

iG8: Updating Receiver Firmware

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Introduction

There are two pieces of firmware in the iG8 receiver:

- 1. Head main firmware
- 2. OEM (Trimble Engine Board Firmware)

Before you begin updating, download the latest firmware to your PC. (Locations follow in this document.)

Put two fully charged batteries in the head before updating.

You will need to connect to the head by Wi-Fi from the PC. (Instructions included in this document.)

Then check what main firmware and what OEM firmware you are currently running.

Update the main firmware first. The head will reboot twice during the process. When the update is complete, reconnect to the head by Wi-Fi.

Update the OEM firmware 2nd. The head will reboot twice during the process. When the update is complete, reconnect to the head by Wi-Fi and verify that the firmware has been updated.

Prepare to Update

Put two fully charged batteries into the head.

Main Board Firmware

Download the latest Main Board firmware:

https://ig8g.com/out/firmware/index.htm

Look for the highest numbered, non-beta firmware:

Index of firmware/ X		
← → C		
Index of firmware/		
Name	Last modified	Si
Parent Directory		
<u>1.5.41/</u>	4/19/2019 11:12:22 AM -	
<u>1.5.5/</u>	4/19/2019 11:12:22 AM -	
<u>1.5.67/</u>	4/19/2019 11:12:22 AM -	
<u>1.6.25/</u>	4/19/2019 11:12:22 AM -	
<u>1.6.35/</u>	11/1/2019 10:11:02 AM -	
<u>1.6.55/</u>	4/19/2019 11:12:22 AM -	
<u>1.6.67/</u>	7/16/2019 7:58:36 AM -	
<u>1.6.79_BETA/</u> Never load Beta Firmware!	3/27/2020 2:15:24 PM -	
OEM/	5/5/2020 11:51:02 AM -	

File Archive provided by iGage Mapping Corporation +1-801-412-0011; 5/5/2020 11:51:22 AM; (XDir Ver: 2019.3.29.2008)

In the example above, 1.6.67 is the correct Main board firmware. Click on the folder, then download the .bin file that is listed in the correct folder.

OEM Board Firmware

Download the latest Main Board firmware:

https://ig8g.com/out/firmware/OEM/index.htm

Look for the highest numbered, non-beta firmware:



Ģ	Index of firmware/OEM/	+			-		
←	→ C ig8g.com/out/firmw	/are/OEM/index.htm		E	:☆	* 4	
Ind	lex of firmware/OEM/						
		Name	Last modified		Size		
2	Parent Directory		-	-			
	<u>5.41/</u>		7/24/2019 5:07:26 PM	-			
	<u>5.42/</u>		8/13/2019 4:14:42 PM	-			
	5.45/		5/5/2020 11:51:04 AM	-			
1	<u>UpdateOEMFirmware_via_WiFi</u>	<u>R001.png</u>	7/24/2019 5:21:10 PM		48,19	9 byte	s

File Archive provided by iGage Mapping Corporation +1-801-412-0011; 5/5/2020 11:51:22 AM; (XDir Ver: 2019.3.29.2008)

In the example above, 5.45 is the correct Main board firmware. Click on the folder, then download the .bin file that is listed in the correct folder.

Index of firmware/OEM/5.45/ × +		- 1
← → C		☆ 🛊
Index of firmware/OFM/5.45/		
Name	Last modified	Size

File Archive provided by <u>iGage Mapping Corporation</u> +1-801-412-0011; 5/5/2020 11:51:22 AM; (XDir Ver: 2019.3.29.2008)

Don't forget the location where you download the firmware too.

Connect the iG8 to the PC by Wi-Fi

After you download the two firmware files, connect your PC to the iG8 receiver.

The iG8 receiver has an internal Wi-Fi Access Point which can be used in conjunction with a PC to setup and control every feature of the receiver.

First make sure that the Wi-Fi hotspot in the iG8 is turned on.

From the Front Panel

SV:14 Auto	100%
Mode Rover	UHF
Static Off	Not Recording
Receiver In	nfo

Highlight the top line, then click on the Enter key

Use the **Next** button to move to the third line, highlighting WiFi Status

18=G08 R05	C00	
Pwr: A 90 %	B 90%	
WiFi Status	s Off WiFi I	Mode Hotspot
3G Status (Online	

If the WiFi Status is Off, then click on Enter

Open WiFi ?		
Cancel	OK	

Then click on Enter again to Open (turn on) Wi-Fi.

After you know that Wi-Fi is enabled, you can connect by Wi-Fi to a Tablet or PC. The Important Wi-Fi Facts are:

SSID	GNSS-unitserial	number	
Wi-Fi Key	12345678		
Address	192.168.1.1	port	<mark>80</mark> (http)
User Name	admin	password	password



Once Wi-Fi is enabled you can connect with a PC, tablet or smartphone. (If you choose to use a Tablet or Smartphone, it is best to 'Request Desktop Site' in the viewer.)

