

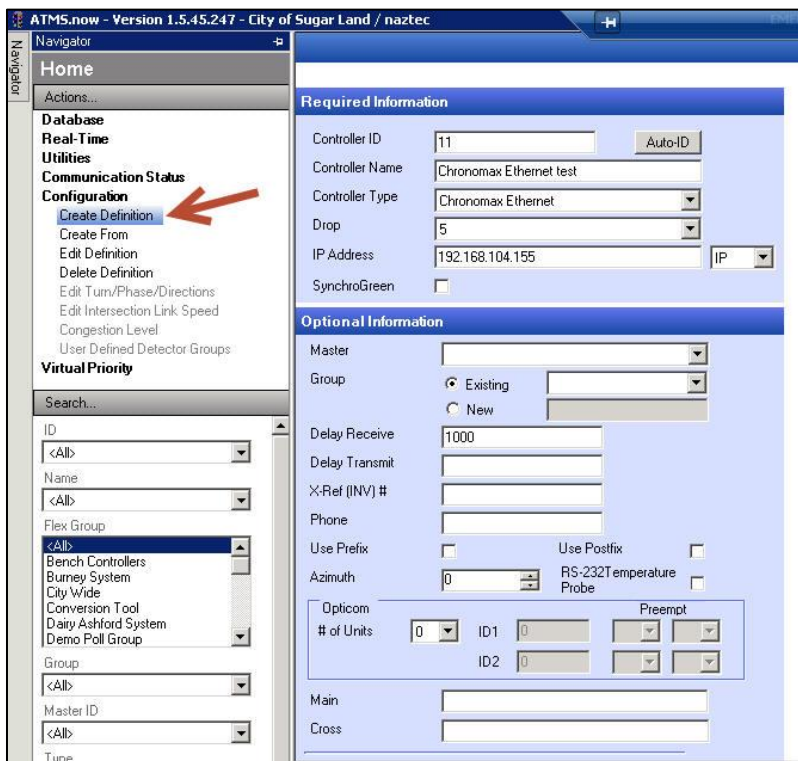
## Tech Note 2008 – Interfacing ATMS.now with a Chronomax Ethernet Interface Device

The purpose of this Tech Note is to help the user interface ATMS.now with a Chronomax Ethernet Interface unit as shown below.



### ATMS.now Considerations

- 1) On ATMS.now, create a Chronomax IP device on the HOME Module by choosing Configurations → Create Definition.



ATMS.now - Version 1.5.45.247 - City of Sugar Land / naztec

Navigator  
Home  
Actions...

Database  
Real-Time  
Utilities  
Communication Status  
Configuration  
Create Definition (indicated by a red arrow)  
Create From  
Edit Definition  
Delete Definition  
Edit Turn/Phase/Directions  
Edit Intersection Link Speed  
Congestion Level  
User Defined Detector Groups  
Virtual Priority

Search...

ID: <All>  
Name: <All>  
Flex Group: <All>  
Bench Controllers  
Bunney System  
City Wide  
Conversion Tool  
Dairy Ashford System  
Demo Poll Group  
Group: <All>  
Master ID: <All>  
Type: <All>

