

# Codonics Safe Label System Shelf Installation

**Technical Brief**

## Armstrong Cart or Generic Rail Mounting

### Overview

This document explains how to properly install the Codonics® Safe Label System® (SLS) Point of Care Station (PCS) shelf with storage compartment onto an Armstrong Medical Industries, Inc., A-Smart Premier medical cart or onto carts with rigid accessory mounting rails, such as a Metro® medical cart.

### Tools Needed for All Installations

- ◆ 5/16-in. nut driver
- ◆ Phillips head screwdriver
- ◆ Level

### Additional Tools Needed for Armstrong Medical Cart Installation

- ◆ 3/32-in. hex wrench

### Additional Tools Needed for Rigid Accessory Mounting Rails Installation

- ◆ Cordless drill
- ◆ 15/64-in. (6-mm) drill bit

### Parts List

The SLS PCS shelf includes the parts listed in the following table:

Part	Part No.	Qty.
Installation instructions	N/A	1
Shelf/drawer assembly	N/A	1
Drawer keys	850-140-001	2
Shelf rail	500-711-XXX	1
Lower support bracket	500-719-XXX	1
Shelf support bracket	500-720-XXX	1
Thumbscrews	740-018-003	2
Flat-head screws, 3/8-in. long	700-109-003	8
#8 flat washers	710-001-006	2

NOTE: The drawer keys are common for all drawers.

### Location of the Shelf

The shelf can be located on the right or left side of the medical cart, as shown in the following two figures:



NOTE: If you are installing the shelf on the left side of the cart, first perform the procedure “Moving the Power Supply Bay for a Left Side Installation,” shown later in this Technical Brief.

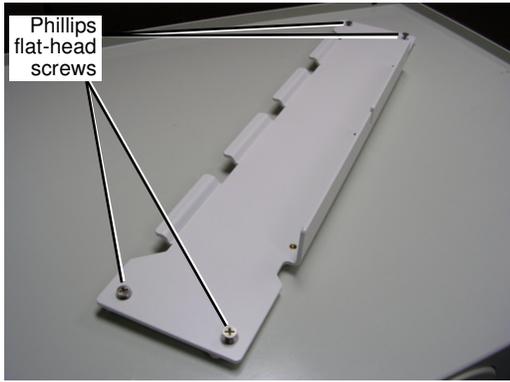
### Installing the SLS PCS Shelf onto an Armstrong A-Smart Premier Medical Cart

NOTE: The figures in this procedure depict an installation of the SLS PCS shelf on the right side of an Armstrong A-Smart Premier medical cart.

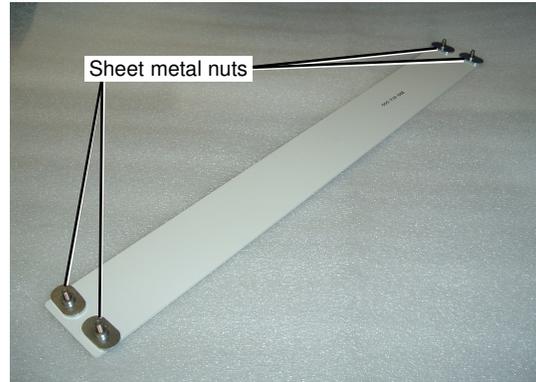
1. Remove the top plastic tray, shown in the following figure, from the medical cart:



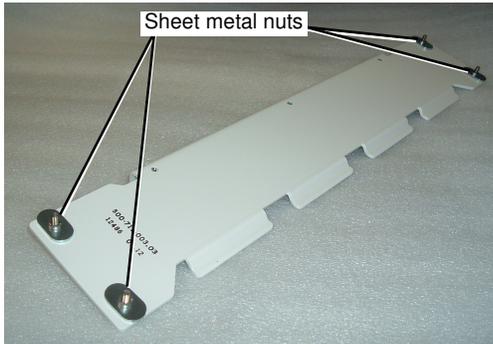
2. On the shelf rail, fully loosen but do not remove the four Phillips flat-head screws, shown in the following figure, that are holding the sheet metal nuts:



