Wireless Multimedia Solutions
# NIMBUS

WiMi5150AT/R Setup

November, 2019

WiMi5150A Operation Modes

TX-AP mode: TX works as an AP (Typical Operation)

WiMi5150AT TX
(TX-AP mode)

Max. 1.5km (5775MHz)
@ LOS

WiMi5150AR RX
(TX-AP mode)

Wi-Fi Streaming
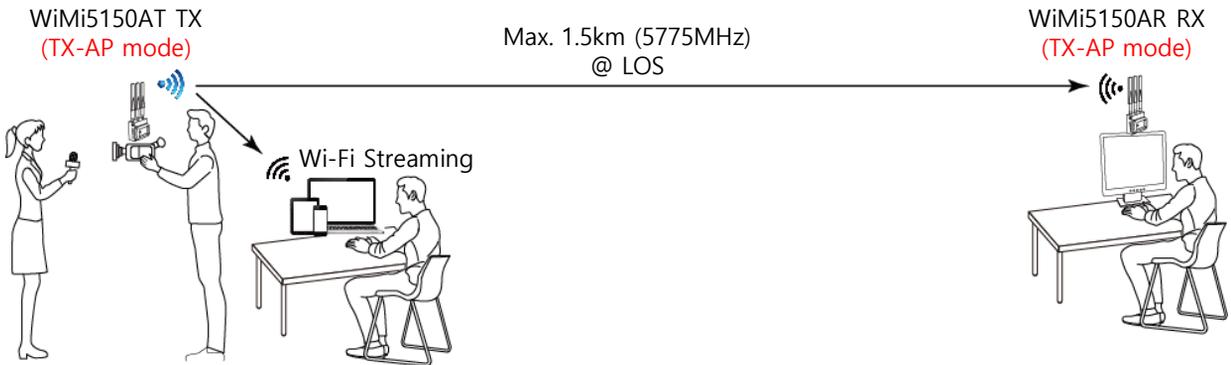
RX-AP mode: RX works as an AP

Note: Transmission distance between TX and RX can be reduced when Wi-Fi devices are connected to the RX and streamed from it.

WiMi5150AT TX
(RX-AP mode)

Max. 1.5km (5775MHz)
@ LOS

WiMi5150AR RX
(RX-AP mode)

Wi-Fi Streaming
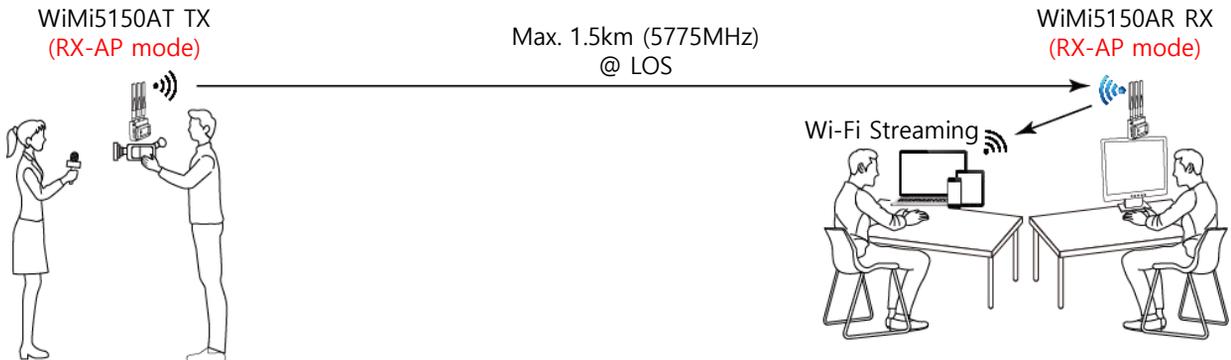
WiMi1000 Repeater Bridge mode: Both TX & RX work as a Station

WiMi5150AT TX
(Repeater Bridge mode)

WiMi1000
Repeater

WiMi5150AR RX
(Repeater Bridge mode)

