

## AMI100D AMPLIFIER INPUT MODULE

The AMI100D Amplifier Input Module is used for connecting Smart Amplifiers and other high level transducers to the MP160 system and provides 16 input and 2 output channels. It is the replacement for the HLT100C High Level Transducer module and functions in much the same fashion. The AMI100D includes additional smart functionality to communicate with Smart Amplifiers. To enable full communications with Smart Amplifiers, the AMI100D must be used with an MP160 unit running firmware version 2.1.0 or higher, and digital channel 15 must be allowed to float or must be held high (1) while *AcqKnowledge* is launched, (2) when Smart Amplifiers are configured, and (3) when data acquisition commences.

Signals from external equipment connected to the AMI100D must use an INISOA Signal Isolation Adapter for proper isolation for subjects connected to Smart Amplifiers.

Earlier-model 100C Series modules connect to the right side of the AMI100D. BioNomadix receivers, STP100C, and STM100C connect to the left side of the AMI100D. When using BioNomadix or 100C Series modules in conjunction with Smart Amplifiers, these modules must be set to channels not in use by Smart Amplifiers. Each Smart Amplifier occupies a single analog channel, and two signals may not share the same channel.

High level output transducers and adapters connect to the AMI100D via standard 6 pin RJ11 type connectors.

In addition to Smart Amplifiers, the following transducers and adapters also connect to the AMI100D module:

TSD109C/F Tri-axial Accelerometers	INISOA Input Signal Isolator
TSD111A Heel/Toe Strike Transducer	OUTISOA Output Signal Isolator
TSD115 Variable Assessment Transducer	DTU100 Digital Trigger Unit (MRI Synchronization)
TSD116 A/B/C Switches and Markers	NIBP-MRI Noninvasive Blood Pressure for MRI
TSD150 A/B: Active Electrodes	

Alternatively, the AMI100D module can be used to connect mains powered external equipment to the MP System when the system also connects to electrodes attached to humans.

### IMPORTANT USAGE NOTE

**To provide the maximum in subject safety and isolation**, use electrically isolated signal adapters to connect mains powered external equipment (i.e., chart recorders, oscilloscopes, etc.) to the MP System. Use the INISOA adapter to connect to MP analog system inputs and the OUTISOA adapter to connect to analog system outputs.

- **See also:** setup notes for external devices and channel contention issues.



Connect the AMI100D to the right side of the MP160 and connect additional modules to the right side of the AMI100D (such as DA100C or other 100C Series amplifiers).



