

Thank you for purchasing Z-Uno!

Here are a few steps to help you get started:

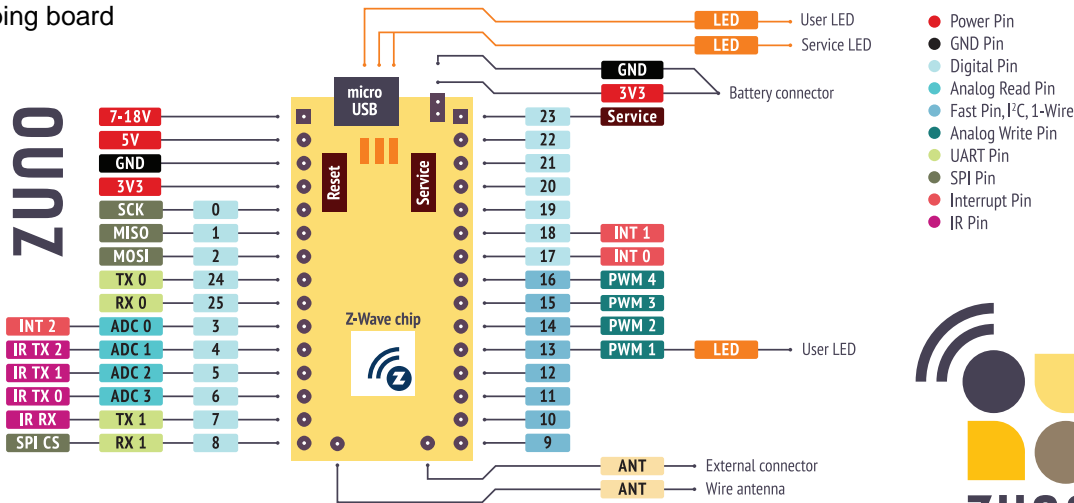
1. Unpack your Z-Uno
2. Connect the board to the USB port of your computer
3. Confirm the LED is blinking. That's because Blink demo sketch is already loaded inside
4. Open your Z-Wave controller interface
5. Start Inclusion (Add) mode on your Z-Wave controller
6. Start Learn Mode on Z-Uno using triple click on the Service Button
7. Confirm the device gets included in the Z-Wave network
8. Check the sketch functionality – changing dimmer value should change LED blinking rate
9. Congratulations! Your Z-Uno is up and running

To start writing your own sketches, you need to:

1. Download Arduino IDE (1.6.5) from <http://arduino.cc/Software>
2. Follow instructions on <http://z-uno.z-wave.me/install> to install Z-Uno package for Arduino IDE and Z-Uno drivers for your platform
3. Update your Z-Uno board to the latest version, using «Burn Bootloader» menu item
4. Start with some examples already prepared for you under «Examples» menu item in Arduino IDE
5. Explore a whole new world of knowledge on <http://z-uno.z-wave.me/getting-started/>
6. Create new awesome devices, already compatible with more than 1500 existing Z-Wave products!

Detailed manual and Z-Wave technical description are available on <http://z-uno.z-wave.me/>

Z-Wave prototyping board ZMEUZUNO



powered by
Z-WAVE>ME
BUILDS THE SMART HOME



Blink Sample Code

```
// initial period of the blink is 1 second
byte dimmerValue = 100; // in 10 ms

// add one Switch Multilevel channel
ZUNO_SETUP_CHANNELS(ZUNO_SWITCH_MULTILEVEL(getter, setter));

// this function runs once, when Z-Uno is powered or reset
// button is pressed
void setup() {
    // set digital pin 13 (built-in LED) in output.
    pinMode(LED_BUILTIN, OUTPUT);
}

// this function loops consecutively forever
void loop() {
    digitalWrite(LED_BUILTIN, HIGH); // turn the LED on
    delay(dimmerValue * 10);         // wait
    digitalWrite(LED_BUILTIN, LOW);  // turn the LED off
    delay(dimmerValue * 10);         // wait
}

// callback function that runs
// when a new value comes from Z-Wave Network
// this is the setter referenced in channel creation
void setter(byte newValue) {
    // save new value in a variable
    dimmerValue = newValue;
}

// callback function runs when Z-UNO is asked for the
// current blink rate from Z-Wave Network
// this is the getter referenced in channel creation
byte getter(void) {
    // return previously saved value
    return dimmerValue;
}
```

FCC Statement

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.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

MAKES Z-WAVE OPEN



FCC information (additional)**Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

Co-location warning:

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

OEM integration instructions:

This module has a LIMITED MODULAR APPROVAL, and is intended only for OEM integrators under the following conditions: As single, non-co-located transmitter, this module has no restrictions in relation to a safe distance from any user. The module shall be only used with the antenna(s) that have been originally tested and certified with this module.

As long as these conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

Validity of using the module certification:

In the event that these conditions cannot be met, or when installing this module in another host as tested in this FCC filing, then the FCC authorization for this module in combination with the host equipment is no longer considered valid and the FCC ID of the module cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

Custom design antennas may be used, however the OEM installer must follow the FCC 15.21 requirements and verify if new FCC approval will be necessary.

End product labeling:

The final end product must be labeled in a visible area with the following:

"Contains FCC ID: 2ALIB-ZMEUZUNO".

Information that must be placed in the end user manual:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module. The end user manual shall include all required regulatory information/warning as shown in this manual.