Max. 1.5km (5775MHz)
@ LOS

Max. 1.5km (5775MHz)
@ LOS
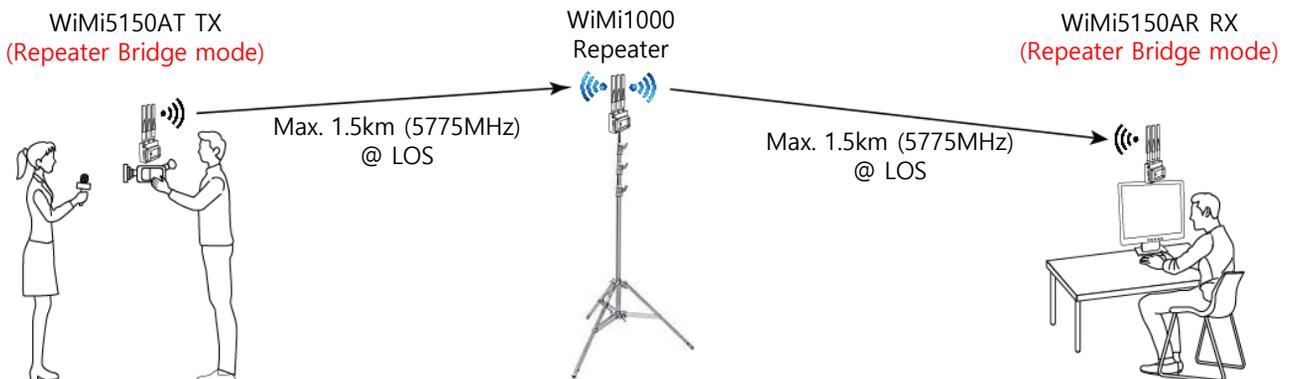
DIP Switch Configuration

WiMi5150AT(Transmitter, TX)

WiFi Ch. — 4 bits: Selection of a specific frequency in TX-AP or RX-AP Mode
Selection of SSID in WiMi1000 Repeater Bridge Mode

ENC. Rate — 2 bits: Selection of Encoding Rate
2 bits: Selection of Operation Mode

Encoding Rate

ENC. Rate	ENC. Rate	ENC. Rate	ENC. Rate
12 Mbps	15 Mbps	20 Mbps	Controlled by Web

Operation Mode

| ENC. Rate	ENC. Rate	ENC. Rate	ENC. Rate
TX-AP Mode	RX-AP Mode	WiMi1000 Repeater Bridge Mode	WiMi1000 Repeater Bridge Mode
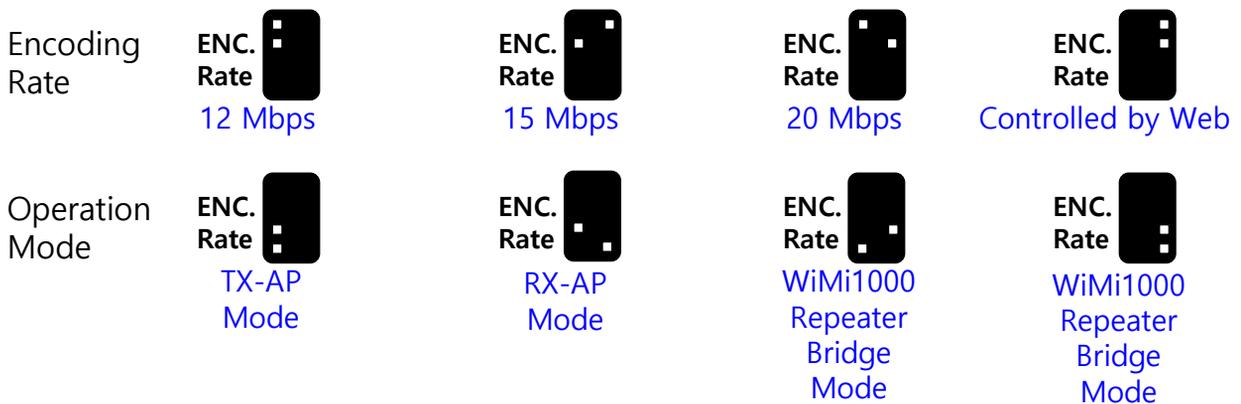
WiMi5150AR(Receiver, RX)

WiFi Ch. — 4 bits: Selection of a specific frequency in TX-AP or RX-AP Mode
Selection of SSID in WiMi1000 Repeater Bridge Mode

SYS-ID — 2 bits: Selectin of Receiver's ID (Receiver-# in 1:3 multicast mode)
2 bits: Selection of Operation Mode

SYS-ID In 1:3 Config.

