

**Operating Manual**  
**ALTAIR io™ Charging Accessories**



Order No.: 10253410/01

Print Spec: 10000005389 (EO)

CR: 800000073091

**⚠ WARNING!**

Read this manual carefully before using or maintaining the device. The device will perform as designed only if it is used and maintained in accordance with the manufacturer's instructions. Otherwise, it could fail to perform as designed, and persons who rely on this device could sustain serious injury or death.

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The warranties made by MSA with respect to the product are voided if the product is not installed and used in accordance with the instructions in this manual. Please protect yourself and your employees by following the instructions.

Please read and observe the WARNINGS and CAUTIONS inside. For additional information relative to use, call 1-800-MSA-2222 during regular working hours.

The Declaration of Conformity can be found under the following link: <https://MSAsafety.com/DoC>.

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For your local MSA contacts, please go to our website [www.MSAsafety.com](http://www.MSAsafety.com)

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## Contents

<b>1</b>	<b>Multi-Unit Charger (MUC)</b> .....	<b>4</b>
1.1	Kit Contents .....	4
1.2	Use .....	4
1.3	Charging Times for Depleted Packs .....	4
1.4	Charging ALTAIR Gas Detectors .....	4
1.5	Multi-Unit Charger (MUC) Installation .....	5
1.6	Disposal .....	5
1.7	Warranty .....	6
1.8	Ordering Information .....	6
<b>2</b>	<b>Cradle Charger</b> .....	<b>7</b>
2.1	Kit Contents .....	7
2.2	Use .....	7
2.3	Charging Times for Depleted Packs .....	7
2.4	Charging ALTAIR Gas Detectors .....	7
2.5	Cradle Charger Installation .....	8
2.6	Disposal .....	10
2.7	Warranty .....	10
2.8	Ordering Information .....	10

## 1 Multi-Unit Charger (MUC)

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### 1 Multi-Unit Charger (MUC)

#### 1.1 Kit Contents

Multi-Unit Charger (MUC)

#### 1.2 Use

##### ALTAIR io 4 Charging

For use with ALTAIR io gas detectors.

#### 1.3 Charging Times for Depleted Packs

- ALTAIR io 4: Approximately 5 hours in normal, room temperature environments.

Minimum and maximum ambient temperature to charge the device is 0 °C (32 °F) and 40 °C (104 °F), respectively. For best results, charge the device at room temperature 23 °C (73 °F).

#### 1.4 Charging ALTAIR Gas Detectors

#### **WARNING!**

Risk of explosion: Do not recharge device in hazardous area.

**Failure to follow this warning can result in serious personal injury or death.**

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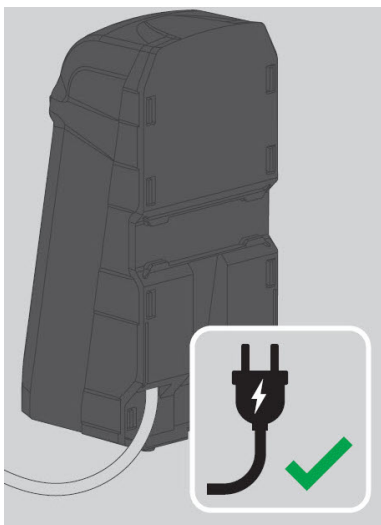
#### **WARNING!**

- Do not use the Multi-Unit Charger (MUC) in a hot or wet environment.
- Devices with a temperature below 0 °C (32 °F) or above 40 °C (104 °F) must stabilize for one hour at room temperature before attempting to charge.

**Failure to follow these warnings can result in serious personal injury or death.**

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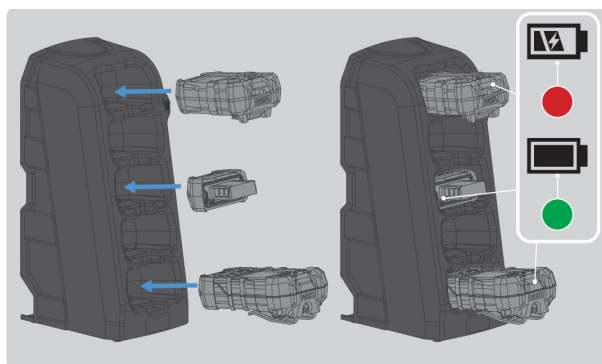
**NOTE:** The MUC may become hot while charging. This is not a malfunction.



