Smart Fan Remote (FRC-1)

OVERVIEW

The Smart Fan Remote (FRC-1) is specifically designed to adjust the fan speed for Aero-Fan Smart Fans. It can also be seamlessly integrated with the TrolMaster Hydro-X Pro (HCS-2)/ Hydro-X Plus (HCS-3) to control the fans through the HCS-2/HCS-3 main controller. Additionally, the FRC-1 also includes separate Day mode and Night mode settings. The FRC-1 is equipped with a day-night photocell sensor that can easily detect whether it is Day or Night. This feature enables the remote to automatically switch between the two modes based on the ambient light conditions.



TrolMaster employs a robust RS485 communication protocol for reliable and long-range communication between the FRC-1 and the fans. With the FRC-1, up to 256 fans can be effortlessly linked and controlled simultaneously. Unlike simple fan dimmers with knobs that cannot accurately control fan speed, and can only slow a fan down slightly, the TrolMaster Smart Fan system utilizes advanced digital communication and EC fan technology to precisely control the speed of a large number of fans from 1%all the way up to 100% speed.

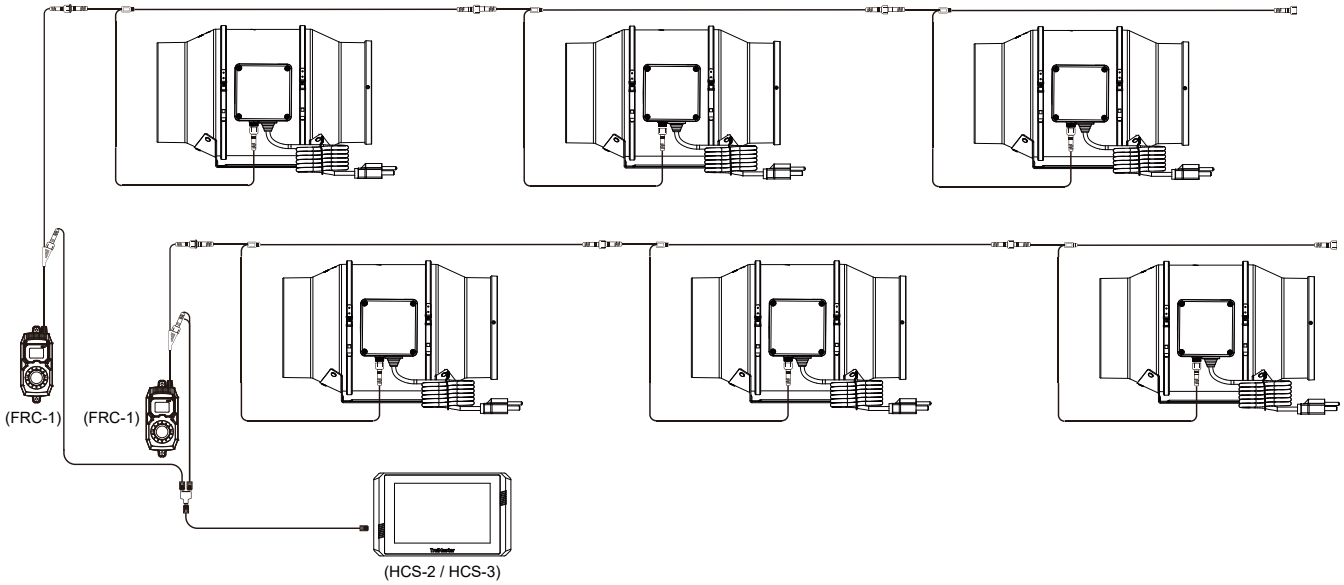
GENERAL INFORMATION

Brand	Aero-Fan
Model	FRC-1
Product Dimensions	160*86*86 mm / 6.30*3.39*3.39 inch
Package Weight	0.93lbs / 0.42kg

SPECIFICATIONS

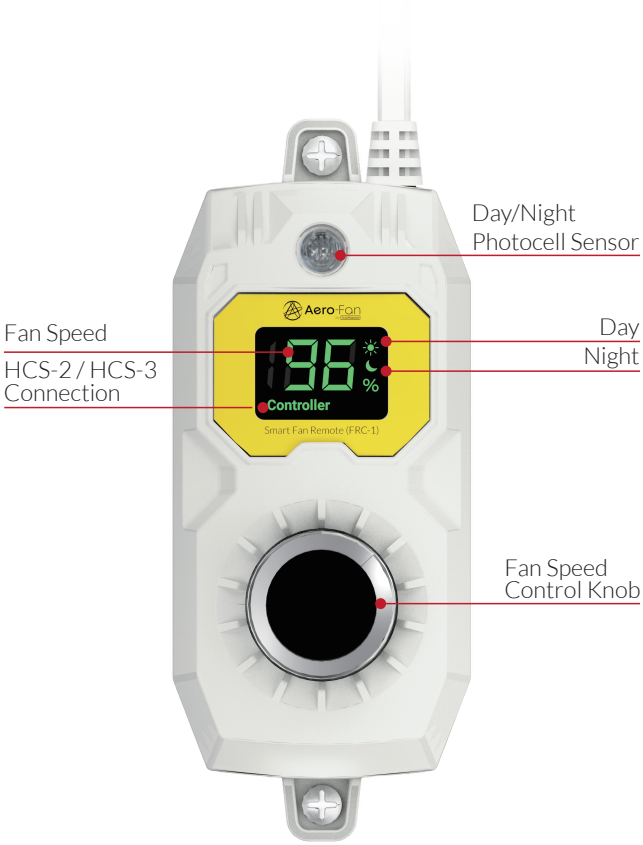
ITEMS	SPECIFICATIONS
Input Voltage	12V~
Amperage	0.1A
Operating Temperature	32~104°F
Operating Humidity	≤ 90%RH