SYS-ID	SYS-ID	SYS-ID	SYS-ID
Slave-1	Slave-2	Slave-3	Slave-4

Operation Mode

SYS-ID	SYS-ID	SYS-ID	SYS-ID
TX-AP Mode	RX-AP Mode	WiMi1000 Repeater Bridge Mode	WiMi1000 Repeater Bridge Mode
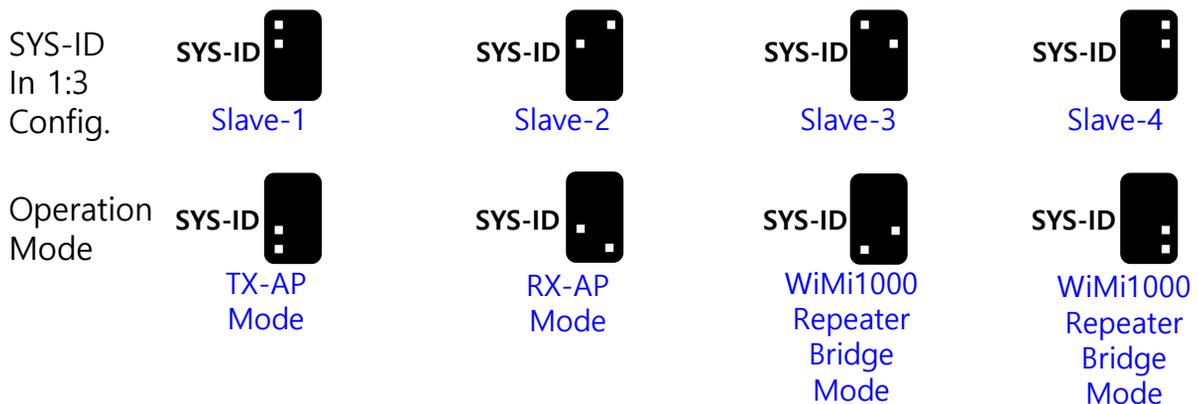
FCC - WiMi5150AT/R Wi-Fi Ch. Selection (TX-AP, RX-AP Mode)

WiFi Ch.
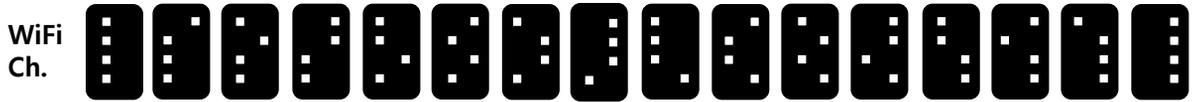
SSID: WiMi5000_00   01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

FCC - SSID Number vs Ch./Frequency Table (TX-AP, RX-AP Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
WiMi5000_00	46 (5230)	WiMi5000_04	106 (5530)	WiMi5000_08	122 (5610)	WiMi5000_12	155 (5775)
WiMi5000_01	46 (5230)	WiMi5000_05	106 (5530)	WiMi5000_09	138 (5690)	WiMi5000_13	155 (5775)
WiMi5000_02	58 (5290)	WiMi5000_06	122 (5610)	WiMi5000_10	138 (5690)	WiMi5000_14	155 (5775)
WiMi5000_03	58 (5290)	WiMi5000_07	122 (5610)	WiMi5000_11	138 (5690)	WiMi5000_15	165 (5825)

* SSID for **RX-AP** mode will be **WiMi5000R_XX**.

