SIMCO ION™
An ITW Company

IONIZATION SOLUTIONS

µWire AeroBar®
Model 5710

User's Manual

About Simco-Ion

Simco-Ion develops, manufactures, and markets system solutions to manage electrostatic charge. As the world's largest provider of electrostatics management products and services, Simco-Ion improves its customers' business results by providing a total solution to their electrostatic discharge and electromagnetic interference challenges. Simco-Ion Technology Group is a division of Illinois Tool Works (ITW), located in Alameda, California. For more information about Simco-Ion visit www.simco-ion.com or call +1 800-367-2452. Simco-Ion is ISO 9001-2008 Certified.

Important Safety Information

Carefully read the following safety information before installing or operating the equipment. Failure to follow these safety warnings could result in damage to your ionization system and/or voiding the product warranty.

Caution! To avoid injury to one's self or the product, make sure to use the correct number of mounting clips for each bar. Refer to **Table 1** for how many are required.

Caution! To avoid injury to one's self or the product, do not place any conductive labels on the 5710 AeroBar chassis! Conductive labels may acquire an electrical charge over time and cause random ESD events.

Caution! To avoid ionizer degradation, keep grounded objects away from the corona wire and the ionized air stream that is produced by the AeroBar.

Caution! To avoid injury to one's self or the product, make sure all mounting clips and brackets are connected to a low-impedance earth ground.

Warning! Do not clean corona wire while the unit is powered. Doing so may result in additional contamination and possible shock.

Caution! To avoid personal injury or damage to the equipment, perform only the maintenance described in this manual.

Caution! Do not use this product in hazardous or explosive environments.

Informations de Sécurité Importantes

Lisez attentivement les consignes de sécurité suivantes avant d'installer ou d'utiliser l'équipement. Le non-respect de ces avertissements peut entraîner des dommages à votre système d'ionisation et/ou d'annuler la garantie du produit.

Attention! Pour éviter les blessures à soi-même ou le produit, assurez-vous d'utiliser le bon nombre de clips de fixation de chaque barre. Reportez-vous au tableau 1 pour savoir comment de nombreux sont nécessaires.

Attention! Pour éviter les blessures à soi-même ou sur le produit, ne placez pas d'étiquettes conductrice sur le 5710 AeroBar châssis ! Étiquettes conductrice peut acquérir une charge électrique dans le temps et la cause aléatoire événements ESD.

Attention! Afin d'éviter la dégradation ioniseur, garder la terre objets loin du fil corona et le milieu ionisé flux d'air qui est produite par l'AeroBar.

Attention! Pour éviter les blessures à soi-même ou le produit, assurez-vous que tous les clips de fixation et les supports sont connectés à un la terre à basse impédance.

Avertissement! Ne pas nettoyer le fil corona pendant que l'unité est sous tension. Cela peut entraîner une contamination supplémentaire et choc éventuel.

Attention! Pour éviter les blessures ou l'endommagement de l'équipement, effectuer uniquement l'entretien décrit dans ce manuel.

Attention! Ne pas utiliser ce produit dans des conditions dangereuses ou les environnements explosifs.

Contents

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Description

1.1 µWire AeroBar Model 5710

The 5710 AeroBar uses patented µPulse technology to meet the performance, cleanliness, and low cleaning/maintenance requirements of large surface areas, particularly those applications found in the flat panel display industry.

The 5710 AeroBar has the following unique features and benefits:

- Patented µPulse technology with high efficiency output
- Corona wire is utilized to provide a uniform ion distribution with low field voltage
- Low swing voltage permitting close placement to work surfaces
- µPulse technology and wire emitters combine to provide long maintenance cycles
- Air delivery system with either straight or angled air jets customizes the ionization to the specific application

This manual covers the installation, operation, and maintenance of the 5710 AeroBar.
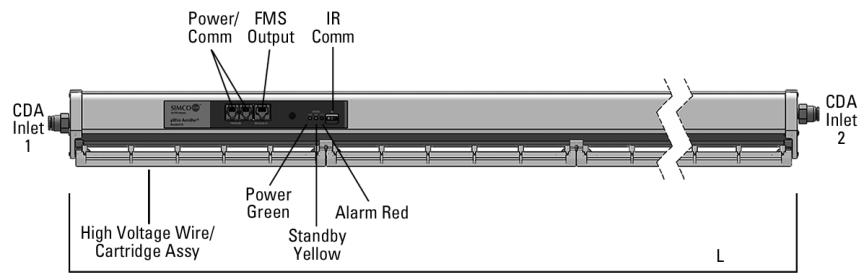
1.2 Identification

Figure 1. 5710 AeroBar Identification
Refer to Table 1 5710 AeroBar Lengths for AeroBar values L for a particular bar length

1.3 Bar Lengths

The 5710 AeroBar is available in multiple lengths to fit any tool environment.

The 5710 AeroBar's active length (L) should be equal or greater than the length of the area to be ionized.

Bar Length (L)	No. of 150 mm Cartridges	No. of 250 mm Cartridges	No. of Mounting Brackets	Air Inlet On both Ends
400	1	1	2	No
500	0	2	2	No
650	1	2	2	No
750	0	3	2	No
900	1	3	2	No
1000	0	4	2	No
1150	1	4	2	No
1250	0	5	3	No
1400	1	5	3	No
1500	0	6	3	No
1650	1	6	3	No
1750	0	7	3	No
1900	1	7	3	No
2000	0	8	3	No
2150	1	8	3	No
2250	0	9	4	No
2400	1	9	4	No
2500	0	10	4	**Yes**
2650	1	10	4	**Yes**
2750	0	11	4	**Yes**
2900	1	11	4	**Yes**
3000	0	12	4	**Yes**

Table 1. 5710 AeroBar Lengths

1.4 Corona Wire Cartridge

Configuration

There are two (2) 5710 AeroBar corona wire cartridges available, a 150 mm and a 250 mm. Both size cartridges share the same attributes, except length. Any given 5710 AeroBar will consist of one or more 250 mm cartridges and only one (1), if any, 150 mm cartridges. Refer to **Table 1 5710 AeroBar Lengths** for cartridges types in any particular 5710 AeroBar length.

Interchangeability

Cartridges of like sizes can be swapped with each other, or swapped between 5710 AeroBars.

Air Jet Position

The 5710 AeroBar can be ordered with either straight air jets or alternately angled (7.5°) air jets. Straight air jets offers optimal performance directly underneath the bar while angling the air jets allows for positioning the ionized air stream across a wider area.

Bar Length (L)	No. of Air Jet with 25 mm spacing	No. of Air Jet with 50 mm spacing
400	14	8
500	18	10
650	23	13
750	27	15
900	32	18
1000	36	20
1150	41	23
1250	45	25
1400	50	28
1500	54	30
1650	NA	33
1750	NA	35
1900	NA	38

2000	NA	40
2150	NA	43
2250	NA	45
2400	NA	48
2500	NA	50
2650	NA	53
2750	NA	55
2900	NA	58
3000	NA	60

Table 2. 5710 AeroBar Air Jet Count

2

Installation

2.1 Installation Guidelines

Keep in mind the following considerations when determining locations for the 5710 AeroBars:

- Observe all site requirements and restrictions.
- Optimal performance will be obtained in an environment with stable temperature and humidity levels.
- Use proper mounting brackets and hardware as required by applicable building codes.
- Avoid installing the 5710 AeroBar near moving components or surfaces.
- Do not install the 5710 AeroBar in hazardous or explosive environments.
- The 5710 AeroBar should be mounted at least 150 mm (6 inches) away from any grounded painted surfaces.

Caution! To avoid injury to one's self or the product, do not place any conductive labels on the 5710 AeroBar chassis! Conductive labels may acquire an electrical charge over time and cause random ESD events.

To avoid degraded ionizer performance, keep grounded objects away from the corona wire and the ionized air stream that is produced by the AeroBar.

Attention! Pour éviter les blessures à soi-même ou sur le produit, ne placez pas d'étiquettes conductrice sur le 5710 AeroBar châssis ! Étiquettes conductrice peut acquérir une charge électrique dans le temps et la cause aléatoire événements ESD.

Afin d'éviter une dégradation des performances ioniseur, garder la terre objets loin du fil corona et le milieu ionisé flux d'air qui est produite par l'AeroBar.

