

C-Collect[®]
by CTB Inc.

C-Collect[®]
by CTB Inc.

Data Courier Installation Instruction Manual

Note: The original, authoritative version of this manual is the [English] version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than [English], and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published [English] version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

Revisions to this Manual

Page No.	Description of Change
	New Manual

Contact your nearby C-Collect[®] distributor or representative for additional parts and information.

CTB Inc.
P.O. Box 2000 • Milford, Indiana 46542-2000 • U.S.A.
Phone (574) 658-4101 • Fax (877) 730-8825
E-Mail: ctb@ctbinc.com • Internet: <http://www.ctbinc.com>



CTB Inc.
P.O. Box 2000 • Milford, Indiana 46542-2000 • U.S.A.
Phone (574) 658-4101 • Fax (877) 730-8825
Email: ctb@ctbinc.com • Internet: <http://www.ctbinc.com>

General

This Page Intentionally Left Blank.....

Support Information

The C-Collect® Data Courier is used to send sample settings and to collect sample data from Chore-Tronics® and Intelligro® Controls for use with the C-Collect® software package. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury. This manual is designed to provide comprehensive planning, installation, safety, operation, and parts listing information. The Table of Contents provides a convenient overview of the information in this manual. The Table of Contents also specifies which pages contain information for the sales personnel, installer, and consumer (end user).

Safety

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately. Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs.

Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Electrical Hazard



Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.

CTB Inc. Warranty

CTB Inc. warrants each new product manufactured by it to be free from defects in material or workmanship for one year from and after the date of initial installation by or for the original purchaser. If such a defect is found by the Manufacturer to exist within the one-year period, the Manufacturer will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void.**
2. Warranty is void if **all components** of the system are not original equipment supplied by the **Manufacturer.**
3. This product must be purchased from and installed by an authorized distributor or certified representative thereof or the Warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under the Warranty.
5. This Warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this Warranty.

The **Manufacturer** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer as a result of any defect in the product. **“Consequential” or “Special Damages”** as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.

THIS WARRANTY CONSTITUTES THE MANUFACTURER’S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

CTB Inc. product Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for CTB Inc. products in addition to those terms expressly stated above. An officer of CTB, Inc. must authorize any exceptions to this Warranty in writing. The Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

Effective 1/07

Level	G	Y	R	Description	Suggested Action
9	X	X	X	No Controls in list successfully serviced	
≡		X		Ready, all settings send ok	No action necessary
≡		X	X	Ready, at least one Control’s settings successfully send	No action necessary
≡	X			Ready, the last state only for setting the display	No action necessary
≡	X		X	Ready, at least one Control successfully collected	No action necessary
H			X	Error on undefined state	Contact CTB

Part Numbers



Figure 12. Supply Voltage

Introduction to Control

The C-Collect Data Courier can send to a Chore-Tronics or Intelligro Control sample settings to be collected by the Control. The sample settings tell the control what data to collect and how often to collect the data. The Data Courier can then gather the data being stored by the Control at a later date.

Part Descriptions



Item	Description
1	LED's
2	Numerical Display
3	Data Port
4	SD Card Slot
5	Selector Switch
6	Connector Cap

