

## CBLCFMA

### Current Feedback Monitor Cable

This cable will permit current sampling and can be used with any BIOPAC Stimulator for current verification. CBLCFMA is recommended for use with any voltage stimulator.



## MP160 SETUP

To connect the CBLCFMA to a STMISO Stimulator:

1. Connect the female 1.5 mm Touchproof lead to the “-” output of the Stimulator.
2. Connect the male 1.5 mm Touchproof lead to the electrode lead.
3. Connect the 3.5 mm mono phone plug to INISOA.
4. Connect INISOA to AMI100D.

Note: for assistance determining connection options using older equipment, contact BIOPAC support. For users with MP150/MP100, do NOT connect CBLCFMA directly to UIM100C if using stimulator on human subjects.

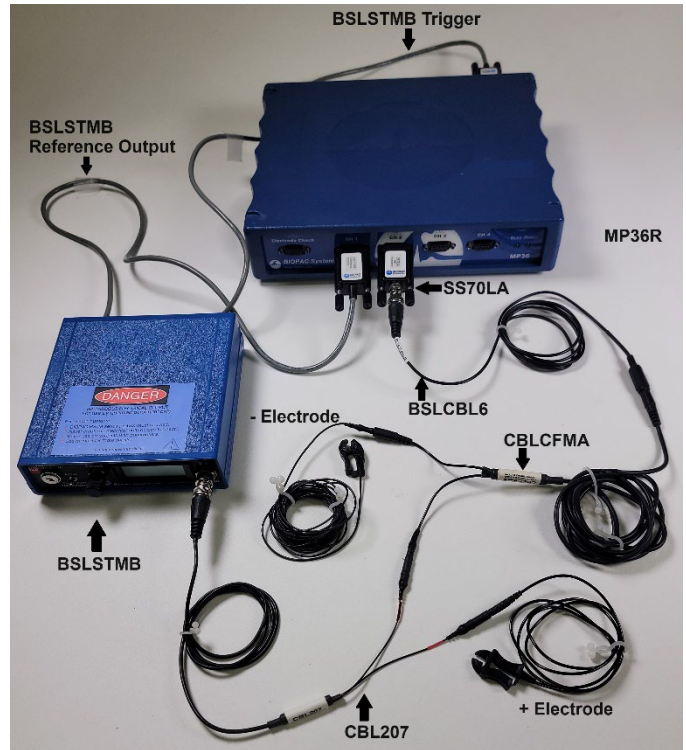
**IMPORTANT:** Place the electrodes on the participant **at least 10 minutes** before starting any electrical stimulation. Use a CBLCFMA to monitor and record the actual current always delivered to the participant. A significant change in current delivered to the participant will alter the subjective perception of the stimulation. An unpleasant shock may become painful if more current is delivered or become ineffectual if less current is delivered than during threshold identification. Changes in the levels of delivered current are due to changes in impedance. Changes in impedance could be due to several factors: gel saturating the skin, gel drying up, hydration level of participant, sweating, decoupling of electrodes and skin due to motion artifacts, etc.



## MP36 SETUP

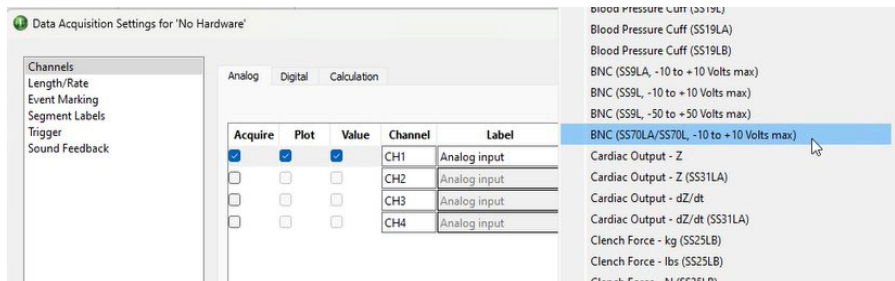
To connect MP36 to BSLSTMB using CBLCFMA:

1. Connect BSLSTMB Trigger cable to analog out connector on rear panel of MP36 device.
2. Connect BSLSTMB Reference Output cable to analog input on front panel of MP36.
3. Connect SS70LA BNC adapter to another analog input on front panel of MP36. Connect BNC connector of BSLCBL6 to SS70LA. Connect female 3.5 mm socket of BSLCBL6 to male 3.5 mm plug of CBLCFMA.
4. Connect CBLCFMA 1.5 mm male touchproof connector to female CBL207 lead.
5. Connect CBLCFMA female 1.5 mm touchproof lead to electrode lead.
6. Connect remaining CBL207 female lead to electrode lead.
7. Connect CBL207 BNC connector to output connector on BSLSTMB front panel.

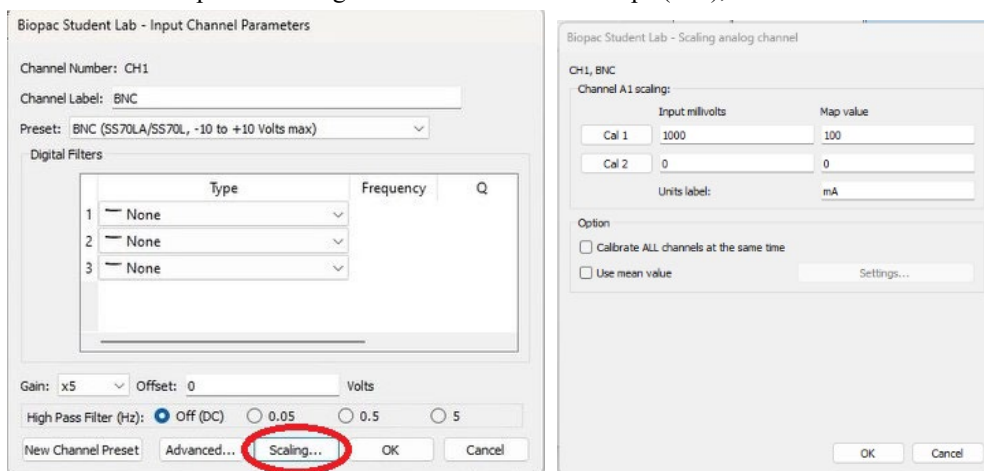


NOTE: MP36R users will need to set scaling in AcqKnowledge as follows:

1. Under the MP36 menu bar tab, select **Set up data acquisition...**
2. In the row for corresponding analog channel click the **Preset** pull-down and select **BNC (SS70LA/SS70L, -10 to +10 Volts max)**.



3. From the Input Channel Parameters window, click the **Scaling** button. The map value should appear as 100 for 1000 millivolts input and change the units label to milliamperes (mA), as shown in the below right screen capture.



**SPECIFICATIONS**

Feedback constant (MP160): 1 V = 10 ma\*

\*MP160. See NOTE above for MP36R scaling settings.

Leads: Male 1.5 mm Touchproof and Female 1.5 mm Touchproof

Resistor: 100 ohm 1% MF 1 Watt resistor (in series between TP leads)

Connector: 3.5 mm mono phone plug

Cable: 2 m (6' 6¾")

*See also:* [STMISOLA Stimulator](#) and [STMEPM-MRI System](#)