» Kontron User's Guide «





Kontron OPS-compliant Media Player KOPS800 & Digital Signage Evaluation Kit (DSEK-12)

Document Revision 1.0

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1 User Information

1.1 About This Document

This document provides information about products from Kontron and/or its subsidiaries. No warranty of suitability, purpose, or fitness is implied. While every attempt has been made to ensure that the information in this document is accurate, the information contained within is supplied “as-is” and is subject to change without notice.

For the circuits, descriptions and tables indicated, Kontron assumes no responsibility as far as patents or other rights of third parties are concerned.

1.2 Copyright Notice

Copyright © 2012 Kontron America

All rights reserved. Information in this document is subject to change without notice. Kontron America Inc. reserves the right to change the technical specifications or functions of its products, or to discontinue the manufacture of any of its products or to discontinue the support of any of its products, without any written announcement and urges its customers to ensure, that the information at their disposal is valid.

Kontron America Inc. has attempted to verify all information in this manual as of the publication date. We assume no responsibility for any errors that may appear in this guide.

1.3 Trademarks

Kontron is trademark or registered trademark of Kontron AG.

The following lists the trademarks of components used in this product.

- Microsoft is a registered trademark of Microsoft Corporation.
- Intel is a registered trademark of Intel Corporation
- All other products and trademarks mentioned in this manual are trademarks of their respective owners.

1.4 Standards

Kontron is certified to ISO 9000 standards.

1.5 Technical Support

Technicians and engineers from Kontron and/or its subsidiaries are available for technical support. We are committed to making our product easy to use and will help you use our products in your systems.

Please consult our Web site at **http://www.kontron.com/support** for the latest product documentation, utilities, drivers and support contacts.

2 Introduction

Kontron offers media players and a digital signage evaluation kit. The Kontron media player KOPS family provides the OEM with a ready-todeploy platform that is open pluggable specification (OPS)-complaint. The Digital Signage Evaluation Kit (DSEK) solutions are designed for rapid prototyping of digital signage solutions.

The DSEK was developed in collaboration with Intel and Microsoft. The DSEK-12 brings multiple technologies and capabilities together in a pre-loaded and validated system that aims to simplify the process of developing more enticing signage solutions. This evaluation kit includes a Kontron OPS-compliant media player KOPS800 and pre-configured content creation software and content management software along with Microsoft OS options for a 180 day evaluation period. The Kontron OPS-compliant media player KOPS800 can be used as part of the DSEK-12 easily supporting a wide variety of displays, or it can be removed from the DSEK-12 and dropped in to an OPS-compliant display. This flexibility is ideal for development and testing of digital signage applications on various display technologies.

2.1.1 Kontron modular digital signage solutions benefits

- **Intel® Open Pluggable Specification (OPS) V1.0 Compliant Media Player**
- **Supports Intel® Core™ i5/ i7 processors (Ivy Bridge)**
- **Pre-validated with Intel® AIM Suite software**
- **Effortless integration for optimized time to market**



3 Guidelines for Safe Use

These guidelines are intended for your safety. Please read this safety information carefully before using the product.

1/ Always treat your product with care

2. Do not expose your product to liquid or moisture or humidity

3/ Do not expose your product to high temperature

3/ Do not expose your product to open flame

4/ Do not drop, throw or bend your product

5/ Do not attempt to disassemble or modify your product

6/ Do not use your product in an area where a potential explosive atmosphere exist

7/ Turn off the electrical power before connecting or disconnecting any cables.

8/ The socket-outlet shall be installed near the equipment and shall be easily accessible

9/



标识含义：加贴该标识的设备仅按海拔2000m进行安全设计与评估，因此，仅适用于在海拔2000m

10/



标识含义：加贴该标识的设备仅按非热带气候条件进行安全设计与评估，因此，仅适用于在非热

4 Product Specifications

4.1 Models

OPS-compliant Media Player KOPS800

KOP827i5-000 – OPS1.0_ System Level Kit – 2.7GHz (for OPS fan)

KOP827i7-000 – OPS1.0_ System Level Kit – i7-1.7GHz (for OPS fan less)

Digital Signage Evaluation Kit: DSEK-12

DSEK827i5-000 - DSEK12_ System Level Kit - 2.7GHz (with fan)

DSEK817i7-000 - DSEK12_ System Level Kit - i7-1.7GHz (without fan)

4.2 Chassis

- EG Steel / aluminum
- OPS-compliant Media Player Dimensions: 118 x 200 x 30 mm
- DSEK-12 Dimensions: 183 x 175 x 30 mm

4.3 Memory and hard drive

- RAM: 4/8 GB DDR2
- SATA: 80 GB

4.4 Wireless

- Built-in WiFi: 802.11 a/b/g/n (2.4GHz/5GHz)
- (Option) Built-in 3G modem : WCDMA/HSPA 850/900/1900/2100

4.5 Audio and video

- HDMI port for HD video out
- Analog audio in/ output

4.6 CPU

- Intel® Core i5-3610ME 2x2.7GHz, 35W or

- Intel® Core i7-3517UE 2x1.7GHz, 17W

4.7 I/O connectors

Front

- 1x RJ45
- 2X USB3.0
- 1x HDMI
- 1x 3.5mm jack line in and 1x 3.5mm jack line out

Rear

- 2 x USB 2.0
- 1x USB3.0
- 1x HDMI
- 1x DP
- 1xRS232
- 1x line out
- 15V DC power -in

4.8 Power rating

- 15V DC, 6A
- (Adaptor: Input: 90~260V, 47~63Hz ac. Output 15V DC, 6A)

4.9 Environment

- Operation temperature: 0 ~40 deg C

4.10 System Cooling

The system is either active or passively cooled based on the SKU selected. There are no system fans in the passively cooled SKU. It is important that the Kontron OPS-compliant media player KOPS800 have adequate ventilation so be careful when mounting the system to not block the vents on the label side of the system.

4.11 In-box Documentation

Documentation available in the box includes an Out-of-Box guide and Errata (as applicable). See the downloads section of the Kontron OPS-compliant media player KOPS800 or DSEk-12 product page on www.kontron.com.

The latest version of this manual and the Out-of-box Guide can be obtained at:

Out-of-box Guide: http://www.**Kontron.com/dsek12/outofboxguide**

User Manual: http://www.**Kontron.com/dsek12/usermanual**

5 Getting Started

5.1 Included with Kontron OPS-compliant media player KOPS800

When you receive your Kontron OPS-compliant media player KOPS800 you will receive the system and an antenna. Since the Kontron OPS-compliant media player KOPS800 is powered by the display once inserted there is no separate power supply or cable. Always check the Kontron website for the most recent documentation.

5.2 Knowing your Kontron OPS-compliant media player KOPS800

- **Power button: The button allows you to turn your device ON and OFF. The blue indicator LED lights when the device is turned on**
- **Status LEDs: Indicates the system status of the device**
- **Audio in Jack: It is designed to connect an external microphone for video conferencing, voice narration, audio recording, and multimedia applications**
- **R/L audio out Jack: It allows you to hear audio after connecting external speakers**
- **DC Input Jack: 12V/15V DC input via AC adapter or internal connector**
- **LAN port: The eight pins RJ-45 LAN port supports a standard Ethernet LAN cable for network connection.**
- **HDMI Ports: To connect an external HDMI monitor**
- **USB Ports: The USB (Universal Serial Bus) ports are compatible with USB 2.0 or USB 3.0 devices**
- **Wireless LED: When the built in WLAN is enabled the LED lights turn on.**
- **DP port: It provides DP video signal output**
- **RS232 port: It provides serial communication**
- **Remote control**

