Euphonix is AVID™

DF66

Super Core

Installation Manual

Document Revision: A

Part Number: 840-11252-01

Release Date: May 2010

Euphonix is Avid. Learn more at www.avid.com

Regulatory and Safety Notices

Warnings and Cautions

- Never install equipment if it appears damaged.
- Disconnect the power cord before servicing unit.
- Only perform the services explicitly described in this document. For services or procedures not outlined in this document, speak with authorized Avid service personnel.
- Follow all warnings and cautions in the procedures.
- Operate the device within its marked electrical ratings and product usage instructions.
- If you need to replace a battery in an Avid hardware unit, be sure to use the correct battery type. There might be a risk of explosion if a battery is replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions.

FCC Notice

Part 15 of the Federal Communication Commission Rules and Regulations has established Radio Frequency (RF) emission limits to provide an interference free radio frequency spectrum. Many electronic devices produce RF energy incidental to their intended purpose.

These rules place electronic equipment into two classes, A and B, depending on the intended use.

Class A devices are those that may be expected to be installed in a business or commercial environment. Class B devices are those that may be expected to be installed in a home or residential environment. The FCC requires devices in both classes to be labeled with the interference likelihood and additional operating instructions. The rating label on the equipment will show which class the product is (A or B). Class A product will not have an FCC logo. Class B equipment will have an FCC logo. The information statements differ on the two classes.

Class A Equipment

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at personal expense.

Modifications

The FCC requires the user to be notified that any changes or modifications made to Avid hardware that are not expressly approved by Avid Technology may void the user's authority to operate the equipment.

Cables

Connections to Avid hardware must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

PRODUCTS WITH MULTIPLE POWER INPUTS:

WARNING: Each power input is intended to be connected to a separate branch circuit. Risk of high leakage exists if multiple inputs are connected to a single source and protective earth is not present. A QUALIFIED SERVICE PERSON shall verify that each socket-outlet from which the equipment is to be powered provides a connection to the building protective earth. If any do not provide this connection, the QUALIFIED SERVICE PERSON shall arrange for the installation of a PROTECTIVE EARTHING CONDUCTOR from the separate protective earthing terminal to the protective earth wire in the building.

Canadian ICES-003

Class A Equipment

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecté toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Union Declaration of Conformity

CE

Declaration of conformity

Konformitätserklärung

Déclaration de conformité

Declaración de Confomidad

Verklaring de overeenstemming

Dichiarazione di conformità

We/Wir/ Nous/WIJ/Noi:

Avid Technology

1925 Andover Street

Tewksbury, MA, 01876 USA

European Contact: Nearest Avid Sales and Service Office or

Avid Technology International B.V.

Sandyford Industrial Estate

Unit 38, Carmanhall Road

Dublin 18, Ireland

declare under our sole responsibility that the product,

erklären, in alleniniger Verantwortung,daß dieses Produkt,

déclarons sous notre seule responsabilité que le produit,

declaramos, bajo nuestra sola responsabilidad, que el producto,

verklaren onder onze verantwoordelijkheid, dat het product,

dichiariamo sotto nostra unica responsabilità, che il prodotto,

Product Name(s) : Super Core

Model Number(s): **DF66**

Product Options: This declaration covers all options for the above product(s).

to which this declaration relates is in conformity with the following standard(s) or other normative documents.

auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder Richtlinie(n) übereinstimmt.

auquel se réfère cette déclaration est conforme à la (aux) norme(s) ou au(x) document(s) normatif(s).

al que se refiere esta declaración es conforme a la(s) norma(s) u otro(s) documento(s) normativo(s).

waarnaar deze verklaring verwijst, aan de volende norm(en) of richtlijn(en) beantwoordt.

a cui si riferisce questa dichiarazione è conforme alla/e seguente/i norma/o documento/i normativo/i.

The requirements of the European Council:

Safety: Directive 2006/95/EC

EN 60065:2002 /A1:2006

EMC: Directive 2004/108/EC

EN 55103-1:1996

EN 55103-2:1996

LED Safety Notices

Avid hardware might contain LED or Laser devices for communication use. These devices are compliant with the requirements for Class 1 LED and Laser Products and are safe in the intended use. In normal operation the output of these laser devices does not exceed the exposure limit of the eye and cannot cause harm.

