

# INSTALLATION AND SETUP INSTRUCTIONS FOR BCSGRAIN

## SPECIAL NOTE

READ THIS ENTIRE BOOKLET  
BEFORE PROCEEDING WITH  
THE INSTALLATION

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## INSTALLATION AND SETUP INSTRUCTIONS FOR A BCSE1000 SYSTEM

The following instructions will explain how to setup a BCSE1000 instrument on a computer and using it with the BCS Grain software.

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## 1. THINGS YOU MUST DO FIRST

- 1.1 You must be logged on to Windows as the Computer Administrator (see glossary below)
  - 1.1.1. To check this, open “Control Panel”.
  - 1.1.2. Open User Accounts, you will see a list of accounts that have Administrator privileges.
- 1.2 Make sure the computer is fully updated through Windows Update, Hardware, and Software. Also check for updates through the computer’s manufacturer’s website.
- 1.3 Close all other programs prior to installation.
- 1.4 When using a stand-alone computer, set the Local Area Connection to IP address: **169.254.1.50**, with Subnet mask: **255.255.0.0**.  
Use a crossover network cable between the computer and interface.
- 1.5 If the stand-alone computer has a wireless connection, disable it first, then change the Local Area Connection.  
For Windows XP; go to Start -> Control Panel -> Network Connections -> right click the Wireless Adapter -> Disable.  
For Windows 7; go to Start -> Control Panel -> Network and Internet -> Network and Sharing Center -> Change Adapter Settings (top left corner) -> right click the Wireless Adapter -> Disable.  
For Windows 8 and 10; Right click start and open Control Panel.
- 1.6 The BCSE1000 instrument uses UDP ports 7654 and 7655. Verify with your IT administrator that these ports are available on the network.
- 1.7 **On Windows 10 and above, install the SQL Server Compact Edition (Net Framework 3.5) first, located in each BCSGrain folder, under the folder “sql server compact edition”. Install the “SSCERuntime-ENU” (32-bit) file first, then the “SSCERuntime-ENU-x64” (64-bit) file. If a repair window comes up, it’s already been installed.**

## 2. INSTALLING SWITCH TEST

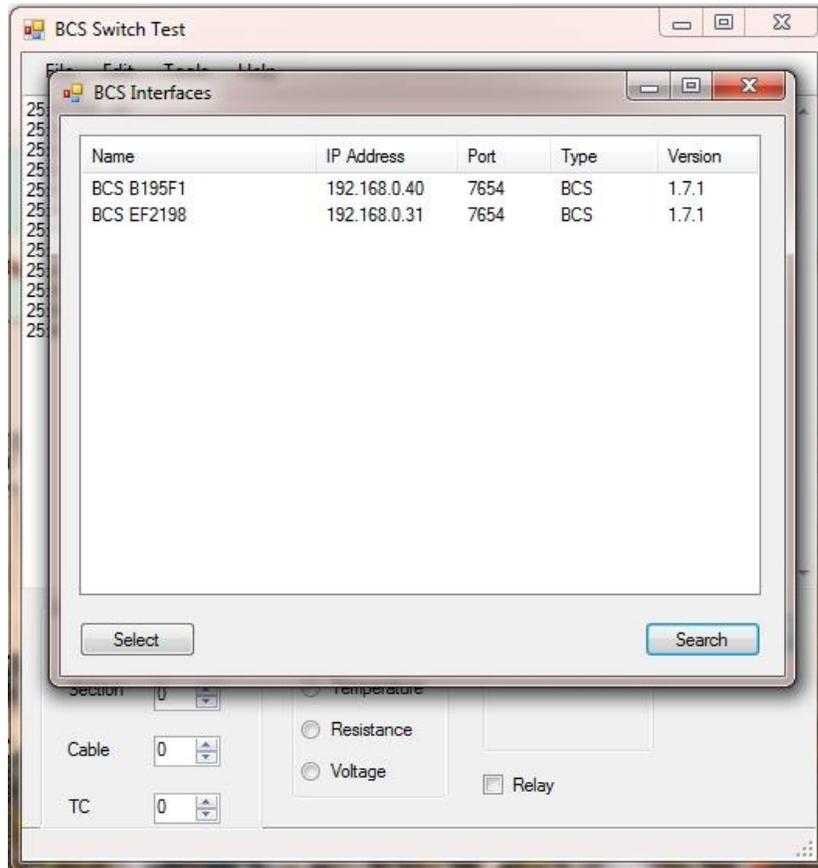
- 2.1 Make sure the BCSE1000 instrument is hooked up and running.
- 2.2 Insert the BCSGrain CD disk/USB stick into the computer.
- 2.3 Make sure the AutoPlay window appears, like the picture below:



- 2.4 Select "Open folder to view files".
- 2.5 If the window above does not appear, right click the "Start" button and select "Explore" (WinXP), "Open Windows Explorer" (Win7), or "File Explorer" (Win8/10).
- 2.6 Right click on the USB or DVD/CD Drive and select "Open".
- 2.7 Double click the "Switch Test" folder.
- 2.8 Run the **Setup.exe** and install the Switch Test program.
- 2.9 If a Windows Firewall message appears, select "Unblock" (Windows XP) or "Allow" (Windows 7 and up). This window will also appear when installing BCSGrain software.

