Counterpoint iD

Quick Start Guide

Reference During Installation

CKP P/N 10073883

CPiD - Quick Start Guide

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For use with Checkpoint's Counterpoint Intelligent Deactivation System.

Document Revision Information

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Rev	Description	Date	Authors
00	CR2642B	March 21, 2014	G. Plizak, B. Langer, R. Decker

Installation Requirements

What's In The Box

1 CPiD Chassis

1 Power Supply Unit (PSU)

Install kit including:

2 #8 hex head screws (5/8 inch long)

2 tie wraps

1 6-Pin connector

Tools Required

1 small flathead screwdriver

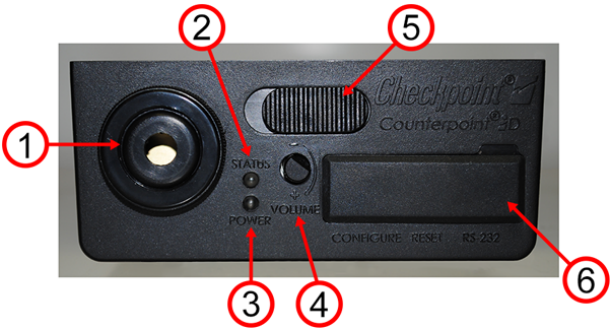
1 1/4 inch nut driver

Optional

DMS Version 1.8.95 or later (required for setup of advanced features)

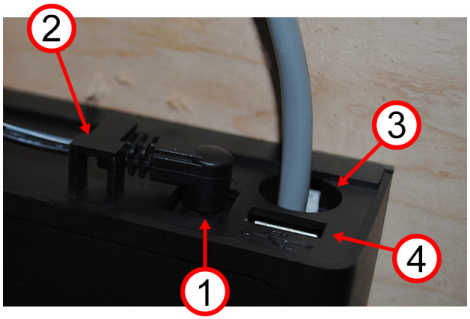
Operation/Features

Front



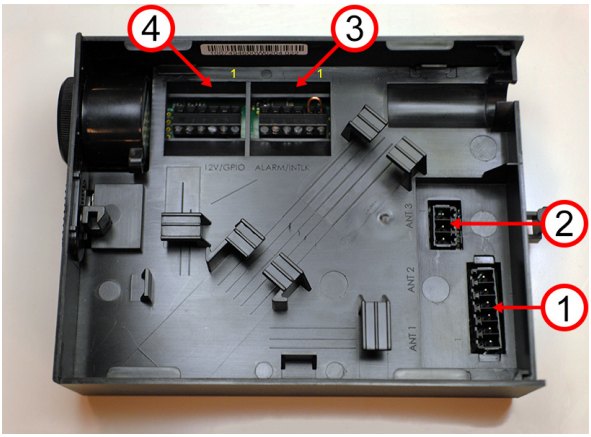
1	Sounder	Sounder for alarm annunciation
2	Status LED	Informs the User about device status. LED Functions are defined in the label underneath the top plate.
3	Power LED (Green only)	Indicates power
4	Volume Knob	Adjusts sounder volume
5	Latch	Allows user to remove unit for installing external connections (e.g., cable for Antenna Pad, key switch or lock/trigger)
6	Rubber Boot	Conceals DIP Switches, Reset Button and DMS Connection port

Rear



1	Input Power Connector	Connector for +12V DC input power
2	DC Jack Strain Relief	Strain relief for power cord
3	Internal Cabling exit	Opening for all cables that connect internally (e.g., Antenna Cable)
4	USB Connector	Connector for future USB functionality

Inside



This is what you find, pre-install with chassis cover (plate) removed.

