

## 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.

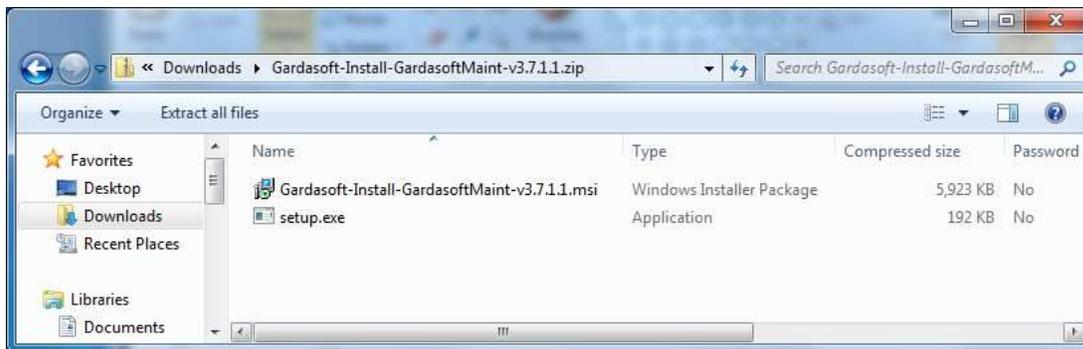
Upgrade takes about 15 minutes the first time someone does it (installation and learning time) and about 2 minutes thereafter. The following is required:

- 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:

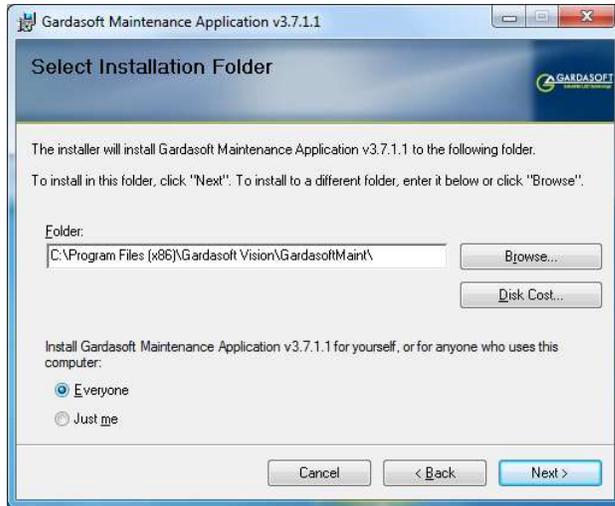
1. Download GardasoftMaint from:  
<https://www.raytecded.com/products/software-pulsestar-management-tool/>
2. Install GardasoftMaint, as follows. Navigate to the location of the .zip file downloaded and double-click that file. You should then see something like this:



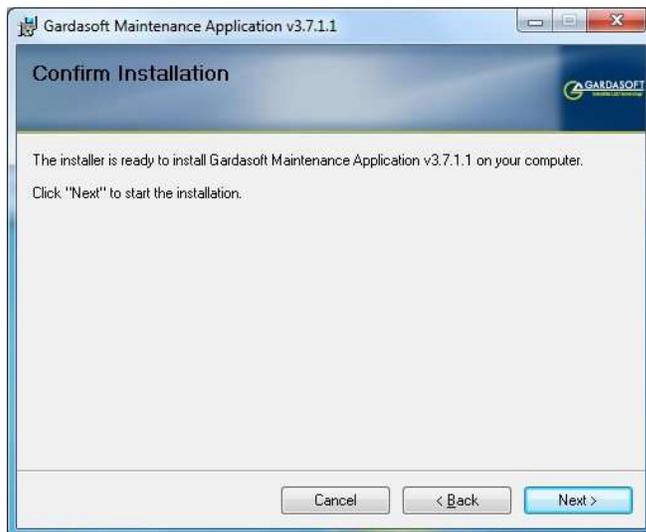
3. Double-click on the setup.exe file. The following dialog box should appear:



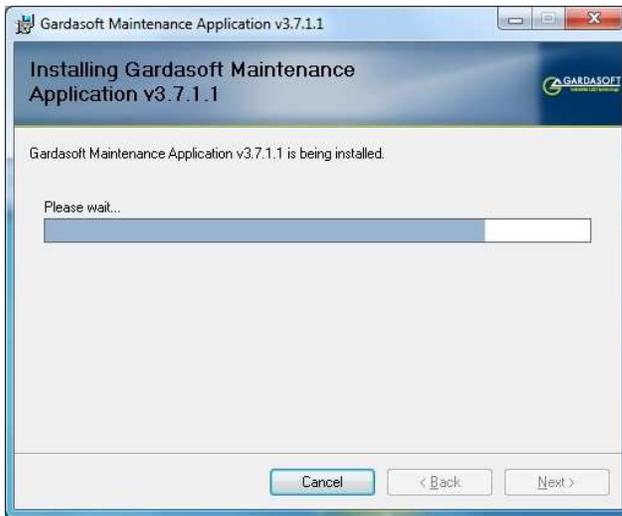
4. Click Next. If your PC does not already have the Microsoft .NET Framework installed, the setup program will install it and that will in most cases involve restarting the PC. *This phase of the installation is not described in this document as it is not required for most machines, and it is quite straightforward.*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



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.



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



6. Finally, the following confirmation screen will appear:



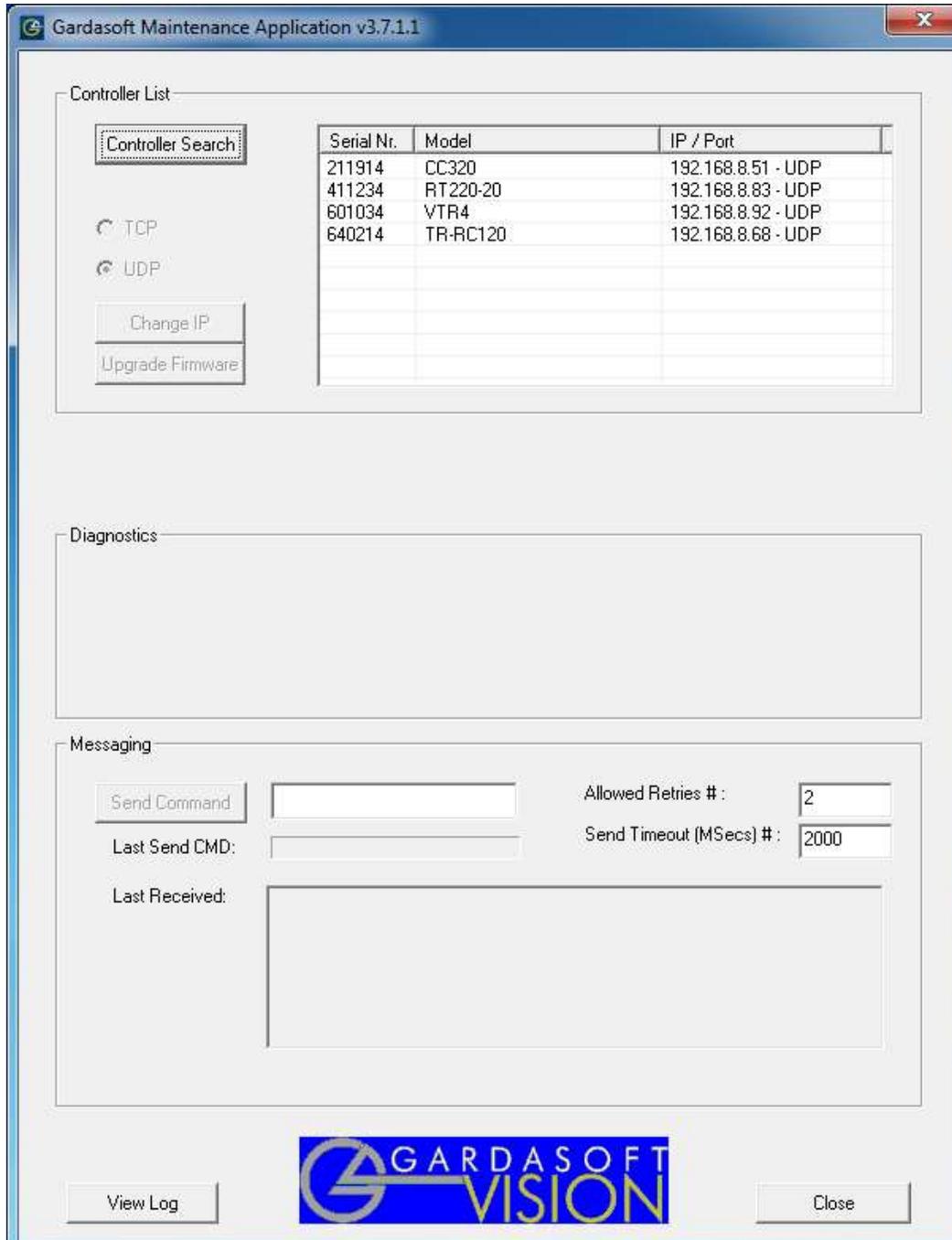
After you have clicked Close at the end of the installation, GardasoftMaint will be ready to run. In most cases, the computer will not need to be restarted but you will be prompted for this if it is necessary. The installer will place an icon on your desktop:



