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Introduction To Digital Electronics – Lesson 5: The SR Latch

PARTS

The following information is meant to go with the online lesson found here:
http://www.pyroelectro.com/edu/digital/sr_latch/

THE TWO TYPES OF SR LATCH

In this lesson we built two different types of SR latches. One used NAND logic gates and the other used NOR logic gates. Both created an SR latch but they worked opposite each other. One used logic 0's to trigger set and reset, while the other used logic 1's to trigger set and reset. The IC's used in this experiment are listed out below.

Picture	Part	Description
	74HC00 4x NAND Gates	This is a NOT Gate logic IC and inside of it there are 6 NOT logic gates that you can use. Datasheet Link
	74HC02 4x NOR Gates	This is an AND Gate logic IC and inside of it there are 4 AND logic gates that you can use. Datasheet Link

Since a NAND and NOR logic gate is just an AND and OR gate combined with a not gate off of the output, you could technically just use two AND gates and two NOT gates to build the NAND SR latch. Similarly, you could use two OR gates and two NOT gates to build the NOR gate SR latch. If you're curious and brave give that 'harder' method of SR latch building a shot and see how it works out.

ADDITIONAL INFORMATION

To ask questions about anything found in this information please
head on over to the forums located at:
http://www.pyroelectro.com/forums/viewforum.php?f=21