Plug the MUC into an outlet.

Insert the gas detector tightly into the MUC as shown.

The charge LED will be red while the gas detector is charging. The charge LED will be green when the gas detector is fully charged.



**⚠ WARNING!**

The gas detector must be disconnected from the Mutli-Unit Charger (MUC) for the gas detector to operate.

**Failure to follow this warning can result in serious personal injury or death.**

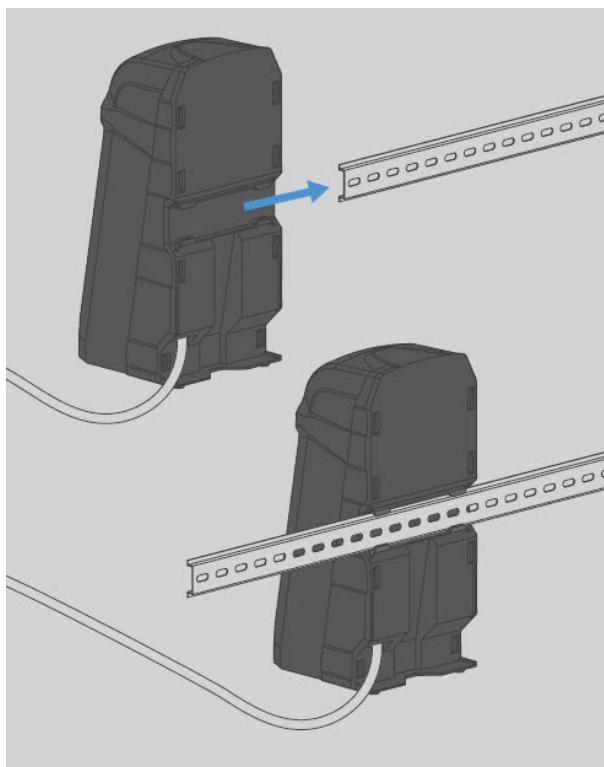
**NOTE:** If a software update is in progress, the charge LED will flash yellow.

**NOTE:** If a problem is detected during charging, the charge LED will flash red. Disconnect the gas detector from the MUC and reinsert to the MUC to reset the charge cycle

During periods of non-use the gas detector may remain connected to the charger.

**1.5 Multi-Unit Charger (MUC) Installation**

The Multi-Unit Charger slides on to Type DIN EN 50 022 Rail 35mm x 7.5mm with no additional hardware as shown.



**1.5.1 Technical Data**

Input Connector	USB-A
Required Input Voltage	≤ 5.25V DC
Required Input Current	≤ 1.0 A

**1.6 Disposal**

The cradle charger cannot be repaired.

## 1 Multi-Unit Charger (MUC)

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Recycling of electrical and electronic equipment:

The crossed-out trash can symbol indicates that after the end of life this product should not be thrown away with the normal trash. To prevent harm to the environment and human health from uncontrolled waste disposal, do not throw this product together with normal trash and dispose of it with the responsibility necessary to the use of material resources. For individuals to obtain information about the rules of disposal in their territory local waste management department should be contacted.

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### 1.7 Warranty

Warranty period - 2 years from the date of production, marked on the product.

The manufacturer sets the shelf life of the product at least 8 years.

### 1.8 Ordering Information

Description	Part Number
ALTAIR io Multi-Unit Charger	See <a href="https://www.MSASafety.com">MSASafety.com</a> for product details.

## 2 Cradle Charger

### 2.1 Kit Contents

- Cradle Charger

### 2.2 Use

#### ALTAIR io 4 Charging

For use with ALTAIR io gas detectors.

### 2.3 Charging Times for Depleted Packs

- ALTAIR io 4: Approximately 5 hours in normal, room temperature environments.

Minimum and maximum ambient temperature to charge the device is 0 °C (32 °F) and 40 °C (104 °F), respectively. For best results, charge the device at room temperature 23 °C (73 °F).

### 2.4 Charging ALTAIR Gas Detectors

#### **⚠ WARNING!**

Risk of explosion: Do not recharge device in hazardous area.

