

All these messages were captured using a digital analyzer (115200 bitrate), so it's real information between Anycubic TFT display and Trigorilla board. You can contrast it with Anycubic firmware 1.3.0 at Github [https://github.com/ANYCUBIC-3D/ANYCUBIC\\_CHIRON](https://github.com/ANYCUBIC-3D/ANYCUBIC_CHIRON)

| Trigorilla messages after reset |                  |                  |
|---------------------------------|------------------|------------------|
| TFT Responds                    | Trigorilla Sends | Meaning          |
|                                 | J17\r\n          | Main board reset |
|                                 | J12\r\n          | Ready            |

| Periodic update (1.1s) from display to Trigorilla |                     |                                       |
|---|---------------------|---------------------------------------|
| TFT Request                                       | Trigorilla Response | Meaning                               |
| A0\r\n  | A0V' '' '31\r\n     | A0 → Current hotend temp (e.g. 31°C). |
| A1\r\n  | A1V' '200\r\n       | A1 → Seted hotend temp (e.g. 200°C).  |
| A2\r\n  | A2V' '' '50\r\n     | A2 → Current bed temp (e.g. 50°C).    |
| A3\r\n  | A3V' '100\r\n       | A3 → Seted bed temp (e.g. 100°C).     |
| A4\r\n  | A4V' '1\r\n         | A4 → Fan speed (e.g. 1%).             |

| Query for SD files (Print option) |                                |   |
|-----------------------------------|--------------------------------|---|
| TFT Request                       | Trigorilla Response            | Meaning                                       |
| A8' 'S0' '\r\n                    | J02\r\n                        | Query [A8] for SD [S0] files but no SD [J02]. |
|                                   | J00\r\n                        | SD inserted notify [J00]                      |
|                                   | J01\r\n                        | SD extracted notify [J01]                     |
| A8' 'S0' '\r\n                    | FN' '\r\n                      | Query for SD files, 3 files in SD.            |
|                                   | STRING~1.GCO\r\n               |   |
|                                   | String' 'Test' '4.gcode\r\n    |   |
|                                   | ARTICU~1.GCO\r\n               |   |
|                                   | Articulated_Butterfly.gcod\r\n |   |
|                                   | 3DBENC~1.GCO\r\n               |   |
|                                   | 3DBenchy.gcode\r\n             |   |
|                                   | END\r\n                        |   |

| Access to Temperature option (Menu>Setup>Temp) |                                |   |
|--|--------------------------------|---|
| TFT Request                                    | Trigorilla Response            | Meaning   |
| A0\r\nA2\r\n                                   | A0V' '' '31\r\nA2V' '' '50\r\n | Current hotend and bed temp (e.g. 31°C/50°C).. This info it's periodic (1.1s) |
| A16' 'S200\r\n                                 |                                | Set hotend temp (e.g. 200°C) [A16].   |
| A17' 'S50\r\n                                  |                                | Set bed temp (e.g. 50°C) [A17].   |

| Access to Motor off option (Menu>Setup>Motor) |                     |                 |
|---|---------------------|-----------------|
| TFT Request                                   | Trigorilla Response | Meaning         |
| A19\r\n                                       | \r\n                | Turn off motors |

| Access to Speed option (Menu>Setup>Speed) |                     |   |
|---|---------------------|---|
| TFT Request                               | Trigorilla Response | Meaning                                   |
| A4\r\n                                    | A4V' '1\r\n         | Query colling fan speed [A4]              |
| A20\r\n                                   | A20V' '100\r\n      | Query printing rate [A20]                 |
| A18' 'S50\r\n                             | \r\n                | Set fan speed (e.g. 50%) [A18]            |
| A20' 'S120\r\n                            | \r\n                | Set printing rate speed (e.g. 120%) [A20] |

| Access to Home (Menu>Tools>Auto Home) |                     |               |
|---------------------------------------|---------------------|---------------|
| TFT Request                           | Trigorilla Response | Meaning       |
| A21' 'C\r\n                           |                     | Home all axis |
| A21' 'X\r\n                           |                     | Home X axis   |
| A21' 'Y\r\n                           |                     | Home Y axis   |
| A21' 'Z\r\n                           |                     | Home Z axis   |

| Access to Home (Menu>Tools>Cooling) |                     |                    |
|-------------------------------------|---------------------|--------------------|
| TFT Request                         | Trigorilla Response | Meaning            |
| A25\r\n                             | J12\r\n             | Set hotend cooling |