Inserting the OPS-compliant Media Player KOPS800 into an OPS-compliant Display

Step 1: Hold the media player as shown



Step 2: Plug into an OPS-compliant video display panel



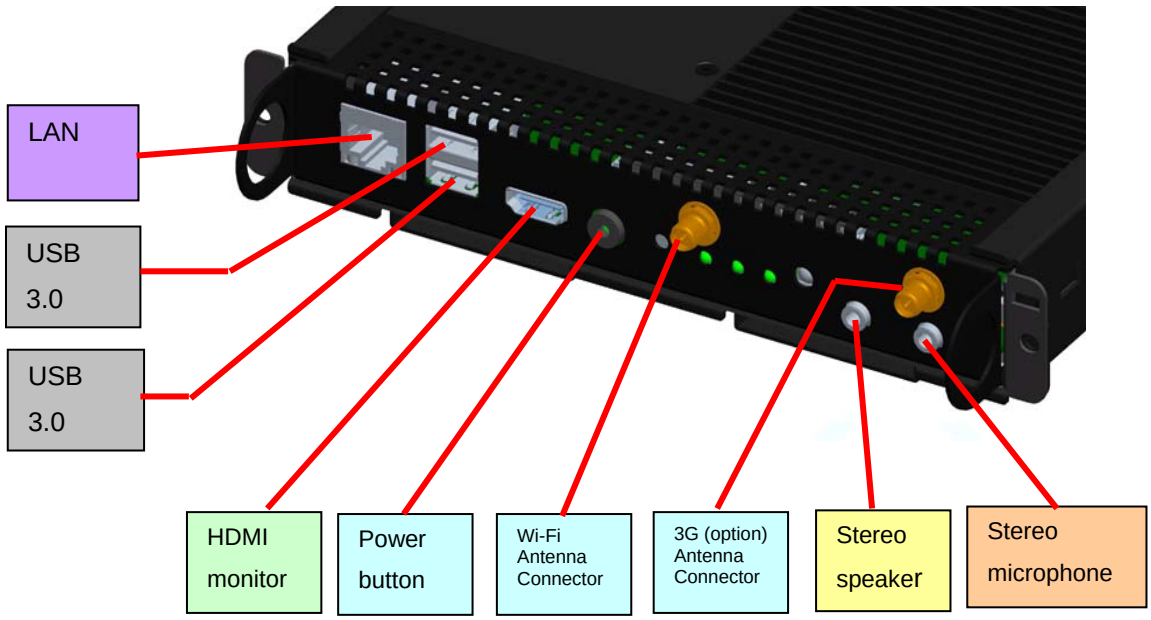
Step 3: This is how the Kontron OOPS-compliant media player KOPS800 will look once inserted into the display panel.



5.3 Connection to external equipment

5.3.1 Front panel connections

Connect all the appropriate devices to their corresponding sockets as shown below





Turn the power “on” either by pressing the power button or using the remote controller. The blue power-on light will turn on



5.4 Installing the Antenna

To install the antenna, remove it from the plastic cover and screw it into the appropriate antenna connectors.

WARNING: The antennas supplied with the kit are the only antennas approved to be used with the device. Use of any other antennas will void the regulatory approvals.

6 BIOS

6.1 UEFI BIOS

The Kontron OPS-compliant media player KOPS800 uses a UEFI BIOS version 2.2 compliant with a boot loader. Some of the benefits of the Kontron OPS-compliant media player KOPS800 include:

- Fast boot
- Static boot device override
- Support of LED, Push Button, GPIO bits through ACPI Tables
- You can update the Firmware using a Flash utility.

6.2 Boot Loader Support

The boot loader is the power up firmware that loads first “main” executable block of code (bare bones BSP). The boot loader supports the following:

- USB-Keyboard during boot
- Booting from HDD/SDD connected to SATA or USB port
- Booting from Optical drive connected to SATA port
- Booting from either MicroSD
- Support Custom settings saved with Password
- Change boot order sequence by pressing hardware button at power on.
- Ability to update the BIOS/Firmware from the BIOS EFI Shell & DOS, Linux command line utility.
- Ability to save BIOS Configuration into a persistent Store USB/SATA/MicroSD. Through BIOS EFI
- Ability to load and save BIOS Configuration into a persistent Store USB/SATA/MicroSD. Through BIOS EFI Shell or DOS, Linux CLI
- Serial Port Redirection through USB7
- Com port redirection to USB Port

6.3 BIOS Operation & Adding Drivers

The Kontron OPS-compliant media player KOPS800 uses the Kontron COMe-bIP6 COM Express basic form factor pin-out type 6 computer-on-module. Please refer to the user’s manual for that board to better understand standard BIOS operation and how to make changes. The computing board uses the AMI® Aptio, which is located in an onboard SPI serial flash memory. You can update the Firmware using a Flash utility.

6.4 Determining the BIOS Version

The AMI® Aptio version is displayed in the main menu of the setup utility.

» BIOS Vendor: American Megatrends

» Core Version: x.x.x.x

» BIOS Date: mm/dd/yyyy hh:mm:ss

» BIOS Version: NTC1RXXX

6.5 Changing the BIOS

The Aptio Setup Utility changes system behavior by modifying the Firmware configuration. The setup program uses a number of menus to make changes and turn features on or off.

Functional keystrokes in POST:

Enter Setup

Enter Setup

Boot Menu

6.6 Start AMI® Aptio Setup Utility

To start the AMI® BIOS setup utility, press <DEL> or <F2> when the following string appears during boot up.

Press <DEL> to enter Setup

The Info Menu then appears.

The Setup Screen is composed of several sections:

Menu Bar Top Lists and selects all top level menus.

Legend Bar Right side Bottom Lists setup navigation keys.

Item Specific Help Window Right side Top Help for selected item.

Menu Window Left Center Selection fields for current menu.

Please refer to the COMe-bIP6 User Manual for additional BIOS screen data and details on making changes. See:

http://us.kontron.com/products/computeronmodules/com+express/com+express+basic/comebip.html

7 Trouble shooting: KOPS800

This chapter helps you identify and solve problems that might occur while you are using the Kontron OPS-compliant media player KOPS800.

For any issue, first ensure you are using the latest firmware and files. Available firmware upgrades include updates for BIOS and the baseboard management controller (BMC). Go to http://us.kontron.com/products/systems+and+platforms/ops+platforms+for+digital+signage/kops800.html, click on downloads, BIOS for information about the latest updates. In addition to the Kontron OPS-compliant Media Player KOPS800 firmware and files, also update any drivers used for components you have installed in your system, such as video drivers, network drivers, etc. drivers.

If you are unable to resolve your Kontron OPS-compliant media player KOPS800 problems on your own, see Kontron customer support for assistance.

7.1 Resetting the System

Before going through in-depth troubleshooting, first attempt to reset your system using one of the methods below.

To do this:	Press:
Soft boot reset to clear the system memory and reload the operating system	<Ctrl+Alt+Del> from the local keyboard connected to the KOPS800 system
Clear system memory, restart power-on self start test (POST), and reload the operating system	Reset button
Cold boot reset. Turn the system power off and then on. This clears system memory, restarts POST, reloads the operating system, and halts power to all peripherals	Power on/off

7.2 Problems Following Initial System Installation

Problems that occur at initial system startup are usually caused by an incorrect installation or configuration. Hardware failure is a less frequent cause. If the problem you are experiencing is with a specific software application, see “Problems with Newly Installed Application Software”.

7.2.1 First Steps Checklist

- Is power available at the source?
- Is the Kontron KOPS800 inserted into the display receptacle properly? Check the power cable on the display and at the power source to ensure that power is able to get to the Kontron KOPS-800.

- For displays with AC Power Modules, check to ensure power cord is properly plugged into a 5-15R outlet for 100-120V or a 6-15R outlet for 200-240V
- Are all cables correctly connected and secured?
- Are all peripheral devices installed correctly?
- Are all device drivers properly installed?
- Are the configuration settings made in Setup correct?
- If you are using a different operating system than the ones that are preloaded, is the operating system properly loaded? Refer to the operating system documentation.

7.3 Hardware Diagnostic Testing

This section provides a more detailed approach to identifying a hardware problem and locating its source.

CAUTION: Turn off devices before disconnecting cables.

Before disconnecting any peripheral cables from the system, turn off the system by unplugging the power cord, and any external peripheral devices.

1. Turn off the Kontron OPS-compliant media player KOPS800 using the power button. Turn off and disconnect all external peripheral devices. Disconnect each of devices from the system, except for the keyboard and the video monitor.
2. Make sure the Kontron OPS-compliant media player KOPS800 is properly inserted into the display. Turn on both the video display and the KOPS800. Set its brightness and contrast controls to at least two thirds of their maximum ranges (see the documentation supplied with your video display).
3. This should turn on the system. If the power LED does not light, see Section below, “Power Light does not Light”.

