CAT

## Cat<sup>®</sup> Simulators Small Wheel Loader Controls Calibration



## Small Wheel Loader Controls Calibration

Note: If computer or controls change, you will need to recalibrate the simulator.

**Initial Steps** 

- 1. Connect all Small Wheel Loader simulator components to your computer as outlined in the "Simulator Assembly Instructions."
- 2. For Windows XP or Vista Operating Systems: From your Windows Desktop, Click "Start" — "Control Panel" — "Game Controllers.

Note: On some computers, this may appear as "Game Options."



3. Double click the first "S/A Combo. Sim Controller."

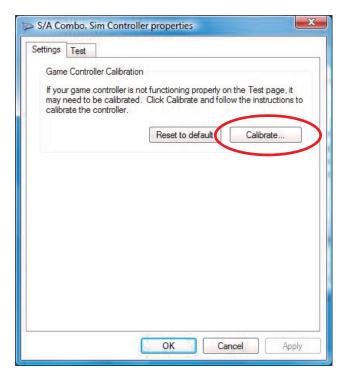
*Note:* For Windows 7 Operating Systems: From your Windows Desktop, Click "Start" — "Devices & Printers." Right click on any one of the "S/A Combo. Sim Controllers" listed.

<u> </u>
game controllers installed on
Status
OK
OK
ОК
<u>P</u> roperties
ОК

4. Click the "Settings" tab.

	If the controller is not functioning properly, it may o calibrate it, go to the Settings page.
	Z Axis
+ .	
	Z Rotation Slider
X Axis / Y Axis	Slider
Buttons	

5. Click the "Calibrate" button.





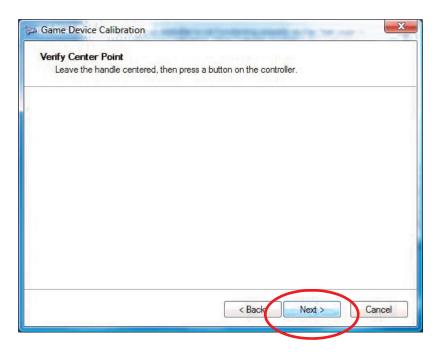
7. Check the "Display Raw Data" box.

Axis Calibration Move the handle in comple	te circles, th <mark>e</mark> n pre	ess a button on the controller.
+		
	X Axis	998
	Y Axis	998
X Axis / Y Axis	V Displa	ıy raw data

8. Move the joystick control through its full range of motion left to right and forward and backward three times. *Note:* The + indicator may not move.

Click the "Next" button.

Axis Calibration Move the handle in complet	e circles, then press a button on the controller.	
+		
	X Axis 998	
	Y Axis 998	
X Axis / Y Axis		
	✓ Display raw data	



10. Move the MP bucket control forward and back three times through its full range of motion. *Note:* The blue bar in the box may not move.

Click the "Next" button.

🖘 Game Device	Calibration	A STATE OF THE PARTY AND A STATE OF	X
Axis Calibratio Move the Z		nd down, then press a button on the controller.	
		62%	
3.7		Z Axis	
Z Axis	996		
🔽 Display raw dat	a	< Back Next > Ca	ancel

Axis Calibration Move the Z Rotation all t	e way up ar	nd down, the	en press a but	ton on the co	ntroller.
		0%			
		Z Rotation			
Z Rotation 0					
Display raw data					

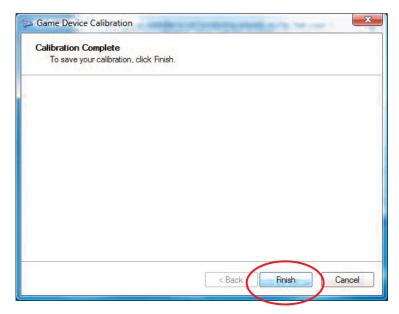
12. Depress and release the center pedal three times through its full range of motion *Note:* The blue bar in the box may not move. Click the next button.

