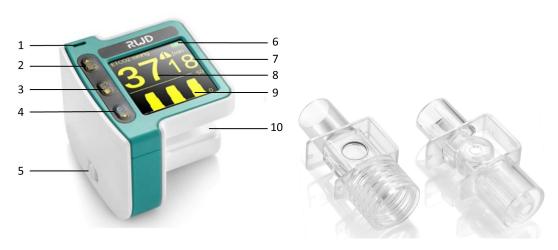
# Quick Operating Guide of RM-C1 Veterinary Capnograph

# 1. Introduction to instrument components



Main unit

Airway adapter

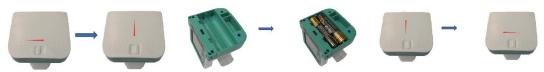
No.	Component name	No.	Component name	
1	String hole	6	Battery state indicator	
2	Mute key/up	7	Respiratory rate value	
3	Menu key/OK	8	ETCO <sub>2</sub> value	
4	Power key/down	9	CO <sub>2</sub> spectrum	
5	Battery compartment lid	10	Installation site of airway adapter	

# 2. Operation procedures

## 2.1 Installation of battery

Push the release button of battery compartment lid to the position , then push down the battery compartment lid to remove it, and install two new AAA batteries. Make sure that the batteries are installed in correct polarity. Push back the battery compartment lid in place and then push the release button of

battery compartment lid to the position



#### 2.2 Installation of airway adapter

Observe whether the airway adapter is clean. The adapter with clean cavity, no foreign matters, no water drops, and no obvious scratches in the center should be selected. A clear "click" sound will be heard when the airway adapter is correctly inserted into the monitor.



#### 2.3 Equipment startup

Press the power button, the ETCO<sub>2</sub> value is displayed as "0" and the respiratory rate value is displayed as "--" when the CO<sub>2</sub> monitor is ready. In the case of a non-zero ETCO<sub>2</sub> value, ensure that there is no CO<sub>2</sub> accumulation between the main unit of sensor and the airway adapter by removing and reconnecting the airway adapter.

The audible alarm can be checked by removing the airway adapter to trigger the alarm of "no adapter".

### 2.4 Connection of respiratory circuit

The monitor can be connected to the sick animal using different methods. Two connection methods are illustrated in the pictures below.



Monitor connected to endotracheal tube

Monitor connected to mask

### 2.5 Equipment shutdown

Press the power button for more than 3 seconds in the monitoring interface to shut down the CO<sub>2</sub> monitor.

The CO<sub>2</sub> monitor will shut down automatically under the following conditions:

- If no breathing is detected, it will shut down automatically after 2 min.
  - If an asphyxia condition is detected and alarm mute has been activated, it

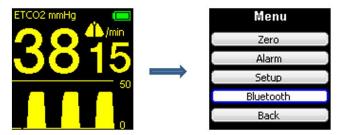
will automatically shut down after 2 min.

• If the airway adapter is disassembled, it will shut down automatically after 60 s

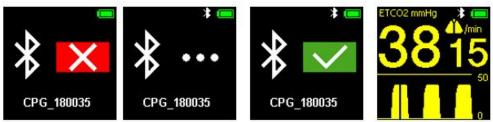
#### 2.6 Connection to Bluetooth

This equipment supports the connection to mobile phones or Pads with Android system via Bluetooth, so that the real-time parameters of detected animals can viewed in the mobile terminal APP. Please contact RWD staff for APP installation files.

- 1) Enter the main menu: Press the menu key in the monitoring interface to enter the menu;
- 2) Enter the setup menu: Press the alarm mute key ( $\triangle$ ) or the power button ( $\nabla$ ) to select the Bluetooth menu, and press the menu key for confirmation;



- 3) Press the mute key ( \( \big) \) to turn on the Bluetooth module.
- 4) Turn on the Bluetooth and positioning service of mobile phone/Pad, start the mobile terminal APP, and conduct operations according to the prompts in the APP pages (do not enter the Bluetooth set in the Android system for searching and pairing).



5) The Bluetooth module will automatically return to the monitoring interface within 2 s after successful connection;



## 3. Routine maintenance

#### 3.1 Cleaning

- Remove the batteries before cleaning.
- Clean the equipment by wiping the surface with a cloth dipped with 70% isopropanol.
- The airway adapter can be cleaned with water, which is usually applicable to a single sick animal. Repeated use may cause cross-infection.

#### 3.2 Zero calibration of equipment

Zero calibration is required after the replacement of adapter or with the prompt of "no adapter" following connection to the adapter and with a large deviation of ETCO<sub>2</sub> value.

- 1) Confirm that the new airway adapter has been installed correctly;
- 2) Press the menu key to enter the menu interface;
- 3) Press the alarm mute key ( $\triangle$ ) or the power button ( $\nabla$ ) to select the Zero menu;
- 4) Press the menu key again to confirm the zero calibration. If the zero calibration is being performed, "Zeroing" and countdown number will be displayed on the screen. If the zero calibration fails, "Zero failed" will be displayed on the screen.
- 5) The zero calibration operation is completed when the countdown of zero calibration is displayed as "0".

Note: Make sure that the gas in the adapter consists of air with CO<sub>2</sub> concentration close to 0 during the zero calibration of monitor. Make sure that no person or animal breathes in the periphery of the adapter before and during the zero calibration.

