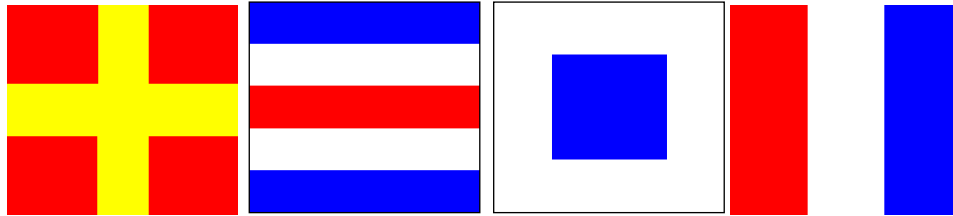


Race Committee Start Timer Users Manual Appendix A - Sequences



This appendix contains descriptions of the sequences offered by the R/C Start Timer. Sequences contained in each version of the software and hardware are noted by Version Number.

The purpose of the R/C Start Timer is to simplify the duties of the Race Committee. It accomplishes this by automating horns, displaying current sequence time, and by replacing certain time-sensitive flag signals with automated lights.

In cases where flags have been replaced with lights, the omitted flags will be grayed and crossed out. These should be considered optional and no longer relevant. In some cases, the flags have been moved to other areas of the sequence and/or are removed from strict timing requirements.

Sequences are selected in Configuration Menu #0. Each sequence has a number which can be selected in the Sequences configuration menu. See the User's Manual for configuration menu usage.

Quick Guide:

Menu Item	Sequence	Version Supported
0	RRS 26	4.1
1	RRS 26 (4-Minute)	4.1
2	RRS Appx U (Sound Signal)	4.1
3	RRS Appx C (Match Racing)	4.1
4	(for testing)	4.1
5	ICSA Appx C	4.1

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RRS 26 (Version 4.1)3

RRS 26 4-minute version (Version 4.1)5

RRS Appendix U - Sound Signal (Version 4.1)6

RRS Appendix C - Match Racing (Version 4.1)7

Test sequence (Version 4.1)8

ICSA Appendix C (modified) (Version 4.1)8

RRS 26 (VERSION 4.1)

Sequence #0

Based upon the RRS rule 26 sequence. Lights have been added, as well as footnotes to support rolling.

<i>Minutes before starting signal</i>	<i>Flag Signal</i>	<i>Light Signal</i>	<i>Sound Signal</i>	<i>Means</i>
(any)	Class Flags, sequentially ordered* I, Z, Z with I, U, or black flag			Defines class order and penalties
5	Class flag	Top Light On	One	Warning Signal
4	P, I, Z, Z with I, U, or black flag	Bottom Light On	One	Preparatory Signal
1	Preparatory flag removed	Top Light Off	One Long	One-Minute
0	Class flag removed*	Bottom Light Off	One	Starting Signal

* Class and penalty flags for started classes shall be removed prior to the Preparatory signal for subsequent classes.

The warning signal for each succeeding class shall be made with or after the starting signal of the preceding class.

The buzzer and R/C Attention lights will turn on at 10-second intervals starting 30-seconds prior to the 4, 1, and 0 time intervals shown above.

Rolling:

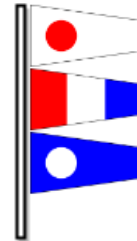
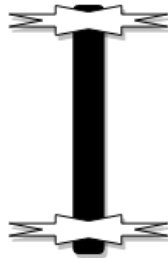
When this sequence rolls, it restarts from the beginning (5 minutes)

Lighted Start Sequence (Rolling)

RRS26

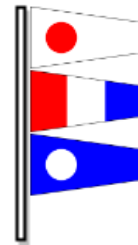
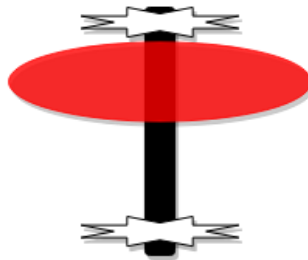
Attention Signal

R/C On Station, 5-honks
 Two small blinking white lights (optional)
 Class Flags for the start



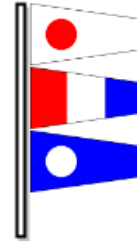
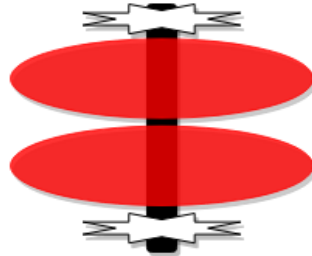
05:00 Warning Signal

Light #1 ON



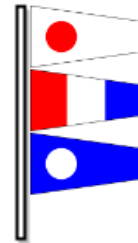
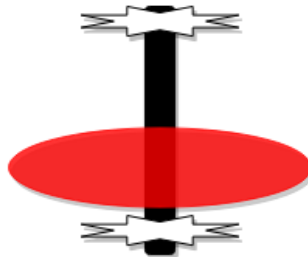
04:00 Preparatory Signal

Light #2 ON



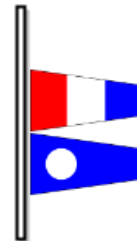
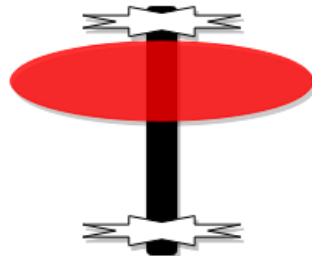
01:00 One-Minute Signal

Light #1 OFF



**00:00 Start Signal
 05:00 Warning Signal**

Light #2 OFF
 Light #1 ON
 Class flag removed prior to next Preparatory signal



Rolling:

When RRS26 rolls, it resumes from the 5-minute time.