2.2 Mounting

The 5710 AeroBar has an integral rib molded along the top of its chassis. Mounting brackets can be securely clamped to this rib.
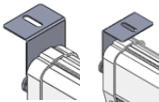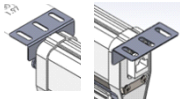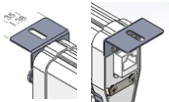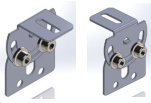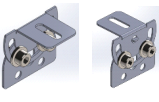
Caution! When mounting the bar from the end caps do not have any connection to the reference clips. These clips perform a critical function in the operation of the Aerobar and must not be connected to any external ground or circuit

Lors du montage de la barre de les bouchons d'extrémité n'ont pas de connexion aux clips de référence. Ces clips exécutent une fonction critique dans l'opération de l'Aerobar et ne doivent être raccordés à aucune terre externe ou à circuit.
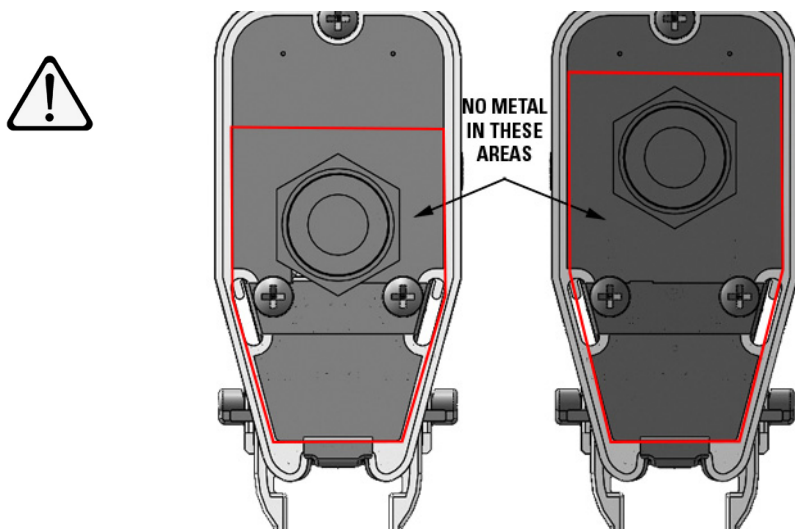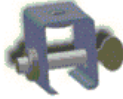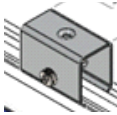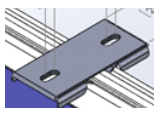
Specially designed stainless steel mounting brackets are available for the 5710 AeroBar and can be ordered from Simco-Ion. The following table shows the available brackets for use with the 5710 AeroBar.

End Brackets

Part No.	Brackets	Mounting		Size	
		Fixed	**Rotatable**	**Standard**	**Low Profile**
32-2501-01 4.4 mm single slot (can be inverted) Order 33-2511-01 kit		●		●	
32-2503-01 4.4 mm triple slot (can be inverted) Order 33-2513-01 kit		●			●
32-2502-01 4.4 mm single slot Order 33-2512-01 kit		●			●
32-2511-01 4.4 mm single slot (can be inverted) Order 33-2521-01 kit			●	●	
32-2510-01 4.4 mm single slot (can be inverted) Order 33-2520-01 kit			●		●

Intermediate Brackets

Part No.	Brackets	Mounting		Size	
		Fixed	Rotatable	Standard	Low Profile
32-2213 8-32 thread		●		●	
32-2500-01 M3 thread (increase width to 1"/2.54 cm)		●		●	
32-2504-01 4.4 mm double slots (increase width to 1"/2.54 cm)		●			●
32-2211-01			●	●	

Mounting brackets should be equally spaced along the length of the bar. Refer to **Table 1 5710 AeroBar Lengths** for the recommended number of brackets for secure mounting of each length of the 5710 AeroBar. All end mounting brackets are orderable in a kit of two and include mounting screws (pan head self-tapping SST 6x19, 3/8th inch). See **Parts and Accessories** section at end of manual for kit part numbers.

⚠ **Caution!** To avoid injury to one's self or the product, all mounting clips and brackets must be connected to a low-impedance earth ground.

⚠ **Attention!** Pour éviter les blessures à soi-même ou le produit, tous les clips de fixation et les supports doivent être connectés à un la terre à basse impédance.

2.3 Power Connection Options

Electrical Wiring

Please refer to the diagrams below that show examples for possible electrical wiring schemes.

A hand-held terminal (HHT) is required to set up the operating parameters and to view the status codes of the 5710 AeroBar. To avoid inadvertent alteration of the bar's settings, it is recommended that the HHT be removed from the system when it is not required. The HHT can access the RS-485 communication bus by being connected to any of the RJ-11 Power/Communication cables in the system

Daisy-chain Configuration

If desired, a maximum of three 5710 AeroBars may be electrically connected together in a serial fashion ("daisy-chained"). Chaining bars together can create a simpler electrical wiring scheme that provides power and communication to all of the connected bars through a single bus with only one connection required to an HHT that can "talk" to all of the connected bars. Wiring connection is made from the RJ-11 jacks on the sides of the bars that are labeled "PWR/COM". See **Section 5.3 Wiring Options** for examples of several wiring schemes.

A "daisy-chain" set up will typically consist of two or three bars that are each addressed as "independent" (address' 1, 2 or 3)[1] bars. Each of the bars will have a unique address and will maintain its own set of operating parameters; the bars will share connection to +24 VDC power and to the RS-485 communication lines (to a hand held terminal).

If there is an alarm condition at one of the daisy-chained bars, the alarm will only be displayed on the status LEDs of the affected bar.

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1. Address' "M" Master and "S" Slave are no longer used. The Master/Slave configuration is no longer supported by the 5710 AeroBar. Setting the AeroBar's address to "M" or "S" will cause the AeroBar to go into alarm.

Daisy-chain wiring does not provide global alarm monitoring capability. See **Section 2.6 Factory Monitoring System (FMS)** for more information regarding alarm monitoring.

An individual connection to a CDA gas supply is required for each bar. There is no "daisy-chain" provision provided for connecting CDA between 5710 AeroBars. AeroBars 2500mm and longer have two (2) gas inlet connectors. This is intended to supply CDA directly at both ends of the AeroBar to supply a greater air volume than a single airline can provide. Do not use the second gas inlet fitting to "daisy-chain" gas between bars. Doing so will reduce the efficiency of the downstream AeroBar.

Bars intended for use on a common wiring bus must be set for unique addresses. See **Section 3.2 Handheld Terminal, Bar Address** for information on how to set the address of a bar. Independent bars must be set for the addresses 1, 2 or 3.

Duplicated bar addresses on a single bus will cause communication errors! Please verify bar addresses to avoid problems caused by duplicate addresses in a system.

Power/Signal Distribution Box (optional)

An optional "Power Signal Distribution Box" is available for use where a remote display of the bar's status indicator LEDs is desired (see **Section 5.4 Parts & Accessories**). This box provides two RJ-11 jacks for power/HHT connections, one terminal block for connection to the FMS relay contact and standby request, and one RJ-45 jack for connection to the "SBY/ALM I/O" connector on the 5710 bar.

A CAT-5 RJ-45 cable is required between the 5710 bar's "SBY/ALM I/O" jack and the "AUX/ALARM" jack on the remote box.
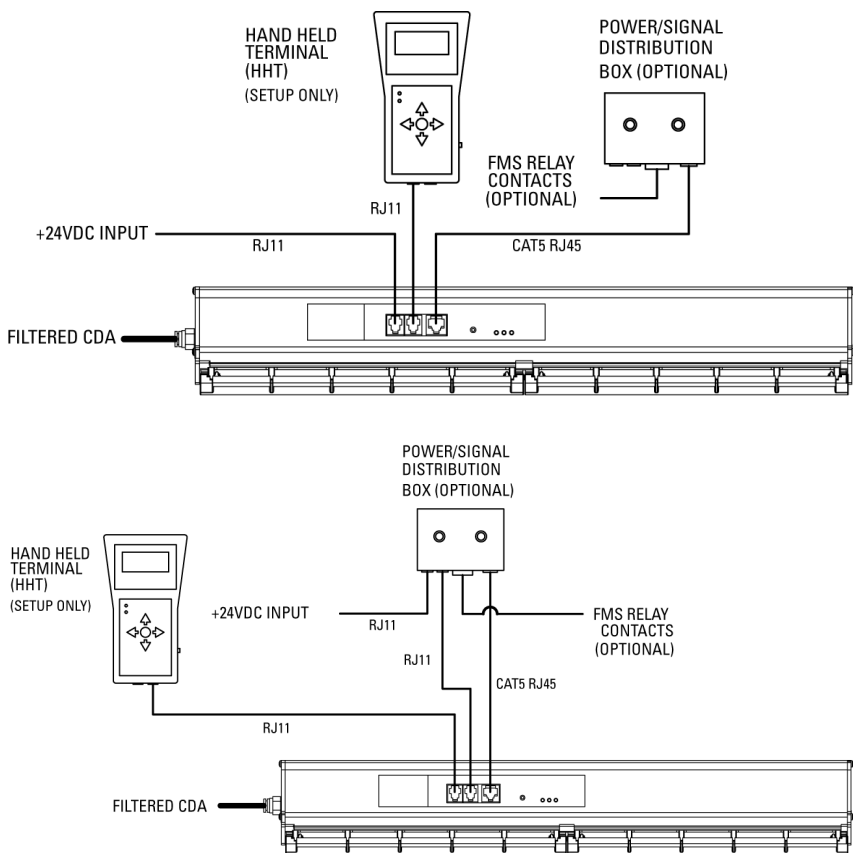
HAND HELD
TERMINAL
(HHT)
SETUP ONLY

