Sprouts BAS to S3C Field Setup

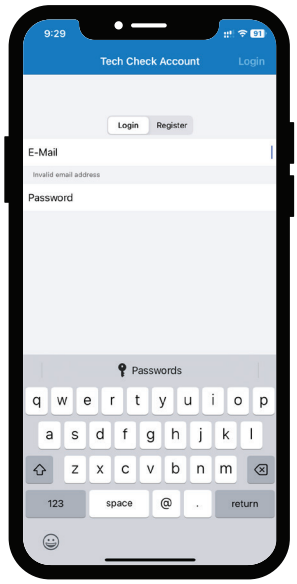
With Sporlan Tech Check App

SD-479 / 52023

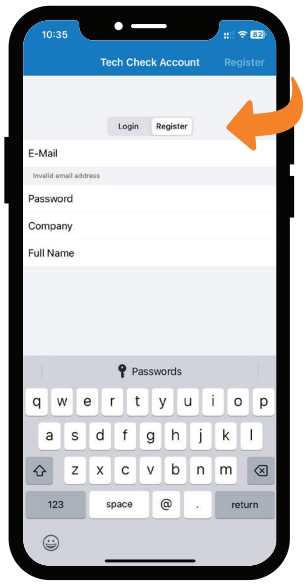
S3C FIELD SETUP

The simplest way to set up the S3C in the field is using the Sporlan Tech Check Mobile App which can be downloaded from the App Store.

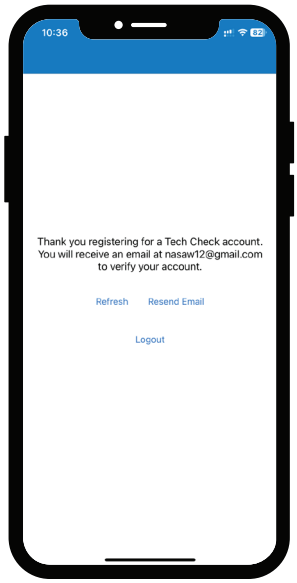
1. After initial opening of the Sporlan Tech Check Mobile app the user will be presented with the following screen:



2. Tap the “**Register**” portion of the “Login/Register” slider to allow for entering the user registration information.

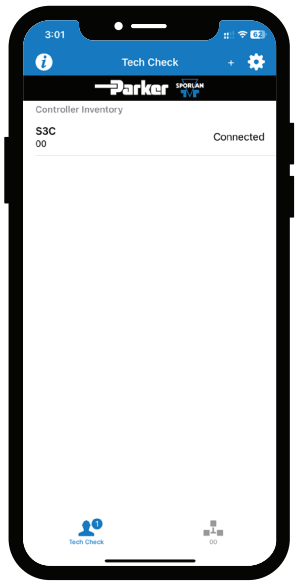


3. After entering the required information, click the “**Register**” button in the upper right corner of the display to complete the registration process. The following screen will be displayed that indicates an e-mail will be sent for account verification.

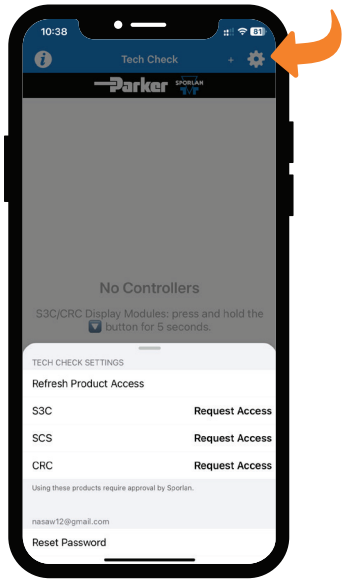


4. In a separate browser window or e-mail application, open the e-mail from “Tech Check” and click the “**Confirm my account**” link to finish the verification process.

5. Click the “**Refresh**” button in the Tech Check app to refresh the screen and advance to the controller selection screen.



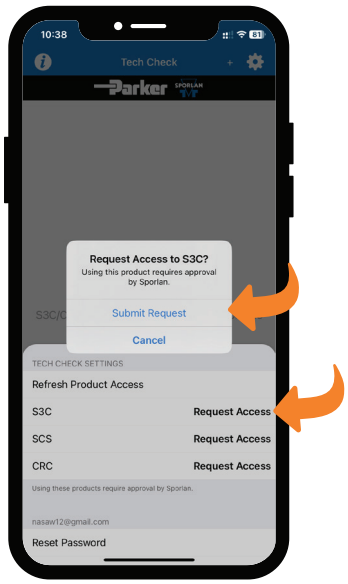
6. To gain access to an S3C controller through the app, tap the gear option (⚙) in the upper right corner of the screen.



7. Tap “**Request Access**” beside the S3C option to request access to connect to an S3C controller type.

   Tap “**Submit Request**” to send the request for access to Sporlan Tech Support.

