

# MiVoice MX-ONE

[SAFETY INFORMATION GUIDE](#)

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# 1 DEFINITIONS FOR SAFETY MESSAGES





## 1.1 SAFETY NOTES FOR MITEL SWEDEN PRODUCTS

*To prevent personal injury and reduce risk of fire, electrical shock, damage to other equipment or to the building, read this Personal Safety Instruction before installing, maintaining or servicing any part of the equipment.*

*Pay attention to all safety regulations, grounding of the equipment and read the labels, warnings and notes posted on the equipment and accompanying documentation.*

*Local regulations, first and foremost national regulations, override the information in this document. Where applicable local regulations are not available, the information herein prevails.*

### General symbols used in this document

	<b>Do!</b> <i>Indicates an action that must be performed to prevent equipment damage, software corruption, and loss of data or service interruption.</i>
	<b>Stop!</b> <i>Indicates that action must be avoided to protect equipment, software, data or service</i>
	<b>Caution!</b> <i>Indicates that special care shall must be taken and considered</i>
 <b>Note!</b>	<i>The term “Note” is used to present important information that might otherwise be overlooked.</i>

## 2 ABOUT THIS GUIDE

### 2.1 DOCUMENT SCOPE

#### **Product Exclusion Indication**

The information in this document covers personal safety aspects of Mitel Sweden products. As the information does not apply to a specific product, the readers must familiarize themselves with the potential hazards indicated on the product they are working with to understand which document parts apply to their product.

Mobile products and Power Supplies may have additional or other Safety related restrictions to consider. Check those safety instructions.

#### **Target Group**

The target group for this safety information is personnel who work with Mitel products. All personnel who work with engineering, installation, test, and operation and maintenance of Mitel products must familiarize themselves with this information.

- **Installer/Service Person**  
A person having appropriate technical training and experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons.
- **User**  
Any person, other than a service person.



## 3 IMPORTANT SAFETY INSTRUCTIONS

### 3.1 GROUND (PROTECTIVE EARTH) CONNECTION

This section provides information on product grounding (earthing) safety.



**Note!** The terms “grounding” and “earthing” are synonyms.

	<p>Where applicable, some telecom products are required to be permanently connected to protective earth to avoid the risk for being a hazard to humans and the risk for the product itself being damaged by overvoltage or over-current.</p> <p>Always connect products to a protective earth according to installation instructions when an earth stud with the following symbol is present.</p> 
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Persons involved in the installation or maintenance of the equipment shall fulfil the level of authorized installer (has knowledge of the equipment) or, preferably, qualified installer (trained and certified by Mitel). For a definition of the term “installer”, see page iii in this document.

When using your telephony equipment, basic safety precautions should always be followed to reduce the risk of fire, electrical shock and injury to persons.

Items of jewellery, for example rings, watches and necklaces should be removed as they can catch on moving parts, or when lifting equipment.

Pay attention to the hazard labels and other information labels on products.

Never remove or cover hazard symbols as this can endanger persons working with the product.

Only use the tools described, in the manner indicated, in instructions.



**Do!**

Be sure to read and follow given instructions of the equipment installation instruction(s):

- Be sure to properly secure the equipment to the building to prevent the equipment from falling or tipping over, causing personal injury or damage to other equipment.
- Be sure to secure that the transportation covering and other shipping material does not pollute the environment. Send it back to the local provider or recycle it.
- Be sure to install this equipment in a location and an environment for which it is designed.
- Be sure to secure that socket-outlets are installed near the equipment and that they are easily accessible for service persons.
- Be sure to operate this product only with the correct power source type indicated. If uncertainty of the type of power supplied to the building, consult with the local dealer or the local power company.

**Stop!**

---

Failure to follow these instruction(s) can result in death, serious injury, or equipment damage:

- Do not perform any changes or modification not expressly approved by responsible for compliance.
- Unauthorized changes or modification could void the user's authority to operate the equipment.
- Do not use the telephone to report a gas leak in the vicinity of the leak.
- Do not place this product on an unstable cart, stand or table. The product may fall and cause personal injury or damage to the unit.
- Do not use the equipment near water, for example near a sink or in a wet basement, or use liquid or aerosols on the product. Use a damp cloth for cleaning.
- Do not spill liquid of any kind on the product.
- Do not block or cover any equipment's slots and vents. Do not place the product on a surface that would cause the vents to be blocked. If the ventilation is blocked, there is a risk for overheating.
- Do not install this product near or over a radiator or heat register, in a cabinet, wall unit and so on unless proper ventilation is provided.
- Do not remove or cover hazard symbols as this can endanger persons working with the product.
- Do not overload wall outlets and extension cords as this can cause fire or electrical shock.
- Do not allow anything to rest on the power cord. Do not place the power cord where it could be walked on.
- Do not push any object through the equipment slots. Short circuit or contact with parts at dangerous voltage can cause fire or electrical shock.
- Do not disassemble the product. Contact qualified service agency when service or repair work is required.
- Do not connect outgoing/incoming lines to the equipment from other buildings, without, at each building entry point, using surge protection.
- Do not tamper with the warranty seal on the back of the phone. Tampering with this seal can void the warranty.