Move the S	Glider all the way up and	d down, then press a button on the controller.
		33%
G.		Slider
Slider	414	
🗸 Display raw da	ta	

13. Repeat the steps for the right pedal. Click the "Next" button.

Game Device	Calibration	×
Axis Calibrati		I down, then press a button on the controller.
		32%
		Slider
Slider	399	
Producer de	-	
V Display raw da	ta	
		< Back Next > Cancel

14. Click the "Finish" button.



15. Change the Transmission Direction Control Switch located on the Load Control Joystick to "Forward" and then to "Reverse." Return the switch to the Neutral (center) position. *Note:* Button 2 will light up when "Forward" is selected and Button 3 will light up when "Reverse" is selected.

Click the "Apply" button; click "OK."

Settings Test	
	he controller is not functioning properly, it may librate it, go to the Settings page.
Axes	Z Axis
	2 Mis
	Z Rotation
	Slider
X Axis / Y Axis	Slider
Buttons	

16. Double click the second S/A Combo. Sim Controller as shown.

Game Controllers	game controllers installed o
your computer.	
Controller	Status
S/A Combo. Sim Controller	OK
S/A Combo. Sim Controller	OK
S/A Combo: Sim Controller	OK
Advanced	
	ОК

- 17. Click the "Settings" tab at the upper left corner.18. Click the "Calibrate" button.

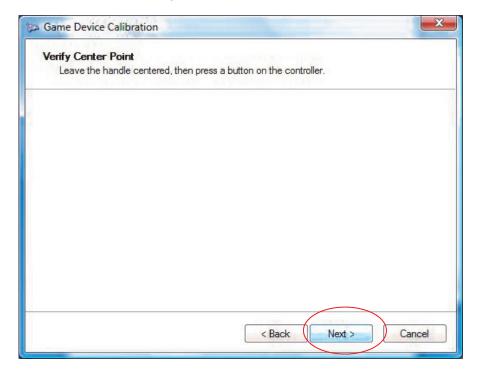
Test the carne controller. If the controller need to be calibrated. To calibrate it, go Axes Z	r is not functioning properly, it may to the Settings page. Z Axis	Game Controller Calibration If your game controller is not functioning properly on the Test page, it may need to be calibrated. Click Calibrate and follow the instructions calibrate the controller.
	Z Rotation Slider Slider	Reset to default Calibrate
Buttons		



20. Check the "Display Raw Data" box. Move the joystick control through its full range of motion, left to right and forward and backward three times. *Note:* The + indicator may not move. Click the "Next" button. Click the "Next" button again.

+	_	- Control Marcine and an and a control
	X Axis	998
	Y Axis	998
X Axis / Y Axis	Displa	ny raw data

21. Click the "Next" button again.



🎓 Game Device	e Calibration	
Axis Calibra Move the		ind down, then press a button on the controller.
		0% Z Axis
Z Axis	0	
📝 Display raw d	ata	< Back Next > Cancel

ibration	
tation all the way	up and down, then press a button on the controller.
	0%
	Z Rotation
0	
	< Back Next > Cancel
	ation all the way

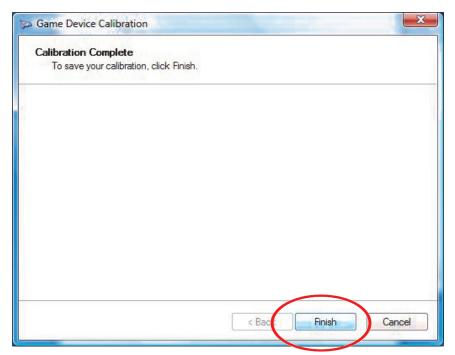
Axis Calibra		
		nd down, then press a button on the controller.
		0%
2,0		Slider
Slider	0	
Display raw d	ata	$\frown$
		< Back Next > Cancel

25. Depress and release the left pedal three times through its full range of motion. *Note:* The blue bar may not move.

Click the "Next" button.

Game Device	e Calibration		
Axis Calibra			
Move the	Slider all the way up and	down, then press a button on the controlle	: <b>г</b> .
		31%	
		Slider	
Slider	393		
Display raw d	ata		
		< Back Next >	Cancel

26. Click the "Finish" button.



27. Turn the Key Switch to the "Run Position." Then turn the Key Switch to the "Off" position. *Note:* Button 2 will light up when the Key Switch is in the "Off" position.

Click the "Apply" button. Click the "OK" button.

