



The Neuralynx HS-72-QC is the active electronic part of the headstage (HS) and tether system. It provides 64 channels of unity gain amplification, 8 reference, ground, and 2 differential stimulation lines. The HS-72-QC implements the revolutionary QuickClip™ connection method, which allows the HS to self-align and connect to the Electrode Interface Board (EIB) with minimal insertion force.

The HS-72-QC uses low noise, low power, and low input bias current op amps instead of the “Source Follower FET circuit” typically used by other headstage manufacturers. The op amps used on the Neuralynx HS-72-QC provide many advantages:

- Precise unity gain greatly improves the Common Mode Rejection Ratio (CMRR), preserving the integrity of the amplified signal
- High performance for the entire recording system for artifact and other common mode noise signal rejection
- Lower output impedance reduces noise susceptibility from the tether and other signal cabling
- Provide critical antistatic protection on each input channel
- Ensure low input bias current levels
- Eliminate signal distortion

HS-72-QC Connection

The HS-72-QC will only mount to the EIB-72-QC series of EIB’s in one direction. Align the “QC” Neuralynx.com

logos on both the HS and EIB for easy connection. Please see the connection method white paper at neuralynx.com/qc for more information.

Tether Connection to the HS-72-QC

The HS-72-QC uses the same standard Neuralynx Litz wire or medical grade tethers used with our HS-36 series. To connect to the HS, line up the lettering on both the HS and the tether’s Omnetics connector. The J1 connection (QC side of HS) is for channels 1-32 and the J2 connection is for channels 33-64. Typically, J1 will plug into DRS board 1 and J2 tether will connect to DRS board 2. During the experiment, if the two Omnetics mating the HS to the tether are separating, this connection can be made stronger by adding epoxy, glue, or tape.

LED Arrangement

The HS’s can be ordered with LEDs for behavioral tracking. The standard LED arrangement is red and blue. If desired, this can be customized with infrared, green or HS-54 LED arrangement.

Contact your Neuralynx Representative for more information on this product, compatible EIBs, or testing equipment: support@neuralynx.com.

Size	38.1 mm in diameter
Signals	64 signals, 2 stim, 8 ref, 1 gnd
Connection	QuickClip™
Weight	4.7 grams

