

# Application Note – PSTR Firmware Upgrade Procedure

This application note is designed to help the user to update the firmware in Raytec PSTR products. This is the easiest way to update the firmware application as no special hardware is required. The method can be used for products with an Ethernet connection.

Upgrade takes about 15 minutes the first time someone does it (installation and learning time) and about 2 minutes thereafter. The following is required:

- GardasoftMaint program installed on a PC (available as a free download from Raytec)
- Ethernet connection from the PC to the controller
- Firmware application update supplied by Raytec. This file must have "App" within the filename

### Installing PulseStar Management Tool

The procedure for installing GardasoftMaint is:

- 1. Download GardasoftMaint from: <u>https://www.raytecled.com/products/software-</u> <u>pulsestar-management-tool/</u>
- Install GardasoftMaint, as follows. Navigate to the location of the .zip file downloaded and doubleclick that file. You should then see something like this:

G 🗢 🖬 « Do	wnloads	s → Gardasoft-Install-GardasoftMaint-v3.7.1.1.zip	+ 4y Search	Gardasoft-Install-Gardas	oftM P
Organize 🔻 Extr	act all f	iles		₩ • [	1 0
🔆 Favorites	*	Name	Туре	Compressed size	Password
Desktop	=	😼 Gardasoft-Install-GardasoftMaint-v3.7.1.1.msi	Windows Installer Package	5,923 KB	No
🚺 Downloads		📧 setup.exe	Application	192 KB	No
Libraries					
Documents	+ 6	e			1

3. Double-click on the setup.exe file. The following dialog box should appear:





4. Click Next. If your PC does not already have the Microsoft .NET Framework installed, the setup program will install it and that will in most cases involve restarting the PC. *This phase of the installation is not described in this document as it is not required for most machines, and it is quite straightforward.* In most cases, the installation will continue as described below.

Select Installation Folder	Garda
The installer will install Gardasoft Maintenance Application v3.7.1.1 to Fo install in this folder, click "Next", To install to a different folder, ente	the following folder. er it below or click "Browse".
Folder:	
C:\Program Files (x86)\Gardasoft Vision\GardasoftMaint\	Browse
	Disk Cost
Install Gardasoft Maintenance Application v3.7.1.1 for yourself, or fo computer:	or anyone who uses this
Install Gardasoft Maintenance Application v3.7.1.1 for yourself, or fo computer:	or anyone who uses this

5. We recommend that you accept the default location for the GardasoftMaint program and just click next on this dialog, but you may change the installation location before clicking Next, if you wish.

Gardasoft Maintenance Application v3.7.1.1	
Confirm Installation	GARDASO
The installer is ready to install Gardasoft Maintenance Application v	3.7.1.1 on your computer.
Click "Next" to start the installation.	
Cancel	< Back Next >

Whilst the installation is proceeding, a progress bar will be shown:

# raytec"

Gardasoft Maintenance Application v3.7.1.1	
Installing Gardasoft Maintenance Application v3.7.1.1	GARDASOF
Gardasoft Maintenance Application v3.7.1.1 is being installed.	
Please wait	

6. Finally, the following confirmation screen will appear:



After you have clicked Close at the end of the installation, GardasoftMaint will be ready to run. In most cases, the computer will not need to be restarted but you will be prompted for this if it is necessary. The installer will place an icon on your desktop:



We recommend that you use this icon to start GardasoftMaint when you wish to use it, but the program can also be started by means of the Windows Start menu if you prefer.



## To update the firmware

1. Start GardasoftMaint and wait for the controller to appear in the list at the top. (You can click the Search button to speed this up ifnecessary.)

Controller Search	Serial Nr. 211914 411234	Model CC320 RT220-20	IP / Port 192.168.8.51 - U 192.168.8.83 - U	IDP IDP
C TOP	601034 640214	VTR4 TR-RC120	192.168.8.92 - U 192.168.8.68 - U	IDP IDP
© UDP				
Change IP				
Upgrade Firmware				
iagnostics				
iagnostics essaging Send Command Last Send CMD: Last Received:			Allowed Retries # : Send Timeout (MSecs) # :	2



2. Select the controller by clicking on its serial number

Controller Search	Serial Nr.	Model	IP / Port
	211914	CC320	192.168.8.51 - UDP
	601034	VTR4	192.168.8.92 - UDP
	411234	RT220-20	192.168.8.83 - UDP
T TCP	610062	ORB100	192.168.8.44 - UDP
UDP	640214	TR-RC120	192.168.8.68 - UDP
Change IP			
Upgrade Firmware			

3. Click the Upgrade Firmware button, whereupon the Firmware Upgrade File Select dialog box will appear, which you can use to navigate to the Application .hex file to be loaded:

🕞 🗢 📕 🕨 Libraries	Documents      Downloads	the Real Property in street, or	✓ 4y Search I	Downloads
organize 🔻 New folde	er			ie • 💼 (
Favorites	Documents library		A	Arrange by: Folder 🔻
Downloads     ≡       ™     Recent Places	Name	Date modified	Type	Size
libraries	ReleaseRT200AppNet_v021.hex	11/10/2013 14:30	HEX File	689 KB
Documents My Documents Downloads Microchip My Music My Pictures				
File n	ame: ReleaseRT200AppNet_v021.hex		- Firmware	Upgrade Files (*.hex)



4. Select the Firmware Application Update file and click the Open button. This dialog box will then close and GardasoftMaint will process the chosen .hex file, showing a progress bar as it does so:

Controller Search	Serial Nr. 211914 411234 601034	Model CC320 BOOT_RT V006 BOOT_VT	IP / Port 192.168.8.51 - UDP 192.168.8.83 - UDP 192.168.8.92 - UDP
C UDP	640214	TR-RC120	192.168.8.68 - UDP
Change IP Upgrade Firmware			
nk to controller web page	Ope	n web page for BOOT_RT	V006 411234 192.168.8.83
iagnostics			

5. At the end of this process, you should see something like the following notification:

# raytec"

Controller Search	Serial Nr. Model 211914 CC320 PT320 20	IP / Port
C TCP	601034 VTR4 640214 TR-RC120	192.168.8.92 - UDP 192.168.8.68 - UDP
Change IP		
Upgrade Firmware		
ink to controller web page		
ink to controller web page	Open web page for RT2	20-20 411234 192.168.8.83
ink to controller web page	Open web page for RT2 GardasoftMaint	20-20 411234 192.168.8.83
ink to controller web page )iagnostics Main State Idle	Open web page for RT2 GardasoftMaint Firmware Upgrade Succ	20-20 411234 192.168.8.83
ink to controller web page Jiagnostics Main State Idle	Open web page for RT2 GardasoftMaint	20-20 411234 192.168.8.83

6. Click the OK button to acknowledge the successful firmware update. After this, you can close the GardasoftMaint program if you wish, or leave it running to perform further upgrades if necessary.

### Disclaimer

No warranty is given as to the accuracy of this application note. Raytec Ltd do not accept any liability for consequential loss of any kind.