



## Optical receiver / USB interface: rear panel

The rear panel contains the system's 37-pin digital I/O connector



## a) 16-bit trigger input port

Pins 1-16 of this port represent bits 0-15 of the 16-bit trigger input port.

#### b) Digital output port

Pins 17-31 of this port represent bits 0-14 of the digital output port (accessible to developers and for custom applications only – not presently utilized by the standard ActiView software).

## c) System clock signal output

The system's clock signal is carried out to pin 32 of the 37-pin digital I/O connector.

#### d) Ground on pin 37

Pin 37 carries the system ground. Connect to ground of trigger port of stimulus computer or ground of other devices connected to trigger port. Use caution when considering connecting this ground to a device that the subject will come in contact with (e.g. a button box), as this can compromise system safety and reduce signal-to-noise ratio of phy siological measurements.

# I. Optional non-EEG sensors

A variety of sensors other than the active electrodes are available for use with ActiveTwo. In general, a "sensor" consists of a transducer with some specialized electronics and one or two dedicated amplifier/converter channels installed in the A/D box. Sensor inputs are on the middle and right-most circular DIN connector on the front panel of the A/D box. If there are any sensors installed in the A/D box, labels above the circular connectors on the front panel of the A/D box will indicate what type of sensor electronics are installed at the connectors. If labels above the connectors read "Aux2" and/or "Aux3", no sensor electronics are installed on the associated connector.

#### 1. Respiration

A Nihon Kohden TR-753T respiration belt is provided with a cable wired for use with one of the three available circular DIN connectors on the ActiveTwo front panel. Strong reliable signals are produced, because the respiration belt uses the ActiveTwo system's power supply. An additional LabVIEW module is delivered with the system when a respiration belt is ordered.

