

Updating the Firmware on a Cygnus Mk5 Surface Thickness Gauge

(for 'Cygnus Mk5 Surface Gauge Updater v2.14')

1. Install the Update Program

To update the gauge you will need to install the **Cygnus Mk5 Surface Gauge Updater** on your computer, the current software version is v2.14. You will only need to do this once.

You can get the installer package from Cygnus UK or download it from the Cygnus Website. On the Website click on '**Support**' on the top menu then click on the '**Technical Software**' link, you will see a link to '**M5 Surface Gauge Updater**' which will download the EXE file.

This is a self-extracting EXE file so just run the file you have downloaded;

- When prompted click [**Setup**] to start installing..
- During installation when prompted just click [**Next**] to proceed
- You will have to choose to accept the License Agreement too, then click [**Next**]

[If you have download a ZIP file instead extract the contents to a temporary location then Run the 'setup' file.]

2. Download the Gauge Firmware

You will need the correct Gauge Firmware for your gauge, you can either download this from the Cygnus website or request it via email from Cygnus Instruments directly.

There are three types of gauge firmware to choose from, one for each model of gauge;

- M5-C2 Firmware
- M5-C4 Firmware
- M5-C6 Firmware

Note 'plus' and non-plus gauges use the same firmware.

When you download the gauge firmware its filename contains the details of the firmware;

The file 'M5-TG-C4-V505-R513' is for a Mk5 Cygnus 4 gauge.

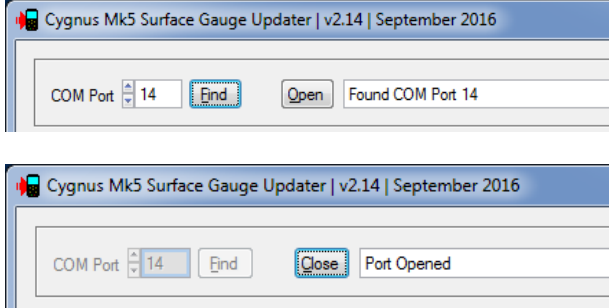
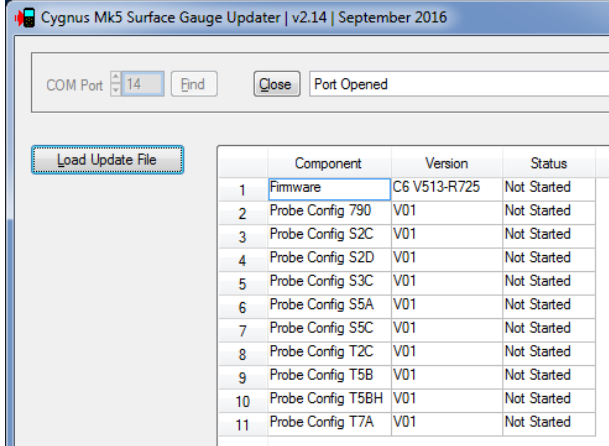
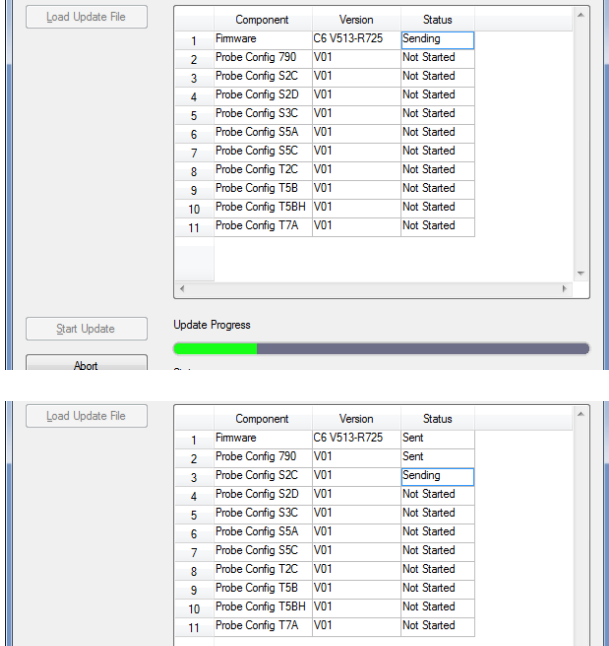
C4 = Means Cygnus 4 or 4+ Gauge.