* The above DIP switch setting of 4-bits on both TX and RX must be same each other.

FCC Ch. (Freq.)

46 (5230MHz) 58 (5290MHz) 106 (5530Hz) 122 (5610MHz) 138 (5690MHz) 155 (5775MHz) 165 (5825MHz)
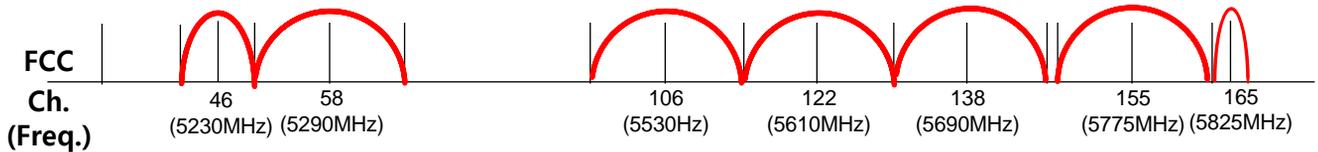
FCC - WiMi5150AT/R SSID Selection (WiMi1000 Repeater Bridge Mode)

WiFi Ch.
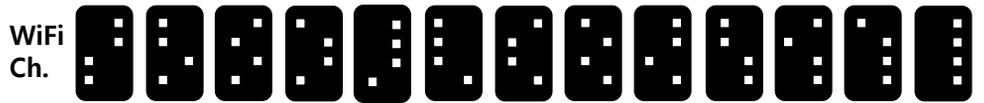
SSID: Bridge_03   04 05 06 07 08 09 10 11 12 13 14 15

* The above DIP switch setting of 4-bits must be same with the WiMi1000's SSID setting.
* The real operating Wi-Fi frequency will be determined by the WiMi1000's SSID setting.

FCC - SSID Number vs Ch./Frequency Table (WiMi1000 Repeater Bridge Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
N/A**		Bridge_04	58 (5290)	Bridge_08	122 (5610)	Bridge_12	155 (5775)
N/A**		Bridge_05	106 (5530)	Bridge_09	138 (5690)	Bridge_13	155 (5775)
N/A**		Bridge_06	106 (5530)	Bridge_10	138 (5690)	Bridge_14	155 (5775)
Bridge_03	58 (5290)	Bridge_07	122 (5610)	Bridge_11	138 (5690)	Bridge_15	165 (5825)

** **Bridge_00, Bridge_01 and Bridge_02 MUST NOT be used with the WiMi5150AT/R**

FCC Ch. (Freq.)

58 (5290MHz) 106 (5530Hz) 122 (5610MHz) 138 (5690MHz) 155 (5775MHz) 165 (5825MHz)
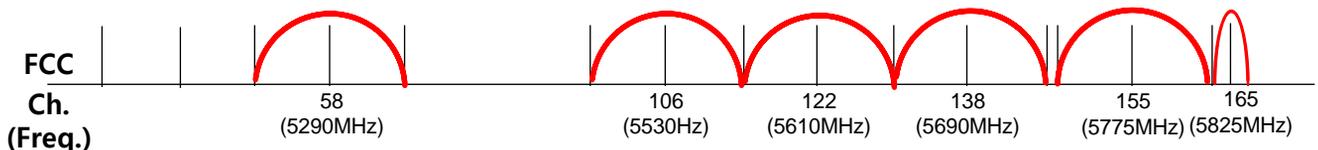
CE - WiMi5150AT/R Wi-Fi Ch. Selection (TX-AP, RX-AP Mode)

WiFi Ch.
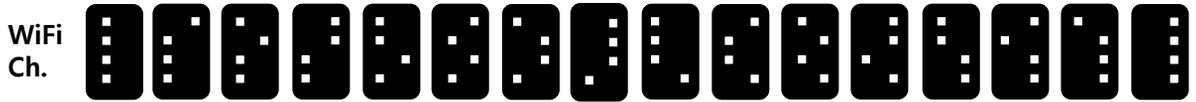
**SSID**: WiMi5000E_00   01   02   03   04   05   06   07   08   09   10   11   12   13   14   15