POWER/SIGNAL
DISTRIBUTION
BOX (OPTIONAL)

FMS RELAY
CONTACTS
(OPTIONAL)

RJ11

+24VDC INPUT

RJ11

CAT5 RJ45

FILTERED CDA

POWER/SIGNAL
DISTRIBUTION
BOX (OPTIONAL)

HAND HELD
TERMINAL
(HHT)
SETUP ONLY

+24VDC INPUT

RJ11

FMS RELAY
CONTACTS
(OPTIONAL)

RJ11

CAT5 RJ45

RJ11

FILTERED CDA

Figure 2. Power Connection using Power Signal Distribution Box

2.4 Wiring Information

Primary electrical connection to the 5710 AeroBar is made through the two RJ-11 jacks on the side of the bar that are labeled "PWR/COM". These two jacks are wired in parallel and are functionally interchangeable. Either of these RJ-11 jacks can be connected to power or to a Handheld Terminal (HHT)

The 5710 AeroBar requires 24 VDC ±10%, 12W. max.

PIN	Description
1	24 VDC Input
2	Communications RS-485B
3	Power Ground
4	Power Ground
5	Communications RS-485A
6	24 VDC Input

Table 2. Power and Communication Connectors (PWR/COM RJ-11)

Typical cable used to connect to 24 VDC power or to a handheld terminal is 26AWG 6-conductor modular flat cable terminated with RJ-11 6/6 modular plugs.

2.5 Factory Monitoring System (FMS)

The 5710 AeroBar provides for an Alarm output and a Standby input.

The alarm output is across pins 1 and 8 of the bar's "SBY/ALM I/O" RJ-45 connector and is a solid state relay contact that is open when the 5710 AeroBar is either not powered or is in an alarm state (see **Table 5 5710 AeroBar Alarm Codes** for more information). The alarm relay contact is rated for +/-24 VDC @ 0.2A maximum.

The standby input (active low) allows the user to temporally stop the ion production without turning off the 5710 AeroBar. This is most useful when the ionization needs to stop when there is no product under the 5710 AeroBar, thus extending the maintenance interval on the 5710 AeroBar. Standby is activated by pulling pin 3 of the "SBY/ALM I/O" RJ-45 connector low. See **Section 3.4** for more information about Standby mode.

In addition, both the alarm output and standby input can be conveniently accessed through a terminal block on the optional Power-Signal Distribution Box. See **Table 4** for pinout information for this option.

Pin	Description
1	Alarm Contact 1
2	24 VDC Out
3	Standby Input (Active Low)
4	Signal Ground
5	Signal Ground
6	RESERVED
7	24 VDC Out
8	Alarm Contact 2

Table 3. 5710 AeroBar's "SBY/ALM I/O" RJ-45 Connector

Pin	Description
1	24 VDC Out
2	Alarm Contact 1
3	Alarm Contact 2
4	Signal Ground
5	Standby Input (Active Low)
6	RESERVED

Table 4. ALARM OUTPUT Terminal Block, Optional Power Signal Distribution Box

2.6 Gas Requirements

A flow meter is recommended for use in conjunction with gas input to the 5710 AeroBar. The use of a flow meter will help to establish a defined and uniform flow of air through the ionizer.

Gas Requirements

Simco-Ion strongly recommends using clean dry air (CDA) to improve performance of ion delivery to the target. A CDA supply should be appropriately filtered to remove moisture, oil, and particles. Filtration to the end user's desired cleanliness level is recommended (filtration systems are not supplied by Simco-Ion.) Using the 5710 without CDA will adversely affect decay times.

Gas Connections

The 5710 AeroBars have a quick push-connect gas inlet fitting(s) on one end of the bar for length 2400 mm and less, and on both ends of the bar for length 2500 mm and above, see Table 1.

All bars, 2500 mm and above, are shipped with an air plug inserted into the right end air fitting. Air can be supplied into either end or both. If only one air supply is used, insert the plug into the unused end.

Bars of lengths 400-1500 mm with a 50 mm air jet spacing, utilize a quick fitting that mates with 6 mm O.D. tubing.

Bars of lengths 400-1500 mm with a 25 mm air jet spacing, utilize a quick fitting that mates with 8 mm O.D. tubing.

Bar of lengths 1650-3000 mm (50 mm air jet spacing) utilize a quick fitting that mates with 8 mm O.D. tubing.

Bars of lengths 2500-3000 mm have quick fittings on both ends of the bar that mate with 8mm O.D. tubing. Both fittings should be directly connected to the gas supply for increased gas delivery. Do not use the second fitting to "daisy-chain" gas between AeroBars.

To connect the air supply tubing to the 5710 AeroBar:

- Insert the tubing into the gas quick fitting on the endcap. Be sure the tubing is fully inserted by gently tugging back on the tubing to lock the tube into place.

All bars, 2500 mm and above, are shipped with an air plug inserted into the right end air fitting. Air can be supplied into either end or both. If only one air supply is used, insert the plug into the unused end.

- To remove the tubing from the fitting, push in the fitting collar towards the bar to release the tubing.

The amount of CDA required will be a function of many factors, including the presence of airflow from HEPA filters, decay time and swing voltage requirements, and distance from the bar to the product. Simco-Ion recommends a minimum of at least 6 liters/minute flow for each 150 mm grill assembly on the bar and 10 liters/minute flow for each 250 mm grill assembly on the bar. (See Table 1 for the number of each size grill assemblies on the bar.)

For example:

5710-500 mm = 20 liters/minute (total flow per bar)
5710-1500 mm = 60 liters/minute
5710-2150 mm = 86 liters/minute

More CDA than this may be necessary to meet a specific application performance requirement. See **Section 3.1** for more information on the trade-off between CDA airflow and bar performance.

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Operation

3.1 Settings

The 5710 AeroBar comes from the factory with default settings that can be optimized for a particular application. For best performance, the settings should be tuned for your specific application--size of the target, distance to the target, purging airflow, HEPA airflow, etc.

There are only four settings that need to be adjusted to optimize the 5710 AeroBar's performance in your environment for any given air flow: Frequency, Positive Power, Negative Power and Balance:

- **Frequency**: Sets the rate of positive and negative ions being supplied to the target. A lower frequency will increase the swing voltage present on the target. Conversely, a higher frequency will decrease the swing voltage present on the target. Typically, a lower frequency will reduce decay time as measured on a CPM.

- **Positive Power**: Sets the amount of positive ions produced. Increasing the Positive power level will produce more positive ions, shift the ion balance in the positive direction and will reduce the negative decay time.

- **Negative Power**: Sets the amount of negative ions produced. Increasing the Negative power level will produce more negative ions, shift the ion balance in the negative direction and will reduce the positive decay time.

- **Balance**: Sets the ratio of positive and negative ions produced for each cycle. Adjust the Balance value to coarsely adjust the ion balance at the target. Then, use the Positive Power and/or Negative Power settings to fine tune the ion balance at the target.

Setup Guidelines

The 5710 AeroBar is designed for easy setup and calibration. In order to obtain the optimum performance for your environment, perform an initial setup with a charged plate monitor (CPM) positioned at the targeted area under the ionizer. The Simco-Ion Model 280A CPM is recommended.