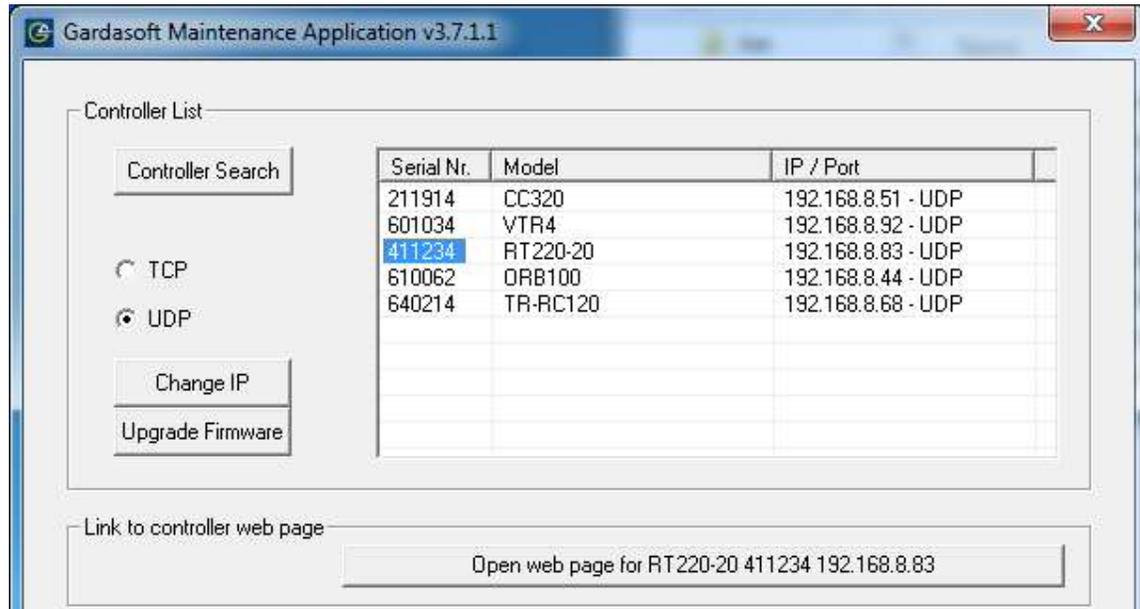
We recommend that you use this icon to start GardasoftMaint when you wish to use it, but the program can also be started by means of the Windows Start menu if you prefer.