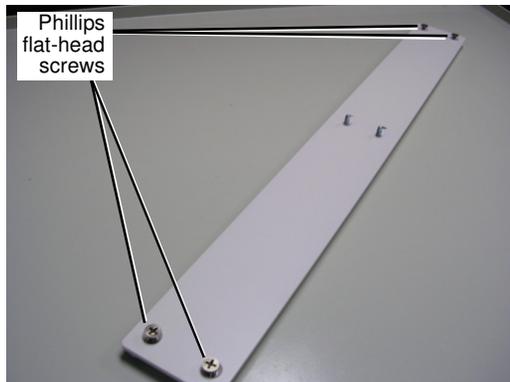
NOTE: The flat side of the four sheet metal nuts must be against the painted bracket surface, as shown in the following figure:



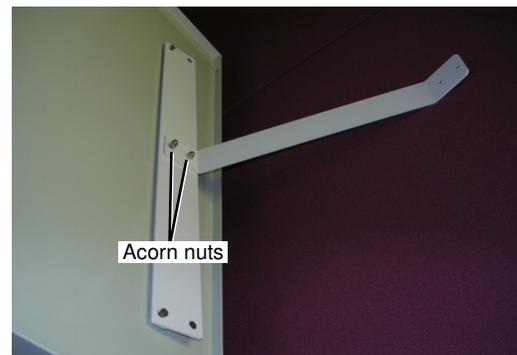
NOTE: The flat side of the four sheet metal nuts must be against the painted shelf rail surface, as shown in the following figure:



3. On the lower support bracket, fully loosen but do not remove the four Phillips flat-head screws, shown in the following figure, that are holding the sheet metal nuts.



4. Remove the two acorn nuts from the lower support bracket. Mount the shelf support bracket to the lower support bracket, as shown in the following figure, using the acorn nuts. Loosely tighten the acorn nuts.

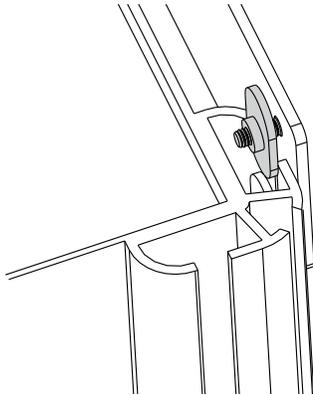


NOTE: The nut driver can mark the paint.

- The cart might have side rails that will need to be lowered or removed before sliding the lower support bracket assembly (from step 4) onto the side of the cart. The cart side rails should be lowered to approximately 16-in. (40 cm) from the top of the cart, as shown in the following figure:



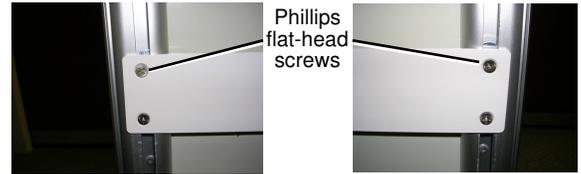
- Slide the lower support bracket assembly onto the cart by engaging or guiding the sheet metal nuts into the slots, as shown in the following figure:



The lower support bracket assembly in the cart side slots is shown in the following figure:



- Loosely tighten two of the four Phillips flat-head screws, shown in the following figure, on the sides of the lower support bracket assembly:



NOTE: Make sure bracket is level.

- Slide the shelf rail onto the cart by engaging or guiding the sheet metal nuts into the slots, as shown in the following figure:



NOTE: Make sure bracket is level.

- The top of the shelf rail will align with the top of the shelf once it is assembled, as shown in the following figure. Raise or lower the shelf rail to the desired shelf height, then tighten the four Phillips flat-head screws to secure the shelf rail to the side of the cart.



10. Remove the acorn nut from the bottom of the shelf that is closest to the side where the shelf frame mounts to the shelf rail, as shown in the following figure. Set it aside for use in step 13 of the installation procedure.



11. Slide the shelf onto the shelf rail. This is done by tilting the shelf into the slots on the shelf rail (as shown in the first figure below) and then pushing down on the shelf until it clicks into place (as shown in the second figure below):



12. Make sure that the shelf is level front-to-back. If the shelf is not level, loosen the four flat screws on the shelf rail to adjust it.

**NOTE:** When the shelf installation is complete, verify that the shelf is level right-to-left after the SLS PCS has been placed on the shelf. Refer to “Mounting the SLS PCS to the Shelf” later in this Technical Brief.