CE - SSID Number vs Ch./Frequency Table (TX-AP, RX-AP Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
WiMi5000E_00	46 (5230)	WiMi5000E_04	58 (5290)	WiMi5000E_08	122 (5610)	WiMi5000E_12	138 (5690)
WiMi5000E_01	46 (5230)	WiMi5000E_05	106 (5530)	WiMi5000E_09	122 (5610)	WiMi5000E_13	138 (5690)
WiMi5000E_02	58 (5290)	WiMi5000E_06	106 (5530)	WiMi5000E_10	122 (5610)	WiMi5000E_14	138 (5690)
WiMi5000E_03	58 (5290)	WiMi5000E_07	106 (5530)	WiMi5000E_11	122 (5610)	WiMi5000E_15	138 (5690)

* SSID for **RX-AP** mode will be **WiMi5000RE_XX**.
* The above DIP switch setting of 4-bits on both TX and RX must be same each other.

CE Ch. (Freq.)

46 (5230MHz)   58 (5290MHz)   106 (5530Hz)   122 (5610MHz)   134 (5670MHz)
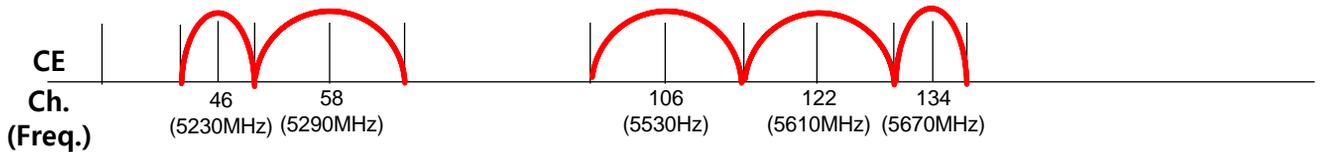
CE - WiMi5150AT/R SSID Selection (WiMi1000 Repeater Bridge Mode)

WiFi Ch.
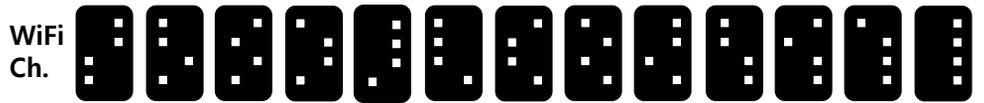
SSID: BridgeE_03   04   05   06   07   08   09   10   11   12   13   14   15

* The above DIP switch setting of 4-bits must be same with the WiMi1000's SSID setting.
* The real operating Wi-Fi frequency will be determined by the WiMi1000's SSID setting.

CE - SSID Number vs Ch./Frequency Table (WiMi1000 Repeater Bridge Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
N/A**		BridgeE_04	58 (5290)	BridgeE_08	106 (5530)	BridgeE_12	138 (5690)
N/A**		BridgeE_05	58 (5290)	BridgeE_09	122 (5610)	BridgeE_13	138 (5690)
N/A**		BridgeE_06	106 (5530)	BridgeE_10	122 (5610)	BridgeE_14	138 (5690)
BridgeE_03	58 (5290)	BridgeE_07	106 (5530)	BridgeE_11	122 (5610)	BridgeE_15	138 (5690)

** Bridge_00, Bridge_01 and Bridge_02 MUST NOT be used with the WiMi5150AT/R

CE Ch. (Freq.)

58 (5290MHz)   106 (5530Hz)   122 (5610MHz)   138 (5690MHz)
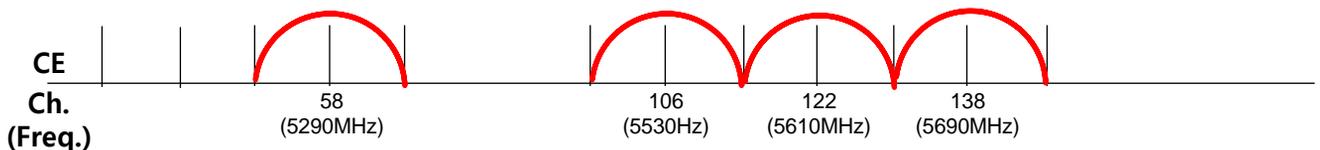
Japan - WiMi5150AT/R Wi-Fi Ch. Selection (TX-AP, RX-AP Mode)