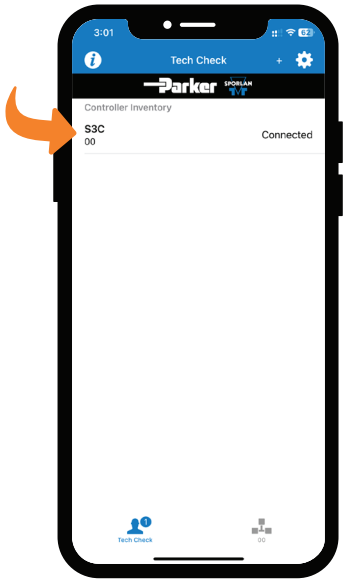
   Contact Sporlan Tech Support at 1-888-920-6284 to complete the approval process.



8. Update one S3C on each loop to the newest firmware before configuring any parameters. Be sure that all S3Cs are connected through the Ethernet daisy chain and powered so all Case Controllers can be updated after new firmware is pushed. This process could take up to 30 minutes to complete. Please view SD-480 S3C Firmware Update via iPhone.

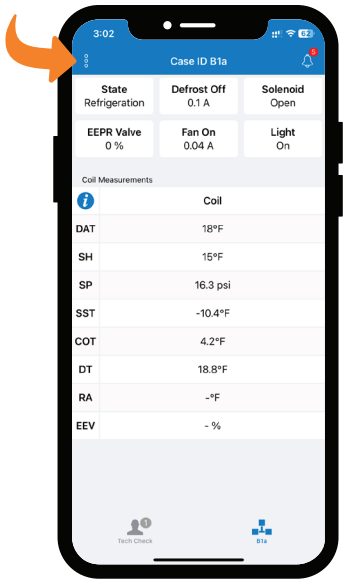
9. To connect to an S3C controller, hold down the “Down Button” on the S3Cs local display for a few seconds until the wireless Bluetooth indicator LED flashes. The controller should show up in the Tech Check apps controller selection screen.

10. Tap “**S3C**” to connect to the controller and view its status screen.

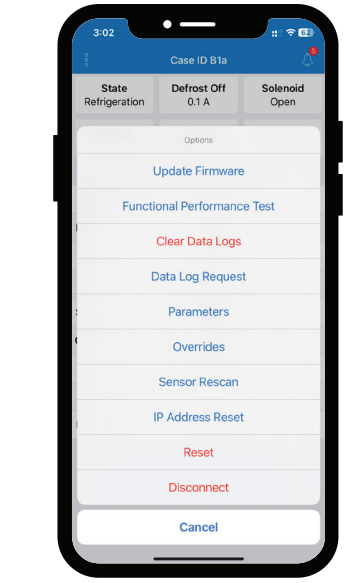


11. Parameters can be entered in the app by tapping on the three vertical dots in the upper left corner and then tapping the “**Parameters**” option.

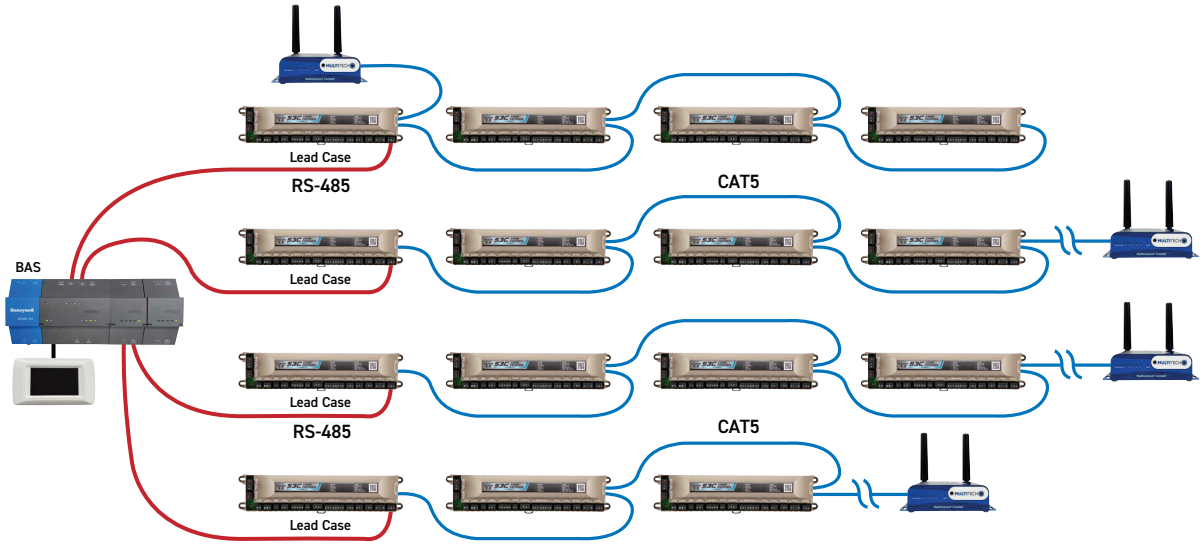
    NOTE: To avoid confusion it is recommended that only one tech at a time configure the communications and case identifier parameters. Otherwise, the app may be connected to the wrong controller and write incorrect parameters.