| Access to Home (Menu>Tools>Move Axis) |                     |                             |
|---------------------------------------|---------------------|-----------------------------|
| TFT Request                           | Trigorilla Response | Meaning                     |
| A21' 'C\r\n                           |                     | Home all axis               |
| A22' 'X' '+10F1000\r\n                | \r\n                | Move X axis 10mm; Speed L   |
| A22' 'X' '-10F1000\r\n                | \r\n                | Move X axis -10mm; Speed L  |
| A22' 'X' '+10F3000\r\n                | \r\n                | Move X axis 10mm; Speed M   |
| A22' 'X' '-10F3000\r\n                | \r\n                | Move X axis -10mm; Speed M  |
| A22' 'X' '+10F5000\r\n                | \r\n                | Move X axis 10mm; Speed H   |
| A22' 'X' '-10F5000\r\n                | \r\n                | Move X axis -10mm; Speed H  |
| A22' 'Y' '+10F1000\r\n                | \r\n                | Move Y axis 10mm; Speed L   |
| A22' 'Y' '-10F1000\r\n                | \r\n                | Move Y axis -10mm; Speed L  |
| A22' 'Y' '+10F3000\r\n                | \r\n                | Move Y axis 10mm; Speed M   |
| A22' 'Y' '-10F3000\r\n                | \r\n                | Move Y axis -10mm; Speed M  |
| A22' 'Y' '+10F5000\r\n                | \r\n                | Move Y axis 10mm; Speed H   |
| A22' 'Y' '-10F5000\r\n                | \r\n                | Move Y axis -10mm; Speed H  |
| A22' 'Z' '+10F1000\r\n                | \r\n                | Move Z axis 10mm; Speed L   |
| A22' 'Z' '-10F1000\r\n                | \r\n                | Move Z axis -10mm; Speed L  |
| A22' 'Z' '+10F3000\r\n                | \r\n                | Move Z axis 10mm; Speed M   |
| A22' 'Z' '-10F3000\r\n                | \r\n                | Move Z axis -10mm; Speed M  |
| A22' 'Z' '+10F5000\r\n                | \r\n                | Move Z axis 10mm; Speed H   |
| A22' 'Z' '-10F5000\r\n                | \r\n                | Move Z axis -10mm; Speed H  |
| A22' 'X' '+1F1000\r\n                 | \r\n                | Move X axis 1mm; Speed L    |
| A22' 'X' '-1F1000\r\n                 | \r\n                | Move X axis -1mm; Speed L   |
| A22' 'X' '+1F3000\r\n                 | \r\n                | Move X axis 1mm; Speed M    |
| A22' 'X' '-1F3000\r\n                 | \r\n                | Move X axis -1mm; Speed M   |
| A22' 'X' '+1F5000\r\n                 | \r\n                | Move X axis 1mm; Speed H    |
| A22' 'X' '-1F5000\r\n                 | \r\n                | Move X axis -1mm; Speed H   |
| A22' 'Y' '+1F1000\r\n                 | \r\n                | Move Y axis 1mm; Speed L    |
| A22' 'Y' '-1F1000\r\n                 | \r\n                | Move Y axis -1mm; Speed L   |
| A22' 'Y' '+1F3000\r\n                 | \r\n                | Move Y axis 1mm; Speed M    |
| A22' 'Y' '-1F3000\r\n                 | \r\n                | Move Y axis -1mm; Speed M   |
| A22' 'Y' '+1F5000\r\n                 | \r\n                | Move Y axis 1mm; Speed H    |
| A22' 'Y' '-1F5000\r\n                 | \r\n                | Move Y axis -1mm; Speed H   |
| A22' 'Z' '+1F1000\r\n                 | \r\n                | Move Z axis 1mm; Speed L    |
| A22' 'Z' '-1F1000\r\n                 | \r\n                | Move Z axis -1mm; Speed L   |
| A22' 'Z' '+1F3000\r\n                 | \r\n                | Move Z axis 1mm; Speed M    |
| A22' 'Z' '-1F3000\r\n                 | \r\n                | Move Z axis -1mm; Speed M   |
| A22' 'Z' '+1F5000\r\n                 | \r\n                | Move Z axis 1mm; Speed H    |
| A22' 'Z' '-1F5000\r\n                 | \r\n                | Move Z axis -1mm; Speed H   |
| A22' 'X' '+0.1F1000\r\n               | \r\n                | Move X axis 0.1mm; Speed L  |
| A22' 'X' '-0.1F1000\r\n               | \r\n                | Move X axis -0.1mm; Speed L |
| A22' 'X' '+0.1F3000\r\n               | \r\n                | Move X axis 0.1mm; Speed M  |
| A22' 'X' '-0.1F3000\r\n               | \r\n                | Move X axis -0.1mm; Speed M |
| A22' 'X' '+0.1F5000\r\n               | \r\n                | Move X axis 0.1mm; Speed H  |
| A22' 'X' '-0.1F5000\r\n               | \r\n                | Move X axis -0.1mm; Speed H |
| A22' 'Y' '+0.1F1000\r\n               | \r\n                | Move Y axis 0.1mm; Speed L  |
| A22' 'Y' '-0.1F1000\r\n               | \r\n                | Move Y axis -0.1mm; Speed L |
| A22' 'Y' '+0.1F3000\r\n               | \r\n                | Move Y axis 0.1mm; Speed M  |
| A22' 'Y' '-0.1F3000\r\n               | \r\n                | Move Y axis -0.1mm; Speed M |
| A22' 'Y' '+0.1F5000\r\n               | \r\n                | Move Y axis 0.1mm; Speed H  |
| A22' 'Y' '-0.1F5000\r\n               | \r\n                | Move Y axis -0.1mm; Speed H |
| A22' 'Z' '+0.1F1000\r\n               | \r\n                | Move Z axis 0.1mm; Speed L  |
| A22' 'Z' '-0.1F1000\r\n               | \r\n                | Move Z axis -0.1mm; Speed L |
| A22' 'Z' '+0.1F3000\r\n               | \r\n                | Move Z axis 0.1mm; Speed M  |
| A22' 'Z' '-0.1F3000\r\n               | \r\n                | Move Z axis -0.1mm; Speed M |
| A22' 'Z' '+0.1F5000\r\n               | \r\n                | Move Z axis 0.1mm; Speed H  |
| A22' 'Z' '-0.1F5000\r\n               | \r\n                | Move Z axis -0.1mm; Speed H |