1	Antenna 1 and 2	Primary RF Connection for 2 antennas max. (parallel)		
		Pin-out	1	ANT2+
			2	GND
			3	ANT2-
			4	ANT1+
			5	GND
			6	ANT1-
2	Antenna 3	Secondary RF Connection for another supported antenna		
		Pin-out	1	ANT3+
			2	GND
			3	ANT3-

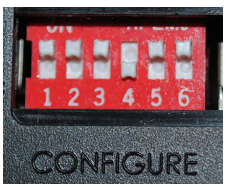
3	Alarm and Interlock	Connection for Interlock and Alarm		
		Interlock Description / Pin-out		
		Interlocks are external devices that relay control signals to the device	1	Interlock Input. Default is shorted to Pin 2 using wire jumper
			2	GND
			3	Interlock Opto, polarity independent (jumper must be removed prior to use).
			4	Interlock Opto, polarity independent (jumper must be removed prior to use)
		Alarm Description / Pin-out		
		The alarm output supports generic sounder devices and external LEDs	5	+12V
			6	Alarm -
4	+12V Auxiliary Output and GPIO	Connection for GPIO and +12V output		
		GPIO Description / Pin-out		
		General Purpose Input Output	1	GPO RLY, 1A max resistive load
			2	GPO RLY, 1A max resistive load
			3	GPI+, 3.3V through 10k Ohm
			4	GND
		+12V Description / Pin-out		
		This set of terminal pins is used to connect devices that require 12V	5	+12V, 100mA max
			6	GND

DIP Switch Functions

Selection	Switch 1
High Power	OFF
Low Power	ON

Selection	Switch 2	Switch 3
Mode 5	OFF	OFF
Mode 6	ON	ON
Mode 4	OFF	ON
Verification	ON	OFF

Selection	Switch 4	Switch 5	Switch 6
Min Gain	OFF	OFF	OFF
Gain 2	OFF	OFF	ON
Gain 3	OFF	ON	OFF
Gain 4	OFF	ON	ON
Gain 5	ON	OFF	OFF
Gain 6	ON	OFF	ON
Gain 7	ON	ON	OFF
Max Gain	ON	ON	ON



Status LED Functions

Status LED Function	Red	Yellow	Blue	Teal	White	Violet	Green
Detection (Tag Alarm)	X						
Waiting for Interlock		X					
Keyswitch disabled		X					
AutoTune		Blink					
Auto Tune Window						0.5s after reset is pressed	
Auto Tune Error				X			
Antenna Overvoltage	Blink						
Mistuned	Blink		Blink				
Verification Mode			X				
Mode 4							X*
Mode 5					X*		
Mode 6						X*	
Factory Default Settings			Blink at power up				

*Future Release

Reset Button

This button resets the unit and auto-tunes the antenna under certain conditions. See Tuning on page 7.

Access to DIP Switches and Reset Button

DMS Setup

Some features of CPiD are able to adjusted / applied without DMS, others are not. For example, DMS is required to enable the secondary transmitter.

(Click here for FSWP link. Download DMS Version 1.8.95 or later.)

GPIO

The default system configuration has the following GPIO functions:

- GPO – Primary Alarm Relay
- GPI – Disabled

Any other functionality needs require DMS.

Mounting

A secure location, such as behind an access door below the register, is ideal for mounting. Plan routing and location so the unit will not be struck by anything. When possible, locate unit such that user has ability to interface with device.

Consult the SOW when provided. Customer may prefer / request no access. Volume can only be muted in DMS. Choose 1 of the following orientations:

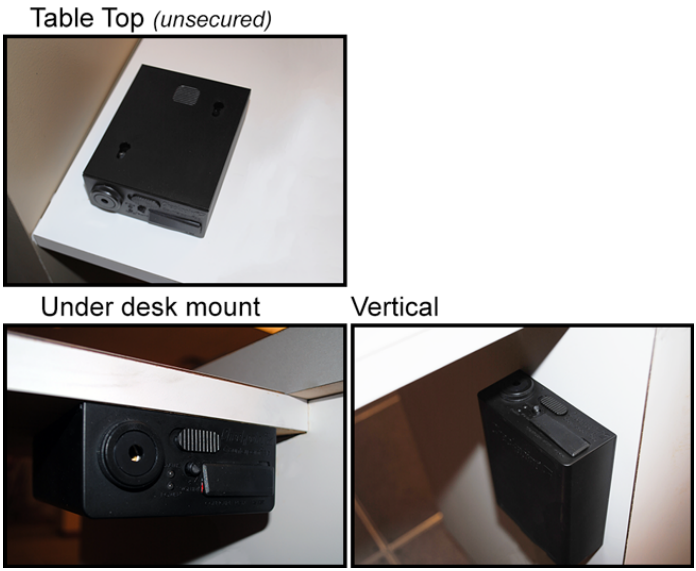
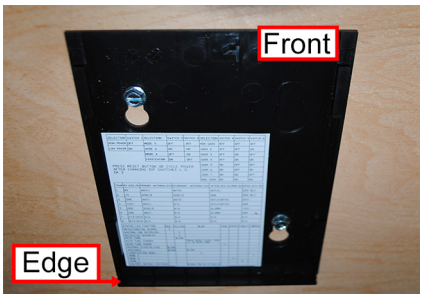


Figure 1: Typical Orientations

Top plate has front and rear. Install with edge in rear (away from user). User can remove entire chassis to change configuration or adjust power.

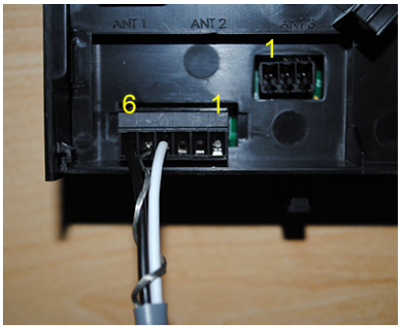
If mounting permanently, install 2 hex head screws using top plate as a template for the 2 screw locations.



- Do not install chassis with front against a surface that can block access or prevent assembly.
- Always release the front latch to remove the chassis or top plate.
- View front labels to ensure unit will achieve correct orientation. An easy visual cue is with the Sounder on the left.

Wiring Procedure

1. Connect antenna cable(s) according to Table on page 2. Plug into ANT1 ANT2 connector, then route cable(s) through the clips for strain relief. Dog-bone excess antenna cable with provided tie wrap.



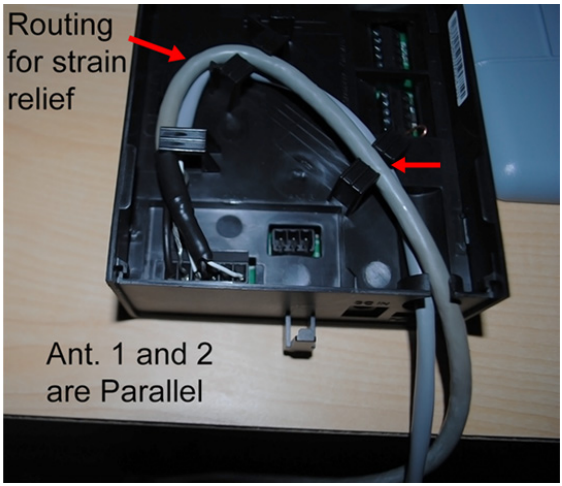


Figure 2: Antenna Wiring, Primary Connection (Cable Routing on right)

2. If there are peripherals such as a Key Switch or an external scanner Interlock to connect, use the following table for the wiring pin-out:

Pin #	Interlock/Alarm (J6)	GPIO/12V (J5)
1	INTLK+	GPO RLY
2	GND	GPO RLY
3	INTLK (OPTO)	GPI+
4	INTLK (OPTO)	GND
5	ALARM+	+12V
6	ALARM-	GND

3. Connect AC cord to PSU. Connect PSU to chassis rear DC Input and slide jack behind the strain relief as shown in Figure 4 below. Route cabling to avoid snags. If necessary, use tie wrap to bundle excess.

