

CORBY

Data Chip



CORBY DATA CHIP SYSTEM Access Control Entry Device

FEATURES:

- ▶ 10-14 VDC Operation
- ▶ Weatherproof Reader
- ▶ Up to 17 Different Users
- ▶ Can Interface with a Printer
- ▶ Heavy-Duty 5 amp Relay
- ▶ Momentary or Latching Relay
- ▶ Stainless Steel Reader
- ▶ Unlimited Users Mode
- ▶ Request-To-Exit Input

THE BASICS

OVERVIEW

This Access Control System supports one to 17 users and each user can be added or deleted in seconds. In the Unlimited Users Mode the system can support thousands of users. The built-in relay can switch power to an electric Door Lock, arm or disarm Alarm Systems, shunt Alarm Devices, or operate a Garage Door. Because of its rugged stainless steel construction, it is ideally suited for aircraft, marine, and automotive security systems. A built-in Voltage Driver can operate an LED and a buzzer. The special Printer Output can send System activity data to an optional Keypad Control Center.

Corby's Stand-alone Data Chip Access Control system consists of a stainless steel reader and an on-board microprocessor based circuit board with non-volatile memory. The microprocessor controls the advanced features of this product and all programming options. The reader has an LED driver circuit for visual/audible feedback and a Request-To-Exit input.

The slim-line readers are compact enough to fit on a narrow aluminum door frame. Their low profiles easily blend with existing architecture. Corby stocks a number of reader mounting plate styles to suit your application. Single gang and slim-line mullion versions are available with either one or two LEDs. The reader is also available without a plate.

FUNCTION & USE

Data Chips contain an internal electronic memory chip which is bonded inside the stainless steel canister. When both the top and side of the chip canister make contact with the reader, the Data Chip is powered and a communication path is established. The chip's information is then read and transmitted to the Stand-alone Access Control System, triggering the 5amp relay. The relay can be programmed for either momentary (1 second to 65,535 seconds) or latching (on/off).

Adhesive backing allows the Data Chip to be easily attached to any smooth surface including keychains and existing photo ID cards or badges.

VERY INEXPENSIVE READER

Because the reader contains no electronics, the traditional high-cost reader is a thing of the past. Data Chip readers are maintenance free and can be used anywhere, regardless of the environment. Its compact design allows it to be concealed easily. Since the reader is simply two pieces of cup-shaped stainless steel, there is nothing to wear out.

Model 4320



Data Chip attached to a keychain



UNMATCHED SECURITY

Corby Data Chips contain sophisticated electronics to store a personal identification number in a coin shaped, sealed, stainless steel canister. This superior design allows the Data Chip to be easily attached to any smooth surface including existing photo ID cards, badges, or keychains. Innovative packaging protects the electronic circuits inside the canister from dirt, moisture, corrosion and static discharge.

Touching a Data Chip to the reader instantly transfers a 46 bit data stream of digital data which allows the user access to a secure area. Unlike keys or other security cards, the Data Chip is user-forgiving... it doesn't need to be precisely aligned to transfer its digital data.

Model 4321

EXCELLENT NOISE IMMUNITY

The Data Chip is well suited for electrically noisy environments which would be unacceptable for other card technologies. The Data Chip is continuously read while in contact with the reader until a complete read occurs. A momentary touching of the Data Chip to the reader will produce hundreds of reads which are verified 50 times a second. Normally, only one good read is required. Other card technologies may require the card to be swiped/presented multiple times to achieve the same result.

TYPICAL APPLICATIONS

The Data Chip system can be used to control various types of electronic devices. The most common uses are arming,

disarming, and shunting Security Systems, activating electrically operated Doors and Gates, and controlling Industrial Process Machinery.

Some of the more popular uses for this reader are in the following locations:



- Computer Rooms
- Office Buildings
- Business Offices
- Household Garage Doors
- Restaurant Liquor Storage Areas
- Laboratory & Pharmacy Facilities
- Apartment & Condominium Entrances
- Manufacturing Facilities
- Mini-Storage Facilities
- Police Evidence Rooms
- Employee Entrances
- Parking Gates
- Residences

USER PROGRAMMABLE

Programming the Stand-alone Data Chip system is fast and easy, even for the first-time user. All programming options are selected using a single Data Chip and the reader. On initial power-up the ammer selects a chip to designate as the "Master". The Master is needed to program any additional features of the system thus preventing unauthorized programming. While programming, it is easy to select the desired options which suit your application from the following list:

- Setting The Relay Time
- Add The First User
- Add Additional Users
- Erase One User
- Erase All Users
- Erase Everything
- Unlimited Users

Model 4340

PROGRAMMABLE RELAY

The built-in Relay can be programmed to either activate for a programmed momentary time or latching (on/off). The Relay has isolated (dry) relay contacts. It is a "C" form, SPDT type.

MOMENTARY DESCRIPTION: The Relay and/or the door will activate for a pre-selected time period (in seconds)



whenever a valid Chip is touched to the Reader.

You may program this System with any momentary time period ranging from one (1) second minimum to a maximum of 65,535 seconds. The accuracy of the actual time period averages about $\pm 10\%$ of the programmed time.

LATCHING DESCRIPTION: The Relay (or the door or device) will alternate between open & closed. When a valid Chip is touched to the Reader, the door will unlock. The next time a valid Chip is touched, the door will lock. This constant pattern of open/close/open/close will continue and repeat itself.



