PREINSTALLATION REQUIRMENTS FOR ETHERNET TCP/IP D6600 NETCOM SYSTEMS

This document is intended to identify all of the necessary conditions that must be met before a Radionics D6600 NetCom system can be installed in an Ethernet TCP/IP environment. Insuring compliance with these issues will minimize NetCom installation problems. If you have any questions regarding these items, please contact the network administrator for the network you are planning to interface with or a Radionics NetCom Engineer.

Pre-installation requirements for D6600 NetCom over Ethernet (INTRANET or INTERNET/WEB) TCP/IP Network:

- ☑ The Ethernet network MUST use a hub.
- ☑ The Ethernet network MUST use Ethernet cables.
- ☑ The D6200 host computer MUST have a properly configured Ethernet network interface card (NIC) installed.
- ☑ The D6600 Receiver/Gateway MUST be connected to the Ethernet network via a Radionics D6680-E NETWORK ADAPTER.
- ☑ If connecting the D6680 NETWORK ADAPTER's CHANNEL 1 port to COM4 on the D6600, use a straight modem cable, 9 pin female to 25 pin male.
- ☑ If connecting the D6680 NETWORK ADAPTER's CHANNEL 2 port to COM4 on the D6600, use a NULL MODEM cable, 9 pin female to 9 pin female.
- ☑ All non-Radionics Alarm Panels that will be used with the NetCom system MUST use Radionics C900TTL Dialer Capture Module.
- ☑ All Radionics 9000/7000 series Alarm Panels that will be used with the NetCom system can use either the Radionics D9133TTL-E serial interface OR C900TTL-E Dialer Capture Module/network adapters. *NOTE: REMOTE PROGRAMMING (RAM) THROUGH THE NETWORK IS NOT POSSIBLE IF USING THE C900TTL-E WITH RADIONICS 9000/7000 SERIES PANELS.*
- ☑ Static (Fixed) IP addresses must be made available for each Radionics device (D6680, D9133, C900, etc.) **THE NETCOM SYSTEM DOES NOT CURRENTLY SUPPORT DHCP (Dynamic Host Configuration Protocol) OR ANY VIRTUAL IP SCHEMES.**

THE FOLLOWING INFORMATION MUST BE PROVIDED BEFORE THE INSTALLATION CAN BEGIN *(PLEASE FILL IN ALL BLANKS WHERE NECESSARY) NOTE: Most, if not all of this information can be obtained from the network System Administrator. If you are planning on utilizing an Internet/Web based NetCom system, then most of this information can be obtained from your ISP (Internet Service Provider).*

CENTRAL STATION NETCOM INFORMATION:

STATIC IP ADDRESS ASSIGNED TO THE D6680 Network Adapter: _____ . _____ . _____ . _____

STATIC IP ADDRESS ASSIGNED TO OPTIONAL SECONDARY D6680: _____ . _____ . _____ . _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

STATIC IP ADDRESS ASSIGNED TO HOST COMPUTER RUNNING 6200 SOFTWARE _____ . _____ . _____ . _____

STATIC IP ADDRESS ASSIGNED TO COMPUTER TO RUN NETWORK RAM IV _____ . _____ . _____ . _____
(can be same as host 6200 computer if necessary)

IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THE FIXED IP's ABOVE? _____

RADIONICS FIELD UNIT NETCOM INFORMATION:

STATIC IP ADDRESS TO BE ASSIGNED TO EACH RADIONICS FIELD UNIT (D9133TTL OR C900TTL):

PHYSICAL LOCATION	ALARM PANEL TYPE (MODEL)	D9133 or C900	STATIC IP ADDRESS TO ASSIGN
#1			__ . __ . __ . __
#2			__ . __ . __ . __
#3			__ . __ . __ . __
#4			__ . __ . __ . __
#5			__ . __ . __ . __

NOTE: In 9000/7000 series EXPANDED panels NetCom is only supported in panel firmware version 6.0 or higher! If necessary, these chips can be obtained and installed in older EXPANDED panels to enable NetCom support!

