### A. How to Wire a QD1010-USB from Laptop to Stat

Steps:

1. Power up the thermostat. Plug a QD1010-USB cord into the jack on the bottom of the stat.



2. Plug the other end of the cord into the RS485 port on the QD1010-USB.





3. Insert the USB cable from the QD1010-USB to the USB Port on the laptop.

\*\*\*Note: Leave all devices plugged in as they will be required for the next steps.

# B. How to Check the Stat Address, making sure it is at Address 1 Steps:

- 1. Press "Program Setup" button.
- 2. Use "Down" arrow and scroll to 248.
- 3. Press "Program Setup" button.
- 4. A set address number will display. Use the up and down arrows to adjust the address to "001".
- 5. Press "Program Setup" button to save.
- 6. Press "Service Status" to return to the main screen.

7. To check the address number saved, press the "Program Setup" and repeat steps 1-4. Address number 001 will display. If it does, press the "Service Status" button to return to the main screen. If it did not save, repeat steps.

### C. How to Start Up Insight and Auto Detect the Stat

#### Steps:

1. Start up the Insight program. Click on "Get Ports". If you are not sure which port the QD1010-USB is plugged into, remove the USB cord from the laptop and click "Get Ports" again. The port that now disappears is the correct port. Plug the QD1010-USB back into the laptop and click on "Get Ports" again.



2. Select the proper 'Com Port' radio button and click the "Open Port" Button.



3. a. Click the "Poll" Tab.

b. Click the "Poll Network" button. A green loading bar will appear at the bottom. Your stat will appear in the second box when it is detected.

c. Click on the Stat Icon to proceed.



#### HEX File Update TCS Technical Bulletin

## тсs *Basys Controls*°

### D. How to use the Boot Loader from Insight to Change the EEPROM to the New HEX File from Laptop

#### Steps:

- a. Click on "Modules," from the dropdown click on "Advanced," and from that dropdown click on "Bootloader." The "TCS Bootloader tab" will appear with the rest of the tabs.
  - b. Click the "TCS Bootloader" tab.
  - c. Click the "Switch to Bootloader Mode" button. The letter 'A' will appear in the body area.
- 2. a. Click the "Open Hex File" button.
  - b. Locate the Hex file saved from the previous steps.
  - c. Double click to open the HEX file

d. After the file is selected the HEX code will appear in the body area. The status on Insight will be 'Status -----'







тсs <u>Basys Controls</u>®

3. Click the "Erase and Program" Button. The status will change to 'Flashing...' and the green loading bar will appear at the bottom. This may take 1-2 minutes to complete.

\* Green and Yellow LED lights on QD1010-USB will flash, indicating that the HEX file is being written to the stat

b. When the HEX file is completely written to the stat,
 the LED's on the QD1010-USB will stop flashing and
 the status on Insight will be "Done."

If an "Error Code" is displayed:

- Click Network Tab
- DO NOT Poll network. Instead, Enter Stat Address
  "1" as this should be the stat address if previous
  Step C was performed correctly.
- · Click on Modules Bootloader
- · Click on "Erase and Program" button
- If Error code occurs again, EEPROM chip is most likely faulty. Replace chip using Chip Replacement Procedure.