**WiFi Ch.**

SSID: WiMi5000J_00   01   02   03   04   05   06   07   08   09   10   11   12   13   14   15

Japan - SSID Number vs Ch./Frequency Table (TX-AP, RX-AP Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
WiMi5000J_00	46 (5230)	WiMi5000J_04	58 (5290)	WiMi5000J_08	106 (5530)	WiMi5000J_12	122 (5610)
WiMi5000J_01	46 (5230)	WiMi5000J_05	106 (5530)	WiMi5000J_09	122 (5610)	WiMi5000J_13	134 (5670)
WiMi5000J_02	58 (5290)	WiMi5000J_06	106 (5530)	WiMi5000J_10	122 (5610)	WiMi5000J_14	134 (5670)
WiMi5000J_03	58 (5290)	WiMi5000J_07	106 (5530)	WiMi5000J_11	122 (5610)	WiMi5000J_15	134 (5670)

* SSID for **RX-AP** mode will be **WiMi5000RJ_XX**.
* The above DIP switch setting of 4-bits on both TX and RX must be same each other.

Japan Ch. (Freq.)

46 (5230MHz)   58 (5290MHz)   106 (5530Hz)   122 (5610MHz)   134 (5670MHz)
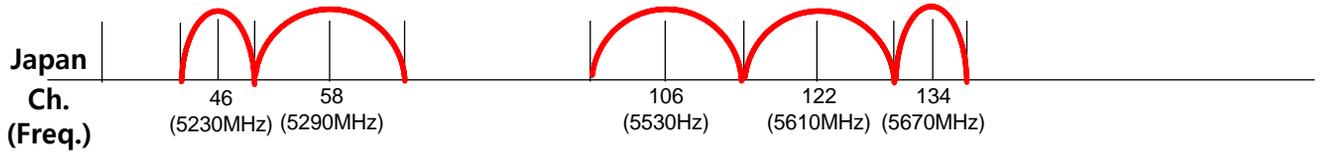
Japan - WiMi5150AT/R SSID Selection (WiMi1000 Repeater Bridge Mode)

WiFi Ch.
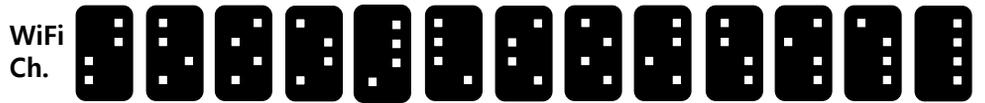
**SSID**: BridgeJ_03   04   05   06   07   08   09   10   11   12   13   14   15

* The above DIP switch setting of 4-bits must be same with the WiMi1000's SSID setting.
* The real operating Wi-Fi frequency will be determined by the WiMi1000's SSID setting.

Japan - SSID Number vs Ch./Frequency Table (WiMi1000 Repeater Bridge Mode)

SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)	SSID	Ch. No. (Freq.)
N/A**		BridgeJ_04	58 (5290)	BridgeJ_08	106 (5530)	BridgeJ_12	122 (5610)
N/A**		BridgeJ_05	58 (5290)	BridgeJ_09	122 (5610)	BridgeJ_13	134 (5670)
N/A**		BridgeJ_06	106 (5530)	BridgeJ_10	122 (5610)	BridgeJ_14	134 (5670)
BridgeJ_03	58 (5290)	BridgeJ_07	106 (5530)	BridgeJ_11	122 (5610)	BridgeJ_15	134 (5670)

** **Bridge_00, Bridge_01 and Bridge_02 MUST NOT be used with the WiMi5150AT/R**

Japan Ch. (Freq.)

58 (5290MHz)   106 (5530Hz)   122 (5610MHz)   134 (5670MHz)