

USER MANUAL

IC1101A, IC1102A, IC1103A

USB TO SERIAL ADAPTERS

24/7 TECHNICAL SUPPORT AT 1.877.877.2269 OR VISIT BLACKBOX.COM

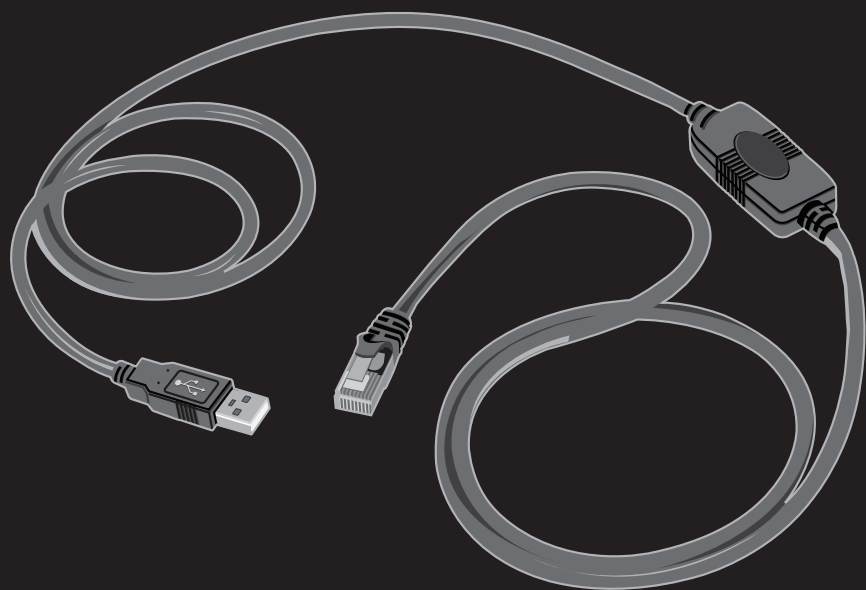


TABLE OF CONTENTS

1. SPECIFICATIONS.....	3
Specification Comparison Chart.....	3
2. OVERVIEW.....	4
2.1 Introduction.....	4
2.2 Features	4
2.3 Hardware Description	4
3. DRIVER INSTALLATION	6
3.1 Driver Installation.....	6
3.2 Serial Communication Settings	6
APPENDIX A. REGULATORY INFORMATION	8
A.1 FCC Statement	8
A.2 CE and RoHS	8
A.3 NOM Statement	9
APPENDIX B. DISCLAIMER/TRADEMARKS	10
B.1 Disclaimer	10
B.2 Trademarks Used in this Manual	10



SPECIFICATION COMPARISON CHART

SPECIFICATION COMPARISON CHART			
	IC1101A	IC1102A	IC1103A
FTDI CHIP	FT232R USB UART IC	FT232R USB UART IC	FT232R USB UART IC
CONNECTORS	(1) USB TYPE A MALE, (1) RJ-45 MALE	(1) USB TYPE C MALE, (1) RJ-45 MALE	(1) USB TYPE C MALE, (1) DB9 MALE
CABLE LENGTH	6 FT. (1.8 M)	6 FT. (1.8 M)	5 FT. (1.5 M)
EEPROM	1024 BIT	1024 BIT	1024 BIT
DATA TRANSFER RATES	300 BAUD TO 3 MBAUD (RS-422, RS-485, RS-232) AT TTL LEVELS	300 BAUD TO 3 MBAUD (RS-422, RS-485, RS-232) AT TTL LEVELS	300 BAUD TO 3 MBAUD (RS-422, RS-485, RS-232) AT TTL LEVELS
BUFFER	RECEIVE: 128 BYTE; TRANSFER: 256 BYTE	RECEIVE: 128 BYTE; TRANSFER: 256 BYTE	RECEIVE: 128 BYTE; TRANSFER: 256 BYTE
COMMUNICATION PARAMETERS	SUPPORTS 7 OR 8 DATA BITS, 1 OR 2 STOP BITS, AND ODD/EVEN/MARK/SPACE/NO PARITY	SUPPORTS 7 OR 8 DATA BITS, 1 OR 2 STOP BITS, AND ODD/EVEN/MARK/SPACE/NO PARITY	SUPPORTS 7 OR 8 DATA BITS, 1 OR 2 STOP BITS, AND ODD/EVEN/MARK/SPACE/NO PARITY
OPERATING TEMPERATURE	32 TO 131° F (0 TO 55° C)	32 TO 131° F (0 TO 55° C)	32 TO 131° F (0 TO 55° C)
STORAGE TEMPERATURE	-40 TO +185° F (-40 TO +85° C)	-40 TO +185° F (-40 TO +85° C)	-40 TO +185° F (-40 TO +85° C)
DRIVERS SUPPORTED	WINDOWS 10 32- OR 64-BIT; WINDOWS 8/8.1 32- OR 64-BIT; WINDOWS 7 32- OR 64-BIT; WINDOWS VISTA AND VISTA 64-BIT; WINDOWS XP AND XP 64-BIT; WINDOWS 98/98SE/ME/2000/SERVER 2003/XP/SERVER 2008/SERVER 2012 R2; WINDOWS XP EMBEDDED; WINDOWS CE 4.2, 5.0, AND 6.0; MAC OS 8/9, OS-X; LINUS 2.4 AND GREATER; ANDROID (J2XX)		
APPROVALS	ROHS, CE, FCC, WEEE	ROHS, CE, FCC, WEEE	ROHS, CE, FCC, WEEE

