



Tech 20141120-1-0

Installation of the Mk5 iBMU with the RS-485 Adapter

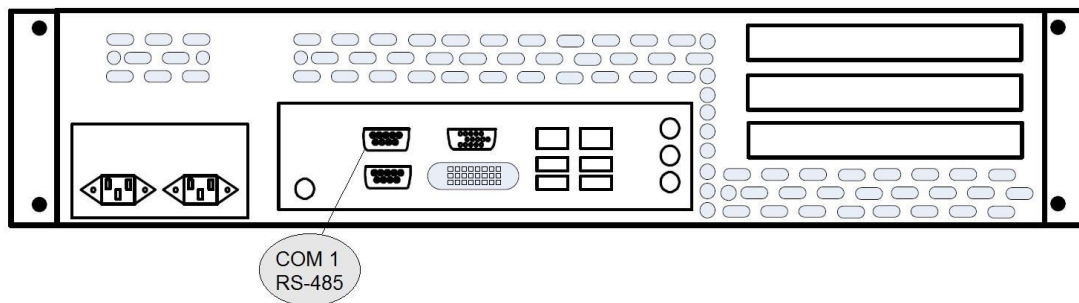
Summary

As of December 2014, NDSL has introduced a new iBMU model (Mk5) into the field. While this unit is functionally the same as previous versions of the iBMU, there have been several hardware improvements and changes that affect how installers will connect the RS-485 adapter. This document will explain how RS-485 connectivity is achieved with the Mk5 iBMU. **Note: The RS-485 adapter wiring itself has not changed.**

Instructions for the Mk5 iBMU

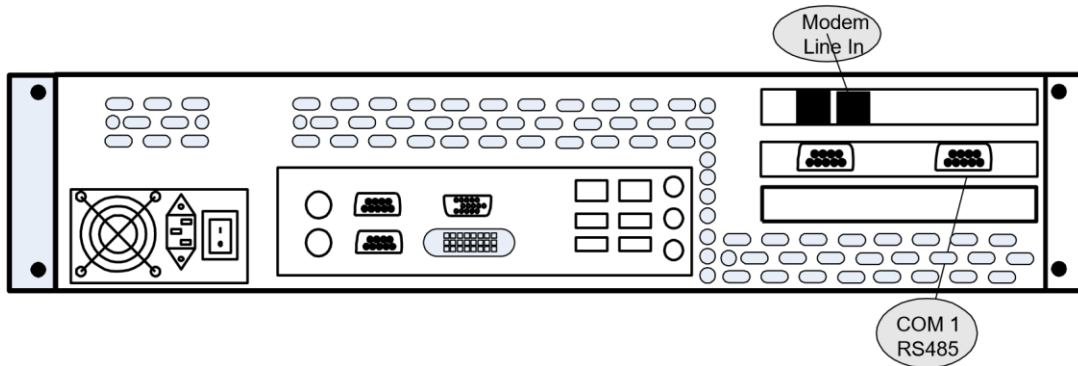
The new Mk5 iBMU is no longer equipped with a dedicated VSCOM card for communication to the Control Unit(s). RS-485 communications are now handled through the serial ports located directly on the motherboard of the iBMU. Connect the RS-485 adapter to the serial port indicated below.

Note: Do not use the lower COM port that is covered with a dust cap. This port will not communicate with Cellwatch.

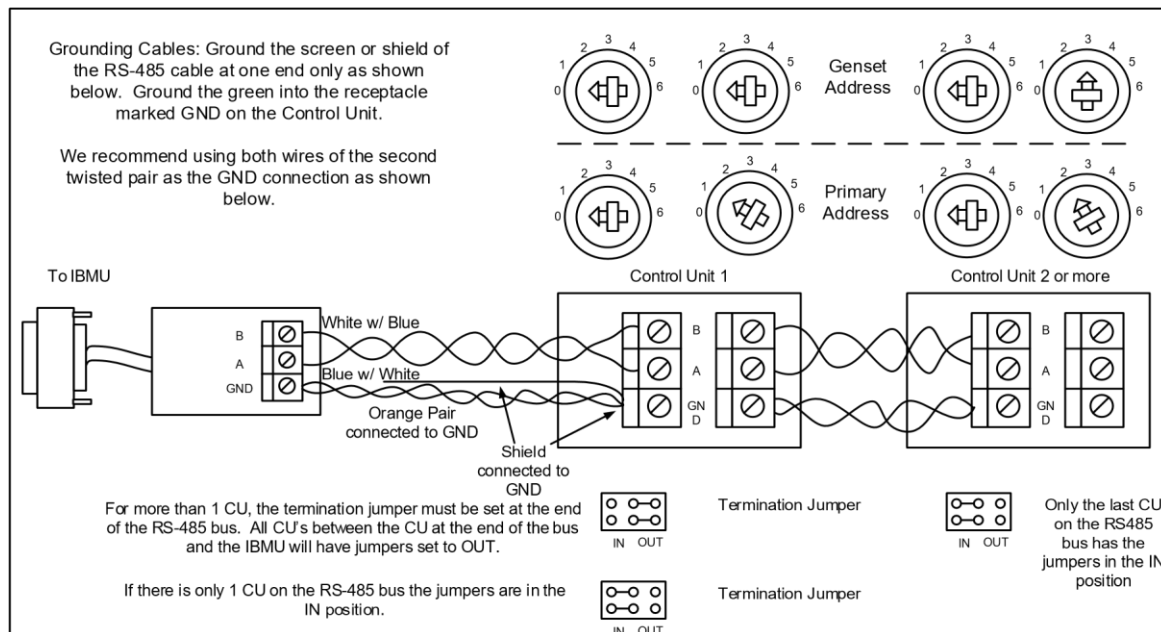


Legacy iBMUs

The RS-485 adapter is connected to the uncovered COM port on the right side of the dedicated VSCOM card, as shown below. **Note: Depending on the age of the iBMU, the VSCOM card may be located to the left of the power supply.**



The illustration below shows the schematic of the wiring for single or multiple Control Units. Inside of the RS-485 adapter box is a cable clamp that will be used to ensure secure termination and strain relief of the cable. Check to make sure that the screws of the DB9 connector are fully tightened when connecting the RS-485 adapter to the correct COM port (see previous page).



Note: Connect the stranded drain wire wrapped around the other wires of the Belden cable into the GND connection. Connect in the first CU connector only to ensure best protection from radiated noise. Do not land the drain on both sides of any RS485 wiring section, (iBMU to CU) or (CU to CU).