



### ***Programming the BK9000 IP Address with KS2000 Configuration Software***

BK-AppNote-003

1.0

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For additional documentation,  
please visit  
[www.beckhoffautomation.com](http://www.beckhoffautomation.com)

For further assistance, please  
contact Beckhoff USA support  
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*This application note describes how to use the Beckhoff KS2000 configuration software to program the IP address and Subnet Mask of the BK9000 Bus Coupler.*

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## Overview

### Supporting Documents

1. Documentation for BK9000 and BK9100

<ftp://ftp.beckhoff.com/Document/BusTermi/BCoupler/BK9000e.chm>

KS2000 Configuration and Diagnostic Software

<ftp://ftp.beckhoff.com/Software/TwinCAT/Infosystem/1033/chm/KS2000.chm>

2. Beckhoff application note, “Beckhoff BC9000 IP Address change Using an ARP Command” (BC-AppNote-005).

<ftp://Customer:Customer@64.122.66.177/Application%20Notes/web/BC-App-Note-005/chm/BC-AppNote-005.chm>

3. Beckhoff Software KS2000, version 3.2.9 or higher

<http://www.beckhoffautomation.com/english/ks2000/default.htm>

### Key Concepts

1. Newer versions of KS2000 allow simple editing of the IP address by clicking on the fieldbus-specific item in the tree.
2. There are two ways to set the IP address - With KS2000 or, if the MAC-ID of the coupler is known, with an ARP command.

## Procedure

Install K22000 on the computer

Plug the KS2000 cable to a serial port on the computer.

Open the access port on top of the Bus Coupler

Plug the small connector from the cable into the Bus coupler (the plug is polarized).

Run the KS2000

Click on the icon that says, “login”. (The node will be graphically displayed.)

Click on the “Online” menu, then “Coupler”, then “Services”.

Click on “Abolish write protection”.

Click on “Table” in the tree on the left side of the screen.

Scroll down to table 100

The default IP of 0x10Ac is at offset 0. This represents 16.172

0x0011 is at offset 1. This represents 00.17

The Subnet Mask is at offset 2 and 3.

To modify the IP or Subnet Mask, simply click on the respective box and change the value.

Click on the Log Off icon

Power cycle the Bus Coupler to communicate with the PC master. (See Beckhoff application note, “Getting Started: BK9000 Modbus TCP Slave”.)

When using an IP address of 20.x.x.x (Class A network), change the Master and Bus Coupler Subnet Mask to 2.55.0.0.0.