K.I.S.S.

Kiln Interface Software System

Installation Manual

BARTLETT Instrument Co.

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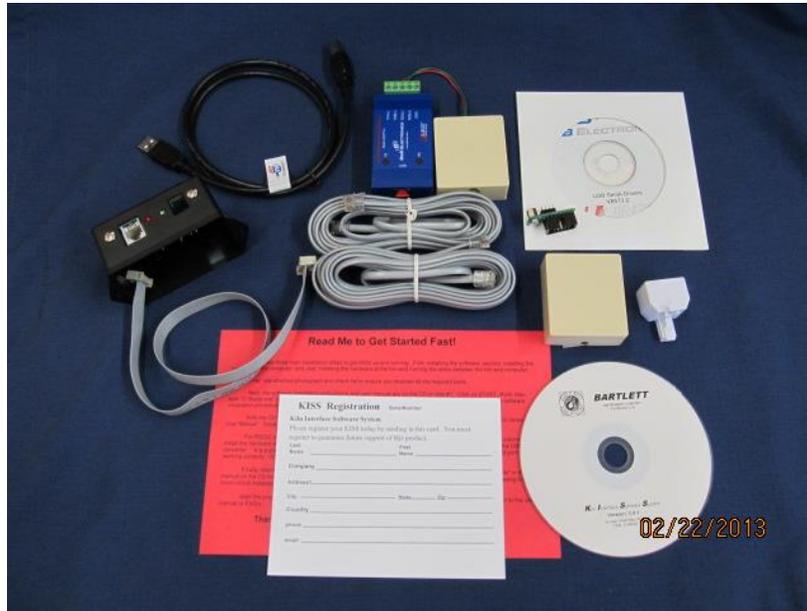319-372-8366

www.bartinst.com

OVERVIEW

In order to take advantage of the Kiln Interface Software System, there is certain equipment that you must have. Check the kit below to be certain you've received all the parts necessary for installation and operation of your new KISS system.

KISS 3 STARTER KIT USB

1	Read Me to Get Started Fast
1	K.I.S.S Registration Card
1	B&B Electronics Connect and Isolate an RS-485/RS422 Network to USB Port Directions
1	USB to RS485 converter with attached modular jack
1	USB cable
2	14' modular straight-through connection cable
1	Modular jack
1	Modular Jack T Adapter
1	A485ISO Board with Enclosure and mounting hardware
1	DIP RIB Board with mounting hardware
1	Ribbon Cable
1	Bartlett Instrument Company K.I.S.S. CD
1	B&B Electronics USB to Serial Driver Disk CD

SOFTWARE INSTALLATION

The first steps in getting a KISS network setup are installing the software on your computer and checking the COM port settings.

RUNNING SETUP QUICK START

1. Close all other programs and insert the B&B Electronics CD in the computer's CD drive.
2. If the CD does not automatically open, go to "My Computer" or "This PC" on your computer to find the CD Drive.
3. Double click on the CD-ROM drive and follow the instruction for installing the USB Serial Driver.
4. Once complete, insert the KISS CD in the computer's CD drive.
5. If the CD does not automatically open, go to "My Computer" or "This PC" on your computer to find the CD Drive.
6. Double click on the CD-ROM drive titled "(D:) KilnKISS 3.1.2". If it doesn't appear in the D: drive, select the appropriate drive.
7. Open the file labeled "KISS".
8. Double click "setup".
9. Follow the on-screen instructions.
10. After installation is complete, click "START", "PROGRAMS", "KILNKISS" to start the program.
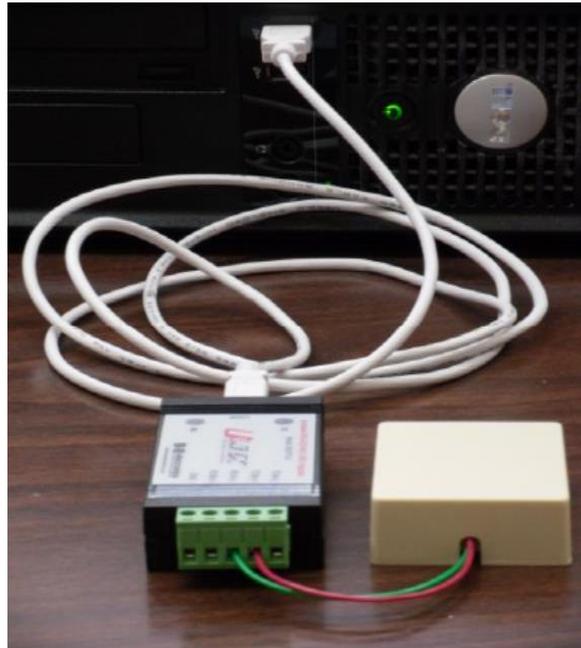
SOFTWARE AND HARDWARE INSTALLATION GUIDE

STEP 1: INSTALL USB DRIVER TO COMPUTER

Insert the B&B Electronics CD, open it, and follow instructions on installing the USB Serial Driver that is provided from B&B Electronics.