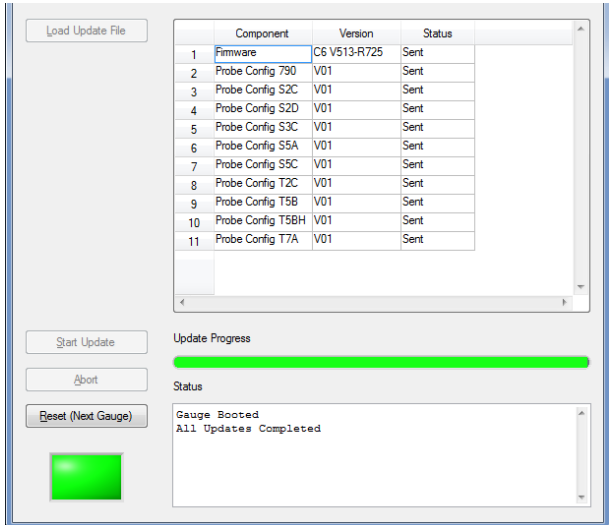
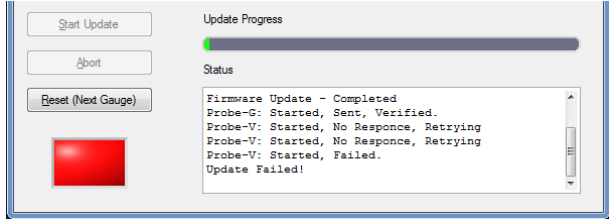
V505 = Is the Version Number (5.05)

R513 = Is the Build Number (513)

3. Updating the Gauge's Firmware

| Step | Instructions | Notes |
|----------|--|-------|
| 1 | Check Bluetooth is set to OFF in the gauge's Setup menu. | |
| 2 | Unplug the Probe from the gauge | |
| 3 | Connect the Mk5 gauge to your computer using the USB lead. The gauge must be turned off . Wait while windows loads a driver and assigns a COM port number. | |

