, Match or Rule 26 RCL* (see below).

TYPE – *Once or Rolling* means one start only or continuous starts.

ALERT – Optional 5 short horns before the first warning signal

iStart									
Automatic Sailboat Race Starter - Balboa Racing (949)760-6050									
MODE	TIME	STYLE	TYPE	ALERT	MODE	TIME	STYLE	TYPE	ALERT
10	1:00	Dinghy	Once	None	41	3:00	Dinghy	Rolling 3+1	15 sec
11	1:00	Dinghy	Rolling	None	42	3:00	ICSA-C	Once	None
20	2:00	Dinghy	Once	None	43	3:00	ICSA-C	Rolling	None
21	2:00	Dinghy	Rolling	None	44	3:00	ICSA-C	Once	15 sec
22	2:00	Dinghy	Once	15 sec	45	3:00	ICSA-C	Rolling	15 sec
23	2:00	Dinghy	Rolling	15 sec	50	5:00	Rule 26	Once	None
24	2:00	Dinghy	Once	60 sec	51	5:00	Rule 26	Rolling	None
25	2:00	Dinghy	Rolling	60 sec	52	5:00	Rule 26	Once	60 sec
30	3:00	Dinghy	Once	None	53	5:00	Rule 26	Rolling	60 sec
31	3:00	Dinghy	Rolling	None	54	5:00	Rule 26 RCL	Once	None
32	3:00	Dinghy	Once	15 sec	55	5:00	Rule 26 RCL	Rolling	None
33	3:00	Dinghy	Rolling	15 sec	70	7:00	Match	Once	None
34	3:00	Dinghy	Once	60 sec	71	7:00	Match	Rolling	None
35	3:00	Dinghy	Rolling	60 sec	80	10:00	Match	Once	None
36	3:00	Rule 26	Once	None	81	10:00	Match	Rolling	None
37	3:00	Rule 26	Rolling	None	90	10:00	Rule 26	Once	None
38	3:00	Rule 26	Once	60 sec	91	10:00	Rule 26	Rolling	None
39	3:00	Rule 26	Rolling	60 sec	92	10:00	Rule 26	Rolling 5+5	None
40	3:00	Dinghy	Rolling 3+1	None	93	10:00	Rule 26	Rolling 5+5	60 sec

(1) Hold MODE button for 3 seconds, (2) Select desired mode with MODE button,
 (3) Wait 3 seconds to SAVE automatically.
<http://www.balboaracing.com>

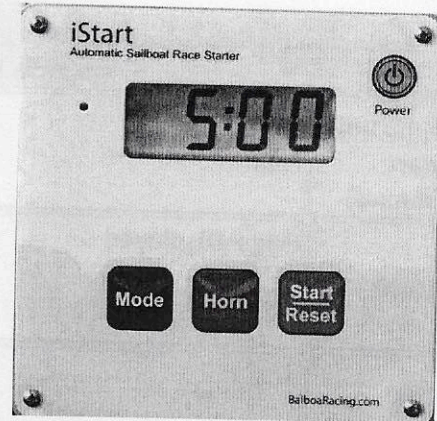
Operating the iStart




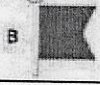
POWER button – Press to turn ON, hold to turn OFF.

MODE button – Press to see details of currently selected mode, hold 3 seconds to select desired mode




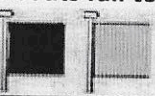

HORN button – Press to sound the horn

START button – Press to start a race sequence, hold for 3 seconds to reset and stop



Rule 26 Starts Usually 5 minutes but also available in 3 or 10 minute versions.				
Time until start (mm:ss)	Flag	Internal Beeper	Loud Horn	Description
6:00 optional			5 short	Alert - optional
5:30 optional		30, 20, 10, 5,4,3,2,1,Flag		optional
5:00	Class Flag UP 		1 long	Warning Signal
4:30		30, 20, 10, 5,4,3,2,1,Flag		
4:00	P-Flag UP 		1 long	Preparatory Signal
1:30		30, 20, 10, 5,4,3,2,1,Flag		
1:00	P-Flag DOWN 		1 extra long	1 Minute until Start Signal
0:30		30, 20, 10, 5,4,3,2,1,Flag		
0:00	Class Flag DOWN and next Class Flag UP 		1 long	First Start and Warning Signal for next start

Match Racing Starts
RRS Appendix C - Available in 7 or 10 minute versions.

Time until start (mm:ss)	Flag	Internal Beeper	Loud Horn	Description
10:00	Flag F Displayed 		1 long	Attention Signal
6:30		30, 20, 10, 5,4,3,2,1,Flag		
6:00	Flag F DOWN			
5:30		30, 20, 10, 5,4,3,2,1,Flag		
5:00	Numeral Pennant UP 		1 long	Warning Signal
4:30		30, 20, 10, 5,4,3,2,1,Flag		
4:00	P-Flag UP 		1 long	Preparatory Signal
2:00	Blue or Yellow or both displayed if boats fail to enter box by now. 			End of Pre-Start entry time
1:30		30, 20, 10, 5,4,3,2,1,Flag		
1:00	P-Flag DOWN 		1 extra long	
0:30		30, 20, 10, 5,4,3,2,1,Flag		
0:00	Numeral Pennant DOWN		1 long	First Start and Warning Signal for next start

Dinghy Starts		
RRS Appendix U - Usually 3 minutes but also available in 1 or 2 minutes versions.		
Time until start(mm:ss)	Loud Horn	Description
3:15	5 short	Alert - optional
3:00	3 long	
2:00	2 long	
1:30	1 long 3 short	
1:00	1 long	
0:30	3 short	
0:20	2 short	
0:10	1 short	
0:05	1 short	
0:04	1 short	
0:03	1 short	
0:02	1 short	
0:01	1 short	
0:00	1 long	START (and 3 minute signal for rolling starts)

ROLLING DINGHY 3+1 STARTS are just ordinary 3-Minute Rolling Dinghy starts with a 1-minute pause between 3-minute sequences. So a 3 minute dinghy start, with a 1 minute pause, then repeat.