### 3 SWITCH TEST

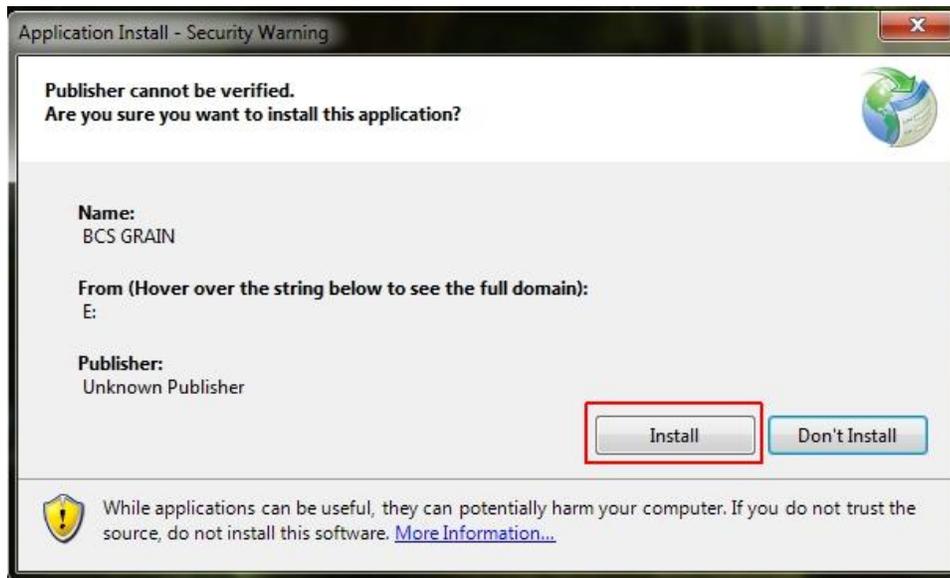
- 3.1 Once Switch Test is installed, two windows will appear; BCS Interfaces and BCS Switch Test.



- 3.2 In the BCS Interfaces window select the “Search” button and make sure the BCSE instrument(s) show up in the window.
- 3.3 Write down the IP address for the instrument(s) showing in the window.
- 3.4 If one or none of the instruments show up, verify power and connections from the instrument to the network or computer.
- 3.5 To verify communication, highlight one of the BCS instruments and click the “Select” button.
- 3.6 On the bottom right click on “Get” and in the window you should get the following line: “rsp&get&type=KT&version=1.#.#&mode=off”. Do the same for the other instruments.
- 3.7 To set the BCSE instrument to a static IP address, go up to Tools -> Address.
- 3.8 Uncheck “dhcp” first then change the IP address and Subnet Mask accordingly.
- 3.9 Select “Update” and close Switch Test.

## 4 INSTALLING AND SETTING UP THE BCSGRAIN SOFTWARE

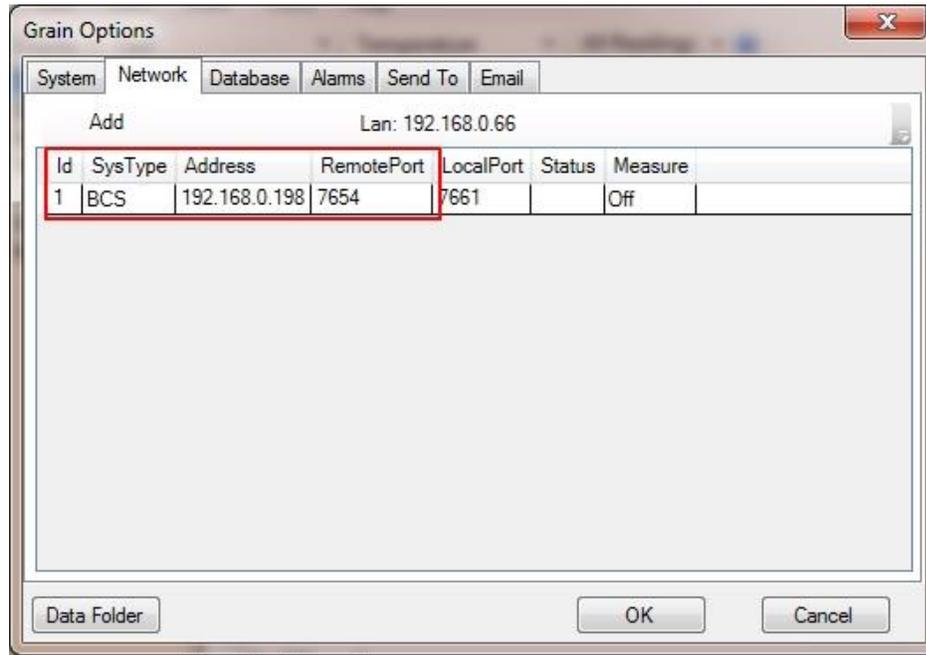
- 4.1 Return to the main files and folders on the USB/CD drive and run **Setup.exe**.
- 4.2 Select “Install” when prompted.



