



RS485 Cable For AppBox System User's Guide



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1.0 Introduction

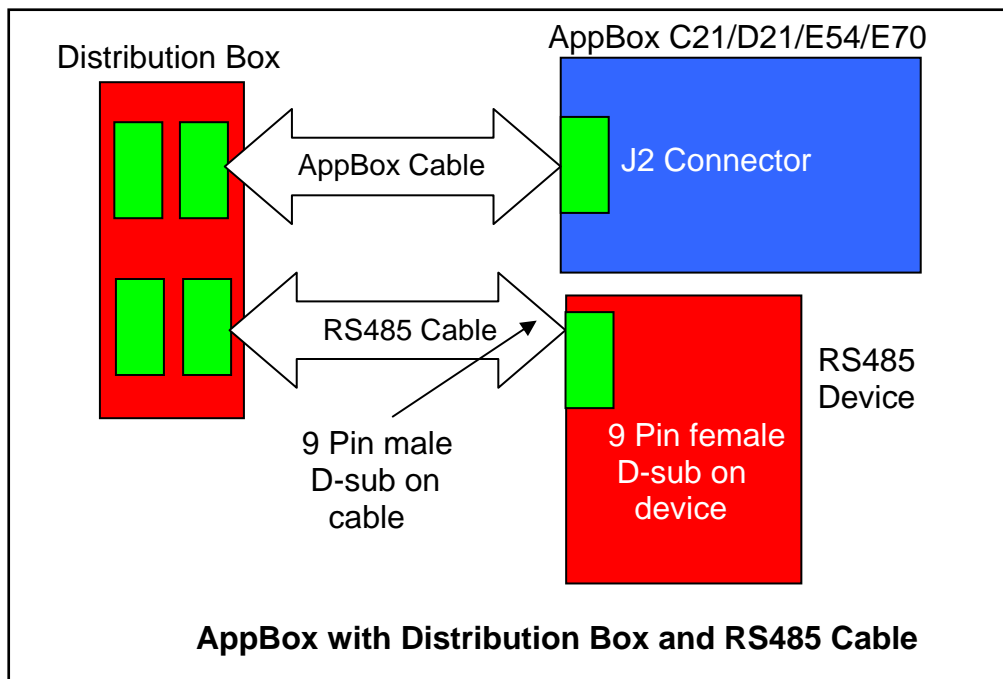
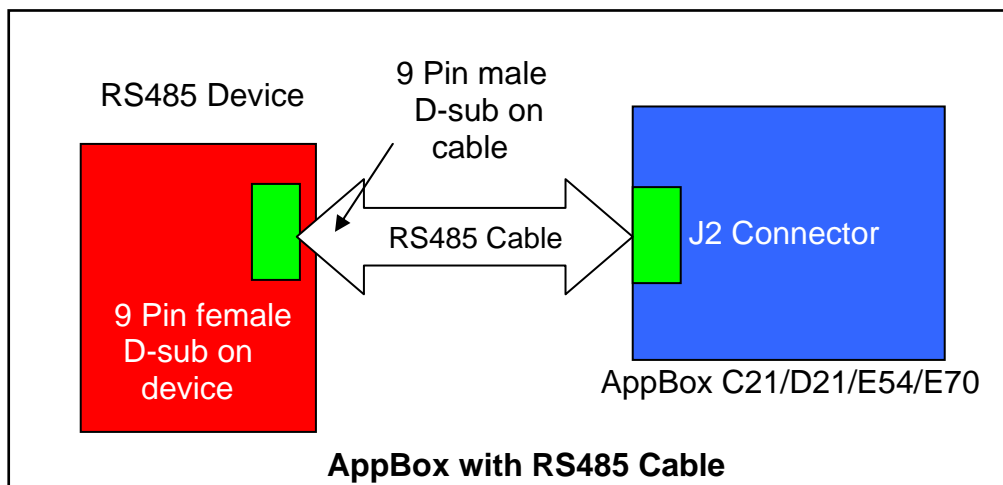
This document describes the RS485 cable (Part/SKU #: 703917-0001) used with the AppBox. This cable brings the RS485 signals off the AppBox C21/D21/E54/E70 J2 connector or J2 image connector on the Distribution Box to a device that has a RS485 interface.

1.1 RS485 Cable Features

This RS485 cable has the following features:

- Mates with AppBox J2 connector or Distribution Box
- Mates with RS485 device
- Length: 3 foot (36 in / 91 cm)

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



1.2 RS485 Cable Product Contents

The following items are contained in the RS485 cable product (Part/SKU #: 703917-0001):

- RS485 cable in bag
- Product information card

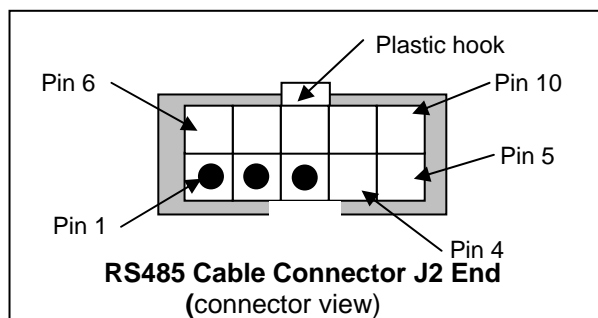
1.3 RS485 Cable Compatibility

The 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 RS485 Cable AppBox / Distribution Box Connector

The RS485 cable end which plugs into the AppBox J2 connector or Distribution Box is a molded 10 pin (2 rows x 5 pin) connector. A view of this connector is shown below.

