



HOW it WORKS

PAC-SK52ST Service Tool

The PAC-SK52ST is a proprietary and recommended essential service tool used to obtain operational data and technical service information for troubleshooting and maintenance purposes from all Mitsubishi Electric P-Series and M-Series branch box units. The service tool plugs into CNM connector on the P-Series outdoor unit control board and on the M-Series branch box control board. Specific SW2 switch settings of PAC-SK52ST will display function values on the LED display. Function settings are listed in the system service manuals (P-Series outdoor unit service manual / M-Series branch box service manual) and used to display operational data such as compressor frequency, pipe temperatures, superheat, subcooling and thermistor values. Accessibility to operational data and check codes is effortless, therefore reduces service times during equipment maintenance and/or service without use of additional tools, i.e., multi-meter, service manifold gauges.

The PAC-SK52ST can be used for preventative maintenance to confirm system operations are in accordance to manufacturer specifications without service gauges. This limits risk of refrigerant contamination, reduced system refrigerant charge, and accidental skin irritation that may be associated with connecting and disconnecting gauges and other tools to the outdoor unit's service ports. Using the Mitsubishi Electric service tool to observe system performance and error codes at the outdoor unit or branch box is a great advantage when indoor unit is located some distance away from outdoor unit, in a hard-to-reach area, or when troubleshooting has proven difficult and more information is required.

PAC-SK52ST on start-up, with dip-switches in default position (all off, refer to above tables):

- LED 1 – Displays the state of operation mode; off/fan, cooling/dry, heating, or defrosting.
- LED 2 – Displays the operation of; compressor warm-up, compressor on, 4-way valve, and solenoid valve.
- LED 1 & 2 – Displays 2-digit error code*

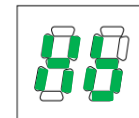
Examples:

- Setting dipswitches 1,2,3 to ON and 4,5,6 OFF will display compressor operating frequency (EX. 1)
- Setting dipswitches 1,2, 3, 4, 5 to ON and 6 to OFF will show discharge superheat (EX.2)
- Setting dipswitches 1 and 6 to ON and 2, 3, 4, 5 to OFF will display the input current to outdoor unit (EX. 3)

When read-out value is negative, a (-) is displayed followed by the read-out value. Additionally, when the read-out value is three digits, '01' is flashed on the display followed by remaining two digits.

*If equipment is non-operational or protection alarm is present on start-up, a check code will be displayed on the service tool.

LED1 LED2



The tens digit : Operation mode

Display	Operation Model
O	OFF / FAN
C	COOLING / DRY *
H	HEATING
d	DEFROSTING

The ones digit : Relay output

Display	Warming-up Compressor	Compressor	4-way valve	Solenoid valve
0	—	—	—	—
1	—	—	—	ON
2	—	—	ON	—
3	—	—	ON	ON
4	—	ON	—	—
5	—	ON	—	ON
6	—	ON	ON	—
7	—	ON	ON	ON
8	ON	—	—	—
A	ON	—	ON	—

