

# KMK 118

## DEVICE PAIRING, FIRMWARE UPDATE AND COMMAND MODE TEST



SMART  
BLUETOOTH  
OPTICAL  
PROBE

AUTO  
PROTOCOL  
DETECTION

[INFO@PROBEFORMETERS.COM](mailto:INFO@PROBEFORMETERS.COM)

[PROBEFORMETERS.COM](http://PROBEFORMETERS.COM)



# 1. DEVICE PAIRING

Enable Bluetooth feature of your PC. Then push the power button of KMK118 to power up your device. The power button is at the left top of the probe.

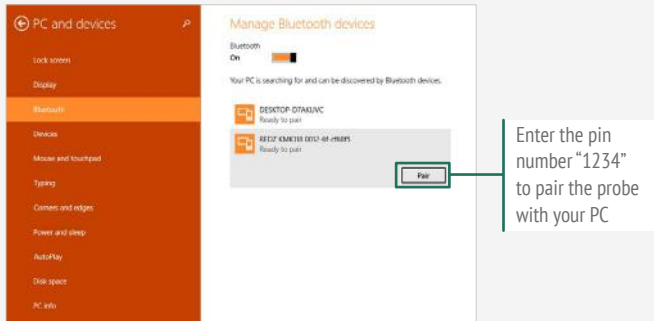
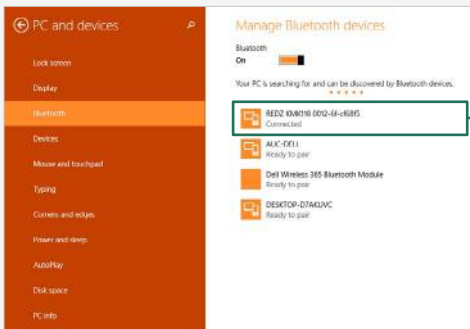
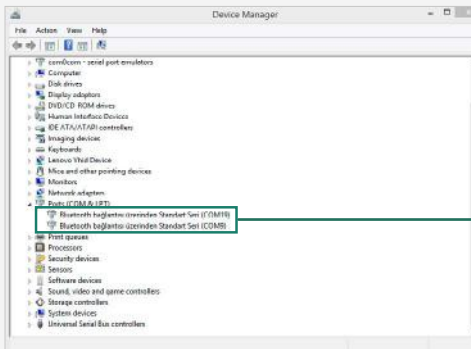


Figure 1



After pairing the devices, you can see that the connection is established with KMK118 and your PC

Figure 2



PC will install  
2 COM ports.  
One is outgoing  
and the other is  
incoming port

Figure 3

This is default behavior of all similar Bluetooth devices. In order to communicate with probe, user must use outgoing port.

User can see this port in device settings or simply try each one and see if Bluetooth Probe connected LED is ON or not.

# 2. FIRMWARE UPDATE

User can update firmware and use probe with different features. There is no limitation to update from one to another firmware. Users can update probe firmware anytime they need. Special software called abcZ is used to update firmware. Please install and launch the software.



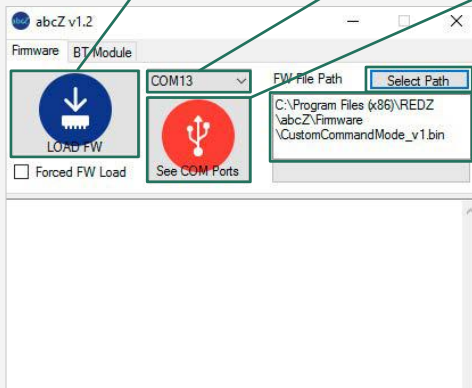
When you connect the probe with abcZ software and upgrade process starts the Bluetooth led will be on

Figure 4

Turn the power off of your optical probe before clicking the LOAD FW button to load the selected firmware for your KMK118 optical probe and then repower it. Then press LOAD FW button in 10 seconds time window

Select the outgoing COM of the probe you paired

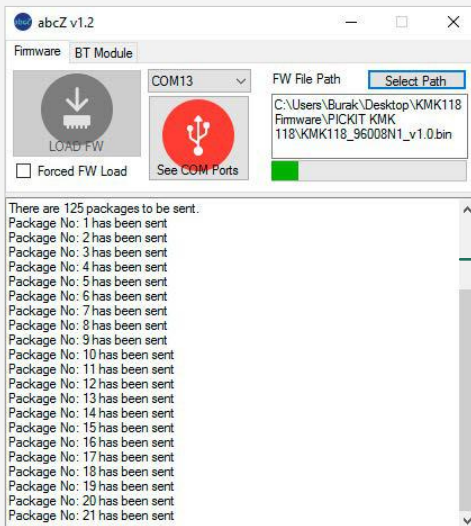
Press the "See COM Ports" shortcut button to see available COM ports on your PC



Select the firmware that you want to install to the probe

The firmware file path that you selected will be seen here

Figure 5



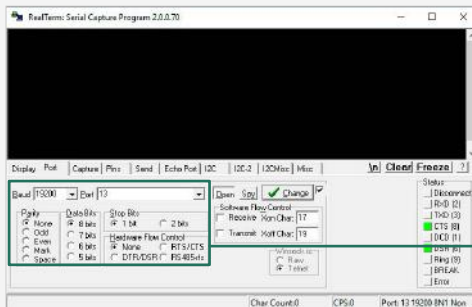
The firmware upgrade process will be shown on the window of the software

Figure 6

After this process the probe will reboot.

# 3. COMMAND MODE TEST

User can test Command mode of the probe with a terminal program. In this example a free software called «Real Term» has been used. Once the firmware is installed user can Turn OFF and On the power of Bluetooth probe. Then terminal program can be launched.



Select the serial settings and COM port. The correct outgoing COM port of the probe should be selected and the serial settings should be 19200 baud rate with 8N1 data type

Figure 7



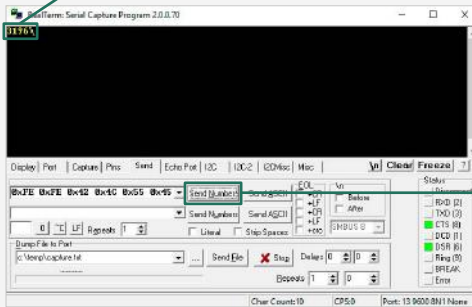
Then you can communicate with the probe using different commands via terminal program. For example to read battery voltage of the probe user can send following byte Array to probe:

0xFE 0xFE 0x42 0x4C 0x55 0x45 0x30 0x38 0x4E 0x31 **0xA1** 0xFF

Probe will answer with battery voltage in mV and will not transmit that data to probe side (meter side) so it is safe to use any command at any time of the data transmission.

Command byte. Other bytes are fixed and do not change. To query the battery voltage, the command byte should be 0xA1

3.196 V  
battery status



In order to send command, click Send Numbers

Figure 8