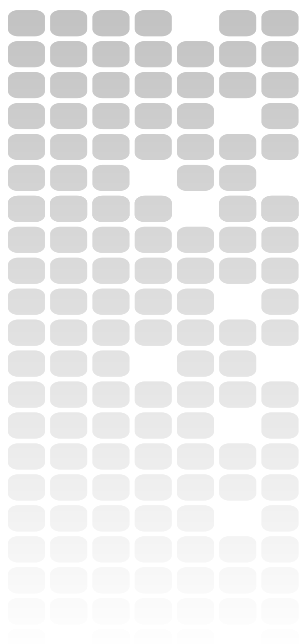


# Clock Products



**Digital Analog and Digital Display**

**Safety Instructions and Regulatory  
Compliance Manual**



# **Clock Products**

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## **Safety Instructions and Regulatory Compliance**



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## Purpose

This manual provides details on the safe use of digital analog and digital display clocks. It also provides information about clock product regulatory compliance. This manual applies to the following clock products:

- 5000/5001 Series Digital Analog Clocks
- UDC-5212 and DTD-5225 Series Digital Time/Date Display Clocks
- DTD-5230, DTD-5231, and DTD-5233 Digital Time/Date Display Clocks

This manual replaces all other clock product safety information.

## Audience

This manual is written for technicians and operators responsible for the installation, setup, and/or operation of digital analog clocks and digital time/ date displays.

## Revision History

Revision History	
Edition A	October 2006





# Important Safety Instructions

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Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. Read these instructions. Keep these instructions. Heed all warnings. Follow all instructions.

## Servicing

Only qualified personnel should perform service procedures. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, including the following:

- Spillage of liquids into the apparatus
- Damage to the power-supply cord or plug
- Exposure of the apparatus to rain or moisture
- Abnormal operation
- Physical damage from dropping

## Terms and Symbols Found in This Manual



**WARNING** statements identify conditions or practices that can result in personal injury or loss of life. High voltage is present. Uninsulated dangerous voltage within the product's enclosure may be sufficient to constitute a risk of electric shock to persons.



**CAUTION** statements identify conditions or practices that can result in damage to the equipment or other property. Important operating and maintenance (servicing) instructions are included in the literature accompanying the product.

# Product Damage Precautions

Review the following safety precautions to avoid injury and prevent damage to this product or any products connected to it. Read these instructions. Keep these instructions. Heed all warnings. Follow all instructions.



## **Do Not Use This Apparatus Near Water**



## **Clean Only with a Dry Cloth**



## **Do Not Block Any Ventilation Openings**

Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.



## **Keep Product Away from Heat Sources**

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.



## **Ground the Product**

Do not defeat the safety purpose of the polarized and grounding-type plugs. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.



## **Protect the Power Cord**

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



## **Only Use Attachments/Accessories Specified by the Manufacturer**

## **Use with Proper Equipment**

Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



**Do Not Operate With Suspected Failures**

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**Use Proper Power Source**

Do not operate this product from a power source that supplies more than the specified voltage.

**Install Near Socket Outlet**

The equipment shall be installed near the socket outlet, and a disconnect device shall be easily accessible.

**Isolate the IT Power Source**

IT power system shall be isolated from earth, except that one point may be connected to earth through an impedance or a voltage limiter. The parts of the equipment required to be earthed shall be connected to earth electrodes at the user's premises. Protective earthing shall be provided either directly to the equipment or into the mains supply building installation.

**ATTENTION:**

Observe precautions for handling electrostatic-sensitive devices.

**Fuse Replacement**

**CAUTION:** For continued protection against the risk of fire, replace only with the same type of fuse: T 250 mA, 250 V.

**French:**

**ATTENTION:** Remplacer uniquement par un fusible de même type et calibre.

# Injury Precautions



**Warning!**

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

**French:**

**AVIS:** Risque de choc électrique. Ne pas ouvrir.



**Warning!**

Potentially lethal voltages are present within this product's frame during normal operation. The AC power cord must be disconnected from the frame before the top panel is removed. (In frames with multiple power supplies, remove ALL power cords.) Power should not be applied to the frame while the top is open, unless properly trained personnel are servicing the unit.

**Poland:**

Przed zdjęciem pokrywy wyciągnąć wtyczkę z gniazda sieciowego.



**Use Proper Power Cord**

To avoid fire hazard, use only the power cord specified for this product.