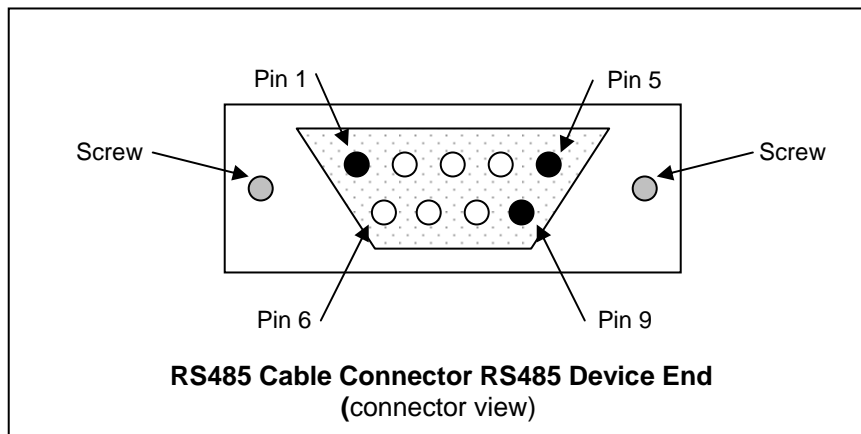


The following table shows the signals present on the RS485 cable at the AppBox J2 connector end

RS485 Cable J2 Connector End	
Pin number	Signal name
1	RS485_A
2	RS485_B
3	DGND
4	No connect
5	No connect
6	No Connect
7	No connect
8	No Connect
9	No connect
10	No connect

1.5 RS485 Cable RS485 Device Connector

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



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

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 RS485 Cable Schematics

The following pages contain the schematics for the RS485 cable.

MOLEX TOOLING	
SERVICE CRIMP TOOL	063811-1000
HAND CRIMP TOOL	0638190901
EXTRACTION TOOL	0011030044
APPLICATOR	63902-3900

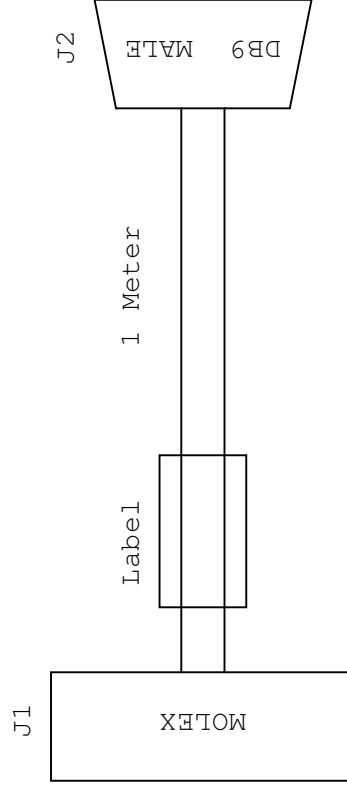
TE TOOLING	
CRIMP TOOL	58448-2
EXTRACTION TOOL	91285-1
APPLICATOR	2151496-1

Molex Strip Length	
Jacket	29.21 mm
Conductor	3.00 mm

LABEL CONTENTS

Spectrum Digital RS485 Cable Part #519175 A

TE Strip Length	
Conductor	2.14 - 2.64 mm



MODBUS over Serial Line
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pin no.5 = B (YELLOW or WHITE)
pin no.9 = A (BROWN or RED)
pin no.1 = Ground (GREY or BLACK)

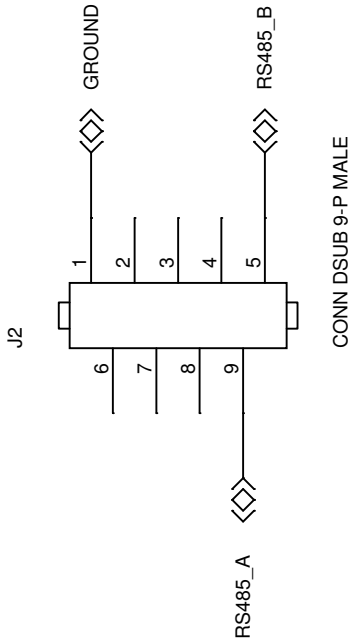
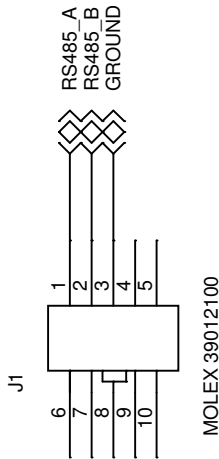
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BELDEN 9534

WIRE	COLOR
1	BLACK
2	WHITE
3	RED
4	GREEN

WIRE TABLE

J1	J2	COLOR	SIGNAL
1	9	RED	RS485_A
2	5	WHITE	RS485_B
3	1	BLACK	GROUND



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