Figure 3: PSU and Regional AC Cord

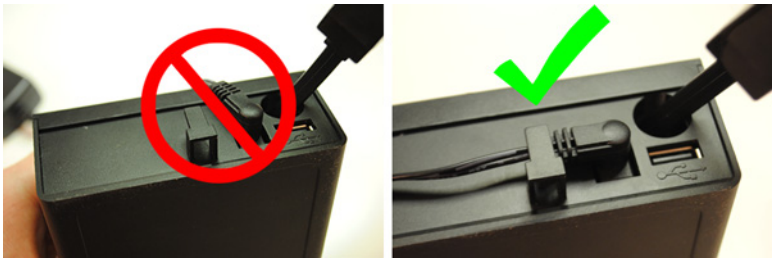


Figure 4: PSU DC Cord Strain Relief

4. Configure the DIP Switches on the front panel for the desired operation.

Note: For details on "Mode Configurations", see DIP Switch Functions on page 3 above.

5. System is ready to power ON. With no advanced features required, the final step is to press Reset button, wait for the Violet LED, then press reset again to tune.

6. **Optional:** Connect field service laptop to front RS-232 port via patch cable, then perform any FW upgrades or advanced tuning with DMS. See Help File for more.

Tuning

CPiD needs to be tuned upon installation or it will not function.

Using DMS SW features (see below), advanced antenna tuning may help achieve desired detection, but keep in mind:

- Avoid interactions when located near EAS pedestal/antennas.
- Tune system for immunity/ False Alarms for the detector.

See Also

DMS version 1.8.95 and later will feature a help file to cover all SW-based configurations and settings for using CPiD. To access the instructions, click Help (or press F1) > Help Files > Counterpoint ID.

Important Information to our Users in North America

FCC Regulatory Compliance Statement

Checkpoint Systems, Inc., offers Electronic Article Surveillance (EAS) or Radio Frequency Identification Products that have been FCC certified or verified to 47 CFR Part 15 Subparts B/C. Appropriately, one of the following labels will apply to the approval:

NOTE: This equipment has been tested and found compliant within the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at own expense.

- OR -

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) including this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation, which may include intermittent decreases in detection and/or intermittent increases in alarm activity.

Industry Canada Regulatory Compliance Statement

This device complies with the Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter (IC: 3356B-CPID) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna Type	Antenna Structure	Antenna Size
Counterpoint pad	1 turn loop	12” x 12”
Royston antenna	1 turn loop	13” x 6”
NCR 7876	2 turn loop	8.5” x 6.5”
NCR 7878	1 turn loop	6” x 6”

Antenna Type	Antenna Structure	Antenna Size
Conveyor Deactivation Pad	1 turn loop	9.8” x 9.8”
Handheld deactivator	1 turn loop	10” x 8”
Hand scan antenna	1 turn loop	6.8” x 1.5”
Sheet deactivator	1 turn loop	9.4” x 9.4”
Magellan 8400/9800	1 turn loop	8” x 8”
Metrologic MS2420	1 turn loop	8” x 8”
Motorola MP6000	1 turn loop	8” x 8”

Equipment Compliance Statement

Checkpoint’s Electronic Article Surveillance (EAS) products have been designed for safeness during normal use and, where applicable have been certified, listed, or recognized in accordance with one or more of the following safety standards; UL 60950-1, CSA C22.2 No. 60950-1-07. Additional approvals may be pending.

WARNING: Changes or modifications to Checkpoint’s EAS or Radio Frequency Identification (RFID) equipment not expressly approved by the party responsible for assuring compliance could void the user’s authority to operate the equipment in a safe or otherwise regulatory compliant manner.

Important Information to our Users in Europe

CE Regulatory Compliance Statement

Where applicable, Checkpoint Systems, Inc. offers certain Electronic Article Surveillance (EAS) products that have CE Declarations of Conformity according to R&TTE Directive 99/5/EC, EMC Directive 2004/108/EC, and Low Voltage Directive 2006/95/EC.

