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CURRENT REVISION

REV	DESCRIPTION	DATE	APPROVED
-	Initial release	February 28, 2019	BM



**MODEL 5510**



**MODEL 5538**

PROPRIETARY INFORMATION OF  
**Daisy Data Displays, Inc.**

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**QUICK INSTALL / REFERENCE DOCUMENTATION**

ALL SHEETS MAINTAINED AT THE SAME REVISION LEVEL

<b>PART NUMBER(S):</b> MODEL 5510 (P070-000503) MODEL 5538 (P070-000536)		<b>INITIAL APPROVAL DATE</b> 2/10/2017	<b>Daisy</b> DATA DISPLAYS	
<b>Engineering</b>	Gregory Drapcho	February 28, 2019	<b>BLACK BOX<sup>®</sup></b> <b>KVM QUICK INSTALL/SETUP</b>	
<b>Quality Control</b>	Matthew Ramskow	February 28, 2019		
<b>Administration</b>	Michael Hadaway	February 28, 2019		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DECIMALS      FRACTIONS 2 PL±XX      ±XXXX		Daisy Data Displays, Inc. 2850 Lewisberry Road York Haven, PA 17370 717-932-9999		<b>D302-100035</b>
		<b>SCALE: NONE</b>		<b>SHEET 1 of 8</b>

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### 1.0 GENERAL INFORMATION

#### 1.1 Objective

This procedure is to assist the installation of an FM Approved Daisy Data Displays KVM Extender kit (Local-ONLY) to an existing Daisy Data “Approved” Remote KVM Switch.

#### 1.2 General Repair/Installation Requirements


Repairs and installation of this unit need to be performed by authorized personnel in accordance with the International Electrotechnical Commission (IEC), National Electrical Code (NEC) (NFPA), European Committee for Electrotechnical Standardization (CENELEC), Canadian Electrical Code (CEC), and any applicable local code regulations. Contact your local Authority having jurisdiction (AHJ) for assistance in field wiring in accordance with local code regulations. This unit incorporates static sensitive components which need to be handled carefully; be sure to follow all ESD safety procedures.

**IMPORTANT SERVICE NOTE**

Any service required on the FM Approved “Remote” KVM Switch must be done by qualified Daisy Data Displays Service personnel.

**WARNING: EXPLOSION HAZARD**

DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.

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**1.3 Cable Requirements**

**1.3.1 PS/2 Keyboard & Mouse Cables**

Local KVM switches that are equipped with PS/2 Keyboard and mouse ports require PS/2 cables with standard 6-pin mini-DIN connectors connect the KVM switch to the local PC.

These cables (max. 6' length) provide 5V PS/2 power to the local KVM switch.



**IMPORTANT**  
 PS/2 Cables cannot exceed 6' in length to ensure a constant 5V power supply to the local KVM switch.


**NOTE:** Unexpected operation could occur if a low quality USB-to-PS/2 adapter is used to make the connection between a USB port and PS/2 cable.

**1.3.2 USB Cables**

When using USB cables locally, it is recommended not to exceed 10' in length to maintain proper signal strength from device-to-device. Depending upon the application and/or device, cable length could be longer.

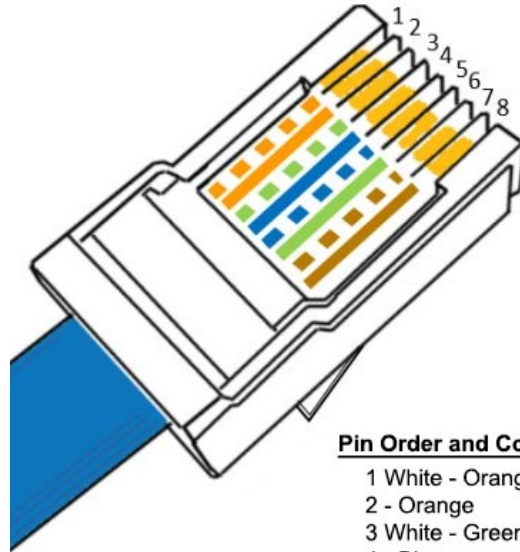
In addition, powered USB connections may power each (local or remote) KVM Switch. If they do not supply enough power for the KVM switch to operate properly, the factory specified power adapter for each switch must be used for the KVMs to work properly.



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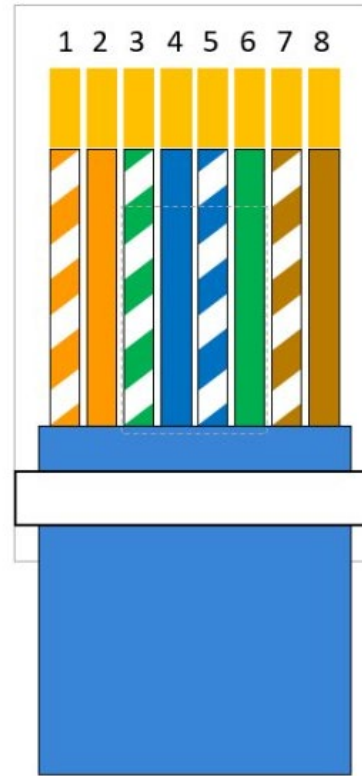
1.3.3 RJ45 Connectors (Pinout)


### RJ45 Pinout T-568B



**Pin Order and Color**

- 1 - White - Orange
- 2 - Orange
- 3 - White - Green
- 4 - Blue
- 5 - White - Blue
- 6 - Green
- 7 - White - Brown
- 8 - Brown



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**1.3.4 RJ45 Cables**

RJ45 interconnection cables are used to connect the local KVM with the remote KVM. To connect the Local and Remote Units you will need CATx (any category 5, 5e, 6 or higher) cable terminated with RJ45 plugs.