7.3.1 Confirming the Operating System Load

Once the system boots up, the operating system prompt appears on the screen. The prompt varies according to the operating system. If the operating system prompt does not appear, see “No Characters Appear on Screen”.

7.4 Specific Problems and Corrective Actions

This section provides possible solutions for specific problems:

Try the solutions below in the order given. If you cannot correct the problem, contact your service representative or authorized dealer for help.

7.5 Power Light does not Light

Check the following:

- Is the KOPS800 properly inserted into the display?
- Is the display turned on?
- For AC, will other items plugged into the same power outlet function correctly?

- The LED light is surfaced mounted on the board.

7.5.1 No Characters Appear on Screen

Check the following:

- If you are using a keyboard, is the keyboard functioning? Test it by turning the “Num Lock” function on and off to make sure the Num Lock light is functioning.
- Is the KOPS800 properly inserted into the display? Check to see if the power light is on.
- Are all other cables properly attached?
- If you are using a switch box, is it switched to the correct system?
- Are the brightness and contrast controls on the display properly adjusted?
- Is the display signal cable properly installed? Are you using a HDMI to DVI Adapter? Have you confirmed that it works by using it on another system?
- Does this display work correctly if plugged into a different system?

7.5.2 Characters are Distorted or Incorrect

Check the following:

- Are the brightness and contrast controls properly adjusted on the vdisplayr?
  See the manufacturer’s documentation.
- Are the display’s signal and power cables properly installed?
- Does this display work correctly if plugged into a different system?

7.5.3 Cannot connect to a Kontron OPS-compliant media player KOPS800 using Ethernet Connector

- Make sure the network cable is securely attached at the connector port.
- Try a different network cable.
- Make sure you are using the correct and the current drivers. Go to downloads for the product:
  http://us.kontron.com/products/systems+and+platforms/ops+platforms+for+digital+signage/kops800.html
- Make sure the driver is loaded and the protocols are bound.
- Make sure the correct networking software is installed.

7.5.4 Diagnostics Pass but the Connection Fails

- Make sure the network cable is securely attached.
- Make sure you specify the correct frame type in your NET.CFG file.

7.5.5 Cannot connect to a Kontron OPS-compliant media player KOPS800 using Wi-Fi

- Make sure that your Wi-Fi router is functioning and within range by confirming connectivity with another Wi-Fi device.

- Make sure you are using the correct and the current drivers. Go to downloads for the product: http://us.kontron.com/products/systems+and+platforms/ops+platforms+for+digital+signage/kops800.html
- Make sure the driver is loaded and the protocols are bound.
- Make sure the correct networking software is installed.

7.5.6 Problems with Newly Installed Application Software

Problems that occur when you run new application software are usually related to the software, not the Kontron OPS-compliant media player KOPS800. Faulty equipment is unlikely, especially if other software runs correctly.

Check the following:

- Make sure the system meets the minimum hardware requirements for the software. See the software documentation.
- Make sure the software is properly installed and configured for the system. See the software documentation.
- Use only an authorized copy. Unauthorized copies often do not work.
- Make sure the correct device drivers installed.

If the problems persist, contact the software vendor's customer service representative.

7.5.7 Problems with Application Software that Ran Correctly Earlier

Problems that occur after the system hardware and software have been running correctly sometimes indicate equipment failure. However, they can also be caused by file corruption or changes to the software configuration.

Check the following:

- Uninstall and reinstall the software. Make sure all necessary files are installed.
- If the problems are intermittent, there may be a loose cable, dirt in the keyboard (if keyboard input is incorrect), a marginal power supply, or other random component failures.
- If you suspect that a transient voltage spike, power outage, or brownout might have occurred, reload the software and try running it again. Symptoms of voltage spikes include a flickering video display, unexpected system reboots, and the system not responding to user commands.

NOTE: For AC power, if you are getting random errors in your data files, they may be getting corrupted by voltage spikes on your power line. If you are experiencing any of the above symptoms that might indicate voltage spikes on the power line, you may want to install a surge suppressor between the power outlet and the display power cord.

8 DSEK-12 (Digital Signage Evaluation Kit)

This section of this manual is for customers that have purchased DSEK-12. Please use the rest of the manual for information about the Kontron OPS-compliant media player KOPS800 that is part of the DSEK-12.

8.1 Contents of the DSEK-12

The following is included with the DSEK-12:

Hardware

- Kontron OPS-compliant media player KOPS800 inserted in a DSEK-12 chassis
- 1 Wi-Fi WLAN antennas
- External power supply and cable
- HDMI cable

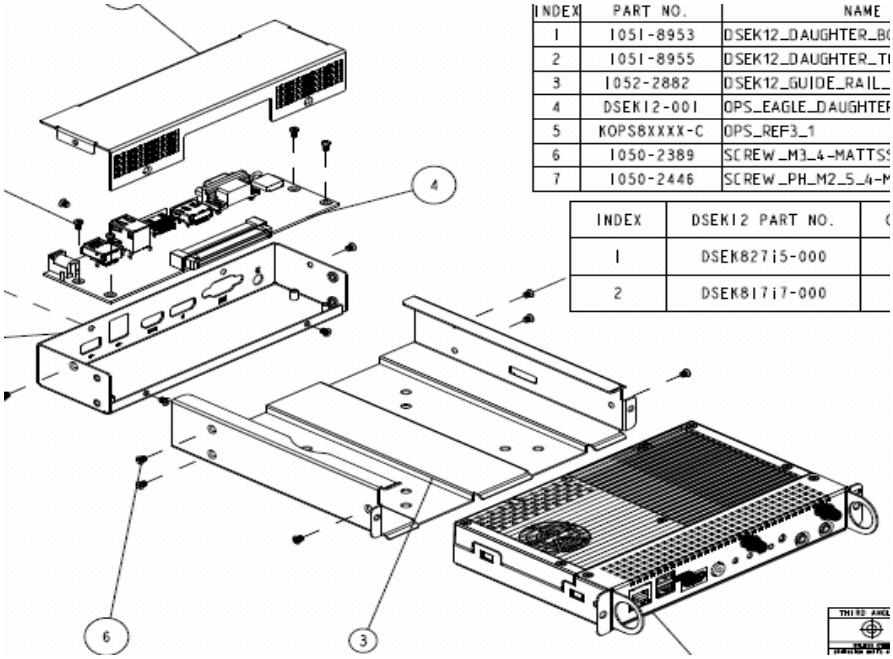
Software

- Easy to edit examples for quick prototyping with custom content
- 180 day trials of pre-configured and validated fully functional software:
  - Flypaper® content creation software with Intel® Audience Impression Metrics (In tel® AIM Suite) anonymous viewer analytics software and Microsoft® Windows Embedded POSReady 7
  - Scala® content management software and Microsoft® Windows Embedded Standard 7

