



Lantronix UDS-10 Configuration

The Lantronix UDS-10 allows communications between the DSX Comm Server and the DSX Master controller via a Local Area Network. The UDS-10 can be programmed using the DSX program “KB2CW.EXE” and setup to communicate using RS-232 or RS-485 through the same DB-25 connector. The following step by step instruction will describe the basic termination and programming procedure as well a screen captures.

1. Connect the UDS-10 to a Serial Port on a WinDSX Computer.
2. Run the KB2CW Program from the same WinDSX Computer.
3. Within KB2CW define the “Comm Port” being used to program the UDS-10.
4. Click “OK” in the Define Port screen of KB2CW then remove power from the UDS-10.
5. Press and hold down the “x” key of the PC keyboard then power up the UDS-10.
6. Within seconds of seeing the “*** Lantronix Universal Device Server ***” line of the KB2CW screen, press “Enter” as described on the screen to enter the “Setup Mode”.

Note /// Timing is critical for steps 5 and 6.

7. Press “0” (zero) to enter the UDS-10 “Server Configuration” mode.
8. The programming will ask for an “IP Address”. This must be a static address.
9. Next, set the “Gateway IP Address”.

Note /// Ask the Network Administrator if available. If no Gateway is used, use 000.000.000.000

10. Next, the “Number of Bits for Host Part” is needed. This could be different in each network. The number needed is dependent on the “Subnet Mask” of the network. Within the “Installation Guide” document provided with each Lantronix UDS-10 is a section named “IP Netmask” and chart named “Netmask Examples” which can provide this needed number.
11. The next option is the “Telnet Config Password” does not need to be changed for WinDSX. Leave this setting at “N” unless required to restrict Telnet access to the UDS-10. If the password is changed and forgotten, the UDS-10 can only be accessed via the Serial Port (Use KB2CW).
12. Press “1” (number one) to enter the “Channel 1 Configuration” to set additional parameters
13. “Baudrate” should be set to 9600 baud, “I/F Mode” should be set to “4D” for 4 wire RS-485 or “4C” for 3 wire RS-232, “Flow” should be left at “00”.

Note /// The I/F Mode setting defines whether we connect from the UDS-10 to the DSX Master panel Using RS-232, I/F Mode = 4C or RS-485, I/F Mode = 4D and wire the DB25 according to diagram.

14. Next, is “Local Port No.”. This number can be anything between 4001 and 5000 for use with WinDSX but must match the “IP Port #” as set in WinDSX 2.1.0 and higher.

Database>System>Setup>Comm Ports>General>IP Port #.

15. “Connect Mode” should be set to “CC”.
16. “Datagram Type” should be “01”.
17. “Remote IP Address” is the IP Address of the Communications Server PC.
18. The settings for “Remote Port”, “PackCtrl”, “Sendchar 1” and “Sendchar 2” should all be left at the default.
19. Press “9” to Save and Exit.
20. Configure a Comm Port within the WinDSX Communication Server, Database>System>Setup>Comm Ports>Add New. Provide a “Port Number” that is higher in number than those addresses that exist within Windows Control Panel. Also set this new Comm Port to a “LAN Type” port with the Lantronix UDS-10 IP Address and “Local Port No.” entered into the IP Port field of the Comm Port settings.

Kb2cW Screen Shot of UDS-10 Programming

```
Kb2cW --- DSX Access Systems Inc. ** COMMPORT **
File CommPort IpClient IpServer IpCommPort Options Help
TYPE:COMMPORT
PORT:2
BAUD:9600
WORDLENGTH:8
STOPBITS:1
PARITY:N

*** Lantronix Universal Device Server ***||Serial Number 6402270  MAC address
00:20:4A:64:08:DE||Software Version V04.1 (000522)
Press Enter to go into Setup Mode |
|*** basic parameters ||Hardware: Ethernet Autodetect
IP addr 192.168.000.034, gateway 192.168.000.042,netmask 255.255.255.224

***** Channel 1 *****
Baudrate 9600, I/F Mode 4D, Flow 00
Port 04096
Datagram Type 01||Pack Cntrl: 00||Remote IP Adr: 192.168.000.057, Port 00000|
|||
|Change Setup : 0 Server configuration
                1 Channel 1 configuration
                7 Factory defaults
                8 Exit without save
                9 Save and exit
                Your choice ? 0
IP Address : (192) .(168) .(000) .(034)
Set Gateway IP Address (Y) Y
Gateway IP addr (192) .(168) .(000) .(042)
Netmask: Number of Bits for Host Part (0=default) (05)
Change telnet config password (N) N
|||
*** basic parameters ||Hardware: Ethernet Autodetect
IP addr 192.168.000.034, gateway 192.168.000.042,netmask 255.255.255.224

***** Channel 1 *****
Baudrate 9600, I/F Mode 4D, Flow 00
Port 04096
Datagram Type 01||Pack Cntrl: 00||Remote IP Adr: 192.168.000.057, Port 00000|
|||
|Change Setup : 0 Server configuration
                1 Channel 1 configuration
                7 Factory defaults
                8 Exit without save
                9 Save and exit
                Your choice ? 1
Baudrate (9600)
I/F Mode (4D) ?
Flow (00) ?
Port No (04096) ?
ConnectMode (CC) ?
Datagram Type (01) ?
Remote IP Address : (192) .(168) .(000) .(057)
Remote Port (00000) ?
Pack Cntrl (00) ?
SendChar 1 (00) ?
SendChar 2 (00) ?|||
*** basic parameters ||Hardware: Ethernet Autodetect
IP addr 192.168.000.034, gateway 192.168.000.042,netmask 255.255.255.224

***** Channel 1 *****
Baudrate 9600, I/F Mode 4D, Flow 00
Port 04096
Datagram Type 01||Pack Cntrl: 00||Remote IP Adr: 192.168.000.057, Port 00000|
|||
|Change Setup : 0 Server configuration
                1 Channel 1 configuration
                7 Factory defaults
                8 Exit without save
                9 Save and exit
                Your choice ? 9
Parameters stored ...|||
```

Checking the Program with Internet Explorer

Once the UDS-10 has been assigned a TCP/IP address it can then be programmed via Telnet or Internet Explorer.

With Telnet select Start>Run and use this Example:

Telnet 192.168.0.45 9999

9999 is the port that must be specified when using Telnet.

With Internet Explorer simply enter the TCP/IP Address in the Address box and click GO. Use the following examples on how the unit is to be programmed substituting your IP Address, Gateway, Subnet Mask and Port number. If Internet Explorer cannot connect to the UDS-10, check the version of IE by clicking on Help and About Internet Explorer. Then either find a PC with a different version or upgrade the version on that machine. Lantronix has confirmed that some versions of Internet Explorer did not include the Java script necessary.

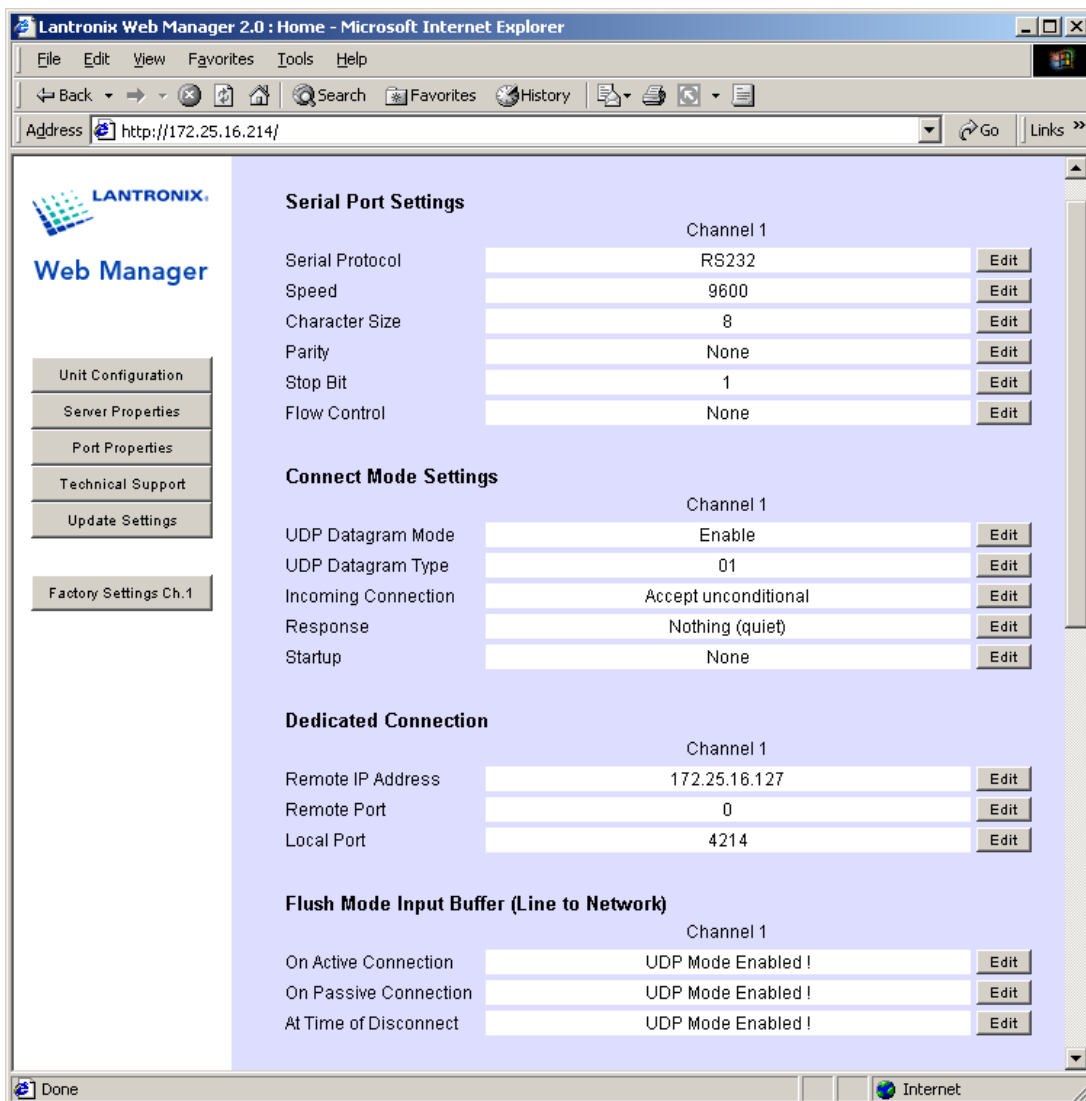
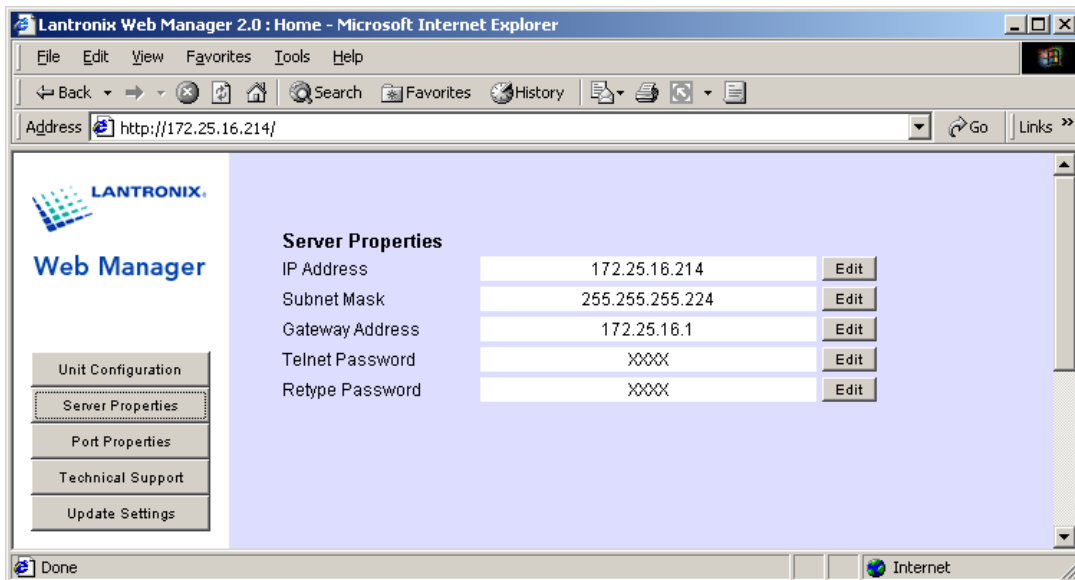
Server Configuration

Product	Lantronix Universal Device Server
Model	Ethernet 1 Channel
Firmware Version	V4.20
Serial Number	2433787
Hardware Address	00-20-4A-24-83-FB
IP Address	172.25.16.214
Subnet Mask	255.255.255.224
Gateway Address	172.25.16.1

Port Configuration

	Channel 1
Local Port Number	4214
Serial Port Speed	9600
Flow Control	00
Interface Mode	4C
Connect Mode	CC
Disconnect Mode	Disabled
Flush Mode	00
UDP Datagram Type	01
Pack Control Byte	Disabled

Additional Screen Sots using Internet Explorer



Additional Screen Sots using Internet Explorer

Lantronix Web Manager 2.0 : Home - Microsoft Internet Explorer

Address <http://172.25.16.214/>

LANTRONIX Web Manager

- Unit Configuration
- Server Properties
- Port Properties
- Technical Support
- Update Settings
- Factory Settings Ch. 1

Flush Mode Output Buffer (Network to Line)

Channel 1

On Active Connection	UDP Mode Enabled !	Edit
On Passive Connection	UDP Mode Enabled !	Edit
At Time of Disconnect	UDP Mode Enabled !	Edit

Packing Algorithm

Channel 1

Packing Algorithm	Disabled	Edit
Idle Time	Pack Algorithm Disabled !	Edit
Trailing Characters	Pack Algorithm Disabled !	Edit
Send Characters	Disabled	Edit
Send Character 01	Not Set	Edit
Send Character 02	Not Set	Edit

Additional Settings

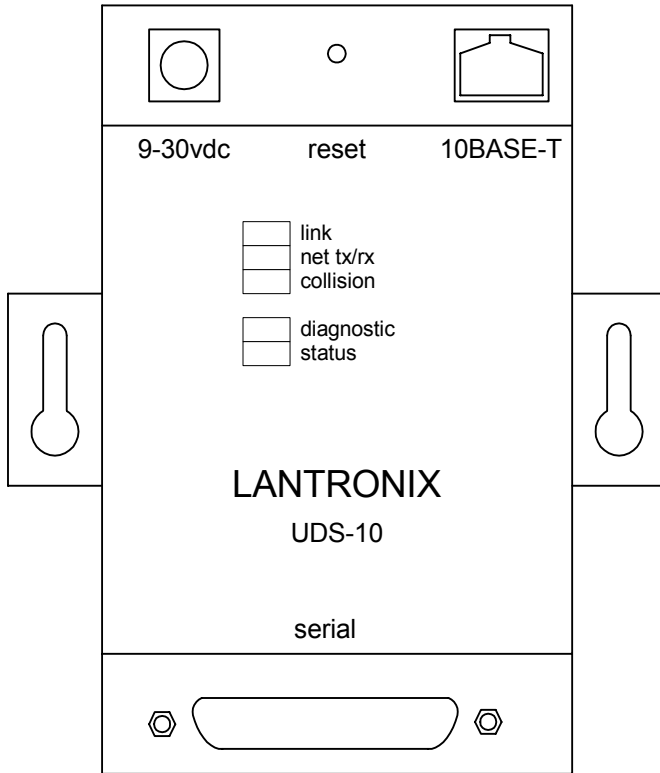
Channel 1

Send Immediate	Disabled	Edit
Disconnect Mode	UDP Mode Enabled !	Edit
Port Password	Disabled	Edit
Telnet Mode	Disabled	Edit
Inactivity Timeout	Disabled	Edit
Inactivity Timer	Not Set	Edit
Terminal Type/ Port Pwd		Edit

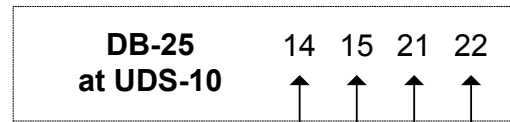
Applet started | Internet

Lantronix UDS-10 Connections

Power for the UDS-10 when used at the Master Controller can be sourced from the 12VDC Card Reader Power.



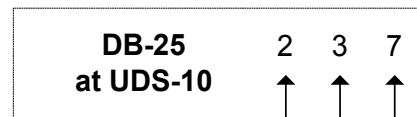
RS-485 Terminations



Note /// Requires the UDS-10s "I/F Mode" set to "4D"

Connections at DSX Panel	RX+	RX-	TX+	TX-
1021 & 1020	51	52	49	50
1022	49	48	51	50
1030 Series	55	56	53	54

RS-232 Terminations

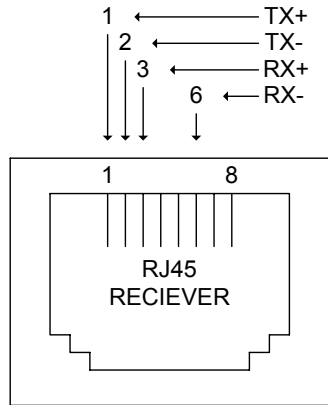


Note /// Requires the UDS-10s "I/F Mode" set to "4C"

Connections at DSX Panel	TX	RX	GND
1030 Series	49	50	51
1042 & 1044	3	4	5
1043	15	16	17

Lantronix UDS-10 Connectors

Ethernet Connector on Lantronix MSS-485-T



DB-25 on Lantronix UDS-10