Settings Test		
		roller is not functioning properly, it may t, go to the Settings page.
Axes	1	Z Axis
+		
	10	
	1	Z Rotation
		Slider
X Axis / Y Axis		Slider
Buttons	•	

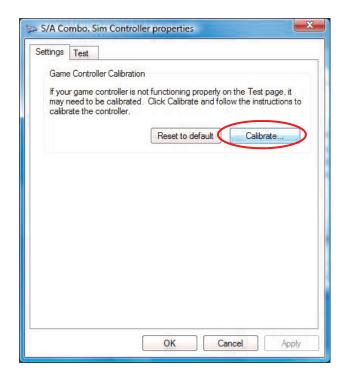
28. Double click the third "S/A Combo. Sim Contoller" as shown.

Game Controllers These settings help you configure the your computer.	game controllers installed on
Installed game controllers	
Controller	Status
S/A Combo. Sim Controller	OK
S/A Combo. Sim Controller	UK
S/A Combo. Sim Controller	OK
Advanced	<u>Properties</u>
	ОК

29. Click the "Settings" tab.

		ne controller is not functioning properly, it may librate it, go to the Settings page.
	1	Z Axis
+	E	Z Rotation
		Slider
X Axis / Y Axis	3	Slider

30. Click the "Calibrate" button.





Same Device Calibration	×
Find Center Point	1.1.1.2.2.2.2.000 + A.2.00 - 11 (20)
Leave the handle centered, then	press a button on the controller.
	< Back Next > Cancel

33. Check the "Display raw data" box.

+			
	X Axis	-512	
	Y Axis	-512	

34. Toggle the throttle lock On/Off switch through its full range of motion three times (X Axis Indicator). Push the throttle lock set (top of switch) through its full range of motion three times (Y Axis Indicator).

Click the next button.

Game Device Calibration	×
Verify Center Point Leave the handle centered, then press	s a button on the controller.
	< Back Next > Cancel
	Caricer

36. Turn the steering wheel all the way left and all the way right three times through its full range of motion. *Note:* The blue bar in the box may not move.

🗫 Game Device	Calibration	x
Axis Calibrati Move the 2		d down, then press a button on the controller.
		2.4% Z Axis
74.0	100	
Z Axis	-402	
📝 Display raw da	ata	
		< Back Next > Cancel

37. Push the throttle lock resume switch (bottom of switch) through its full range of motion three times (Z Rotation Indicator).

Click the "Next" button.

🔊 Game Device Cali	bration	×
Axis Calibration Move the Z Rot	ation all the way up	p and down, then press a button on the controller.
		50%
Se		Z Rotation
Z Rotation	-512	
🔽 Display raw data		
		< Back Next > Cancel

38. Toggle the autoshift control switch through its full range of motion three times. (Slider Indicator)

🗫 Game Device	Calibration	×
Axis Calibratio Move the S		d down, then press a button on the controller.
		150%
12		Slider
Slider	507	
✓ Display raw dat	a	
		< Back Next > Cancel

39. Click the "Finish" button.

A Game Device Calibration	×
Calibration Complete	14 C
To save your calibration, click Finis	sh.
	< Back Finish Cancel

40. Click the "Apply" button; click the "OK" button.

41. Click the "OK" button on the Game Controllers Screen.

Settings Test Test the game controller. need to be calibrated. To Axes	If the controller is not functioning properly, it may calibrate it, go to the Settings page. Z Avis	These settings help you configure the your computer.	e game controllers installed on
	6.778	Controller	Status
+	Z Rotation	S/A Combo. Sim Controller	OK
	Slider	S/A Combo. Sim Controller	OK
X Axis / Y Axis	Slider	S/A Combo. Sim Controller	OK
(	Cancel Apply	Advance	ed Properties

## Client Services Support

Cat Simulators come with support services for the first year (nominal subscription fee applied after the first year). Technical support is included (in English) Monday-Friday 6 a.m. to 7 p.m. CST. The support staff will answer any questions, trouble-shooting needs, warranty requests or relicense and transfer needs.

- Call 1.877.434.7467 (inside the U.S.); 1.309.266.2640; or e-mail support@catsimulators.com
- On-site set up and installation of the simulator is available. Call for quote.
- Simulator instruction is available by a trained simulator operator on-site or over the Internet. Call for quote.

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