- 4.3 After the program installs it will ask for the Site file. Select “OK”.



- 4.4 A new window will open. Find the USB/CD drive and select it.
- 4.5 Highlight the Site.dat or Grainsite.datx file and select “Open” at the bottom right. This will open the BCSGrain program.
- 4.6 Go to Tools, Options, and select the network tab. It should show the Lan address at the top, which is the computer’s IP address.
- 4.7 Select “Add” to add the BCSE instrument under ID 1. Change the default IP address to the one found in Switch Test. Make sure the Remote Port address is “7654”.
- 4.8 For multiple instruments, keep selecting “Add” and change the default IP addresses.



- 4.9 When done, select "OK" and restart the program. If it says "Ready" in the bottom left corner of the screen, select "Read" at the top and do a "Begin Read". The instrument(s) should start reading temperatures.

## 7 TROUBLE SHOOTING

### UNHANDLED EXCEPTION ERROR MESSAGES; SELECT “DETAILS”

#### 7.1 SQL Server error message:

When this message appears trying to install the software, it means the “SQL Server Compact Edition” needs to be updated. On the disk is a folder called “sql server compact edition “, with 2 files:

1. SSCERuntime-ENU.msi (32bit version)
2. SSCERuntime-ENU-x64.msi (64bit version)

If the computer is a 32-bit version, install the first file only. If the computer is a 64-bit version, install the first file and then the second file.

When done, try re-installing the BCSGrain software.

#### 7.2 Access denied to database file:

When this message appears trying to run the BCSGrain software, it means the User has no permission to write to the database.sdf file. To fix this problem, the administrator must allow full control to the BCSGrain datafolder, located under “C:\ProgramData (Win 7, 8, 10) or C:\Documents and Settings\All Users\Applacation files (Win XP). Be aware this folder is a hidden folder.

#### 7.3 Failed attempt to a socket already in use:

When this message appears when the program opens, it means there are either 2 BCSGrain programs open at the same time or Switch Test and BCSGrain are open at the same time.

Do a “CTRL, ALT and DELTE” and open “Task Manager” to see if there is a SwitchTest/BCSGrain program already running in the background. Close it and restart BCSGrain.

#### 7.4 Error trying to send email:

When this message appears after a read, check the email settings under the “Tools”, “Options”, “Email”, and “Send To” tabs. Under the “Email” tab it should have listed all the Outgoing email server of the default email account on that computer and the Logon information. Check with your IT department for the correct information. The “Send To” tab should have listed the email addresses of the people you want to send the readings. Make sure the “Email Report Summary After Read” is checked.

## **FAIL: INTERFACE CHECK ERROR**

- 7.5 When this message appears after the BCSGrain program opens, it means the program lost communication with the BCSE1000 instrument(s). This could be caused by several issues:
1. The instrument or Ethernet module has a no power.
  2. The network cable is unhooked.
  3. The instrument has a different IP address than the network/computer.
  4. The instrument is still “locked” to another computer.
  5. Wrong network cable.
  6. Network card.
1. Check the power cable and power switch. Make sure it’s plugged in and turned on.
  2. Check the CAT5 cable from the instrument to the network/computer. Make sure it’s plugged in and has a green solid and blinking amber light on the connection.
  3. Under the Network tab in BCSGrain, if the Lan’s IP address is different than the IP address of the instrument, contact your IT department to match the 2 addresses.
  4. Recycle the power of the BCSE1000/Ethernet module.
  5. From the instrument to the computer use a CROSSOVER CAT5 cable. The colors of the wires in one connector of a crossover cable are different than the other one. From the instrument to a network switch or router use a STRAIGHT THROUGH CAT5 cable. Both ends on this cable should be the same colors.
  6. If the Lan address under the Network tab in BCSGrain reads: 127.0.0.1, this means there is no network card assigned to the computer. Could be a faulty card. Contact your IT department.
- 7.6 If there are any other issues, please contact Boone Cable Works & Electronics at (515) 432-2010 or 1-800-265-2010 or visit our website: <http://www.rolfesatboone.com>.