Wireless Communication Card for TB7200/7600 Series Communicating Thermostats

APPLICATION

The Honeywell wireless communication card (TB-VWG-APP-1014) and related WirelessStatNetwork.jar driver file are designed for use with WEBs-AX controllers to integrate Honeywell TB7200 and TB7600 Series wireless thermostats into a WEBs-AX building control system. This card allows the integrator to work in the familiar Workbench tool set using any of the TB7200 and TB7600 Series wireless thermostats.

The wireless communication card and TB7200 and TB7600 Series thermostats use ZigBee® wireless mesh. The wireless thermostats are ideal for retrofit applications where the addition of communicating field bus wiring in the building space is difficult or cost prohibitive.

This document covers the mounting of the wireless communication card in a WEBs-AX controller.

BEFORE YOU BEGIN

Included in the wireless card package you should find the following items:

- The wireless communication card
- A local antenna

A #2 phillips screwdriver is required for installation.

To add the Honeywell wireless thermostat network to a WEBs system, you need two .jar files for the WEBStation-AX. You can download these files from the Honeywell Buildings Forum at buildingsforum.honeywell.com.

.jar Files Needed:

- Wireless Thermostat Network Driver: WirelessTstat.jar, version 4.0.4.8 or greater.
- Wireless Thermostat Device and Point Configuration: Wireless TstatDevices.jar, version 4.0.4.8 or greater.

More Information

We recommend downloading the Honeywell Wireless Installation and Integration Reference Guide for the TB7200 and TB7600 Series Thermostats (Form No. 63-4522) from http://customer.honeywell.com before you begin installation.
INSTALLATION

**CAUTION**

Erratic System Operation Hazard.

Failure to follow proper wiring practices can introduce disruptive electrical interference (noise). Keep wiring at least one foot away from large inductive loads such as motors, line starters, lighting ballasts, and large power distribution panels.

Shielded cable is required in installations where these guidelines cannot be met.

Ground shield only to grounded controller case.

**IMPORTANT**

All wiring must comply with local electrical codes and ordinances or as specified on installation wiring diagrams.

- Power to the WEBs-AX controller must be OFF when installing or removing the wireless communication card or damage will occur! Also, be careful to plug the wireless communication card into its connector properly (pins aligned).
- Only one the wireless communication card can be installed in a WEBs-AX controller. Always install the card in option slot 1 in WEB-2xx and WEB-6xx models. Option slot 1 or 2 can be used on WEB-7xx models.

Mounting the wireless communication card on a WEBs-AX controller

1. Remove power from the controller.
2. Remove the controller cover. To do this, press in the four tabs on both ends of the unit, and lift the cover off.
   - **NOTE:** If other expansion accessory modules are plugged into the controller, you may need to slide them away from the unit to get to the cover tabs.
3. Remove the battery and bracket assembly by taking out the four screws. (Fig. 1)
4. Unplug the battery from the connector on the controller.
5. Remove screws and battery assembly.
6. Remove the front blanking end plate for option slot 1 (Com1) on WEB-2xx and WEB-6xx controllers and option slot 1 or 2 (Com3 or Com4 in the WEBStation-AX) on WEB-7xx controllers.
7. Carefully insert the pins of the wireless communication card into the appropriate socket. The mounting holes on the option board should line up with the standoffs on the base board. If they do not, the connector is not properly aligned. Press until the option card is completely seated.
8. Plug the battery cable back into the battery connector on the controller.
9. Set the battery and bracket assembly back over the option card slots, with the mounting holes aligned with the standoffs.
10. Re-fasten screws through battery bracket the four holding screws through. **DO NOT** over tighten.
11. Replace the controller cover.
12. Install the antenna. (Fig. 2)

![Fig. 1. Removing battery and bracket assembly](image1)

![Fig. 2. Antenna location](image2)
STATUS LED INDICATORS

See the table below for status indicators on the wireless communication card.

**Table 1. Status LED Indicators**

<table>
<thead>
<tr>
<th>Indicator Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 200ms short blink</td>
<td>Power on</td>
</tr>
<tr>
<td>2 x 200ms short blinks</td>
<td>Power on and card memory initialized properly</td>
</tr>
<tr>
<td>3 x 200ms short blinks</td>
<td>Power on, card memory initialized properly and serial communication with WEBs-AX controller main board active</td>
</tr>
<tr>
<td>4 x 200ms short blinks</td>
<td>Power on, card memory initialized properly, serial communication with WEBs-AX controller main board active and wireless networks started successfully</td>
</tr>
<tr>
<td>4 x 200ms short blinks and 1 x 1500ms long blink</td>
<td>Power on, card memory initialized properly, serial communication with WEBs-AX controller main board active, wireless networks started successfully and wireless communication with wireless thermostats active</td>
</tr>
</tbody>
</table>

SPECIFICATIONS

**Thermostat Compatibility:** TB7200 and TB7600 Series wireless thermostats

**Network Protocol:** ZigBee wireless mesh

**WEBs-AX Controllers:** Compatible with WEB-2xx, WEB-6xx, and WEB-7xx

**Platform:**
- WEB-2xx and WEB-6xx - WEBStation-AX 3.0 or later
- WEB-7xx - WEBStation-AX 3.5 or later

**Number of Thermostats Supported:**
- WEB-2xx - up to 30 wireless thermostats
- WEB-6xx & WEB-7xx - up to 50 wireless thermostats

**NOTE:** The maximum number of thermostats supported by a WEBs-AX controller is dependent on resources available at the controller.

**Connections:** 2 x 15 gold plated header for serial connection to compatible WEBs-AX controller and SMA connector for antenna.

**Input:** Reset button

**Status LED:** 1 green LED

**Board Dimensions:** 2.2 in. x 1.75 in. (excluding antenna)

**Approximate Shipping Weight:** .02 lb

**Agency Approvals:** Compliant with FFC Part 15, Subpart C; C-Tick: EN55022:2006, IEC 61326-1:2005
WIRELESS COMMUNICATION CARD FOR TB7200/7600 SERIES COMMUNICATING THERMOSTATS

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Electronic controls are static sensitive devices. Discharge yourself properly before manipulation and installing the Honeywell wireless gateway.

Honeywell, Inc. may not be held liable for continued reliable, or robust operation of any and all wireless based devices. Although Honeywell has taken many precautions in assuring the robustness of the TB7200/7600 Series wireless thermostat product line and associated network access point. Please note; future application of additional wireless devices utilizing the same or similar channels and / or frequencies may degrade performance of overall system and / or reliability.

Non-approved modifications or changes made to the wireless communication card or wireless thermostats may void the FCC compliance of the and wireless thermostats.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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