Below is list of guidelines to keep in mind when setting up the 5710 AeroBar:

- Lower the frequency and increase the voltage levels to reduce ion recombination prior to the ions reaching the target
- For small target areas that are close to the AeroBar (typically within 50-150 mm to the bar), lower the ±power levels to reduce the ion emission and use a higher frequency setting to decrease the swing voltage
- For long distance applications, a setup with lower frequencies is appropriate
- For short distance applications, a setup with higher frequencies is appropriate
- Adjust the balance to ensure that equal numbers of positive and negative ions reach the target area
- Balance can be "fine-tuned" by using the Positive and Negative Power setting
- Increase Air flow for longer distances and lower air for close or short distance

Example of a Typical Setup

1. If the installation will be a multi-bar setup utilizing daisy-chained wiring, it can be helpful to set the bar addresses before installing the bars in place. See **Section 3.2 Handheld Terminal, Bar Address** for information on how to change a bar's address. (Addresses can be changed later but this requires disconnecting the bar from the bus so it can be communicated with singly.)
2. Securely mount the bar (see **Sections 2.2 and 2.3**). Place a Charged Plate Monitor (CPM) at the actual target location for the ionized air stream.
3. Connect filtered CDA to the bar. (see **Section 2.7**)
4. Connect power to the bar. (see **Sections 2.4 and 2.5**)

⚠ **Caution!** The Model 5710 bar will be powered up as soon as 24 VDC power is connected to the bar.

⚠ **Attention!** Le modèle 5710 bar sera mis sous tension dès que alimentation 24 VCC est raccordé à la barre.

Use either a wired connection to a Handheld Terminal (HHT) or IR communication from a battery powered HHT to adjust the bar's operating parameters.

5. Set both the Positive and Negative Power settings for a starting value of 50% (factory default).

6. Set the operating Frequency. Set the Frequency at the value that provides a +/- swing that is as close as possible to the maximum limit allowed, but without exceeding the limit.

7. Use the Pulse Balance screen of the HHT to adjust the Pulse Balance value either more (+) or (-) to center the +/- swing around zero.

8. If necessary, use the Positive Power and Negative Power adjustments to increase or decrease the peak amount of +/- swing.

9. If needed, adjust the Pulse Balance to re-center the +/- swing around zero.

The general performance of the 5710 AeroBar will be determined by a number of factors:

- **The bar's adjustable operating parameters set by the end user**

- **The CDA flow rate through the ionizer. A higher CDA flow rate generally means a faster CPM decay at the target.**

- **Any HEPA air flow rate in the target environment. Higher environmental air flow from the bar to the target area generally results in a faster CPM decay rate at the target.**

- **The proximity of nearby grounds. Grounded surfaces near the ionizer or in the ionized air stream can cause shifts in balance and/or slower decay times.**

- **The maintenance level of the bar's corona wire system. A poorly maintained ionizer will result in reduced ionizer performance for both decay times and balance.**

3.2 Handheld Terminal (HHT)

Use the Handheld Terminal (HHT) to change the settings of the 5710 AeroBar. The HHT can be used to monitor the 5710 AeroBar during operation (It is recommended that the HHT be removed from the system after setup to prevent inadvertent changes to the operating parameters.)

The HHT has an LCD display, two LED indicators, 5 menu navigation buttons, an IR (infrared) Communications interface, two RJ-11 ports, and a Power On/Off switch:
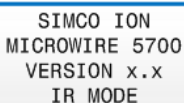
- **LCD Display** is where the setting and 5710 AeroBar information is displayed.

- **COM/STATUS** (Green) displays the current HHT and Bar Status:

  -- A flashing indicator indicates the HHT is communicating to the 5710 AeroBar.

  -- A solid on indicator indicates the bar is on and ionizing.

Fault (Red) displays fault at either the HHT or 5710 AeroBar:

- A flashing indicator indicates that the 5710 AeroBar and HHT are not communicating.

- A solid on indicator indicates the 5710 AeroBar is in alarm or standby and may not be ionizing. Some alarm states still allow the bar to operate, see Table 5 Alarm Codes, for more information.

Menu Navigation buttons allows the user view or set 5710 AeroBar parameter:
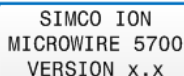
- *<UP>/<Down>* Arrows increment or decrement the parameter value.

- *<LEFT>/<RIGHT>* Arrows navigate to screens menus.

- *<ENTER>* sends the parameter value shown on the "NEW" line to the bar or performs the requested act.

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SIMCO ION
MICROWIRE 5700
VERSION x.x
IR MODE
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IR (infrared) Communications interface allows two way line-of-sight communications to the 5710 AeroBar. A 9 VDC battery (internal) is required for using the IR interface. When the HHT is turned on and not wired to the 5710 AeroBar it will automatically switch to IR mode. The IR range is approximately 8 feet.

In IR Mode the HHT does not update automatically. To refresh the screen, point the HHT at the 5710 AeroBar and press the <ENTER> key. In wired Mode the HHT updates automatically.

```
SIMCO ION
MICROWIRE 5700
VERSION x.x
```

Two RJ-11 ports on the bottom of the HHT allow for power and communication connections to a 5710 AeroBar over a wired RS-485 balanced pair serial interface.

Power ON/OFF switch allows the user to turn on or off the HHT. In the IR mode it is best to turn off the HHT when not in use to conserve battery power.

BAR ADDRESS shows or sets the 5710 AeroBar's communication address. In order to set a bar's operating parameters, the HHT needs to be set to the desired 5710 AeroBar's address.

- Press the *<Up>* or *<Down>* Arrow to select a different 5710 AeroBar address.

While on this menu screen and the 5710 AeroBar's address matches the address shown on the display, all three of the LEDs on the 5710 AeroBar will quickly blink. This allows you to locate the bar that is being addressed. The HHT cannot be used in IR mode to change a bar's address setting.

```
BAR  ADDRESS
       VERIFY        >
FLASHING LEDS<
ADDRESS = 0 ♦ 0
```
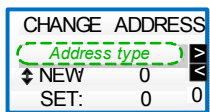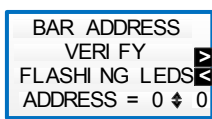
To Change the address of the bar, press and hold the <Enter> key for about 5 seconds to activate a "CHANGE ADDRESS" menu screen. Using this screen, an address of 1, 2 or 3 can be set. Addresses 1, 2 and 3 are used to denote "independent" bars that will each operate as stand-alone units.

```
CHANGE  ADDRESS
   ( Address type )  >
♦ NEW      0       <
   SET:      0      0
```

The Master/Slave configuration is not available in the 5700 AeroBar system. "M", master and "S" slave should not be selected for the AeroBar's address.

SYSTEM STATUS shows the current status of the 5710 AeroBar:

```
SYSTEM STATUS
IONIZATION ON >
ALM CODE:  xx <
                    0
```
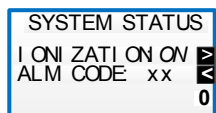
"Ionization" is a short notification of the 5710 AeroBar's state and will display:
- "ON" when Ionization is normal;
- "SB" when the 5710 AeroBar is in standby;
- "TS" when the 5710 AeroBar is in Alarm Test; or
- "AL" when the 5710 AeroBar has some type of Alarm.

"ALM Code" will help diagnose any problems that might occur. All states of the 5710 AeroBar including a normal state have an associated number code (see **Table 5 5710 AeroBar Alarm Codes**) to aid in diagnosing any alarms that might occur.

FREQUENCY shows or sets the 5710 AeroBar's ionization cycle rate which is the

```
FREQUENCY
♦ NEW  XXX HZ >
   SET:  XXX HZ <
                     0
```
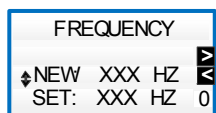
rate at which the ionization changes polarity. By using the **<UP>** or **<Down>** arrow keys, you can change the rate at which the ionization polarity changes from 0.1Hz to 35Hz. After the value is keyed in, press the **<ENTER>** key to save the new value in the 5710 AeroBar.

POSITIVE POWER shows or sets the 5710 AeroBar's positive ionization output level.

```
POSI TI VE  POWER
                 >
♦ NEW   XXX      <
  SET:  XXX      0
```

Setting a larger value will increase positive ion production and shift the ion balance in the positive direction. By using the *<UP>* or *<Down>* arrow keys you can change the positive ionization level from 1, the minimum power level, to 100, the maximum power level.

NEGATIVE POWER shows or sets the 5710 AeroBar's negative ionization output level.

```
NEGATI VE  POWER
                 >
♦ NEW   XXX      <
  SET:  XXX      0
```

Setting a larger value will increase negative ion production and shift the ion balance in the negative direction. By using the *<UP>* or *<Down>* arrow keys you can change the negative ionization level from 1, the minimum power level, to 100, the maximum power level.