Standard to which conformity is declared: (IEC 60825-1)

Optical connections are located on the rear panel and are typically labeled “Optical” or “SPDIF/ADAT.” The exact location of optical connections is identified more clearly elsewhere in the documentation for the Avid hardware device.

Use of controls and/or adjustments or the performance of procedures other than those specified herein and elsewhere in documentation for the Avid hardware might result in hazardous radiation exposure.

Disposal of Waste Equipment by Users in the European Union

This symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.

Rack-mount Requirements

The following rack-mount requirements are listed below:

• Elevated Operating Ambient — If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment might be greater than room ambient. Therefore, consider installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

• Reduced Air Flow — Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. Do not block vents.

• Mechanical Loading — Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

• Circuit Overloading — Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

• Reliable earthing — Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (for example, use of power strips).

Lithium Battery Replacement

If a battery is supplied in this Avid product it *must* only be replaced by qualified personnel. Contact Avid Customer Support for assistance.

WARNING

Danger of explosion if battery is incorrectly replaced. Replace with only the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

ADVARSEL!

Lithiumbatteri - Eksplosjonsfare. Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

VARNING

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

Overview

The DF66 is an audio DSP core for the S5 and MaxAir families

It is available with between 1 and 6 x 120Mhz DSP cards

Up to 334 channels at 48 KHz and 176 channels at 96 KHz

Models with bus processing available (including limiter)(lower channel counts)

Up to 24 MADI ins and outs fully routable

4U, chassis inc. Digital Pilot.

Redundant PSU's

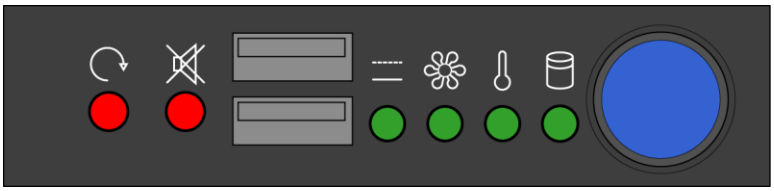
Up to 48 Mix busses

Can be used in a full hardware redundancy system

Front Panel

Power Switch and Status Indicators: See Status Module below.

Software Status Indicator: The blue "wave" in the Euphonix logo lights up to indicate the software in the DF66 is operating correctly.



Status Module

Power Switch: Turns the unit on or off.

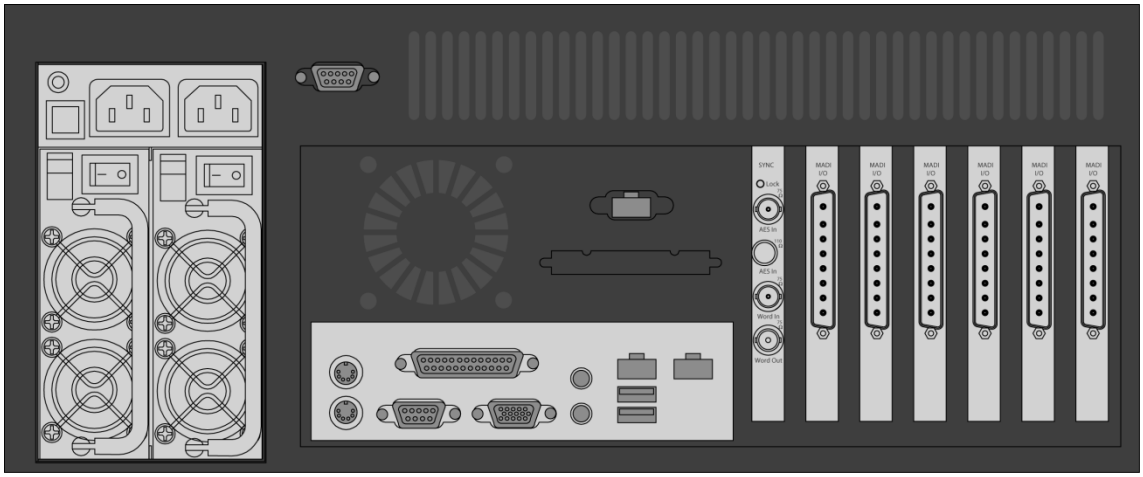
System Reset Switch: Forces a manual reset of the DF66.

