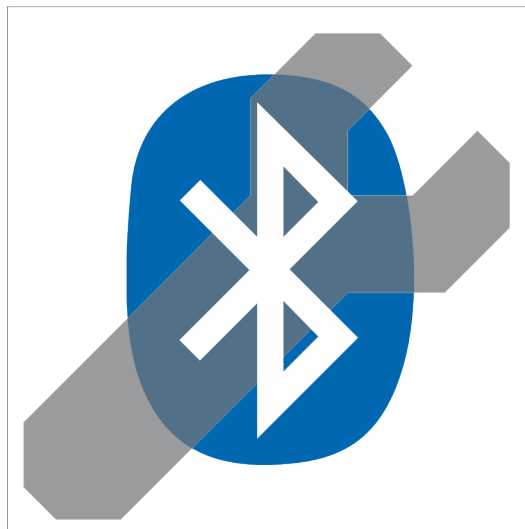# BlueTooth Assistant™

User Guide

Ver. 1.03

B&C Technologies

www.**B**and**C**tech.com

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System Compatibility

Bluetooth Assistant™ is compatible with the following Microsoft Windows® operating systems:

- Windows XP SP3®
- Windows Vista®
- Windows 7®
- Windows 8®
- Windows 10®

Your computer must have either built in Bluetooth support (most modern laptop have this) or a USB Bluetooth adapter – you can buy one from B&C Technologies by ordering part number 370-156. Almost any commercial Bluetooth adapter will work. The Bluetooth Assistant is also useful for programming the EL6 with a USB-Serial Adapter, as it can automatically map a COM port for the EL6 Win 2 software – *no more digging into the Device Manager*!

Description

The handy Bluetooth Assistant utility was designed by B&C to be EASY. Its used in conjunction with the EL6win2 programming software. When launched it finds only B&C's FM7 washing machine controls or any connected USB to serial adapters. Bluetooth Assistant automates installing and cleaning up the Bluetooth drivers, and mapping COM ports. It can also be used to map com ports for older EL6 controls, or any other equipment using serial ports.

Installation

To download the installer, open your browser and go to:
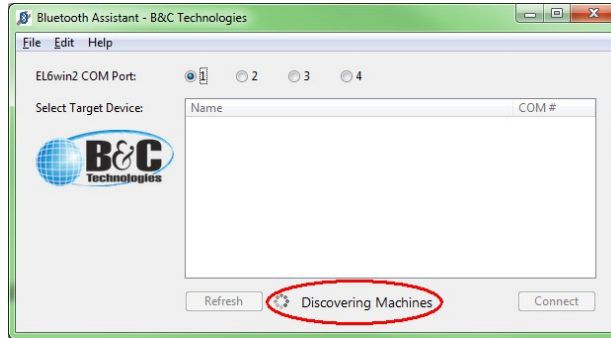
http://bandctech.com/service.php#controlmanuals

Once on the web page, Look for the text FM7 Bluetooth Assistant Software highlighted in blue – that's the download link. Run the installer and follow the installation dialogue. When completed you will find the Bluetooth Assistant icon on your desktop:
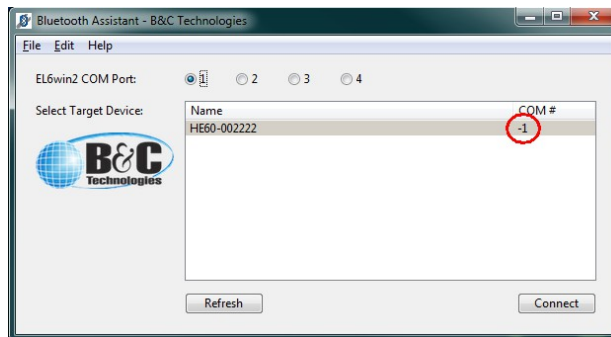
General Operation and Startup

After installation, familiarize yourself with this before moving on to the instructions for your operating systems:
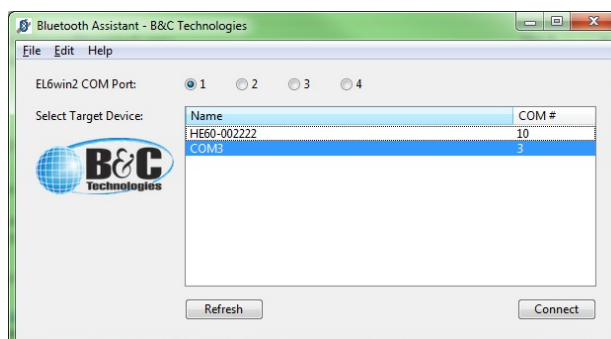
- Make sure you have a computer with built in Bluetooth support or a USB-Bluetooth adapter connected.

