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Configuration Tool for Base Units

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1.0 **SmaRT Connect™ 2.3.03**

SmaRT Connect 2.3.03 (SC2.3.03) provides a convenient means for a user to directly configure a SmaRT Base Unit with a PC or laptop without the need for the user to open and possibly violate the integrity of the base unit enclosure. Using SmaRT Connect 2.3.03, a user can custom program how the base unit outputs respond to SmaRT Handheld Remote button commands.

SC2.3.03 also provides the user with the means to retrieve current information stored on the base unit including:

- base unit ID
- first associated ID
- current base unit channel number

**Requirement**

A computer with .NET 4.0 Framework.

See Appendix A for information on checking compatibility of SmaRT Connect 2.3.03 with the computer being used.

2.0 **Configuration and Cable Installation**

Depending on your particular requirements, SmaRT Connect 2.3.03 is shipped as one of several possible configuration packages, some examples of which are shown in the table below:

*Table 1. Configuration Package Example*

<table>
<thead>
<tr>
<th>Configuration Package 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SmaRT Connect 2.3.03 USB to Deutsch Connector Cable for BU-x08D Family of SmaRT Base Units</td>
<td></td>
</tr>
<tr>
<td>SmaRT Connect 2.3.03 User Guide</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configuration Package 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SmaRT Connect 2.3.03 USB to Deutsch Connector Cable for BU-x18XF Family of SmaRT LVD Base Units</td>
<td></td>
</tr>
<tr>
<td>SmaRT Connect 2.3.03 User Guide</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configuration Package 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SmaRT Connect 2.3.03 USB to Deutsch Connector Cable for BU-xH6R Family of SmaRT Base Units</td>
<td></td>
</tr>
<tr>
<td>SmaRT Connect 2.3.03 User Guide</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Configuration Package 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SmaRT Connect 2.3.03 USB to Deutsch Connector Cable for BU-xH16R Family of SmaRT Base Units</td>
<td></td>
</tr>
<tr>
<td>SmaRT Connect 2.3.03 User Guide</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** If the USB cable driver is not automatically found when you plug the cable into your computer (Plug-and-Play), you will have to download it from:

http://www.ftdichip.com/Products/ICs/FT230X.html
2.1 Configuration 1 (for BU-xH8D)

1. Make sure the USB driver is installed on the computer.
2. Connect the USB terminal of the adaptor (Figure 1) to a USB port on the computer.
3. Connect the gray SmaRT cable connector into P1 of the BU-xH8D base unit. The computer will provide power to the base unit through the SmaRT Connect connector.
4. Use the SmaRT Connect software to configure your base unit.

2.2 Configuration 2 (for BU-xH18XF)

1. Make sure the USB driver is installed on the computer.
2. Connect the USB terminal of the SmaRT Connect adaptor (Figure 1) to a USB port on the computer.
3. Connect the gray and black SmaRT cable connectors into the P1 and P2 respectively—the connectors are keyed to avoid cross connection—of the BU-xH18XF base unit. The computer will provide power to the base unit through the SmaRT Connect connectors.
4. Use the SmaRT Connect software to configure your base unit.
2.3 Configuration 3 (for BU-xH6R)

1. Make sure the USB driver is installed on the computer.
2. Connect the USB terminal of the SmaRT Connect adaptor (Figure 1) to a USB port on the computer.
3. Connect the green and brown SmaRT cable connectors into the P1 and P2 respectively—the connectors are keyed to avoid cross connection—of the BU-xH6R base unit. The computer will provide power to the base unit through the SmaRT Connect Connectors.

✓ Note: If the base unit keeps resetting, plug the wall wart (line power adapter) into the side of the SmaRT Connect enclosure.

4. Use the SmaRT Connect software to configure your base unit.

2.4 Configuration 4 (for BU-xH16R)

1. Make sure the USB driver is installed on the computer.
2. Connect the USB terminal of the SmaRT Connect adaptor (Figure 1) to a USB port on the computer.
3. Connect the green and brown SmaRT cable connectors into the P1 and P2 respectively—the connectors are keyed to avoid cross connection—of the BU-xH16R base unit. The computer will provide power to the base unit through the SmaRT Connect Connectors.

✓ Note: If the base unit keeps resetting, plug the wall wart (line power adapter) into the side of the SmaRT Connect enclosure.

4. Use the SmaRT Connect software to configure your base unit.
3.0 COM Port Selection

**Note:** You may want to check which COM ports are currently in use prior to connecting your communication cable and powered Base Unit. You can then connect the BU communication cable and check to see which COM port is added to determine which should be used with the configuration tool in case multiple port options are presented to you when the Port menu (Step 6) is opened.

1. From the **Start Menu** right-click My Computer; the menu in Figure 2 displays.

![Figure 2. Working from the Start Menu](image)

```plaintext
Figure 2. Working from the Start Menu
```
Configuration Tool for Base Units

1. Click **Manage**. The **Computer Management** screen shown in Figure 3 displays.

![Figure 3. Computer Management Screen](image)

2. Click **Device Manager**. A Computer Management screen similar to that in Figure 4 displays. Click the plus sign in front of Ports. In this case, COM3 is the only port shown.

![Figure 4. Click Device Manager](image)

3. Power up the base unit by plugging the cable into the computer.
4. Double-click the SmaRT Connect shortcut. The **Main Console Window** displays as shown in Figure 5.