The following two figures show the shelf and shelf rail attached to the cart:

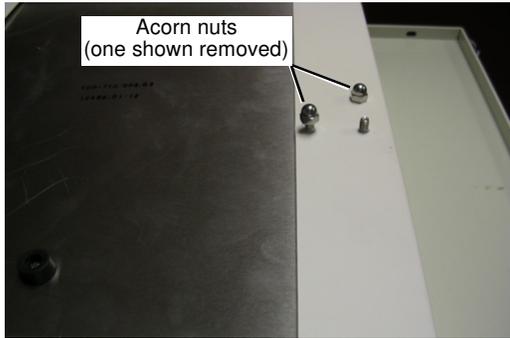


13. Install the acorn nut that was removed in step 10 back onto the bottom of the shelf, and tighten the acorn nut using a 5/16-in. nut driver, as shown in the following figure:



**NOTE:** The nut driver can mark the paint.

14. Remove the two acorn nuts, shown in the following figure, from the threaded studs on the bottom of the shelf opposite the shelf rail. Set them aside for use in step 17 of the installation procedure.



17. Once the shelf support bracket and shelf are aligned, attach the two acorn nuts that you removed in step 14, as shown in the following figure. Tighten the nuts using a 5/16-in. nut driver.

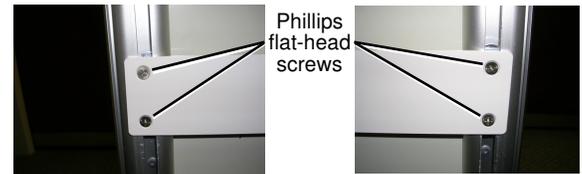


15. Loosen the two Phillips flat-head screws, shown in the following figure, that are securing the lower support bracket to the side of the cart:



NOTE: The nut driver can mark the paint.

18. Lightly push up on the lower support bracket to put a slight preload to the shelf support bracket but not enough to push the shelf up. Then tighten all four Phillips flat-head screws, shown in the following figure, to secure the lower support bracket to the side of the cart.



16. Slide the lower support bracket up so that the shelf support bracket aligns with the two studs on the bottom of the shelf.

NOTE: Make sure bracket is level.

## Installing the SLS PCS Shelf onto a Cart with Rigid Accessory Mounting Rails

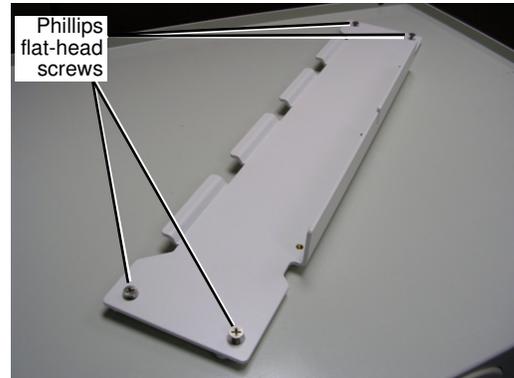
NOTE: The figures in this procedure depict an installation of the SLS PCS shelf on the right side of a Metro medical cart unless otherwise noted.

1. Remove the two accessory mounting rails, shown in the following figure, if they are already installed on the medical cart.



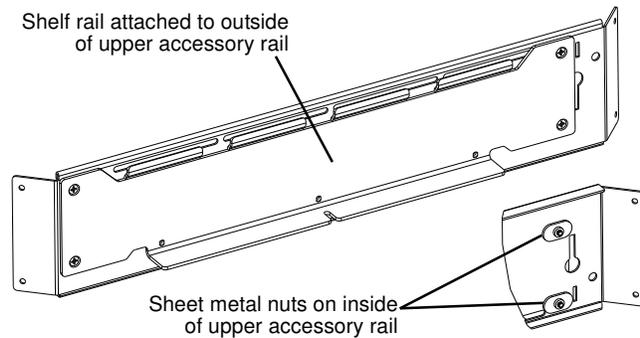
2. In the upper accessory rail, drill four 15/64-in. holes in a 17.1 x 2.5-in pattern, shown in the first figure on the following page. The figure shows the recommended hole locations for installing the shelf on the right side of a Metro medical cart.
3. In the lower accessory rail, drill four 15/64-in. holes in a 17.1 x 1.5-in pattern, shown in the second figure on the following page. The figure shows the recommended hole locations for installing the shelf on the right side of a Metro medical cart.