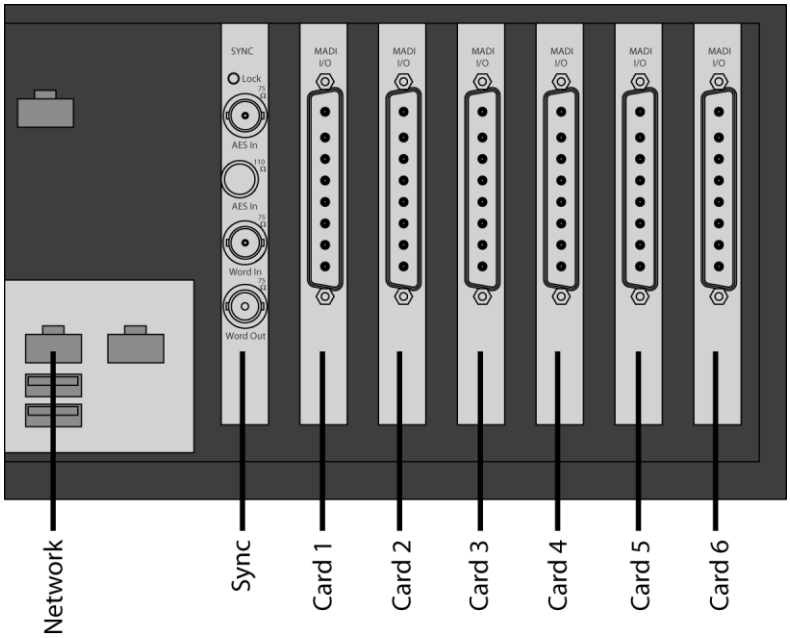
Alarm Cancel Switch: Cancels the audible hardware fault alarm.

LED Status Indicators: Indicates the status of the power supply, cooling fans, temperature, and file system activity. Healthy status is indicated with a green light, faults are indicated with a red light.

USB Ports: Connect a USB storage device to update software (see *SP662 DSP Card Firmware* on page 15**).**

Connections





Rear Panel

AES In (3-pin Lemo Female or BNC): The DF66 clocks to the signal at this port when the sync source is set to AES Sync. Connect this port to a digital sync reference.

Word In (BNC): The DF66 clocks to the signal at this port when the sync source is set to Word Clock. Connect this port to a digital sync reference.

Word Out (BNC): This signal is active regardless of selected sync source.

Locked LED: Indicates that the DF66 is receiving from and locked to the selected sync source. This LED must be lit for proper DF66 audio operation.

MADI In Ports: Digital audio signal input. Each port can receive 56 or 64 audio channels at sample rates up to 48 kHz, or 28 or 31 channels at 96 kHz.

MADI Out Ports: Digital audio signal output. Each port can transmit 56 or 64 channels of audio at sample rates up to 48 kHz, or 28 or 31 channels at 96 kHz.

VGA (DB-15), **Keyboard** (PS2), **Mouse** (PS2): Service connections only.

LAN Port 1 (RJ45): Connect to EuCon Network Switch via RJ45 (provided).

LAN Port 2 (RJ45): Not used.

SNMP LAN Port (RJ45): **Connect this port to a network with SNMP monitoring or e-mail services to enable the hardware monitoring system to report errors.**

SNMP Serial Port (DB-15): Service connection only.

Power Connectors (IEC): Accepts two standard IEC power cords (provided). Two auto-ranging switching supplies accept voltages in the range100–240 VAC, 50–60 Hz.

Network: Connect the left Ethernet port (from the rear) to the console's Ethernet switch.

Sync: Connect a digital reference signal from a master clock source to one of the sync inputs. Be sure to select this as the sync source when configuring the DF66 (see *General Settings* on page 11).

MADI: MADI ports and DSP cards are numbered from left to right (from the rear).

MADI port A on the first DSP card is always used for the monitor/comms connection.

More information

Please check the website www.euphonix.com for the Service manual and Operational Manual

Specifications

DF66 Technical Specification	
Power Requirements	100-240 VAC; 50 or 60 Hz (Auto-ranging)
Power Consumption	8-4 A Per Input
Tempreture of Operation	5-35 ºC
Dimensions	H 177mm W 482mm L 482mm
Weight	20kg
Heat Dissipation	1025BTU/hr