**Connect to an Earthed Mains Socket-Outlet**

The apparatus must be connected to an earthed socket-outlet.

**Sweden:**

Apparaten skall anslutas till jordat uttag när den ansluts till ett nätverk.

**United Kingdom:**

**WARNING:** This appliance must be earthed.



**Do Not Operate Without Covers**

To avoid electrical shock or fire hazard, do not operate this product with covers or panels removed.



**Do Not Operate in an Explosive Atmosphere**

To avoid injury or fire hazard, do not operate this product in an explosive atmosphere.



### **Avoid Exposed Circuitry**

To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.



### **Isolate IT Power System Connection**

**CAUTION** IT power system shall be isolated from earth, except that one point may be connected to earth through an impedance or a voltage limiter. The parts of the equipment required to be earthed shall be connected to earth electrodes at the user's premises. Protective earthing shall be provided either directly to the equipment or into the mains supply building installation.



### **Preventing Electrostatic Discharge**

**CAUTION** Electrostatic discharge (ESD) can damage components in the product. To prevent ESD, observe these precautions when directed:

- **Use a ground strap.** Wear a grounded wrist strap to discharge the static voltage from your body while installing or removing sensitive components.
- **Use a safe work area.** Do not use any devices capable of generating or holding a static charge in the work area where you install or remove sensitive components. Avoid handling sensitive components in areas that have a floor or benchtop surface capable of generating a static charge.
- **Handle components carefully.** Do not slide sensitive components over any surface. Do not touch exposed connector pins. Handle sensitive components as little as possible.
- **Transport and store carefully.** Transport and store sensitive components in a static-protected bag or container.



**CAUTION** To completely disconnect this equipment from the AC Mains, disconnect the power supply cord plug from the AC receptacle.



**CAUTION** Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

# Safety Symbols Found on the Product



**DANGER**—Indicates a hazard for high voltage, fire, or personal injury immediately accessible as one reads the marking



**WARNING**—Indicates a personal injury hazard that is not immediately accessible as one reads the marking



**CAUTION**—Indicates a hazard to property including the product or the need to take attention and refer to the manual



Protective ground (earth) terminal



Fuse—Replace with the same type and rating of fuse: T 250 mA, 250 V.



Observe precautions for handling electrostatic-sensitive devices.

# Certifications and Compliances

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Our digital analog and digital display clock products have been tested and found to comply with the EMC and safety compliances and standards listed below:

## EMC Compliance

Clock Product	EMC Compliance Description
<ul style="list-style-type: none"><li>• DTD-5230</li><li>• DTD-5231</li><li>• DTD-5233</li><li>• DTD-5225</li><li>• UDC-512</li><li>• ADC-5105, ADC-5105-L</li><li>• ADC-5106, ADC-5106-L</li><li>• ADC-5108</li><li>• ADC-5112, ADC-5112-L</li><li>• ADC-5116, ADC-5116-L</li></ul>	<b>USA</b>
	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. Caution: Changes or modifications not expressly approved by the manufacturer could void your authority to operate this equipment.
	<b>Canada</b>
	This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.
	<b>European Union</b>
	EN55103-1 Electromagnetic compatibility-Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use, Part 1: Emission, Environment E4.EN55103-2 Electromagnetic compatibility-Product family standard for audio, video, audio-visual and entertainment lighting control apparatus or professional use, Part 2: Emission, Environment E4.

Clock Product	EMC Compliance Description
<ul style="list-style-type: none"><li>DAC-5005</li><li>DAC-5006</li><li>DAC-5008</li><li>DAC-5012</li><li>DAC-5016</li><li>UDT-5700</li><li>UDT-5701</li><li>UDC-512</li></ul>	<b>USA</b>
	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. Caution: Changes or modifications not expressly approved by the manufacturer could void your authority to operate this equipment.
	<b>Canada</b>
	This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.



# EU Standards

## Restriction on Hazardous Substances (RoHS) Compliance

Directive 2002/95/EC—commonly known as the European Union (EU) Restriction on Hazardous Substances (RoHS)—sets limits on the use of certain substances found in electrical and electronic equipment. The intent of this legislation is to reduce the amount of hazardous chemicals that may leach out of landfill sites or otherwise contaminate the environment during end-of-life recycling. The Directive takes effect on July 1, 2006, and it refers to the following hazardous substances:

- Lead (Pb)
- Mercury (Hg)
- Cadmium (Cd)
- Hexavalent Chromium (Cr-VI)
- Polybrominated Biphenyls (PBB)
- Polybrominated Diphenyl Ethers (PBDE)

According to this EU Directive, all products sold in the European Union will be fully RoHS-compliant and “lead-free.” (See our Web site, [www.broadcast.harris.com/leitch](http://www.broadcast.harris.com/leitch), for more information on dates and deadlines for compliance.) Spare parts supplied for the repair and upgrade of equipment sold before July 1, 2006 are exempt from the legislation. Equipment that complies with the EU directive will be marked with a RoHS-compliant emblem, as shown in Figure P-1.