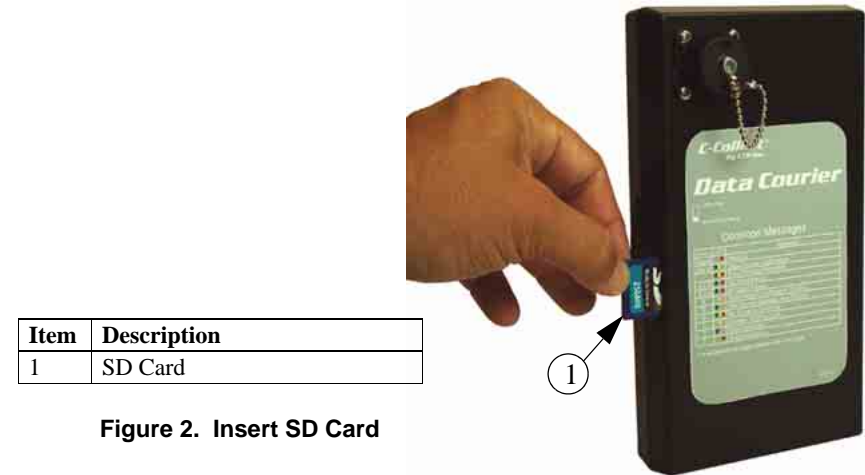
Figure 1. Supply Voltage

Level	G	Y	R	Description	Suggested Action
6		X	X	Fnet or SD-Card failure-	Check Data Courier Cable connection.-Check FNET connection inside control-Check FNET connection inside Data Courier-Make sure SD card is inserted properly into the data courier.-Make sure SD card write protection switch is in the unlocked position-Try a different SD card
6		X		Send settings from the local memory buffer to the control	No action necessary
6		X	X	Sending settings from Data Courier to control failed	Re-try
7	X			Write the data from the previous step to SD-Card	No action necessary
7	X		X	SD-Card write failure-	Make sure SD card is inserted properly into the data courier.-Make sure SD card write protection switch is in the unlocked position-Try a different SD card
8	X			Write report for this control to SD-Card	No action necessary
8	X		X	SD-Card write failure-	Make sure SD card is inserted properly into the data courier.-Make sure SD card write protection switch is in the unlocked position-Try a different SD card
8	X			Write report for this control to SD-Card	No action necessary
8		X	X	SD-Card write failure	Make sure SD card is inserted properly into the data courier.-Make sure SD card write protection switch is in the unlocked position-Try a different SD card
9	X			Checks if more controls need to be serviced	No action necessary
9	X		X	No control(s) in list successful serviced	
9		X		Checks if more controls need to be serviced	No action necessary
9		X	X	No control(s) in list successfully serviced	

Level	G	Y	R	Description	Suggested Action
2	X			Determine site name from settings file out of Control	No action necessary
2	X		X	Could not get site name (timeout)	Disconnect Data Courier from Control and re-try.
2		X		Check if file for current control in the list can be opened	No action necessary
2		X	X	Opening settings file failed	Make sure SD card is inserted properly into the data courier.- Try a different SD card
3	X			Check if the SD-Card is fit to dump data and settings on	No action necessary
3	X		X	SD-Card failure	Make sure SD card is inserted properly into the data courier.- Try a different SD card
3		X		Check if the length of the file is as expected	No action necessary
3		X	X	Settings file is incorrect or corrupted	Re-save the settings file from C-Collect Farm Connection program and re-try to load settings.
4	X			Create path on SD-Card to store data and settings	No action necessary
4	X		X	Write failure on SD-Card (timeout)	Make sure SD card is inserted properly into the data courier.- Make sure SD card write protection switch is in the unlocked position-Try a different SD card
5	X				
5	X		X	Write failure on SD-Card (timeout)	Make sure SD card is inserted properly into the data courier.- Make sure SD card write protection switch is in the unlocked position-Try a different SD card
5		X		Copy settings from SD-Card to local memory buffer	No action necessary
5		X	X	Settings file copy or close failed	-Disconnect Data Courier Cable and try again.
6	X			Get the sample data from the control	No action necessary
6	X			Get the sample data from the control	No action necessary

Sending Sample Settings to Control

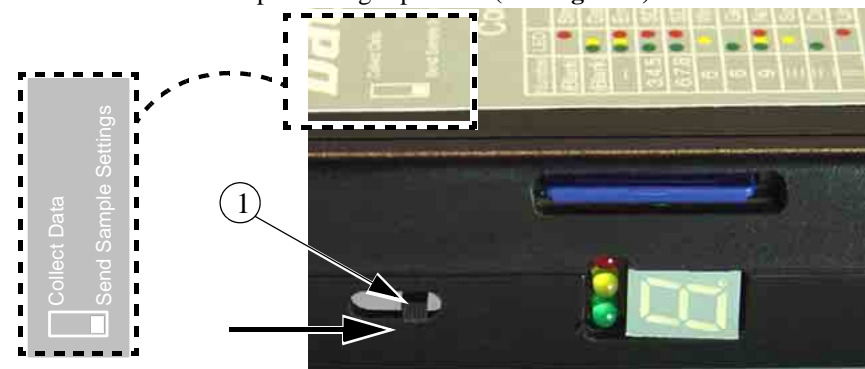
Insert the SD Card (**Item 1, Figure 2**) with the sample settings for the control into the SD Card slot on the Data Courier. **Note:** For information on how to save sample settings to an SD card, please see the C-Collect Farm Connection Manual. Be sure that that the control settings on the SD card match the control to be uploaded.



