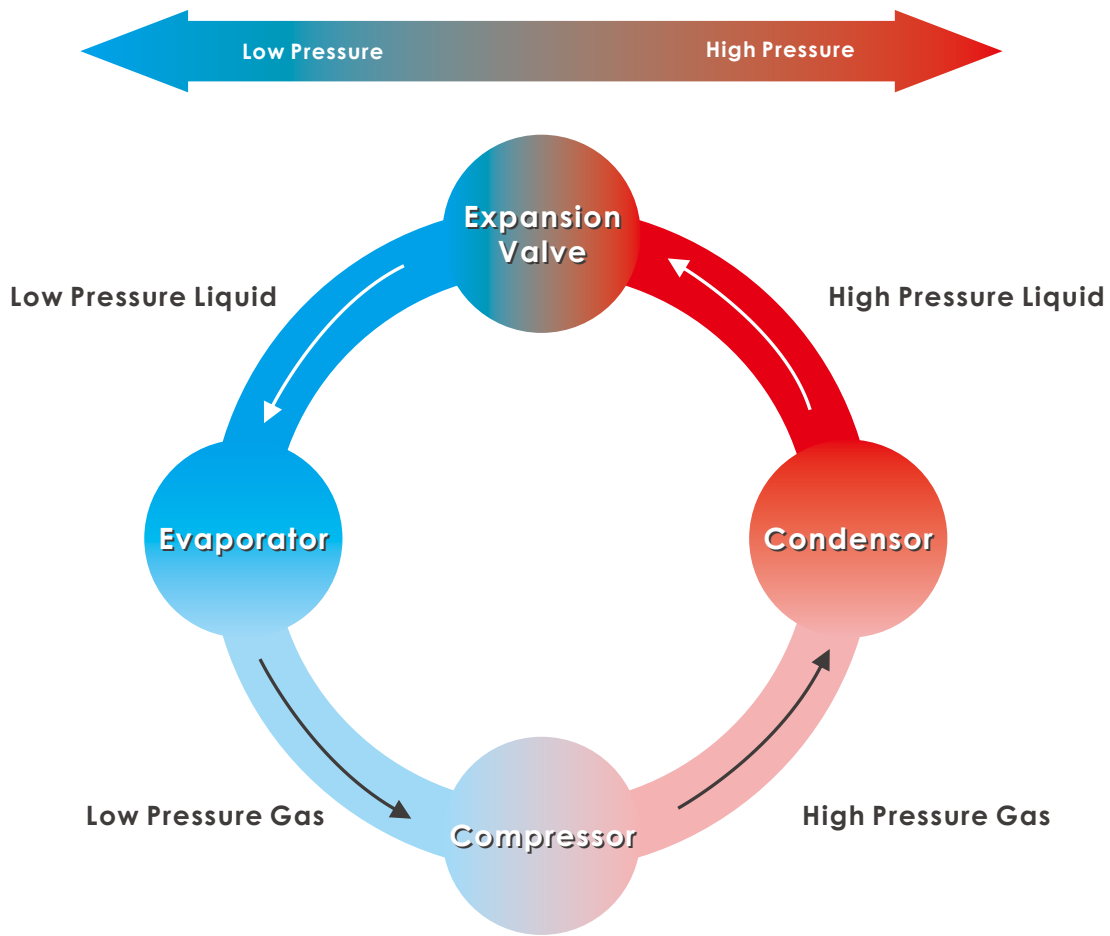


# KR-101

## Refrigerator Model Training System

The Refrigerator Model Training System (KR-101) locates all essential refrigerator components on the front panel of the system. The 4 major components of a basic refrigeration cycle, namely the condenser, the compressor, the evaporator, and the capillary tube, are located at the rear side of the system for students to touch and feel. Through observing these 4 elements, students can also draw the Mollier Chart to record the characteristics of the refrigerant during different phases of the refrigeration cycle.

