**Quick Install / Reference Documentation**

**Part Number(s):**

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<th>MODEL 5510 (P070-000503)</th>
<th>INITIAL APPROVAL DATE</th>
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<td>MODEL 5538 (P070-000536)</td>
<td>2/10/2017</td>
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<th>Department</th>
<th>Name</th>
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<tbody>
<tr>
<td>Engineering</td>
<td>Gregory Drapcho</td>
<td>February 28, 2019</td>
</tr>
<tr>
<td>Quality Control</td>
<td>Matthew Ramskow</td>
<td>February 28, 2019</td>
</tr>
<tr>
<td>Administration</td>
<td>Michael Hadaway</td>
<td>February 28, 2019</td>
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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

**Black Box® KVM Quick Install/Setup**

**D302-100035**

**Scale:** None

**Sheet 1 of 8**
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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 “Aproved” 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.
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 to connect the KVM switch to the local PC.

These cables (max. 6’ length) provide 5V PS/2 power 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.

IMPORTANT
PS/2 Cables cannot exceed 6’ in length to ensure a constant 5V power supply to the local KVM switch.
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
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.
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 their 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](image)

<table>
<thead>
<tr>
<th>Maximum Cable Lengths</th>
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<tbody>
<tr>
<td>CAT 5</td>
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<tr>
<td>CAT 7</td>
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<td>CAT 7a</td>
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![Local Monitor Connection](image)

![Local PS/2 Keyboard & Mouse Connections](image)

**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 *(Required to power local KVM switch)*

To PC PS/2 Keyboard & Mouse Ports *(Optional serial port for touchscreen operation)*
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)

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

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

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<tr>
<td>CAT 7</td>
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<tr>
<td>CAT 7a Patch</td>
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Local Monitor Connection (Required)

Local Power Connection (Required if powered USB connections cannot support system)
### 3.0 Revision History

<table>
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<th>REVISION</th>
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