IMPORTANT IMPORTANT!: In intranet (private network) applications the following information may be the same as the information given for the Central Station section. However, for INTERNET/WEB applications this information may be different than the Central Station section. Because Radionics requires static IP addresses, this information may be different for each physical location. If this is true for your application please identify the following parameters for EACH physical location. This information can usually be obtained from the Network Administrator that manages the network at the specific physical location OR the ISP (Internet Service Provider) that provides the Internet connectivity for the specific physical location:

FIELD UNIT PHYSICAL LOCATION #1: _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

   PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

*IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THIS FIXED IP? _____

   NOTES:_____

   _____

FIELD UNIT PHYSICAL LOCATION #2: _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

   PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

*IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THIS FIXED IP? _____

   NOTES:_____

   _____

FIELD UNIT PHYSICAL LOCATION #3: _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

*IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THIS FIXED IP? _____

NOTES:_____

_____

FIELD UNIT PHYSICAL LOCATION #4: _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

*IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THIS FIXED IP? _____

NOTES:_____

_____

FIELD UNIT PHYSICAL LOCATION #5: _____

NETWORK DEFAULT GATEWAY IP ADDRESS: _____ . _____ . _____ . _____

NETWORK SUBNET MASK: _____ . _____ . _____ . _____

PRIMARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

SECONDARY DNS SERVER IP ADDRESS: _____ . _____ . _____ . _____

*IF A FIREWALL IS INSTALLED ON THE NET, WILL IT ALLOW UDP TRAFFIC TO/FROM THIS FIXED IP? _____

NOTES:_____

_____

Pre-installation requirements for the host computer used to setup the D6600 NetCom system:
- ☑ Will be used to ARP and TELNET (both are DOS utilities that must be run from the DOS prompt) the D6680 NETWORK ADAPTER, D9133TTL serial interface, or C900TTL Dialer Capture Module.
- ☑ The host computer MUST have a properly configured Ethernet OR Token Ring network interface card (NIC) installed *(card dependent on network type)*.
- ☑ The host computer MUST have the appropriate cables - Ethernet or Token Ring. Be sure to manually set the Host Computer's IP address to an address that is acceptable to the particular class network. (*SEE NEXT SECTION):*

IMPORTANT INFORMATION ON IP ADDRESSING, NETMASKS, AND NETWORK CLASSES:

IP ADDRESSING OVERVIEW:

An IP address is a 32-bit value, divided into four octets of eight bits each. The standard representation is four decimal numbers (in the range of 0..255), divided by dots.

Example: 192.2.1.123
This is called decimal-dot notation. The IP address is divided in two parts: network and host. To support different needs, three "network classes" have been defined. Depending on the network class, the last one, two or three bytes define the host, while the remaining part defines the network. In the following, 'x' stands for the host part of the IP address:

- **Class A Network**
  IP address 1.x.x.x to 127.x.x.x
  Only 127 different networks of this class exist. These have a very large number of potential connected devices (up to 16,777,216)
  Example: 10.0.0.1, (network 10, host 0.0.1)
- **Class B Network**
  IP address 128.0.x.x to 191.255.xxx.xxx
  These networks are used for large company networks. Every network can consist of up to 65,534 devices.
  Example: 172.1.3.2 (network 172.1, host 3.2)
- **Class C Network**
  IP address 192.0.0.xxx to 223.255.255.xxx
  These network addresses are most common and are often used in small companies. These networks can consist of a maximum number of 254 hosts.
  Example: 192.7.1.9 (network 192.7.1, host 9)

NETMASK OVERVIEW:
The netmask is used to divide the IP address differently from the standard defined by the classes A, B, C. A netmask defines how many bits from the IP address are to be taken as the network section and how many bits are to be taken as the host section.

Standard IP Network Netmask:

	Network Bits	Host Bits	Netmask
Class A	8	24	255.0.0.0
Class B	16	16	255.255.0.0
Class C	24	8	255.255.255.0

Netmask Examples and the appropriate Host Bits settings:

Netmask	Host Bits
255.255.255.252	2
255.255.255.248	3
255.255.255.240	4
255.255.255.224	5
255.255.255.192	6
255.255.255.128	7
255.255.255.0	8
255.255.254.0	9
255.255.252.0	10
255.255.248.0	11
255.128.0.0	23
255.0.0.0	24