System Electromagnetic Compatibility (EMC) has been tested and notified through Spectrum Management Authorities if necessary, using accredited laboratories, whereby, conformity is declared by voluntarily accepted European Telecommunications Standards Institute (ETSI) standards EN 301489-3 and EN 302208 and/or EN 300330, as applicable.

> NOTE: Certain Electronic Article Surveillance (EAS) equipment have been tested and found to conform to the CE emission and immunity requirement in Europe. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Under unusual circumstances, interference from external sources may degrade the system performance, which may include intermittent decreases in detection and/or intermittent increases in alarm activity. However, there is no guarantee that interference will not occur in a particular installation. If this equipment experiences frequent interference from external sources or does cause harmful interference to radio communications reception, which can be determined by turning the equipment off and on, please contact a Checkpoint Systems representative for further assistance.

RoHS Compliance Statement

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment." A RoHS compliant product means that electrical and electronic equipment cannot contain more than maximum permitted levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE). Checkpoint is in compliance with the RoHS directive.

WEEE Compliance Statement

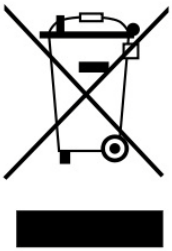
The Waste Electrical and Electronic Equipment Directive (WEEE) applies to companies that manufacture, sell, distribute, or treat electrical and electronic equipment in the European Union. There are a number of obligations imposed on Checkpoint as a supplier of electrical and electronic equipment. Checkpoint's compliance approach for each of these obligations is provided below.

WEEE Marking

All products that are subject to the WEEE Directive supplied by Checkpoint are compliant with the WEEE marking requirements. Such products are marked with the "crossed out wheelie bin" WEEE symbol shown below in accordance with European Standard EN 50419.

Information for Users

According to the requirements of European Union member state WEEE legislation, the following user information is provided in English for all Checkpoint supplied products subject to the WEEE directive.



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal waste. Instead, it is your responsibility to dispose of your waste equipment by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment. By separating and recycling your waste equipment at the time of disposal you will help to conserve natural resources and ensure that the equipment is recycled in a manner that protects human health and the environment. For information about how to recycle your Checkpoint supplied waste equipment, please contact the Checkpoint Systems, Inc. Field Service office in your region. Customers can obtain this information from their system User's Guide.

REACH Compliance Statement

The European REACH Regulation 1907/2006 on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH), Annex XVII entered into force in June 2009, and affects all companies producing, importing, using, or placing products on the European market. The aim of the REACH regulation is to ensure a high level of protection of human health and the environment from chemical substances.

Checkpoint Systems' substances management system follows and complies with the current revision of the REACH Regulation on the substances as identified by ECHA (European Chemical Agency).

Checkpoint Systems' products are considered articles as defined in REACH Article 3 (3).

These products/articles under normal and reasonable conditions of use do not have intended release of substances. Therefore the requirement in REACH Article 7 (1) (b) for registration of substances contained in these products/articles does not apply.

Checkpoint Systems' products/articles do not contain Substances of Very High Concern or if there are SVHC in the product/article, the content is less than the 0.1% (wt/wt) as defined by REACH Article 57, Annex XIV, Directive 67/548/EEC. Therefore the requirement in REACH Article 7 (2) to notify ECHA if a product/article contains more than 0.1% wt/wt of an SVHC and tonnage exceeding 1 tonne per importer per year is not applicable.

Checkpoint Systems' European operations do not manufacture or import chemicals, therefore Checkpoint Systems has no obligation to register substances.

Packaging Compliance Statement

No CFCs (chlorofluorocarbons), HCFCs (hydrofluorocarbons) or other ozone depleting sub-stances are used in packaging material. Chromium, lead, mercury, or cadmium are not intentionally added to packaging materials and are not present in a cumulative concentration greater than 100 ppm as incidental impurities. No halogenated plastics or polymers are used for packaging material. Checkpoint complies with the EU Directive 94/62/EEC.