## To update the firmware

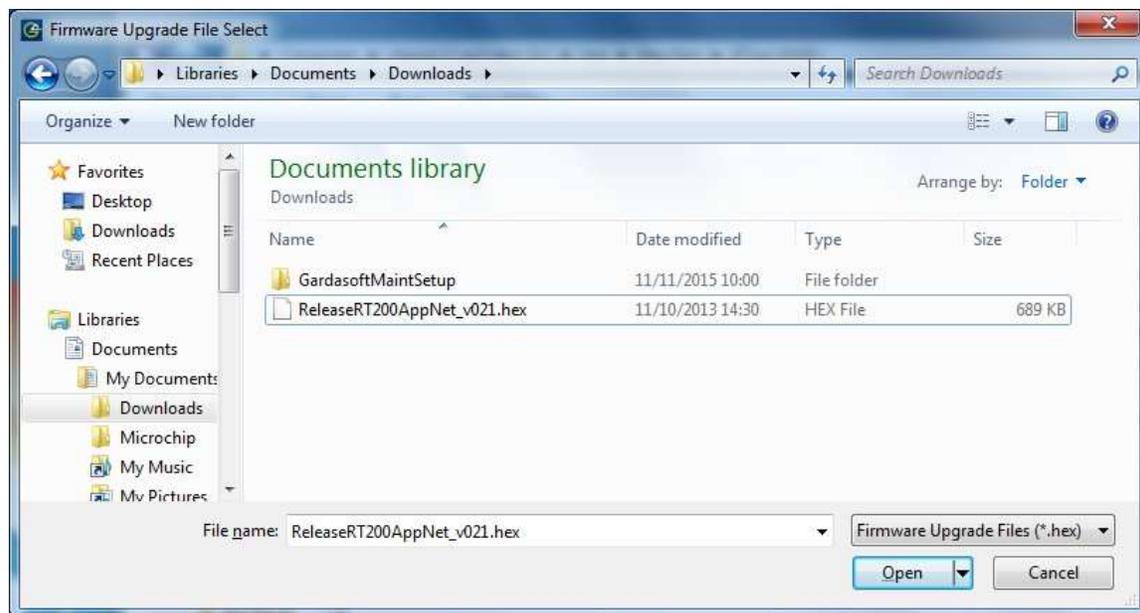
1. Start GardasoftMaint and wait for the controller to appear in the list at the top. (You can click the Search button to speed this up if necessary.)



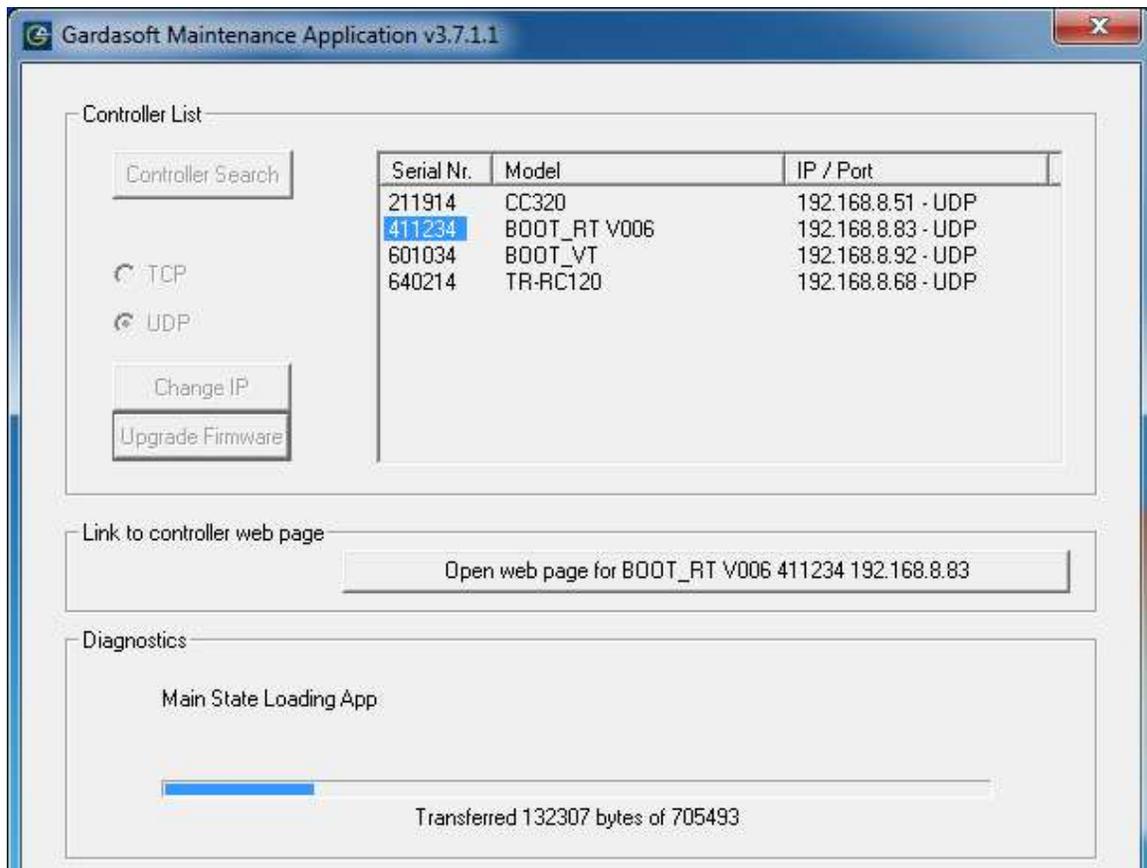
2. Select the controller by clicking on its serial number