Documentation

- Solutions Brief
- Kontron Out-ofbox Guide

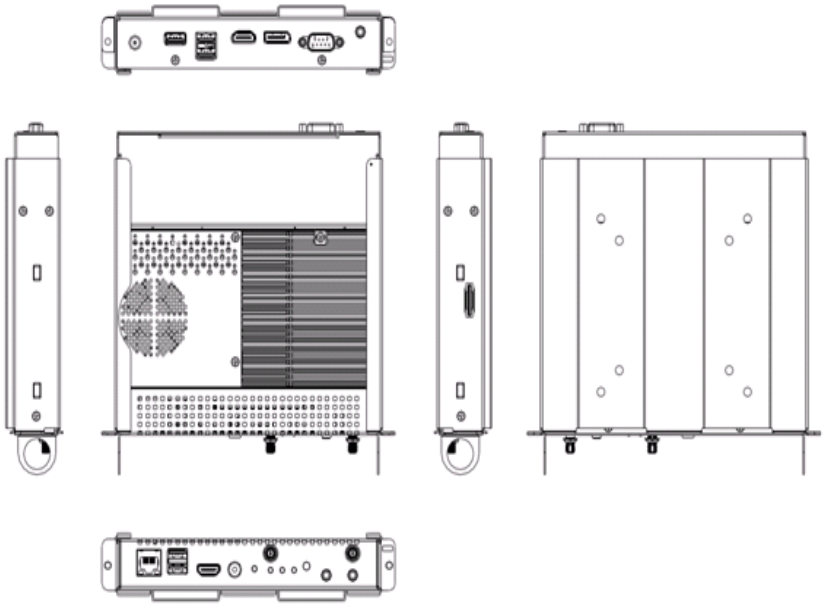
8.2 DSEK-12 Assembly diagram



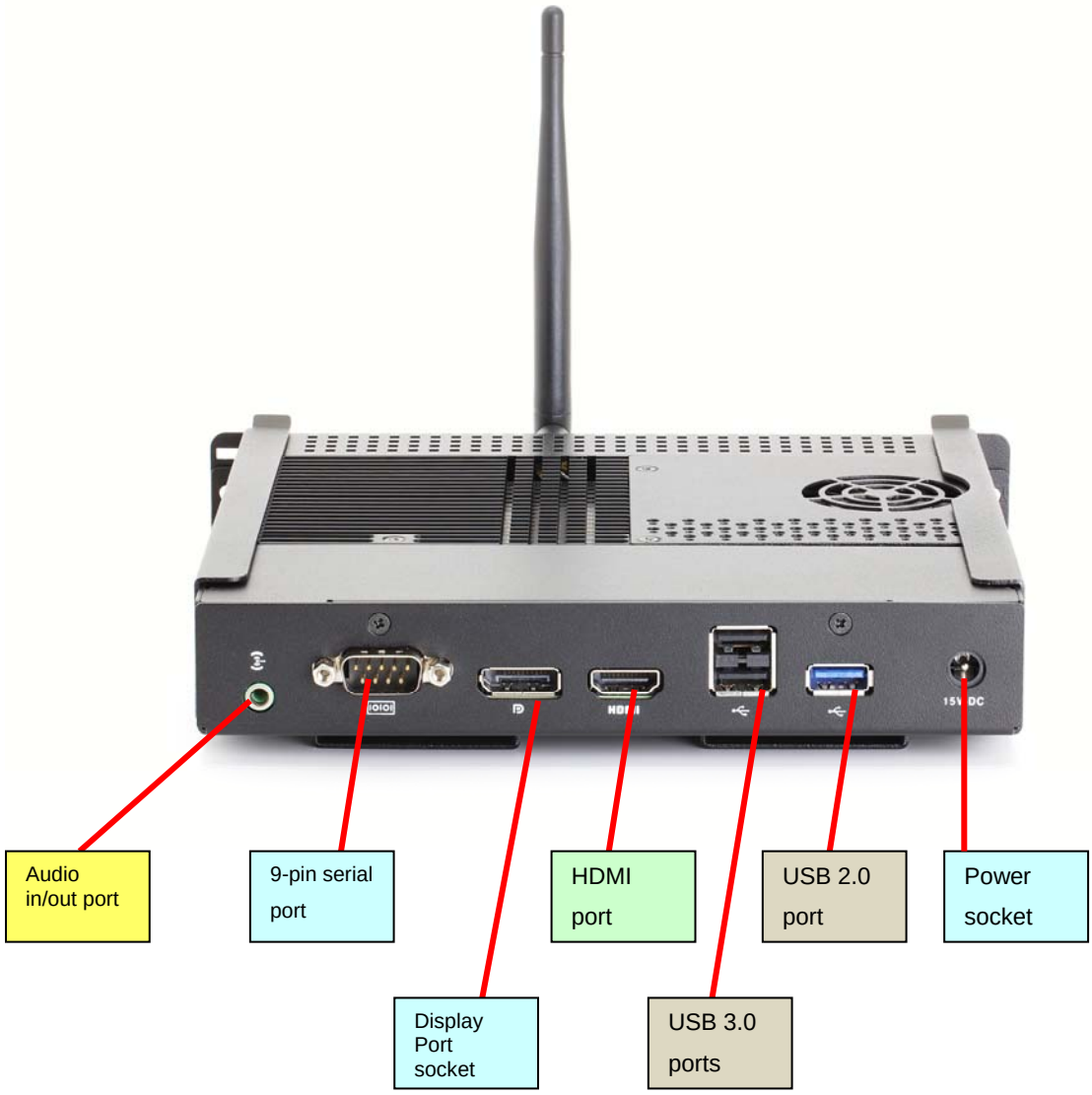
INDEX	PART NO.	NAME
1	1051-8953	DSEK12_DAUGHTER_B(
2	1051-8955	DSEK12_DAUGHTER_T(
3	1052-2882	DSEK12_GUIDE_RAIL_
4	DSEK12-001	OPS_EAGLE_DAUGHTEF
5	KOPS8XXXX-C	OPS_REF3_1
6	1050-2389	SCREW_M3_4-MATTS
7	1050-2446	SCREW_PH_M2_5_4-M

INDEX	DSEK12 PART NO.	
1	DSEK827i5-000	
2	DSEK817i7-000	

8.3 DSEK-12 Drawing

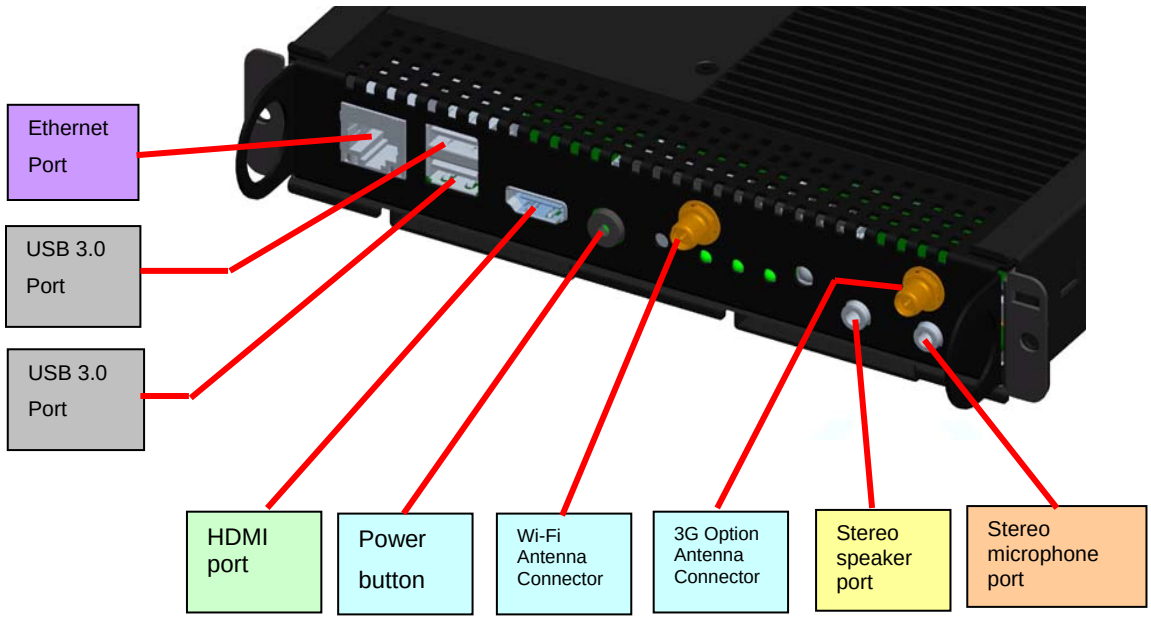


8.4 Front panel connections for DSEK-12



8.5 Rear panel connections for DESK-12

Connect all the appropriate devices to their corresponding sockets as shown below.



8.6 Antennas

There is one antenna for 802.11 (WLAN) in each DSEK-12.

WARNING: The antenna supplied with the kit is the only antennas approved to be used with the device. Use of any other antennas will void the regulatory approvals.

8.7 Power Supply

WARNING: The power supply included with the DSEK-12 is 15V DC, 6A
(Adaptor: Input: 90~260V, 47~63Hz ac. Output 15V DC, 6A)
No other power supply should be used beyond what has been provided with the kit.

Use the appropriate cord for your geography. Any IEC320-C7 power cord with appropriate safety agency rating is acceptable for use, but do not use the IEC320-C7-PW cords that are squared on one side.

8.8 In-box Documentation

Documentation available in the box includes an Out-of-Box guide and Errata (as applicable). See the downloads section of the DSEK-12 product page on www.kontron.com.