CHAPTER 2: OVERVIEW

2.1 INTRODUCTION

The USB to Serial Adapters are cables with a USB connector on one end and a serial connector on the other. They each use a special FTDI chip to convert a USB interface to an RS-232/422/485 serial interface over a distance of five or six feet, depending on the model.

The adapters support common Windows®, Mac®, Linux®, and Android® software drivers.

Three models are available:

- IC1101A: USB to Serial Adapter USB A/M to RJ-45M, 6-ft.
- IC1102A: USB to Serial Adapter USB C/M to RJ-45M, 6-ft.
- IC1103A: USB to Serial Adapter USB C/M to DB9M, 5-ft.

2.2 FEATURES

- ♦ Single FTDI chip USB to asynchronous serial data transfer interface
- ♦ Entire USB protocol is handled on the chip. No USB specific firmware programming required
- ♦ Fully integrated 1024 bit EEPROM storing device descriptors and CBUS I/O configuration
- ♦ Fully integrated USB termination resistors
- ♦ Data transfer rates from 300 baud to 3 Mbaud (RS-422, RS-485, RS-232) at TTL levels
- ♦ 128-byte receive buffer and 256-byte transmit buffer using buffer smoothing technology to allow for high data throughput
- ♦ UART interface support for 7 or 8 data bits, 1 or 2 stop bits and odd/even/mark/space/no parity
- ♦ Supports bus powered, self-powered and high-power bus powered USB configurations
- ♦ Low USB bandwidth consumption

2.3 HARDWARE DESCRIPTION

Figures 2-1 through 2-3 show the media converters and describe their components.

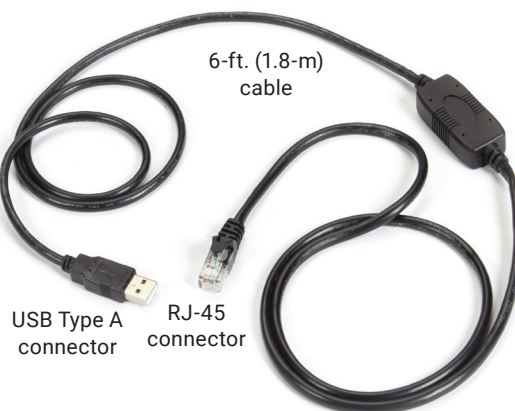


FIGURE 2-1. IC1101A

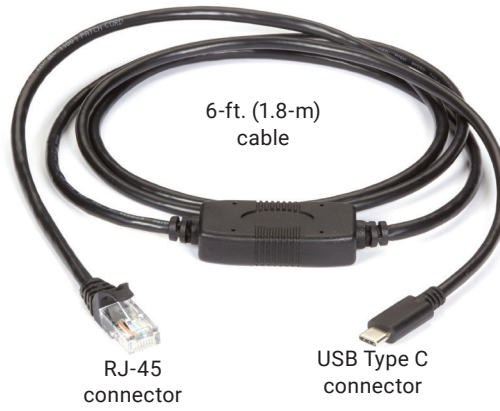


FIGURE 2-2. IC1102A

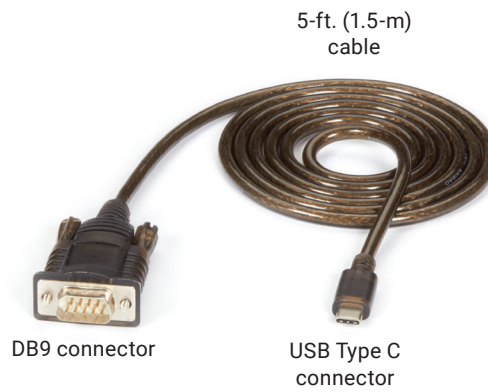


FIGURE 2-3. IC1103A

CHAPTER 3: DRIVER INSTALLATION

3.1 DRIVER INSTALLATION

1. Open the driver, choose your operating system, and double-click to proceed. The driver installation wizard will guide you to complete the process.