# ● The Refrigeration Cycle of a Refrigerator



Evaporator

Condenser

Meters and Display

Refrigerator Controlling Circuits

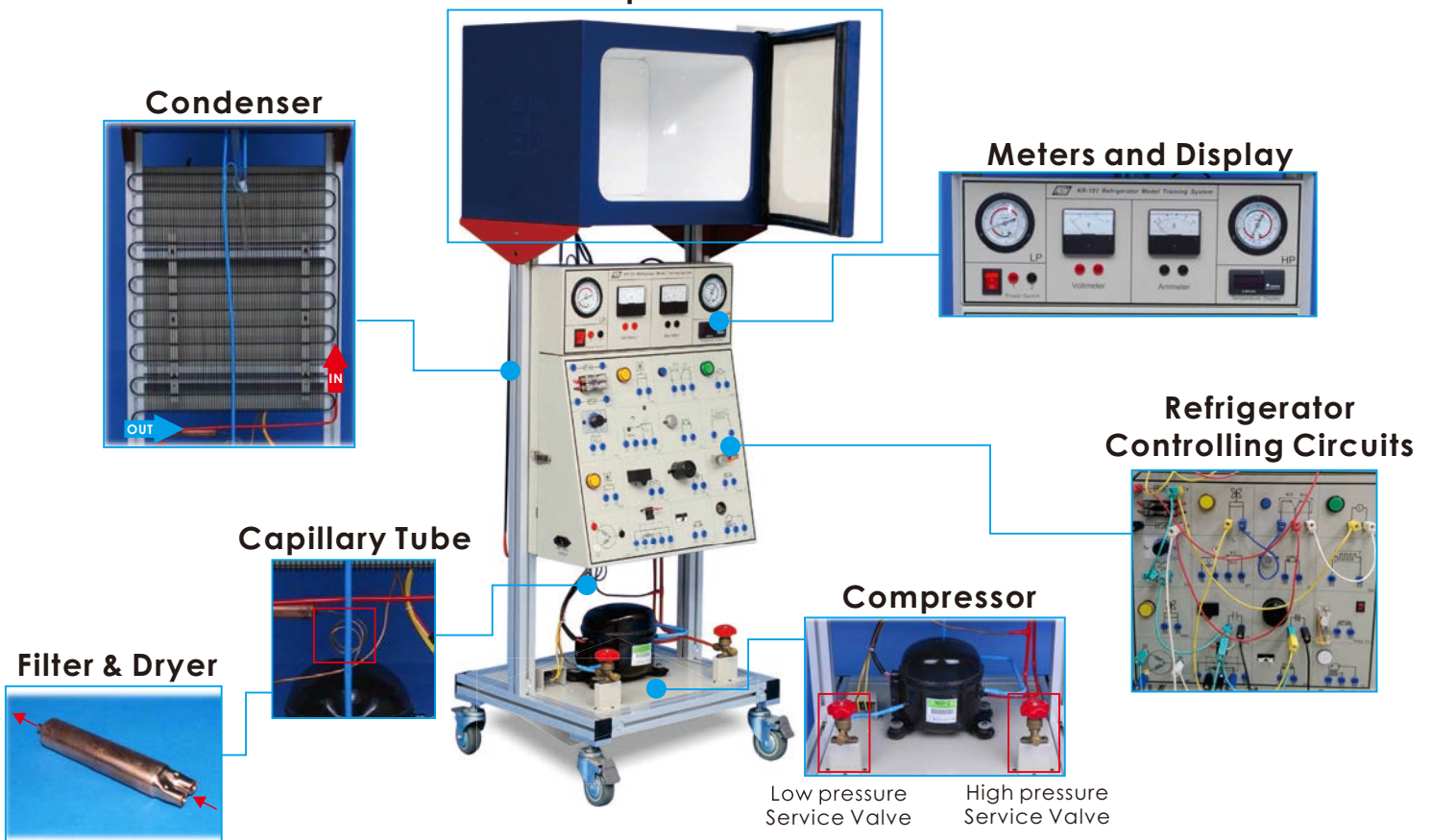
Capillary Tube

Compressor

Filter & Dryer

Low pressure Service Valve

High pressure Service Valve



## ● System Features

1. Teacher Mode: The teacher board can be inserted into the side slot to allow the system to operate normally even if the wire connections on the front panel are incorrect.
2. The condenser, the compressor, the evaporator, the capillary tube, the filter, and the drier are all unfolded to allow clearer observation.
3. KR-101 consists of various electronic components and meters, allowing students to construct circuits to control the system and to use these meters to record the status of the components during system operation.



## ● Learning Topics

- III ➔ Hands-on practice in compressor wiring
- III ➔ Construction of control circuits for the refrigerator system
- III ➔ Management of the refrigerator system
- III ➔ Understanding the refrigerator characteristics
- III ➔ Plotting the Mollier Chart
- III ➔ Calculation of the performance in the refrigerator