**Caution!**

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Failure to follow these instruction(s) can result in injury, or equipment damage:

- Be aware of that rotating fan blades may exist that can cause injury to body parts that come in contact with the blades.
- Avoid using a telephone (other than cordless type) during an electrical storm. There may be a remote risk of electrical shock from lightning.
- Disconnect the equipment from the power source and contact qualified service personnel under the following conditions:
  - The power supply cord or plug is damaged.
  - Any liquid has been spilled on the equipment.
  - The equipment has been dropped or a card has been damaged.
  - The product does not operate in accordance with operating instructions provided or exhibits a distinct change in performance. Do not adjust controls not described in operating instructions. Improper adjustment of controls may result in damage to equipment.



## 4 CUSTOMER NOTICE

### 4.1 EUROPEAN CUSTOMERS



The CE marking affixed to Mitel products indicates conformance to the R&TTE Directive 99/05/EC (Radio and Telecommunications Terminal Equipment Directive)

For a copy of the Original Signed Declaration (In full conformance with EN45014) please contact Product Certification responsible at:

Mitel Sweden AB, Box 5197, SE-12118 Johanneshov, Sweden

### 4.2 US CUSTOMERS



Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the exterior of the cabinet of this equipment is a label that contains, among other information, a product identifier in the format US: ABBPFNANMX-ONE. If requested, this number must be provided to the telephone company. Below REN, FIC, SOC and USOC jack type data are applicable for the MX-ONE ISDN interface, MGU

ACTA Registration Number:	US: ABBPFNANMX-ONE Ringer Equivalence Number (REN): N/A
Facility Interface Code (FIC):	04DU9.1SN
Service Order Code (SOC):	6.0P
USOC Jack Type:	RJ48

This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that is Part 68 compliant. See Installation Instructions for details.

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. Typically, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line (as determined by the total RENs) contact the local telephone company.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes to its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice so you can make the necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact Mitel Networks, North Alma School Road, 85201 Mesa, Arizona, USA, phone number (480) 961-9000 ([www.mitel.com](http://www.mitel.com)). If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to party line service is subject to state tariffs. (Contact the state public utility commission, public service commission or corporation commission for information.)

This equipment is hearing aid compatible.

Facility Interface Codes (FIC), Service Order Codes (SOC), USOC Jack Codes and Ringer Equivalence Numbers (REN) are shown in the table below for each port where applicable:

Port	FIC	SOC	USOC Jack	REN
Analogue trunk, TLU83	02GS2, 02LS2	7.0Y	N/A	N/A
Digital trunk, MGU	04DU9.1SN	6.0P	RJ48	N/A
Digital trunk, TLU77	04DU9.1SN	6.0P	RJ48	N/A

### **Toll Restriction and Least Cost Routing Equipment**

The software contained in MiVoice MX-ONE™ that allow user access to the network must be upgraded to recognize newly established network area codes and exchange codes as they are placed into service.

Failure to upgrade the premises systems or peripheral equipment to recognize the new codes as they are established will restrict the customer and the customer's employees from gaining access to the network and to these codes.

### **Equipment with Direct Inward Dialing (DID)**

ALLOWING THIS EQUIPMENT TO BE OPERATED IN SUCH A MANNER AS TO NOT PROVIDE FOR PROPER ANSWER SUPERVISION IS A VIOLATION OF PART 68 OF THE FCC'S RULES

PROPER ANSWER SUPERVISION IS WHEN:

A. This equipment returns answer supervision to the PSTN when DID calls are:  
 Answered by the called station  
 Answered by the attendant  
 Routed to a recorded announcement that can be administered by the CPE user.  
 Routed to a dial prompt

B. This equipment returns answer supervision on all DID calls forwarded to the PSTN.

Permissible exceptions are:

A call is unanswered  
 A busy tone is received  
 A reorder tone is received

### **Equal Access Requirements**

This equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

### **Electrical Safety Advisory**

It is strongly suggested that an AC surge arrestor is installed in the AC outlet to which this equipment is connected.

