



# MCN Server Software

## Monitoring & Control for Voting Comparator & General Purpose I/O

CTI MCNRCD Remote Comparator Display - McnDemo									
File Edit View Help									
<span>Police</span>   <span>Fire</span>   <span>EMS</span>   <span>Service</span>									
East Police		Central Police		West Police		Area Wide		Command	
Indian Hill	Rx	Williamson Rd.		Miami Heights		Indian Hill		Indian Hill	
Williamson Rd.	Vote	Engineers		Calhoun Hall	Rx	Williamson Rd.		Comm Center	
Glendale W.T.	Rx	Greenhills		Cheviot	Rx	Glendale W.T.		Loveland W.T.	
Comm Center	Rx	Glendale W.T.		Comm Center	Rx	Comm Center		Sweetwine	
Loveland W.T.	Rx	Calhoun Hall		Mt. Echo	Rx	Loveland W.T.		Greenhills	Tx
Sweetwine	Rx	Comm Center		Miami WW	Rx	Sweetwine		Engineers	
Anderson Twp				Greenhills	Vote	Anderson Twp.		Calhoun Hall	
Greenhills	Rx			Cleves		Greenhills		Miami Heights	
Engineers	Rx			Fernald		Engineers		Miami WW	
Milford				Prov. Hosp.	Rx	Milford		Cleves	
Marionmont				Mt. St. Joesph	Rx	Marionmont		Miamitown	
Calhoun Hall				Engineers		Calhoun Hall	Rx	Harrison	
				Miamitown	Fail	Miami Heights	Rx		
				Harrison		Cheviot	Rx		
						Mt. Echo	Rx		
						Miami WW	Vote		
						Cleves			
East Tx		Microwave		Generators					
Indian Hill	On	Indian Hill	Normal	Comm Center	Normal	Fernald			
Comm Center		Sweetwine	Standby	Indian Hill	Normal	Prov. Hosp.	Rx		
				Miami Hts	Normal	Mt. St. Joesph	Rx		
				Sweetwine	Run	Miamitown	Rx		
				Miami WW	Normal	Harrison	Rx		
				Calhoun Hall	Normal				

**CTI Products, Inc.**  
 1211 West Sharon Road  
 Cincinnati, Ohio 45240  
 USA

phone  
 +1.513.595.5900

fax  
 +1.513.595.5983

e-mail  
 info@ctiproducts.com

www.ctiproducts.com

### Introduction

The MCN™ (Monitoring and Control Network) Server software lets you monitor and control receiver voting system and general purpose inputs & outputs from your console or service shop over IP LANs or WANs. It extends comparator lights and switches and other input/output (I/O) devices to PC displays. The comparator or other equipment may be located remotely, limited only by your WAN connections.

The system is compatible with the following MCN modules:

- CIB modules for comparators
- AIB modules for ASTRO-TAC comparators
- TIB modules (with CIB modules) for Transmitter Steering
- GPIO Modules for general purpose I/O

It can be used to monitor & control:

- Motorola Digitac, Spectra-TAC, TAC, ASTRO-TAC
- JPS SNV-12 Voters
- M/A-Com G.E. Analog Voters
- Doug Hall 4RV/2 Voters
- Generic I/O (Doors, Alarms, Generators, etc.)

### Server Overview

The MCN Server software communicates with I/O modules on the MCN network. It processes status messages (Vote, Receive, Disable, Fail, Door Open, Alarm, etc.) messages from the MCN modules and passes them to the client displays on the LAN or WAN network.

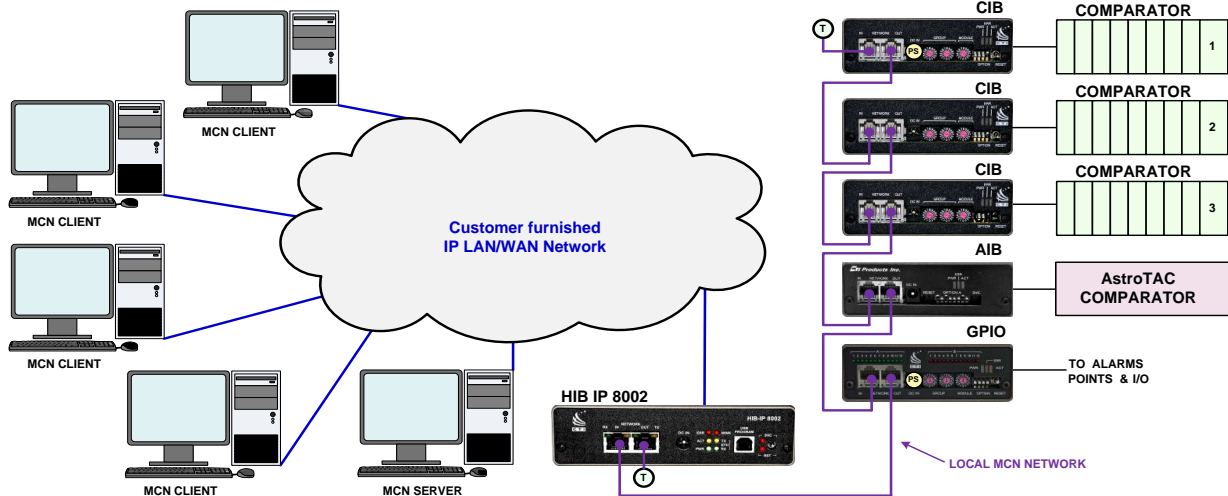
The server accepts control commands (Force-Vote, Disable, Open, Run, Stop, etc.) from the remote clients and sends them on to the modules on the MCN network.