To connect the iG8, on your PC:



Click on the Network icon in the System Tray

1. Find the iG8 receiver which will be named 'GNSS-' followed by the full serial number of your device:



2. Click on 'Connect':



3. If requested enter the Wi-Fi password "12345678"



- 4. Click on 'Next' to connect by Wi-Fi to the GPS head.
- 5. Open a browser window on your PC and type in the GPS IP address: <u>http://192.168.1.1</u>
- 6. A Login screen will be shown:

Login Account: admin Password:	GNSS	
Password:	Login Account:	
••••••	Password:	
	••••••	

The Login Account is 'admin' and the Password is 'password'.



7. Click the 'Login' button, you will be at the 'Home Screen' of the GPS receiver:

192.168.1.1/pc/index.h	ntm ×	Trimble - 2017-08-27T23 ×					-		×
← → C ① Not set	cure	192.168.1.1/pc/index.html?par	am1=HC_PRODUCT_MODEL180¶m2=true&p	param3=true¶m4=false¶m5=true&p	aram6=true&p	☆ 🙆	۷	7 5	:
Gage				SN:1013096			C E	Quit English	~
Status	\sim	Desition							
Position		rosition							
C Activity		Position		DOP					
🗒 Google Map		Latitude:	40°44'10.20340757"(North)	PDOP:	1.725529				
		Longitude:	111°51'33.66294427"(West)	HDOP:	0.967624				
		Height:	1315.332	VDOP:	1.428690				
		Туре:	Float	TDOP:	1.116831				
		Satellite Used: 13Total		Satellites Tracked: 17	Fotal				
		GPS(7):	18,15,29,10,21,27,20	GPS(8):	18,15,29,10,21,2	7,20,13			
		GLONASS(4):	8,23,22,1	GLONASS(5):	8,23,7,22,1				
		BDS(0):		BDS(0):					
		GALILEO(2):	4,18	GALILEO(2):	4,18				
		SBAS(0):		SBAS(2):	135,133				
Satellites	*								
Receiver Configuration	~	Receiver Clock							
Data Recording	*	GPS Week:	1964						
I/O Settings	*	GPS Seconds:	85290						
Network Setting	*								
Module Setting	*								
Firmware	*								
Cloud Service Setting	*								

- From the Wi-Fi interface, you can configure nearly every aspect of the receiver's operation.
- 8. First check on the current Main board firmware version:

192.168.1.1/pc/index.8	ntml?pa	aram × +
← → C ③ No	t secu	re 192.168.1.1/pc/index.html?param1=HC_PRODUCT_MODEL180¶m2=true¶m3=true&g
G age		
Status	♦	Firmers on Infe
Satellites	♦	r irmware inio.
Receiver Configuration	≈	
Data Recording	♦	Filliware Velsio . 1.6.67 Wain Firmware
I/O Settings	♦	
Network Setting	*	
Module Setting	*	
Firmware	\sim	
 Firmware Info. Hardware Version 		1. Click 'Firmware: Firmware Info.'

Click on 'Firmware: Firmware Info.' The displayed Firmware Version is the current Main board firmware.



9. Next check the OEM board firmware:

192.168.1.1/pc/index.i	ntml?pa	ram x +
← → C ① No	t secu	re 192.168.1.1/pc/index.html?param1=HC_PRODUCT_MODEL_180¶m2=true¶m
Gage		
Status	≷	II - January V
Satellites	≈	Hardware version
Receiver Configuration	♦	Main Danati - 4.0
Data Recording	*	Main Board: 1.4
I/O Settings	*	Cure Board. 1.4
Network Setting	♦	Board Firmware Version
Module Setting	♦	Number: 0.45 OEM Firmware
Firmware	~	\
 Firmware Info. Hardware Version Config File System Log 		1. Click on 'Firmware' then 'Hardware Version'

Click on 'Firmware: Hardware Version' The displayed Board Firmware Version number is the current OEM firmware. 10. If the latest Main board firmware is higher than the currently installed firmware update the Main board firmware:



1. Click on 'Firmware Update'; then 2. Click on Browse, choose the downloaded main board firmware; then 3. Click on Confirm. The head will reboot twice, the entire process will take about 10-minutes.

11. After the head reboots the 2nd time, re-connect to the receiver by Wi-Fi (see step 1 above.)



12. If the latest OEM firmware is higher than the currently installed firmware, update the OEM board firmware:

192.168.1.1/pc/index.l	html?pa	aramı x +
← → C ① No	ot secu	re 192.168.1.1/pc/index.html?param1=HC_PRODUCT_MODEL_180¶m2=true¶m3=true¶m
Gage		
Status	♦	
Satellites	♦	GNSS Board Upgrade
Receiver Configuration	*	
Data Recording	*	
I/O Settings	♦	Confirm 3
Network Setting	*	
Module Setting	*	
Firmware	\sim	
🗐 Firmware Info.		
Hardware Version		
Config File		
System Log		
🗐 User Log		
📋 Firmware Update		4
GNSS Board Upgrade	<	
🗐 Upgrade Online		
GNSS Registration		

- 13. 1. Click on 'GNSS Board Update'; then 2. Click on Browse, choose the downloaded OEM board firmware; then 3. Click on Confirm. The head will reboot twice, the entire process will take about 10-minutes.
- 14. After the head reboots the 2nd time, re-connect to the receiver by Wi-Fi (see step 1 above.)
- 15. Verify that both the main board and OEM firmware have been updated.

After the update, the OEM board will need a few extra minutes to begin tracking satellites again.