HOW TO CONNECT LEAD WIRES

* 1. AC (Power source socket)

Those sockets provide outlets for record player, a TV set, or a tape-recorder, etc.

* 2. HUMBAL (Hum-balancer)

Most of the humming noise comes from reverse insertion of the power plug into the power outlet.

If humming noise is excessive, reverse the power plug insertion.

When humming noises become excessive after a tube or some other part is replaced, you can reduce them by turning the "HUMBAL" knob.

* 3. M.F.B. (Motional feed back speaker system)

These are terminals only for MFB speaker systems, for example, NATIONAL SB-88H, SB-105H etc.

Its voice coil impedance is 8Ω, and this terminal is already connected to 8Ω.

* 4. NORMAL SP

These are terminals for normal speakers of which voice coil impedance may be 4, 8, 16 or 32Ω.

If you use MFB speaker systems, do not connect any other speaker here.

* 5. OUT. IMP. (Speaker voice coil impedance select switch)

Adjust the output impedance according to your regular speaker.

* 6. SEPARATION

This is the FM stereo separation adjustor, but, in order to adjust it, adjusting equipment must be used.

* 7. DX-LOCAL

This set has a built-in ferrite antenna for MW band, so you can enjoy high quality reception, free from noises caused by other electrical appliances.

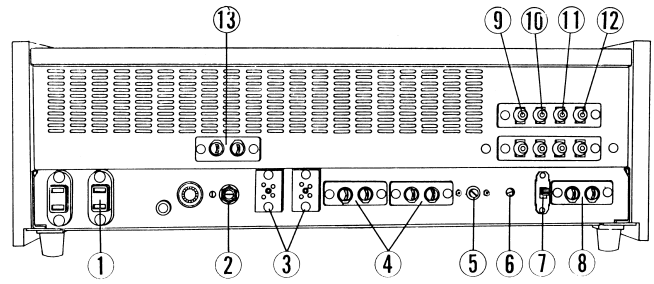


Fig. 2

When you want to listen to distant broadcasts, switch the "DX-LOCAL" at the rear of the set, to "DX", then connect your outdoor antenna (about 36 feet long and 24 feet high) to the "AM ANT" terminal.

This DX-LOCAL switch does not work on SW band.

* 8. AM. ANT

* 9. REC-OUT

When you want to record from the set to your tape recorder, plug the appropriate cord into the "REC-OUT" terminal.

* 10. MAG

Use for reproducing records by mganetic pickup.

You can enjoy record playing at PH position of SELECT switch.

* 11. CRYSTAL

Use for ceramic or crystal pickup.

You can enjoy record playing at PH position of SELECT switch.

* 12. AUX

Use for reproducing high level signals of a tape recorder or a TV set.

You can enjoy them at AUX position of SELECT switch.

* 13. FM ANT

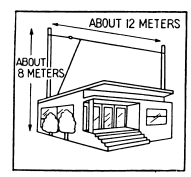
Connect an external 300Ω antenna.

ANTENNA AND EARTH

* This set has a built-in ferrite antenna for MW band, so that you can enjoy high quality reception free from noise caused by other electrical appliances.
* When you want to listen to distant broadcasts, switch the "DX-LOCAL" at the rear of the set to "DX", then connect your outdoor antenna (about 36 feet long and 24 feet high) to the antenna terminal ("A" of AM. ANT) at the back of the set. (Fig. 3) This DX-LOCAL switch does not work on the SW band.
* To reduce, ground the chassis from the earth terminal ("E" of AM. ANT) at the back of the set. (Fig. 4)
* To prevent lightning damage, it is advisable to install a lightning arrester. (Fig. 5)

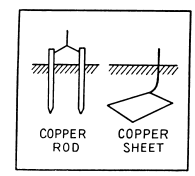
FM antenna

* Where signal strength is strong, the attached antenna is sufficient for good FM reception. (Fig. 6)
* Where signal strength is weak, it is desirable, for best reception, to use a TV low-band antenna or an FM dipole antenna, instead of the attached antenna. (Fig. 7)



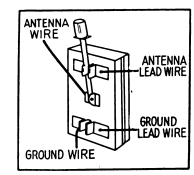
ANTENNA

Fig. 3



GROUND

Fig. 4



LIGHTNING ARRESTER

Fig. 5

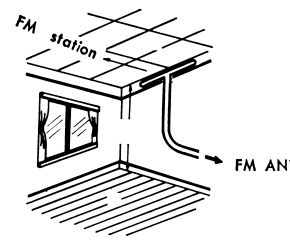


Fig. 6

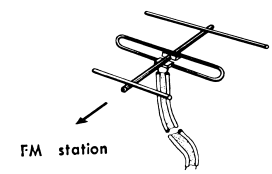


Fig. 7

HOW TO KEEP WOOD CABINET CLEAN

The wooden part of the cabinet is made of wood finished with polyester resin.

1. For dusting, wipe it with a dry cloth.
2. When it is smeared with finger prints, etc., wipe with a cloth damped with benzene.
3. When polished with "NATIONAL Eclaire", the mat finish will become slightly glossy.

Do not use cleaners made for shoes or other electric appliances.

Humming noise while playing records

* If there is excessive humming while playing records, Connnect the earth line (or terminal) of your record player to the "E" position on the "AM ANT" terminal at the rear of this set.

Don't put anything on the amplifier

Although this set may become warm after prolonged use, it is not cause for anxiety. If, however, any foreign object is placed on the set in such a way as to intrerfere with ventilation, the sets' performance may suffer.