#### 4.2.1 FCC NOTICE



**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:

##### **Electrical Safety Advisory**

It is strongly suggested that an AC surge arrestor is installed in the AC outlet to which this equipment is connected.

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into 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

### 4.3 CANADIAN CUSTOMERS

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications networks protective, operational and safety requirements. Industry Canada does not guarantee the equipment will operate to the user's satisfaction. The industry Canada certification number for these products is

IC: 1884F-MXONE

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an approved method of connection. The customer should be aware that compliance with above conditions may not prevent degradation of service in some situations.

Repairs of certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.



Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate

The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the REN's of all devices does not exceed 5. Refer to the system description for the system and specifically the analogue extension board, ELU 34. Each extension line on ELU34 has a REN value of 3.

There are no user serviceable parts within this equipment. Refer all servicing to a Mitel authorized repair facility or to Mitel Corporation. If you require a Mitel return authorization number, or information on obtaining service or parts, please contact Mitel at the following telephone number 1-800-SXMTEL (1-800-796-4835)

A Mitel return authorization number must be obtained before sending equipment to the Mitel repair facility. The Mitel repair facility is located at the following address:

Mitel Corporation  
350 Legget Drive  
Kanata, Ontario  
Canada K2K 2W7

## 4.4 NEW ZEALAND CUSTOMERS

### **General Warning**

The grant of Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

## 5 PERSONAL SAFETY INFORMATION

### 5.1 INTRODUCTION

This section presents the personal safety information. The instructions are to ensure personal safety while working with Mitel Sweden products.



**Note!** Reduce the risk of accidents by studying all the information carefully before starting work. If questions arise regarding safety information, contact your supervisor; partner a local Mitel entity for clarification

The target group for this information is personnel who work with Mitel Sweden products. All personnel who work with engineering, installation, test, and operation and maintenance of Mitel products must familiarize themselves with this information

A good understanding of technical English is a prerequisite, or of the language that the information is presented in, to ensure that these and other instructions can be understood and complied with.

As all information does not apply to a specific product, the readers must familiarize themselves with the potential hazards indicated on the product they are working with to understand which document parts apply to their product.

#### Hazard Symbols and Admonitions

This section presents the types of admonitions and hazard symbols used in this part of this document. There are three levels of personal safety admonitions that indicate risk to persons: danger, warning and caution. Hazard symbols are used to indicate these and to present various other hazards.

The admonition levels for personal safety are presented in order of severity, with danger being the highest level, warning the intermediary and caution the lowest. When admonitions are encountered anywhere in a document, the information included should be read and any instructions should be followed.


#### 5.1.1 PERSONAL SAFETY ADMONITIONS

Personal safety admonitions are used to indicate hazardous activities and are normally preceded by the common hazard symbol shown in the figure below, or in specific cases by specialized symbols, see 1.1, *Special Hazard Symbols*.



#### Safety Hazard Symbol


The hazard symbol is common for all three admonition levels. The three admonition levels are defined below:

<b>Danger!</b>	Indicates that there is an imminent hazard that is likely to result in death or serious injury.   <b>Note!</b> <i>Danger can be accompanied by other symbols depending on the country of operation.</i>
<b>Warning!</b>	Indicates that there is a potential hazard that could result in death or injury


<b>Caution!</b>	Indicates a hazard that could result in minor or moderate injury
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### 5.1.2 HAZARD SYMBOLS


This section presents special hazard symbols used to indicate the risk of chemical, electric shock, heat and laser exposure hazards:

	Chemical Hazard Symbol		Electrical Hazard Symbol
	Laser Hazard Symbol		Heat Hazard Symbol

## 5.2 SAFETY PRECAUTIONS FOR WORKING WITH ELECTRICAL EQUIPMENT

	Improper electrical installation may cause fire or electric shock that is likely to be fatal. Only a qualified and authorized electrician is permitted to install or modify electrical installations.
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 **Note!** Only qualified electricians are allowed to work directly with equipment that presents an electric shock hazard.

 **Note!** AC mains installation must be carried out according to local regulations.

The following precautions must be observed when working with electrical equipment:

- The AC mains power is switched off.
- Equipment exposed to moisture is protected with a tent or other equipment.
- Power cables are installed according to instructions.
- Installed cables are always clearly marked with labels.
- All personnel are familiar with and understand the warning signs on equipment.
- Only tested electrical tools are used.
- Holes are never drilled in equipment, or walls, without ensuring that there are no concealed cables.

