

**M-PODS AND C-PODS**

Map any Input Signal to any Output Pin—Event Markers sent USB

STM-M-POD-IO for MP36/36R Systems

STM-M-POD-STP for STP100D and MP160 Systems



*STM-M-POD-IO*



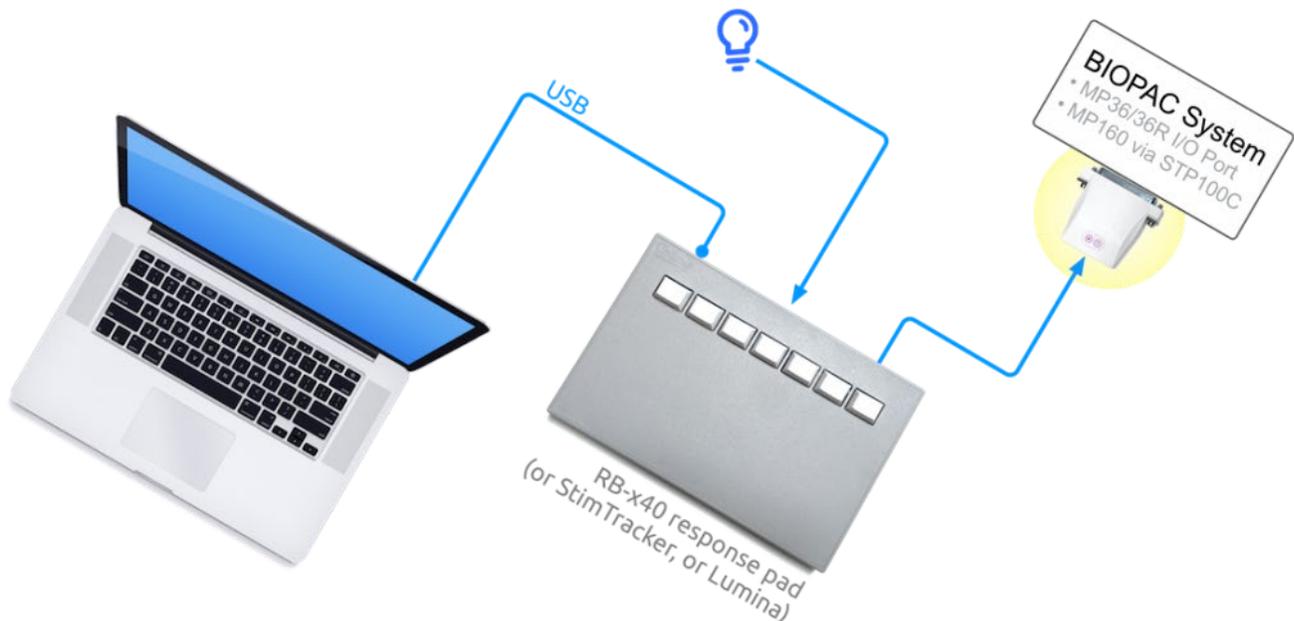
*STM-M-POD-STP*

Use m-pod to map any input signal to any output pin or combine any number of input signals to a single output pin and build your very own custom output table. With its speedy microprocessor, this translation power adds a minuscule 50  $\mu$ s delay.

Use m-pods to get all, or only, the desired signals. In some experiments, it may be appropriate to mark the onset of participants' key presses. In others, these markers get in the way and it may be preferable to have more data bits available for markers sent via USB. Or even a mix of both.

No more fussing over the right connector size, gender, and pin assignments—just choose the m-pod for the specific interface and enjoy instant compatibility:

- interface directly to the I/O port on MP36 and MP36R units, or
- interface to an STP100D for MP160 Systems



*Easily Send Event Markers from Computer to Recording Devices—Affordable Jitter-Free Precision*

STM-C-POD-IO for MP36/36R Systems

STM-C-POD-STP for STP100D and MP160 Systems



**STM-C-POD-IO**



**STM-C-POD-STP**

Send event markers via USB with high precision. c-pods simplify connection & timing details and deliver guaranteed jitter-free performance.

- Asynchronous Output
- Scheduler
- Pattern Generation
- Mixed output
- 32-bit microprocessor
- Interface directly to I/O port on MP36 and MP36R units, or to an STP100D for MP160 Systems.

### **Asynchronous Output**

With traditional I/O cards, software programs used for sending pulses need to wait for the duration of the pulse before work can resume. Imagine sending a postcard to a friend and then not being able to do anything else until that postcard is delivered. It's a lot of wasted time. This is synchronous delivery.

c-pod can deliver signals asynchronously—an application sends a command that includes the pulse duration and then resumes working, e.g. to present a stimulus or look for participant response. c-pod takes care of completing the pulse delivery.

### **Scheduler**

c-pod takes the idea of asynchronous output a step further. Instead of delivering a pulse now, why not deliver it later? Better yet, why not deliver multiple pulses later?

This is a useful feature that answers the following question: when presenting a movie or sound, how can I mark certain points precisely during playback?

With the scheduling feature, it's possible to preload c-pod with a list of times for pulse delivery, the length of the pulse, and the output line(s) that it should be delivered on. A subsequent command can be sent at the onset of the movie or sound to start executing the schedule.

### **Pattern Generation**

c-pod can function as a pattern generator as well, sending periodic pulses out on a user-defined output line, or even pulses of different periods on multiple output lines. This is useful for applications requiring strobing, or where the intensity of light or a motor is controlled using pulse width modulation (PWM).

### **Mixed Output**

And more: the features described above are not mutually exclusive. For example, while a schedule is being executed on output lines 1, 2, and 3, an async pulse command can be sent at any time on the remaining lines 4 through 8.

Similarly, while a pattern is being generated on some lines, an asynchronous pulse command can be sent on the remaining lines. c-pod will not skip a beat.

### **32-Bit Microprocessor**

Inside the c-pod is a computer with a speedy 32-bit engine, humming with useful, well-polished software.

	c-pod	m-pod <i>+ using an existing response pad</i>	StimTracker
Send Pulses Asynchronously	✓	✓	✓
Signal / Pattern Generator	✓	✓	No
Pulse Scheduler Feature	✓	✓	No
Marks Onset of Participant Key Presses	No	✓	No
Marks Onset of Visual Stimuli	No	✓	✓
Marks Onset Of Auditory Stimuli	No	No	✓
Marks Onset of External TTL Input	No	No	✓
Voice Key	No	No	✓
Number of Simultaneous Outputs	1	1	2