The latest version of this manual and the Out-of-box Guide can be obtained at:

Out-of-box Guide: http://www.**Kontron.com/dsek12/outofboxguide**

User Manual: http://www.**Kontron.com/dsek12/usermanual**

8.9 Installing the Antenna

To install the antenna, remove it from the plastic cover and screw it into the appropriate antenna connectors.

WARNING: The antennas supplied with the kit are the only antennas approved to be used with the device. Use of any other antennas will void the regulatory approvals.

8.10 Installing the power supply (power brick)

WARNING: Do not attempt to modify or use an AC power cord set that is not the exact type supplied. Note that the power supply in the kit is a Mean Well GS90A15-P1M.

The power supply that accompanies the Kontron OPS-compliant media player KOPS800 is the only one that should be used. Use of any other power supply invalidates the certifications and may be dangerous.



To install the power supply (external power brick) follow these steps:

1. Attach the cord for your geography to the power supply. The power supply is external to the KOPS-800. It is a brick style.
2. Insert the power supply plug into the power socket in the DSEK-12 as shown above.
3. Plug in the cord to the wall socket.

8.11 DSEK-12 Evaluation Software

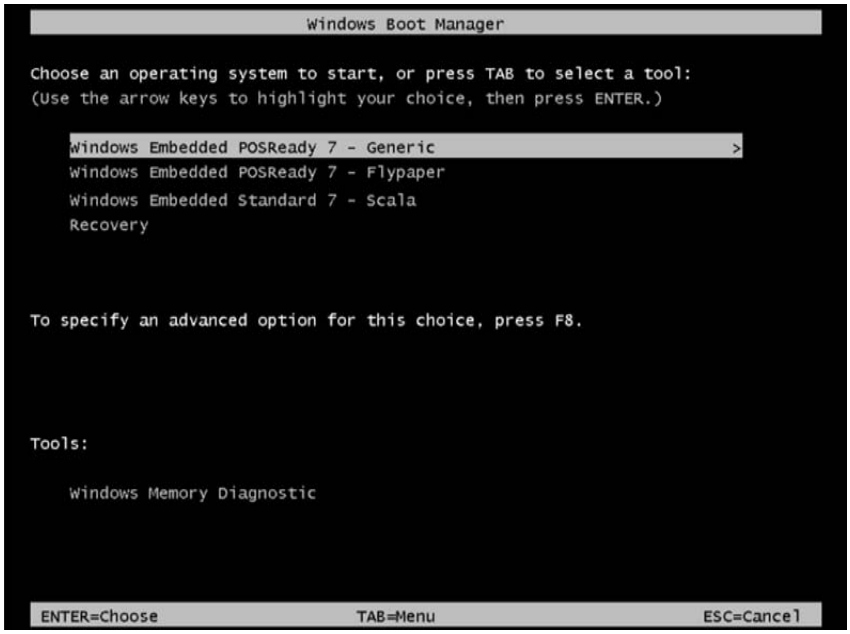
All OS and application software that is provided with the DSEK-12 is provided as 180 day evaluations. After that period the software must be purchased from the independent software vendor (ISV) or from their distributors.

8.11.1 DSEK-12 Menu

The DSEK-12 menu will enable you to select as follows:

- Microsoft Windows Embedded POSReady 7
- Microsoft Windows Embedded POSReady 7 – Flypaper
- Microsoft Windows Embedded Standard 7 – Scala
- Recovery

You may return to this screen to use other options at any time.



The following sections will give you an overview of the Flypaper and scala software options.

8.11.2 Windows® Embedded POSReady 7

If you select Windows® Embedded POSReady 7 the menus will walk through the following steps:

1. Starting Windows
2. Udating registry settings
3. Starting services
4. Installing devices
5. Applying systems settings
6. Rebooting

7. Starting Windows
8. Preparing for first use
9. Locale, Time & Currency, Keyboard Layout
10. First User and Computer Name
11. First User Password and Password Hint
12. 180 day Evaluation License Agreement
13. Windows Update Options
14. Current Date and Time
15. Network Discovery (Suppressed if not Connected)
16. Finalizing Setup
17. Welcome and Preparing Users Desktop
18. POSReady 7 ready to use
    (Other images will automatically bring up demo quickly after this)
19. POSReady 7 Start Menu
20. . Login Screen Presented on Subsequent Sessions
21. Activation Status – Choose Computer – Properties
22. Activation automatic in 3 days or manually initiated
23. (30 day grace period to activate, Notifications on Boot if not activated)
24. Activate Windows Now Activating Windows
25. Activation Successful
26. Computer – Properties shows Activated

8.11.3 Flypaper and Intel® AIM Suite

Flypaper provides digital signage content-creation software. Through the Flypaper showcase you can view sample content created with Flypaper, visit Flypaper's Web site and launch the actual Flypaper Creator application. This enables you to build your own content, either by starting with one of our samples or building from scratch.



Getting Started

To view a short orientation, click the ‘START HERE’ button in the top, left box. The video that begins provides an overview of the showcase interface as well as an overview of Flypaper and how it solves the content-creation problem that exists within the digital signage industry.

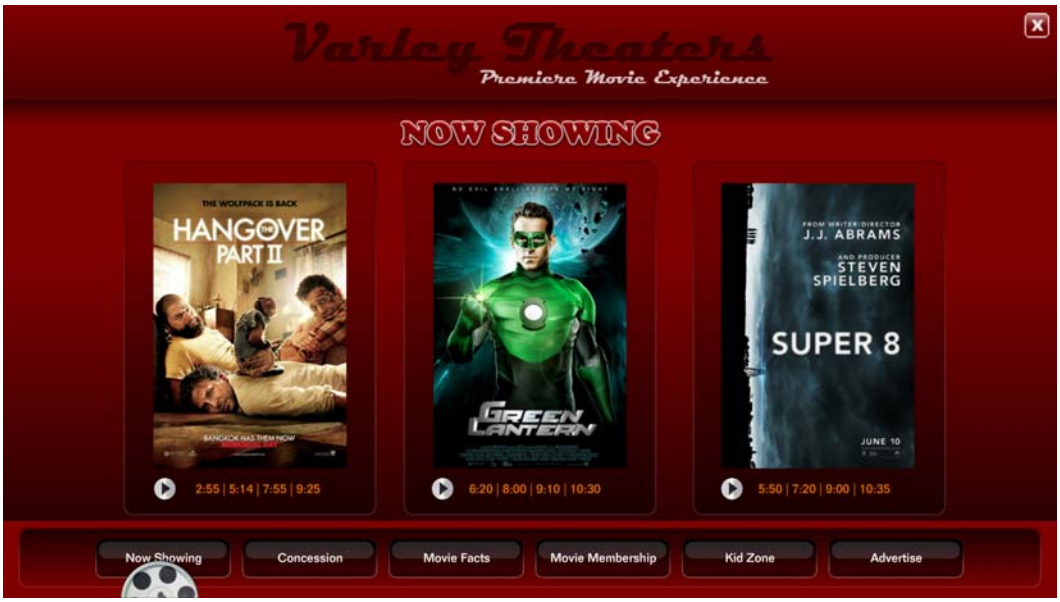


Sample Content Created with Flypaper

The green boxes showcase variety of content created using Flypaper. Within each box are three buttons that enable you to a) Preview the project, b) Open the editable project in Flypaper to see how it was constructed and c) Read a brief description of each project.

Each Flypaper Demo when selected will cycle as an example of a Digital Sign.







Preview Button

Open-in-Flypaper Button

Information Button

Clicking the Preview button opens the sample project as a full-screen presentation. To close the preview, click the Close (X) button in the sample project's upper, right corner.

Clicking the Information Button displays a short description for the project, as well as icons depicting a quick visual of features within that project. Each project has at least one icon to indicate that it is interactive (touch) or auto-playing. Note: Some projects require an internet connection to function properly. Those samples display another icon representing that feature.