## 5.3 ENERGY HAZARDS

This section provides information on how to avoid energy hazards.

Whenever work is done on equipment that normally is connected to an energy source such as e.g. electricity, personnel may be exposed to source-related hazards. Be aware of the possible energy hazards to prevent any danger.

The following precautions must be observed when working with equipment powered from mains, batteries etc. that present an energy hazard:

All metallic objects worn, such as wrist watches, rings, bracelets, etc. are removed.

Disconnect the mains and/or battery power supply until the work is complete.

Only use insulated tools.

### 5.3.1 BATTERIES

This section provides instructions and information on the proper handling of batteries.



**Note!** Where Mitel/Aastra is not the supplier of battery equipment, please refer to the manufacturer's information on battery safety.

#### General



**Improper** handling of batteries can result in the batteries short-circuiting, which can result in serious injury due to high energy levels. Exercise the necessary care when working with batteries.

#### Lithium batteries



Switching poles when replacing lithium batteries can result in an explosion that can lead to injury. Always ensure that lithium batteries are connected to the right poles.

### 5.3.2 CAPACITORS AND UNINTERRUPTABLE POWER SUPPLIES

This section provides information on how to avoid energy hazards in Capacitors and Uninterruptible Power Systems (UPS).




High energy levels are present in this unit. Improper handling of the unit can lead to short circuiting that can result in serious injury. Exercise care when working with this unit.

**Note!** Some capacitors and UPSs have energy levels above 240 VA. If this is the case this is indicated on the product with a voltage hazard.

## 5.4 HEAT HAZARDS


This section describes how to avoid injury from hot surfaces or hot air in equipment marked with the Heat Hazard symbol.

	<p>Parts inside this equipment attain high temperatures during normal operation, which can cause burns to the skin if touched without heat protective clothing. Always use heat protective clothing when working with equipment containing hot surfaces, or switch the equipment off and allow it to cool before starting work.</p>
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Direct contact with hot air or hot surfaces can lead to burns.

## 5.5 MECHANICAL HAZARDS

This section provides information on mechanical hazards in equipment containing sharp edges or rotating blades.

	<p><b>Hazardous Sharp Metal Edges</b> - Sharp metal edges may exist that can cause cuts to the skin or clothing. Wear protective gloves when handling this equipment.</p> <p><b>Hazardous Moving Parts</b> - Rotating fan blades may cause injury so keep fingers, body parts, jewellery, clothing, etc. away from the fan. Even after the power has been switched off, the fan blades continue to rotate for a period of time. Wait until the fan has stopped rotating completely before starting work on or near the fan.</p>
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## 5.6 LASER HAZARDS

This section provides information on working with products that have devices that communicate through optical fibers using laser.

 **Note!** This information only applies to products marked with the laser hazard symbol, stating the class of laser in use.



### 5.6.1 CLASS 1 LASER

This section provides information on working with equipment containing Class 1 laser. Products containing a Class 1 laser, according to IEC/EN 60825, are safe to use and therefore have no requirements for cautions or warnings during operation or maintenance procedures.

### 5.6.2 CLASS 3 LASER

This section provides information on working with equipment containing Class 3 laser.





Never look directly into the end of a fiber optic cable, or other laser source. Equipment that transmits laser light can cause permanent eye damage. Switch off the laser before starting work on laser equipment.

## 5.7 CHEMICAL HAZARDS

This section provides information on chemical hazards that can be present in products.

### 5.7.1 BATTERY ACID HAZARD



Excessive heat can cause battery casing to soften and warp, potentially allowing acid to escape. In contact with the skin, acid can cause injury, and if breathed in, can affect the airways. Use protective equipment when replacing batteries.



Batteries can leak electrolyte if improperly handled. Electrolyte in contact with skin or eyes can cause injury. In the event of electrolyte injuries, rinse the affected area with water and seek medical attention immediately. Use protective equipment when replacing batteries.

The following precautions must be observed when working with lead-acid batteries:

- Eye wash facilities, and protective gloves or aprons are available.

### 5.7.2 GAS EXPLOSION HAZARD

Open-cell lead acid batteries can give off gases that in the event of a fire can cause an explosion that is likely to be fatal. All battery areas must be adequately ventilated and protected from fire.