Item	Description
1	SD Card

Figure 2. Insert SD Card

Place the Selector Switch (**Item 1, Figure 3**) that is located on the side of the Data Courier to the “Send Sample Settings” position (See **Figure 3**).

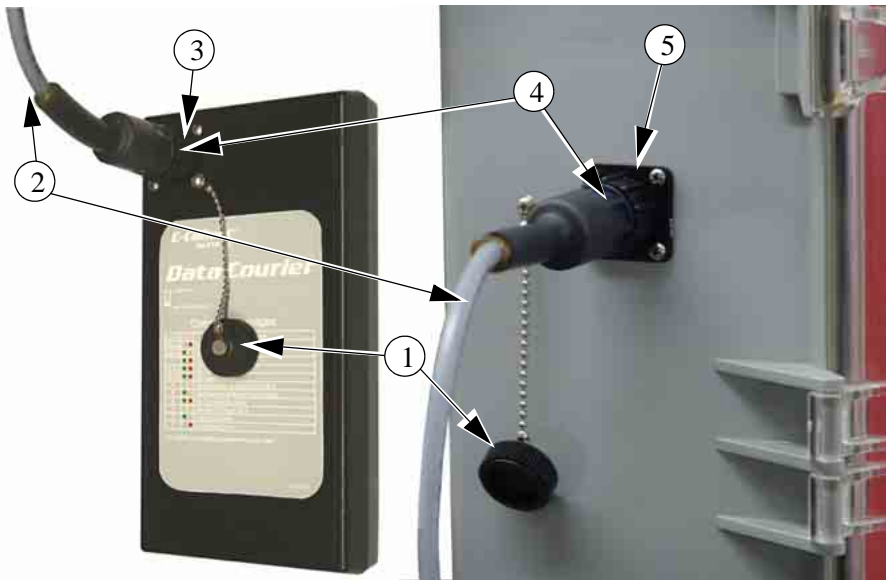


Item	Description
1	Selector Switch

Figure 3. Insert SD Card

Unscrew and remove the Connector Caps (**Item 1, Figure 4**) and connect one end of the Data Courier Cable (**Item 2**) to the Connector Plug on the Data Courier (**Item 3**). Make sure the Data Courier Cable is seated properly and the Locking Nut (**Item 4**) is tight. Turn the Power on to the Control and plug the free end of the Data Courier Cable into the Plug on the Data Courier (**Item 5**). Make sure the cable is seated properly and that the Locking Nut is tight.

Note: Data Courier Plug can be located on the side, bottom, or front of the Control. If the Control does not have a Data Courier Plug, please see the Data Courier Plug Kit installation manual for instructions on installing the Data Courier Plug



Item	Description
1	Connector Cap
2	Data Courier Cable
3	Connector Plug (Data Courier)
4	Locking Nut
5	Connector Plug (Control)

Figure 4. Plugging in the Data Courier Cable

Data Courier Messages

The following is list of possible messages that could be displayed by the data courier. If the message displayed is an error message, consult the Suggested Action column for a possible solution. If the error is not corrected please contact CTB.

