

DC-DC converters have a wide usage as the driver circuit of direct current (DC) motors. This has necessitated sensitive speed controls to be made on DC motors. Classical controllers have lower performance due to the non-linear features of DC motors, such as saturation and friction. The Neural Network Controllers (NNC) are widely used in controlling poorly-defined, nonlinear and uncertain systems. NNC courses are now being offered by several universities at the bachelor's and master's degree levels as a result of NNC's successful applications in these fields. However, the training of an NNC driver circuit in a laboratory environment is a time-consuming and expensive task. In this study, an NNC training set of the DC converter-fed Permanent Magnet Direct Current (PMDC) motor, which is part of the electrical machinery courses, was prepared. The set has a flexible structure and a graphical interface. Thanks to this set, it has become possible to change the PMDC motor and controller parameters, and monitor the system's reaction under various operational conditions in graphics. This training set can also guarantee effective learning and comprehension of Artificial Neural Networks (ANN).