![Figure 5. Main Console Window](image)

5. Click on the Port menu selection. Select the COM port for the SmaRT connector cable. See Figure 6.

![Figure 6. Port Menu Example](image)
3.1 Testing the Serial Port

SmaRT Connect 2.3.03 is able to test the serial port connection to a given SmaRT base unit. The following is used to test the serial port:

1. Connect the SmaRT Connect cable to the SmaRT base unit.
2. Select the appropriate COM port.
3. Select the serial port menu and then select Serial Test.

Select Port then Serial Test.

![Select Port then Serial Test](image1)

Confirmation

![Confirmation](image2)

Figure 7. Testing Serial Port Connection
4.0 Select Handheld and Base Unit

1. Pull back the boot on the handheld remote and locate the label that is located near the top of the handheld. Note the handheld product information. Example: HH-9H10

2. Click the **Handheld menu selection** and select the handheld desired for configuration to the base unit. The program is frequency independent, so the handheld frequency is represented with an x rather than a 2 — which represents 2.4GHz — or a 9, which represents 900MHz. See Figure 8.
3. Look at the base unit label and determine the base unit model number.

4. Click the **Base Unit menu selection** and select the base unit desired for configuration with the handheld. The program is frequency independent, so the handheld frequency is represented with an x rather than a 2, which represents 2.4GHz — or a 9, which represents 900MHz. See Figure 9.
5.0 Configuring the Devices

It is up to the user to define each output channel that will be associated to a particular handheld button press.

To select a color for a button, the user must click on the button with the mouse. The colors that appear are BLACK, GREEN, and RED.

- BLACK indicates a ‘DO NOT CARE’ state that has no bearing on the output.
- GREEN indicates that the button must be pressed in order for the button to activate.
- RED indicates that the button must NOT be pressed for the button to activate.

1. Figure 10 shows an example of Channel 1 being turned on by pressing Button 1. After download (see Section 6.1), the channel will activate if Button 1 is pressed and when Button 2 is NOT pressed.

2. See Figure 10. After configuring Channel 1, click on the tab labeled CH2 for to configure Channel 2. This step is repeated for each channel configured—that is, tabs CH1 through CH6.
3. Figure 11 shows Channel 2 being configured as a latching output, where latching is a maintained output until a button press or a timeout occurs to unlatch the output. The output is latched by pressing Button 3 and is unlatched by pressing Button 4.

4. If an output is not to come on, click the Disable Channel checkbox. Figure 12 shows Channel 3 is disabled.

5. Figure 12 shows an option using the OR radio button. When the OR option is chosen, an output will active while a button is pressed or when another chosen button is pressed.
6.0 Transfer and Save Operations

Once the unit is configured as desired, the configuration can either be saved and/or transferred.

6.1 Transfer Operation

The **Transfer** operation provides a means to download the current configuration into the chosen base unit. Before transferring, ensure the base unit is connected to the COM port selected earlier for use. To Transfer:

> **Note**: The transfer process may take minutes to transfer depending upon which base unit is selected.

1. Select the **Configuration** menu item. This displays a drop-down menu from which to make a selection. Select **Transfer**. The configuration downloads to the base unit.

2. Click **OK** when the pop-up displays. You should notice that the base unit resets when the transfer is complete.

*Figure 13. Transfer Operation*
6.2 Save Operation

The **Save** operation provides a means to save the current configuration to the computer.

1. Select Save from the Configuration drop-down menu.

![Select Save from the Configuration Menu.](image)

Choose a file name, then click Save.

![Choose a file name, then click Save.](image)

![Figure 14. Save Operation](image)

2. Choose a directory/folder location on the computer to save the file. Choose a file name and then click the Save button.

Saving the configuration file allows you to load it to the base unit at a later time.

6.3 Save/Transfer Option

The Save/Transfer option operates as a sequential operation. That is, the file is saved and then, provided the cabling is in place, transfer of the configuration is made to the base unit.
7.0 Other Operations

Other operations are added functionality for beneficial use of SmaRT Connect 2.3.03. These operations include loading an existing configuration and reading an existing configuration from the base unit.

✓ Note: Go through 3.0 COM Port Selection and 4.0 Select Handheld and Base Unit before attempting to load or read a configuration from a base unit. This will ensure the correct information is loaded to SmaRT Connect 2.3.03.

7.1 Loading a Configuration File

Previously saved configuration files can be uploaded to SmaRT Connect 2.3.03. To load a configuration file:

1. Click Load from the File menu.
2. Choose the location in which the configuration file is saved.
3. Select the file. Click Open. See Error! Reference source not found..

Figure 15. Loading a Configuration File
7.2 Reading a Base Unit Configuration File

A base unit configuration can be uploaded to SmaRT Connect 2.3.03. Afterwards the file can be saved and/or modified and saved. To Read from the base unit:

1. Much like Transfer, a Read operation may take a few minutes depending on the particular base unit chosen.

2. After the Read is complete, click the popup OK.

Figure 16. Reading Configuration Information From the Base Unit

The information obtained can be saved or modified as desired. Modification can be done in active screen (Figure 16-2).
Appendix A: .NET Framework Compatibility

SmaRT Connect 2.3.03 uses the .NET Framework to execute its program. To check the compatibility of SmaRT Connect with the computer in use you must find out whether or not the correct .NET Framework is installed. To do so, click on the following link or copy it in a browser to go to the Microsoft Developer Network Website and follow the instructions on the Webpage.


If the proper .NET Framework is not installed on the computer, you can use the following link to download the installer and necessary software from the Microsoft Download Center. Before downloading the .NET Framework, be sure to check computer compatibility by clicking the System Requirements information section of the Website.


Figure 17. Microsoft Download Center Screen
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Visit our Web site at: www.cervisinc.com

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