RRS 26 4-MINUTE VERSION (VERSION 4.1)

Sequence #1

Based upon the RRS rule 26 sequence. This is a 4-minute version, with one minute removed from the middle.

<i>Minutes before starting signal</i>	<i>Flag Signal</i>	<i>Light Signal</i>	<i>Sound Signal</i>	<i>Means</i>
(any)	Class Flags, sequentially ordered. * P, I, Z, Z with I, U, or black flag			Defines class order and penalties
4	Class flag	Top Light On	One	Warning Signal
3	P, I, Z, Z with I, U, or black flag	Bottom Light On	One	Preparatory Signal
1	Preparatory flag removed	Top Light Off	One Long	One-Minute
0	Class flag removed *	Bottom Light Off	One	Starting Signal

* Class and penalty flags for started classes shall be removed prior to the Preparatory signal for subsequent classes.

The warning signal for each succeeding class shall be made with or after the starting signal of the preceding class.

The buzzer and R/C Attention lights will turn on at 10-second intervals starting 30-seconds prior to the 4, 1, and 0 time intervals shown above.

Rolling:

When RRS26 4-minute rolls, it resumes from the 4-minute time.

RRS APPENDIX U - SOUND SIGNAL (VERSION 4.1)

Sequence #2

Based upon the RRS Appendix U Sound Signal sequence.

The only change is that one light is turned on at the same time the horn sounds.

<i>Signal</i>	<i>Sound</i>	<i>Light</i>	<i>Time Before Start</i>
Attention (Must be handled manually using the Horn Button)	Series of short sounds		Before the warning
Warning	3 Long	3 Long	3 minutes
Preparatory	2 Long	2 Long	2 minutes
	1 Long, 3 Short	1 Long, 3 Short	1 minute, 30 seconds
	1 Long	1 Long	1 minute
	3 Short	3 Short	30 seconds
	2 Short	2 Short	20 seconds
	1 Short	1 Short	10 seconds
	5 Short, 1 second apart	5 Short, 1 second apart	5 - 4 - 3 - 2 - 1 seconds
Starting	1 Long	1 Long	0

The R/C Attention lights will turn on at 10-second intervals starting 30-seconds prior to the starting signal shown above.

Rolling:

When the Sound Signal sequence rolls, it resumes from the 3-minute time.

Note: Lamp blink patterns (configuration menu 4) are disabled for this sequence.

RRS APPENDIX C - MATCH RACING (VERSION 4.1)

Sequence #3

Based upon the RRS Appendix C Match Racing sequence.

<i>Time in Minutes</i>	<i>Visual Signal</i>	<i>Lamp Signal</i>	<i>Sound Signal</i>	<i>Means</i>
(any)	Numeral pennants, sequentially ordered. ***			Defines class order
10	Flag F displayed		One	Attention Signal
6	Flag F removed		None	
5	Numeral pennant displayed*	Top Light On	One	Warning Signal
4	Flag P displayed	Bottom Light On	One	Preparatory Signal
2	Blue or yellow flag or both displayed**		One**	End of pre-start entry time
1	Flag P removed	Top Light Off	One long	
0	Warning signal removed***	Bottom Light Off	One	Starting signal

*, ** = refers to footnotes in RRS Appendix C. See official rules for their definitions, as this start timer does not modify them.

*** Class and penalty flags for started classes shall be removed prior to the Preparatory signal for subsequent classes.

The buzzer and R/C Attention lights will turn on at 10-second intervals starting 30-seconds prior to the 6, 5, 4, 2, 1, and 0 time intervals shown above.

Rolling:

When the Match Racing sequence rolls, the sequence resumes from the Warning Signal (5-minute time increment).

TEST SEQUENCE (VERSION 4.1)

Sequence #4

Reserved for testing

ICSA APPENDIX C (MODIFIED) (VERSION 4.1)

Sequence #5

Inter-Collegiate Sailing Association Appendix C - Modified Sound-Signal Starting System

<i>Signal</i>	<i>Sound</i>	<i>Light</i>	<i>Time Before Start</i>
Warning	3 sounds	3 Long	3 minutes
Preparatory	2 sounds	2 Long	2 minutes
	1 sound	1 Long	1 minute
Start	1 sound	1 Long	0

The buzzer and R/C Attention lights will turn on at 10-second intervals starting 30-seconds prior to the Start.

Rolling:

When the ISCA Appendix C sequence rolls, it resumes from the 3-minute time. The 3 honks do not sound.