STANDBY shows or sets the 5710 AeroBar's Standby mode.

```
     STANDBY
                 >
♦ NEW   OFF      <
  SET:  OFF      0
```
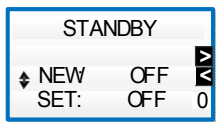
Setting the standby to "ON" will temporarily pause the ionization of the 5710 AeroBar. This state will also be shown in the **SYSTEM STATUS** screen as "SB" with an alarm code of 4.
This screen will also show the state of the standby input request from the RJ-45 "SBY/ALM I/O" port. Note that a standby request from the RJ-45 port will override a standby request set using the HHT.

ALARM TEST activates or deactivates the alarm output.

```
   ALARM  TEST
  PRESS  ENTER   >
    TO START     <
                 0
```

```
   ALARM  TEST
  PRESS  ENTER   >
    TO STOP      <
                 0
```
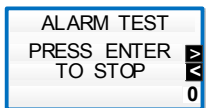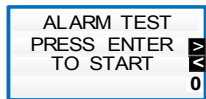
On this screen you can turn on or off the alarm circuit to test FMS connection to your equipment. Pressing the *<Enter>* key will activate the alarm output relay and show a *walking* (✳✳✳) LED display on the 5710 AeroBar. To stop the Test simply press the *<Enter>* key again.

This state will also be shown in the **SYSTEM STATUS** screen as "TS" with an alarm code of 11.

⚠️ **Caution!** The Alarm Test will not change the 5710 AeroBar's ion production. If the ionizer HV is enabled when the Alarm Test is activated, the HV remains enabled during this test.

⚠️ **Attention!** Le Test de l'alarme ne change pas le 5710 AeroBar la production d'ions. Si le ioniseur HV est activé lorsque le test de l'alarme est activée, le HV reste activée pendant ce test.

LOAD DEFAULTS to restore a set settings.

```
    LOAD
  DEFAULTS     >
  SETTINGS     <
PRESS ENTER    0
```
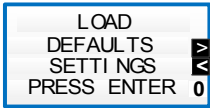
Each 5710 AeroBar contains pre-defined settings that can be recalled to return the 5710 AeroBar to a known operational state.

```
    LOAD
ARE YOU SURE?  >
 PRESS ENTER   <
  TO ⇕ CANCEL  0
```
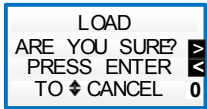
Upon pressing the <Enter> key, you must confirm this request. Using the *<Up>* or *<Down>* arrow keys, select either **CANCEL** (default) or **ACCEPT** then press *<Enter>*.

- Selecting ACCEPT will change all the 5710 AeroBar's settings to the pre-defined values (except the 5710 AeroBar's address).
- Selecting CANCEL will return you the previous menu screen.

```
  DEFAULT
  SETTINGS     >
  RESTORED     <
               0
```
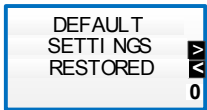
After selecting "**ACCEPT**", the HHT will display "Default Settings Restored" for 2 seconds. The restored settings will take effect immediately.

FIRMWARE VERSION shows the versions of both the 5710 AeroBar and HHT.

```
  FW VERSION
5700 : X.Y    >
5710 : N.M    <
               0
```
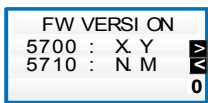
Displays the firmware version of the addressed AeroBar (Model 5710) and of the Handheld Terminal (HHT, Model 5700).

3.3 Alarms

An alarm condition is indicated by the 5710 AeroBar's LEDs and the HHT's red LED (if connected). Alarms are caused by one or more of the following possible conditions:

Code	Grn LED	Yel LED	Red LED	Alarm Contacts	Comments
xx	Off	Off	Off	OPEN	No Power
1	On	Off	Off	CLOSED	Normal, All OK
2	Blink	Off	Off	CLOSED	Wire Communication
3	Blink	Blink	Off	CLOSED	IR Communication
4	On	On	Off	CLOSED	Standby Mode
5	On	Blink	Off	OPEN	Input Power Warning (< 20 VDC)
6	Off	Off	On	OPEN	Local Power Supply Fault
7	Off	Off	Blink	OPEN	SLAVE Reporting Fault[2]
8	Off	Off	On	OPEN	ARC Detected[1]
9	On	On	Blink	OPEN	Broken Wire Detected
10	On	Blink	Blink	OPEN	SLAVE Sync Failure[2]
11		Walking		OPEN	Alarm Test

Off: ○   On: ●   Blink: ✹   Walking: ✹✹✹

1. When an ARC is detected, the AeroBar's high voltage will turn off for 30 second after which the high voltage will turn back on and the AeroBar will resume operation.

2. The Master/Slave configuration of bars is no longer supported by the 5710 AeroBar product. If the AeroBar shows an Alarm 7 or 10, verify that the AeroBar's address is 1,2 or 3. An address of "M" or "S" is not supported.

Table 5. 5710 AeroBar Alarm Codes

Note: For safety, the 5710 AeroBar is designed to shut off the high voltage ionization any time an arc is detected in the area of the corona wire. This alarm is indicated by a steady Green and Red LED and an Alarm state 8.

> **Remarque:** Pour des raisons de sécurité, les 5710 AeroBar est conçu pour couper la haute tension d'ionisation tout moment un arc est détecté dans la zone du fil corona. Cette alarme est indiqué par un voyant vert allumé et voyant rouge et un état d'alarme .

If the red alarm LED continues to stay lit, contact Simco-Ion Technical Support (techsupport@simco-ion.com or +1 510-217-0460).

Alarm Test (for wiring testing, etc.)

The alarm output can be tested without affecting the ionization output. Connect the HHT to the Ionizer (refer to **Section 2.4** for more information on connecting the HHT to the 5710 AeroBar.)

```
ALARM TEST
PRESS ENTER  >
  TO START   <
             0
```
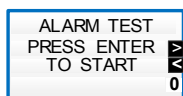
Navigate to the Alarm Test Screen, press the *<Enter>* key on the HHT to start the alarm test.

This will open the Alarm relay contacts, simulating an alarm condition.

```
ALARM TEST
PRESS ENTER  >
  TO STOP    <
             0
```
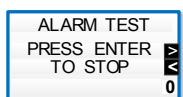
To stop the test and return to normal operation, press the *<Enter>* key on the HHT again.

3.4 Standby

Standby allows stopping the flow of ions while keeping the 5710 AeroBar's electronics powered on. This mode can be used to temporally turn off ionization when there is no product under the bar, thus reducing the contamination build up on the wire.

The 5710 AeroBar can be place in standby mode by:

- Connecting signal ground to the Standby input on either the bar's RJ-45 FMS I/O pin 5 or to Pin 3 of the optional Power/ Signal Distribution Box.

- On the HHT, navigate to the Standby screen, and press the up or down arrow keys + <ENTER> to set the 5710 AeroBar into standby ("ON") or normal operation ("OFF").

```
        STANDBY
                    >
  ↕ NEW     OFF     <
    SET:     OFF     0
```
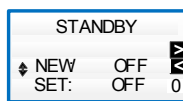
A standby request via the bar's "SBY/ALM I/O" connector or from a Power/Signal Distribution Box will override a standby request made via a HHT.

4

Maintenance

4.1 Maintenance Considerations

As maintenance schedules will vary depending on installation conditions, the end user will need to develop a schedule that meets the requirements for their application. In general, equipment should be checked on a monthly basis to ensure it is operating as originally set.

The 5710 AeroBar is designed so that only the emitter cartridge is user-serviceable. There are no other user-serviceable parts inside the 5710 AeroBar.

Any unauthorized service will void the warranty and may result in additional repair charges.

4.2   Corona Wire Inspection & Cleaning

Warning! Remove power from the 5710 AeroBar before inspecting or cleaning the unit.

Do not clean the AeroBar while the unit is powered on. Doing so may result in particle contamination to the work area and electrical shock to the operator.

Avertissement! Retirer l'alimentation du 5710 AeroBar avant l'inspection ou le nettoyage de l'appareil

Ne pas nettoyer l'AeroBar tandis que l'unité est sous tension. Cela risque d'entraîner la contamination de la zone de travail et d'éventuels chocs électriques à l'opérateur.

Inspection

Before performing any maintenance, the 5710 AeroBar must be powered down.

Dirty or eroded corona wires may result in reduced ionization output or failure. Contamination can be caused by a number of environmental factors, including non-visible airborne molecular contaminates (AMC). The corona wire should be checked regularly for erosion or material accumulating in or around the corona wire and cartridge.