STEP 2: INSTALL USB TO RS485 CONVERTER

Install the cable into the converter and then into the USB port of the computer

STEP 3: INSTALL KISS 3 SOFTWARE

Insert the KISS CD in the computer's CD drive. If the CD does not automatically open, go to "My Computer" or "This PC" on your computer to find the CD Drive. Double click on the CD-ROM drive titled "(D:) KilnKISS 3.1. 2". If it doesn't appear in the D: drive, select the appropriate drive. Open the file labeled "KISS" and double click "setup". Then, follow the on-screen instructions.

STEP 4: RUN ECHO TEST

After software installation click "Start", "All", "KilnKISS" the KISS program will open.

After KISS is running, click "install" then click "run Echo test" it will ask you to install the Echo jumper before continuing so move the switch from Echo OFF as shown in the picture above to Echo ON and Click "OK"

If COM port and converter are working a message will indicate a successful test. After test move the switch back to Echo OFF.

THIS COMPLETES KISS INSTALLATION TO A COMPUTER

STEP 5: SMT 700 KILN KIT INSTALLATION
NOTE: SMT700 has 14 segment display

Once the computer portion of the installation has been completed, you are ready to install the hardware on the kiln and connect each kiln to the system. Above is a picture of the Kiln Kit that will be used on each kiln installed

**Note: You should first disconnect power from the kiln.**

Remove the controller by unscrewing the 4 screws at the corners of the controller.
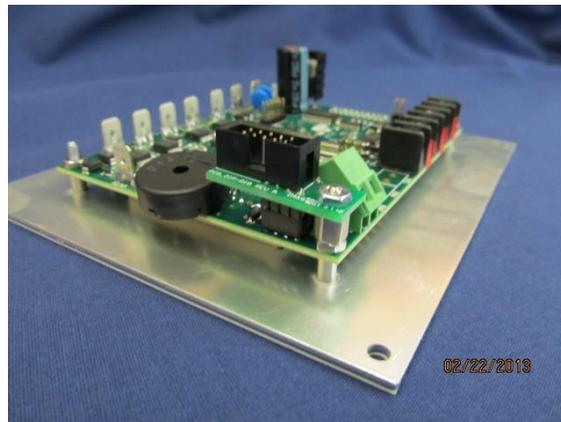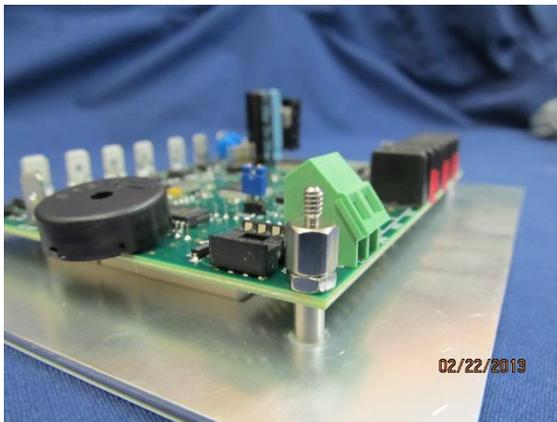
Once the screws are removed pull out the controller toward you. Install the spacer as show in picture above to the left. Then install Dip Rib board into the socket on circuit board and fasten down with nut as shown in the picture above to the right.

