

Important Safety Instructions

Please read and observe ALL of the following notes:

- Check all of the hardware devices for transport damage.
- Any devices showing signs of mechanical damage or damage from the spillage of liquids **MUST NOT** be connected to the mains supply or disconnected from the mains immediately by pulling out the power lead.
- All devices **MUST** be grounded by use of grounded main connection.
- All devices **MUST** be connected to the mains using the three cord power leads supplied with the system. Only supply electrical interfaces with the voltages and signals described in these instructions.
 - **CAUTION:** For continued protection against risk of fire, replace only with same type and rating of power supply units.
- **!DO NOT** use the system at extreme temperatures. Proper operation can only be guaranteed between temperatures of 0 C and 35 C and a maximum relative humidity < 90%.
- **!DO NOT** expose devices to liquids which may drip or splash.
- **!DO NOT** place objects filled with liquids, such as vases, upon a device.
- Exposure to excessive sound pressure levels can lead to impaired hearing and cause damage to the ear.
- Servicing of components inside a device **MUST** only be carried out by qualified service personnel according to the following guidelines:
 - Before removing parts of the casing, shields, etc. the device **MUST** be switched off and disconnected from all mains.
 - Components that carry heavy electrical loads, such as power transistors and resistors, DC/DC converters and FPGAs should **NOT** be touched until cool to avoid burns.
- Servicing unprotected powered devices may only be carried out by qualified service personnel at their own risk. The following instructions **MUST** be observed:
 - **!NEVER** touch bare wires or circuitry.
 - Use insulated tools **ONLY**.
 - **!DO NOT** touch metal casings as they can bear high voltages.
 - **!NEVER** touch cooler parts after removing a blade from the frame
- This equipment has provisions to install Class 1 Laser transceivers that provide optical coupling to communication network, Once a Class 1 laser product is installed, the equipment is a Class 1 Laser Product (Appareil à Laser de Class 1). It emits invisible laser radiation that may lead to eye injury.
 - **!NEVER** look directly into optical components or optical fiber cables or view directly with optical instruments.
 - Keep optical components closed by protection plugs when unused.
 - For your safety connect all fiber cables first before turning on the equipment.
 - The customer is responsible for selecting and installing the Class 1 laser transceiver and for insuring that the Class 1 AEL (Allowable Emission Limit) per EN/IEC 60825-1, CSA E60825-1, and Code of Federal Regulations 21 CFR 1040 is not exceeded after the laser transceivers have been installed. **DO NOT** install laser products whose class rating is greater than 1. Refer to all safety instructions that accompanied the transceiver prior to installation. Only Class 1 laser devices certified for use in the country of installation by the cognizant agency are to be utilized in this product.
- Use only **BLADE//runner** processing blades and rear modules or V_matrix processing blades and rear modules with **BLADE//runner** frames or V_matrix frames!

Defective Parts/Modules

- **BLADE//runner** contains no user serviceable parts. Therefore **DO NOT** open the devices other than to perform the procedures described in this manual.
- In the event of a hardware defect, please send the system component to your local service representative together with a detailed description of the fault. We would like to remind you to please check carefully whether the failure is caused by erroneous configuration, operation or connection before sending parts for repair. We recommend contacting our service department before sending parts for repair.

First Aid (in the case of electric shock)

- **DO NOT** touch the person or his/her clothing before power is turned off, otherwise you risk sustaining an electric shock yourself.
- Separate the person as quickly as possible from the electric power source as follows:
 - Switch off the equipment.
 - Unplug or disconnect the mains cable.
 - Move the person away from the power source by using dry insulating material (such as wood or plastic).
- If the person is unconscious:
 - Check their pulse and reanimate if their respiration is poor.
 - Lay the body down and turn it to one side. Call for a doctor immediately.
- Having sustained an electric shock, **ALWAYS** consult a doctor.

Electromagnetic Compatibility

This is a class A device. This equipment may cause interference in a residential installation. In this case the user is encouraged to perform appropriate measures to correct the interference.

Overview

This chapter provides an overview of **BLADE//runner** and its key features:

- **BLADE//runner** Hardware Suite
- **Blade Front Panel**
- **Frame Front Panel**
- **Frame Rear Panel**

The BLADE//runner Hardware Suite

Basic Frames:

- FR_3RU
- FR_2RU
- FR_1RU
- FR_2RU_LN

PSUs:

- PSU_AC/DC_B1100W (Default)
- PSU_AC/DC_B1500W
- PSU_AC/DC_M1500W

Design Front:

- DF_3RU
- DF_2RU
- DF_1RU

Components:

- AT300
- IO_MGMT
- IO_MSC2
- IO_BNC_16
- IO_BNC_11+11
- IO_BNC_16+16

Air Guides:

- Short air guide (Default)
- Long air guide