#### FLS Phono board 포노 보드 설명서

최상의 음질을 위해서 포노보드 장착 후 최초 100시간은 턴테이블을 연결 하고 앰프를 계속 작동하여 에이징하시길 바랍니다. 포노 보드의 엽력단 자에는 턴테이블 이외의 소스기기를 연결하면 안 됩니다.

for best performance we advice you to go on with running for 100 hours more. Remember that this is meant in operating presence of signal.

**DON'T CONNECT OTHER KIND OF DEVICES ON THESE INPUTS.** Connections from turntable should be through high quality audio interconnects with proper shielding. We would recommend using audio interconnects less than 1,5 meters in length.

#### Connection 보드 설치

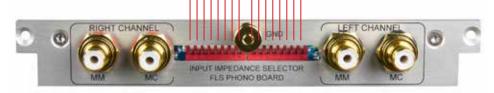
보드 장착 전에 모든 전원이 차단된 것을 확인바랍니다. 포노보드를 장착하면 아래 그림처럼 앰프의 전면 표시창에 2개의 입력이 추가되어 보여 집니다.

Before connecting any audio cables, be sure that all components in your system are powered off. When your FLS unit is equipped with this Phono board, two new inputs will be added, PHONO MC and PHONO MM.









# How to configure your Phono board 포노 보드 환경설정

보드에는 2세트의 딥스위치가 있습니다. 좌측 것은 좌측 채널용, 우측 것은 우측 채널용입니다. 위 그림은 모든 딥 스위치가 OFF 상태에 있습니다. 스위치 1~5번은 MC용이며, 6~8번은 MM용 스위치입니다.

Phono board has two, identical group of dip-switch (see above). The two dip-switch MUST be configured always the same way, because one is for the left channel and the other one for the right channel.

Picture shows the dip-switches position in "OFF".

Group switches from 1 to 5 are dedicated for MC input load selection. Group switches from 6 to 8 are dedicated for MM input load selection.

### MC input MC입력 설정

MC입력게인은 60dB입니다. 카트리지 임피던스에 맞추어 아래 표를 보시고 딥 스위치를 조정하십시오. 만약 이 표에 없는 임피던스의 카트리지인 경우에는 모든 딥 스위치를 OFF로 놓고, 임피던스에 맞는 저항(1/4왓트)을 구하여 아래 그림처럼 포노보드의 삽입홀에 장착하여 사용하십시오.

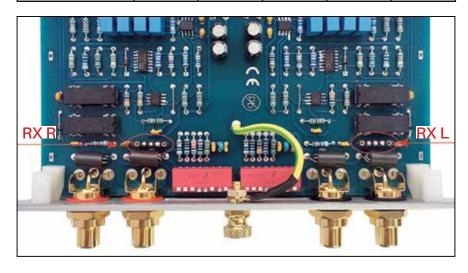
Connect to this input to MC cartridges only. The gain of MC input is 60 dB. To select the correct input impedance (resistive), please refer to Table 1.

If it is necessary to use a different load value from Table 2, select the switches from 1 to 5 all in OFF position and insert custom resistors in the two sockets as in following picture.

Please be sure that you use correct type resistors, i.e. 0.25 watt. In all cases, you MUST use exact same resistor value for both right and left channel.

Table 1

MC	1	2	3	4	5
20 Ohm	ON	ON	ON	ON	ON
25 Ohm	ON	OFF	ON	ON	ON
30 Ohm	ON	OFF	OFF	OFF	OFF
70 Ohm	OFF	ON	ON	ON	OFF
100 Ohm	OFF	ON	OFF	OFF	OFF
200 Ohm	OFF	OFF	ON	ON	ON
250 Ohm	OFF	OFF	ON	ON	OFF
330 Ohm	OFF	OFF	ON	OFF	OFF
600 Ohm	OFF	OFF	OFF	ON	ON
1000 Ohm	OFF	OFF	OFF	ON	OFF
1500 Ohm	OFF	OFF	OFF	OFF	ON



# MM input MM 입력 설정

MM 게인은 40dB입니다. MM카트리지의 캐패시턴스에 맞추어 아래 표를 보시고 딥 스위치를 조정하십시오.

Connect to this input to MM cartridges only. The gain of MM input is 40 dB. To select the correct input impedance (capacitive), please refer to Table 2. Most turntables have a separate ground wire and this should be connected to the rear panel gold binding post (GND). If your turntable does not have a separate ground wire, it may be advisable to run a separate wire from a metal screw or grounded area of the turntable to this post. Turntables are very sensitive to hum and grounding table, head shell or cartridge to Phono board can help lower hum.

Table 2

MM	6	7	8
50 pF	OFF	OFF	OFF
100 pF	ON	OFF	OFF
150 pF	OFF	ON	OFF
200 pF	ON	ON	OFF
250 pF	OFF	OFF	ON
300 pF	ON	OFF	ON
350 pF	OFF	ON	ON
400 pF	ON	ON	ON