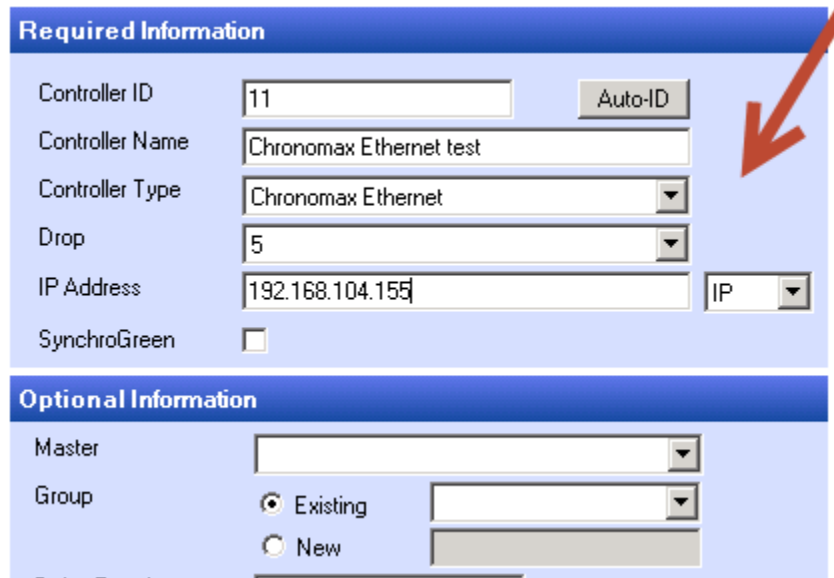
Required Information

Controller ID: 11 (Auto-ID)  
Controller Name: Chronomax Ethernet test  
Controller Type: Chronomax Ethernet  
Drop: 5  
IP Address: 192.168.104.155 (IP)  
SynchroGreen: ☐

Optional Information

Master:   
Group: Existing   
Delay Receive: 1000  
Delay Transmit:   
X-Ref (INV) #:   
Phone:   
Use Prefix: ☐ Use Postfix: ☐  
Azimuth: 0 RS-232 Temperature Probe: ☐  
Opticom:   
# of Units: 0 ID1: 0 ID2: 0 Preempt:   
Main:   
Cross:

- 2) Fill in the Chronomax ID number, the name of the Chronomax, Chronomax Type, ATMS Comm Drop, and the IP address.



The screenshot shows a web-based configuration interface for ATMS.now. It is divided into two main sections: "Required Information" and "Optional Information".

**Required Information:**

- Controller ID: 11 (with an "Auto-ID" button)
- Controller Name: Chronomax Ethernet test
- Controller Type: Chronomax Ethernet (dropdown menu, highlighted by a red arrow)
- Drop: 5 (dropdown menu)
- IP Address: 192.168.104.155 (with an "IP" dropdown menu)
- SynchroGreen: ☐

**Optional Information:**

- Master: (dropdown menu)
- Group: ☒ Existing (dropdown menu) or ☐ New (dropdown menu)

**NOTE:** The selected Controller Type must be *Chronomax Ethernet*.

## Connecting the PC to the Ethernet Interface Device

- 1) Install Internet cable in the Interface device in the "TPE Port" connector, which is labeled on the side of the unit.

