F6 Modular I/O Frame

PRODUCT HIGHLIGHTS

- *Six slots for field-swappable I/O cards*
- *Fits in standard NEMA Type 1 enclosures*
- *Flexible mounting options: on wall, in wall, rack-mount, stage box*
- *Power over Cat-5, or via XLR or Euroblock*
- *Designed for low-noise environments*
- *Easily configured using Pro64® Network Manager™ software interface*

The F6 is a modular I/O frame for the AllFrame Multi-Modular I/O System™. Utilizing the F6 and digitizing the signals at the wall or floor connection panel eliminates the need for multiple large conduit runs filled with analog wire, as well as the labor associated with dressing, terminating, and testing analog connections.

As part of the AllFrame Multi-Modular I/O System, the F6 can be integrated into a system in a number of ways. When housed in a standard NEMA Type 1 enclosure, along with other A/V and electrical services required for an installation, the F6 can be mounted on or in the wall, in standard 16"-centers studded walls, and dressed with custom plates as desired. (Minimum suggested backing box size: 12 x 14 x 4 in.) Using the optional RK6 Rack Kit, the F6 can also be mounted front- or rear-facing in a standard 19" rack (6U required). The SK6 Stage Kit may be used to provide added protection to the F6 for on-stage use.

The F6 can be outfitted with up to six I/O cards, for a maximum of 24 in and 24 out. Cards are available for mic/line inputs, analog outputs, and AES3 digital I/O. Cards can be configured by the user, allowing the F6 to adapt easily to a changing audio environment.

Connecting the F6 to the Pro64 network requires only an A-Net cable (Cat-5e/Cat-6 or fiber) and DC power (*no power supply is included*).

Power may be provided via the Cat-5 cable, using an approved Power Over A-Net (PoA) power supply such as the Aviom POA80, or on the Euroblock or four-pin XLR connector.
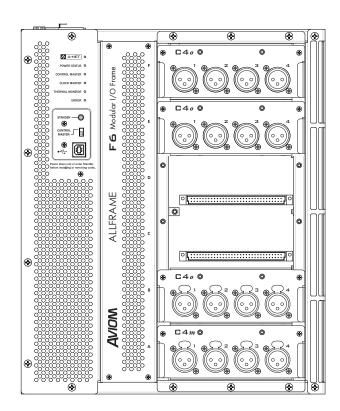
The F6 and its I/O cards are configured using the Pro64 Network Manager™ control application and can be used in conjunction with Aviom's complete line of Pro64 audio networking products as well as Pro16® Series personal mixers, output modules, and network devices. Mic preamp channels can be remote controlled from the software application, from a Pro64 RCI/MCS combination, or from Yamaha® devices using m-control™.

Because Aviom's Pro64 audio network offers unique advantages both in audio performance and in systemic flexibility, integrating the F6 into an installation is straightforward and free from compromise in audio fidelity. The Pro64 network supports any combination of parallel and serial connections without fidelity loss or directional limitations, so connection points can be placed wherever needed in a particular facility.
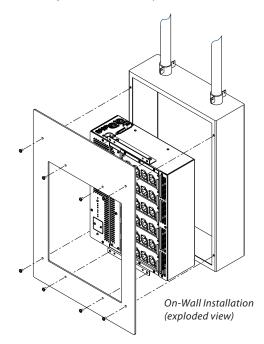
TECHNICAL SPECIFICATIONS

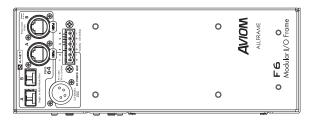|		
Channels	Modular; 6 user configurable card slots; maximum 24 channels of I/O	
Sample Rates	1x: 39.7–52kHz; 2x: 79.4–104kHz	24-bit resolution
Routing and Control	Via computer using Pro64 Network Manager	
Computer Interface	1x USB; Type B connector	
Max. Ambient Temp.	0˚C to 50˚C (32˚F to 122˚F)	
A-Net	2 EtherCon® RJ45 connectors; 2 SFP single- or multi-mode fiber optic transceiver ports; (transceivers not included)	
A-Net Cable Length (no DC power)	400 feet (120 meters) between devices (Cat-5e) multi- and single-mode fiber distance performance varies with the transceivers	
Maximum simultaneously usable A-Net ports	A maximum of two A-Net ports can be active at any time; Auto sensing scans the Cat-5 copper and SFP fiber ports at power up to determine which ports are to be made active; Any combination of Cat-5 and/or fiber can be used.	

Power Supply	30-60VDC, inclusive of tolerance. Power supplies are not included and must be supplied by the installer.
Power Over A-Net (PoA) Requirements	Requires POA80; a UL60950-1 Certified/Listed ITE power supply having a SELV (Safety Extra Low Voltage) rated output voltage.
DC Power Requirements for Euroblock and XLR Connectors	Requires a UL60950-1 Certified/Listed ITE power supply having a SELV (Safety Extra Low Voltage) rated output voltage between 30 and 60V DC. To guarantee proper startup, this supply should be rated for at least 100 watts.
Backup Power	4-pin XLR; 30-60VDC. Pin 1 Ground; Pin 2/3 no connect; Pin 4 24VDC; Euroblock; Pin 1: (+) 30-60VDC; Pin 2 (-) Ground
Cooling	3 ultra-quiet low-velocity fans
Dimensions	10.504 x 12.60 x 3.852 in., 269.24 x 320.04 x 97.79 mm
Minimum Backing Box Dimensions	12 x 14 x 4 in., 304.8 x 355.6 x 101.6 mm
Weight	9 pounds (4.1 kg)

◀ **FRONT PANEL FEATURES**

- Six I/O card slots, user configurable
- Mic/line input, line-level output, or AES3 digital I/O cards (max. 24 in, 24 out)
- Mounts in a standard NEMA Type 1 enclosure
- LED indicators for A-Net, Power Status, Control Master, Clock Master, Thermal Monitor, and Error
- USB interface, Control Master and Standby switches protected by removable cover plate

On-Wall Installation (exploded view)

◀ **TOP PANEL FEATURES**

- DC power via Euroblock, 4-pin XLR, or Cat-5e (approved external supply required)
- Two locking EtherCon® RJ45 jacks
- Two SFP fiber optic transceiver ports
- Supports single- or multi-mode fiber

ARCHITECTURAL SPECIFICATION

The Aviom F6 shall provide up to twenty-four channels of audio inputs and outputs transmitted digitally via a Pro64® A-Net® network. It shall provide full-bandwidth, high-quality audio by employing the A-Net audio transmission protocol and shall support sample rates from 39.7kHz to 52kHz and 79.4kHz to 104kHz.

Digital and analog audio inputs and outputs shall be user-configurable and field-servicable and shall be provided in the form of six expansion slots into which compatible I/O cards can be fitted.

Front-panel features shall include LED indicators for A-Net Active, Power/Standby, Clock Master, Control Master, Thermal Monitor, and Error. On the top panel it shall employ two EtherCon® RJ45 connectors and two SFP fiber optic transceiver slots for the A-Net digital signal connections.

All programming and network interface control shall be provided via a computer-controlled software interface.

The unit shall be powered via Cat-5e or from an external DC power supply (22-60VDC) with a Euroblock or four-pin XLR power connector. It shall be UL listed.

Its dimensions shall be 10.504 inches wide, 3.852 inches deep, and 12.6 inches high. Its net weight shall be 9 pounds, and its front panel shall be finished in black. The unit shall be Aviom Incorporated model F6.

All Aviom products are designed and manufactured in the USA.

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