Do not use open-cell lead acid batteries. Open-cell lead acid batteries give off hazardous gases that, if ignited, can cause an explosion that is likely to be fatal.

## 6 OTHER HAZARDS

This section includes safety instructions and rules for the following hazards:

- Handling Heavy Goods
- Working at Height

### 6.1 HANDLING HEAVY GOODS

This section provides instructions and rules for handling heavy goods.



**Note!** Follow local regulations for safety clothing and safety equipment for hoisting and moving goods.

#### 6.1.1 FALLING OBJECTS



Risk for falling objects, work at height in progress. Falling objects can cause serious injury or even be fatal. Always wear a helmet and avoid standing in the danger area.

#### 6.1.2 OVERLOADING



Overloading, or other wrong use of lifting devices, can cause serious injury to anyone hit by falling equipment. Do not create an angle exceeding 90° between lifting straps as this increases the strain on them and can cause them to snap.



The equipment is heavy. Lifting the equipment without the aid of a lifting device can cause injury.

#### 6.1.3 UNSECURED EQUIPMENT



Tip risk! Unsecured equipment can tip over if not secured properly, causing injury to personnel. Secure products with a high center of gravity as soon as possible to avoid accidents.

## 6.2 WORKING AT HEIGHT

This section provides information about working at height.

The following precautions must be observed when working at height:

- Personnel have the appropriate training and medical certificate.
- A full-body safety harness and safety helmet are available
- Adequate protective clothing, essential in cold and wet weather, is available.
- All lifting devices are tested and approved, and ready for use.
- All personnel in the area are wearing helmets.

## 7 OTHER HAZARD SYMBOLS & CONSIDERATIONS

### 7.1 OTHER HAZARD SYMBOLS

This section presents special hazard symbols used to indicate the risk of Electrostatic Discharge (ESD):



Electrostatic Discharge Hazard Symbol

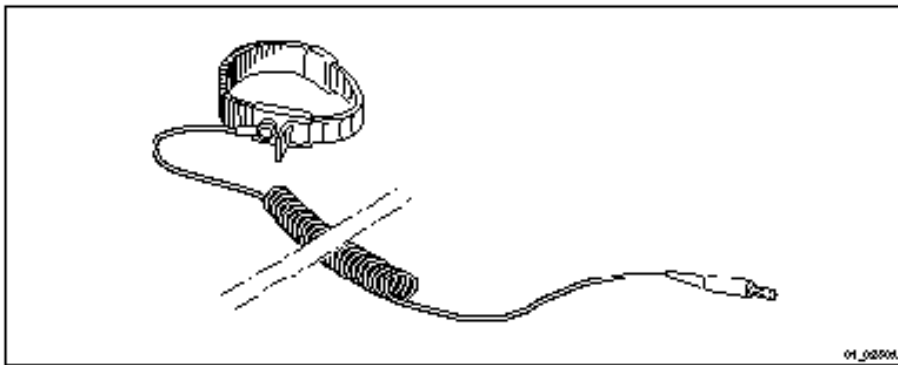
### 7.2 ELECTROSTATIC DISCHARGE

This section provides information and instructions on Electrostatic Discharge (ESD) product safety. ESD is defined below.

#### ESD

A static electric charge accumulates when a body rubs against clothes, slides against a chair, when shoes rub against a floor, or when ordinary plastics are handled, and so on. The electrostatic charge can remain for a considerable length of time and is discharged when the body comes into contact with conductive material.

An ESD wrist strap must be used when working with ESD sensitive components, even in equipment rooms fitted with ESD protective floor covering. Although ESD floor covering reduces the risk of ESD, if the wrong type of shoes is used, or if the person is already charged when they enter the room, the floor covering in itself does not protect from this, and therefore an ESD wrist strap must be used.



*Standard ESD Wrist Strap*



**Note!** Other types of ESD wrist strap are available than that shown in the figure above. For details, see the “Installation, Preparation and Earthing” CPI document.

The ESD wrist strap contains a resistor with resistance greater than 1 M Ohms in the cable to protect the operator. The resistance value is low enough to discharge the electrostatic voltage. The ESD wrist strap must be connected to ground.

#### Instructions for ESD Wrist Strap Use

1. Place the ESD wrist strap around your wrist and insert the connector at the other end to the ground (earth) terminal on the equipment.
2. Always use the wrist strap when and where its use is required.



**Note!** Test the ESD wrist strap regularly.

## 7.3 HANDLING PRINTED BOARD ASSEMBLIES AND IC COMPONENTS



**Note!** Treating all components as if they are ESD sensitive, whether they have IC components or not, reduces the risk for ESD and significantly reduces the operating time between failures.