- If there are no Bluetooth adapters and no comports, the program will be stuck in the discovery cycle because it can't find anything. In other words, the "Discovering Machines" message flash on briefly and then off.
- Launch Bluetooth Assistant. Be patient while the program starts and discovers available machines. At first you will see the window above - notice the text at the bottom of the window next to the moving circle which says "Discovering Machines". The utility is scanning for washing machines and attaching to them... let it do the work for you.
- Avoid using the system bluetooth dialog to pair with the washing machines – doing so may cause Windows device conflicts.
- After scanning your window will look something like this:

- Occasionally you might get a machine with a comport number of "-1" as circled above. This means windows didn't install the driver properly. To fix it:
  - If you are on Windows 7, Vista, or XP - just press the "Refresh" button and it will usually correct the issue. If refresh doesn't work reboot and try again.
  - If you are on Windows 8 or 10 – you likely didn't pair with the machine properly or the serial service is disabled (see troubleshooting instructions later in this document).
  - This also happens if your computer cannot get a strong signal from the washing machine – make sure you are within 10 feet of the washer you are programming.
- When everything is ready to go the dialogue will look like this example:

- In the example above, you can see that FM7 equipped machines will show up listed by model and serial number (ex. "HE60-002222" in the picture above). Other com ports, like an adapter used to program the EL6, will show up identified by the com port number (ex. "COM3" in the picture above). To find the model and serial number of any B&C washer-

extractor, simply open the door and look at the serial sticker by the hinge.

- To connect to a machine or com port, simply select it in the list and then click "Connect". In the example below, HE60-002222 is mounted on com10, and mapped to com1 for the EL6 software or other applications to access it.

- If you need to use a com port other than 1 for your EL6 software, simply use the "1, 2, 3, 4" radio buttons to make your selection before clicking connect.
- Now that you've connected to your washer or serial port, launch the EL6win 2 or other programming application and program your machine.
- Don't forget to enter the communication function code before attempting to program the machine... start+reset 144.

Operation – Pairing in Windows7 and Windows8

To Communicate with a bluetooth device you must "pair" with it to create a secure link. There are two easy ways to do this: 1) Select a device in the list (click on it) and then click "connect". When you begin using (sending or receiving data) that device, windows will initiate the pairing process for the selected device. 2) After initial discovery is complete, click refresh. This will cause windows to pair with each discovered device, after which they will all be ready to go.

- During this process you will see a system notification at the task bar saying "A bluetooth device is trying to connect". This is the pairing dialogue. When you see that message, click on it and the following dialogue box will come up. If you are prompted to enter a pairing code, it will always be "1234", then click "Next" to confirm that you want to pair to the washer and then "Close" to close the pairing dialogue. *Note that newer FM7's do not use a pairing code process.*

- You will be prompted to pair with each machine once.
- If you have multiple machines to program do this:
  - select the machine or com port to program
  - click connect
  - program the machine
  - click disconnect

- repeat

Follow this concise procedure to program machines under Windows XP, Vista, 10:

1. Close the EL6win2 program
2. Close Bluetooth Assistant
3. Open the bluetooth panel and "unpair" or "forget" each washing machine.
4. Cycle power on all FM7 equipped washing machines (turn off - wait 5 sec. - turn on).
5. On the windows task bar next to the clock, click on the up arrow to "show hidden icons".
6. Click on the Bluetooth icon.
7. Select "Show Bluetooth Devices" in the menu to open the Windows 7 Bluetooth Devices panel.
8. Select "Add a Device" and add a washer you wish to work with, repeat this until all desired washers are added.
9. Repeat this for each washer: Right click on the washer icon, select properties. Click on the "Services" page, make sure there is a check mark next to the "Serial port (SPP)" item if it shows up. Click "apply". Go to the Hardware page and make sure a COM port is showing up in the "Device Functions" list. If there are no ports or no services listed, close the panel, un-pair the device, and re-pair it.
10. When you have ports and services for all washers, un-pair with each washer so no devices are listed in the Bluetooth Devices panel. This may seem odd but it works.
11. You have no cleaned up the bluetooth settings which were not set up properly by windows. From this point Bluetooth Assistant should behave normally.
12. Close the Bluetooth Devices panel, do not minimize it. You should never have it open while Bluetooth Assistant is running.
13. Open bluetooth Assistant. You should now have comports for all washers. If any show up as negative numbers, hit refresh and the program should take care of it.
14. In Bluetooth Assistant click on the machine you wish to talk to and click the "connect" button".
15. Open EL6win2, make sure the correct com port is selected (1-4), press start+reset to enter the 144 communication code, and program your machine.
16. After programming, make sure you wait for the FM7 to reset itself and return to the "Enter Prog>" prompt. If this doesn't happen (i.e. the machine is stuck on the "Device > FM7" prompt), you didn't get a complete data transfer.
17. You can now bounce back and forth between Bluetooth Assistant and EL6win2 and program additional machines by remapping on the fly. Make sure you don't close Bluetooth Assistant until you are finished with all machines.
18. When you finish programming, close EL6win2
19. Close Bluetooth Assistant