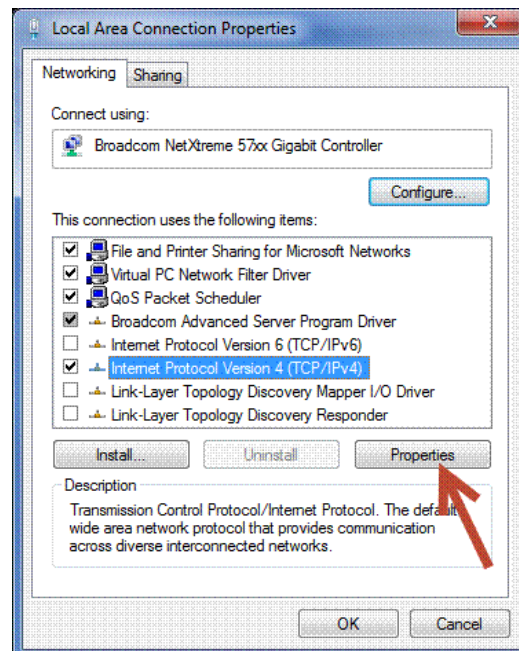


## Programming the Ethernet Interface Unit

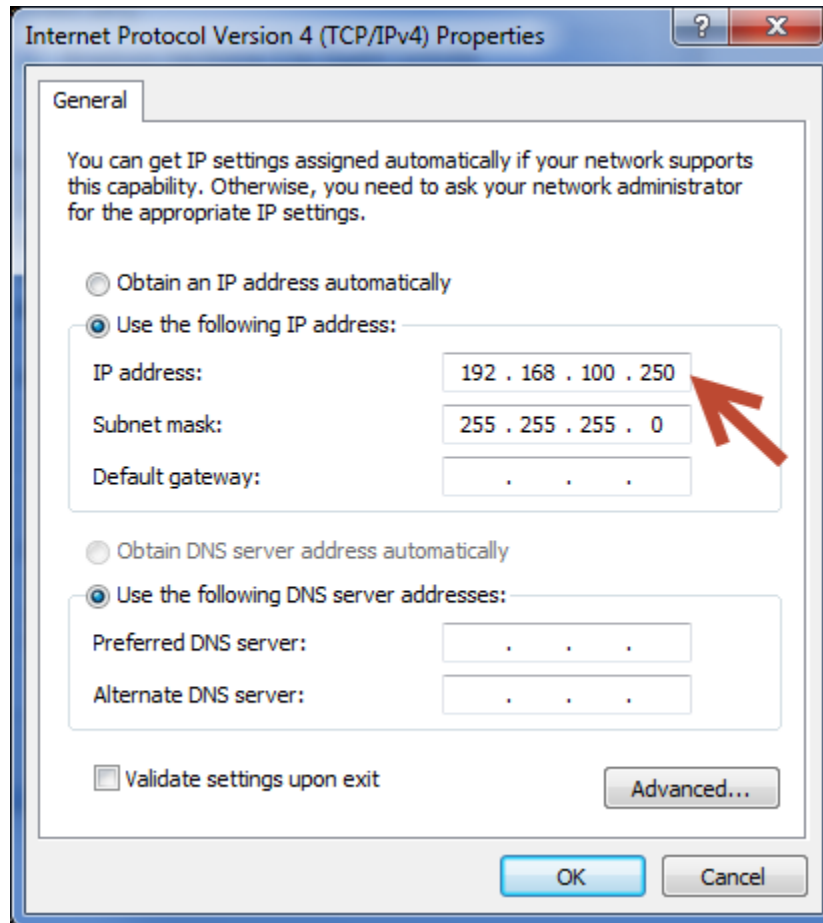
- 1) To set up this device, many users will connect this unit to a standalone Laptop or PC. Change the Default Fixed IP address on the laptop to the following:
  - a. Go to Network Connections
  - b. Choose Properties



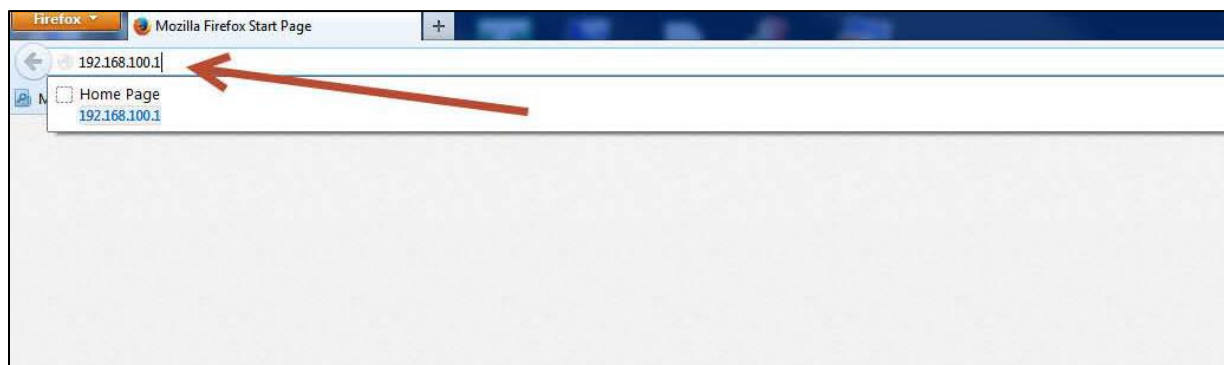
- c. Choose (Highlight) Internet Protocol Version 4 (TCP/IPv4) Properties



- d. Edit IP address of the PC to be 192.168.100.250



- 2) Bring up your browser, such as Firefox or Internet Explorer, and type in Factory Default IP 192.168.100.1.



3) The following screen should come up:

The screenshot shows a web browser window with the address bar set to 192.168.100.1. The page features the Naztec, Inc. logo and a navigation bar with tabs for 'UDP Hosts', 'Network', and 'Serial'. The 'UDP Hosts' tab is selected. On the left side, there is a sidebar with the text 'The TCP/IP Server Version NW1 192.168.100.1 00:13:52:FF:B4:44' and a section titled 'UDP Hosts'. The main content area is titled 'UDP Hosts Table' and contains five rows, each with a dropdown menu set to 'Off' and four input fields for IP address configuration. Below the table, there are fields for 'UDP Port' (set to 5001), 'Idle Time' (set to 10 centiseconds), and 'Idle size' (set to 256 characters). A note next to the UDP Port field says '(reboot if you change this value)'. At the bottom, there are 'Apply' and 'Reset' buttons.

**NOTE:** If the device does not come up you can reset it to the Factory default settings by:

- Power off/on the unit switch 5 to 6 times in a row.
- Wait 30 seconds and restart the unit.
- Repeat step 3 above.

## Programming the Ethernet Interface Device

- 1) Select the UDP Hosts tab and program the host server(s) that the Ethernet Internet Device is going to communicate with. In addition, program the Port number that will match the drop that the devices will use in the ATMS.now. Hit the Apply button to accept the changes.

**Naztec, Inc.**

The TCP/IP Server  
Version NW1  
192.168.100.1  
00:13:52:FF:B4:44

UDP Hosts

UDP Hosts Table

On ▾	192	168	104	109
Off ▾				
Off ▾				
Off ▾				
Off ▾				

UDP Port: 5005 (reboot if you change this value)

Idle Time: 10 centiseconds

Idle size: 256 characters

Apply Reset

- 2) Select the Network Tab and program the IP address, Subnet Mask, and Gateway as appropriate. Hit the Apply button to accept the changes.

**Naztec, Inc.**

The TCP/IP Server  
Version NW1  
192.168.100.1  
00:13:52:FF:B4:44

Network Settings

MAC Address: 00:13:52:FF:B4:44

IP Address: 192 . 168 . 104 . 155

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 104 . 254

Apply Reset

- 3) Select the Serial Tab and setup the Baud Rate, DataBits, Stop Bits, Parity, and Flow Control to match the Chronomax settings. Hit the Apply button to accept the changes. Typical settings are shown below.

The screenshot shows the Naztec, Inc. web interface. At the top, there's a navigation bar with tabs: UDP Hosts, Network, Serial, and others. The 'Serial' tab is selected. On the left sidebar, it says 'The TCP/IP Server Version NW1 192.168.104.155 00:13:52:FF:B4:44'. Below this is a 'Serial Settings' section. The main content area contains five dropdown menus: Baud Rate (9600), Data Bits (8), Stop Bits (1), Parity (None), and Flow Control (None). Below these are 'Apply' and 'Reset' buttons. An orange arrow points to the Data Bits dropdown.

- 4) Power off the unit and connect it to the Chronomax device (Terminal Port) and the Ethernet port (TPE port) of the server.

## Chronomax Settings

The Chronomax settings are accessed from the front panel via the COMM submenu screen, as shown below. Please refer to the Chronomax manual for further details.

<b>1</b>	<b>2</b>	<b>3</b>
ID : 0117 →	← Baud: 9600 →	← Comm Tmr 3.5 →
<b>4*</b>	<b>5*</b>	<b>6*</b>
← Zone : 0010 →	← Fail Time: 0020 →	← Pager: ON

- 1) **ID** – The ID number selects a unique comm address for each time switch. It is numerically entered. <ENTR> is pressed when the current select is to be saved. Pressing <ESC> will exist without saving.
- 2) **Baud Rate** – The baud rate field selects the communications data rate. It may be



selected by using the arrow keys. <ENTR> is pressed when the current selection is to be saved. Moving to another data field also saves the data. Pressing <ESC> will exit without saving.

- 3) **Comm Timer** – The comm timer entry selects the amount of time in seconds that expires between retries. It is numerically entered. <ENTR> is pressed when the current selection is to be saved. Pressing <ESC> will exit without saving.
- 4) **Zone** – The zone entry identifies the school zone to which the timeswitch belongs. This is used in radio or pager zones in which several flashers are to be activated by a single broadcast message. It is numerically entered. <ENTR> is pressed when the current selection is to be saved. Pressing <ESC> will exit without saving.
- 5) **Fail Time** – The fail time entry selects the number of minutes to wait before defaulting to the programmed schedule. This is used as a failsafe mechanism in radio zones. It is numerically entered. <ENTR> is pressed when the current selection is to be saved. Pressing <ESC> will exit without saving.
- 6) **Pager** – The pager entry turns on or off the pager mode. When enabled, it allows the time switch to be controlled by pager messages. It may be selected by using arrow keys. <ENTR> is pressed when the current selection is to be saved. Pressing <ESC> will exit without saving.

**NOTE: Select Pager = OFF if communicating to ATMS.now.**

## Summary

The Chronomax interface device is easy to set up. When ATMS.now is communicating with the Chronomax Ethernet interface device, you will see the status indication turn green on the ATMS.now overview screen.

Controller List																	
Alarm	Status	ID	Name	Lock	Lock User Name	Revision	Note	Drop	Port	Flex Group	Type	Pattern	TBC	Local Counter	Cycle	Offset	IP Address
	<input type="radio"/>	1	Ygnacio Valley VC #1					<input type="checkbox"/>	3	E-NET-5003	Ygnacio Valley VC	NTCIP 65.n 2070 Ethernet	0	0			192.168.100.061
	<input type="radio"/>	2	NTCIP Master					<input type="checkbox"/>	4	E-NET-5004		NTCIP Ethernet MASTER 1.48	0	0			192.168.104.001
	<input type="radio"/>	3	v51 Test Conversion					<input type="checkbox"/>	1	E-NET-5001	Conversion Tool	50.x TS2 RS232	0	0			
	<input type="radio"/>	4	2070 V65.x test Ethernet					<input type="checkbox"/>	3	E-NET-5003		NTCIP 65.n 2070 Ethernet	0	0			192.168.100.004
	<input type="radio"/>	5	Test 2070 Lane Control Controller					<input type="checkbox"/>	5	E-NET-5005		2070 LCS Ethernet New	----	0	0		192.168.104.176
	<input type="radio"/>	6	LCS New 54					<input type="checkbox"/>	2	E-NET-5002		2070 LCS Ethernet New	----	0	0		192.168.104.150
	<input type="radio"/>	7	V76 Walnut Creek Test 2					<input type="checkbox"/>	3	E-NET-5003	Walnut creek	NTCIP 76.x ATC Ethernet	0	0			192.168.104.164
	<input type="radio"/>	8	Test Full Status					<input type="checkbox"/>	4	E-NET-5004	Walnut creek	NTCIP 76.x ATC Ethernet	0	0			192.168.104.163
	<input type="radio"/>	9	Test GVS 61032 V65					<input type="checkbox"/>	1	E-NET-5001		NTCIP 65.x 2070 RS232	0	0			
	<input type="radio"/>	10	v51 Test Conversion					<input type="checkbox"/>	1	E-NET-5001	Conversion Tool	NTCIP 61.x TS2 RS232	0	0			
	<input checked="" type="radio"/>	11	Chronomax E-net test					<input checked="" type="checkbox"/>	5	E-NET-5005	Bench Controllers	Chronomax Ethernet	0	0			192.168.104.155
	<input type="radio"/>	12	dhcp controller					<input checked="" type="checkbox"/>	2	E-NET-5002		NTCIP 61.x TS2 Ethernet	0	0			
	<input type="radio"/>	13	9808					<input type="checkbox"/>	1	E-NET-5001		NTCIP 76.x 2070 Ethernet	0	0			192.168.100.100