Next, prep the control box for mounting the above part. Start by finding a spot on the control box where drilling does not interfere with other wiring and also make sure the spot is not too far for the length of the ribbon cable that came in this kit. Place part above flat against the control box with the connection ports pointing to the floor and then trace the two holes on each mounting tab. Set the above box to the side and then drill the two traced holes with a #36 drill bit. Then drill a 5/8" hole or bigger in between the two #36 holes. Attach the ribbon cable to the above part as shown below in the picture on the left.
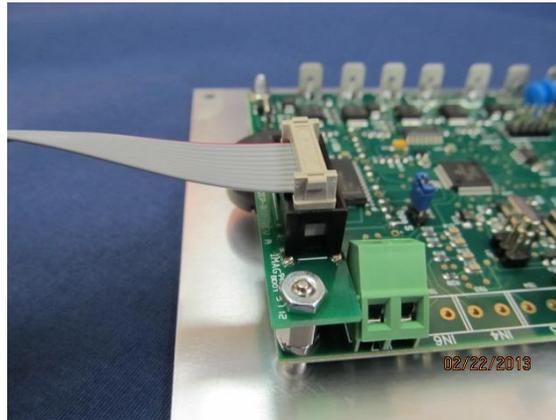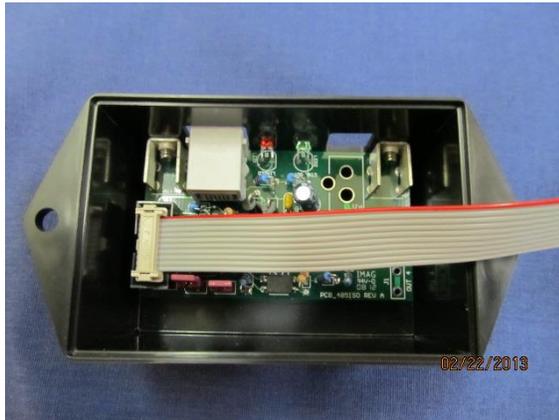
Insert the ribbon cable through the 5/8" hole and then fasten the enclosure using the two #6 sheet metal screws supplied. Make sure that you do not pinch the ribbon cable.

Next find the ribbon cable inside the control box and attach it to the controller as shown in the picture to the right.

Re-install your controller to the kiln with the 4 screws.

Restore power to the kiln.

Note: When adding additional controllers, be sure to change the controller's ID number, found in the controller menu. See the controller's Operation Manual for details.

