

## **Registering the X90-OPUS Antenna in GNSS Solutions**

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Description: This document describes how to register the absolute antenna model for the X90-OPUS into the antenna database in GNSS Solutions.

1. Download the X90-OPUS antenna model. Navigate to <u>www.x90gps.com</u>, then click on the 'Updates' link, click on 'Antenna Calibration Files' and finally right-click on 'CHC X90D-OPUS .003 File' choose 'Save Link as...' and put the file someplace where you can find it:



2. Start GNSS Solutions, choose 'Run without a project':





3. <u>Click on 'Tools: GNSS Antenna...'</u>:



4. Click on the 'Import' button:

ſ	GNSS Antenna		
II	<mark>수</mark> 110454		AERA 11
Ш	수 3S-02-TSADM	↑ ACCG3ANT_52AT1	T AERA Import
		ACCG5ANT_123CAN     ACCG5ANT_133CAN     ACCG5ANT_133CAN	수 AERAT16

5. Browse for, then click on the model we downloaded in step 1:

🧶 Open				
Look in: 🚺	CHCAntennaModels	← 🖻 💣 📰 -		
Name	*	Date modified	Туре	Size
CHCX90	D-OPUS_NONE.003	7/28/2013 6:04 PM	003 File	1 KB
File <u>n</u> ame:	File name: CHCX90D-OPUS_NONE.003			<u>O</u> pen
Files of type: NGS Antenna Calibration Files (.003)				Cancel
Open as read-only			//	

Click on 'Open' to read and register the antenna model.

 Close 'GNSS Solutions' then restart 'GNSS Solutions'. Proceed back to the 'GNSS Antenna' dialog. Use the slider bar at the bottom to find the section where CHC antennas are listed:



우 ASH802147_A       우 CHCX900R       우 HEMA3         우 ASH_LOCUS       우 CHCX90D-OPUS       우 HEMA4         우 CHANV3       우 CHCX91B       우 HEMA5         우 CHATKO       우 CHCX91R       우 HEMA5         우 CHCA300GNSS       우 GUTGPSL1L2A       우 HXCG0	🔳 GNSS Antenna						
T CHCX900B T HEMA21 T HXCGG	<ul> <li></li></ul>	СНСР	<ul> <li>         ← CHCX900R         <ul> <li>             ← CHCX900-OPUS             </li> <li>             ← CHCX91B             ← CHCX91R             ← DGR_QEDGE             ← GUTGPSL1L2A             ← HEMA21         </li> </ul> </li> </ul>	<ul> <li>         ・</li> <li>         ・</li></ul> <li>         ・</li> <li>         ・</li>			

Double-click on 'CHCX90D-OPUS' to select and open it.

7. The antenna parameters for the CHCX90D-OPUS receiver should look like this:

Antenna Parameters					
Antenna Model : CHCX90D-OPUS					
					R (m): 0
h (m) : 0	h				
C1 (m): 0.0893					
C2 (m) : 0.1017	A				
Description : P/N:1190403181, X90 L1/L2/L2C MMI->					
Advanced	OK Cancel				
Clicking the 'Advanced' button will display:					
Antenna Advanced Parameters					
North (mm):         11         (Satellite elevation dependent offset )           East (mm):         0.7         0° 5' 10' 15' 20' 25' 30' 35' 40' 45' 50' 55' 60' 65' 70' 75' 80' 85' 90'					
Height (mm): [993] + [0.0] 0.0 [0.7] 1.7 [2.2] 2.5 [2.6] 2.6 [2.6] 2.4 [2.1] 1.7 [1.3 [0.8] [0.5 [0.3] [0.1] [0.0]					
-L2- (Satellite elevation dependent offset )					
Noth (mm):         0.7           East (mm):         3.1         0°         5°         10°         15°         20°         25°         30°         35°         40°         45°         50°         55°         60°         65°         70°         75°         80°         85°         90°           Height (mm):         101.7         +         0.0         0.0         3.8         3.6         3.6         3.6         3.4         3.2         2.3         2.7         2.4         2.2         1.6         0.9         0.0					
DK Cancel					



 If you plan to use 'Slant Measurements' you should enter the radius (0.1170 M) and the height offset (0.0470 M) from the bottom of receiver to the rubber seal:



9. The new model is now registered and available for use in GNSS Solutions.