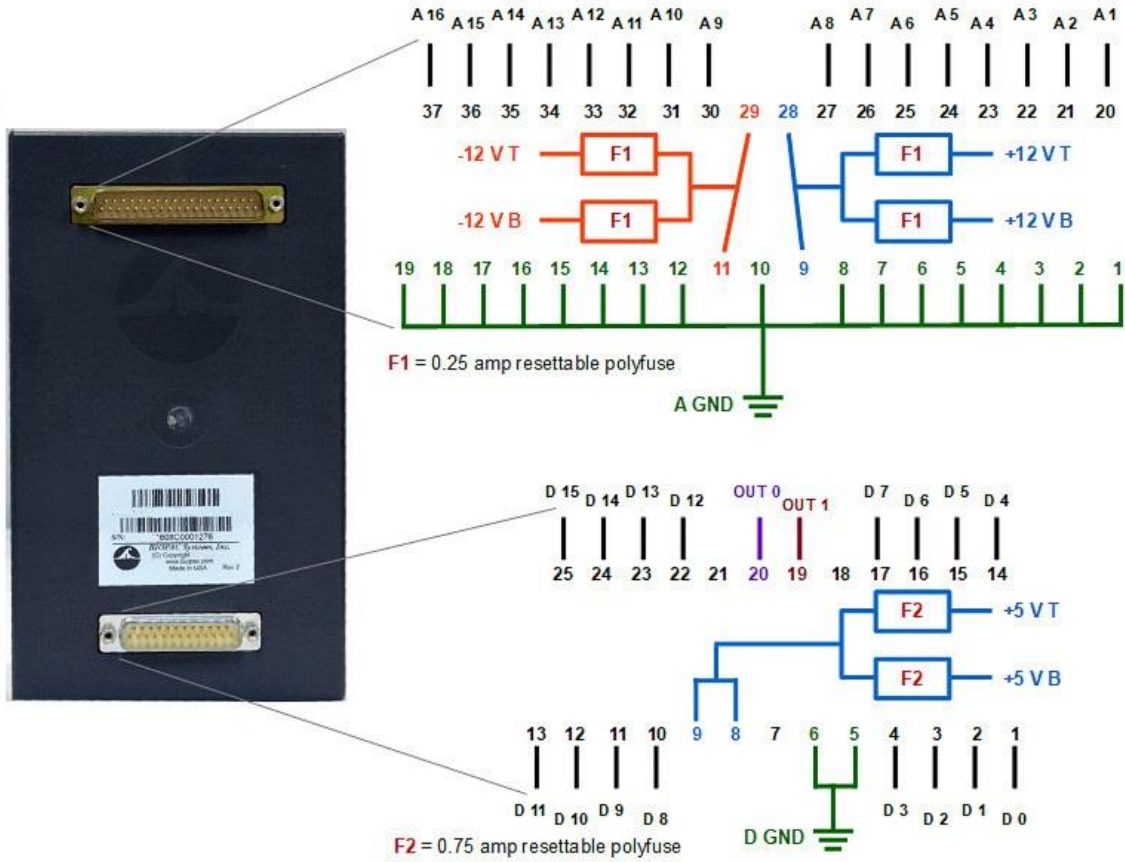
**Left:** MP160 Unit – **Right:** AMI100D Module

Smart Amplifiers, high level output transducers (e.g., TSD109C3 Tri-Axial Accelerometer) connect via the 16 analog RJ11 jacks on the AMI100D front panel. Up to 16 analog channels can be used at the same time, as long as no other analog channels are in use by other BIOPAC modules.

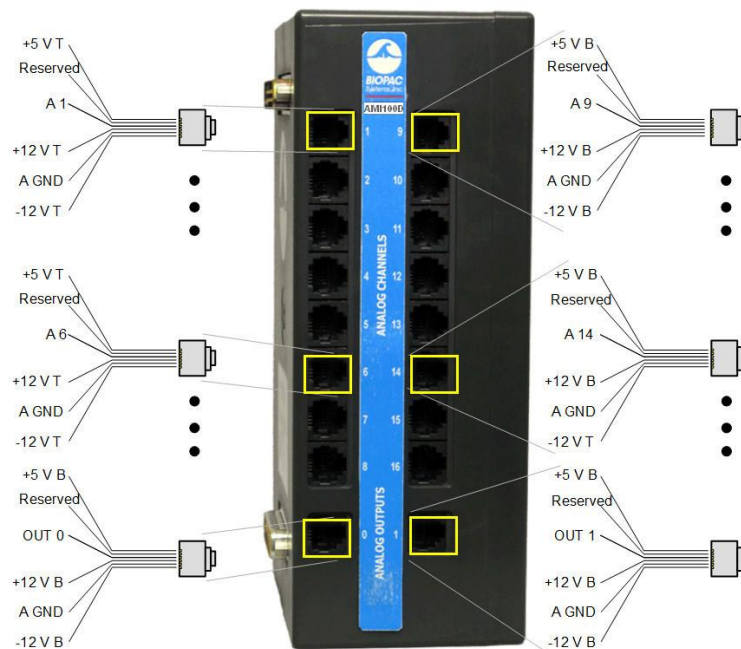
## SPECIFICATIONS

Smart Amplifier/Transducer Inputs: 16 channels (front panel) – RJ11 jacks  
System D/A Outputs: 2 channels (front panel) – RJ11 jacks  
Isolated Power Access:  $\pm 12$  V, +5 V @ 100 ma (via all RJ11 jacks)  
Weight: 540 grams  
Dimensions: 7 cm (wide) x 11 cm (deep) x 19 cm (high)

PIN OUTS



DSUB37 and DSUB25 Connectors



6-Position Modular Jacks