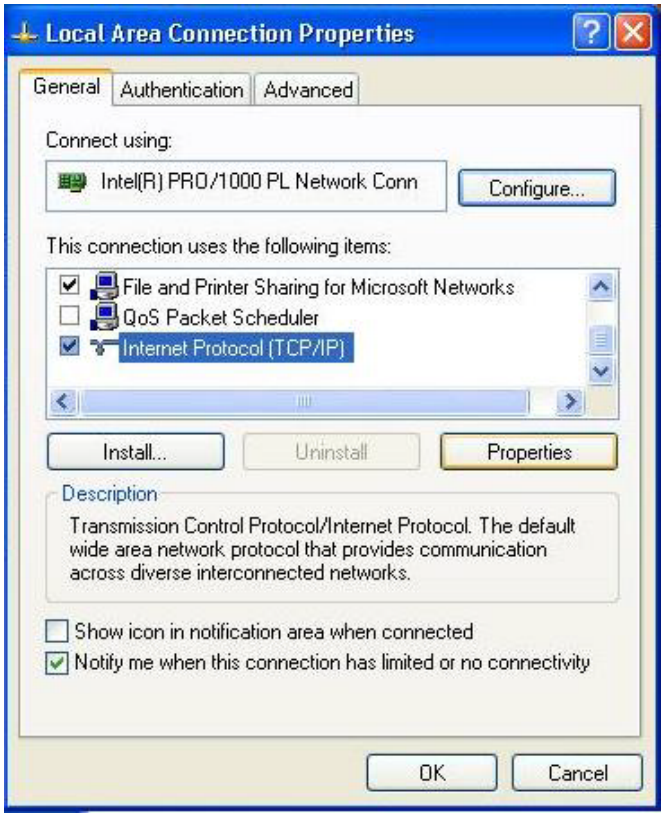
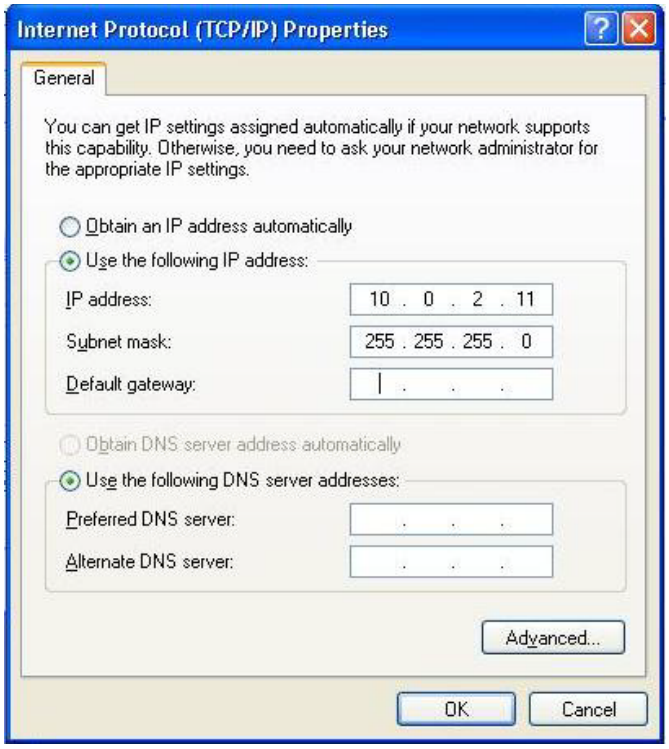
Configuring the LT-EA

Programming the LT-EA is accomplished through an IP connection. A Cross-Over cable or standard network switch will do. The Default IP address of the LT-EA is (10.0.2.40) subnet mask (255.255.255.0). All the programming is done through Internet Explorer. To communicate, the PC needs to be set to an address that will work with the LT-EA. For Example: (10.0.2.11), Subnet (255.255.255.0).

To Change your PC IP Address

Go to Control Panel, Network Connections, and Select Properties. Highlight the Internet Protocol and select Properties.



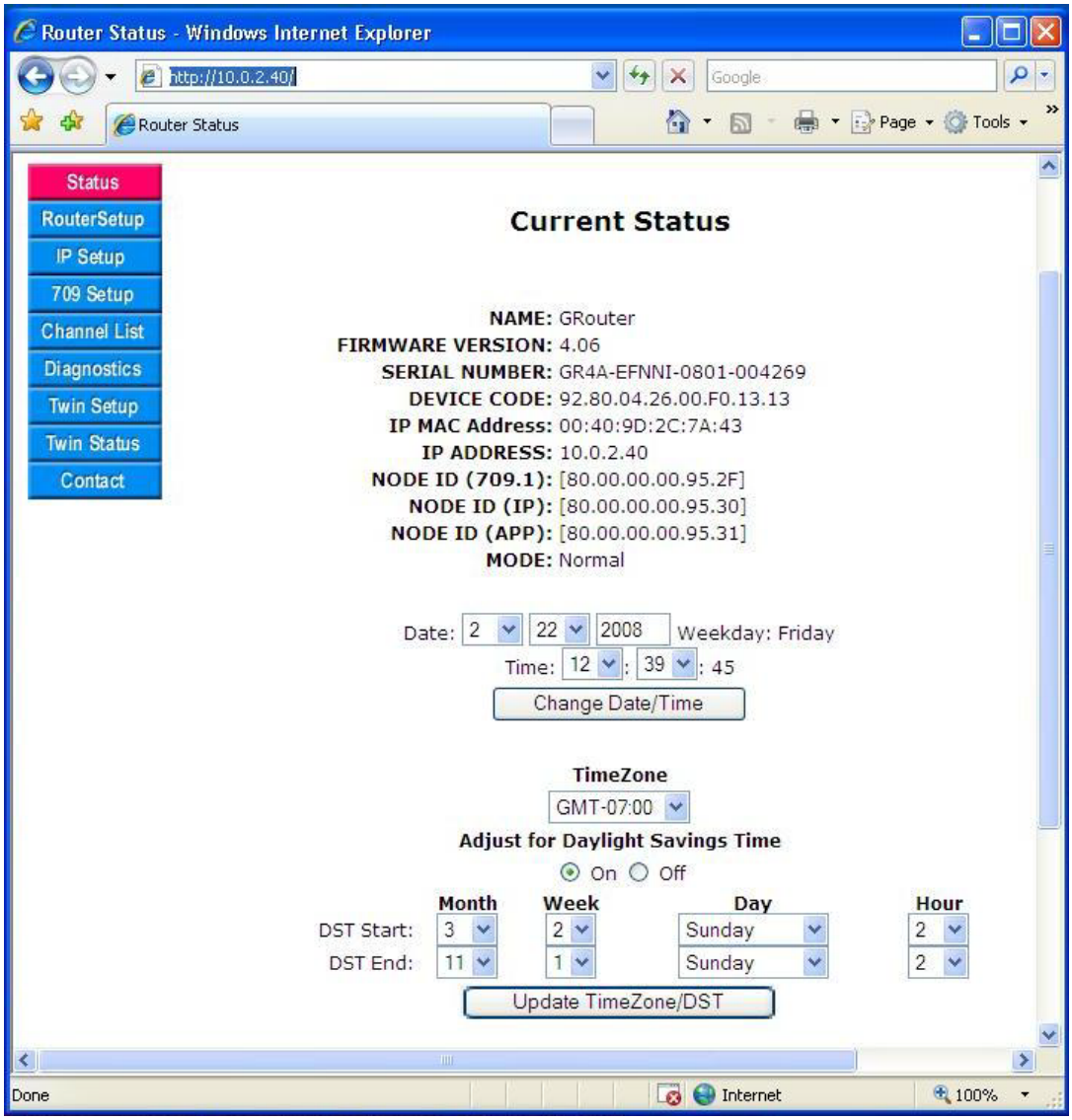


Select an IP address compatible with the LT-EA.

Logon to LT-EA Router

Using Internet Explorer, Type http://10.0.2.40 to logon to an unconfigured router. The user name is *Adept*, default password is *Gadget*. This is case sensitive

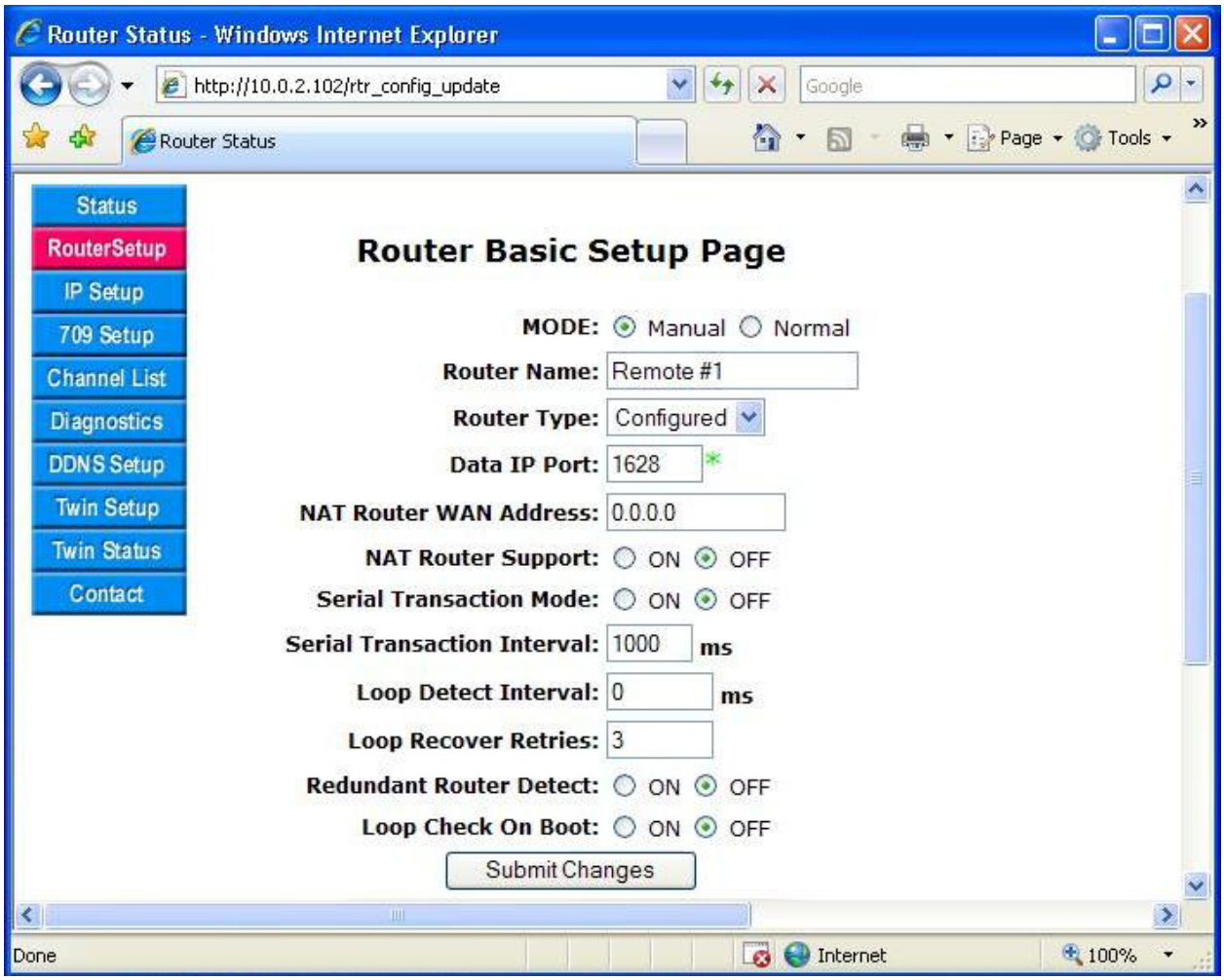
Main Screen



There's one router for every remote location and one router at the Intelli-Site server location. We'll program the Remote Location first then the Server. It's a four step process;

- Router Setup
- IP Setup
- 709 Setup (Two Sides, IP and FTT-10)
- Channel List

Router Setup, Remote Location

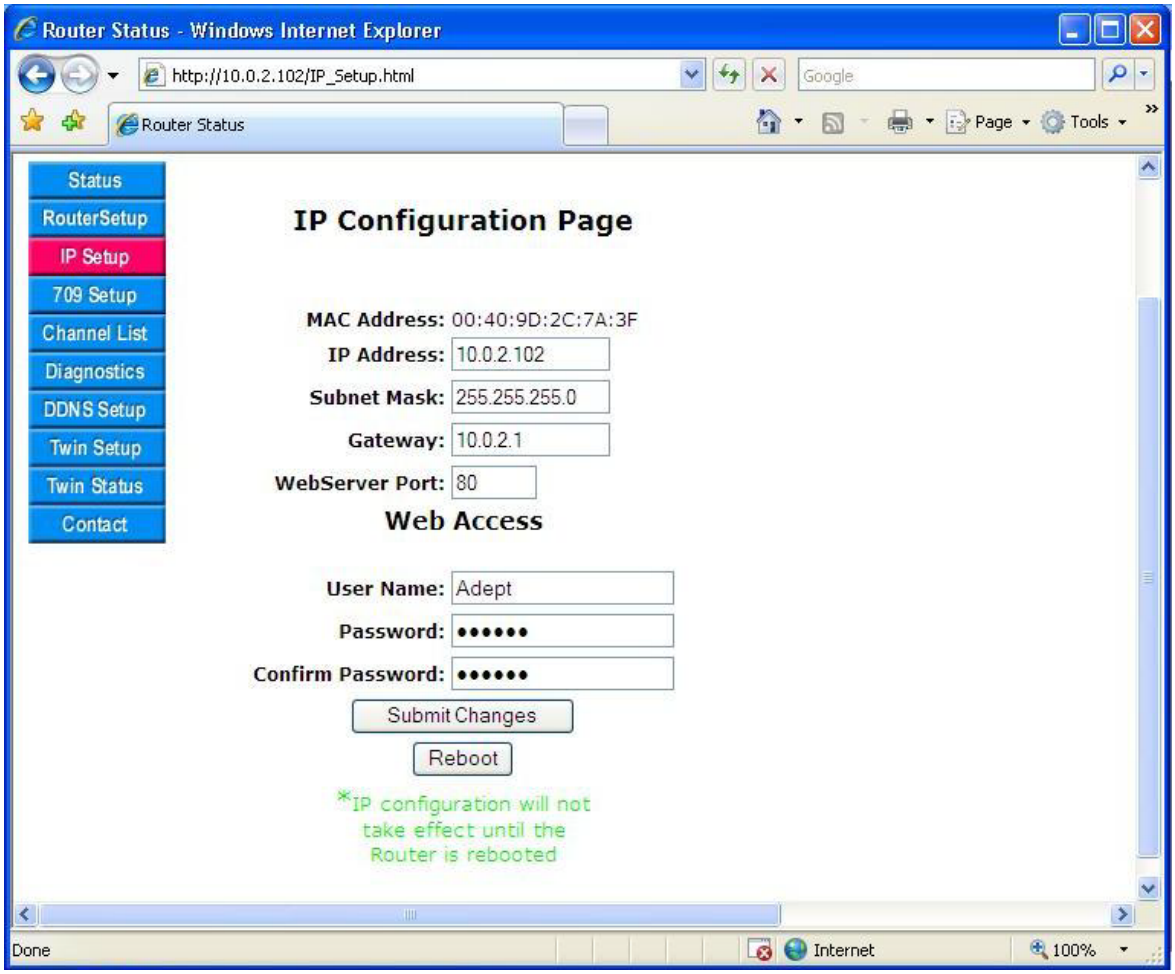


The basic configuration for a *Remote Site* is;

- Mode: Manual Mode
- Router Type: Configured
- Loop Detect Interval: 0,
- Submit Changes

A zero in Loop detect Interval is not required and could remain the same and still work. We are setting it here to 0, which will disable this feature. With this disabled you will be able to trouble shoot using diagnostics, looking for packets received from the 709 side and sent from the 709 side without loop detect adding more transactions. The benefit for leaving it on, each router sends a periodic event to it's local loop and if your are trouble shooting you know you're router is connected to the local loop.

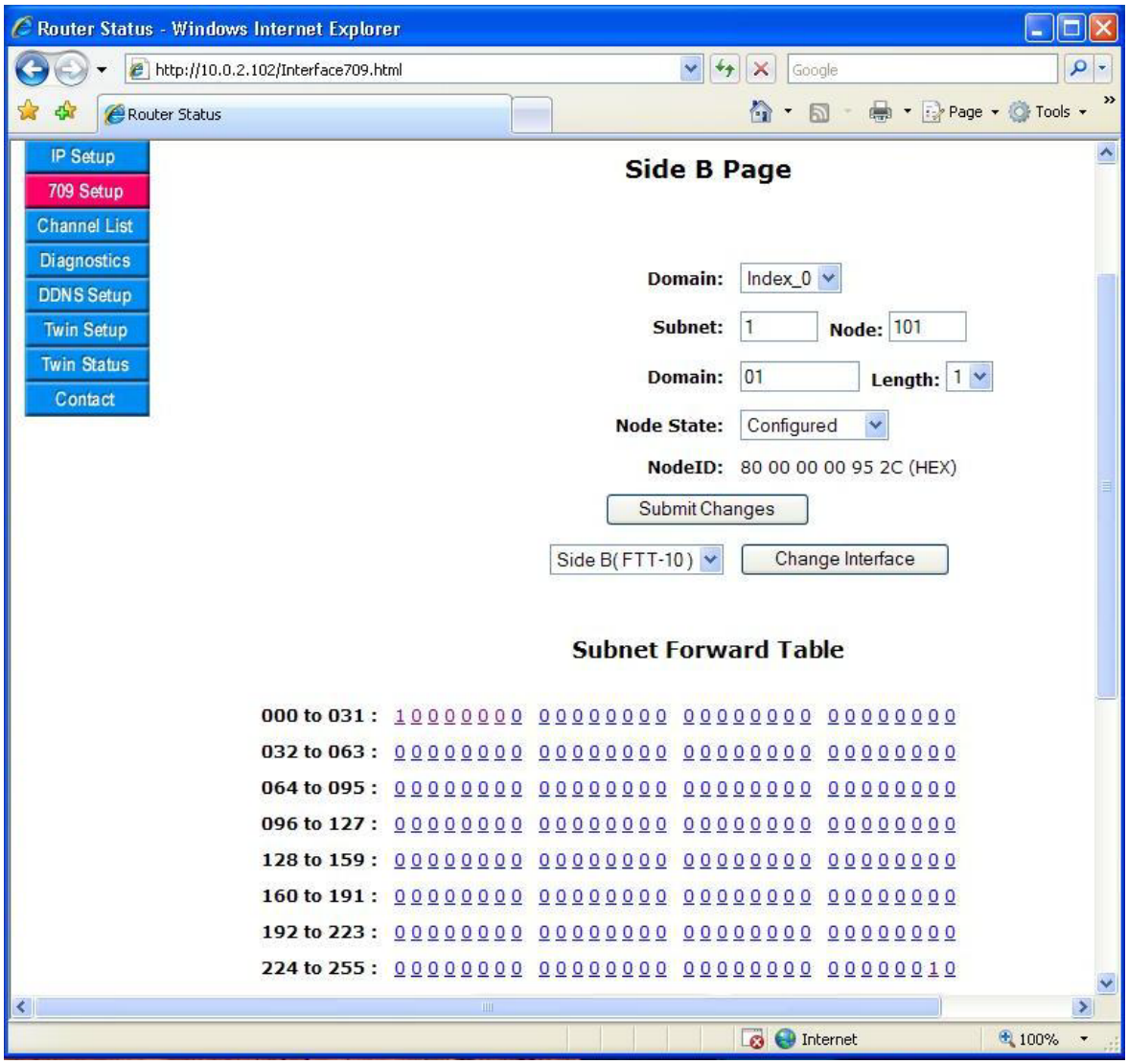
IP Setup, Remote Location



Set the IP address to something compatible with your network. If just testing units it would be best to set it compatible with the default IP address but different from the default address. Make sure you write this down, as if lost you maybe programming the unit again from the default settings again.

- IP Address: 10.0.2.102
- Submit Changes
- Reboot
- Logon Again

709 Setup, Remote Location, FTT-10 Side



There are two sides to every router. Each side wants to know which subnets to forward to the other side of the router. Each side needs to be assigned a Subnet/Node number. This is remote location #1 and the subnet for this section is subnet 1. The node address can be any number from 1-127. We want to save the lower numbers for our controllers so we'll start addressing our routers at 100. To remind us that this is site 1 we'll use 101. Subnet 1 / Node 101.

- Subnet: 1 Node: 101
- Domain 01 Length: 1
- Node State: Configured
- Submit Changes

All of our controllers are set to a Hardware Domain address of 01. Please enter the zero in from of the 1 as you need to enter the hex value. The routers will only forward events from the same domain it's set to. This hardware domain should not be confused with the INTELLI-SITE field called Domain and the field in the INTELLI-SITE software is used to inform the server which PC and serial port to use.

Changing the Node state to configured is an important setup as it will not begin to operate until

you tell it to go. This gives us a chance to turn on and off ports while the system is fully configured.

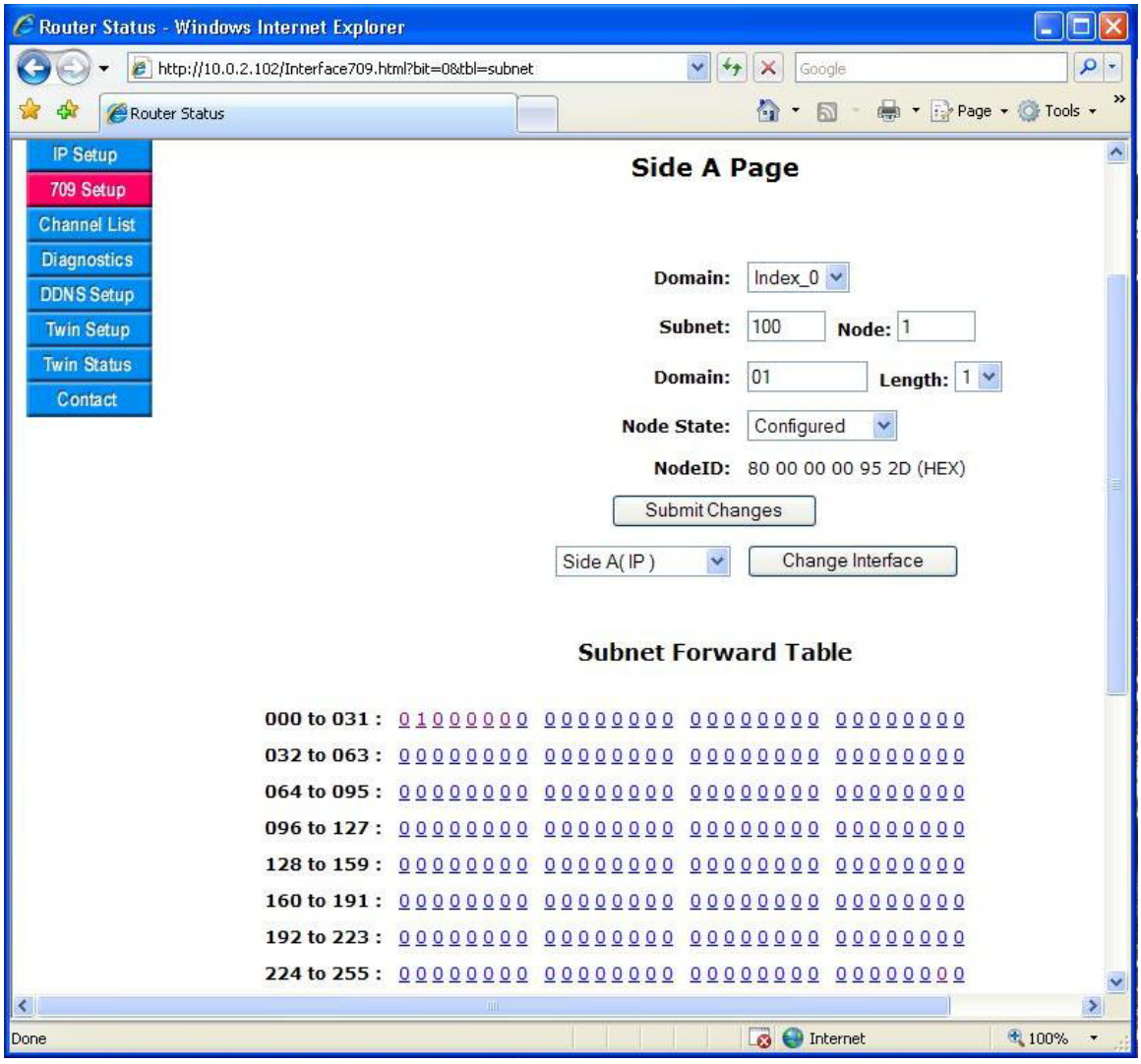
Subnet Forward Table

- Select: 0, 254

All the remote subnet tables are programmed the same way. The control panels only have three types of events. All commands and events get sent to Subnet 254, the Lon-Talk Serial adapter. It's default address is Subnet: 254 Node: 1. The other event is a Service Pin. The pin is used to send the unique Neural ID to the INTELLI-SITE software. After the INTELLI-SITE software has the neural ID the software can change the Subnet/Node address of the controller. This Service Pin goes out on Subnet 0.

Don't go anywhere yet, we need to configure the other side of this router. The IP Side.

709 Setup, Remote Location, IP Side



The IP side of this node is related to the IP side of every other router. In regards to addressing it should be considered another Echelon subnet. We'll call this subnet: 100. The number 100 is not used for any routing but is used to tie all the routers together. We'll use Subnet/Node address 100/1 for this location as it's Remote Location #1. Remote Location #2 (IP side) would be 100/2 etc. The Router (IP Side) at the INTELLI-SITE server will be set to 100/100 as we can

not use 0. This will give all IP routers a common subnet of 100.

- Change the Combo Box next to Change Interface to: Side A (IP)
- Change Interface
- Subnet: 100 Node: 1
- Domain 01 Length: 1
- Node State: Configured
- Submit Changes

All of our controllers are set to a Hardware Domain address of 01. Please enter the zero in from of the 1 as you need to enter the hex value. The routers will only forward events from the same domain it's set to. This hardware domain should not be confused with the INTELLI-SITE field called Domain and the field in the INTELLI-SITE software is used to inform the server which PC and serial port to use.

Changing the Node state to configured is an important setup as it will not begin to operate until you tell it to go. This gives us a chance to turn on and off ports while the system is fully configured.

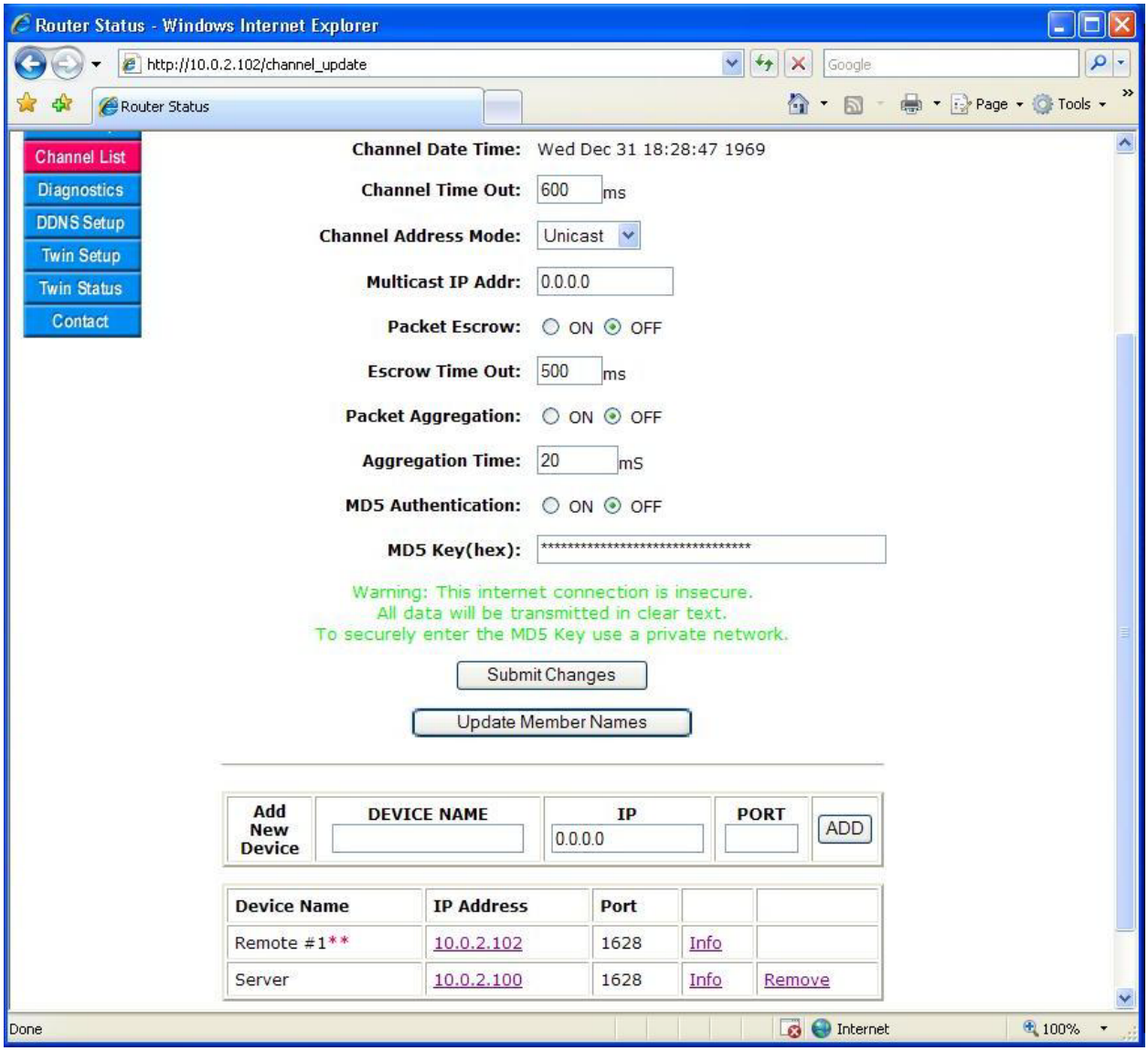
Subnet Forward Table

The IP side of the connection determines which subnet packets get forwarded to the Remote Location. This is Remote Location #1 so we'll forward any packet with Subnet #1 through the router.

- Select: 1

Channel List, Remote Location

The Channel List is used to inform the router who to forward packets to. We are currently programming Remote Location #1 so we need to send our packets to the MASC server location. This router has not been programmed yet but it doesn't stop us from pre-entering the information. We'll set the IP address to the Server router to 10.0.2.100 and name it Server.

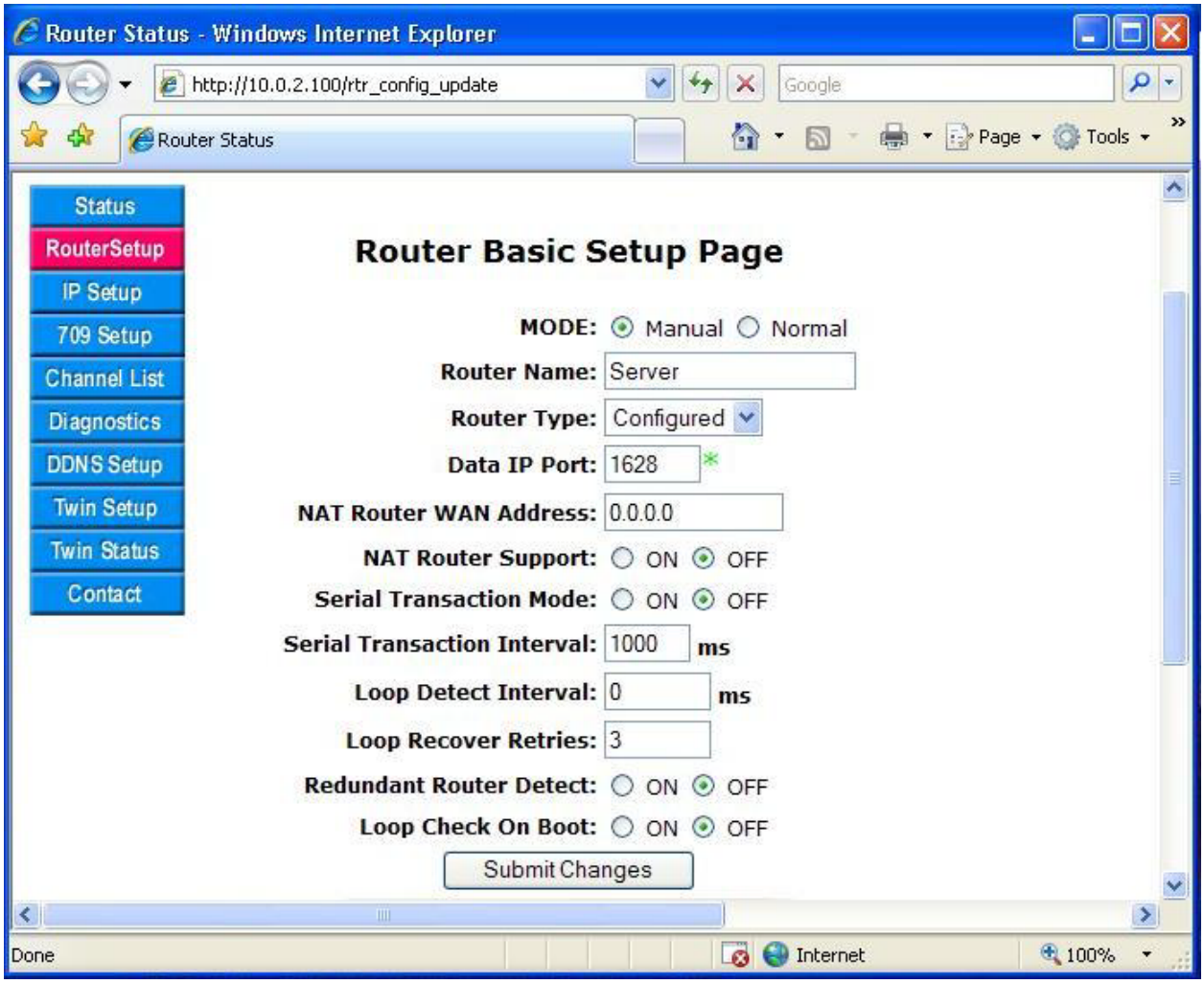


- Device Name: Server
- IP: 10.0.2.100
- Port: 1628
- ADD

Label the Router and proceed with programming the INTELLI-SITE server location.

Router Setup, Server Location

The server location is where the Lon-Talk serial adapter is located. The Default address the Lon-Talk Adapter is Subnet 254 Node 1. So we'll all the cabling at the Server location Subnet 254. Control panel can also be wired to this segment. The main concern would be not using Subnet 254 Node 1 for a control panel as it's already being used by the SLTA.

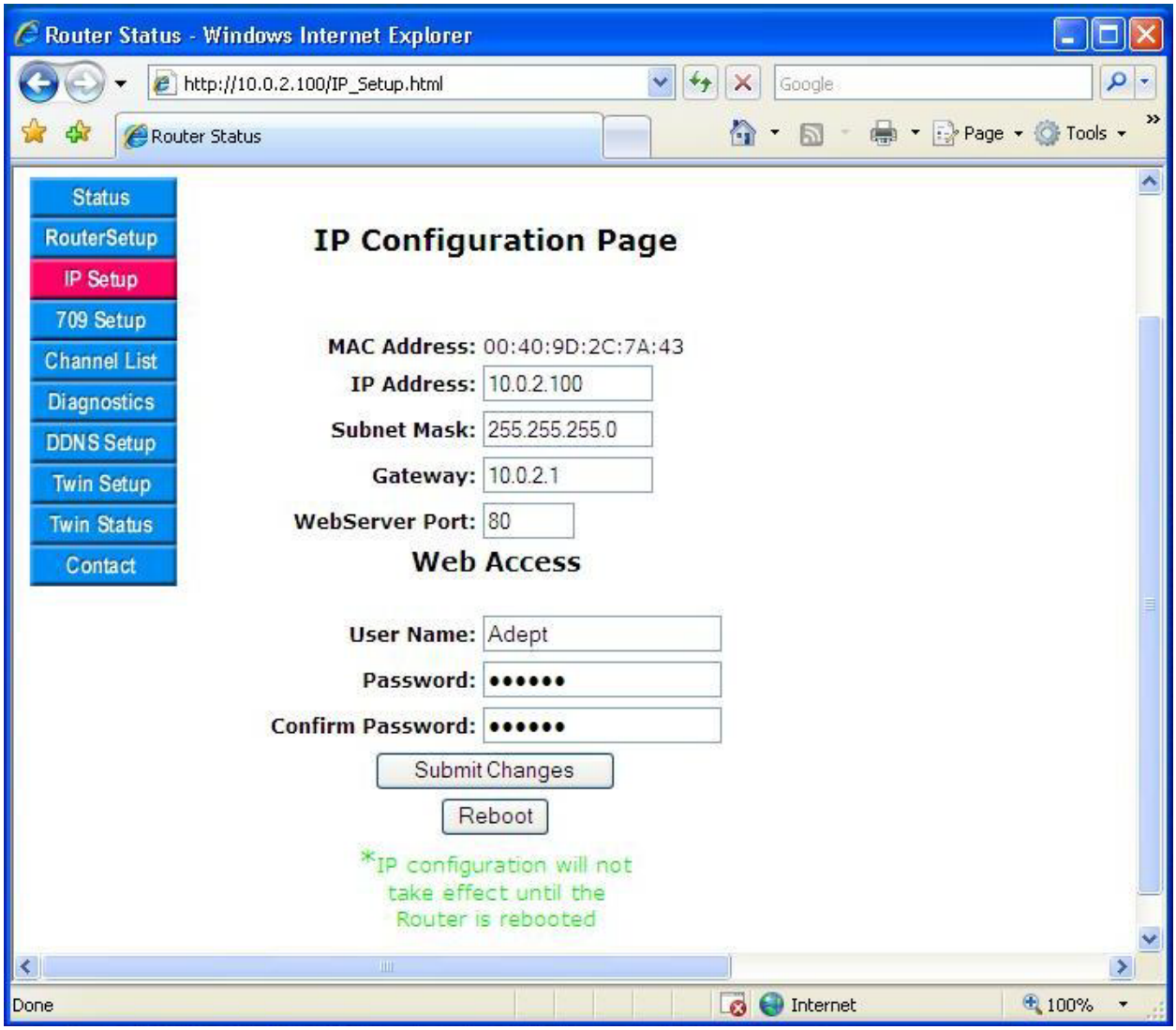


The basic configuration for a *Remote Site* is;

- Mode: Manual Mode
- Router Name: Server
- Router Type: Configured
- Loop Detect Interval: 0,
- Submit Changes

A zero in Loop detect Interval is not required and could remain the same and still work. We are setting it here to 0, which will disable this feature. With this disabled you will be able to trouble shoot using diagnostics, looking for packets received from the 709 side and sent from the 709 side without loop detect adding more transactions. The benefit for leaving it on, each router sends a periodic event to it's local loop and if your are trouble shooting you know you're router is connected to the local loop.

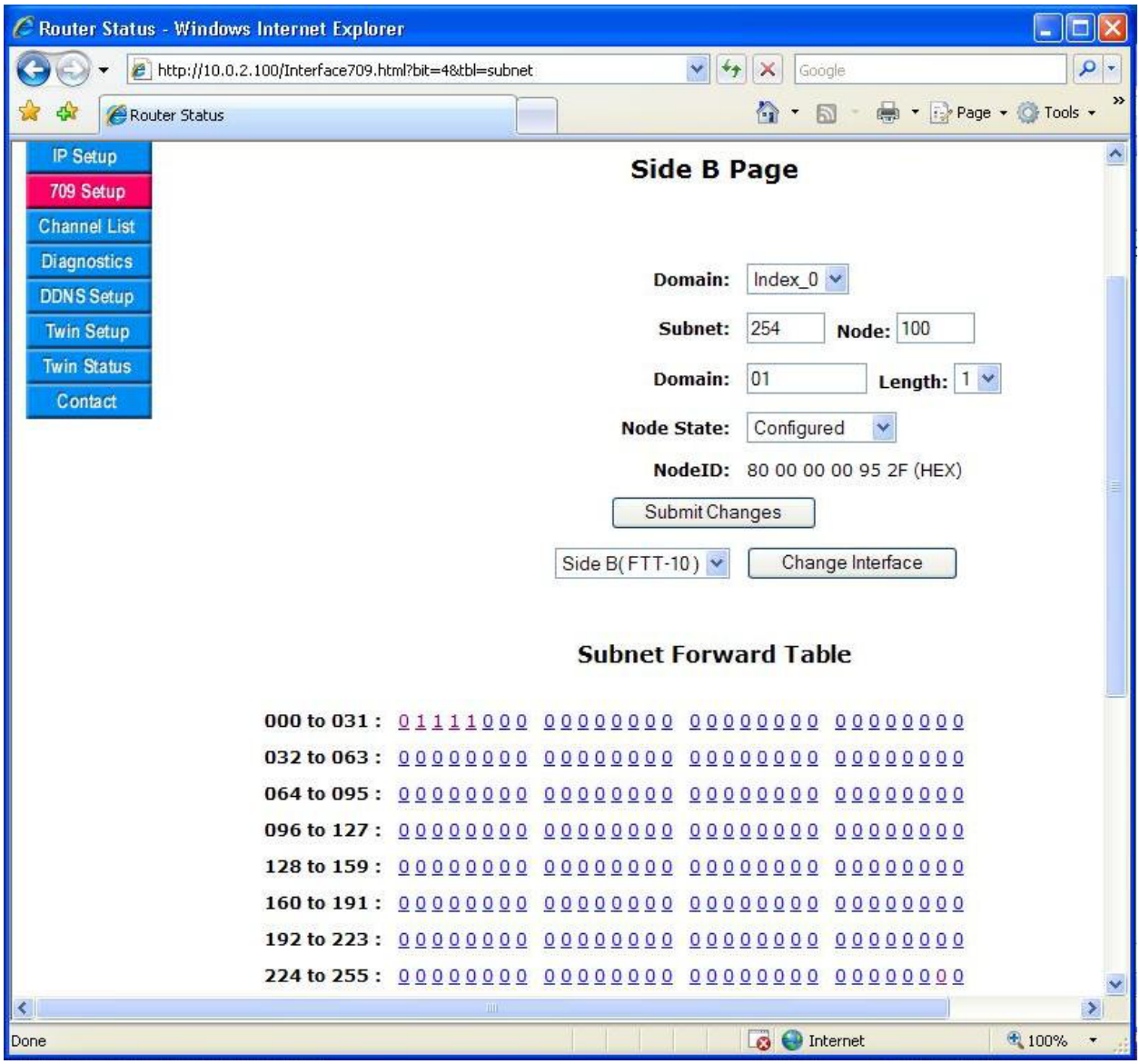
IP Setup, Server Location



Set the IP address to something compatible with your network. If just testing units it would be best to set it compatible with the default IP address but different from the default address. Make sure you write this down, as if lost you maybe programming the unit again from the default settings again.

- IP Address: 10.0.2.100
- Submit Changes
- Reboot
- Logon Again

709 Setup, Server Location, FTT-10 Side



There are two sides to every router. The FTT-10 side needs to get configured and a determination needs to be made as to which packets get sent out to the IP network.

- Subnet: 254 Node: 100
- Domain 01 Length: 1
- Node State: Configured
- Submit Changes

All of our controllers are set to a Hardware Domain address of 01. Please enter the zero in from of the 1 as you need to enter the hex value. The routers will only forward events from the same domain it's set to. This hardware domain should not be confused with the INTELLI-SITE field called Domain and the field in the INTELLI-SITE software is used to inform the server which PC and serial port to use.

Changing the Node state to configured is an important setup as it will not begin to operate until you tell it to go. This gives us a chance to turn on and off ports while the system is fully

configured.

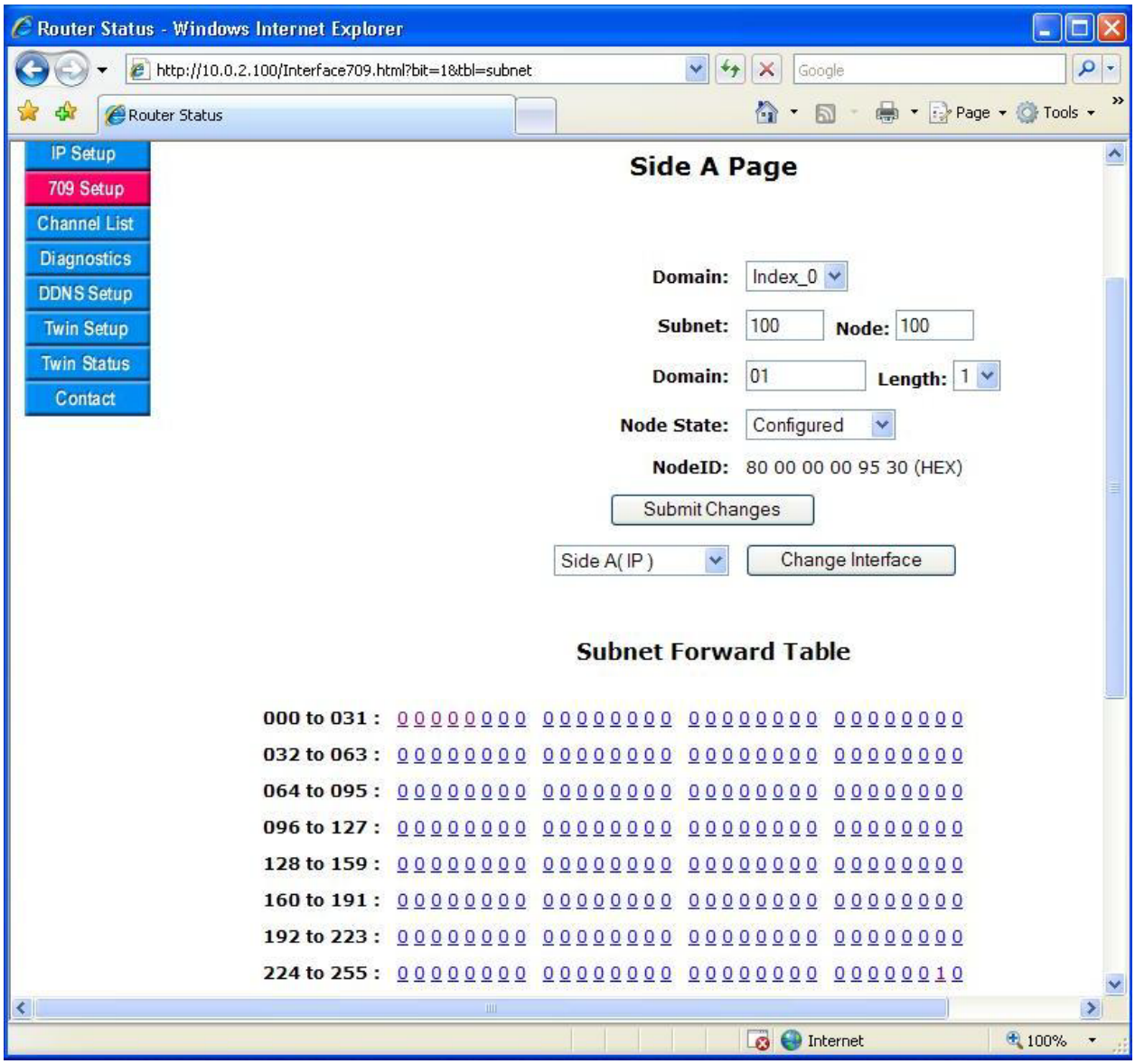
Subnet Forward Table

- Select: 1, (Opt. 2, 3, 4)

The computer sends commands to the SLTA and the SLTA sends commands to the remote panels. In this case we have Remote Location #1 that needs to receive commands so we'll forward all commands for Subnet 1 out to the IP network. The reason 2, 3, and 4, are check is it gives you an example of how to program a system with 4 remote locations.

Let's configure the IP Side.

709 Setup, Server Location, IP Side



The IP side of this node is related to the IP side of every other router. In regards to addressing it should be considered another Echelon subnet. We'll call this subnet: 100. The number 100 is not used for any routing but is used to tie all the routers together. We'll use Subnet/Node address 100/1 for this location as it's Remote Location #1. Remote Location #2 (IP side) would be 100/2 etc. The Router (IP Side) at the INTELLI-SITE server will be set to 100/100 as we can

not use 0. This will give all IP routers a common subnet of 100.

- Change the Combo Box next to Change Interface to: Side A (IP)
- Change Interface
- Subnet: 100 Node: 100
- Domain 01 Length: 1
- Node State: Configured
- Submit Changes

All of our controllers are set to a Hardware Domain address of 01. Please enter the zero in from of the 1 as you need to enter the hex value. The routers will only forward events from the same domain it's set to. This hardware domain should not be confused with the INTELLI-SITE field called Domain and the field in the INTELLI-SITE software is used to inform the server which PC and serial port to use.

Changing the Node state to configured is an important setup as it will not begin to operate until you tell it to go. This gives us a chance to turn on and off ports while the system is fully configured.

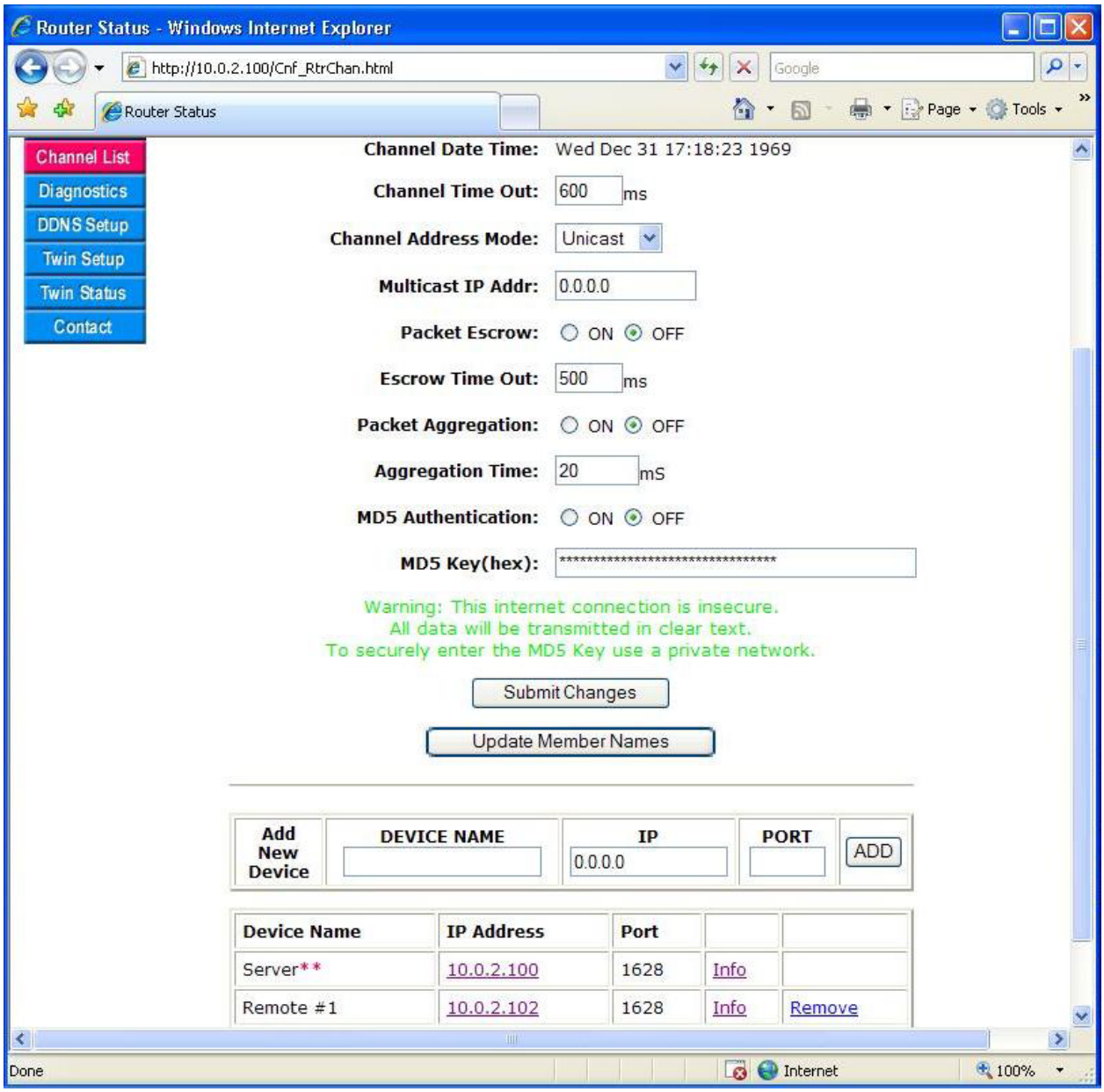
Subnet Forward Table

The IP side of the connection determines which subnet packets get forwarded to the INTELLI-SITE server. All commands from every panel are sent to Subnet 254 by default so this is the only packet we'll need to forward.

- Select: 254

Channel List, Server Location

The Channel List is a list of Routers that packets could be forwarded to. This example has one other location, as more locations are needed we just add them to the list.



- Device Name: Remote #1
- IP: 10.0.2.102
- Port: 1628
- ADD

Remember to label the Router.