

## VISUAL STIM INTERFACE (STMSYNC-VIS)

The Visual Stim Interface is used to generate TTL level event markers for visual stimulus presentation systems. Four light sensitive sensors are easily attached to the four corners of a presentation monitor. By alternating the corners of the monitor between black and white squares underneath the sensor locations, different TTL level signals may be generated to identify both the specific visual stimulus that is on the screen as well as mark the onset and end of presentation. A black or dark area will be a 0 V level while a white or bright area will be a 5 V level. More than four stimulus types may be recorded by using binary coding with multiple sensors activated at the same time.

The Visual Stimulus Interface has a female DB25 connector to interface with the 25-pin port of a BN-SMART-IOCBL for use with a BioNomadix Smart Center or of an STP100C\* or STP100D for use with an MP160 or MP150 Research System.

- BN-SMART-IOCBL + Smart Center is compatible directly out of the box
- STP100C/D must provide external power and may be connected to an MP160 or MP150

\* Older STP100C (discontinued) may need to be updated to enable external power to run the photodiodes; if necessary, contact [BIOPAC Support](#) for an RMA.

The sensors of the visual stimulus interface can be attached to the monitor using ADD208 adhesive disks or similar collars.

There is 1 meter of wire between the DB connector and each individual photodetector. If more length is needed to reach the STP100C/D or BN-SMART-IOCBL, a CBL110C DB25 female to male extension ribbon cable may be used.

### Pin connectors:

- Pins 2-5 of the connector correspond to the four output signals from the photodetectors.
  - For a Smart Center, this corresponds to digital channels 1-4.
  - For an STP100C/D+MP160/MP150, this corresponds to digital channels 0-3.
- Pin 21 corresponds to ground (GND).
- Pin 15 corresponds to +5 V power.

The MP36 and MP36R are not compatible with the visual stimulus interface.

