Let $G$ be a solvable group, and let $\Delta(G)$ be the character degree graph of $G$. In this paper, we generalize the definition of a square graph to graphs that are block squares. We show that if $G$ is a solvable group so that $\Delta(G)$ is a block square, then $G$ has at most two normal nonabelian Sylow subgroups. Furthermore, we show that when $G$ is a solvable group that has two normal nonabelian Sylow subgroups and $\Delta(G)$ is block square, then $G$ is a direct product of subgroups having disconnected character degree graphs. (Received August 28, 2019)