

PLL FM Stereo Radio(Receiver) Unit

88MHZ ~ 108MHz

NR – B108RU Ver 7.0

Related Products : NR-B108RM (PLL FM Stereo Radio Receiver Module)
NR-B108TU3 (PLL FM Stereo Radio Transmitter Unit)
NR-B108TM3 (PLL FM Stereo Radio Transmitter Module)



1. PLL FM Stereo Radio(Receiver) Unit.

- * This is a miniature-sized receiver that can pick up wireless signals/FM broadcast signals over 76-108MHz, having same functions as FM Radio set(Radio & Receiver).
- * While generally used receivers work on a single or several pre-determined frequencies, NR-B108RU can pick up any stereo signals of any frequency within the range of 76-108MHz.
- * Miniature-sized to fit into any of your products, it is especially easy to install in electronic devices of compact size.
- * You can set receive frequencies on 4 switches. ex) 82.6MHzset on 0, 8, 2 or 6.
- * You can set frequencies from MCU as well.
Set frequency select switch on 0000. ---> Transmit as serial data 082.6M (9600,8,1,N).

2. Features.

- . Stereo reception from all broadcast band(76-108MHz)
- . PLL system guarantees good frequency stability.
- . Miniature-sized(SMD Type), easy to apply to any of your products.
- . Controllable from CPU(MCU)-control method supplied.
- . Works on a single voltage 5V.

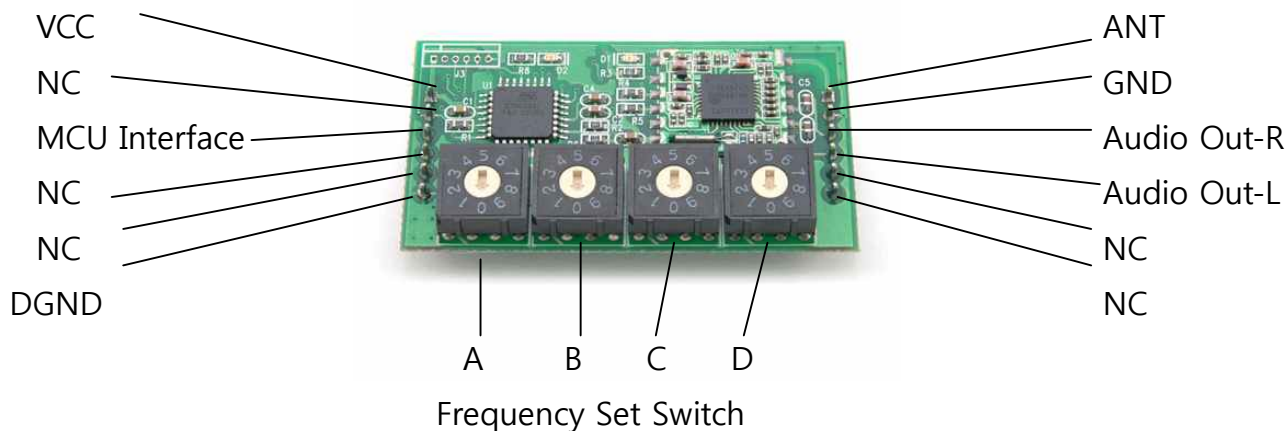
3. Applications

- . Compact FM radio.
- . Portable TV, MP3, PDA.
- . Telephone & Mobile, CAR Navigation System, Game machine.

4. PLL FM Stereo Radio(Receiver) Unit Specification.

Item	Specification
Operation Voltage	DC 5V.
Operation Current	Under 22mA
Frequency	88Mhz - 108Mhz(Normal)
Frequency Control	CPU (MCU) Interface or 4-Switchs
Receiving Method	Super Heterodyne
Audio Output Power	60 – 90mV

5. PLL FM Stereo Radio(Receiver) Unit Pin.



- .VCC : Power DC 5V (+)
- . MCU Interface : Use when controlling by MCU (CPU).
- . NC : Not in use.
- . DGND : Power DC 5V (-).
- . ANT : Antenna terminal.
- . GND : Ground (DGND).
- . R-OUT : Right audio signal output.
- . L-OUT : Left audio signal output.
- . NC : Not in use.
- . NC : Not in use.

