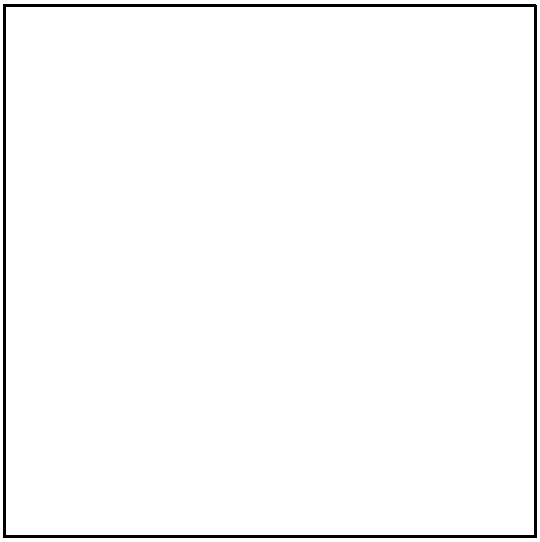
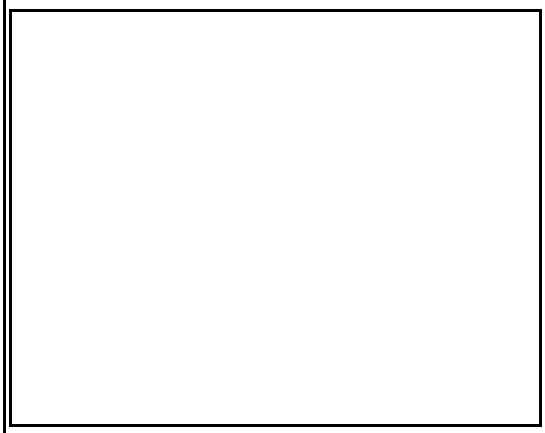
B206mini Getting Started Guides

Contents

- 1 Kit Contents
- 2 Verify the Contents of Your Kit
- 3 You Will Need
- 4 Proper Care and Handling
- 5 Getting Started with B206mini Tutorials
- 6 Install and Setup the Software Tools on Your Host Computer
- 7 Connect the USRP to the Host Computer
- 8 Test and Verify the Operation of the USRP

- USRP B200 / B210 / B200mini / B205mini / B206mini
- USB 3.0 Cable
- Universal power supply (B210 only)


Make sure that your kit contains all the items listed above. If any items are missing, please contact your sales agent or Ettus Research Technical support immediately.

- A host computer with an available USB 2.0 or 3.0 port to use the USRP B2xx.

All Ettus Research products are individually tested before shipment. The USRP? is guaranteed to be functional at the time it is received by the customer. Improper use or handling of the USRP? can easily cause the device to become non-functional. Listed below are some examples of actions which can prevent damage to the unit:

- Never allow metal objects to touch the circuit board while powered.
- Always properly terminate the transmit port with an antenna or 50 Ohms load.
- Always handle the board with proper anti-static methods.
- Never allow the board to directly or indirectly come into contact with any voltage spikes.
- Never allow any water, or condensing moisture, to come into contact with the boards.
- Always use caution with FPGA, firmware, or software modifications.

☐ Never apply more than -15 dBm of power into any RF input.

☐ Always use at least 30dB attenuation if operating in loopback configuration

To learn how to set up the USRP Hardware Driver (UHD), and use UHD to acquire an RF spectrum using the B206 follow the Getting Started with USRP Products tutorials.

In order to use your Universal Software Radio Peripheral (USRP?), you must have the software tools correctly installed and configured on your host computer. A step-by-step guide for doing this is available at the Building and Installing the USRP Open-Source Toolchain (UHD and GNU Radio) on Linux, OS X and Windows Application Notes. The following minimum USRP Hardware Driver, UHD, versions are required:

- The USRP B2xx other than B206mini require UHD version 3.8.4 or above.
- The USRP B206mini requires UHD version 4.9 or above.

It is recommended to use the latest stable version of UHD that is available.

The included USB 3.0 cable provides power and data connectivity for the USRP Bus Series. The shipping kits include appropriate USB 3 cables to connect the B200/B210, B200mini, or B205mini to an available USB 3.0 (or 2.0) Type-A port on the host computer. The B206mini shipping kit includes a USB 3.2 Gen 1 Type-C cable, designed for connection to USB 3 Type-C ports on the host computer. It also features a USB Type-C connector with a locking screw, which when used with the optional enclosure and matching threaded insert, provides added strain relief for secure and stable operation.

Note: If a GPSDO module is installed (B200/210 only) or when using USB 2.0, an external DC power supply or a cable designed to pull power from 2 USB ports (USB 2.0 dual A to micro-B or B) must be used.

Note: The cables for the B200-Series USRP have different device side USB connectors. Before attempting to use custom 3rd party USB 3 cables ensure they have the required device side USB connector:

Device	Device side USB connector
B200/B210	USB Type B connector
B200mini/B205mini	USB Micro B Superspeed connector
B206mini	USB Type C connector

Once the software tools are installed on the host computer, verify the correct operation of the USRP by running the utility programs on the host computer. More information is available at the Verifying the Operation of the USRP Using UHD and GNU Radio Application Note.