

Speed Control Parameter Adjustment Chart

Updated speed control parameters may be posted on the USA WS website, accompanied by a revision date, and will supersede the speed control parameters printed in the AWSA Rule Book. No changes shall be made between July 1 and the conclusion of Nationals.

JUMP

Parameter	Who	When	Perfect Pass	Zero Off
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
SKIER - JUMP LETTER	Driver/Judge – with input from skier	Before each jump Boat crew may adjust as necessary including for the first jump	Select NEW JUMPER and input speed, skier weight and rated distance. Skier may adjust initial setting +/- 3 letters. Adjust as necessary	Hold "SEL" while jump letter is highlighted. Enter skier weight and rated distance. Skier may adjust initial setting +/- 4 letters. Adjust as necessary.
41METER SEGMENT SKIER - FAST or RTB (Return to Baseline)	Skier selects Fast or RTB	Before each skier based on type of 41 meter segment pull requested	S2% - Fast segment = 40 to 60 Return to Baseline = Zero	Letter Only = faster segment Letter with "RTB" above = return to baseline
BOAT ADJUST (Raises speed in the 41 Meter segment. Adds to the target speed)	Driver/Judge	Boat crew may adjust as necessary	S2 FINE – Fine adjust additional RPM as needed to speed up 41Meter segment for actual times.	ADDER - Range = 0 to 9. Start at 0. Adjust as needed for actual times. This number follows "Power Factor". Example: 6/0 - Where 6 is the Power Factor and 0 is the "adder"
BOAT – POWER FACTOR	Driver/Judge – with input from skier	Start at 6 or 7 with 5.7 liter engine Start at 4 with 6.0 liter engine Boat crew may adjust as necessary	N/A	Range 0 to 15 - Raises or lowers the base speed. A lower number result in boat entering the course slower. At 3 or below there is no additional decrease in baseline (adjustments are then made to the ramp rate for the letter)
COUNTER CUT TIME (CT)	Driver	Before event May be adjusted as necessary to control speed during counter cut w/head or tail wind	Recommended: 175 Head Wind 190 Tail Wind 170 ¾ Cut 160	Recommended: 180 Head Wind 190 Tail Wind 170 ¾ Cut 160
CREW WEIGHT	Driver/Judge	Before event	Weight in lbs	N/A
RPM ADJUST	Driver	As needed	Adjust for conditions	N/A
X8u	Skier	The manufacturer's setting may be adjusted up or down within the range as published for that towboat. One additional adjustment may be made after the skier's 1 st jump only.	Controls rate of additional rpm added. With a higher number, it will take longer for the full additional rpm to be reached (softer at the start/stronger at the base).	N/A
X8d	Driver/Judge – with input from skier	The manufacturer's setting may be adjusted up or down within the range as published for that towboat. Before each skier	Controls the timing of the rpm drop once the skier has unloaded the switch. With a higher number, the longer it will take for the boat to begin to slow.	N/A

Speed Control Parameter Adjustment Chart

SLALOM

Parameter	Who	When	Perfect Pass	Zero Off
OPERATING MODE	Driver/Judge	Before event	TOURNAMENT MODE ONLY	TOURNAMENT MODE ONLY
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
A1, A2, A3 B1, B2, B3 C1, C2, C3	Skier – skier's option. Set to default - B2 unless skier asks for other setting	Before each pass	N/A	A = Slowest engine response out of buoy B = Moderate engine response out of buoy C = Fastest engine response out of buoy 1 = Softest feel behind the boat 2 = Moderate feel behind the boat 3 = Firmest feel behind the boat
CREW WEIGHT	Driver/Judge	Before event	Enter total crew weight in lbs	N/A
SKIER WEIGHT	Driver/Judge	Before each skier No adjustment between passes	Set skiers weight: Zero = no skier Feather = < 120 lbs Light = 120 to 160 lbs Normal = 160 to 200 lbs X = > 200 lbs	N/A
(PP CLASSIC) KX	Skier – should be set to Normal unless skier asks for other setting	Before each pass	KX - = softer KX NORMAL = default KX + / KX++ = firmer	N/A
(PP CLASSIC) PX	Skier – should be set to zero unless skier asks for other setting	Before each skier No adjustment between passes	PX = 0 to 40 Zero eliminates the switch	N/A
(PP CLASSIC) RPM ADJUST	Driver	Adjust as necessary for conditions	Adjust for conditions	N/A
(PP CLASSIC) SSB	Driver	Adjust as necessary to balance speed between first and second segments of the course	Initial setting for each boat from mfg suggested settings - adjust as needed	N/A

TRICKS

Parameter	Who	When	Perfect Pass	Zero Off
BOAT SPEED	Skier	Before each pass	Speed in MPH/KPH	Speed in MPH/KPH
A1, A2, A3 B1, B2, B3 C1, C2, C3	Skier – skier's option. Set to default - B2 unless skier asks for other setting	Before each pass	N/A	See ABC in slalom Above
Kd	Skier – skier's option. Set to default - unless skier asks for other setting	Before each pass	Default = 28	N/A

NOTE: If the designated towboat has multiple GPS systems available, the skier has the option to select from available GPS systems. If the tournament committee chooses to use older Perfect Pass Classic, then no choice is permitted.