Cleaning the Corona Wire Materials

Cleaning is recommended every 6 months or longer depending on the application and/or environment.

Simco-Ion offers a specially designed 5710 AeroBar emitter wire cleaning tool. The tool will conveniently and safely clean the emitter wire using a disposable foam swab wetted with 50% de-ionized water and 50% IPA. See Section 5.4 Parts and Accessories for part numbers of the 5710 AeroBar Cleaning Tool, Tool Extension Rod and Emitter Cleaner.

4.3 Cleaning the Corona Wire Cartridge Assembly & Chassis

Warning! Remove power from the 5710 AeroBar before inspecting or cleaning the unit.

Do not clean the AeroBar while the unit is powered on. Doing so may result in particle contamination to the work area and electrical shock to the operator.

Avertissement! Retirer l'alimentation du 5710 AeroBar avant l'inspection ou le nettoyage de l'appareil

Ne pas nettoyer l'AeroBar tandis que l'unité est sous tension. Cela risque d'entraîner la contamination de la zone de travail et choc éventuel.

Caution! Use only 50% de-ionized water and 50% IPA to clean the exterior of the 5710 AeroBar chassis and corona wire cartridge grills. **Do not use any other cleaners or solvents.**

Attention! Utiliser seulement 50 de l'eau déionisée et 50 IPA pour nettoyer l'extérieur du 5710 AeroBar châssis et fil corona cartouche barbecues. **Ne pas utiliser d'autres produits nettoyants ou de solvants.**

The external surfaces of both the 5710 AeroBar chassis and the corona wire Cartridge grill assembly can be cleaned if dirt has accumulated on the surface. Use a cleanroom-compatible cloth moistened with 50% de-ionized water and 50% IPA. Do not use a soaking wet cloth; the cleaning cloth should only be moistened with IPA. Change the cloth frequently to ensure that any dirt is completely removed from the surface to be cleaned. Do not use this method to clean the corona wire inside a cartridge assembly. Use the recommended Wire Cleaner tool that is described in **Section 4.2.**

After cleaning, allow the bar to dry thoroughly before reapplying power to the bar.

The corona wire cartridges may be cleaned in an ultrasonic bath using deionized water @ 50C, maximum. Follow the instructions provided in Section 4.4 Cartridge Insertion/Removal when removing the corona wire cartridges from the AeroBar.

⚠ **CAUTION! DO NOT ALLOW THE CORONA WIRES TO BE TOUCHED DURING THE WASHING PROCESS.**

⚠ **ATTENTION! NE PAS LAISSER LES FILS CORONA à être touché PENDANT LE PROCESSUS DE LAVAGE.**

Care must be taken while loading or removing the corona wire cartridges from the ultrasonic bath.

Cartridges must be loaded into the ultrasonic bath in either a single layer or stacked in a crossed pattern to prevent tangling of the cartridges and damage to the corona wires.

After washing, the cartridges must be completely dry before reinstalling into the bar. The temperature of the drying operation should not exceed 50°C, maximum.

Follow the instructions in **Section 4.4 Cartridge Insertion/ Removal** when reinstalling the corona wire cartridges and the protective contact spring covers to the AeroBar.

4.4 Cartridge Insertion/Removal

Remove the Contact Spring Covers

Protective plastic covers are installed over the HV corona wire contact springs that are at the ends of the corona wire cartridges. These contact spring covers must be removed before the corona wire cartridges can be released from the 5710 bar.

Contact covers at ends of bar: Remove the contact spring covers at the ends of the bar by lifting up on the narrow end of the cover, angling the cover up and it should release from the bar

5710 uWire Contact Spring Cover
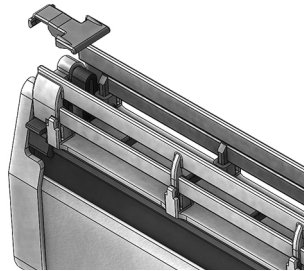
5710 uWire End Contact
Spring Cover Off Cartridge

Contact covers between cartridges: Remove the contact spring covers that cover the contact springs between corona wire cartridges by grasping the round pegs on the sides of the covers and wiggling/pushing the spring covers up the gap between the cartridges until the cover comes free.

Contact Spring Cover

Push UP on round pegs on both sides of bar
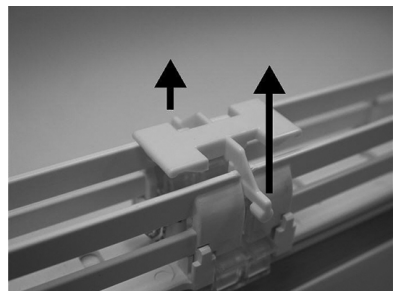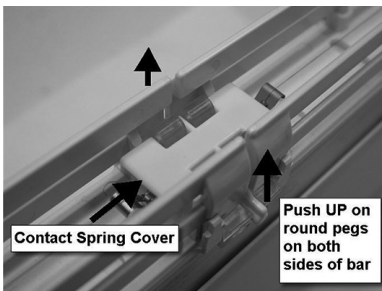
Removal of Cartridge

Squeeze the release tabs inward on either side of one end of the cartridge and gently pull the end of the cartridge away from the clear retaining clip, angling the cartridge away from the bar. If the other end of the cartridge does not release from its retaining clip as the cartridge angles away, squeeze the release tabs on that clip and gently pull the cartridge out.
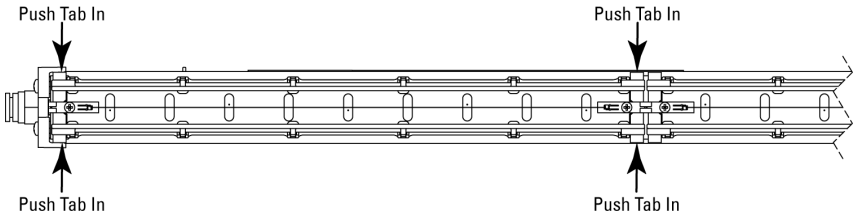
Figure 5. Location of Cartridge Release Tabs on Retaining Clips (top view)
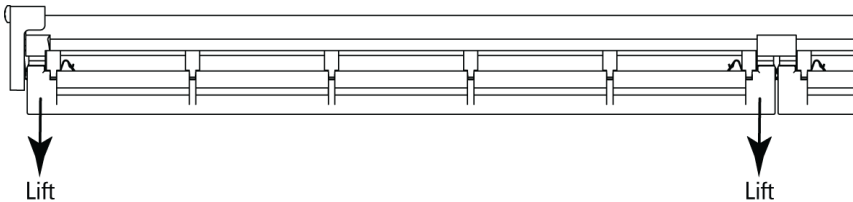
Figure 6. Lift/Pull Cartridge Out of Retaining Clips (side view)

Insertion of Cartridge

To insert a cartridge, align the cartridge in between the clear retaining clips and gently press the cartridge toward the 5710 AeroBar, The retaining clips should click into place when the cartridge is completely seated. The base plate of the cartridge should be flat against the bar.
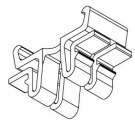
Reinstall the Contact Spring Covers

After installing the corona wire cartridges, reinstall the contact spring covers over the contact springs at the ends of the bar and between cartridges.

Contact covers at ends of bar: Hook the narrow end of the cover over the top lip of the end cap at the end of the bar, rotate the cover downward over the spring contact and snap it into place.

Contact covers between cartridges: Fit the cover into the slot between cartridges and press it down the slot until it seats over the spring contacts between the cartridges. The cover should be pressed down far enough so that the round pegs on the side legs of the cover lock under the clear clips.

Round peg locked under clear clip
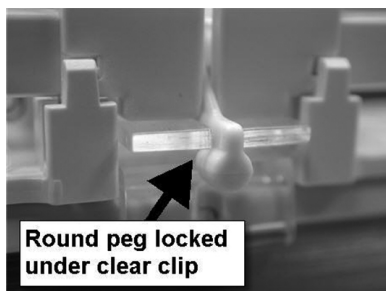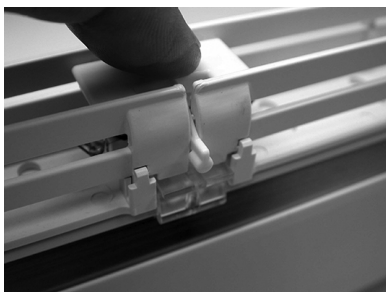
Replacement Cartridges

Replacements cartridge assemblies can be ordered from Simco-Ion. See **Section 5.4 Parts and Accessories** for further information.