| Access to Home (Menu>Tools>Preheat) |                     |             |
|-------------------------------------|---------------------|-------------|
| TFT Request                         | Trigorilla Response | Meaning     |
| A23\r\n                             | OK\r\n              | Preheat PLA |
| A24\r\n                             | OK\r\n              | Preheat ABS |

| Access to Home (Menu>Tools>Filament) |                                |   |
|--------------------------------------|--------------------------------|---|
| TFT Request                          | Trigorilla Response            | Meaning   |
| A16' 'C230\r\n                       |                                | Filament In/Out; If temp. hotend<230°C          |
| A22' 'E' '+50F700\r\n                | \r\n                           | Filament In; If temp. hotend>230°C. Every 1,1s  |
| A22' 'E' '-50F700\r\n                | \r\n                           | Filament Out; If temp. hotend>230°C. Every 1,1s |
| A19\r\n                              | \r\n                           | Stop  |
| A0\r\nA1\r\n                         | A0V' '230\r\nA1V' '' '' '0\r\n | Periodic hotend temp. update, every 1,1s        |

| Access to Home (Menu>Tools>Info) |                     |  |
|----------------------------------|---------------------|--|
| TFT Request                      | Trigorilla Response | Meaning  |
| A33\r\n                          | J33' 'V1.3.0\r\n    | Ask for firmware version. Only updates version in display, remaning data is hardcoded. |

| Access to Home (Menu>Tools>Level>Probing) |                     |  |
|---|---------------------|--|
| TFT Request                               | Trigorilla Response | Meaning  |
| A30S\r\n                                  | J26\r\nJ25\r\n      | Start probing process. First Trigorilla sends J26 and J25 85 secods after. |

| Access to Home (Menu>Tools>Level>Advanced setting) |                       |  |
|--|-----------------------|--|
| TFT Request  | Trigorilla Response   | Meaning  |
| A31G\r\n   | A31V' '-17.65\r\n\r\n | Access to 'Advanced setting' option. Trigorilla sends Z offset (e.g. -17.65mm) |
| A29' 'X0' 'Y0\r\n                                  | A29V' '2799.50\r\n    | Get info point 1 (X0,Y0), Trigorilla sends offset (displays 27.99)             |
| A29' 'X4' 'Y4\r\n                                  | A29V' '21987.50\r\n   | Get info point 25 (X4,Y4), Trigorilla sends offset (displays 219.87)           |
| A34' 'X4' 'Y4' 'V22012\r\n                         |                       | Set offset point 25 (X4, Y4), TFT displays 220.12                              |
| A31S0.05\r\n                                       | A31V' '-17.60\r\n\r\n | Set offset (e.g. +0.05) to ALL points. TFT displays offset (-17.60).           |
| A31S-0.05\r\n                                      | A31V' '-17.65\r\n\r\n | Set offset (e.g. -0.05) to ALL points. TFT displays offset (-17.65).           |
| A31D\r\n   | \r\n                  | Push OK to confirm changes.  |