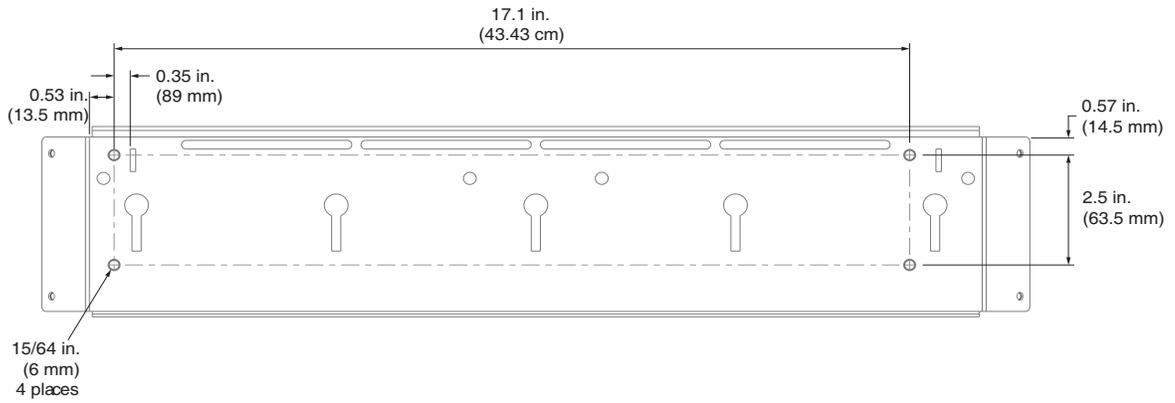
4. On the shelf rail, remove the four 1/4-in long Phillips flat-head screws, shown in the following figure, that are holding the sheet metal nuts. Set the screws aside; they can be discarded once you have completed the installation.



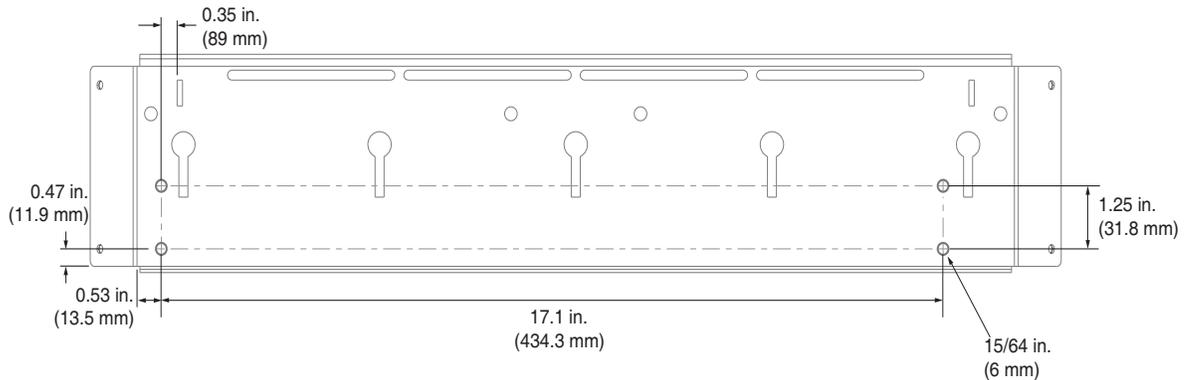
5. Mount the shelf rail to the upper accessory rail, as shown in the following figure, using four 3/8-in. long flat-head screws and the sheet metal nuts that were removed in the previous step.

NOTE: The flat side of the four sheet metal nuts must be against the inside of the upper accessory rail.



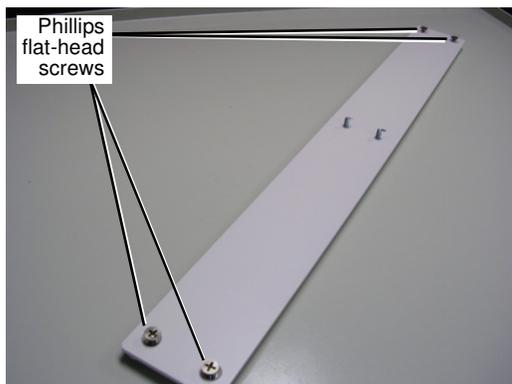


**Drill hole pattern for upper accessory rail**



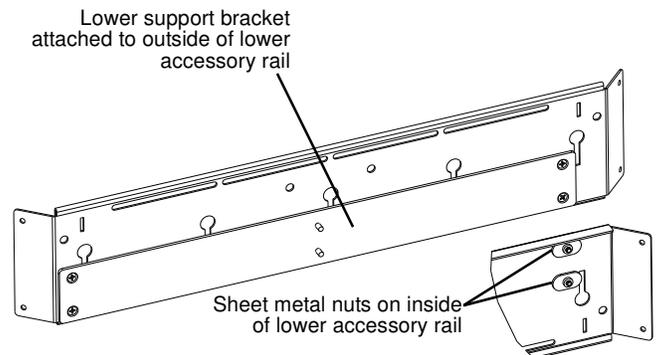
**Drill hole pattern for lower accessory rail**

- On the lower support bracket, remove the four 1/4-in. long Phillips flat-head screws, shown in the following figure, that are holding the sheet metal nuts. Set the screws aside; they can be discarded once you have completed the installation.



