APPLICATION BULLETIN | TECHNOLOGY

C2G USB SUPERBOOSTER COMPATIBILITY WITH INTERACTIVE WHITEBOARDS
Effective: 04/15/14

OVERVIEW
Recently, several C2G customers have experienced performance challenges when using superbooster extenders in conjunction with interactive whiteboards. Symptoms of this include periodic dropped signals and/or periodic spikes when using these products together. After extensive testing and field research, the cause of this issue has been isolated to a compatibility conflict between the chipset used in the superbooster and the chipset used in the integrated USB hub of certain interactive whiteboards.

USB signals have a native length limitation of 16.4 feet. Products such as USB extenders, or superboosters, use an active chipset as an integrated component to boost the signal so that it can be carried far longer than 16.4 feet. Many models of interactive whiteboards, regardless of manufacturer or brand, use an integrated USB hub to control the data signals to and from the appropriate device(s) connecting to the whiteboard—such as laptops, projectors or other devices.

There are a limited number of USB chipset manufacturers used by nearly every manufacturer of USB hubs, extenders, superboosters and similar products. Therefore when conflicts exist, such as in this case, it is highly likely that all extender products and interactive whiteboards will be affected, regardless of the manufacturer.

MODELS AFFECTED
C2G customers have experienced this issue when using the following equipment together with any interactive whiteboard which features an integrated USB hub in a single application.

C2G USB SUPERBOOSTER EXTENDERS
USB 2.0 Superbooster Extender Wall Plates and Dongle Combinations

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>29341</td>
<td>USB 1.1 Superbooster Extender</td>
</tr>
<tr>
<td>29342</td>
<td>USB 1.1 Superbooster Wall Plate Transmitter</td>
</tr>
<tr>
<td>29343</td>
<td>2-Port USB 1.1 Superbooster Wall Plate Receiver</td>
</tr>
<tr>
<td>29344</td>
<td>USB 1.1 Superbooster Extender Wall Plate Kit</td>
</tr>
<tr>
<td>29345</td>
<td>USB Superbooster Extender Wall Plate Kit</td>
</tr>
<tr>
<td>53877</td>
<td></td>
</tr>
</tbody>
</table>
MODELS AFFECTED (Continued)

C2G USB SUPERBOOSTER EXTENDERS

USB 1.1 Keystone Extender Insert – Transmitter

1-Port USB 1.1 Superbooster Dongle – Receiver

1-Port USB 1.1 Superbooster Dongle RJ45 Female to USB B Male – Receiver

2-Port USB 1.1 Superbooster Dongle – Receiver

4-Port USB 1.1 Superbooster Dongle – Receiver

USB 1.1 Superbooster Dongle – Transmitter

IDENTIFYING AND CORRECTING THE ISSUE

Please note that there are several important considerations to keep in mind when identifying this issue in a particular installation:

1. Not all interactive whiteboards use an integrated USB hub.
2. It is possible that even interactive whiteboards within the same series or product family may use different chipsets. Therefore, the issue may occur on one board but not another.
3. The issue does not occur 100% of the time, even when using the superbooster extenders and interactive whiteboards previously mentioned.

How to identify issues in a current installation
- Sporadic performance issues such as dropped signals or “frozen” display content are known to occur in a small percentage of installations when using USB extension products with interactive whiteboards.

How to avoid issues on planned installations
- If using an interactive whiteboard that has an integrated USB hub—use C2G product #29338 USB 1.1 Enhanced Superbooster.
- Contact the manufacturer of the interactive whiteboard being used for guidance on 1) bypassing the USB in the interactive whiteboard or 2) alternative solutions provided by the manufacturer. Note that the primary use for the USB hub is to connect speakers to the board. If audio is not required for the application, bypassing the USB hub on the interactive whiteboard may be a viable option.

NOTE: Please contact the whiteboard manufacturer prior to making any modifications to the whiteboard to ensure that the warranty is not inadvertently voided.
FREQUENTLY ASKED QUESTIONS

Q. I am experiencing performance issues when using interactive whiteboards with the USB products previously mentioned. What should I do?
A. Contact C2G Technical Support at 1.800.506.9607 or visit http://www.cablestogo.com/contact/technical-support for email and live chat options.

Q. How can I tell if the whiteboard I am using has an integrated USB hub that might be affected?
A. Please refer to the interactive whiteboard user manual or contact the board manufacturer directly to learn if the whiteboard utilizes an integrated USB hub.

Q. I am planning an installation, what should I do to ensure I do not run into this issue?
A. For planned installations, please do one of the following:
   - If using an interactive whiteboard that has an integrated USB hub—use C2G product #29338 USB 1.1 Enhanced Superbooster.
   - Contact the manufacturer of the interactive whiteboard being used for guidance on 1) bypassing the USB in the interactive whiteboard or 2) alternative solutions provided by the manufacturer. Note that the primary use for the USB hub is to connect speakers to the board. If audio is not required for the application, bypassing the USB hub on the interactive whiteboard may be a viable option.

Q. I am using the C2G USB extender products with interactive whiteboards, but I am not experiencing any issue. Can I expect that this may occur at some point in the future?
A. If the installation has been in operation for longer than one month and no performance issues are being experienced, there is little probability that the issue described here will suddenly appear. However, if you are planning to upgrade or change any of your interactive whiteboards, please refer to question #3 above.

Q. I am using USB extension products from a manufacturer other than C2G with interactive whiteboards. Should I be concerned?
A. If this is an existing installation that has been in operation longer than one month, there is a very low probability that any issues will occur. However, because of the limited number of chipset manufacturers, most, if not all, USB extension hardware, regardless of manufacturer, may be affected. Therefore, it is recommended that you work with your connectivity solution provider to determine the appropriate solution.

Q. I plan to use the USB 2.0 Superbooster with a projector. Should I be concerned there will be an issue?
A. No, there will not be an issue. Projectors do not have an integrated USB hub, which is the source of compatibility issues when used with the USB 2.0 Superbooster.

Q. Who should I call with additional questions about this issue?
A. Contact C2G Technical Support at 1.800.506.9607 or visit http://www.cablestogo.com/contact/technical-support for email and live chat options.