CONNECTION DIAGRAM



INSTRUCTIONS

1. On-board Digital Display



2. Control Knob

Controlling the speed of multiple fans with the FRC-1 is a straightforward process.

To increase the fan speed, turn the control knob clockwise. The maximum fan speed that can be set is 100%.

To decrease the fan speed, turn the control knob counterclockwise. The minimum fan speed that can be set is 0%.

3. Hydro-X Pro (HCS-2) / Hydro-X Plus (HCS-3) Connection

Connect the FRC-1 to the HCS-2/HCS-3 controller using the 12' RJ12 to 4-pin Connector Cable (ECS-9). Insert one end of the cable into the "DEVICES" port on the HCS-2/HCS-3 controller, and plug the other end into the corresponding port on the FRC-1.

Once the connection is established, press the control knob on the FRC-1 once to assign an address to the FRC-1 on the HCS-2/HCS-3 controller. This will enable communication between the two devices.

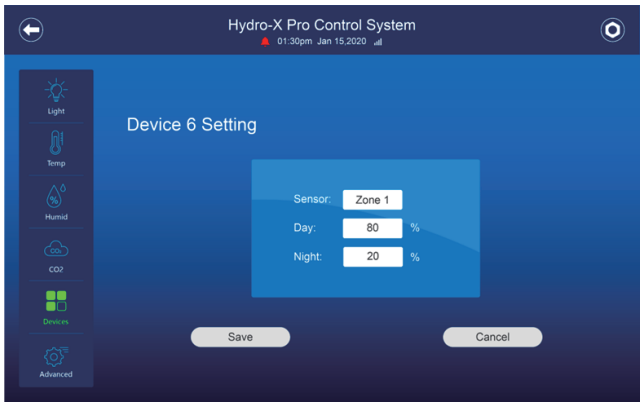
When the HCS-2/HCS-3 controller successfully connects and addresses the FRC-1, the controller connection status indicator on the FRC-1 will illuminate with the word "Controller." At this point, the remote control functionality can be accessed through the HCS-2/HCS-3. The fan speed displayed on the FRC-1 will reflect the fan speed set on the HCS-2/HCS-3 controller.

4. Day & Night Setting

The FRC-1 is equipped with a built-in photocell sensor that enables it to control the fan speed based on the Day/Night setting. Having two separate “modes” allows the user to program the fans to work differently during the Day and Night. By detecting and determining light levels, the FRC-1 can run the fan based on the user’s predetermined settings.

To activate the Day setting mode, press and hold the control knob for 3 seconds. Once in Day mode, you can adjust the fan speed to your desired level.

To save the Day setting, press the control knob and proceed to access the Night mode setting by following the same instructions as for the Day mode.



Additionally, the HCS-2/HCS-3 offers the ability to set separate fan speeds for Day and Night. To do this, access the Device settings for the FRC-1 in the HCS-2/HCS-3 and adjust the Day and Night fan speeds as per your preference.

5. Fan Remote Digital Screen Display Status

In the Daytime Icon Display mode, all the digits on the display are illuminated to provide clear visibility.

In the Nighttime Icon Display mode, the digital display will automatically turn off after one minute of inactivity to conserve power and minimize distraction during nighttime use.

To wake up the display, simply press any button or rotate the knob. This will activate the display for two seconds, allowing you to make adjustments or access the desired functions.

6. Temporary Override Mode

To enter the Temporary Override Mode, simply turn the rotation knob or press any button, except when in the parameter setting mode. This will activate the temporary adjustment mode, allowing you to make immediate changes to the fan settings. In this mode, the fan will be controlled based on the temporary adjustment data for a duration of 30 minutes.

To exit the Temporary Override Mode, there are two scenarios:

1. If no adjustments are made within the 30-minute period, the fan will automatically revert to its previous settings and exit the temporary mode.

2. If adjustments are made using the connected HCS-2/HCS-3 controller, the fan will exit the temporary mode and switch to the new settings made on the HCS-2/HCS-3.

In both cases, the fan will resume normal operation and return to its regular control mode.

For any issues or concerns with our products, DO NOT return them to the store. Please contact our tech support department at **support@trolmaster.com** or call **877-420-9876**.

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