Apex
Communications Cradle

By **Compsee**

Cradle Manual #: COCMIICRUGB

Operators Manual

COMPSEE

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Introduction

The Apex Communications Cradle is an optional accessory for the Apex Data Collection Unit. The cradle adds convenience and efficiency to the data collection process.

People use the cradle:

- When the Apex is not in use, as a safe "home location."
- In proximity to the PC designated for transferring data from Apex units.
- To transfer data quickly between the Apex unit and the PC.
- To recharge the internal battery pack when the Apex is not in use.
- To recharge an external battery at any time.

These features make the cradle an attractive addition to the standard Apex equipment. Since the cradle and the PC are connected via cable, the Apex does not have to be connected to the PC before each transfer of data. The connection is made by simply placing the Apex into its cradle.

The battery recharge feature and the battery status indicators, when appropriately used, eliminate delays caused by low batteries.
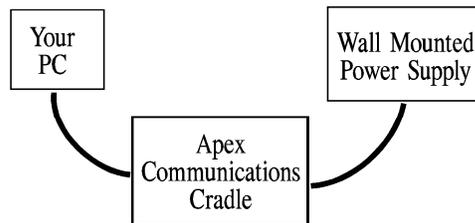
NOTE
The cradle recharges Compsee battery packs. The cradle does not recharge single cell AA batteries.

System Description

The Apex Communications Cradle includes the Cradle and Wall Mounted Power Supply.

The Apex Communications Cradle is connected to a PC via the communications cable supplied with the Apex unit.

Standard AC power passes through the wall mounted power supply; is transformed to 9 Volt DC power (1500 mA); and reaches the cradle via the power cord on the power supply.

Data is transferred by
1. Putting the Apex into the cradle.
2. Initiating the transfer with the appropriate software.

Batteries are recharged by
1. Turning the Apex off and putting it into the cradle.
2. Putting an external battery into the cradle.

The internal battery pack of an Apex is charged whenever the Apex is turned off and placed in the cradle. Recharging terminates when the Apex is turned on (to initiate communications with the PC). Recharging starts when the Apex is turned off again.
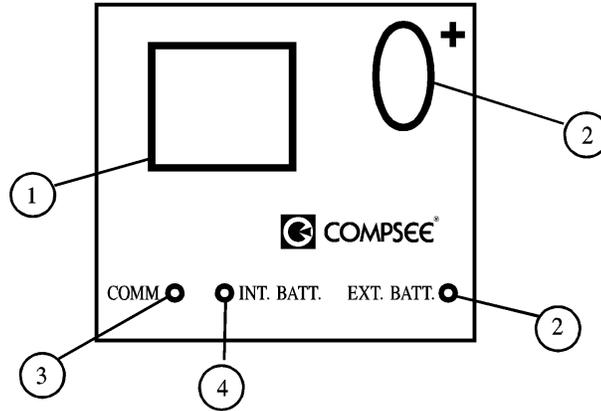
The battery can be recharged approximately 400 times.

NOTE
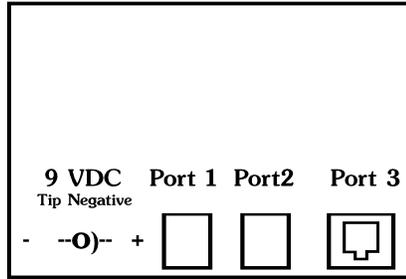The cradle recharges Compsee battery packs. The cradle does not recharge single cell AA batteries.

Controls and Indicators

The following figures and tables describe the Apex Cradle.

No.	Control/Indicator	Function
1	**Apex Port**	Location for the Apex to rest. Ten pin RJ (phone) connector is at the bottom of the port.
2	**External Battery Slot**	Location for recharging an external battery. Contacts are located at the bottom of the slot. The plus sign on the port indicates the orientation for the external battery contacts as they are inserted.
3	**Data XFER LED**	Flashes *green* when data is being transmitted from the Apex or flashes *orange* when data is transmitted to the Apex.
4	**Internal Battery LED**	Not illuminated when power is off, an Apex is not in its port, or when the Apex is improperly placed in its port. Illuminated when the power is on and the Apex is properly placed in the port.
5	**External Battery LED**	Not illuminated when power is off, a battery is not in its slot, or when the battery is improperly placed in its slot. Illuminates when cradle power is on and an external battery is in its slot.
	Internal and External Battery LED Color Indicators	Green: battery is fully charged. Orange: Non-flashing - battery is being fast charged. Orange: Flashing - battery is being prepared for quick (Internal, 6 hours maximum) or fast (External, 2 hours maximum) charging.

