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LoRa Developer Documentation

Created By
Namal Jayasuriya
DroLa Project
SCoRe – UCSC [GSOC]

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Ebyte Lora modules has their own protocol to change device parameters at mode-03.

Modes can be changed by setting M0 and M1 status.

Mode - 00 M1-1 M2-1
Mode - 01 M1-0 M2-1
Mode - 02 M1-1 M2-0
Mode - 03 M1-0 M2-0

To communicate between two nodes, addresses of two nodes should be same and communication channel should be same.

There are two communication methods
  1.Fixed transmission
     In this transmission node temporally change its channel and address to receivers channel and address.

Fixed transmission

Each module can connect with other modules in different addresses and channels to achieve application like networking, repeating etc.

① Each one can act as transmitter to send out data.
② The format is : Target address + Target channel + Data
③ The sender itself can be arbitrary address and channel.
④ HEX format is required for fixed transmission.

D target address +
D target channel +
data

● Valid
● Unvalid
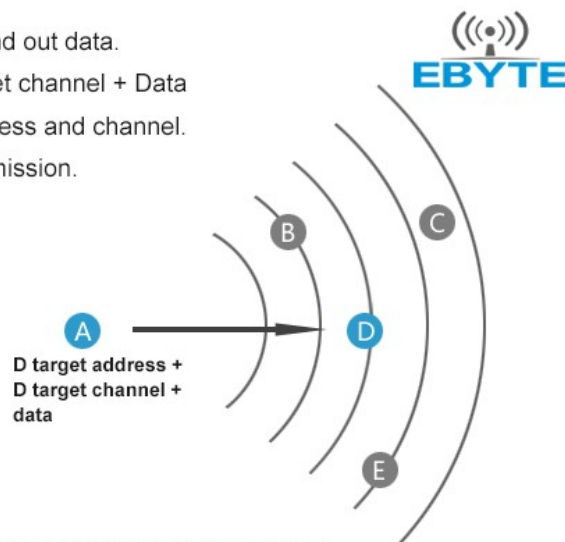
Notes:Only module D can receive data which transmitted from module A.

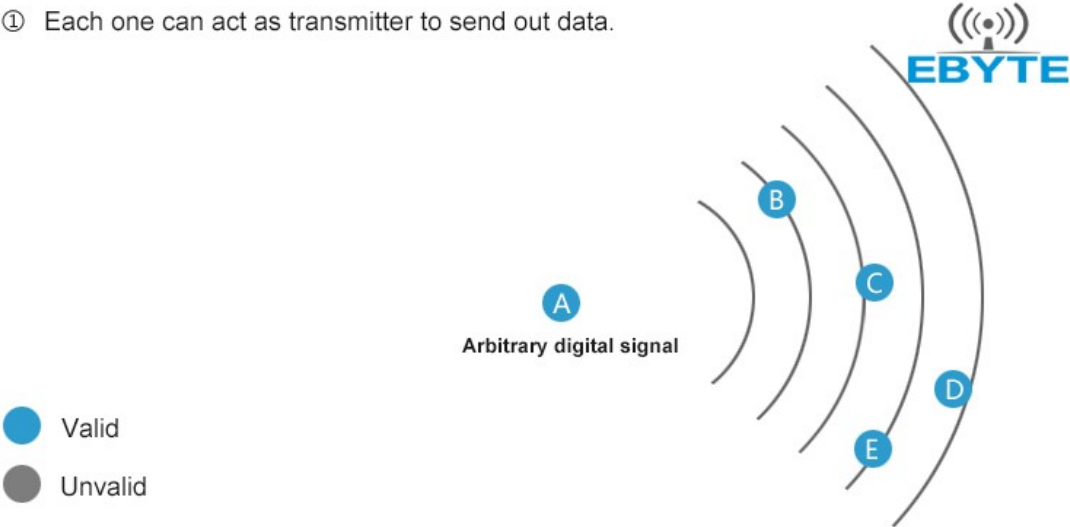|	Working mode	Transmitting mode	Format for data
Transmitter	Normal mode(mode 0)	Fixed transmission	Target address + Target channel + Data
Teceiver	Normal mode(mode 0)	Arbitrariness	Data

2.Transparent Transmission

Transparent transmission
Address, chanel and air data rate must keep the same for transparent transmission.

① Each one can act as transmitter to send out data.

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Arbitrary digital signal

● Valid

● Unvalid

Notes:Module B,C,D,E all can receive data transmitted from module A and output data.

	Working mode	Transmitting mode	Format for data
Transmitter	Normal mode(mode 0)	Transparent transmission	Data
Receiver	Normal mode(mode 0)	Arbitrariness	Data

Chengdu Ebyte Electronic Technology Co.,Ltd.

Official website : www.cdebyte.com   Technical support : support@cdebyte.com   Tel : +86-28-61399028

In DROLA network, we have end nodes at several locations and an another node as a base station. Each end node should send it's location to base station. For this network we can use fixed transmission from each end node to base station.