CHCNAV How to upgrade the motor version

Introduction

For some motors, which the electric steering wheel turns in one direction continuously during automatic driving, we propose the solution to upgrade motor firmware.

Note

The solution only supports software version 3.8.2.8-OS.20230607 and above. The solution only supports firmware version 2.9.9.5T and above. The solution only supports motor version CES-T 5.1(PN:4006020035). Do not operate in Demonstration Mode.

÷	About			
	Software Version(110T008382100901)	3.8.2.8-	OS.20230607	
	Firmware Version(3448940)		2.9.9.5T	
	Cellular Network		>	
	Register		>	
	Upgrade			

Download link: https://chcnavigation.jianguoyun.com/p/DSRP5WgQtq_UCxjx8ZgFIAA

Upgrade

1. Check the motor version in **Parameters** interface

← Param	eters							
Real-time Information			SIM Card Information					
Plane Coordinate	64.160,-62.620	Angle of Pitch	0.730*	Tablet SI	IMEI	863163045660794	Networked	
Angle of Roll	-0.140°	Raw Data	0	ESIM card	IMEI		Non-networke	
Heading Angle	271.580°			SIM card	IMEI		Non-networke	
Size Parameter (m	1)			Installation parameters				
Wheelbase (A)	2.500	Implement Tow Point (B)	0.000	Vehicle Type	Front Steer	TNC Connectors	Rear	
Axle Height(F)	0.750	Front Hitch(G)	2.000	Steering Controller	Motor Drive	LED Panel	Up	
To Middle Axle (C)	0.000	To Rear Axle(D)	0.000	Wheel Angle Sensor	r Without WAS	Gasensor-Installation	Left Wheel	
Antenna Height (E)	3.000	Implement's Width	5.000	Steering Mode	CEST51	Gasensor-Orientation	Label Up	
Row Spacing	0.000	Center Offset	0.050	Nav. controller	PA-3	Gaseneor-Type	-	
Driver Parameters		Mounting Bias		Scene parameter	rs	Other information		
PGain	25	Pitch Angle Offset	0.000	Current scene	Ag_NX01_default	Subscription model		
DGain	80	Roll Angle Offset	0.000	Cross Track Gain	35.000	Wheel Version	1.19-1.1	
Response Linearity	18.000	Installation Angle Offset	0.000	Heading Gain	100.000			
Steering Dead Zone	0			Reverse Gain	10.000			

2. Firmware online upgrade

a) Enter Upgrade interface and click **Motor online upgrade**.

u	lpgrade		
	Beta software online upgrade	>	
	PA-3 firmware online upgrade	>	
	PA-3 firmware local upgrade	>	
	System online upgrade	>	
	MCU online upgrade	>	
	External radio local upgrade	>	
	External radio online upgrade	>	
	Motor online upgrade	>	
	GAsensor online upgrade	>	

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b) The firmware will be upgraded automatically, wait around 5 minutes and please do not touch the steering wheel at this time to avoid damage.