Intel® AIM Suite Integration

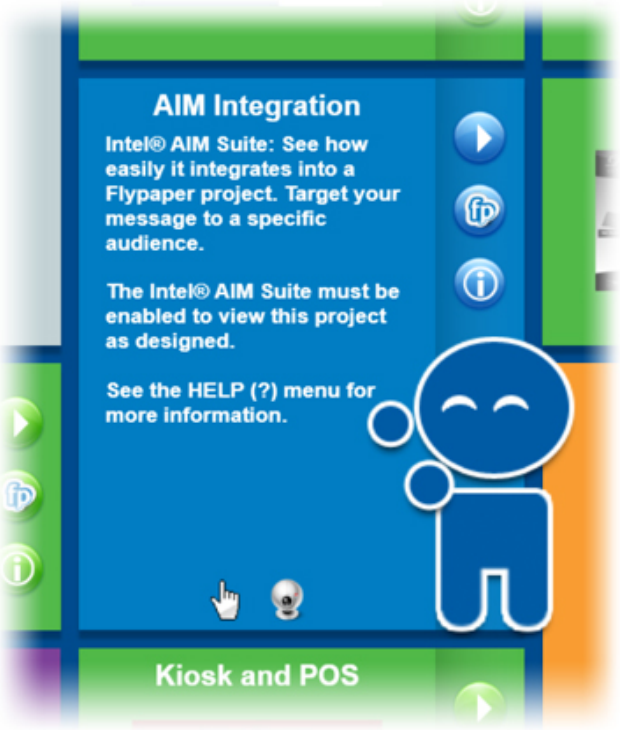
The blue box is the feature showcase sample. This sample project integrates with the Intel® AIM Suite to display content specific to the audience size and gender viewing the project at that time.

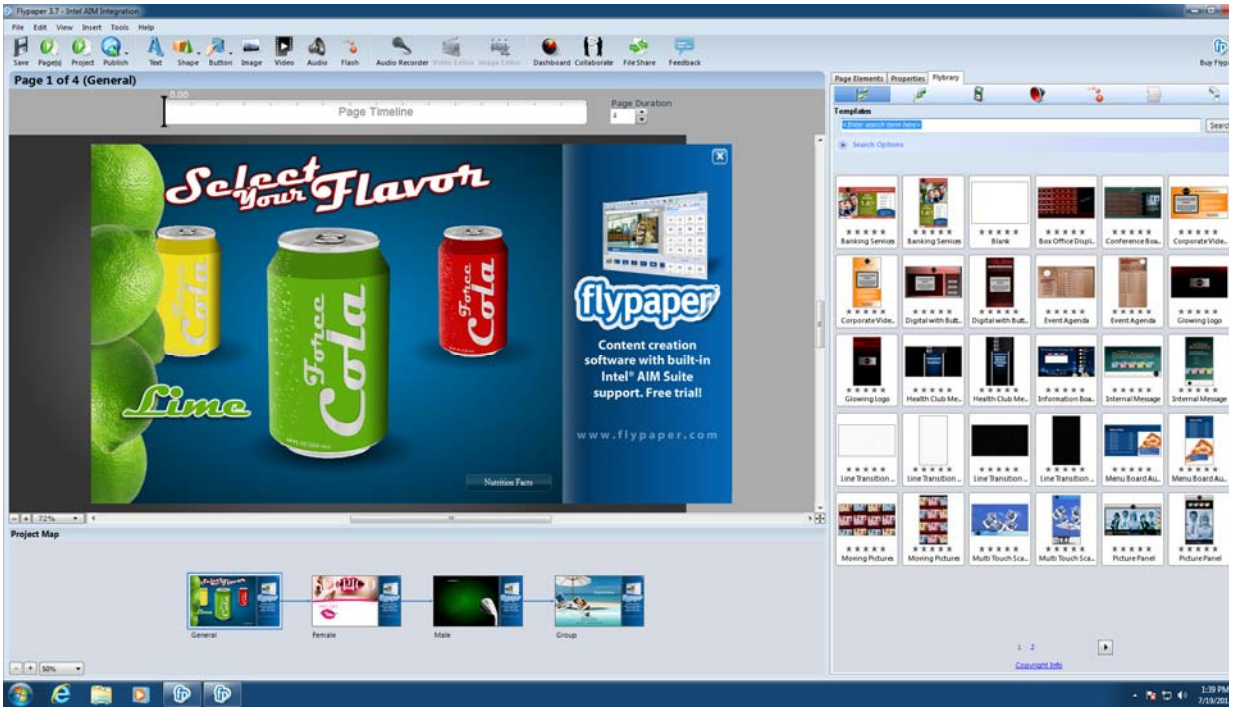
You must have a Web cam installed and enable the Intel® AIM Suite to view this project as designed.

Please contact Intel® AIM Support at **aim-support@intel.com** for assistance.

Note: The small icons at the bottom of the box indicate that it is an interactive project and that it requires a Web cam to view it as designed.

Each Flypaper screen is editable by the user. This is an example with Intel® AIM ingegration.





Launching Flypaper

If you would like to start building your own content or just want to take a closer look at the Flypaper Creator application, click the orange box labeled ‘LAUNCH FLYPAPER’ in the lower, left corner. Note: You will be asked to activate Flypaper when first launching it.

More Information

Click the purple box to visit the web site at http://www.flypaper.com/dsek

Help Menus

To review the features within the showcase or access additional documentation related to Flypaper and the Intel® AIM Suite, click the Help (?) button at the top, right. To close the Help panel simply click the Help button again.



Closing the Showcase

To exit the showcase click the Close (X) button at the top, right or press ESC on your keyboard.



8.11.4 Scala Software

Scala offers extensive online multi-lingual documentation:

http://www.scala.com/extras/manuals/software-quick-start-and-user-guides/?searchterm=user

Scala online templates are availavle at:

http://www.scala.com/extras/scala-templates-demo-scripts-and-videos/templates

Scala demo scripts are available at:

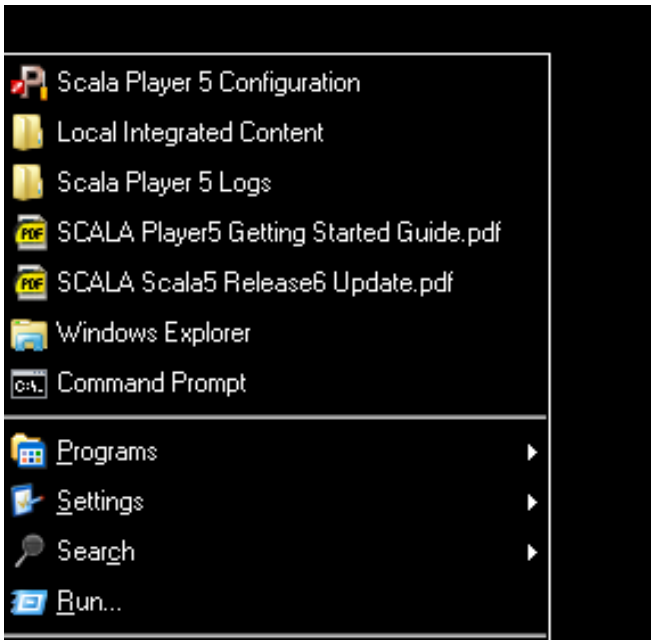
http://www.scala.com/extras/scala-templates-demo-scripts-and-videos/demo-scripts

By selecting the scala option from the main DSEK-12 menu you will see:.

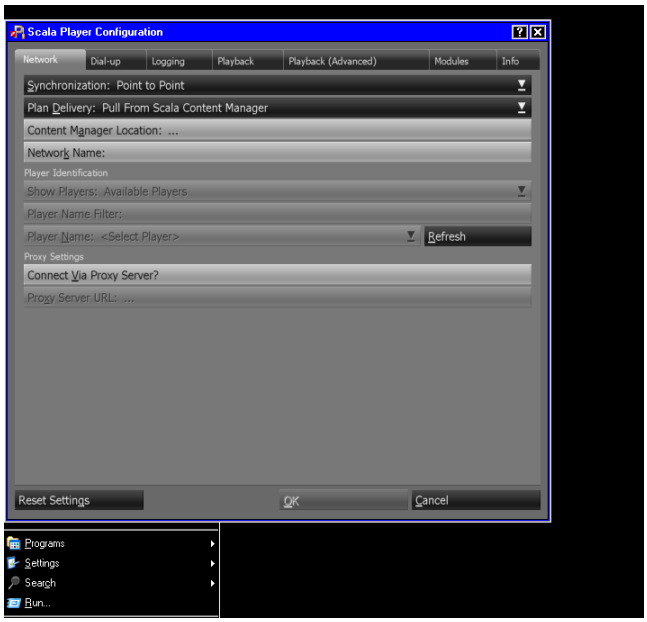
1. Start Up Screen with Base Menu



2. Expanded Menu Components



3. Configuring Scala Player



8.12 Removing Kontron OPS-compliant media player KOPS800 from DSEK-12

Use a Phillips head screw driver to unscrew the three screws on either side of the DSEK-12 in order to release the Kontron OPS-compliant media player KOPS800 from the DSEK-12 chassis.