Connectors are located on the back of the cradle.

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 │                                 │
 │                                 │
 │  9 VDC   Port 1  Port2   Port 3 │
 │  Tip Negative                   │
 │                 ┌──┐ ┌──┐ ┌──┐  │
 │  -  --O)-- +    │  │ │  │ │ ⊔ │  │
 │                 └──┘ └──┘ └──┘  │
 └─────────────────────────────────┘
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Control	Function
9 VDC Connector	Connects the Apex Communications Cradle to the Wall Mounted 1500 mA Power Supply (Part No. 0212009).
Ports 1 & 2	These locations are currently not in use.
Port 3	RS 232 port. Connects the Apex Communications Cradle to your PC via Cable No. 0227001 (supplied with the Apex).
	Pin Configuration:
	1. PORTVCC (+5 volt/400 milliampere power source from the Apex)
	2. Receive data
	3. Transmit data
	4. Data Terminal Ready
	5. Ground
	6. No connection
	7. Request To Send
	8. Clear To Send
	9. No connection
	10. No connection

Unpacking, Inspecting, and Checkout Procedures

The Apex Communications Cradle is manufactured, packed and shipped carefully to prevent damage.

Please unpack, inspect, and check out your cradle upon receipt. Please report any problems to Compsee Inc. Technical Support (page 8).

1. Remove all parts from the shipping container. Refer to the documentation shipped with the Cradle and the parts list (page 8) to assure you have received what you ordered. Check part numbers against actual equipment. Report any discrepancies to Compsee Customer Service (800-628-3888).

2. Inspect all parts for damage. Discoloration or cracks on the case indicate damage.

3. Configure the cradle and power supply using the procedure that begins on page 5.

4. Transfer data using the procedure that begins on page 5.

5. Recharge an internal and an external battery using the procedure that begins on page 6.

6. If you encounter problems, follow the trouble-shooting procedures beginning on page 7.

If, after completing the trouble shooting procedures, you still encounter problems, please contact Compsee Inc., Technical Support (page 8).

Operations

Apex Communications Cradle Operations include:

- Configure the Apex Communications Cradle (page 5).
- Transfer Data between your PC and the Apex via your Apex Communications Cradle (page 5).
- Recharge the internal and external batteries (page 6).

NOTE
The cradle recharges Compsee battery packs. It does not recharge single cell AA batteries.

Configuration

Please use the Controls and Indicators section (page 3) as you perform the following procedures.

Connect the Apex Communications Cradle to your PC.

1. Locate the communications port or ports on your PC. If necessary, refer to your PC manual. Identify the communications port you are using for the Apex cradle.
2. Connect the female end of Cable No. 0227001 to the desired communications port on your PC.
3. Connect the RJ plug of Cable No. 0227001 to the Port 3 connector on the back of your Apex Cradle.

Connect the Apex Communications Cradle to the Wall Mount Power Supply.

1. Decide where you want to locate the Wall Mount Power Supply. The power supply plugs into a standard wall outlet. Assure that the cable reaches from that point to where you want to locate the Apex Cradle.
2. Plug the power supply connector into the 9 Volt DC connector on the back of the Apex Cradle.

Transfer Data

Procedures for transferring data involve both the PC and the Apex. Before transferring data using the procedure from the appropriate manual, assure that:

- The Apex Communications Cradle is configured correctly (page 5).
- Both the PC software program and the program running on the Apex identify the physical communications port (Comm Port) you are using.
- The Apex is in the cradle and on, with the main menu displayed.

In order to transfer data between your PC and the Apex using the Apex Cradle, you need appropriate, compatible software.

1. Identify the software you are using.

2. Consult the manual for that software.

3. In the appropriate manual, follow the directions for transferring data. Some manuals may use the terms "Send Data," "Upload Data", or "Download Data" for transferring data.

The COMM LED on the front of the Apex Communications Cradle flashes *green* when data is being transmitted from the Apex unit and flashes *orange* when data is being transmitted to the Apex unit.

