

## CD-1 Color Detector installation guide

The CD-1 Color Detector allows you to detect painted animals and sort them according to special settings. The advanced-technology sensor mounts in the ProSort sorter and connects quickly and easily to the auxiliary inputs on *any* new or existing PS-1 Scale Head.

Common uses for the CD-1 include gilt selection and sick pig segregation. For example, you can select and mark gilts for breeding. When one of the specially marked gilts moves through the sorter, the CD-1 detects the painted animal, and the system sorts it according to the color sorting settings. This allows you not only to separate the gilts, but also to confirm that they are the correct weight.

### Selecting a paint

The CD-1 Color Detector is designed to detect **blue paint**. Other colors *will not work properly*.

#### Phason recommends

Phason has tested and recommends **Raidex Spray marker for pigs and cattle**. For information about Raidex spray markers, including locating a dealer, visit the Raidex website.

Phason recommends using aerosol paint, not liquid paints that require mixing.

#### Phason DOES NOT recommend

Phason has tested and does not recommend **Uni Mark aerosol marking spray**.

#### What about other paints?

Other blue paints *might* work, but Phason has not tested them. **Paints that are more purple than blue will not work**. If you have paint you would like to test, follow the testing instructions on page 4.

### Installing the CD-1

Carefully read and follow *all* the instructions in the order they are listed.

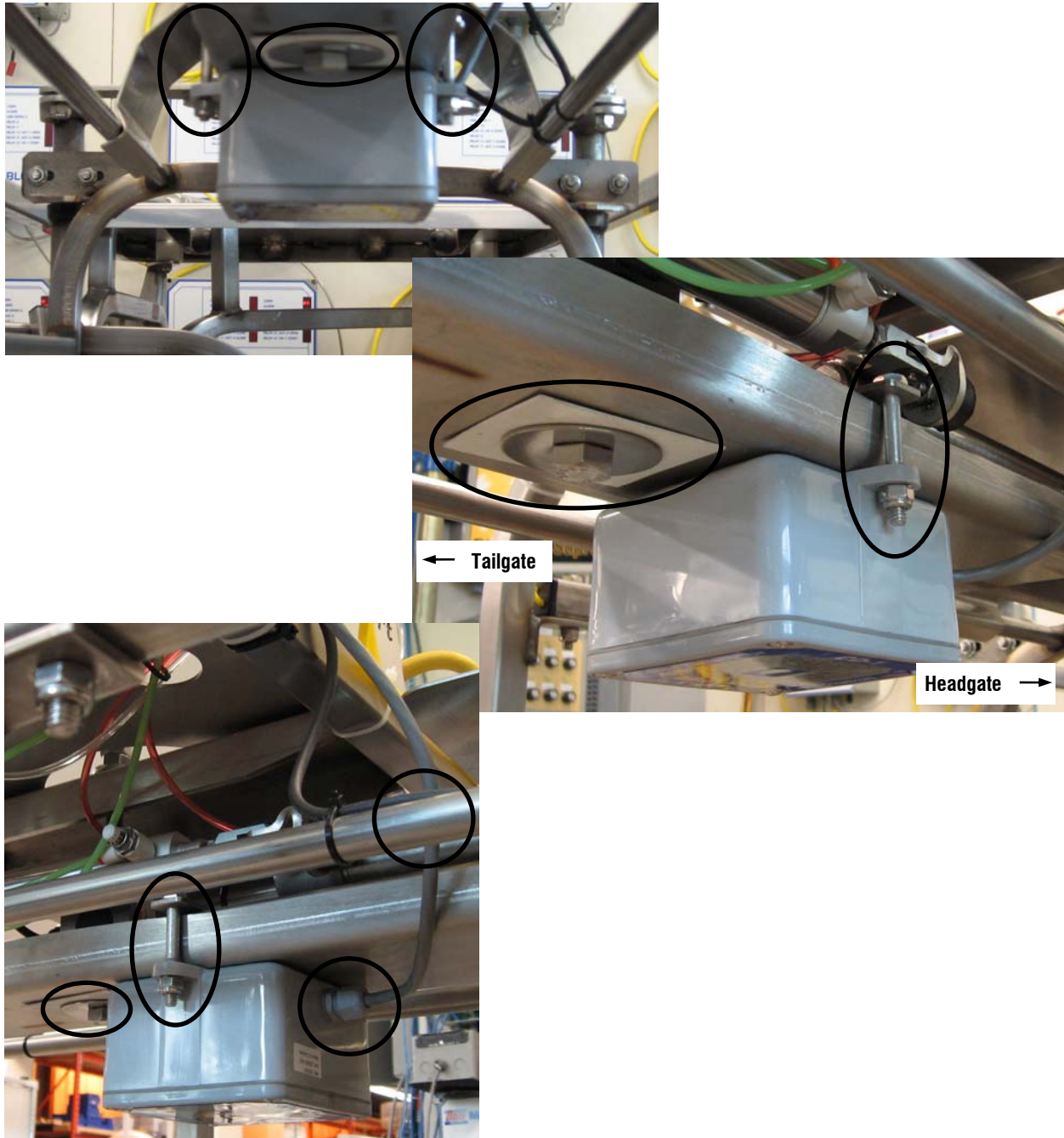


- ◇ After installing the CD-1 *and before leaving the system unattended*, test the equipment. For more information, read **Testing the installation** on page 4.
- ◇ Before installing or servicing the CD-1, switch off the power to the PS-1.

