

**Important: Please read before installation.**

1. LUMINA (NAV-561) IS COMPATIBLE WITH ANY NU-AIR H/ERV WHICH FEATURES AN ES SERIES CIRCUIT BOARD, RESIDENTIAL OR COMMERCIAL. THE ES SERIES CIRCUIT BOARD IS EASILY IDENTIFIED BY THE PRESENCE OF ONE 4-WIRE AND ONE 10-WIRE REMOVABLE TERMINAL BLOCK USED FOR CONTROLS WIRING.
2. **FOR UNITS WITHOUT A RECIRCULATION DAMPER, TURN OFF RECIRCULATION FUNCTIONS IN CUSTOM SETTINGS.**
3. **COMPATIBLE NU-AIR ACCESSORY CONTROLS:** WIN-20 (20-MINUTE TIMER), ES-T1 (20/40/60-MINUTE TIMER), OR \*NAV-460 (20/40/60 MINUTE TIMER).
4. **FOR RETROFIT APPLICATIONS:** PLEASE REMOVE THE FOLLOWING ES CONTROLS: **ES-M1, ES-M2, ES-M3, ES-M4, ES-DVC** AS THEY ARE NOW REDUNDANT. **USE ONLY ONE (1) NAV-561 PER INSTALLATION AND CONNECT NAV-561 TO A DEDICATED 4-WIRE CIRCUIT; WIRE TIMERS SEPARATELY.**
5. ROUTE CONTROL WIRING ACCORDING TO LOCAL BUILDING CODES.

\*NAV-460 IS NOT COMPATIBLE WITH WIN-20, WIN-20-GANG, OR WITH ES-T1 TIMERS.

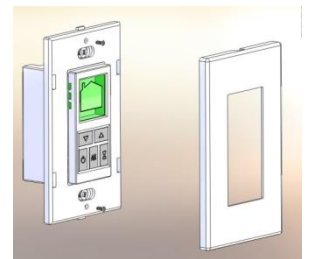
YOUR NAV-561 KIT INCLUDES: 1 WALL CONTROL WITH INSTALLATION/USER GUIDE AND 2 WALL-BOX MOUNTING SCREWS.

## Mounting

MOUNT IN A CENTRAL LOCATION WITHIN THE BUILDING.

FITS A STANDARD 2X3" (NOMINAL) ELECTRICAL WALL BOX (NOT INCLUDED).

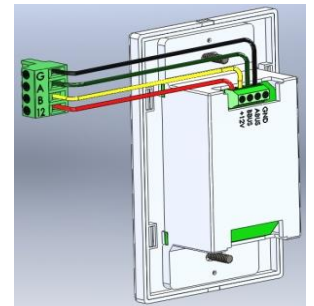
DRYWALL ANCHORS (NOT INCLUDED) MAY BE USED WHERE A WALL BOX IS NOT AVAILABLE.



## Wiring

USING A 2 MM FLAT SCREWDRIVER AND 4-CONDUCTOR WIRE, CONNECT THE H/ERV 12 VDC TERMINAL BLOCK TO THE CORRESPONDING NAV-561 TERMINALS.

H/ERV TERMINAL BLOCK	NAV-561
G	GND
A	A BUS
B	B BUS
12	+12V



## Use

**BACKLIGHT:** FIRST BUTTON PRESSED WILL TURN ON THE BACKLIGHT. THE BACKLIGHT WILL REMAIN ILLUMINATED FOR 10 SECONDS.



**POWER.** TURNS THE VENTILATOR ON/OFF.



**MODE.** USE THIS BUTTON TO ENTER THE MODE SELECTION MENU AND TO ACTIVATE A CHOSEN MODE OF OPERATION.



**TIMER.** USE THIS BUTTON TO ACTIVATE THE VENTILATOR INTO HIGH SPEED FOR 20, 40 OR 60 MINUTES. THE TIMER BUTTON CAN ALSO BE USED TO TURN OFF THE HIGH SPEED TIMER FUNCTION.