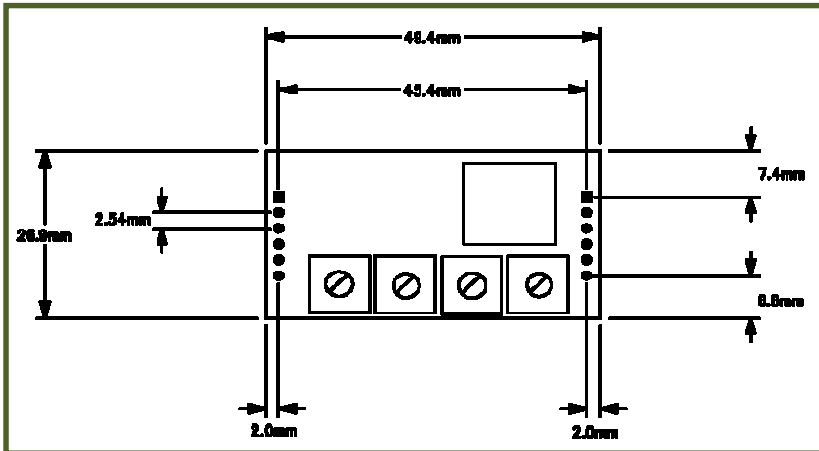
. Frequency Set Switch

- | | | |
|------------------|---|-------------------------------|
| | A | : 100MHz Count Frequency Set. |
| ex) 1 0 7 . 5MHz | B | : 10MHz Count Frequency Set. |
| A B C D | C | : 1MHz Count Frequency Set. |
| | D | : 100KHz Count Frequency Set. |

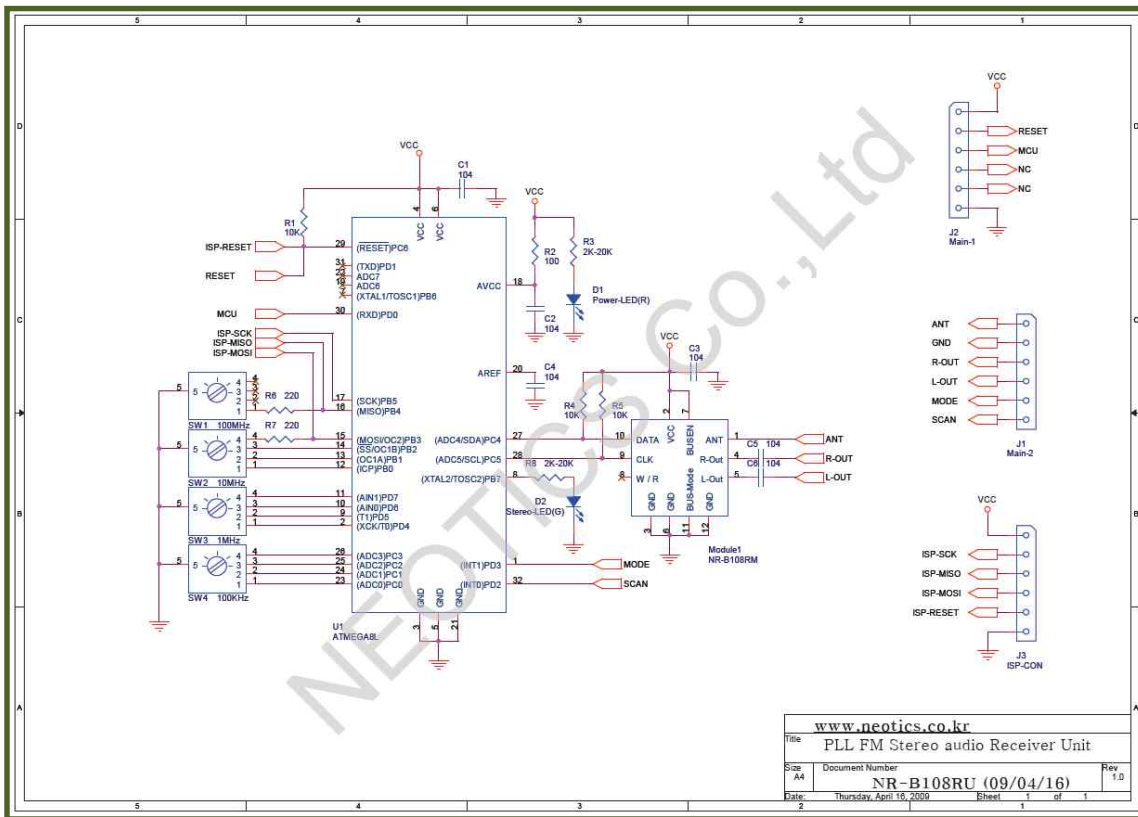
***** How to input frequencies as serial from CPU(MCU) *****

1. Set the frequency on "0000" when controlling from MCU.
 2. Transmit to MCU control terminal as Serial Data (TTL level).
 - ex) Receive frequency 82.6MHz.....Transmit "082.6M" from UART-Port TTL Level
- . Please use the NR-B108 Only Antenna (PN-ANT-FM) or FM Frequency Antenna.
 - . Use DC 5V for power (VCC)
 - . For bigger sound, connect Audio AMP to R-OUT or L-OUT (use audio amplifier or LM386).

6. PLL FM Stereo Radio(Receiver) Unit Size.



7. PLL FM Stereo Radio(Receiver) Unit Circuit.



***** Caution*****

1. Check the features first to connect with other equipment.
2. This circuit is strictly tested.
3. The developer, manufacturer or dealer is not responsible for any malfunctioning/damage caused by connection with other equipment.
4. Appropriate permit /approval is required for some products utilizing this module, depending on functions and usages.

- For more information and inquiry, please refer to the sites below.