5

Specifications

5.1 Specifications

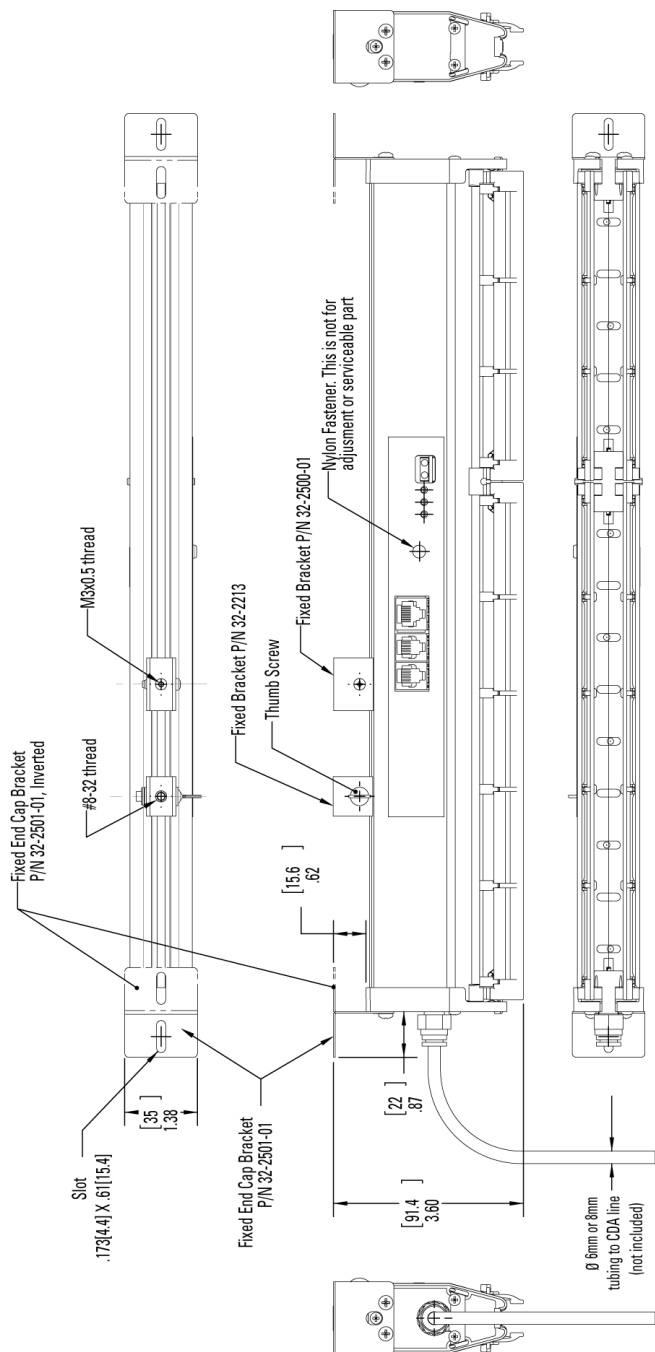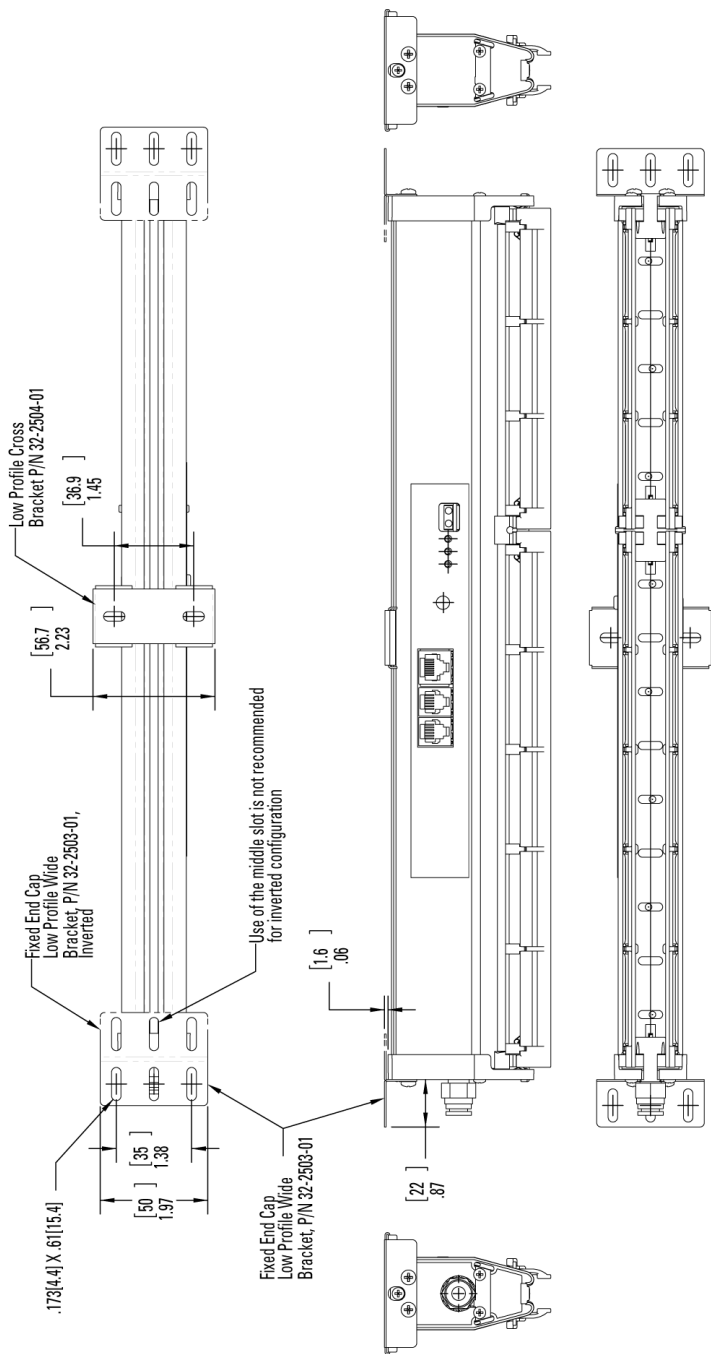|	
Input Voltage	24 VDC ±10%, 12W (max)
Output Voltage	Adjustable, 13 kV pk-pk (typ)
Range	Target ionization 50-2000 mm, application and performance specification dependent
Frequency	Factory default setting is 1 Hz, adjustable from 0.1-35 Hz
Balance	<±25V over the length of the bar; maintains balance performance >6 months without cleaning (in an ISO 14644-1 Class 4 or better environment)
Ion Emission	Micropulsed high voltage technology
Performance	3.5 sec decay average @ 600 mm (typ) measured at 5710 AeroBar center and 50 mm straight air jet spacing, 70 l/m purging air, no laminar flow; setting 1 Hz, 100% output, CPM: balance <±10V; swing 100V pk-pk
Corona Wire	Tungsten, 80 micron dia.
Gas Supply	Clean dry air (CDA)
Airflow	345 kPa (50 psi) optimal; 620 kPa (90 psi) max; flow volume at 70 lpm (1500 mm bar)
Air Input	Bars 400-1500 mm with 50 mm air jet spacing: (1) 6 mm OD quick fitting connector Bars 1650-2400 mm with 50 mm air jet spacing or bars 400-1500 with 25 mm air jet spacing: (1) 8 mm OD quick fitting connector Bars 2500 mm and longer with 50 mm air jet spacing with 50 mm air jet spacing: (2) 8 mm OD quick fitting connectors
Alarm Output	Solid state relay contact, rated ±24 VDC @ 0.2A max
Cleanroom Class	ISO 14644-1 Class 2 (better than Fed. Std. 209E Class 1)
Operating Env.	Temperature 15-35°C (59-95°F); humidity 30-60% RH, non-condensing
Ozone	<0.05 ppm
EMI	Below background level
Bar Settings	All operating parameters set via a Handheld Terminal (HHT) by either wired connection to the bar or by battery powered IR control
LED Indicators	Green POWER; Yellow COMMUNICATION; Red ALARM (combinations of LEDs indicate specific status conditions of the bar)
Enclosure	ABS chassis; stainless steel reference plates
Dimensions	3.0H x 1.3W x 15.75/19.7/25.6/29.5/35.4/39.4/45.3/49.2/55.1/59.1/65/68.9/ 74.8/78.75/84.65/88.6/94.5/98.4/104.3/108.25/114.15/118.1L in. (76H x 33W x 400/500/650/750/900/1000/1150/1250/1400/1500/1650/1750/1900/2000/ 2150/2250/2400/2500/2650/2750/2900/3000L mm)
Warranty	Two year warranty
Certifications	CE cULus KC RoHS2

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5.2 Dimension Drawings

The drawings in Section 5.2 provide dimensional information for the 5710 AeroBar with various types of mounting brackets. Dimensions are shown in [mm] and inches. See also Pages 10 & 11 and Section 5.4 Parts and Accessories for more information on available brackets.

