

Routine Video-EEG with BrainRT™

The BrainRT equipment is the perfect solution for routine EEG acquisitions with or without video. Thanks to a handy screen set-up with a selection of buttons to add notes and events, it is easy to perform all the necessary tasks related to a routine EEG. High quality amplifiers offer up to 64 EEG channels as well as respiratory channels, EMG, SpO₂, EOG etc.



Example of a routine EEG with HD video

Key features for acquisition

- **Use of measuring protocols for different types of acquisition**

The measurement protocol defines the number of channels, display settings, analysis settings, report templates, etcetera. Some examples of protocols:

- Routine EEG
- Sleep EEG
- Baby EEG
- Routine EEG + Maudsley

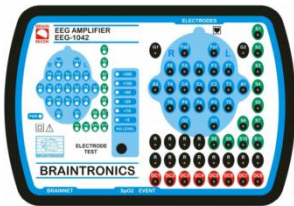
- **During the measurement, BrainRT offers many review functionalities:**

- Add notes and events
- Perform real-time analyses
- Change display settings
- Make a report
- Page back in the recording
- Play back video

BrainRT™ EEG Amplifiers

A choice of different amplifiers is available to suit every application: different numbers of channels and sampling rates as well as wireless and ambulatory options.

Brainbox-1042



Technical specifications

- Up to 44 channels (32 EEG channels)
- Braintronics IP amplifier: connected to PC via **Ethernet cable**
- Maximum sampling rate: 1024 Hz for 32 EEG channels
- Amplifier resolution: 16 bit
- Input impedance: 10 MΩ ± 1 %

Brainbox-1166



Technical specifications

- 64 EEG channels per unit (up to 256 channels)
- Configurable sampling rate (256 Hz up to 4096 Hz)
- Optional channels: SpO₂, Event Button, DC channels
- Amplifier resolution: 16 bit
- Braintronics IP amplifier: connected to PC via **Ethernet cable**

Morpheus



Technical specifications

- Up to 34 channels (24 EEG channels)
- 1 Gb CF memory card
- 2 AA 1.5V batteries for power supply
- Bluetooth® communication unit for **wireless** recordings
- Ambulatory recordings: 24 hours
- Size: 11 x 8 x 3 cm
- Weight: 250 grams (including batteries)

Schwarzer AHNS



Technical specifications

- Up to 44 channels (33 EEG channels)
- Maximum sampling rate: 2 kHz
- Schwarzer amplifier powered via USB cable
- Amplifier resolution: 20 bit
- Input impedance: 100 MΩ per channel

BrainRT™ Video solutions

BrainRT™ offers a very powerful interface for live video acquisition together with the EEG signals. It combines Full HD video recordings with efficient compression, resulting in high image quality at compact file size. With the **Multiple Camera** option, it is even possible to record the patient's face in close-up as well as the complete body.

Live monitoring of video recordings is possible from a remote location. And thanks to a choice of different cameras it is easy to find a good camera solution for every recording situation.

Key features for Video-EEG acquisitions

- ✓ Highly accurate Synchronized Video-EEG acquisition
- ✓ Automatic start of video recording with EEG signal recording
- ✓ Normal (640 x 480) to Full HD (1920 x 1080) camera resolution available
- ✓ Pan-Tilt-Zoom functionality directly in the BrainRT video window, also from remote locations!
- ✓ Split screen window for videoLive and Replay option
- ✓ Choice of different camera configurations to adapt the video recording to the application!
- ✓ Option for **multiple cameras**: during the recording, you can record a close-up of the patient's face together with a shot of the patient's full body for very accurate review possibilities of the patient's actions. The BrainRT™ software allows for post-recording clipping of both recordings without any loss of sync.

Key features for Video-EEG review

- ✓ Review at reduced (1/2 or 1/4) or accelerated speed (2x, 5x, 10x, 32x, 64x)
- ✓ Flexible display options: separate video window, integrated in screen, or video on a separate screen
- ✓ Automatic sync of video images with cursor
- ✓ Automatic sync of video images when scrolling through signal or event browser
- ✓ Video clipping option (without loss of synchronization with EEG)
- ✓ Digital zoom option during review
- ✓ Frame by frame replay

Cameras for Video-EEG

BrainRT offers a choice of cameras to suit every application!