**NOTE:** Do NOT mistake network or Ethernet cable requirements when selecting RJ45 cable for the local-to-remote KVM connection. Display resolution requirements will dictate the throughput needed by the RJ45 cable.


Interconnect cables must be solid-core type. Stranded patch cable will give poor results over longer distances. The pairing of the cable and pinning of its connectors should normally be in accordance with EIA-568B.

Display resolution and the amount of data transmitted between the remote and local KVM will dictate the cable type and length.

The higher the RJ45 cable rating (type – 5, 5e, 6, 6a, 7 or higher), the longer the cable length may be used due to less signal degradation and external electrical noise interference.



Consult your specific KVM User Manual specifications and configuration options. Some KVMs incorporate special settings to accommodate longer cables, and signal adjustments to maintain the best display quality over longer, electrically noisy cable runs.

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## 2.0 BLACK BOX KVM CONNECTIONS (LOCAL)

### 2.1 Daisy Data Model 5510 (Black Box Model ACU1008A)

It is recommended that you download and review the [Black Box CAT5 KVM Extender User Manual](#) from there website. It contains specific information about setting up the Local KVM Switch:

- Interconnect Cable Requirements
- Local Unit Installation
- Video Configuration/Adjustments
- Troubleshooting & FAQ

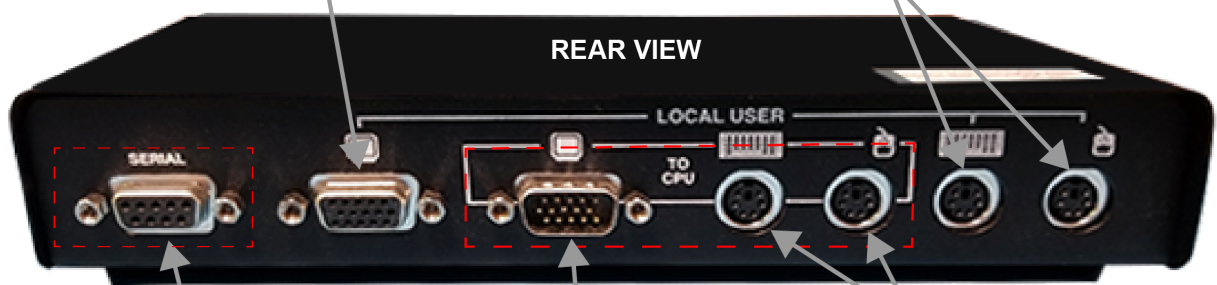


RJ45 Interconnection Cable from Local KVM to Remote KVM

Recommended RJ45 Remote Interconnect Cable Length	
Maximum Cable Lengths	
CAT 5	100m to 300m
CAT 5e	
CAT 6	
CAT 7	
CAT 7a	

**Local Monitor Connection** (Local & remote display resolution must be the same)

**Local PS/2 Keyboard & Mouse Connections**




**To PC Serial Port Connection**  
(Optional - For touch screen operation)

**To PC Display Port**

**To PC PS/2 Keyboard & Mouse Ports**  
(Required to power local KVM switch)

Connections to connect to local PC primary video, PS/2 keyboard and mouse ports (Optional serial port for touchscreen operation)

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## 2.2 Daisy Data Model 5538 (Black Box Model ACU5050A-R2)

It is recommended that you download and review the [ServSwitch Wizard USB KVM Extender with Audio](#) from their website. It contains specific information about setting up the Local KVM Switch:

- Interconnect Cable Requirements
- Local Unit Installation
- Video Configuration/Adjustments
- Troubleshooting & FAQ

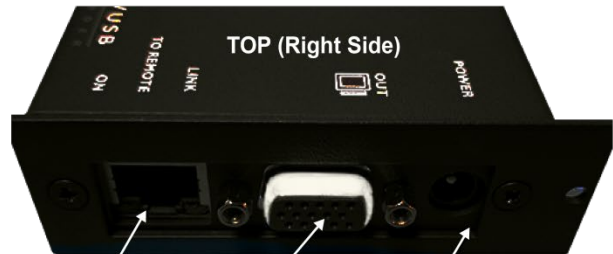


**MODEL 5538 BLACK BOX KVM CONNECTIONS**  
(ACU5050A-R2)



Speakers (OUT)  
Speakers (IN)  
To PC USB Connection (10' Long Max.)  
To PC Serial Port (Optional for Touchscreens)

To PC USB Connection (10' Long Max.)  
(Keyboard/Mouse - Remote KVM Supports up to 4 USB devices)




Local Monitor Connection (Required)

Local Power Connection  
(Required if powered USB connections cannot support system)

**RJ45 Interconnection Cable from Local KVM to Remote KVM**  
(Recommended cable lengths)

Maximum Cable Lengths	
CAT 5	250m
CAT 5e	250m
CAT 6	300m
CAT 7	300m
CAT 7a Patch	200m

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3.0 Revision History

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