If the data does not transfer successfully, perform the procedure again. If the problem persists, refer to the trouble shooting procedures in that manual.

Recharge Internal and External Batteries

The time it takes to recharge a battery depends on the amount of charge in the battery when you begin recharging. An internal battery pack takes about six hours to fully charge from a low charge condition to a fully charged condition. An external battery takes about 1.5 to 2 hours to fully charge from a low charge condition to a fully charged condition.

To avoid having to recharge batteries during a shift, begin each shift with fully charged batteries (indicated by the LED being green when the Apex or External battery is in the cradle).

When the Apex or the external battery is placed into the cradle, the INT. BATT. LED or the EXT. BATT. LED on the bottom front of the cradle indicate whether the battery pack contains a low (flashing orange), lower than full (steady orange), or full (steady green), charge.

If the appropriate LED does not illuminate after the Apex or the external battery has been placed into the cradle, refer to the trouble shooting procedures (page 7).

To recharge the internal battery pack:
1. Turn the Apex off (screen is dark).
2. Place the Apex into the cradle, sliding the connector end into the Apex Port (page 3).

If the Apex is powered on while in the cradle, the quick charge is terminated and is reinitiated as soon as the Apex is powered off again.

To recharge the external battery:

Place the Apex into the cradle, sliding the end with exposed contacts into the External Battery Slot. The positive contact on the battery should go into the top of the slot, marked with a plus (+) sign (page 3).

If the EXT. BATT. LED is not illuminated, the battery may be inserted with the wrong polarity. Remove the battery and insert it again so that the positive (not the negative) contact on the external battery is connecting with the positive contact in the slot.

Specifications

The Apex Communications Cradle conforms to the specifications listed and described in the following table.

Specifications	Apex
Operating Temperature	0 to 50 degrees Centigrade
Storage Temperature	-25 to 95 degrees Centigrade
Relative Humidity	5 percent to 95 percent (non-condensing)
Electrostatic Discharge	Able to withstand up to 15 Kilovolts to any external surface
EMC Regulation	FCC/CE approved
Physical Dimensions	Height: 5.0" Width: 6.0" Depth: 6.5"

Trouble Shooting

If problems occur when you attempt to transfer data or recharge batteries:

1. Assure that the cradle is configured properly (page 5).
2. Assure that the Wall Mount Power Supply is plugged into an appropriate power source and that the cable from the power supply to the cradle is firmly connected.
3. Assure that the Apex connector is seating properly in the Apex Port.

If, after the above steps, the LED does not illuminate when the Apex or an external battery is placed in the cradle:

4. Assure that an internal battery pack (not alkaline) is in the Apex.
5. Assure that the external battery is inserted into its slot so that the positive (not the negative) contact on the external battery is connecting with the positive contact in the slot.
6. Determine how many times the external battery has been recharged. If it has been recharged more than 400 times, it may need to be replaced.
7. If problem persists after Steps 1 - 6, contact Technical Support (page 8).

Technical Support

Compsee offers technical support for questions about the Cradle not addressed by this manual.

For assistance, please call (800) 628-3888 and ask for Software Technical Support. Technical Support is available from 8:30 a.m. to 5:00 p.m. EST, Monday through Friday.

Please have the following information when you call:
a) The steps leading up to the error condition and the problem encountered. This information is necessary to duplicate the condition and identify the cause of the problem.
b) Procedure in this manual that you were performing.
c) Steps you have taken to resolve the problem, if any.
d) If the problem relates to transferring data, the name, version and license (if applicable) of the software you are using on the PC and with the Apex.
e) The make, model, and configuration of the PC you are using.

Parts List

The following table lists and physically describes the hardware included with the Apex Communications Cradle.

Part No.	Part Name	Physical Description
COAAIICRD1/2	Apex Communications Cradle - Kit-1 or Kit -2	Top level assembly for the cradle.
COAAIICRD	Apex Communications Cradle	Molded, black polycarbon blend construction. Dimensions: 6" by 6.5" by 5".
COCMIICRUGB	Apex Communications Cradle Operators Manual	6 ½" by 8 ½". This booklet.
0212009	Wall Mount Power Supply Kit-1 Only	Plugs into a standard wall power outlet. Transforms AC current to 9 volts DC. (1500 mA)