- Cameras with IR light for recordings in the dark
- Ceiling mounted cameras for fixed EEG systems
- Mobile cart mounted cameras for mobile EEG systems
- SD, HD or Full HD image quality to suit every clinical purpose

- **Sony IP camera**

- Pan Tilt Zoom (ceiling mounted)
- Control with BrainRT
- Automatic NightShot
- SD to Full HD
- 30 fps



Sony IP camera PTZ

- **Sony IP camera**

- Mobile camera (standard/cart mounted)
- NightShot
- 30 or 60 fps
- 1280 x 720 (HD)



Sony IP camera

- **Logitech Webcam**

- USB camera
- 25 fps
- 1280 x 720 (HD)
- No NightShot



Logitech webcam

- **Handy-cam**

- Handy-cam
- 25 fps
- 640 x 480 (HD)
- NightShot
- Optical zoom

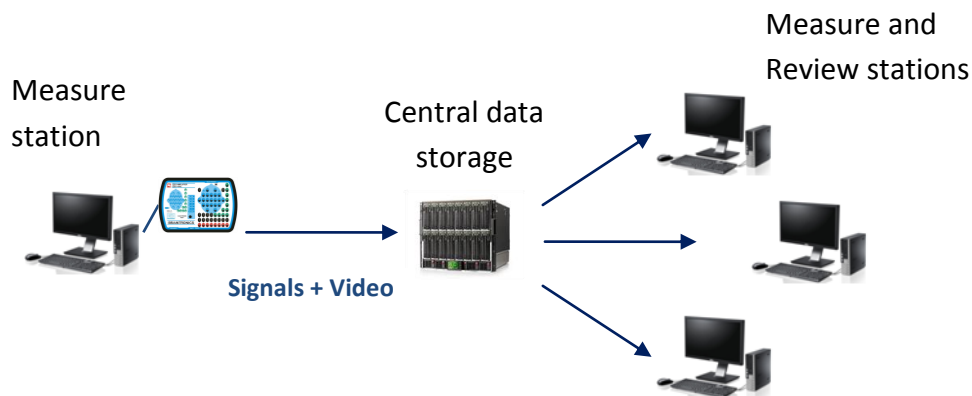


Sony handy-cam

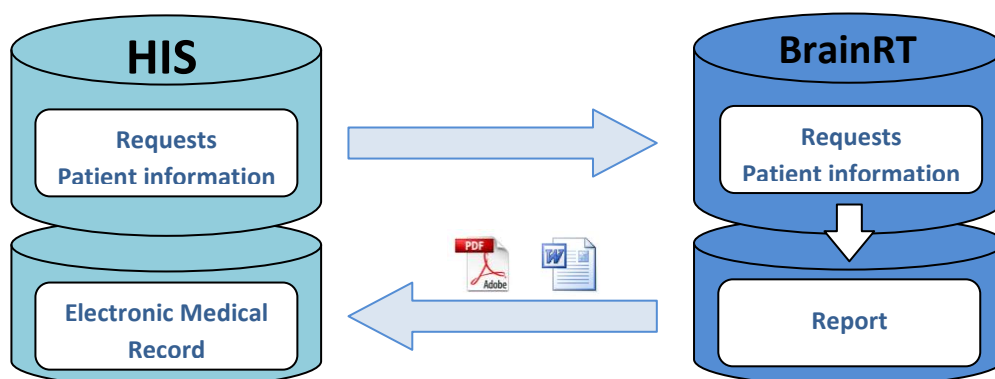
BrainRT™ integration in the hospital

In the hospital, BrainRT offers many advantages with its centralized data management and integration in the hospital network.

- During the acquisition, signals and video are immediately transferred to the central server, which enables doctors and technicians to monitor live acquisitions on remote review stations.



- BrainRT offers network licenses for review, making the client application accessible to all hospital computers.
- BrainRT communicates with the Hospital Information System to fill in patient information automatically, to make an appointment list and to send reports to the Electronic Medical Record.



BrainRT is a product of OSG BVBA
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