



## Superior Amplifier Solutions

Nihon Kohden amplifiers have long been regarded for delivering superior signal quality using the highest recording specifications available. Our flagship JE-921 provides flexibility and configurability that is exclusive in the industry. With a full 10-20 electrode array, 14 bipolar inputs, built in End Tidal  $CO_2$  and  $SpO_2$ , this proven technology will increase ease of use and recording power for all types of EEG recordings.

When reliable trend data is instrumental in detecting subtle changes over time, you can rely on the superior signal processing that has defined Nihon Kohden amplifiers for decades, even in adverse recording environments.

### JE-921 Multimodalilty 10-20 System Amplifier Specifications

#### Number of Inputs:

32 Channels Total

10-20 Input Layout

3 Dedicated Bipolar Channels

4 Programmable Bipolar Channels

4 DC Channels

Optically Isolated

Input Impedance:

 $100~\text{M}\Omega$ 

CMRR:

 $> 105 \, dB$ 

Internal Noise Level:

<3uV p-p (0.53-120Hz)

High-Cut Filter:

300 Hz (-18 dB/oct)

Low-Cut Filter: 0.016-160 Hz

Sampling Frequency: Up to 1000 Hz





The use of continuous EEG (cEEG) can enhance the neurological assessment and care of critically ill patients through early detection of reversible neurological deterioration.

Nihon Kohden amplifiers' superior signal quality ensure reliable cEEG trends. The QP-160 application is designed to fully integrate the EEG-1200 data with user-selectable trends over time. Areas of clinical interest are easily recognized at the bedside and provide clinicians fast review capabilities of the associated EEG data over days, and even weeks, in a single display with synchronized audio and video data.

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## Data Capture and Analysis

The QP-160 application offers quantitative EEG and real-time trend displays to quickly identify changes over time. Color coded annotations, as well as integrated event logs, facilitate the review process. View real-time EEG and a variety of single or dual time base trend displays for short- and long- term trend comparison either at the bedside or remotely.

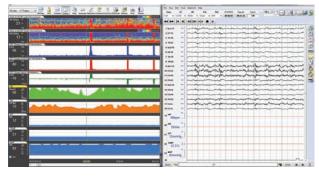
These user-selectable trends allow review of data for a patient's entire recording of several days, even weeks in a single display. Use integrated annotation and editing tools to navigate through the record. Customize the layout of the EEG and trend display on acquisition and review for convenient navigation between trend and EEG data. Optional synchronized digital video enables confirmation of EEG traces vs. environmental artifacts. Our unique artifact detection algorithm marks the trends influenced by electrode artifact for more reliable interpretation.



- In spectral analysis, the EEG signals acquired by the EEG-1200 are analyzed with FFT for display of DSA, spectral edge, power and power ratio measurements
- Asymmetry for DSA and FFT power trends can be displayed
- Amplitude integrated EEG (aEEG) is displayed in a time compressed format and is inclusive within the QP-160 application
- Burst suppression parameters include burst suppression ratio (BSR), inter burst interval (IBI), and bursts per minute (BPM)
- Trend relationships between real time EEG changes and vital sign monitor data such as HR, SpO<sub>2</sub> and EtCO<sub>2</sub> along with other DC parameters for multimodality monitoring
- Real-time numeric values are displayed with the trends
- Optional comprehensive EEG monitoring pack (CPA) from Persyst® includes Reveal<sup>TM</sup> Rosetta and MagicMarker®

## Vital Sign Integration





Vital sign integration through the Neurofax DC input or optional bedside monitor interface allows for time synchronized EEG, vital sign numerics and QP-160 trending. This real-time correlation between EEG and physiological parameters such as HR, SpO<sub>2</sub>, MAP and ICP assists in monitor-guided decision support.

The integration of the vital sign data is available at the bedside, as well as remotely for more timely EEG intervention by the reviewing clinician.

The QP-160 is flexible, yet comprehensive and integrates cEEG and vital sign trends into Nihon Kohden's trusted high quality EEG-1200 instrumentation.

Vital sign monitor integration is available for Nihon Kohden, GE, Philips and Spacelabs monitors. See your Nihon Kohden representative for monitor model and interface information.

# Configuration Flexibility

Sensitive to the space constraints in the busy ICU setting, Nihon Kohden offers a wide range of configuration options from portable flexibility to dedicated bedside monitoring.

- Fixed, fold-away wall-mount options
- Ceiling mount options
- Portable, compact cart-based systems for multi-room and multi-purpose use









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