- 4. a. Click "Switch to User Program" button.
  - b. A pop up window will appear. Click yes.
- 🐏 TCS\_insight 2.13 --- Co File Edit View Modules Controllers Help Network Programming TCS Bootloader Schedule Monitoring Â Switch to Bootloader Mode Open Hex File Erase and Program Switch to User Program Reset Controller Clear Erase All Program Execute user prog Status: done Sent 60494, length=59113 Switch to user program - X-If you select Yes, the user program will take over when you reset. You can only go back to the Bootloader if you build that in the user program. Yes No TCS\_insight 2.13 --- Controller 1033 Version File Edit View Modules Controllers Help Network Programming Schedule Monitoring TCS Bootloader 02000040000FA 100000004007264F16A09D07FD1100EEECFE6F4C GR011000E22FCD71200EF 100018007F10165091EEb0472 100118007F10165091EEb0472 100118007F10165091E80472 100040004F190808325C1046A010E33007FE0B 100040004F190808325C1046A010E33007FE0B 1000500036905090805280200208960584010E33 100070000C5619509803252C10400268960584010E33 100070000C56197307500208960584010E33 100070000C5619737076000718E4E102068820082C5 100040000F519737076000718E4E102068820082C5 100040000F519737076000718E4E102068820082C5 100040000F519737076000718E4E102068820082C5 1000400000F519707500718E4E10206820025254846 100020000E51977071000718E4500756042554842 100000000E51977071000718E4500756042554842 100000000E51977707000718E4500050030035E0440000 1000F00075015707100201511800750030035E0440000 1000F00075015509F70020E1384C30711EE08980E Switch to Bootloader Mode Â Open Hex File Erase and Program Switch to User Program Reset Controller Clear Erase All Program Execute user prog Status: Success - 0 **X** TCS\_insight 2.12 --- Controller 1033 Version 0206 Address: 6 File Edit View Modules Controllers Help Network Schedule Monitoring Programming TCS Bootloader 1202000040000FA 1000000004007EAA\*16A09D07FD1100EEECFE6FF4C 100001000E2EECCD71200EF 1080018007FD1360901EE00F0A2 10002000E9500FE203200E35FED72050DE950EE6E10 10002000E9500FE203200E5CD1A6AD10E3308076CE0 10005000030E900806E170E086058400E98308076CE0 10005000030E900806E170E086058400E984010E93 10007000AC6AF6EACS4AC2AA20A86AA888A88EAE5058 10008000A68050E00B00580A7CE104000C5A071CFA 100080000186E118000EE10F00064240E016E8D880 10009000A6E1F8000EE010F00664240E016E8D880 10009000A6E1F8000EE10F00064240E016E8D880 1000800A6EFF07J50001E6115007082476EA5F86A4E 100000000EFF07J1060718E115007082F78AA6EF86A4E 100000000EFF07J1060718E115007082F78AA6EF86A4E 100000000EFF07J1600718E115007082F78A6EF86A4E 10000E000EF6F07J50001E115007082F78A6EF86A4E 10000E000EF6F07J50002E136420771E6076EC -020000040000FA Switch to Bootloader Mode Open Hex File Erase and Program Switch to User Program 1000F00007D155D8FF00020E1364C3D711EE00F0EC Reset Controlle Clear Erase All Program Execute user prog Reset Success Status:

c. The status will now be 'Success.'

5. Click the "Reset Controller" button. The status will now be 'Reset Success.'



- 6. Make sure the Stat has been updated correctly by following these steps:
  - a. Click the "Network" tab.
  - b. Click the "Poll" tab.
  - c. Click the "Poll Network" button.
  - d. If the stat icon and name appear in the second body area the update has been done correctly.
  - e. Hit the "Stop" button and close the program.

#### E. How to Set the Time and Date Using Insight.

#### Steps:

- 1. a. Click the "Schedule" tab.
  - b. Click the "Set Time and Date" tab.
  - c. Either click "To PC Time" or set manually.
  - d. Click "Write" button to set.
  - e. Unplug Cables
  - f. IMPORTANT !! Place green sticker on inside flip-cover on stat. Write "Month/Year" on sticker

#### If Thermostat is Conventional Instead of Heat Pump:

#### Steps:

- 1. Press "Program Setup" button.
- 2. Use Down Arrow and enter "007" for access code.
- 3. DO NOT give out this access code or leave this info at the branch.
- 4. Change from "Conventional" to "Heat Pump" if stat is used to control reversing valve.
- \*\*See "CBRE SZ1033 Supplemental Programming Guide" for multi-stage heat pump or conventional stat operations.

#### Troubleshooting

- 1. If there are any issues during the process, start over with Step A
- 2. If a communications error happens, there is a slight chance that the programming chip will become disabled and need to be replaced.
- This should be a very rare occurrence.
- 3. Call Operations Manager if you have any questions.