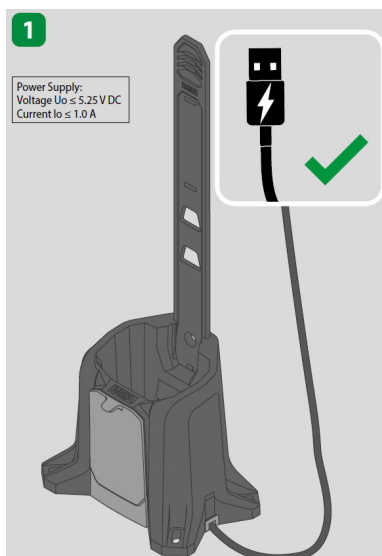
**Failure to follow this warning can result in serious personal injury or death.**

#### **⚠ WARNING!**

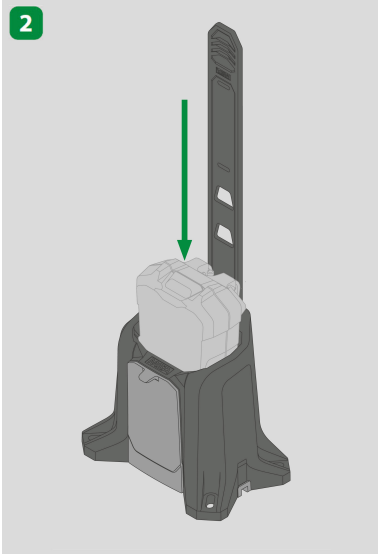
- Do not use the cradle charger in a hot or wet environment.
- Devices with a temperature below 0 °C (32 °F) or above 40 °C (104 °F) must stabilize for one hour at room temperature before attempting to charge.

**Failure to follow these warnings can result in serious personal injury or death.**

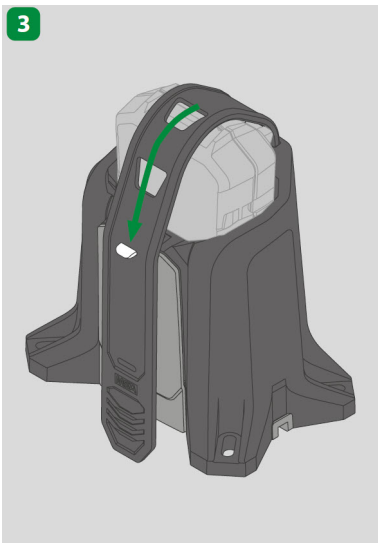
**NOTE:** The cradle charger may become hot while charging. This is not a malfunction.



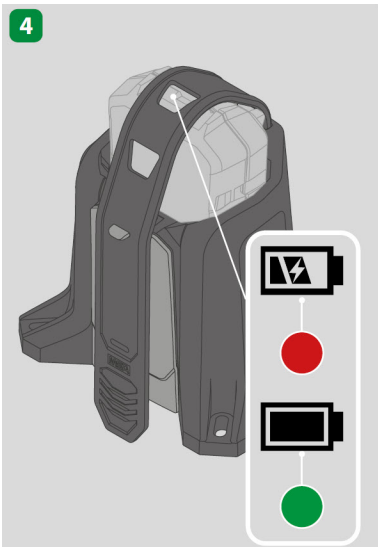
Connect USB-A to a power source.



Insert the gas detector tightly into the cradle charger as shown.



Pull the strap down over the gas detector and secure in place on the hook in the base plate. Use the slot in the strap that corresponds to the size of the gas detector.



The charge LED will be red while the gas detector is charging. The charge LED will be green when the gas detector is fully charged.

### **⚠ WARNING!**

The gas detector must be disconnected from the cradle charger for the gas detector to operate.

**Failure to follow this warning can result in serious personal injury or death.**

**NOTE:** If a software update is in progress, the charge LED will flash yellow.

**NOTE:** If a problem is detected during charging, the charge LED will flash red. Disconnect the gas detector from the cradle charger and reconnect it to the cradle charger to reset the charge cycle.

