UGUS_DSE401_STR_02-24

Hero Simple Edge Signal Tester

DSE401ASTR

DSE401BSTR

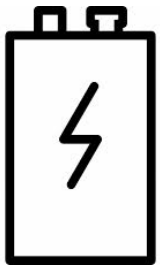
QUICK USER GUIDE

1. Hero Simple Edge Cellular Signal

The Daikin Hero Simple Edge adds connectivity to a VRV system for cloud-based monitoring via a cell signal. The cell signal used is different than the signal used by consumer cell phones. Because of this, a cell phone cannot be used to determine whether a site or exact location is a good candidate for the Simple Edge (SE) product. The SE Signal Tester will test the signal strength and confirm cloud connection so that it can be determined if Simple Edge will work in the desired location.

2. SE Signal Tester Package Contents

The SE Signal Tester package will include the Signal Tester, a 9v battery enclosure and a lithium 9v battery. This device cannot be installed to the VRV system and used as a Simple Edge device. It will not be registerable, nor will it report any data to the HERO cloud.

Package Contents		
		
Simple Edge Signal Tester	Battery Holder	Lithium 9v Battery

3. Setting up the Device

Install the 9v battery in the battery enclosure if not already. Plug battery connector into the SE Signal Tester harness. Place the tester in the desired location. Turn on the switch on the battery case to activate the device.

Note on Battery Recommendation

It is recommended that only a lithium-type 9v battery is used due to the power requirement of this device. Alkaline batteries can power the device for a short time, but the signal strength cannot be accurately determined due to lower operating voltages of the alkaline battery.

4. Method for Signal Testing

Usually the Simple Edge will be installed on the side of the VRV outdoor unit using the integrated magnets. Identify the ideal location and attach the SE Signal Tester to the unit. Integrated magnets will hold the device in place. When powered on, the Signal Tester will start flashing the yellow LEDs labeled “CLD” and “RUN” constantly. Once the device has initiated, it will check for signal strength and cloud connection. After about 1-2 minutes, a signal strength will be reported using the amber “ANT1” and “ANT2” LEDs. Use the chart below to determine the reported value.

LED display ●: Unlit ○: Lit ◑: Blinking ●: Unlit or Lit/Blinking

Antenna level	Cell signal strength	Cell signal reception				Usability in installation location
		ANT1	ANT2	CLD	RUN	
3	Very good	○	○	●	●	OK
2	Good	○	●	●	●	OK
1	Poor	●	○	●	●	(NOTE 1)
0	Out of service area	●	●	●	●	No (NOTE 2)

(NOTE 1) If the antenna level is 1 (Bad or poor signal), changing the installation location is recommended.
(NOTE 2) If the antenna level is 0 (Out of service area), change the installation location.

Fig. 1 – Signal Strength Chart

The SE Signal Tester will continuously update the signal strength while powered up, however there is a delay between each reading. The test cycle while powered on is about 3 minutes. Therefore, when placing and moving the SE Signal Tester for testing different locations, the device should be left stationary for about 3 minutes before reading the results. Taking multiple readings over several intervals will give a better idea of the signal stability of the location chosen.

If no ANT LEDs are lit, as in the red box above, then the cell signal at the current location of the tester is not adequate for Simple Edge operation. Try relocating the SE Signal Tester to see if a better signal can be acquired. This can sometimes be achieved by moving the tester to another side of the VRV unit.

If the result is classified as “Poor” with only ANT2 LED lit, as in the orange box above, the Simple Edge may work here, but gather a few measurements at this location to see if the signal fluctuates or gets stronger. If there is no improvement, try relocating the tester to see if another location will provide a stronger signal. This can sometimes be achieved by moving the Tester to another side of the VRV unit.

If the signal strength is “Good” or “Very Good” with only ANT1 or both ANT1 and ANT2 LEDs on, as in the green box above, it is confirmed that the Simple Edge device will perform as expected. It is recommended to leave the tester activated in this location for a few cycles to make sure the signal is stable.