8.13 Troubleshooting: DSEK-12

Resetting the System

Before going through in-depth troubleshooting, first attempt to reset your system using one of the methods below.

To do this:	Press:
Soft boot reset to clear the system memory and reload the operating system	<Ctrl+Alt+Del> from the local keyboard connected to the DSEK-12
Clear system memory, restart power-on self start test (POST), and reload the operating system	Reset button
Cold boot reset. Turn the system power off and then on. This clears system memory, restarts POST, reloads the operating system, and halts power to all peripherals	Power on/off

Problems Following Initial System Installation

Problems that occur at initial system startup are usually caused by an incorrect installation or configuration. Hardware failure is a less frequent cause. If the problem you are experiencing is with a specific software application, see “Problems with Newly Installed Application Software”.

First Steps Checklist

- Is power available at the source?
- Is the power supply plugged in? Check the power cable on the DSEK-12 and at the power source.
- Is the system power cord properly connected to the system? For systems with AC Power Modules, check to ensure power cord is properly plugged into a 5-15R outlet for 100-120V or a 6-15R outlet for 200-240V
- Are all cables correctly connected and secured?
- Are all peripheral devices installed correctly?
- Are all device drivers properly installed?
- Are the configuration settings made in Setup correct?
- Is the operating system properly loaded? Refer to the operating system documentation.

Hardware Diagnostic Testing

This section provides a more detailed approach to identifying a hardware problem and locating its source.

CAUTION: Turn off devices before disconnecting cables.

Before disconnecting any peripheral cables from the system, turn off the system by unplugging the power cord, and any external peripheral devices.

4. Turn off the DSEK-12 using the power button. Turn off and disconnect all external peripheral devices. Disconnect each of devices from the system, except for the keyboard and the video monitor.
5. Make sure your video display and keyboard are correctly connected to the system. Turn on the video monitor. Set its brightness and contrast controls to at least two thirds of their maximum ranges (see the documentation supplied with your video display).
6. Then make sure the DSEK-12 power brick power cord is plugged into a properly grounded AC outlet.
7. This should turn on the system. If the power LED does not light, see Section below, “Power Light does not Light”.

Confirming the Operating System Load

Once the system boots up, the operating system prompt appears on the screen. The prompt varies according to the operating system. If the operating system prompt does not appear, see “No Characters Appear on Screen”.

Specific Problems and Corrective Actions

This section provides possible solutions for specific problems:

Try the solutions below in the order given. If you cannot correct the problem, contact your service representative or authorized dealer for help.

Power Light does not Light

Check the following:

- Did you plug in the system to the outlet?
- Have you securely plugged the DSEK-12 power cord into the power supply brick?
- For AC, will other items plugged into the same power outlet function correctly?
- The LED light is surfaced mounted on the board.

No Characters Appear on Screen

Check the following:

- Is the keyboard functioning? Test it by turning the “Num Lock” function on and off to make sure the Num Lock light is functioning.
- Is the video monitor plugged in and turned on? If you are using a switch box, is it switched to the correct system?
- Are the brightness and contrast controls on the video display properly adjusted?
- Is the video display signal cable properly installed? Are you using a HDMI to DVI Adapter? Have you confirmed that it works by using it on another system?
- Does this video display work correctly if plugged into a different system?

Characters are Distorted or Incorrect

Check the following:

- Are the brightness and contrast controls properly adjusted on the video monitor? See the manufacturer's documentation.
- Are the video monitor's signal and power cables properly installed?
- Does this video monitor work correctly if plugged into a different system?

Cannot Connect to DSEK-12 using Ethernet Connector

- Make sure the network cable is securely attached at the connector port.
- Try a different network cable.
- Make sure you are using the correct and the current drivers. Go to downloads for the product: http://us.kontron.com/products/systems+and+platforms/ops+platforms+for+digital+signage/kops800.html
- Make sure the driver is loaded and the protocols are bound.
- Make sure the correct networking software is installed.

Diagnostics Pass but the Connection Fails

- Make sure the network cable is securely attached.
- Make sure you specify the correct frame type in your NET.CFG file.

Cannot connect to the DSEK-12 using Wi-Fi

- Check to see if the Wi-Fi/3G indicator light is on. It should be red and be the third light on the top. It is surface mounted. When the light is on it is indicating that the Wi-Fi card in the system is functioning.
- Make sure that your Wi-Fi router is functioning and within range by confirming connectivity with another Wi-Fi device.
- Make sure you are using the correct and the current drivers. Go to downloads for the product: http://us.kontron.com/products/systems+and+platforms/ops+platforms+for+digital+signage/kops800.html
- Make sure the driver is loaded and the protocols are bound.
- Make sure the correct networking software is installed.

Problems with Newly Installed Application Software

Problems that occur when you run new application software are usually related to the software, not the Kontron OPS-compliant media player KOPS800 in the DSEK-12. Faulty equipment is unlikely, especially if other software runs correctly.

Check the following:

- Make sure the system meets the minimum hardware requirements for the software. See the software documentation.

- Make sure the software is properly installed and configured for the system. See the software documentation.
- Use only an authorized copy. Unauthorized copies often do not work.
- Make sure the correct device drivers installed.

If the problems persist, contact the software vendor's customer service representative.

Problems with Application Software that Ran Correctly Earlier

Problems that occur after the system hardware and software have been running correctly sometimes indicate equipment failure. However, they can also be caused by file corruption or changes to the software configuration. Check the following:

- Uninstall and reinstall the software. Make sure all necessary files are installed.
- If the problems are intermittent, there may be a loose cable, dirt in the keyboard (if keyboard input is incorrect), a marginal power supply, or other random component failures.
- If you suspect that a transient voltage spike, power outage, or brownout might have occurred, reload the software and try running it again. Symptoms of voltage spikes include a flickering video display, unexpected system reboots, and the system not responding to user commands.

NOTE: For AC power, if you are getting random errors in your data files, they may be getting corrupted by voltage spikes on your power line. If you are experiencing any of the above symptoms that might indicate voltage spikes on the power line, you may want to install a surge suppressor between the power outlet and the system power cord. Only use an IEC320-C7 power cord with the power supply provided in the kit.

9 Warranty

This Kontron product is warranted against defects in material and workmanship for 2 years from the date of shipment. During the warranty period, Kontron will at its discretion decide to repair or replace defective products. Within the warranty period, the repair of products is free of charge as long as warranty conditions are observed.

The warranty does not apply to defects resulting from improper or inadequate maintenance or handling by the buyer, unauthorized modification or misuse, operation outside of the product's environmental specifications or improper installation or maintenance.

Kontron will not be responsible for any defects or damages to other products not supplied by Kontron that are caused by a faulty Kontron product.

Please use the following link for more information: **http://us.kontron.com/support/rma-information/**

10 Revision History

Revision	Date	Edited by	Changes
1.0	26 Aug 2012	NYP	Preliminary version

Appendix A: Safety Information

Warning: This product has been designed for service development purposes. Although this product has already been approved by several agencies, compliance with your local regional rules may require additional EMC compliance testing. Before working with your Kontron OPS-compliant media player KOPS800 or your DSEK-12, pay close attention to these safety instructions. You must adhere to the assembly instructions in this guide to ensure and maintain compliance with existing product certifications and approvals. Use only the described, regulated components specified in this guide. Use of other products / components will void the UL listing and other regulatory approvals of the product and will most likely result in non-compliance with product regulations in the region(s) in which the product is sold. This is an FCC (Federal Communications Commission) Class B device.

A.1 Emissions Disclaimer

To ensure EMC (Electromagnetic Compatibility) compliance with your local regional rules and regulations, the final configuration of your end system product may require additional EMC compliance testing. For more information, please contact your local Kontron Representative. See Appendix B, "Regulatory and Certification Information" for product Safety and EMC regulatory compliance information. This is an FCC (Federal Communications Commission) Class B device.