If the symbol is visible, then the product contains components sensitive to ESD. Use an approved ESD wrist strap, connected to the product grounding point, to avoid damaging these components.

Always use an approved ESD wrist strap when working with sensitive equipment. Damage to components mounted on printed board assemblies can occur if an ESD wrist strap is not used.

## 7.4 STORING & TRANSPORTING PRINTED BOARD ASSEMBLIES AND IC COMPONENTS

When storing or transporting printed board assemblies or IC components, ensure one of the following:

- The item is stored or transported in its original packaging, or in other anti-ESD material.
- The item is stored or transported in a conductive material, or a special IC carrier that either short-circuits or insulates all leads of the components.

## 7.5 PRINTED BOARDS CONTAINING LITHIUM BATTERIES

The MX-ONE ASU board is equipped with a Lithium-Metal button cell battery (located behind the disk drive bay) of a CR2032 type.

Lithium batteries are dangerous goods and can pose a safety risk if not prepared and shipped in compliance with international transport regulations.

In case a malfunctioning ASU needs to be sent for repair, and to eliminate any unwanted events during transport, **it is mandatory that the battery is removed from the ASU board. Do not enclose the battery with the board at return.**


Please be careful at removal of the battery as electro static discharges may cause greater damage to the ASU board than wanted. Send the battery for re-cycling.

A new battery is after repair mounted on the ASU prior Mitel return the board.

## 7.6 BATTERIES

This section provides information on damage that can be caused to products containing batteries that are damaged.

### Overheated Batteries

	Check batteries for signs of overheating. The casing surrounding overheated batteries can be soft and warped. Replace damaged batteries according to instructions.
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If it is suspected that batteries are overheated, check the following:


The internal temperature of the equipment is below +60 degrees C (140 degrees F).

Batteries have not leaked.

### Corrective Actions

1. Replace overheated batteries.
2. Treat leakages from batteries as described in paragraph 7.7

## 7.7 TREATING HAZARDOUS WASTE FROM LEAKS

	Check batteries for acid leakage. Acid can corrode the product. Replace leaking batteries according to instructions.
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In case of spillage of hazardous substances, there should always be sufficient absorbers or neutralizing materials available on site. There is a danger of spillage occurring when installing, removing, replacing or servicing batteries. The absorbers and neutralizing materials must be suitable for the hazardous substances involved. Typical neutralizing agents are shown in below table.

**Table 1 Typical neutralizers**

Baking soda (bicarbonate)	$\text{NaHCO}_3$
Sal soda	$\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$
Soda ash	$\text{Na}_2\text{CO}_3$



**Note!** Absorbers and neutralizing products will vary, depending on the country and battery manufacturer. Consult the battery manufacturer for specific details of absorbers and neutralizing materials.

## 7.8 ELECTRICAL INSTALLATION

This section provides information on ensuring that AC and DC powered products are not damaged due to improper installation.



Do not install or modify AC or DC powered equipment unless you are a qualified and authorized electrician. Improper installation work can seriously damage the equipment.

#### Safety Precautions for Working with Electrical Installations

The following precautions must be observed when working with electrical installations:

1. Ensure that approved circuit breakers or fuses are installed.
2. Ensure that the cables used have a sufficient cross-sectional area in accordance with product requirements and local laws and regulations.
3. Ensure that conductors are connected according to the connection diagram.

Label the cables correctly.

Check the installation work upon completion.

## 7.9 EQUIPMENT HANDLING

This section provides information on how to avoid damage to products when handling them.



Tip risk! This equipment has a high center of gravity without all units installed. Secure the equipment before opening the door.



Never lift a unit by the cables as this can damage the equipment.

## 7.10 LIGHTNING PROTECTION

This section provides information on protecting products from damage due to lightning where a lightning protection system is available.



Connect products to the lightning protection system to protect the equipment from transient surges.

## 7.11 DESIGNED FOR USE UP TO 2000 M ABOVE SEA LEVEL

This section provides information on Low Altitude Use safety.




For use at altitude 2 000 m or lower the equivalent.

	Depending on country legislation, this mark may be visible on the product.
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## 7.12 DESIGNED FOR USE IN NON-TROPICAL ENVIRONMENT

This section provides information on Non-Tropical Location safety.

	<p>For use in non-tropical locations or the equivalent.</p> <p>Depending on country legislation, this mark may be visible on the product.</p>
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