iID®science
iID®Network

Assembling Instructions

iID® science – iID® Network

iID® BEEscience Starter Kit v300.2D
iID® BEEscience professional Bundle v313.2D

RFID small animal identification and monitoring solution
UHF long distance coupling RFID

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Content

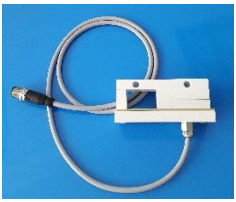
Figure 1: iID®science system

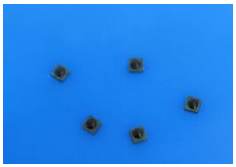
Component overview

General

iID®science is a small animal identification and monitoring system, which consists of the following components:

iID®BEEcontroller: designed for iID®BEE systems running iID®DataCapture software. This device is the main component controlling the readers and storing the data
 CCO-01DC / CCR-01DC(with internal reader)
power supply 12V with appropriate connector

iID®science reader device AEB-03.C2D: RFID reading component equipped with a special high-performance antenna system optimized for BEE-TAG mic3®Q1.6 transponders

PCAN cable: to connect iID®BEEcontroller and reading devices among each other


BEE-TAG mic3®Q1.6: Read-Only RFID transponders, miniaturized, to tag the animal for detection when passing through the reader module	
	
PCAN termination resistor	PCAN T-connector
	

***We recommend using the following USB flash drives for data storage:** Scan Disc Cruzer Fit, sdcz33-016g-g35 16GB

Handling

Figure 2: Back panel iID®BEEcontroller CCR-01DC

System setup

To start working with the iID®science system, please connect all components as illustrated and described below. Please pay attention to additional remarks shown in the components as well as labels, which are used to identify the correct plugging of the different connectors.

Installation procedure

The following chapter and figures describe the necessary installation steps. Connect all components in the following order:

1. Plug in the male PCAN cable in the female PCAN interface on the iID®BEEcontroller

   * Before connecting make sure you align groove on female connector to ridge on male connector (Figure 3 & 4), otherwise the PCAN cable pins can be damaged.

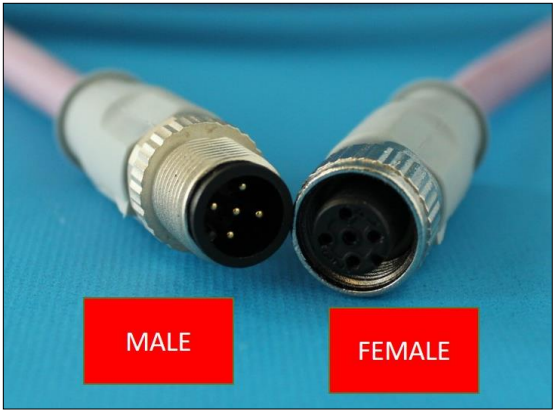


Figure 3: female/male connector

Figure 4:P-CAN Cable Plug and controller back panel P-CAN plug

2. As next connect the four T-connector to each other
   NOTE: Align female groove with male ridge.

Figure 5: T-Connectors female and male plugs

3. Connect PCAN cable female plug to first T-connector (female side)

Figure 6: P-CAN cable, 4 T-Connector and Termination Resistor

4. Connect the termination resistor to the last T-connector (Figure 6).
5. Connect each reader/antenna male plug to the female plug on each T-connector (Figure 7 & 8).

Figure 7: AEB-03.C2D Antenna male Plug and T-Connector female Plug

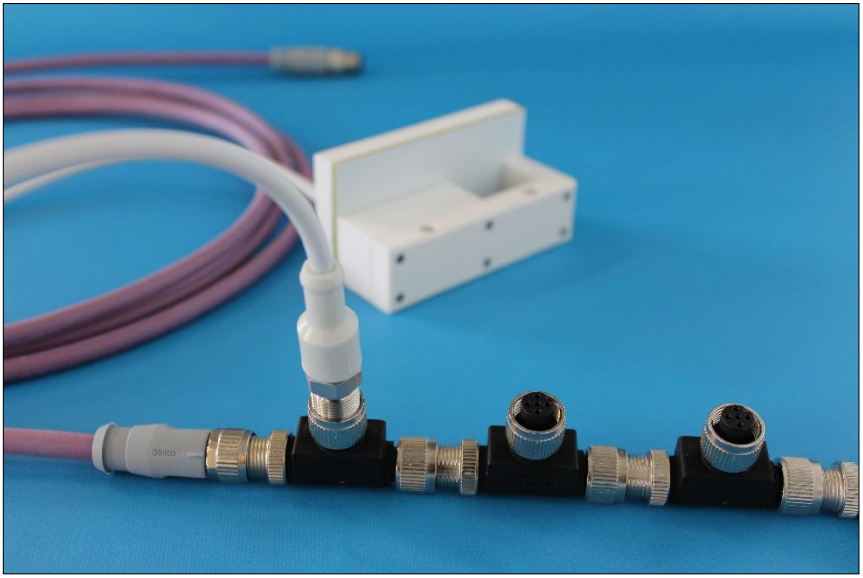


Figure 8: P-CAN cable, AEB-03.C2D Antenna, T-Connector

6. Connect the AC power adaptor with the delivered 3 prong AC power cord to the iID®BEEcontroller power supply port.

Figure 9: Power Adaptor with power Cable

Figure 10: Controller, Power Adaptor Plug

7. Example: AEB-03.C2D antenna mounted on a bee house

Figure 11: bee house

Recommended mounting procedure

1. Mount the iID®science bi-directional antenna AEB-03.C2D within a minimum of 1.5 meters (5 feet) apart. We recommend mounting every AEB-03.C2D with two screws 3x30.
2. To mount the AEB-03.C2D is necessary to drill a hole with a diameter 16mm on the beehive's approaching plate. This hole allows to take the AEB's antenna cable through the approaching plate.
3. Do not install the iID®BEEcontroller and his power supply in damp locations or places where it may be exposed to water.
   - Deteriorated insulation on electrical parts may cause an electric shock or fire.
4. Do not place the iID®BEEcontroller and his power supply in extremely hot environment (maximum t° < 60°C).
5. Do not tie/cross together the different antenna cables.
6. Do not connect more than four reader/antenna devices to the PCAN cable and iID®BEEcontroller.

Important notes

Important notes!

1. Although iID®BEEcontroller, reader devices, antennae and all accessory parts are particularly protected against water and dust, please make sure to prevent harsh environmental conditions from the device.

2. By mounting and connecting AEB-03.C2D devices, please assure a minimum distance of 1.5 meters between each.

3. Do not tie together the separate antenna, reader and power supply cables together.

4. Pull the USB external storage when “Waiting” counter is screened at the display

   or the controller is off.

5. By disconnecting and connecting again one of the reader devices, please reboot the controller.

Please be careful that the components are protected against rain and dirt or other harsh environmental conditions. Please keep the readers away from metal surroundings during operation mode! Metal will interfere with the signals.

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