**DOWN ARROW.** USE THIS BUTTON TO DECREASE DESIRED HUMIDITY SETTING, OR TO SCROLL THROUGH MODE/MENU OPTIONS.

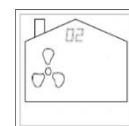


**UP ARROW.** USE THIS BUTTON TO INCREASE DESIRED HUMIDITY SETTING, OR TO SCROLL THROUGH MODE/MENU OPTIONS.



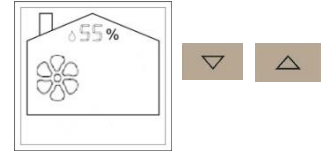
## Select a Mode of Operation

PRESS THE MODE BUTTON AND THE CURRENT MODE ICON AND MODE NUMBER (00-06) WILL FLASH. **USE THE ARROW BUTTONS TO SCROLL UP AND DOWN THE NUMBERED MENU CHOICES.** TO INITIATE A DESIRED MODE, PRESS THE MODE BUTTON ONCE MORE, OR SIMPLY WAIT 4 SECONDS AND THE MODE WILL AUTOMATICALLY ACTIVATE.



## Select a Humidity Setting

PRESS THE UP OR DOWN ARROW KEY UNTIL THE PRESENT HUMIDITY SETTING AND % SYMBOL ARE FLASHING. USE THE UP/DOWN ARROW BUTTONS TO ADJUST HUMIDITY SETTING IN 5% INCREMENTS. AFTER **4 SECONDS** OF NO BUTTON ACTIVITY, SELECTED HUMIDITY SETTING (**SETPPOINT**) WILL BE PROGRAMMED. THE CURRENT AMBIENT HUMIDITY WILL THEN BE DISPLAYED.

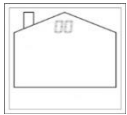


WHEN AMBIENT HUMIDITY EXCEEDS THE CHOSEN SETPOINT A WATER DROP ICON WILL APPEAR AND THE VENTILATOR WILL OPERATE IN HIGH SPEED UNTIL THE HUMIDITY LEVEL DROPS BELOW SETPOINT. AVAILABLE HUMIDITY SETTING RANGE: 20-80%.

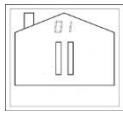
**TO TURN OFF HUMIDITY-ACTIVATED HIGH SPEED IF DESIRED, USE THE ARROW KEYS TO TOGGLE THE HUMIDITY SETPOINT TO ONE CLICK ABOVE 80% OR ONE CLICK BELOW 20%. ALSO USE ARROW KEYS TO REACTIVATE HUMIDITY CONTROL.**

**OPERATING HINT.** GENERALLY, A HUMIDITY SETTING OF 40-60% IS DESIRABLE. WHILE YOUR VENTILATOR IS NOT A DEHUMIDIFIER, VENTILATION CAN HAVE THE EFFECT OF REDUCING INDOOR HUMIDITY WHEN EXCHANGING MOISTURE-LADEN AIR FROM THE INTERIOR SPACE WITH LESS HUMID, FRESH AIR FROM OUTSIDE, ESPECIALLY DURING COLDER MONTHS.

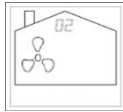
## Modes



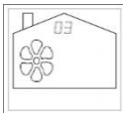
**00: OFF.** VENTILATOR IS OFF, BUT THE CONTROL ITSELF IS ON AND WILL DISPLAY AMBIENT HUMIDITY LEVEL.



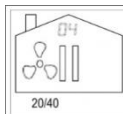
**01: STANDBY.** VENTILATOR IS IDLE. DURING THIS MODE, A STATIC PAUSE ICON WILL DISPLAY. DURING STANDBY MODE THE VENTILATOR WILL TEMPORARILY SWITCH TO HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR A TIMER.



**02: LOW SPEED.** VENTILATOR RUNS IN LOW SPEED CONTINUOUSLY. DURING THIS MODE, AN ANIMATED 3-BLADE FAN WILL DISPLAY. DURING LOW SPEED MODE THE VENTILATOR WILL TEMPORARILY SWITCH TO HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR A TIMER.



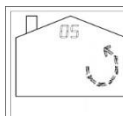
**03: HIGH SPEED.** VENTILATOR RUNS IN HIGH SPEED CONTINUOUSLY. DURING THIS MODE, AN ANIMATED 6-BLADE FAN WILL DISPLAY. VENTILATOR WILL REMAIN IN HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR A TIMER AND CONTINUE IN HIGH SPEED AFTER THE HUMIDITY/TIMER DEMAND IS MET.