Fixed End Cap Bracket P/N 32-2501-01, Inverted

M3x0.5 thread

#8-32 thread

Fixed Bracket P/N 32-2213

Thumb Screw

Fixed Bracket P/N 32-2500-01

Nylon Fastener. This is not for adjusment or serviceable part

Slot .173[4.4] X .61[15.4]

[35] 1.38

[15.6] .62

Fixed End Cap Bracket P/N 32-2501-01

[22] .87

[91.4] 3.60

Ø 6mm or 8mm tubing to CDA line (not included)

Low Profile Cross
Bracket P/N 32-2504-01

[56.7]
2.23

.173[4.4] X .39[9.9]

[36.9]
1.45

1.00

[1.6]
.06

.173[4.4] X .61[15.4]

[35]
1.38

[22]
.87

Fixed End Cap
Low Profile Bracket
P/N 32-2502-01.
Inverted installation
not recommended

Low Profile Cross
Bracket P/N 32-2504-01

[36.9]
1.45

[56.7]
2.23

Fixed End Cap
Low Profile Wide
Bracket, P/N 32-2503-01,
Inverted

Use of the middle slot is not recommended
for inverted configuration

[1.6]
.06

.173[4.4] X .61[15.4]

[50]
1.97

[35]
1.38

Fixed End Cap
Low Profile Wide
Bracket, P/N 32-2503-01

[22]
.87

Rotatable End Cap
Bracket, Low Profile
P/N 32-2510-01, Top
inverted

[17.1
.673

[19.1
.75

.173[4.4] X .61[15.4]

[34.5
Ø 1.36

Rotatable End Cap
Bracket, Low Profile
P/N 32-2510-01.

[23.1
.91

45°

[67.5
2.66

45°

Rotatable Bracket, P/N 32-2211-01

Rotatable End Cap
Bracket, Low Profile
P/N 32-2511-01, Top inverted

Rotatable End Cap
Bracket, P/N 32-2511-01.

[5.2]
Ø .205

[27.9]
1.099

[23.1]
.91

[19.1]
.75

[34.5]
Ø 1.36

.173[4.4] X .6[15.4]

[72]
2.83

45°

45°

Fixed Bracket P/N 32-2213

Thumb Screw

Fixed Bracket P/N 32-2500-01

Nylon Fastener. This is not for adjustment or serviceable part

[15.6]
.62

2500mm and longer

Ø 8mm tubing to CDA line (not included)

All other brackets in Pages 49-53 are compatible with the 2500mm and longer Bars.

[22]
.87

[91.4]
3.60

5.3 Wiring Options

HANDHELD TERMINAL (HHT)

RUN 24 VDC THRU
HHT TO BAR DURING SETUP
AFTER SETUP, REMOVE
HHT AND RUN 24 VDC
DIRECTLY INTO BAR

**INDEPENDENT BAR
ADDRESS "1", "2", OR "3"**

OPTIONAL:
FMS
ALARM RELAY
CONTACTS

+24 VDC INPUT

RJ-11   RJ-11   CAT-5 RJ-45

FILTERED CDA

HANDHELD TERMINAL (HHT)
(SETUP ONLY)

**INDEPENDENT BAR
ADDRESS "1", "2", OR "3"**

OPTIONAL:
FMS
ALARM RELAY
CONTACTS

+24 VDC INPUT

RJ-11

RJ-11   CAT-5 RJ-45

FILTERED CDA

HANDHELD TERMINAL (HHT)
(SETUP ONLY)

**POWER/SIGNAL
DISTRIBUTION
BOX (OPTIONAL)**

FMS RELAY
CONTACTS
(OPTIONAL)

+24 VDC INPUT

RJ-11

RJ-11   CAT-5 RJ-45

FILTERED CDA

INDEPENDENT BAR WITH OPTIONAL POWER / SIGNAL DISTRIBUTION BOX

POWER/SIGNAL
DISTRIBUTION
BOX (OPTIONAL)

HANDHELD
TERMINAL
(HHT)
(SETUP ONLY)

+24 VDC INPUT

RJ-11

FMS RELAY
CONTACTS
(OPTIONAL)

RJ-11

CAT-5 RJ-45

RJ-11

FILTERED CDA

+24 VDC INPUT

RJ-11

FILTERED CDA

RJ-11

HANDHELD
TERMINAL
(HHT)
(SETUP ONLY)

POWER/SIGNAL
DISTRIBUTION
BOX (OPTIONAL)

CAT-5 RJ-45

RJ-11

FMS RELAY
CONTACTS
(OPTIONAL)

DAISY-CHAIN SETUP

+24 VDC INPUT

INDEPENDENT BAR ADDRESS "3"

INDEPENDENT BAR ADDRESS "2"

INDEPENDENT BAR ADDRESS "1"

RJ-11

FILTERED CDA

CAT-5 RJ-45

POWER/SIGNAL DISTRIBUTION BOX (OPTIONAL)

HAND-HELD TERMINAL (HHT) (SETUP ONLY)

FMS RELAY CONTACTS (OPTIONAL)

5.4 Parts & Accessories

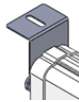|		
33-2845-01		Cartridge, 150 mm
33-2855-01		Cartridge, 250 mm
33-1710-7 (7 ft) 33-1710-10 (10 ft) 33-1710-15 (15 ft) 33-1710-20 (20 ft) 33-1710-40 (40 ft)		RJ-11 6 pin, 6 wire Power and communication cable
25-0540-6 (6 ft) 25-0540-10 (10 ft) 25-0540-15 (15 ft)		CAT-5 with RJ-45 Ethernet Cable for connection to Power Signal Distribution Box or Master/Slave connection
33-5700-01		Power Signal Distribution Box

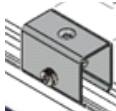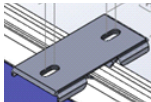|		
32-2501-01 (included in 33-2511-01 kit)		4.4 mm single slot (can be inverted)
32-2503-01 (included in 33-2513-01 kit)		4.4 mm triple slot (can be inverted)
32-2502-01 (included in 33-2512-01 kit)		4.4 mm single slot
32-2511-01 (included in 33-2521-01 kit)		4.4 mm single slot (can be inverted)
32-2510-01 (included in 33-2520-01 kit)		4.4 mm single slot (can be inverted)
32-2211-01		Swivel Mounting Bracket
32-2500-01		M3 thread (increase width to 1"/2.54 cm)
32-2504-01		4.4 mm double slots (increase width to 1"/2.54 cm)
32-2213		Mounting Bracket
33-5701-1		24 VDC Power Supply

91-5700-HHT-01		Handheld Terminal (HHT)
91-5700-02		Emitter Wire Cleaner with 3 ft. Rod (must order 22-1100)
33-5715-01		Emitter Wire Cleaner 3 ft extension rod
22-1100		Foam Swab, 100 ppi (bag of 100)
18-20392		Blanking Plug, 8 mm, 10 mm x 33 mm x 17.5 mm

5.5 Factory Default Settings

The 5710 AeroBar will ship from the factory with the following factory default operating settings. If custom defined default settings are required, please contact Simco-Ion for further information prior to ordering.

Bar Address: 1 (Independent mode)
Frequency: 1 Hz
Positive Power: 50
Negative Power: 50
Pulse Balance: 0
Standby: OFF

6

Warranty & Service

Simco-Ion provides a limited warranty for the µWire AeroBar Model 5710. New products manufactured or sold by Simco-Ion are guaranteed to be free from defects in material or workmanship for a period of two (2) years from date of initial shipment. Simco-Ion liability under its new product warranty is limited to servicing (evaluating, repairing, or replacing) any unit returned to Simco-Ion that has not been subjected to misuse, neglect, lack of routine maintenance, repair, alteration, or accident. In no event is Simco-Ion liable for collateral or consequential damages. Consumable items such as, but not exclusive to, emitter points, corona wires, batteries, filters, fuses or light bulbs are only covered under this warranty if found defective as received with the new product.

To obtain service under this warranty, please contact Simco-Ion Technical Support at techsupport@simco-ion.com or +1 510-217-0470.

Notes

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