Level	G	Y	R	Description	Suggested Action
Blank	X	X		Sets the initial led and display status, clear data, init sd card and log file and try to read *.cfg files	No action necessary
Blank	X	X	X	SD Card could not be initialized	Make sure SD card is inserted properly.-Try a different SD card
-	X	X		Performs a FNet (NBP) lookup searching for controls	No action necessary
-	X	X	X	FNet lookup error looking for controls or timeout of lookup	Check Data Courier Cable connection.-Check FNET connection inside control-Check FNET connection inside Data Courier
L	X	X		Checks if controls found, support collect	No action necessary
L	X	X	X	Control(s) do not support collect	Update control programming to a level that will support C-Collect
C	X	X	X	Notify control of collection process	No action necessary
C	X	X	X	No settings list available in control	Make sure an SD card is inserted in the Data Courier that has the settings file stored on it.-Try another SD card
0	X	X		Get the settings list from a control	No action necessary
0	X	X	X	FNet communication error (timeout)	Check Data Courier Cable connection.-Check FNET connection inside control-Check FNET connection inside Data Courier
1	X			Starts the data collect process	No action necessary
1	X		X	Error starting data collect process	Make sure SD card is properly inserted into Data Courier-Try a different SD card
1		X		Starts the settings process	No action necessary
1		X	X	Error starting setting process	Make sure SD Card is properly inserted into Data Courier. Try a different SD Card.

Watch the LED and numerical display of the Data Courier. The Data Courier will only show the RED LED during the initial start up. (See **Figure 10**).

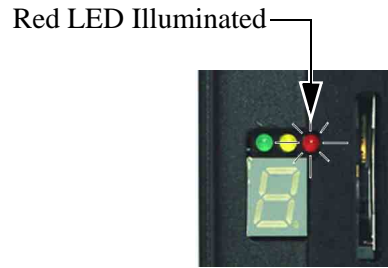


Figure 10. Collect Data Initial Start Up

The Data Courier will then show several messages very quickly indicating the status of the downloading process. The process has been completed successfully when the display shows three horizontal lines and the GREEN LED is lit. (See **Figure 11**). When this message appears, the Data Courier has collected the data successfully and the Data Courier Cable can be disconnected from the Control.

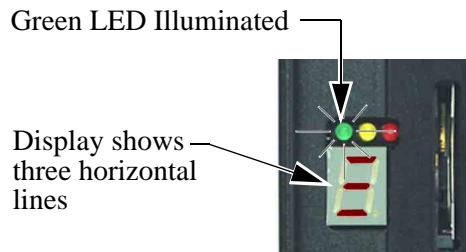


Figure 11. Collect Data Process Complete

If a different message appears in the display, consult either the Data Courier Messages Table on pages 11-14 of this manual or the separate laminated sheet included with the Data Courier to see what the problem is and what action needs to be taken to correct the problem. Disconnect the Data Courier Cable, correct the problem and repeat the previous steps until the sample settings have been sent successfully.

Once the Data has been successfully downloaded from the Control, the Data Courier Cable can be disconnected.

Repeat the previous steps until data has been collected from all Controls. It is not necessary to change SD cards unless the SD card is full.

During the initial start up, watch the LED's and numerical display of the Data Courier (See **Figure 5**). Only the RED LED will illuminate (**Figure 5**).

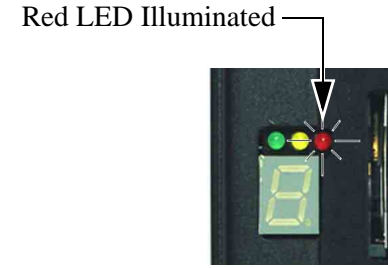


Figure 5. Initial Start Up

The Data Courier will then show several messages very quickly indicating the status of the uploading process. The process has been completed successfully when the display shows three horizontal lines and the YELLOW LED is lit (See **Figure 6**). When this message appears, the Data Courier has sent the settings successfully and the Data Courier Cable can be disconnected from the Control.