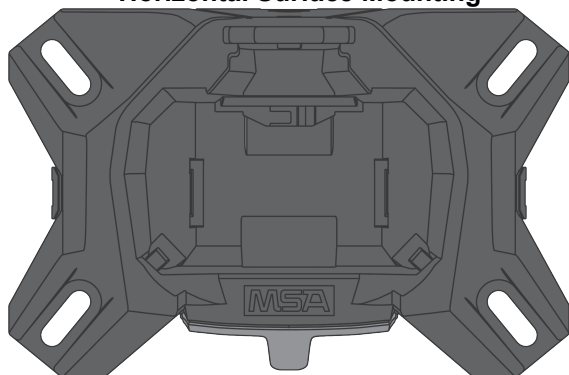
During periods of non-use the gas detector may remain connected to the charger.

### 2.5 Cradle Charger Installation

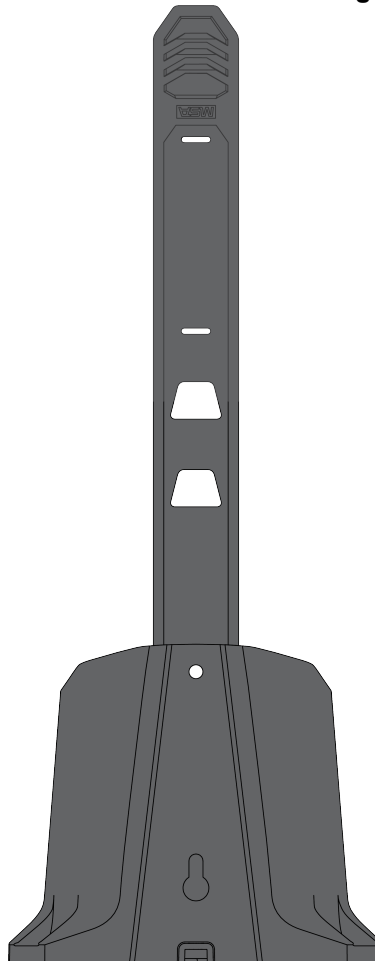
For mounting the cradle charger, there are two options. There is a set of four slots on the bottom of the unit to install onto horizontal surfaces. There is also a set of one hole and one slot on the back of the cradle charger for mounting on vertical

surfaces. Any fastener used on the top hole must not secure the strap, but go through the hole in the strap. Utilize the slot first when mounting onto a vertical surface, and then the hole. See below figures for mounting options.

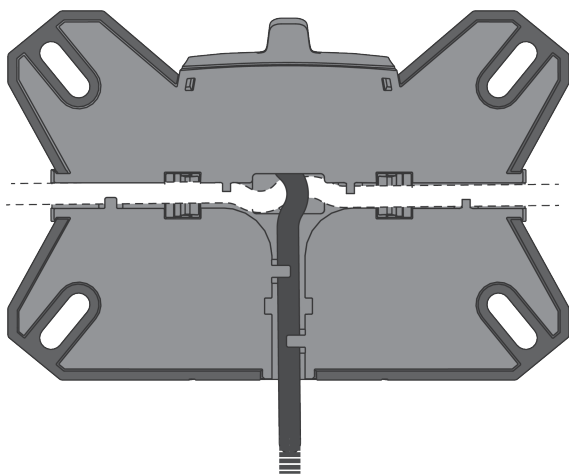
**Horizontal Surface Mounting**



**Vertical Surface Mounting**



For routing the charging cable, there are three options. Wire guiding channels are provided on the bottom of the cradle charger, see Figure below.



### 2.5.1 Technical Data

Input Connector	USB-A
Required Input Voltage	$\leq 5.25V$ DC
Required Input Current	$\leq 1.0$ A

## 2 Cradle Charger

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### 2.6 Disposal

The cradle charger cannot be repaired.



Recycling of electrical and electronic equipment:

The crossed-out trash can symbol indicates that after the end of life this product should not be thrown away with the normal trash. To prevent harm to the environment and human health from uncontrolled waste disposal, do not throw this product together with normal trash and dispose of it with the responsibility necessary to the use of material resources. For individuals to obtain information about the rules of disposal in their territory local waste management department should be contacted.

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### 2.7 Warranty

Warranty period - 2 years from the date of production, marked on the product.

The manufacturer sets the shelf life of the product at least 8 years.

### 2.8 Ordering Information

Description	Part Number
ALTAIR io Cradle Charger	10253408