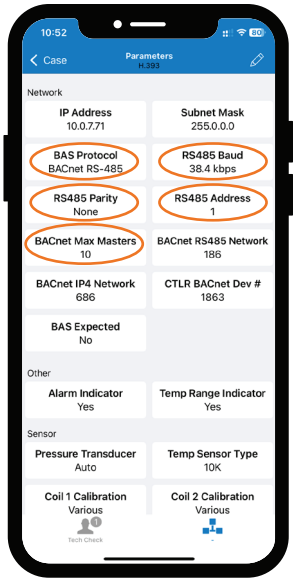
12. Be sure the firmware version shown in the Parameters screen of the app matches the firmware version of the file found in the Update Firmware parameters screen.



13. Before the S3Cs can communicate to the BAS the lead case parameters must be properly configured. The lead case is the S3C controller connected to the BAS directly through the RS-485 port. There is only one lead S3C connected per BAS RS-485 communications port. See example wiring diagram below:

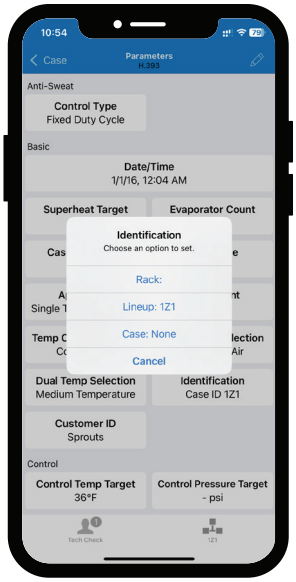


14. Scroll down to the **Network** parameters and verify the following:



    - Verify **BAS Protocol** parameter is set to BACnet MS/TP to allow BACnet communications through the RS-485 port
    - Verify **RS485 Baud** parameter (must match baud rate configuration of the building system)
    - Verify **RS485 Parity** parameter is set to None
    - Verify **RS485 Address** parameter is set correctly (Any address will work but must not conflict with RS-485 address of the building system or other devices on the same RS-485 link and must be less than or equal to BACnet Max Masters parameter. Generally, lower address values are better for optimizing network bandwidth.)
    - Verify **BACnet Max Masters** parameter is set to the address of the highest master address on the RS-485 link. This shouldn't typically need to be changed from the default but can be lowered to optimize network bandwidth utilization.

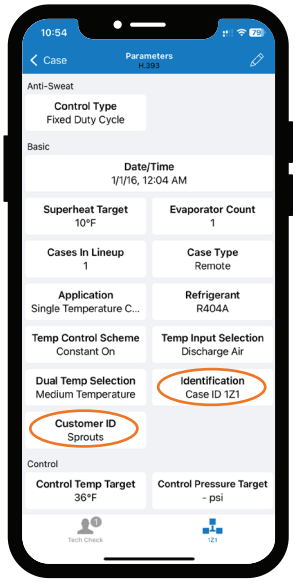
15. For every case including the lead case the tech in the field must also set and verify the following parameters:



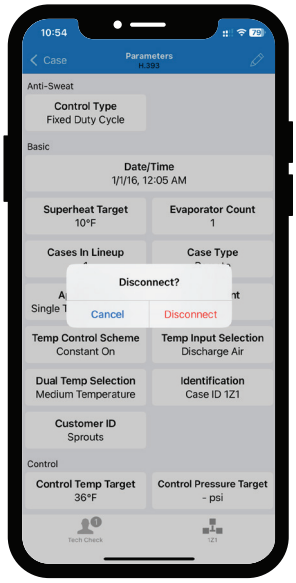
    - Verify the **Customer ID** parameter is set to Sprouts. This will enable Sprouts specific control functions and automatically configures the BACnet ID based upon case naming according to the format listed in the **Identification** options described next.
    - Tap the **Identification** to open the parameters submenu for setting the case identification:
        - **Rack** parameter should be left blank (only one rack). NOTE: The S3C does include options for more racks by allowing the rack identifier to be configured from digits 0 through 9 for possible future variations if needed.
        - **Lineup** parameter may be referred to as System Number in the Sprouts drawings
            - First character is loop identifier (1 through 9)
            - Second character is circuit identifier (A through Z)
            - Third character is optional but indicates a separate refrigeration line drop (1 through 9)
        - **Case** parameter (blank or 1 through 9)

- If the **Customer ID** and **Identification** parameters are set correctly then the **CTRL BACnet Dev #** (BACnet device identifier) under **Network** parameters should match the respective BACnet Device Id of the case/unit in the Building Automation System (BAS).

16. After all parameters have been configured tap the icon to bring up the disconnect screen.



17. Tap **Disconnect** to disconnect from the S3C controller after setup of the parameters is completed to allow for connecting and configuring the next S3C controller.



18. This will conclude the setting of the networking parameters necessary to establish communications with the building automation system (BAS). The BAS will take care of pushing the remaining settings to configure the controllers if the name of the case has been configured correctly. If a connection to the BAS cannot be established, then verify the BACnet Device Id of the case in the BAS matches the BACnet ID in the S3C controller and check network wiring.

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