



# USB-RS485 Cable For AppBox System User's Guide



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## 1.0 Introduction

This document describes the USB - RS485 cable (part #: 703914-0001) used with the AppBox. This cable converts USB signals on a standard USB connector to RS485 signal levels and brings them out to a 9 pin male D-sub connector. This cable along with the RS485 cable (703917-0001), and a female-female gender changer allows the user to connect a PC with a USB port to communicate with an AppBox (J2 connector), or Distribution Box.

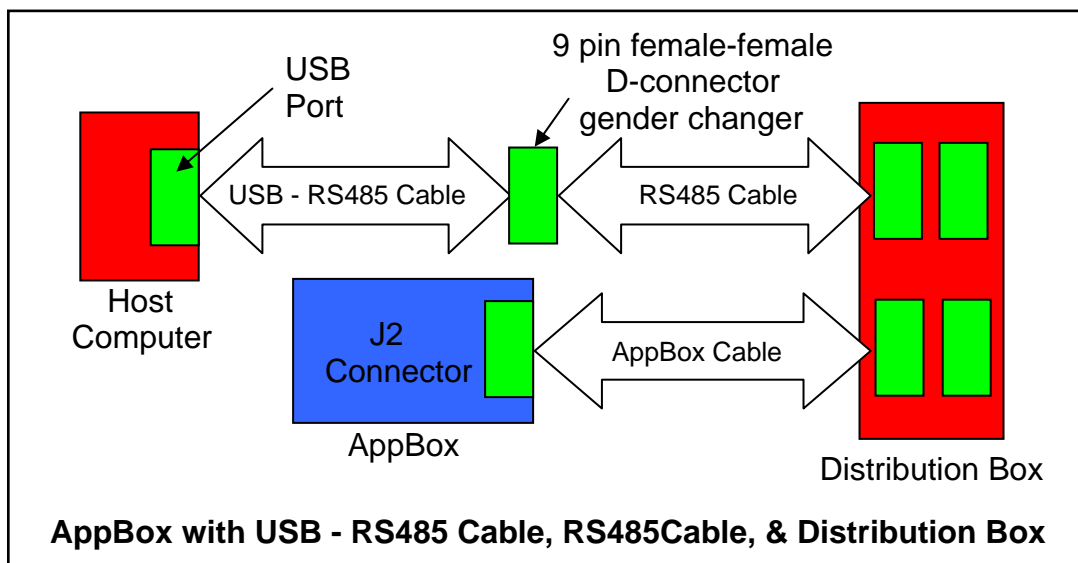
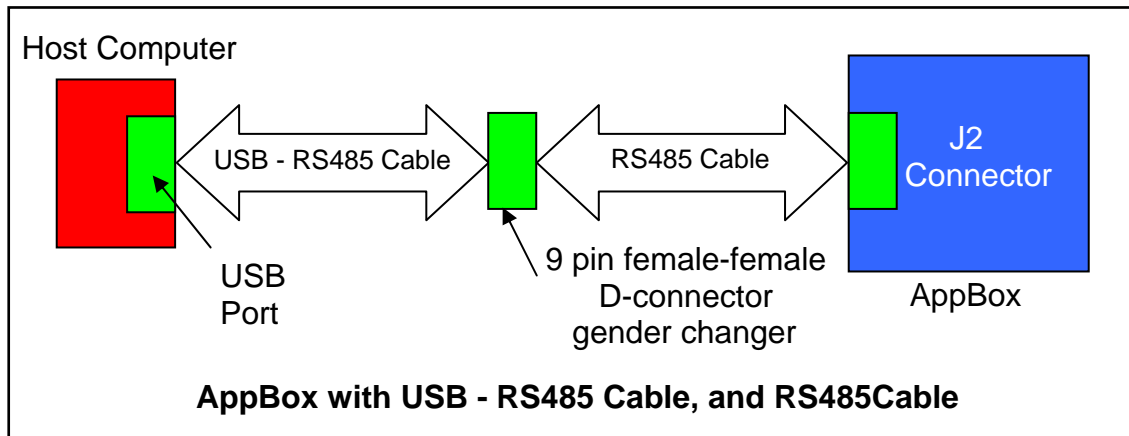
### 1.1 USB - RS485 Cable Features

This USB - RS485 cable has the following features:

- Mates with USB connector on a PC
- Converts USB signals levels to RS485 signal levels
- Converts RS485 signal levels to USB signals
- Mates with RS485 cable with female-female gender changer
- Length: 3 foot (36 in / 91 cm)

The two diagrams below show the use of the USB - RS485 cable.