FIGURE 3-1.

2. After installing the driver, open Device Manager and check the installation status. As pictured below, the driver installation is successful.

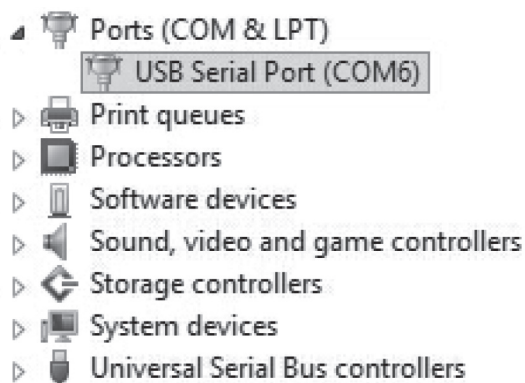


FIGURE 3-2.

3.2 SERIAL COMMUNICATION SETTING

After installing, you can set the serial port according to your requirement for serial communication. Make sure that the setting is correct and matches, otherwise, the computer and devices will not work correctly. For example, for some industrial equipment that supports the application software, you need to specify the corresponding port for communication. Please refer to the illustration below (right-click on "USB Serial Port [COM]").

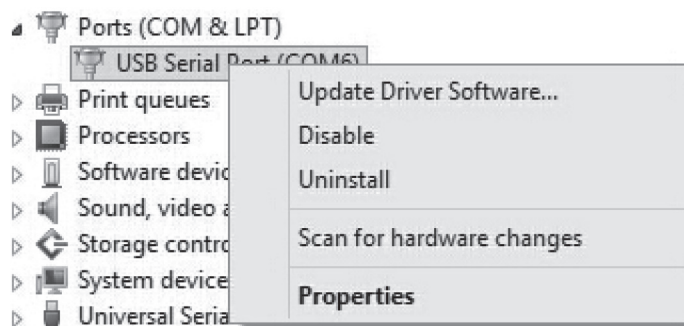


FIGURE 3-3.

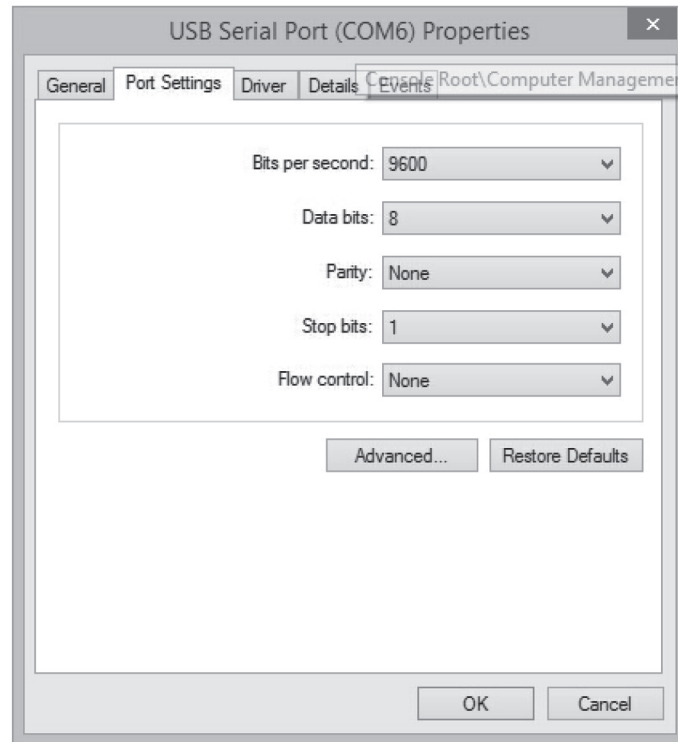


FIGURE 3-4.

APPENDIX A: REGULATORY INFORMATION

A.1 FCC CLASS A STATEMENT

This equipment generates, uses, and can radiate radio-frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

A.2 CE AND ROHS2

This product complies with CE and ROHS2 certifications.



APPENDIX A: REGULATORY INFORMATION

A.3 NOM STATEMENT

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

APPENDIX B: DISCLAIMER/TRADEMARKS

B.1 DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

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