

ABSTRACT

A signal that is transmitted to a terminal apparatus itself is demodulated with high precision, and throughput is improved. A terminal apparatus that communicates with a base station apparatus includes: a reception unit that receives downlink control information from the base station apparatus; and a signal detection unit that demodulates a signal that is transmitted to the terminal apparatus itself, based on first modulation mapping, and demodulates an interference signal based on second modulation mapping, in a case where information relating to a transmit power of the interference signal is included in the downlink control information. A base station apparatus that communicates with a terminal apparatus includes: a transmission unit that transmits a transmit signal at a different transmit power to each of a plurality of terminal apparatuses, in a case where the plurality of terminal apparatuses are multiplexed with the same resource, and a modulation unit that performs modulation using first modulation mapping for a terminal apparatus that has a minimum transmit power, and performs the modulation using second modulation mapping for other terminal apparatuses.