**NOTE: A 9 pin female-female D-connector gender changer is required to mate the 2 cables.**



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## 1.2 USB - RS485 Cable Product Contents

The following items are contained in the USB - RS485 cable product (Part/SKU #: 703914-0001):

- USB - RS485 cable in bag
- 9 Pin D-connector female-female gender changer
- Product information card

## 1.3 USB - RS485 Cable Compatibility

The USB - RS485 Cable is designed to work with the following products which can be ordered from Spectrum Digital or authorized resellers:

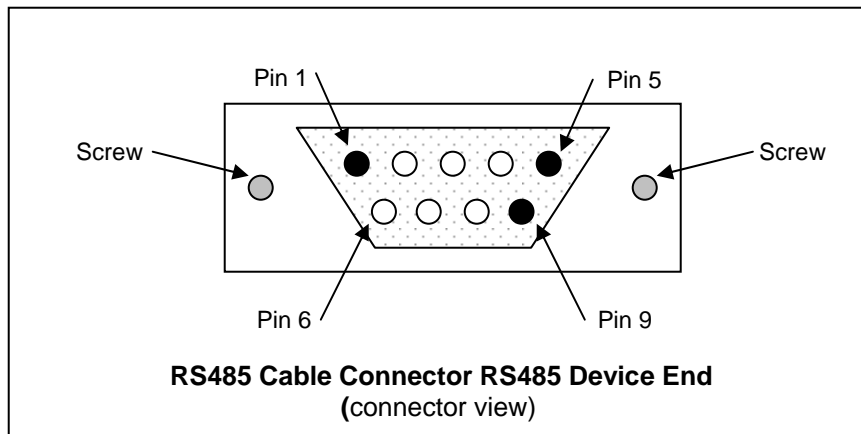
Accessory Description	Part/SKU Number
AppBox C21	703909-0001
AppBox D21	703910-0001
AppBox E54	703919-0001
AppBox E70	703911-0001

## 1.4 USB - RS485 Cable AppBox / Distribution Box Connector

The USB - RS485 cable plugs into a standard USB connector. This allows the users to communicate to the AppBox via USB. The RS485 cable is also needed so that the RS485 signals can connect to the J2 connector.

## 1.5 USB - RS485 Cable RS485 Device Connector

The USB - RS485 cable end which plugs into a RS485 cable is male 9 pin D-sub connector. A view of this connector is shown below.



The following table shows the signals present on the USB - RS485 cable at the RS485 Device end.

USB - RS485 Cable Device End	
Pin number	Signal name
1	DGND
2	No connect
3	No connect
4	No connect
5	RS485_B
6	No connect
7	No connect
8	No connect
9	RS485_A

## 1.6 USB – RS485 Cable Schematics

The following pages contain the schematics for the USB-RS485 cable.

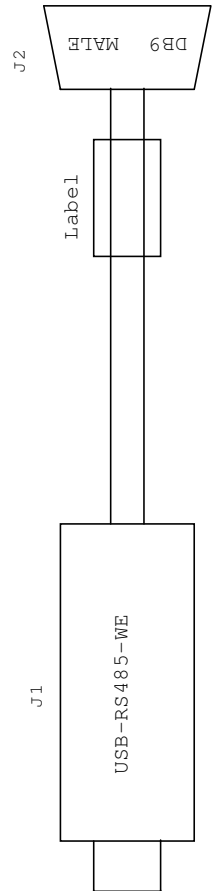
D 1 2 3 4 5

TE TOOLING	
CRIMP TOOL	58448-2
EXTRACTION TOOL	91285-1
APPLICATOR	2151496-1

LABEL CONTENTS

Spectrum Digital USB-RS485 Cable Part # 519185
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TE Strip Length	
Conductor	2.14 - 2.64 mm

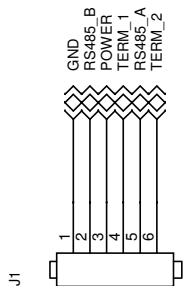


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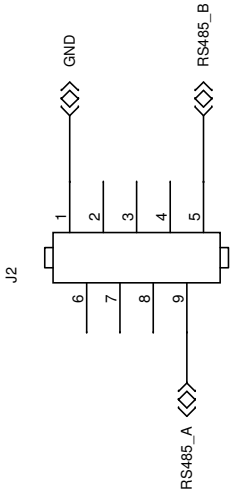
D 1 2 3 4 5

WIRE TABLE

J1	J2	COLOR	SIGNAL
1	1	BLACK	GROUND
2	5	YELLOW	RS485_B
3		RED	POWER
4		BROWN	TERM_1
5	9	ORANGE	RS485_A
6		GREEN	TERM_2



USB-RS485-WE



CONN DSUB 9-P MALE

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