Model 4342



doors, the unit can be programmed to accept all Data Chips.

This feature allows hundreds or thousands of Data Chip holders quick access to the device or area and these users do not have to be individually programmed into the unit. The mere fact that they have a Data Chip in their possession allows them quick access.

In this unlimited mode, the unit will accept ANY 4320/4321 Data Chip ever manufactured or distributed by any vendor.

VISUAL FEEDBACK

Never again will you wonder if your access card was presented to the reader correctly. With Data Chips you will know instantly. Light Emitting Diodes (LEDs) are supplied with all Corby Data Chip Readers to provide the user with visual feedback of system operation. These LEDs are "Super-Brite" and give a 180° viewing angle. All LEDs have a built-in resistor and are supplied with 6" flying leads. These LEDs can be connected by the installer to give the users visual feedback to whether or not the chip was presented to the reader correctly.

You can attach Data Chips to existing photo ID cards or tags with a super 3M adhesive tab

Model 4343



Model 4341

UNLIMITED USERS

For special low security applications such as Elevator Control or general passage

With the addition of a Keypad Control Center (KCC), Corby Model #6099, you can turn Corby Data Chip Readers into a multi-faceted and very sophisticated Digital Access Control System. The KCC will support up to 15 Data Chip Readers.

Its low cost design allows connection to almost any kind of serial or parallel printer. All user information can be programmed with a low cost Keypad, a Video Display Terminal, or any Personal Computer that has a Terminal Software Package installed.

HOW THE KCC WORKS

After touching a valid Chip, the KCC will print: Reader Used, Time and Date, CODE OK or CODE ER, User Name or the User Code. If an unprogrammed Data Chip is touched to the reader the KCC will print: CODE ER.

Here's a sample printout using a five (5) digit length:

```
02 11:20 05/26 CODE OK 012345
04 11:44 05/26 CODE OK 013579
16 12:07 05/26 CODE OK 024680
07 13:23 05/26 CODE ER 012346
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or... if using names

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05 14:12 05/26 CODE OK TIM SMITH
11 15:32 05/26 CODE OK R. JACKSON
13 17:40 05/26 CODE OK TOM RYAN
08 18:00 05/26 CODE ER TIM SMITH
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AUDIBLE FEEDBACK

A miniature 12VDC electronic buzzer can be wired in parallel with the LED to produce an audible feedback which can assist you while programming the unit. It is also useful for normal Data Chip operation.



PRINTED REPORTS

ARCHITECTURAL SPECIFICATIONS

The Data Chip shall be housed in a type 305 stainless steel container measuring 0.64 inches in diameter and 0.12 inches in height.

The Data Chip Reader Head shall be plate mounted and constructed of type 305 stainless steel. The reader shall be 0.83 inches in diameter and 0.40 inches in height. The reader shall contain no active

electronics and shall interface to the access control system via up to 500 feet of cable.

The Single Gang plate shall mount to a standard electrical box and be of the dimensions 4.50 inches high, 2.75 inches wide, 0.60 inches overall depth. The plate shall be of aluminum with a protective clear coat. The Single Gang plate shall be available with either one red or one red and one green indicator Light Emitting Diode (LED). The LED(s) shall be rated for 12 volts with built-in current limiting resistors and flying leads.

The Slim-Line plate shall be 3.125 inches high, 1.375 inches wide and 0.60 inches overall depth. The plate shall be of aluminum with a protective clear coat. The Slim-Line plate shall be available with either one red or one red and one green indicator Light Emitting Diode (LED). The LED(s) shall be rated for 12 volts with built-in current limiting resistors and flying leads.

SPECIFICATIONS

Input Voltage: Constant 10-14 VDC Only
Power Required: 20mA idle, 120mA max
Relay: Miniature Form C, Dry Contacts

rated at 5 Amps and 30VDC.
LED Driver: Open collector, NPN transistor switches negative () upon activation. Can sink up to 50mA maximum.
CPI Output: NPN transistor, pulse train. Software format is available.
Memory: EEPROM
Operating Temp: -18°C to 55°C (0°F to 131°F)
Dimensions in inches: (H X W X D)
Mullion plate: 3.125" X 1.375" X 1.00"
Single gang plate: 4.5" X 2.75" X 1.00"
Circuit board: 2.5" X 1.6" X 1.25"
Data Chip: .642" Diameter
.126" Depth
Data Chip Reader: .83" Diameter
.40" Surface Depth
.88" Overall Depth
Circuit Board to Reader distance: 150 ft. maximum

These specifications and product features are subject to change without notice or obligation. Before purchasing or specifying this equipment, be sure to call Corby Customer Service to verify the current status of intended products, software, or firmware features to ensure the product(s) will meet or exceed your requirements.

CUSTOMER SERVICE AT ITS BEST

Call us on our 16 toll-free lines and let our team of dedicated and experienced personnel help you design and layout your next Access Control application. We'll specify the system that is perfect for your needs. For the very best in Access Control, it's Corby. No other name in the security industry represents this total commitment to product and service. You can turn to us with confidence knowing you will receive the high quality and customer satisfaction you've come to expect from Corby. Remember, If it's Corby ...It's the Best!

CORBY.. A FULL SUPPORT COMPANY

Corby stocks most equipment needed to complete your access control installation including magnetic door holders, door strikes, power supplies, wire, plenum cable, Request-To-Exit buttons, and installation kits.



**If It's Corby...
It's the
Best!**