- Mount the lower support bracket to the lower accessory rail, as shown in the following figure, using four 3/8-in. long flat-head screws and the sheet metal nuts removed in the previous step.

**NOTE:** The flat side of the four sheet metal nuts must be against the inside of the lower accessory rail.



8. Attach the upper accessory rail to the cart at the desired height.

**NOTE:** If the accessory rails slide in a track, you will need to first assemble the lower accessory rail and lower support bracket. You will then need to temporarily secure the lower accessory rail at a position that is approximately 16-in. (40 cm) below the desired position of the top of the shelf. Refer to step 13 and step 15.

The following figure shows how the top of the shelf will align with the top of the cart once the shelf is assembled (Armstrong A-Smart Premier medical cart shown).



**NOTE:** Make sure bracket is level.

9. Remove the acorn nut from the bottom of the shelf that is closest to the side where the shelf frame mounts to the shelf rail, as shown in the following figure. Set it aside for use in step 12 of the installation procedure.



10. Slide the shelf onto the shelf rail. This is done by tilting the shelf into the slots on the shelf rail (as shown in the first figure below) and then pushing down on the shelf until it clicks into place (as shown in the second figure below).



11. Make sure that the shelf is level front-to-back. If the shelf is not level, loosen the four flat-head screws on the shelf rail to adjust it.

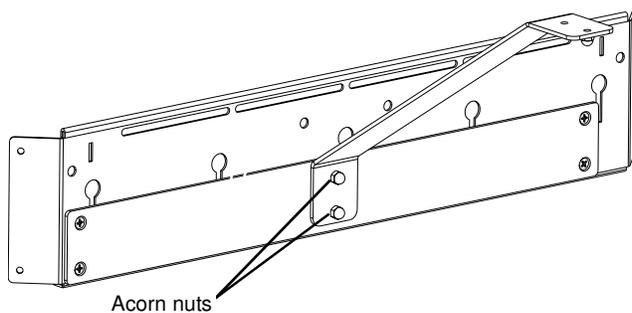
**NOTE:** When the shelf installation is complete, verify that the shelf is level right-to-left after the SLS PCS has been placed on the shelf. Refer to "Mounting the SLS PCS to the Shelf" later in this Technical Brief.

12. Install the acorn nut that was removed in step 9 back onto the bottom of the shelf, and tighten the acorn nut using a 5/16-in. nut driver, as shown in the following figure:

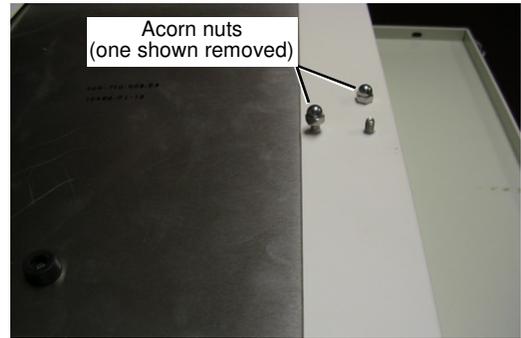


**NOTE:** The nut driver can mark the paint.

13. Remove the two acorn nuts from the lower support bracket. Mount the shelf support bracket to the lower support bracket using the acorn nuts, as shown in the following figure. Loosely tighten the acorn nuts.



14. Remove the two acorn nuts, shown in the following figure, from the threaded studs on the bottom of the shelf opposite the shelf rail. Set them aside for use in step 17 of the installation procedure.



15. Attach the lower accessory rail (with the lower and shelf supporting brackets attached to it) to the cart.
16. Slide the lower accessory rail up so that the shelf support bracket holes align with the two threaded studs on the bottom of the shelf.

**NOTE:** Make sure the bracket is level.

17. Attach the shelf support bracket to the shelf using the two acorn nuts that you removed in step 14, as shown in the following figure. Tighten the nuts using a 5/16-in. nut driver.