The server supports multiple clients.

### System Configuration

The common system configuration information (Receiver names, Module addresses, channel information, display screen configuration, output functions, etc.) resides in the server and is user-configured with the MCN Config program.

The display screens can be user-defined with various numbers of rows and columns and a number of tabs. Multiple screens can be defined for different users (Police Dispatch, Fire Dispatch, Technicians, etc.). Individual client PCs can be limited to specific screens if desired.



Typical MCN Client-Server System

**PC Client Display Overview**

The Client PC display features real-time status monitoring and control of the modules on the MCN network. The client display opens a display screen from the server and accepts status updates from it.

Control functions such as Force-Vote or Disable for comparators, Open for doors, or Run/Stop for generators are passed to the server for processing.

**Local Display**

The server software includes local display & control capability.

**Receiver Failure and Error Logging**

The MCN Server software can log receiver failures and other user-defined errors. The error log can aid in diagnosing intermittent receivers or phone lines. Logging can be sent to:

- PC Screen
- Disk
- Printer
- Email

**Remote Comparators**

Some dispatch centers have comparators located at site(s) remote from the MCN Server. A HIB-IP 8002 unit can be used to connect to a remote site over an IP WAN. If you need to connect to multiple sites, the higher-tier MCN Advanced Server supports multiple HIB-IP units.

**Controlling Comparators at Multiple Sites**

MCN Remote Comparator Display systems can be custom-designed to control comparators located at multiple remote sites. Contact a CTI Products, Inc. system engineer.

Part Number	Network Interface Included
S1-61855	HIB-IP 8002 78K (External – via IP)
S1-61126	HIB-232 78K (Ext. RS-232)
S1-61130	Additional MCN Server 4-Pack Client License Add-on Option to MCN Server Software above

**Server Specifications**

Application type	Native 32 Bit Windows Application
Operating Systems	Windows XP, Vista, 7, 10, Server 2008 (32 or 64 Bit)
PC Requirements (min.)	Pentium 4, 2 GHz, 2 GB RAM, CD, HDD, 100Base-T NIC
MCN Network Interfaces Supported (select one)	HIB-IP 8002 78 Kb/s Standard HIB-232 78 Kb/s  Limited support for legacy: PCLTA-2x 78 Kb/s or 1.25 Mb/s (varies with PC & OS – Contact CTI):
Multiple Comparator Site Support	Yes, with legacy EXB Network Extenders. (Contact CTI)  See MCN Advanced Server for multiple remote sites over IP
Clients Supported:	Base system: 4 Expandable to 64 with additional Client Packs
Transport Protocol	UDP-IP Unicast and UDP-IP Multicast (to Clients)
Number of MCN I/O modules monitored	78k MCN Network: 16 1250 PCLTA: 128  For greater capacity, use the MCN Advanced Server.
Maximum receivers or I/O points per window	Over 400, depending upon screen resolution and length of names
Receiver Names & Channel Titles & Screen	User-configurable
Status Messages & Colors	User-configurable

**Client Specifications**

Application type	Native 32 Bit Windows Application
Operating Systems	Windows XP, Vista, 7, 10, Server 2008 (32 or 64 Bit)
PC Requirements (min.)	Pentium 4, 2GHz, 2 GB RAM Appropriate IP network card, CD, and HDD

MCN, MCNRCD, CIB, AIB, TIB, GPIO, HIB-IP, HIB-IP 8000, and HIB-IP 8002 are trademarks of CTI Products, Inc. Windows and its variants are trademarks or registered trademarks of Microsoft.

Other trademarks referenced are properties of their respective owners. Specifications subject to change or improvement without notice.