CLAIMS

[Claim 1]

A liquid jet head, comprising a wiring plate having a first surface to which a driving element-forming plate including a plurality of driving elements is connected and a second surface which is on a side opposite from the first surface and on which a drive IC that outputs signals for driving the driving elements is provided, wherein wiring connected to a common electrode common to the driving elements is formed on the first surface of the wiring plate, and the wiring is at least partially embedded in the wiring plate and provided to extend in a direction in which each of the rows of the piezoelectric elements extends.

[Claim 2]

The liquid jet head according to claim 1, wherein the wiring is at least partially covered with a metal layer.

[Claim 3]

The liquid jet head according to claim 1 or 2, wherein the wiring and the common electrode are connected to each other by bump electrodes.

[Claim 4]

The liquid jet head according to claim 3, wherein each of the bump electrodes includes a resin having elasticity and a conductive layer covering at least part of a surface of the resin.

[Claim 5]

The liquid jet head according to claim 4, wherein the resin is formed on a surface of the wiring, and the conductive layer is connected to the wiring at a position offset from the resin.

[Claim 6]

The liquid jet head according to claim 4, wherein the wiring is formed in two rows, the resin is formed between the two rows of the wiring, and the conductive layer is connected to at least one of the two rows of the wiring at a position offset from the resin.

[Claim 7]

The liquid jet head according to claim 4, wherein the resin is formed at a position facing the wiring, and the conductive layer is the common electrode.

[Claim 8]

The liquid jet head according to any one of claims 1 to 7, wherein the wiring plate includes a penetrating wire made of a conductor and formed inside a through-hole penetrating the wiring plate, and the wiring is connected to the penetrating wire on the first surface.

[Claim 9]

A method for manufacturing a liquid jet head including a wiring plate having a first surface to which a driving element-forming plate including a plurality of driving elements is joined and a second surface which is on a side opposite from the first surface and to which a drive IC that outputs signals for driving the driving elements is joined, the wiring plate including wiring connected to a common electrode common to the driving elements and a penetrating wire which provides connection between the first surface and the second surface, the method comprising: wiring plate processing of forming a recessed portion recessed in a plate thickness direction on the first surface of the wiring plate and forming a through-hole penetrating the wiring plate; and wiring formation of forming the wiring by embedding a conductive material in the recessed portion wherein the wiring is provided to extend in a direction in which each of the rows of the piezoelectric elements extends, and forming the penetrating wire by embedding the conductive material in the through-hole.

[Claim 10]

The method for manufacturing a liquid jet head according to claim 9, wherein the wiring formation includes forming the conductive material in the recessed portion and the through-hole by an electrolytic plating method.

[Claim 11]

The method for manufacturing a liquid jet head according to claim 9, wherein the wiring formation includes forming the conductive material in the recessed portion and the through-hole by printing.

[Claim 12]

The method for manufacturing a liquid jet head according to claim 11, wherein the conductive material is an electrically conductive paste, and the wiring formation includes hardening the conductive material.