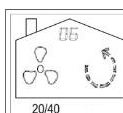
**04: 20 LO/40 STANDBY.** VENTILATOR CYCLES CONTINUOUSLY BETWEEN 20 MINUTES OF LOW SPEED OPERATION AND 40 MINUTES OF STANDBY OPERATION. DURING LOW SPEED CYCLE, THE FAN 3-BLADE FAN ICON WILL ANIMATE AND THE PAUSE SYMBOL WILL FLASH TWICE EVERY 5 SECONDS. DURING THE STANDBY CYCLE, THE PAUSE ICON WILL BE STATIC AND THE FAN ICON WILL FLASH TWICE EVERY 5 SECONDS. DURING 20 LO/40 STANDBY MODE THE VENTILATOR WILL TEMPORARILY SWITCH TO HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR A TIMER.

## Recirculation Modes

**NOTE TO INSTALLER:** FOR MODELS OF VENTILATOR THAT DO NOT HAVE RECIRCULATION COMPONENTS, TURN OFF RECIRCULATION FUNCTIONS THE OPTIONS MENU (SEE **CUSTOM SETTINGS**).



**05: RECIRCULATION.** VENTILATOR CONTINUOUSLY RECIRCULATES AIR WITHIN THE HOME AND DOES NOT BRING IN AIR FROM OUTSIDE, I.E. AIR EXCHANGE DOES NOT OCCUR. DURING THIS MODE AN ANIMATED CYCLING ARROW WILL DISPLAY. DURING RECIRCULATION MODE THE VENTILATOR WILL TEMPORARILY SWITCH TO HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR AN EXTERNAL TIMER.

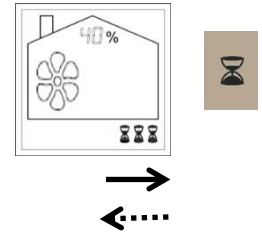


**06: 20 LO/40 RECIRCULATION.** VENTILATOR CYCLES CONTINUOUSLY BETWEEN 20 MINUTES OF LOW SPEED OPERATION AND 40 MINUTES OF RECIRCULATION OPERATION. DURING THE LOW SPEED CYCLE, THE FAN WILL ANIMATE AND THE RECIRCULATION RING WILL FLASH TWICE EVERY 5 SECONDS. DURING THE RECIRCULATION CYCLE, THE RECIRCULATION ARROW WILL ANIMATE AND THE FAN ICON WILL FLASH TWICE EVERY 5 SECONDS. DURING 20 LO/40 RECIRCULATION MODE THE VENTILATOR WILL TEMPORARILY SWITCH TO HIGH SPEED ON DEMAND FROM THE LUMINA HUMIDITY SENSOR OR A TIMER.

## Using the High Speed Timer

FOR TIMED HIGH SPEED OPERATION, PRESS THE HOURGLASS BUTTON ONCE FOR 20 MINUTES, TWICE FOR 40 MINUTES, OR THREE TIMES FOR 60 MINUTES. AFTER **3 SECONDS** THE HIGH SPEED CYCLE WILL BEGIN. AS EACH 20 MINUTE CYCLE EXPIRES, ONE HOURGLASS ICON WILL DISAPPEAR FROM RIGHT TO LEFT. YOU CAN TURN OFF THE TIMER CYCLE BY PRESSING THE HOUR GLASS BUTTON UNTIL ALL THE HOURGLASS ICONS DISAPPEAR.

YOU CAN STILL VIEW OR CHANGE OPERATION MODES DURING TIMER FUNCTION IF DESIRED. CHOSEN MODE WILL RESUME/COMMENCE AFTER THE TIMER FUNCTION STARTS.



## Using External Timers (ES-T1 Timer and/or Win-20 Timer)

THE ES-T1 AND WIN-20 STYLE TIMERS ARE COMPATIBLE WITH YOUR LUMINA CONTROL, HOWEVER, THE LUMINA WILL NOT INDICATE THAT THESE EXTERNAL TIMERS ARE ACTIVE (I.E. IT WILL CONTINUE TO DISPLAY PRESENT MODE OF OPERATION ONLY). YOU CAN CHANGE THE DESIRED MODE OF OPERATION DURING A TIMER CYCLE; IT WILL COMMENCE AFTER THE TIMER CYCLE HAS EXPIRED.