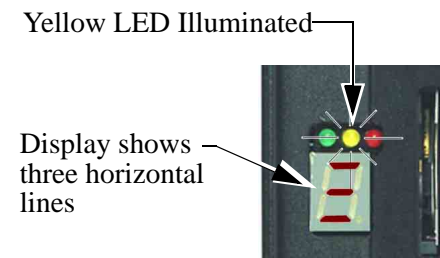


Figure 6. Initial Startup Complete

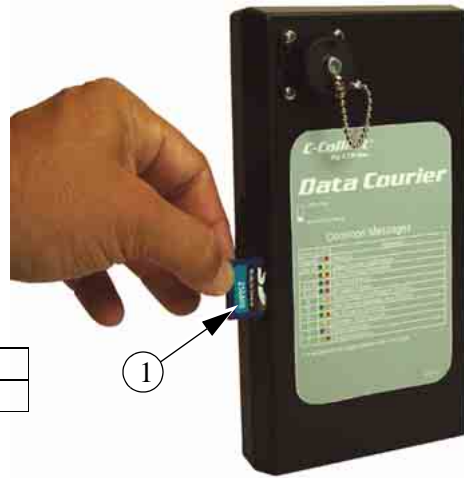
If a different message appears in the display, consult either the Data Courier Messages Table on pages 11-14 of this manual or the separate laminated sheet included with the Data Courier to see what the problem is and what action needs to be taken to correct the problem. Disconnect the Data Courier Cable, correct the problem and repeat the previous steps until the sample settings have been sent successfully.

Once the Sample Settings have been successfully sent to the Control, the Data Courier Cable can be disconnected.

Repeat steps above for all Controls that need to store data.

Collecting Sample Data from Control

Insert a blank SD card (Item 1, Figure 7) into the SD Card slot.



Item	Description
1	SD Card

Figure 7. Insert SD Card

Move the selector Switch (Item 1, Figure 8) to the “Collect Data” setting. .

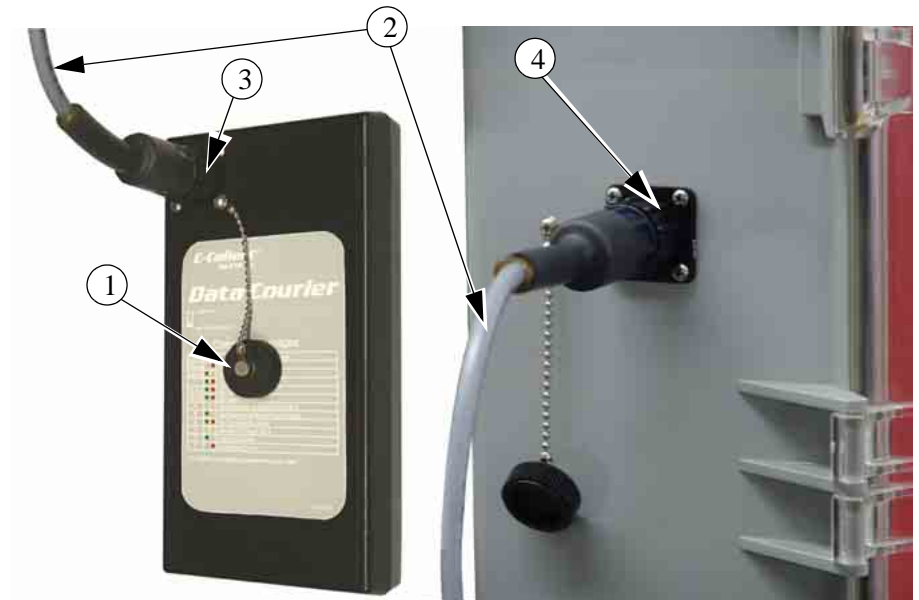


Item	Description
1	Selector Switch

Figure 8. Move Selector Switch to “Collect Data”

Unscrew and remove the Connector Caps (Item 1, Figure 4) and connect one end of the Data Courier Cable (Item 2) Connector Plug on the Data Courier (Item 3). Make sure the Data Courier Cable is seated properly and the Locking Nut (Item 4) is tight. Turn the Power on to the Control and plug the free end of the Data Courier Cable into the Connector Plug on the Control (Item 5). Make sure the cable is seated properly and that the Locking Nut is tight.

Note: Data Courier Plug can be located on the side, bottom, or front of the Control. If the Control does not have a Data Courier Plug, please see the Data Courier Plug Kit installation manual for instructions on installing the Data Courier Plug



Item	Description
1	Connector Cap
2	Data Courier Cable
3	Connector Plug (Data Courier)
4	Locking Nut
5	Connector Plug (Control)

Figure 9. Plugging in the Data Courier Cable