| Step | Instructions | Notes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | <p><i>NOTE. There should only be one Cygnus gauge connected to the computer at a time.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>4</p> | <p>Run Cygnus Mk5 Surface Gauge Updater</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>5</p> | <p>Click [Find] to locate the COM Port - the "Found COM Port xx " message should be displayed.</p> <p>Click [Open] to open the port. The "Port Opened" message should be displayed.</p> |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>6</p> | <p>Click [Load Update File] and locate the new gauge firmware file you downloaded and load it.</p> <p>The table will list all the components in the update, Firmware followed by Probe Configuration files.</p> <p>Their Status will be 'Not Started'</p> |  <table border="1" data-bbox="1058 925 1437 1211"> <thead> <tr> <th></th> <th>Component</th> <th>Version</th> <th>Status</th> </tr> </thead> <tbody> <tr><td>1</td><td>Firmware</td><td>C6 V513-R725</td><td>Not Started</td></tr> <tr><td>2</td><td>Probe Config 790</td><td>V01</td><td>Not Started</td></tr> <tr><td>3</td><td>Probe Config S2C</td><td>V01</td><td>Not Started</td></tr> <tr><td>4</td><td>Probe Config S2D</td><td>V01</td><td>Not Started</td></tr> <tr><td>5</td><td>Probe Config S3C</td><td>V01</td><td>Not Started</td></tr> <tr><td>6</td><td>Probe Config S5A</td><td>V01</td><td>Not Started</td></tr> <tr><td>7</td><td>Probe Config S5C</td><td>V01</td><td>Not Started</td></tr> <tr><td>8</td><td>Probe Config T2C</td><td>V01</td><td>Not Started</td></tr> <tr><td>9</td><td>Probe Config T5B</td><td>V01</td><td>Not Started</td></tr> <tr><td>10</td><td>Probe Config T5BH</td><td>V01</td><td>Not Started</td></tr> <tr><td>11</td><td>Probe Config T7A</td><td>V01</td><td>Not Started</td></tr> </tbody> </table> | | Component | Version | Status | 1 | Firmware | C6 V513-R725 | Not Started | 2 | Probe Config 790 | V01 | Not Started | 3 | Probe Config S2C | V01 | Not Started | 4 | Probe Config S2D | V01 | Not Started | 5 | Probe Config S3C | V01 | Not Started | 6 | Probe Config S5A | V01 | Not Started | 7 | Probe Config S5C | V01 | Not Started | 8 | Probe Config T2C | V01 | Not Started | 9 | Probe Config T5B | V01 | Not Started | 10 | Probe Config T5BH | V01 | Not Started | 11 | Probe Config T7A | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | Probe Config 790 | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <p>7</p> | <p>Click [Start Update], next turn on the Mk5 gauge - press the power-on button.</p> <p>The update should start and the progress bar will start to move.</p> <p>The Status will be 'Sending' then 'Sent' as each part is transferred.</p> <p><i>Note. The gauges display will remain blank during the Firmware update process.</i></p> |  <table border="1" data-bbox="1011 1245 1318 1480"> <thead> <tr> <th></th> <th>Component</th> <th>Version</th> <th>Status</th> </tr> </thead> <tbody> <tr><td>1</td><td>Firmware</td><td>C6 V513-R725</td><td>Sending</td></tr> <tr><td>2</td><td>Probe Config 790</td><td>V01</td><td>Not Started</td></tr> <tr><td>3</td><td>Probe Config S2C</td><td>V01</td><td>Not Started</td></tr> <tr><td>4</td><td>Probe Config S2D</td><td>V01</td><td>Not Started</td></tr> <tr><td>5</td><td>Probe Config S3C</td><td>V01</td><td>Not Started</td></tr> <tr><td>6</td><td>Probe Config S5A</td><td>V01</td><td>Not Started</td></tr> <tr><td>7</td><td>Probe Config S5C</td><td>V01</td><td>Not Started</td></tr> <tr><td>8</td><td>Probe Config T2C</td><td>V01</td><td>Not Started</td></tr> <tr><td>9</td><td>Probe Config T5B</td><td>V01</td><td>Not Started</td></tr> <tr><td>10</td><td>Probe Config T5BH</td><td>V01</td><td>Not Started</td></tr> <tr><td>11</td><td>Probe Config T7A</td><td>V01</td><td>Not Started</td></tr> </tbody> </table> <table border="1" data-bbox="1011 1648 1318 1883"> <thead> <tr> <th></th> <th>Component</th> <th>Version</th> <th>Status</th> </tr> </thead> <tbody> <tr><td>1</td><td>Firmware</td><td>C6 V513-R725</td><td>Sent</td></tr> <tr><td>2</td><td>Probe Config 790</td><td>V01</td><td>Sent</td></tr> <tr><td>3</td><td>Probe Config S2C</td><td>V01</td><td>Sending</td></tr> <tr><td>4</td><td>Probe Config S2D</td><td>V01</td><td>Not Started</td></tr> <tr><td>5</td><td>Probe Config S3C</td><td>V01</td><td>Not Started</td></tr> <tr><td>6</td><td>Probe Config S5A</td><td>V01</td><td>Not Started</td></tr> <tr><td>7</td><td>Probe Config S5C</td><td>V01</td><td>Not Started</td></tr> <tr><td>8</td><td>Probe Config T2C</td><td>V01</td><td>Not Started</td></tr> <tr><td>9</td><td>Probe Config T5B</td><td>V01</td><td>Not Started</td></tr> <tr><td>10</td><td>Probe Config T5BH</td><td>V01</td><td>Not Started</td></tr> <tr><td>11</td><td>Probe Config T7A</td><td>V01</td><td>Not Started</td></tr> </tbody> </table> | | Component | Version | Status | 1 | Firmware | C6 V513-R725 | Sending | 2 | Probe Config 790 | V01 | Not Started | 3 | Probe Config S2C | V01 | Not Started | 4 | Probe Config S2D | V01 | Not Started | 5 | Probe Config S3C | V01 | Not Started | 6 | Probe Config S5A | V01 | Not Started | 7 | Probe Config S5C | V01 | Not Started | 8 | Probe Config T2C | V01 | Not Started | 9 | Probe Config T5B | V01 | Not Started | 10 | Probe Config T5BH | V01 | Not Started | 11 | Probe Config T7A | V01 | Not Started | | Component | Version | Status | 1 | Firmware | C6 V513-R725 | Sent | 2 | Probe Config 790 | V01 | Sent | 3 | Probe Config S2C | V01 | Sending | 4 | Probe Config S2D | V01 | Not Started | 5 | Probe Config S3C | V01 | Not Started | 6 | Probe Config S5A | V01 | Not Started | 7 | Probe Config S5C | V01 | Not Started | 8 | Probe Config T2C | V01 | Not Started | 9 | Probe Config T5B | V01 | Not Started | 10 | Probe Config T5BH | V01 | Not Started | 11 | Probe Config T7A | V01 | Not Started |
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| 1 | Firmware | C6 V513-R725 | Sending | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Probe Config 790 | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 4 | Probe Config S2D | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Probe Config S3C | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 9 | Probe Config T5B | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Probe Config T5BH | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | Firmware | C6 V513-R725 | Sent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Probe Config 790 | V01 | Sent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Probe Config S2C | V01 | Sending | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Probe Config S2D | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Probe Config S3C | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Probe Config S5A | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Probe Config S5C | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Probe Config T2C | V01 | Not Started | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Step | Instructions | Notes |
|-----------------|--|---|
| <p>8</p> | <p>When all the updates have been successfully completed the indicator will be Green and all the Status should show "Sent".</p> <p>If the update fails for any reason the Status will show a "Update Failed!" message and the indicator will be Red.</p> <p>To re-try click [Reset (Next Gauge)] and start again. Remember to turn the gauge off.</p> |   |
| <p>9</p> | <p>If you accidentally interrupt this process just re-start again from the beginning. You can also abort the process by clicking the [Abort] button.</p> | |