

Revision History

APPLICATION NOTE

APP #134

Date	Author	Description
03-052019	DEW	Setup

Test MCS-Magnum Ethernet Connectivity

Any questions regarding this release, contact: support@mcscontrols.com

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1.1. Windows - Testing for MCS-MAGNUM Ethernet Connectivity

Before testing for connectivity for your MCS-MAGNUM controller, you must know the IP address of controller. You can find the address by going to your Magnum Keypad or Touchscreen

1.1.1 KEYPAD - Main Menu

Using the keypad's right arrow key, move to 'Serv Tools', hit enter, arrow down to 'Ethernet' to see your IP address.

1.1.2 MCS-Touchscreen

- 1. At main menu screen, click on MCS-TOOLS
- 2. Click on 'Utilities'
- 3. Click on 'LXTerminal'
- 4. At prompt, type 'ifconfig' to see your IP address.

1.2. Using WIN Start Menu

1. At the bottom of your window screen type 'CMD' click on command prompt



- 2. The following windows will open
- 3. Type in the command window: **'ping'** than the known IP address for your controller. in this example, 192.168.10.254



1.3. MCS-CONNECT Test - using port 5000

1. Select 'Ethernet'

	Local Network Co	onnections-
Serial		Ethernet
Site Name	Remote Network	Connections

2. Scan will find all MCS-Magnum on the network (using port 5000), below example found 3 MCS-Magnum on network.

File Setup Offline Rese	t/Clear Workspace	View Button Bar	Time Help Li	ive Graph Exte	nded History - I	nactive ALA	ARM ALER	TS-INACTIVE
Disconnect Scan	Graph	Transmit Cfg	Receive Cfg	/iew Only [liagnostic Save	Print	Graphics	Alarms
Site Info 2 - Chiller	1 1 - TransNo	rth1-PID 1 - I	HOT ROOM	L - 4COMP/4	CKT-PIDD	1 - Trainin		••
Address	HW Serial # Cfg	Name Company	Na Unit Model #	Unit Serial #	Installed Da	Cfg Vers.	Firmware	Cfg Date
192.168.10.102 (2)	003463 Ch	iller 1 WestTee	chs Carrier19	. 18383	02/07/2	17	CENTG	02/28/
192.168.10.254 (1)	000886 Tran	sNor AAON	LL-060-3	BAAE000	11/19/2	17	HVAC	03/04/
192.168.10.240 (1)	000884 HOT	ROOM STI	HOT ROOM	1	10/02/2	17	HVAC	10/02/

1.4. Web Browser Test

 Open any web browser on a laptop connected to the network. Then enter the known IP address of the MCS-Magnum in the web browser, see below, IP address typed in the web browser and the MCS-Magnum web page.



1.5. ModScan (or any modbus test tool) - uses port 502

1. Setup ModScan to connect to MCS-Magnum IP address

IP Address: Service Port:	192.168.10.254 502		Magnum controller
	1		
00 -	Hardware Flow Co	ntrol from slave from slave tisable ms after RTS before transmitting first character ms after last character before releasing RTS	
		00 Image: Wait for DSF Image: Wait for CTS Image: Wait for Control: Image: Wait for CTS Image: Wait for Control: Image: Wait for Control:	00 Image: Wait for DSR from slave Image: Wait for CTS from slave Image: DTR Control: Image: Dtrop Imag

2. Setup ModScan to poll for Sensor input from Slave

💼 ModSca2			
Address: 0001 Length: 16	Device Id: 1 MODBUS Point Type 04: INPUT REGISTER 💌	Number of Polls: 35 Valid Slave Responses: 28 Reset Ctrs	
		Address, Length and Input Register searching for 16 registers	·_
30001: <00600> 30002: <00500> 30003: <00850> 30004: <00750> 30005: <00000>			
30006: <00001> 30007: <00000> 30009: <64537> 30010: <64537> 30011: <64537> 300112: <64537>	Replies 16 re slave at this a	egisters from address	
30014: <00000> 30015: <00001> 30016: <64537>			

1.6. BQT (or any Bacnet Test tool) - uses UDP port BACO (47808)

1. Select Bacnet IP

BACnet Quick Test Port Select		
Select any Number of Port Types		
MS/TP		
COM Port Baud Station (TS) Max Master COM1 9600 0 127		
К	nown COM	port for Magnum
I BACnet/IP CC	ontroller	
IP Adapter/Address to use		
192.168.10.68 [255.255.255.0] Plugable Ethernet	-	
UDP Port BAC0		
E Register as Fareign Device with BBMD at IP: 0.0.0.0		
Registration Time-to-Live		
OK		

2. Select Magnum

ACnet Quick Test v6.09 for Windows 10 x64		
ed for use by: Micro Contru! Systems - Fort Myers FL		
Cnet	Name 🗸	Address
BACnet/IP	😾 Magnum419430	2 192.168.10.116:BAC0
	🚽 💂 Magnum 18180	192.168.10.240:BAC0
	₹ Magnum18170	192.168.10.119:BAC0
	3 Magnum18102	192.168.10.102:BAC0
Magnum1205 (1205)	🚽 😴 Magnum18100	192.168.10.254:BAC0
	₽ Magnum1205	192.168.10.123:BAC0
⊋ Magnum1205 (1205) ⊋ Magnum18100 (18100) ttings	😴 Magnumi	1205

3. Read Points