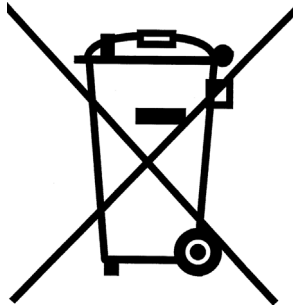


**Figure 1.** RoHS Compliance Emblem

## Waste from Electrical and Electronic Equipment (WEEE) Compliance

The European Union (EU) Directive 2002/96/EC on Waste from Electrical and Electronic Equipment (WEEE) deals with the collection, treatment, recovery, and recycling of electrical and electronic waste products. The objective of the WEEE Directive is to assign the responsibility for the disposal of associated hazardous waste to either the producers or users of these products. Effective August 13, 2005, producers or users will be required to recycle electrical and electronic equipment at end of its useful life, and may not dispose of the equipment in landfills or by using other unapproved methods. (Some EU member states may have different deadlines.)

In accordance with this EU Directive, companies selling electric or electronic devices in the EU will affix labels indicating that such products must be properly recycled. (See our Web site, [www.broadcast.harris.com/leitch](http://www.broadcast.harris.com/leitch), for more information on dates and deadlines for compliance.) Contact your local sales representative for information on returning these products for recycling. Equipment that complies with the EU directive will be marked with a WEEE-compliant emblem, as shown in Figure P-2.



**Figure 2.** WEEE Compliance Emblem

# Safety Compliance

Clock Product	EMC Compliance Description
<ul style="list-style-type: none"> <li>DTD-5230</li> <li>DTD-5231</li> <li>DTD-5233</li> </ul>	<b>USA</b>
	Bi-national standard CAN/CSA-C22.2 No.60950-1-03/UL 60950-1, First Edition, Information Technology Equipment - Safety - Part 1: General Requirements.
	<b>Canada</b>
	Bi-national standard CAN/CSA-C22.2 No.60950-1-03/UL 60950-1, First Edition, Information Technology Equipment - Safety - Part 1: General Requirements.
	<b>European Union</b>
	European standard EN60950-1:2002, First Edition, Information Technology Equipment - Safety - Part 1: General Requirements.
	<b>International</b>
	International Electrotechnical Commission standard IEC60950-1, First Edition (2001), Information Technology Equipment - Safety - Part 1: General Requirements.

Clock Product	EMC Compliance Description
<ul style="list-style-type: none"><li>• DTD-5225</li><li>• UDC-512</li><li>• ADC-5105, ADC-5105-L</li><li>• ADC-5106, ADC-5106-L</li><li>• ADC-5108</li><li>• ADC-5112, ADC-5112-L</li><li>• ADC-5116, ADC-5116-L</li></ul>	<b>USA</b>
	UL 863, Time-Indicating and -Recording Appliances.
	<b>Canada</b>
	CSA-C22.2 No. 6-M1984, Electric Clocks CSA-C22.2 No. 55-M1986, Special Use Switches.
	<b>European Union</b>
	EN60065: 1998, Sixth Edition, Audio, video and similar electronic apparatus, safety requirements.
	<b>International</b>
	IEC60065: 1998, Sixth Edition, Audio, video and similar electronic apparatus, safety requirements.

Clock Product	EMC Compliance Description
<ul style="list-style-type: none"><li>• DAC-5005</li><li>• DAC-5006</li><li>• DAC-5008</li><li>• DAC-5012</li><li>• DAC-5016</li><li>• UDT-5700</li><li>• UDT-5701</li><li>• UDC-512</li></ul>	<b>USA</b>
	UL 863, Time-Indicating and -Recording Appliances.
	<b>Canada</b>
	CSA-C22.2 No. 6-M1984, Electric Clocks CSA-C22.2 No. 55-M1986, Special Use Switches.



## **Customer Service Support**

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