← U	ograde				_	5	∎≭▼ 11:19
	Beta software	e online upg	rade			>	
	PA-3 firmware	e online upg	rade			>	
	PA-3 firmware	e local upgra	ade			>	
	System online	e upgrade	:	Nr.		>	
	MCU online u	pgrade	firmware down	nload, please wait		>	
	External radio	local upgra	ade			>	
	External radio	o online upg	rade			>	
	Motor online	upgrade				>	
	GAsensor on	ine upgrade	•			>	
← Pa	rameters						
Real-time In	formation			SIM Card Informa	ation		
Pla530-	719.600,-1304969.550	Angle of Pitch	0.600*	Tablet SI	IMEI	863163045660794	Networked
Angle of Roll	-0.380°	Raw Data	0	ESIM card	IMEI		Non-networke
Heading Ang	e 77.580°			SIM card	IMEI	867698045547885	Non-networke
Size Param	eter (m)			Installation paran	neters		
Wheelbase (A) 2.500	Implement Tow Pe	oint (B) 0.000	Vehicle Type	Front Steer	TNC Connectors	Rear
Axle Height(F	0.750	Front Hitch(G)	2.000	Steering Controller	Motor Drive	LED Panel	Up
To Middle Axl	e (C) 0.000	To Rear Axle(D)	0.000	Wheel Angle Sensor	Without WAS	Gasensor-Installation	Left Wheel
Antenna Heig	ht (E) 3.000	Implement's Width	5.000	Steering Mode	CEST51	Gasensor-Orientation	Label Up
Row Spacing	0.000	Center Offset	0.000	Nav. controller	PA-3	Gaseneor-Type	
Driver Parar	neters	Mounting Bias		Scene parameters	S	Other information	
PGain	25	Pitch Angle Offset	0.000	Current scene	Ag_NX01_default	Subscription model	
DGain	80	Roll Angle Offset	0.000	Cross Track Gain	35.000	Wheel Version	1.21-1.1
Response Lin	earity 18.000	Installation Angle	Offset 0.000	Heading Gain	100.000		
Steering Dead	Zone 0			Reverse Gain	10.000		

3. Firmware webpage upgrade

a) Connect to receiver's WiFi named 'GNSS-XXXXXXX'.

b) Open Google browser and enter **192.168.1.1**, then go to **Firmware-motor Firmware Update**. If there is no motor firmware update module, try clearing the browser cache and re-entering the receiver webpage.

L 132.100.1.1/poindex.nd	
	22 192.168.1.1 /pc/index.html?param1=HC_PRODUCT_MODEL_PA_3¶m2=true¶m3=true¶m4=false¶m5=true¶
🗊 Status	motor Firmware Update ×
💦 Satellites	Upgrade File: 🛄 Browse
🔀 Receiver Configuration	
🔝 Data Recording	
I/O Settings	
Retwork Setting	
See Module Setting	
📚 Firmware	
 Firmware Info. 	
Hardware Version	
 Config File 	
 System Log 	
 User Log 	
 Firmware Update 	
 GNSS Board Upgrade 	
 PLC Firmware Update 	
▶ motor Firmware Update	
 Upgrade Online 	
 GNSS Registration 	



c) Select the firmware file and click Confirm.

motor Firmware Update ×
Upgrade File: Browse update_CEST51_v1.1.21_b20230517.bin
Confirm

d) Wait around 5 min to finish the update.

÷	Parameters							
Real-time Information					SIM Card Information			
Pla	-5304719.600,-130	4969.550	Angle of Pitch	0.600*	Tablet SI IMEI		863163045660794	Networked
Angle	of Roll	-0.380°	Raw Data	0	ESIM card IMEI			Non-networke
Headir	ng Angle	77.580°			SIM card IMEI		867698045547885	Non-networke
Size F	Size Parameter (m)				Installation parameters			
Wheelbase (A) 2.500		Implement Tow Point (B)	0.000	Vehicle Type	Front Steer	TNC Connectors	Rear	
Axle Height(F) 0.750		Front Hitch(G)	2.000	Steering Controller	Motor Drive	LED Panel	Up	
To Mid	dle Axle (C)	0.000	To Rear Axle(D)	0.000	Wheel Angle Sensor	Without WAS	Gasensor-Installation	Left Wheel
Antenr	na Height (E)	3.000	Implement's Width	5.000	Steering Mode	CEST51	Gasensor-Orientation	Label Up
Row Spacing 0.000		Center Offset	0.000	Nav. controller	PA-3	Gaseneor-Type		
Driver Parameters		Mounting Bias		Scene parameters	s	Other information		
PGain		25	Pitch Angle Offset	0.000	Current scene	Ag_NX01_default	Subscription model	
DGain		80	Roll Angle Offset	0.000	Cross Track Gain	35.000	Wheel Version	1.21-1.1
Respo	nse Linearity	18.000	Installation Angle Offset	0.000	Heading Gain	100.000		
Steerin	ng Dead Zone	0			Reverse Gain	10.000		

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