If everything looks good in Bluetooth Assistant, but EL6win2 doesn't talk to the FM7, do this first... Cycle power on the FM7, put it back in Com mode (enter 144) and try again. Most of the time this takes care of the issue and the data will transfer.
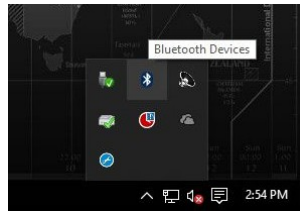
TIP 1: Make sure you don't open or close Bluetooth Assistant while using the Windows "Bluetooth devices" panel. This can result in corruption of Bluetooth Device profiles in Windows.

TIP 2: Rather than reboot the computer is may be much easier to restart the bluetooth stack by going here: Start Menu > Type "Services" in the search and press enter to launch the "services" panel > Find "Bluetooth Support Service" > right click on it and select "restart". The bluetooth service will be restarted and the bluetooth stack cleared.
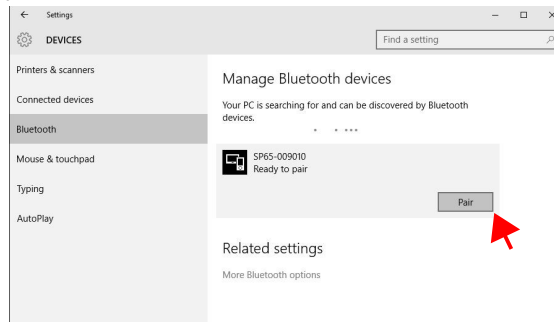
Operation – Pairing in Windows10

To pair with a machines under Windows10 you must use the system dialogue as follows – this must be done prior to launching Bluetooth Assistant. Follow these steps:
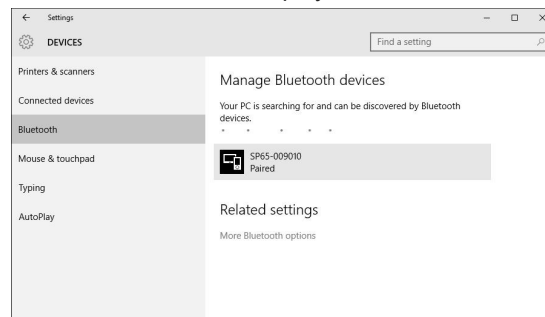
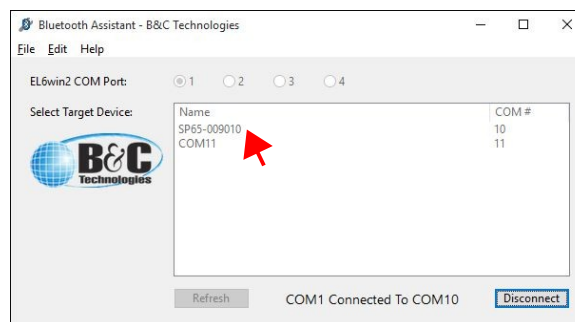- Locate the Bluetooth Devices panel on your desktop start bar.   Click to open it.

- In the Bluetooth Devices panel select the machine you wish to program and pair with it by pressing the pair button. Repeat this for each machine you plan to work with.

- When you have successfully paired to the device the display will look like the following example.

- Make sure to repeat this process for each machine you need to work with.
- Now open Bluetooth Assistant. It will see each machine you paired with and show it in the window.

- You can now select the device you wish to program, click connect, and then work with it.
- When you close Bluetooth assistant it will unmap all the washing machines for you and clean up.

Note: If you open Bluetooth Assistant first under Windows 10, it will seem to install all the drivers properly and map the machines. The will not work unless you follow the proceedure above.

Follow this concise proceedure to program machines under Windows 8 or 10:

1. Close the EL6win2 program
2. Close Bluetooth Assistant
3. Open the bluetooth panel and "unpair" or "forget" each washing machine.
4. Turn off all washing machines (remove power or press the e-stop button).
5. Turn on all washing machines (restore power) - don't worry, they won't interfere with each other.
6. Make sure you are within 15 feet of the machine(s) you intend to program.
7. Open the bluetooth panel and pair with each washer. Do not proceed until the status of all washers changes from "Connected" to "Paired" in the "Manage Bluetooth devices" panel.
8. At the bottom of the "Manage Bluetooth devices" panel, click the "More Bluetooth options" link to open a "Bluetooth Settings" window. In that window select the "COM Ports" page. (Note that the "Bluetooth Settings" panel sometimes opens behind the "Manage Bluetooth devices" panel - go figure...)
9. Make sure each machine you paired with has com ports associated with it before proceeding. If a machine is missing comports, you must unpair with the machine, cycle its power, re-pair, then check if its COM ports show up on the "Bluetooth Settings" window. If all machines have COM Ports proceed to the next step.
10. CLOSE the windows "Manage Bluetooth devices" panel - don't minimize it.
11. Open Bluetooth Assistant. Let it find everything and crossreference the com ports. Only use the COM ports associated with machines.
12. If everything is ok you shouldn't have any devices highlighted in yellow with a -1 comport number.
13. In Bluetooth Assistant click on the machine you wish to talk to and click the "connect" button". If you close Bluetooth Assistant for any reason at this point, you should close everything and start over.
14. Open EL6win2, make sure the correct com port is selected (1-4), press start+reset to enter the 144 communication code, and program your machine.
15. After programming, make sure you wait for the FM7 to reset itself and return to the "Enter Prog>" prompt. If this doesn't happen (i.e. the machine is stuck on the "Device > FM7" prompt), you didn't get a complete data transfer.
16. You can now bounce back and forth between Bluetooth Assistant and EL6win2 and program additional machines by remapping on the fly. Make sure you don't close Bluetooth Assistant until you are finished with all machines.
17. When you finish programming, close EL6win2
18. Close Bluetooth Assistant

If everything looks good, but EL6win2 doesn't talk to the FM7, do this first... Cycle power on the FM7, put it back in Com mode (enter 144) and try again. Most of the time this takes care of the issue and the data will transfer.

TIP 1: Make sure you don't open or close Bluetooth Assistant while using the Windows "Manage Bluetooth devices" panel. This can result in corruption of Bluetooth Device profiles in Windows.

TIP 2: If you begin getting an error saying "Cannot Parse Com Enumerator" when you launch Bluetooth Assistant you can usually click "ok" and continue past the error. Reboot your computer and the error should go away.

<u>Operation – Clean Up</u>

- When you're all finished, click the red x (close window button) in the upper right corner of the program window. At the bottom of the window, the message will change to "Cleaning Up". This tells you that the program is asking Windows to clean up the Bluetooth devices and drivers, and delete paired machines. This usually only takes a few seconds, but may take a 1 or 2 minutes on some computers – be patient and let it do its thing and the program window will close on its own.
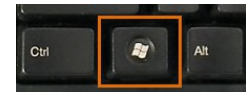

<u>Tips and Hints</u>

Here are some extra tidbits of help:

- In Windows 7 avoid using the windows system "Bluetooth Devices" dialogue to manually connect to your FM7 controls. This can create conflicts which the Bluetooth Assistant cannot clean up.

- Avoid installing the bluetooth software which comes with some Bluetooth USB adapters. Just connect the adapter and let windows find its own driver for it. The 3rd party utilities sometimes replace the windows system components and create compatibility problems with other applications like Bluetooth Assistant.

- In Windows8 and Windows10 the system dialogues may have slightly different messages and appearances. But operation is generally the same.

- If you need to open the Windows Device Manager, there is a handy link in Bluetooth Assistant's "Help" menu

- Don't use Bluetooth Assistant's "Clear Com Ports" function unless its really needed. Having big com port numbers won't usually cause any real problems.

Troubleshooting

Following are some solutions to problems:

- If you need help with something not listed here, call us! One of our laundry geeks will be thrilled to help get you going! 850-249-2222

- A machine is stuck with a comport number of "-1". In this case the windows system driver for the device is either corrupted or was improperly installed. To correct it try these actions:
    1. Click the "Refresh" button to rescan for devices, wait for the rescan to finish. Did that fix it? If not continue...
    2. Reboot the computer, then relaunch Bluetooth Assistant, if this doesn't work, go to the next step...
    3. Open Windows Device Manager using the shortcut in Bluetooth Assistant.
    4. Look for drivers showing up with a yellow triangle and exclamation point, select and delete them
    5. Look for drivers showing up as unknown or "Other Devices", select and delete them
    6. Restart your computer and start over.

- If your com port numbers go out of range (sometimes greater than 255) then take these steps:
    1. Open Bluetooth Assistant
    2. Select Help
    3. Select "Clear Com Ports"
    4. This resets Window's "comport reservation system" to clear things up.

- If your computer constantly wants to attach to the internet to install drivers, try this to speed things up:
    ○ Windows 7 – right click on "Computer" in the system "Start" menu and select "properties"
    ○ Windows 8 – Press the Windows key and the X key together, and select System from the pop up menu
    ○ Select "advanced system settings" on the left
    ○ Select the "Hardware" Tab
    ○ Select "Device Installation Settings"
    ○ Select "No, let me choose what to do"
    ○ Select "Install driver software from Windows Update if its is not found on my computer"

This is what the above steps look like in Windows7: