

Tibbo DS110X Serial-over-IP Controller

Quick Installation Manual

1. Device Overview

The DS110X are a series of serial-over-IP controllers with many options ranging from WiFi to OLED display. The device can also be turned into a Tibbo BASIC programmable device when loaded with TiOS firmware.

Features

- Configurable multi-port RS232 or RS232/422/485 , up to 460kbps *
- Web-based configuration over Ethernet or WiFi
- 802.11b/g WiFi with WEP, WPA, WPA2 security modes **
- OLED display for status monitoring (Optional)
- Power over Ethernet (Optional)

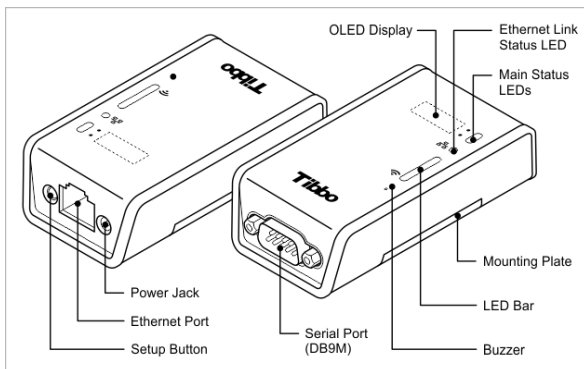
*Varies depending on model ** DS1100 supports WEP only

2. Device and Accessories Checklist

Please verify the following contents in the product package before installation.

- Power adapter
- Quick Installation Manual
- Din-Rail mounting kit

3. Status LED



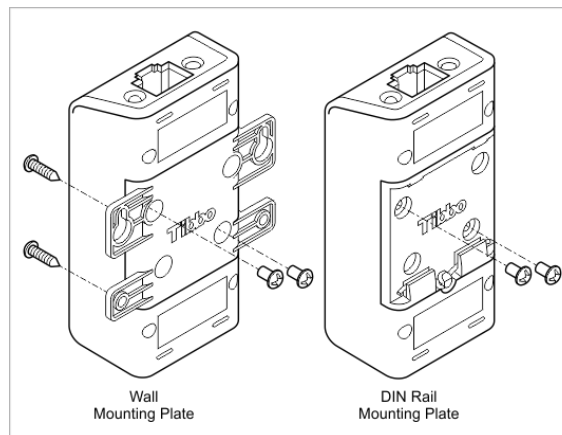
Ethernet Link LED: Amber when Ethernet is connected
 Wireless LED Bar: WiFi strength indicator, increasing from 1 to 5
 5 being strongest
 Setup Button: 1. Scrolls through the status menu on the OLED display
 2. Hold for 5 second to enter “serial programming mode”, release and hold for 5 seconds again to restore to factory presets.
 Status LED: Device status indicator

LED Pattern	Description
	Power up pattern.
	Error Mode, can be fixed by “initializing”
	No Ethernet Connection, idle state
	Attempting to establish TCP connection
	TCP connection reset / rejected
	Data connection is established and is idle

*refer to user manual for other LED status

4. Din Rail and Wall Mount

Two mounting plates are provided, one for DIN rail installation, and one for wall mounting.

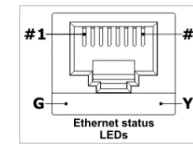


5. Power Arrangement

The DS110X can be powered through adaptors with 3.5mm diameter socket and 12VDC nominal output. Power inputs on PoE, or serial port pin 9 are optional.

6. Ethernet port & Link LED

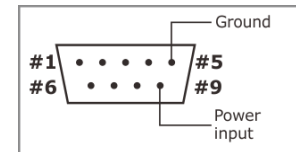
The Ethernet port of the DS110X is of 10/100BaseT type and the pin arrangement is as follows:



- #1 : TX+
- #2 : TX-
- #3 : RX+
- #4 : PoE
- #5 : PoE+
- #6 : RX-
- #7 : PoE-
- #8 : PoE-

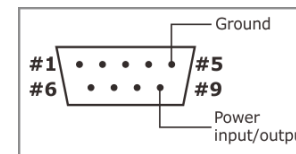
7. Serial Configuration

DS1100



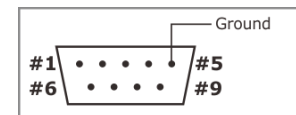
- #1 : N/A
- #2 : RX
- #3 : TX
- #4 : DTR
- #5 : GND
- #6 : DSR
- #7 : RTS
- #8 : CTS
- #9 : Power Input

DS1101



- #1 : N/A
- #2 : RX
- #3 : TX
- #4 : DTR
- #5 : GND
- #6 : DSR
- #7 : RTS
- #8 : CTS
- #9 : Power In/Out

DS1102



Standard mapping

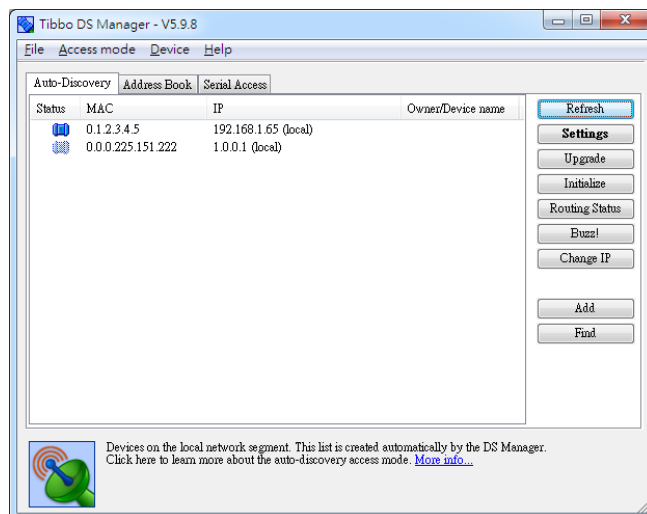
	RS232	RS422	RS485
#1	--	RTS-	--
#2	RX	RX-	RX-
#3	TX	TX+	TX+
#4	DTR	TX-	TX-
#5	GND	GND	GND
#6	DSR	RX+	RX+
#7	RTS	RTS+	--
#8	CTS	CTS+	--
#9	--	CTS-	--

8. Software & setup


To configure the device, install the "Current Release" of TDST (Tibbo Device Server Toolkit), which is available for download from the link below:

<http://tibbo.com/downloads/soi/tdst.html>

With the device powered on and connected to the local network, start up "DS Manager". Following screen should appear:




How to find the device:

 The device will have the default IP of 1.0.0.1, if multiple new units are on the network, select the unit and press the "buzz" button to see which device is connected by displaying the "Buzz" LED pattern.


How to access the unit for setup:

Unit can be setup by one of the following methods.

1. Setup by using DS Manager. To setup, please select the device from the list and click the "Settings" button.

 The configuration menu will popup.

2. Setup by using the web interface. Click the "Change IP" button and give the unit a valid IP address on the network

 button and give the unit a valid IP address on the network

Once the IP is set, enter the IP address on the web browser to log in:



There is no default password. Click "Login" to enter the unit configuration.



Working as Programmable device

The DS110X has built-in "programmable" feature. If programmable feature is needed, please download TIDE (Tibbo Integrated Development Environment) from the link below:

<http://tibbo.com/downloads/basic/software.html>

There are sample projects available at:

<http://tibbo.com/basic/resources.html>

The full Tibbo BASIC documentation can be found here:

<http://docs.tibbo.com/taiko/index.html>

For technical support, please send requests to:

support@tibbo.com