ROLLING RULE 26 5+5 STARTS are just ordinary 5-Minute Rule 26 starts with a 5-minute pre-horn, 5-minute sequence, then a 5 minute pause. So a horn at 10:00 minutes, ordinary sequence at 5:00 minutes, then a 5 minute pause, then repeat.

RULE 26 RECALL STARTS are just ordinary 5-Minute Rule 26 starts with an additional horn 1 minute prior to the 5-minute sequence. So a horn at 6:00 minutes then an ordinary sequence beginning at 5:00 minutes.

The Display and Internal Beeper

The large 4-digit LCD display will indicate how many minutes and seconds until the first start. Time will count down once the START button has been pressed. The horn and internal beeper will sound as required by the selected mode. For Rule 26 starts, a flashing P will appear in front of the time remaining for the 30 seconds before P-flag changes. The internal beeper will also sound to help race committee raise or lower flags at the correct time.

Flashing P for 30 seconds before P-flag changes **P4:30** and **P1:30**.

iStart Whistle – How to select one of four included tones

The iStart Whistle comes with four tone pairs, the sounds you hear when sounded. To select the one that works best for you, with the POWER OFF, hold the HORN button, then turn the POWER ON. Use the MODE button to select either H1, H2, H3 or H4, the four included tones. Press the HORN button to listen to them. After you have selected your favorite tone, turn the POWER OFF, and your selection will be saved.

Customizing - Hiding Starting Sequences you don't use

Since the iStart comes with over 35 starting sequences, you may want to hide the ones you don't use and enable the ones that you do (similar to enabling channels on a new television that you want and hiding the ones you don't). Select the modes from the chart your club wants to use. Turn the power ON while holding the MODE switch down. Use the MODE switch to ENABLE (E) or HIDE () each pre-programmed mode. Use the HORN and START switches to scroll up or down the list. If you just want modes 30 and 50, be sure there is an E next to those modes and a blank next to the rest. Power OFF, then ON to resume normal operation.

Now when you select a starting sequence, you will only have to choose between the few modes you have ENABLED. Race Committee will appreciate this.

Factory Reset

To return the iStart to factory default settings, with the power OFF, hold all three buttons down (MODE, HORN and START) then turn the power ON. Screen will read HELO. Turn power off and you are back to factory default settings.

Charging

It's best to keep the charger plugged in at all times when not in use. Leaving it off the charger for months may damage your battery and require expensive replacement. Remove the white rubber plug from the right side of the enclosure, then plug in the included charger. A minimum of overnight charging is best to assure a full charge. A fully charged battery should last for an entire day of racing.

Care and Maintenance

The plastic enclosures are very durable and water resistant. Use a soft cloth and Simple Green to clean.

Support

Technical Support, repairs and replacement parts are available at:

Balboa Racing
(949)760-6050
support@BalboaRacing.com
<http://www.BalboaRacing.com>

(1) Hold MODE button for 3 seconds, (2) Select desired mode with MODE button,
 (3) Wait 3 seconds to SAVE automatically.

MODE	TIME	STYLE	TYPE	ALERT
10	1:00	Dinghy	Once	None
11	1:00	Dinghy	Rolling	None
20	2:00	Dinghy	Once	None
21	2:00	Dinghy	Rolling	None
22	2:00	Dinghy	Once	15 sec
23	2:00	Dinghy	Rolling	15 sec
24	2:00	Dinghy	Once	60 sec
25	2:00	Dinghy	Rolling	60 sec
30	3:00	Dinghy	Once	None
31	3:00	Dinghy	Rolling	None
32	3:00	Dinghy	Once	15 sec
33	3:00	Dinghy	Rolling	15 sec
34	3:00	Dinghy	Once	60 sec
35	3:00	Dinghy	Rolling	60 sec
36	3:00	Rule 26	Once	None
37	3:00	Rule 26	Rolling	None
38	3:00	Rule 26	Once	60 sec
39	3:00	Rule 26	Rolling	60 sec
40	3:00	Dinghy	Rolling 3+1	None
41	3:00	Dinghy	Rolling 3+1	15 sec
42	3:00	ICSA-C	Once	None
43	3:00	ICSA-C	Rolling	None
44	3:00	ICSA-C	Once	15 sec
45	3:00	ICSA-C	Rolling	15 sec
50	5:00	Rule 26	Once	None
51	5:00	Rule 26	Rolling	None
52	5:00	Rule 26	Once	60 sec
53	5:00	Rule 26	Rolling	60 sec
54	5:00	Rule 26 RCL	Once	None
55	5:00	Rule 26 RCL	Rolling	None
56	5:00	Rule 26 RCL	Rolling	60 sec
57	5:00	Rule 26 RCL	Rolling	60 sec
70	7:00	Match	Once	None
71	7:00	Match	Rolling	None
80	10:00	Match	Once	None
81	10:00	Match	Rolling	None
90	10:00	Rule 26	Once	None
91	10:00	Rule 26	Rolling	None
92	10:00	Rule 26	Rolling 5+5	None
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