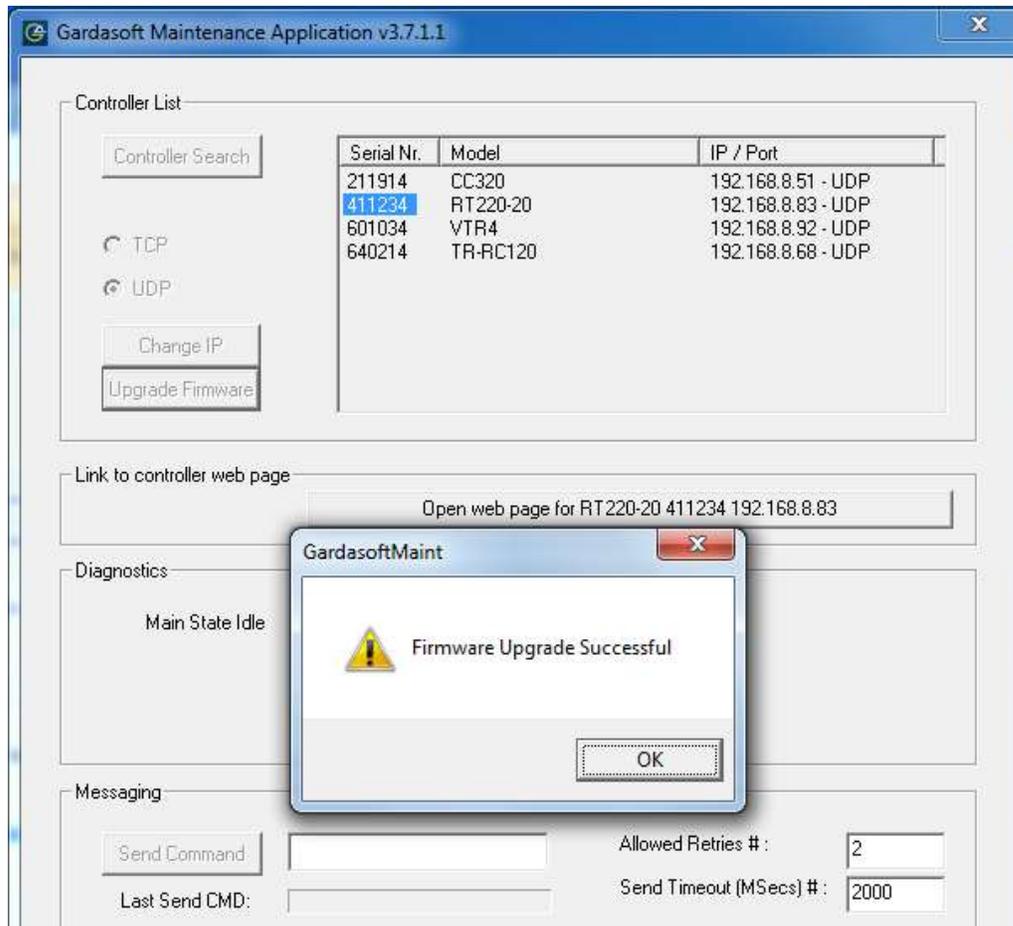
3. Click the Upgrade Firmware button, whereupon the Firmware Upgrade File Select dialog box will appear, which you can use to navigate to the Application .hex file to be loaded:



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:



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



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.