## Mounting the CD-1

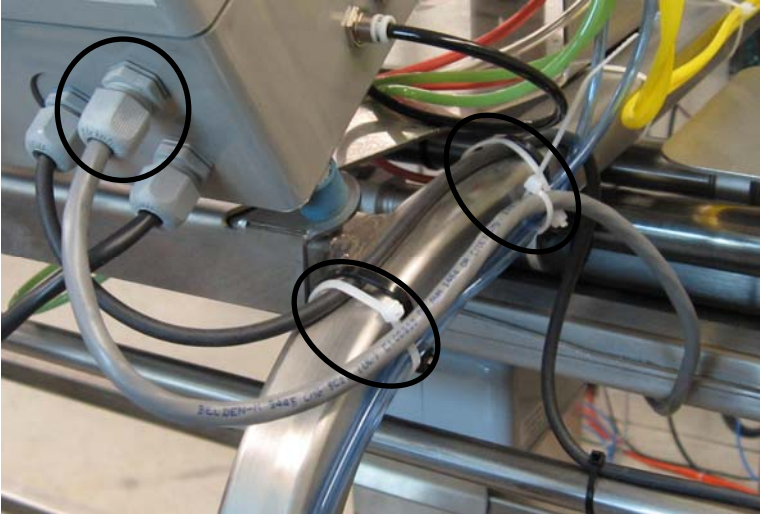
Fasten the CD-1 to the sorter using the mounting bracket, bolts, and nuts.

- ◆ Note location of the CD-1 in relation to the load cell bolt.
- ◆ Note the location of the strain relief and cable as it passes through the cage.

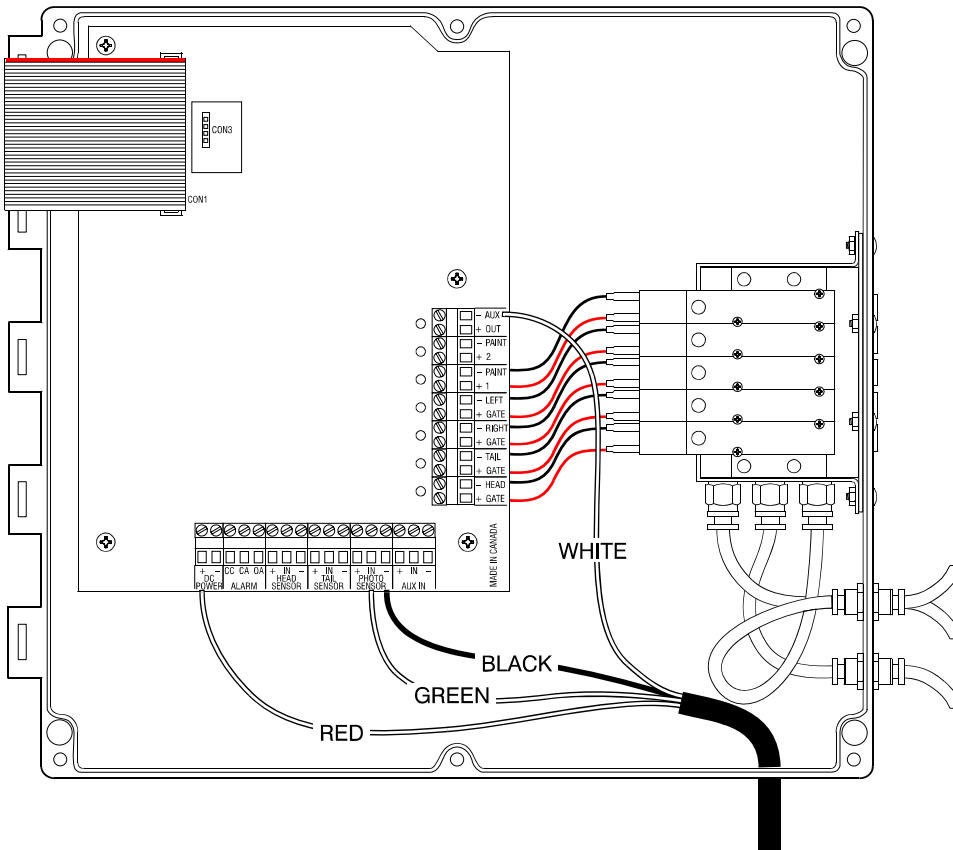


### Connecting the CD-1 to the scale head

1. Insert the cable into the scale head enclosure through a strain relief. Route the cable as shown and hold it in place using cable ties.