THIS COMPLETES KISS INSTALLATION TO A KILN CONTROLLER
REPEAT STEP 5 IF YOU HAVE MULTIPLE KILN CONTROLLERS YOU WANT TO CONNECT TO KISS
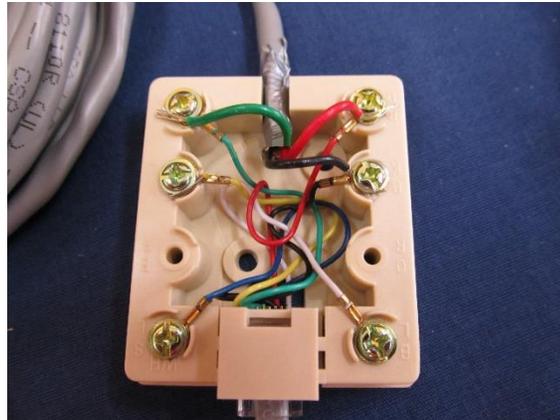
COMPUTER TO KILN CONNECTIONS
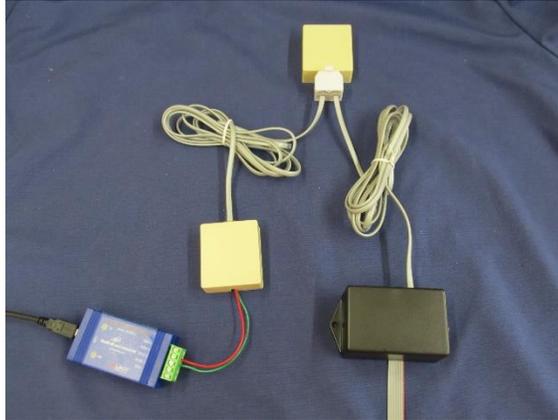
NOTE: A single controller connection is shown above. For a multiple controller connection see the diagram on page 10.
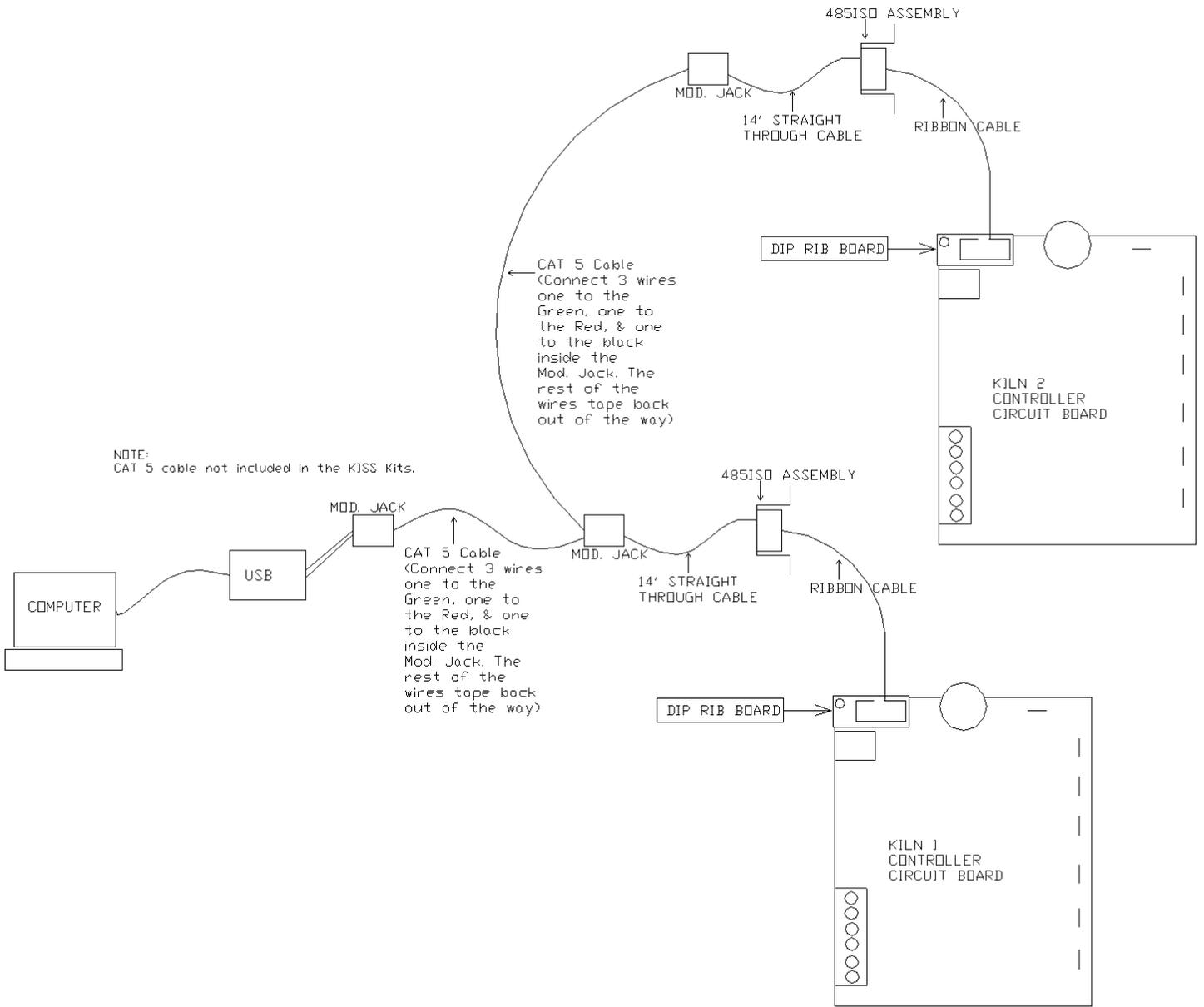
Shown below is a picture of the Installation lay out between the Computer and Kiln Controller if the provided cables are not long enough. (Note: You will need to provide an extra modular jack as shown in the picture on the left below or wire directly into the modular jack attached to the USB Converter).

The picture below to the right shows the wire connections.

Do not exceed 400 feet.

MULTIPLE CONTROLLER WIRING DIAGRAM

485ISO ASSEMBLY

MOD. JACK

14' STRAIGHT
THROUGH CABLE

RIBBON CABLE

CAT 5 Cable
(Connect 3 wires
one to the
Green, one to
the Red, & one
to the black
inside the
Mod. Jack. The
rest of the
wires tape back
out of the way)

DIP RIB BOARD

KILN 2
CONTROLLER
CIRCUIT BOARD

NOTE:
CAT 5 cable not included in the KISS Kits.

485ISO ASSEMBLY

MOD. JACK

USB

CAT 5 Cable
(Connect 3 wires
one to the
Green, one to
the Red, & one
to the black
inside the
Mod. Jack. The
rest of the
wires tape back
out of the way)

MOD. JACK

14' STRAIGHT
THROUGH CABLE

RIBBON CABLE

COMPUTER

DIP RIB BOARD

KILN 1
CONTROLLER
CIRCUIT BOARD

A multiple controller connection is shown above.