A.2 Intended Uses

This product was evaluated as Information Technology Equipment (ITE), which may be installed in offices, schools, computer rooms, and similar commercial type locations. The suitability of this product for other product categories and environments (medical, telecommunications, residential, alarm systems, etc.), other than an ITE application, may require further evaluation and additional certifications.

WARNING: Do not attempt to modify or use an AC power cord set that is not the exact type supplied.

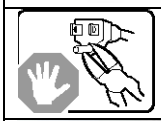
10.1.1 Temperature and Ventilation

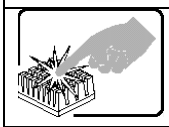
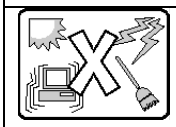
CAUTION: Temperature -- The temperature, in which the Kontron OPS-compliant media player KOPS800 and DSEK-12 operates when installed, must not go below 0°C or rise above 50°C. Extreme fluctuations in temperature can cause a variety of problems in your Kontron OPS-compliant media player KOPS800.

CAUTION: Ventilation -- The OPS-compliant media player KOPS800 and DSEK-12 equipment mounting location must provide sufficient airflow to the OPS-compliant media player KOPS800 to maintain proper cooling. The mounting area must also include ventilation sufficient for exhaust of heat from the unit. Do not cover up air venting on the system.

A.3 Safety Cautions

Read all caution and safety statements in this document before performing any of the instructions.

	The power supply in the DSEK-12 contains no user-serviceable parts.
	Do not attempt to modify or use the supplied AC power cord if it is not the exact type required.
 	Use the power button to turn off power on the Kontron media player KOPS800 or the DSEK-12.
  	SAFETY STEPS: If you remove the chassis cover to access the inside of the system, follow these steps: 1. Turn off all peripheral devices connected to the system. 2. Turn off the system by unplugging all AC power cords from the system or from wall outlets. 3. Disconnect the power supply from the system. 4. Label and disconnect all cables connected to I/O connectors or ports on the system. 5. Provide electrostatic discharge (ESD) protection by wearing an antistatic wrist strap attached to chassis ground of the system—any unpainted metal surface—when handling components. After you have completed the five SAFETY STEPS above, you can remove the system covers. To do this: 1. Remove and save all screws from the top and bottom covers. 2. Remove the cover. 4. Do not operate the system with the chassis cover removed.
	For proper cooling and airflow, always reinstall the chassis covers before turning on the system. Operating the system without the covers in place can damage system parts. To install the covers: 1. Check first to make sure you have not left loose tools or parts inside the system. 2. Check that cables, add-in boards, and other components are properly installed. 3. Attach the covers to the chassis with the screws removed earlier, and tighten them

	firmly. 4. Attach the mounting brackets to the system with the screws removed earlier, and tighten them firmly. 5. Connect all external cables and for the DSEK-12 AC power cord(s) to the system or to the display holding the OPS-compliant media player KOPS800.
	A microprocessor and heat sink may be hot if the system has been running. Also, there may be sharp pins and edges on some board and chassis parts. Contact should be made with care. Consider wearing protective gloves.
	The OPS-compliant media player KOPS800 and the DSEK-12 is designed to operate in a typical office environment. Choose a site that is: • Clean and free of airborne particles (other than normal room dust). • Well ventilated and away from sources of heat including direct sunlight. • Away from sources of vibration or physical shock. • Isolated from strong electromagnetic fields produced by electrical devices. • In regions that are susceptible to electrical storms, we recommend you plug your display or your DSEK-12 into a surge suppressor. • Provided with a properly grounded wall outlet for the display or the DSEK-12. • Provided with sufficient space to access the display or DSEK-12 power supply cord(s).

Appendix B: Regulatory and Certification Information

B.1 Product Regulatory Compliance

10.1.2 Product Safety Compliance

The Kontron OPS-compliant media player KOPS800 Kit complies with the following safety requirements:

» Nemko NRTL 60950-1 (North America)
» EN60950-1 (Europe)
» IEC60950-1 (International), CB Certificate & Report including all international deviations

10.1.3 Product EMC Compliance - Class B Compliance

The OPS-compliant media player KOPS800 has been has been tested and verified to comply with the following electromagnetic compatibility (EMC) regulations.

» FCC /ICES-003 - Emissions (USA/Canada)
» CISPR 22 - Emissions (International)
» EN55022 - Emissions (Europe)
» EN55024 - Immunity (Europe)
» EN61000-3-2 - Harmonics (Europe)
» EN61000-3-3 - Voltage Flicker (Europe)
» CE- EMC Directive 89/336/EEC (Europe)

10.1.4 Certifications/Registrations/Declarations

» Nemko NRTL (North America)
» CE Declaration of Conformity (Europe)
» FCC/ICES-003 Class B Verification Report (USA/Canada): **TBD**

B.2 Electromagnetic Compatibility Notices FCC (USA)

This device complies with Part 15 of the FCC Rules. Operation is subject to the conditions noted in the FCC Compliance Statement noted below.

FCC ID number: TBD

For questions related to the EMC performance of this product, contact:

Kontron America, Inc.

14118 Stowe Drive

Poway, CA 92064-7147

(888) 294-4558

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Wireless Radio Use: This device is restricted to indoor use when operating in the 5.15 to 5.25 GHz frequency band. Cet appareil doit être utilisé à l'intérieur. Canadian Compliance Statement Complies with the Canadian ICES-003 Class B specifications.

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

B.3 European Community Compliance Statement

The equipment complies with the RF Exposure Requirement 1999/519/EC, Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0–300 GHz). This wireless device complies with the R&TTE Directive.

Hereby, Kontron AG declares that this Wi-Fi device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

B.4 Exposure to Radio Frequency Energy

The Kontron OPS-compliant media player and DSEK-12 contain radio transmitters and receivers. When on, the System sends and receives radio frequency (RF) energy through its antenna. The Wi-Fi antenna is located attached to the system. The Kontron OPS-compliant media player KOPS800 has been tested and meets the RF exposure requirements for Wi-Fi operation. For optimal mobile device performance and so that human exposure to RF energy does not exceed the FCC, IC, and European Union guidelines, always follow these instructions and precautions: Orient the device with the cellular antenna (located In either side of the device away from your body or other objects. You can further limit your exposure to RF by limiting the amount of time using the OPS-compliant media player KOPS800, since time is a factor in how much exposure a person receives, and by placing more distance between your body and the OPS-compliant media player KOPS800 since exposure level drops off dramatically with distance.

B.5 Additional Information

For more information from the FCC about exposure to RF energy, see: www.fcc.gov/oet/rfsafety The FCC and the U.S. Food and Drug Administration (FDA) also maintain a consumer website at www.fda.gov/Radiation-EmittingProducts/Radiation

EmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm to address inquiries about the safety of mobile phones. Please check the website periodically for updates.

For information about the scientific research related to RF energy exposure, see the EMF Research Database maintained by the World Health Organization at: www.who.int/emf

Radio Frequency Interference

Radio-frequency emissions from electronic equipment can negatively affect the operation of other electronic equipment, causing them to malfunction. Although the OPS-compliant media player KOPS800 is designed, tested, and manufactured to comply with regulations governing radio frequency emission in countries such as the United States, Canada, the European Union, the wireless transmitters and electrical circuits in the OPS-compliant media player KOPS800 may cause interference in other electronic equipment. Therefore, please take the following precautions:

- Aircraft Use of OPS-compliant media player KOPS800 may be prohibited while traveling in aircraft.
- Vehicles Radio frequency emissions from OPS-compliant media player KOPS800 may affect electronic systems in motor vehicles.
- Pacemakers -- The Health Industry Manufacturers Association recommends that a minimum separation of 15 cm (6 inches) be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker.
- Other Medical Devices -- If you use any other personal medical device, consult the device manufacturer or your physician to determine if it is adequately shielded from radio frequency emissions.
- Health Care Facilities -- Hospitals and health care facilities may use equipment that is particularly sensitive to external radio frequency emissions.
- Blasting Areas and Posted Facilities – Follow site regulations for RF devices

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