

White Paper

Web Mountain's SW2 Universal Dimming Transceiver Base and Link 241

Web Mountain's SW Universal Dimming Transceiver Base is an extremely flexible and powerful product. By applying many different rocker faceplates, the unit can be configured for many different functions.

However, in order to implement this level of sophistication, functionality and flexibility, the SW-2 has been implemented in such a manner that it can lead to confusion. This white paper will explain this implementation.

The Web Mountain SW-1 dimmer can accept either a single rocker or a dual tall rocker (where the left most rocker controls the local load). When you use the rocker to control the local load, the rocker is actually sending a signal directly to a processor that tells the processor to turn on or turn off the local load and dim as required. However, the SW-1 dimmer can also be controlled by sending a Link Activate signal over the powerline, which is received by the UPB processor on the switch, which then controls the local load without having to use the rocker.

The SW-2 is implemented differently. Since the SW-2 can accept any of the Web Mountain rockers (single, dual tall, dual short, triple, quad, 4 button, 8 button, single short rocker + 4 pushbuttons), the rocker on the SW-2 does not control the local load directly, as the SW-1 does, but rather pushing the rocker sends a Link Activate signal, which is detected by the UPB processor on the switch, and causes the local load to be controlled as required.

As such, if you want the rocker to control the local load, you must have a link signal in both the receive and transmit tables for that rocker in the switch. The switch comes default out of the box with the first rocker position programmed with Link 241 in both receive and transmit tables. See the following example (this switch is programmed as a single rocker and 4 pushbuttons):

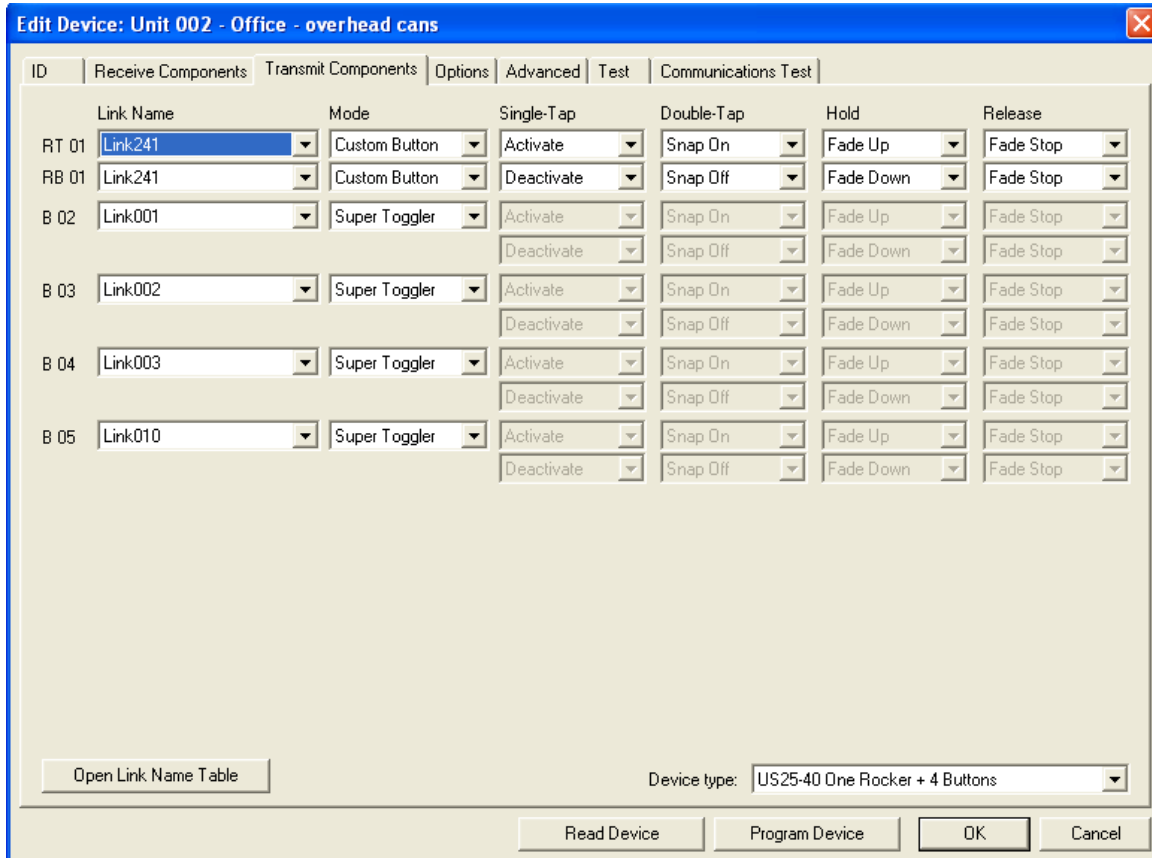
Receive table from Upstart:

The screenshot shows a software window titled "Edit Device: Unit 002 - Office - overhead cans". The window has several tabs: "Receive Components", "Transmit Components", "Options", "Advanced", "Test", and "Communications Test". The "Receive Components" tab is active, displaying a table with 16 rows. Each row represents a link configuration. The columns are: ID, Link Name, Test Now, Level, Level, and Fade Rate. The first row (ID 01) is selected, showing "Link001", "Test Now", "100%", and "Default". The remaining rows (IDs 02-15) are "Unused" with "Last On Level" and "Default". The last row (ID 16) is "Link241" with "Test Now", "100%", and "Default". At the bottom of the window, there are buttons for "Open Link Name Table", "Read Device", "Program Device", "OK", and "Cancel".

ID	Link Name	Test Now	Level	Level	Fade Rate
01	Link001	Test Now	100%		Default
02	Unused	Test Now	Last On Level		Default
03	Unused	Test Now	Last On Level		Default
04	Unused	Test Now	Last On Level		Default
05	Unused	Test Now	Last On Level		Default
06	Unused	Test Now	Last On Level		Default
07	Unused	Test Now	Last On Level		Default
08	Unused	Test Now	Last On Level		Default
09	Unused	Test Now	Last On Level		Default
10	Unused	Test Now	Last On Level		Default
11	Unused	Test Now	Last On Level		Default
12	Unused	Test Now	Last On Level		Default
13	Unused	Test Now	Last On Level		Default
14	Unused	Test Now	Last On Level		Default
15	Unused	Test Now	Last On Level		Default
16	Link241	Test Now	100%		Default

Notice that Link 241 is programmed into the 16th slot.

Transmit table from Upstart:



Notice that the main rocker is programmed with Link 241 also.

Basically, the way this works is that when you push the top of the rocker, it sends out a link 241 activate, which is detected by the Receive components table and controls the switch.

Link 241 is a special link. When 241 is used, it stays within the switch and is not transmitted out onto the network. That way, you can use 241 on all the switches on your UPB network and they won't respond to rocker presses from other units.

However, what if you wanted to have other units respond from a rocker press on another unit? Change Link 241 to another link, say Link5. Make sure you have Link 5 in both the transmit and receive tables of the first device, then put it into the receive table of any other device you want to control.

So, very IMPORTANT – if you want to have the first rocker on the SW-2 unit you are working with to control a local load, you MUST have the same link programmed into both the receive and transmit component tables of the device.