2. Connect the wires to the terminal blocks as shown below.



## Testing the installation



**After installing the CD-1 and before leaving the system unattended:**

- ◇ Verify that the CD-1 Color Detector and PS-1 Scale Head function properly.
- ◇ Set up OMNI-Sort and then make sure the system correctly sorts painted animals.



One of the following tests requires a blue sample. Try painting a piece of paper, or similar object, with the paint you will be using on the animals.

1. At the PS-1 Scale Head, scroll to *Advanced Menu* and activate emergency mode.
2. Scroll to *Settings* and then select *Sick Sort*.
3. Change the sick sort options to *Color Only* and *Straight*.
4. Make sure the group 1 direction is not straight so that it does not interfere with the tests.
  - ◆ Scroll to *Group 1* and then change the direction to *Left*.
  - ◆ Scroll to and take note of the weight set points for groups 1 and 2.
5. Exit the *Advanced Menu* and return to the main display.
6. Place a weight on the scale that is between the group 1 and 2 set points.
7. The CD-1 LEDs should come on. Wait five seconds until the LEDs go off. The sorter should sort to the left because it did not detect the color blue. Take the weight off the scale.
8. Place a weight on the scale that is between the group 1 and 2 set points.
9. The CD-1 LEDs should come on. Pass a blue item about one foot in front of the CD-1. The LEDs should go off and the sorter should sort straight because it detected the color blue. Take the weight off the scale.
10. Return the sick sort and group 1 settings to their original values.
11. Scroll to *Advanced Menu* and deactivate emergency mode.



- ◇ If the system passes the tests, go to **OMNI-Sort** and set up your color sorting options.
- ◇ If the system does not pass the tests, read the following **Troubleshooting** section.

## Troubleshooting the installation

- ◆ If the LEDs do not come on, make sure the CD-1 wires are connected exactly the same as shown in the wiring diagram.
- ◆ If the system sorts in the same direction for each test, make sure the Sick Sort direction is not the same as the group 1 (or whichever group corresponds to the weight value you put on the scale during testing) or default directions.

## Maintaining the CD-1

Proper care and maintenance will help your CD-1 last longer. To prevent damage to the unit, perform the following steps after the first two weeks of operation, and once a year after that.



If you need to seal the enclosure, use a sealant that is labelled as 'non-corrosive', 'electronics grade', or 'neutral cure', such as GE Silicone RTV6780B, RTV 142, or RTV 162.

*Do not* use a sealant that is labelled as 'acetic acid cure' or 'acetoxycure'. These sealants release acetic acid while curing, which can damage the unit and will void the warranty.

1. Remove the cover from the unit and then check inside for moisture. If there is any moisture, wipe it away using a dry cloth.
2. Check the cable entry point to make sure it is properly sealed. If it is not properly sealed, apply silicone sealant around the entry point.
3. Check all wires to make sure they are properly connected and in good condition.
4. Fasten the cover to the enclosure.

## Limited warranty

This warranty applies only to the Phason CD-1 Color Detector (CD-1). If you need warranty service, return the product and original proof of purchase to your dealer.

Phason Inc. (Phason) warrants the CD-1 subject to the following terms and conditions.

This warranty is valid only to the original purchaser of the product, for 90 days from the manufacturing date. The manufacturing date is stated in the first eight digits of the serial number in the form year-month-day.

Phason hereby warrants that should the CD-1 fail because of improper workmanship, Phason will repair the unit, effecting all necessary parts replacements without charge for either parts or labor.

### Conditions

- ◆ Installation must be done according to our enclosed installation instructions.
- ◆ The product must not have been previously altered, modified, or repaired by anyone other than Phason.
- ◆ The product must not have been involved in an accident, misused, abused, or operated or installed contrary to the instructions in our user and/or installation manuals. Phason's opinion about these items is final.
- ◆ The person requesting warranty service must be the original purchaser of the unit, and provide proof of purchase upon request.
- ◆ All transportation charges for products submitted for warranty must be paid by the purchaser.

Except to the extent prohibited by applicable law, no other warranties, whether expressed or implied, including warranties of merchantability and fitness for a particular purpose, shall apply to the CD-1. Any implied warranties are excluded.

Phason is not liable for consequential damages caused by the CD-1.

Phason does not assume or authorize any representatives, or other people, to assume any obligations or liabilities, other than those specifically stated in this warranty.

Phason reserves the right to improve or alter the CD-1 without notice.