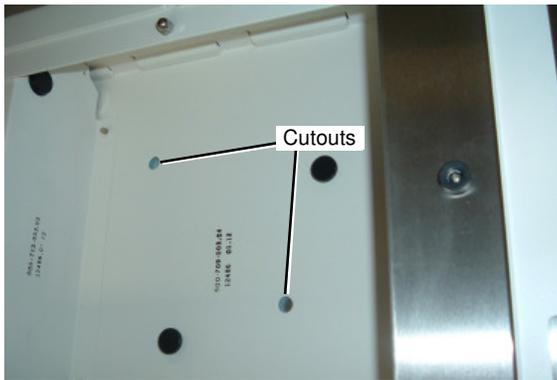
**NOTE:** The nut driver can mark the paint.

18. Lightly push up on the lower accessory rail to put a slight preload to the shelf support bracket but not enough to push the shelf up. Secure the lower accessory rail to the side of the cart.

## Mounting the SLS PCS to the Shelf

1. Place the SLS PCS onto the shelf.
2. Make sure that the shelf is still level right-to-left with the SLS PCS on it. If necessary, remove the SLS PCS and use the three set screws on the shelf rail to readjust the level of the shelf.
3. Open the drawer and look up from the bottom of the shelf frame.

Adjust the position of the SLS PCS until you see two threaded holes on the bottom of the SLS PCS aligned with the two cutouts in the shelf frame, shown in the following figure:



A close-up of one of the SLS PCS threaded holes as seen through the cutout in the shelf frame is shown in the following figure:



4. Install two #8 flat washers onto the two thumbscrews, then insert the two thumbscrews into the threaded holes and tighten them so that the SLS PCS is mounted to the shelf.

5. If it has been removed, place the top plastic tray, back on top of the cart shown in the following figure:



## Moving the Power Supply Bay for a Left Side Installation

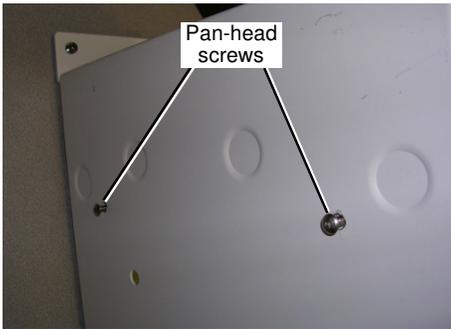
The procedure for installing the SLS PCS shelf on the left side of the medical cart is similar to installing it on the right side. However, you must first move the power supply bay to the other side of the shelf/drawer assembly.

1. Remove the rubber bumper from the bottom of the shelf, as shown in the following figure:



2. Remove the shelf.

- Remove the four pan-head screws, shown in the following two figures, on the top and bottom of the shelf frame that secure the power supply bay to the shelf.



- Remove the power supply bay from the shelf frame, as shown in the following two figures.



- Install the power supply bay into the opposite side of the shelf frame. Secure it to the shelf frame with the four pan-head screws that you removed in step 3.
- Install the shelf and then install the rubber bumper on the bottom of the shelf, as shown in the following figure:



The shelf/drawer assembly is now set up for mounting to the left side of the cart. Perform the procedure in "Installing the SLS PCS Shelf" on the first page of this Technical Brief to complete the installation process.

### **Technical Support**

If problems occur when installing the shelf, contact Codonics Technical Support.

Phone: +1 (440) 243-1198  
 Email: support@codonics.com  
 Website: www.codonics.com

*Get it all with just one call*  
**1-800-444-1198**



All registered and unregistered trademarks are the property of their respective owners. Specifications subject to change without notice.

Patents: [www.codonics.com/ip/patents](http://www.codonics.com/ip/patents).

Copyright © 2016-2019 Codonics, Inc. Printed in the U.S.A. Part No. 901-556-003.03.

17991 Englewood Drive  
 Cleveland, OH 44130 USA  
 (440) 243-1198  
 (440) 243-1334 Fax  
 Email [info@codonics.com](mailto:info@codonics.com)  
[www.codonics.com](http://www.codonics.com)

Codonics Trading Co, Ltd.  
 317 Xianxia Rd. Building B  
 Unit 1412  
 Changning Dist., Shanghai  
 P.R. China, 200051  
 86-21-62787701  
 86-21-62787719 Fax

Codonics Limited KK  
 AQUACITY 9F,  
 4-16-23, Shibaura  
 Minato-ku, Tokyo, 108-0023  
 JAPAN  
 81-3-5730-2297  
 81-3-5730-2295 Fax