## Maintenance Indicator/Resetting Maintenance Clock

YOUR LUMINA CONTROL HAS A MAINTENANCE RUN CLOCK (IT ONLY COUNTS TIME WHEN THE VENTILATOR IS **TURNED ON**). FACTORY DEFAULT FOR THE MAINTENANCE CLOCK IS 3 MONTHS, AT WHICH TIME A **WRENCH ICON** WILL APPEAR IN THE UPPER RIGHT OF THE LCD SCREEN AND A YELLOW LED TURN ON BELOW THE SCREEN. THIS INDICATES THAT IT IS TIME TO CHECK YOUR VENTILATOR TO SEE IF IT NEEDS CLEANING AND IF YOUR FILTERS NEED TO BE CLEANED OR REPLACED. PRESS AND HOLD THE POWER BUTTON FOR 8 SECONDS TO RESET THE MAINTENANCE CLOCK. **NAV-561B (2017-) units feature a RED LED which will light after 3 months if the initial service reminder is not turned off.**



## Operation Following a Power Interruption

IF THE ELECTRICAL SERVICE TO THE VENTILATOR IS INTERRUPTED, THE MODE OF OPERATION ACTIVE IN THE WALL CONTROL AT THE TIME OF THE INTERRUPTION WILL RESUME WHEN THE ELECTRICAL SERVICE TO THE VENTILATOR RESUMES. ANY CUSTOM SETTINGS WILL HAVE BEEN SAVED.

## Custom Settings

THE NAV-561 ALLOWS ADJUSTMENTS TO CUSTOMIZE ITS USE. THESE CHANGES CAN BE DONE/UNDONE AN INFINITE NUMBER OF TIMES. IT IS RECOMMENDED THAT ONLY A QUALIFIED TECHNICIAN MAKES THESE ADJUSTMENTS AS THEY CAN AFFECT THE NATURE OF THE VENTILATOR'S PERFORMANCE. THE CUSTOMIZABLE FEATURES **WILL APPEAR IN SEQUENCE** AND INCLUDE:

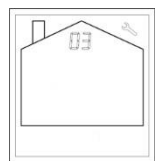
1. ADJUSTING THE RUN TIME OF THE MAINTENANCE CLOCK
2. CALIBRATING THE HUMIDITY SENSOR
3. TURNING OFF/ON RECIRCULATION FUNCTIONS.

TO **OPEN CUSTOM SETTINGS MENU**, SIMULTANEOUSLY PRESS AND HOLD THE UP AND DOWN ARROW BUTTONS FOR **15 SECONDS** (THE BACKLIGHT TURNS ON AFTER **10 SECONDS**). USE THE ARROW BUTTONS TO NAVIGATE CHOICES FOR EACH SETTING. PRESS THE MODE BUTTON TO PRESERVE FACTORY SETTINGS, INITIATE ANY CHANGE, AND MOVE TO THE NEXT MENU ITEM. AFTER **5 SECONDS** OF NO BUTTON ACTIVITY, CURRENT SETTINGS WILL BE WRITTEN AND THE CONTROL WILL RESUME REGULAR OPERATION.



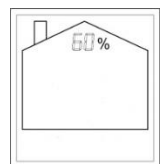
### Adjustment Setting 1: Run Time Maintenance Clock

MAINTENANCE CLOCK FACTORY SETTING: 3 MONTHS. TO KEEP FACTORY SETTING, PRESS THE MODE BUTTON OR USE THE UP AND DOWN ARROW BUTTONS TO CHANGE 1-12 MONTHS. ONCE ANY DESIRED CHANGE IS MADE (IF ANY), PRESS THE **MODE** BUTTON. **MENU ADVANCES TO HUMIDITY SENSOR.**



### Adjustment Setting 2: Calibrating the Humidity Sensor

IF CALIBRATION IS NOT DESIRED, SIMPLY PRESS THE MODE BUTTON. IF CALIBRATION IS DESIRED, USE THE UP AND DOWN ARROW KEYS TO CALIBRATE THE HUMIDITY SENSOR IN 5% INCREMENTS. TO PROGRAM ANY CHANGES, PRESS THE **MODE** BUTTON. **MENU ADVANCES TO RECIRCULATION.**



### Adjustment Setting 3: Turn OFF/ON Recirculation Functions (default is ON)

AN ANIMATED RECIRCULATING ARROW INDICATES THAT RECIRCULATION IS ENABLED. USE THE UP AND DOWN ARROW KEYS TO TURN OFF RECIRCULATION (STATIC ARROW) OR ON (ANIMATED ARROW). TO PROGRAM ANY CHANGES, PRESS THE **MODE** BUTTON. **CUSTOM MENU CLOSES.**

NOTE: IF RECIRCULATION IS NOT TURNED OFF FOR VENTILATORS NOT EQUIPPED FOR RECIRCULATION, THE VENTILATOR WOULD OPERATE IN LOW SPEED WHEN RECIRCULATION MODE IS SELECTED.

