



## Features

- Differential Input for AC and DC Signals
- 10 VDC Output
- High Input Impedance
- Low Output Impedance
- Selectable Gain

## DESCRIPTION

The BA112 is designed as a signal conditioning amplifier plug-in module to the MC1 Multi-Channel Transducer System. The module provides a high-impedance differential input for AC and DC signals. It also provides a low-impedance, single ended output. Single ended input signals may also be inserted into the BA112 by means of a simple external jumper at the amplifier's input connector.

Overall gains of 10, 1.0 and 0.2 are obtained by means of a three-position toggle switch/Additionally, the gain may be varied from zero to 100% at each setting with a 10-turn calibrated control.

## Specifications

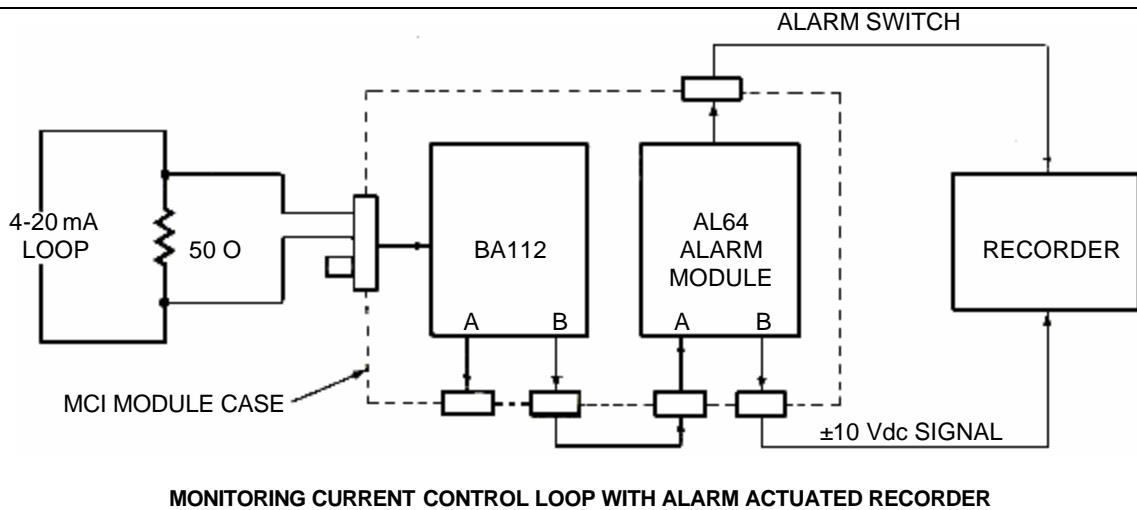
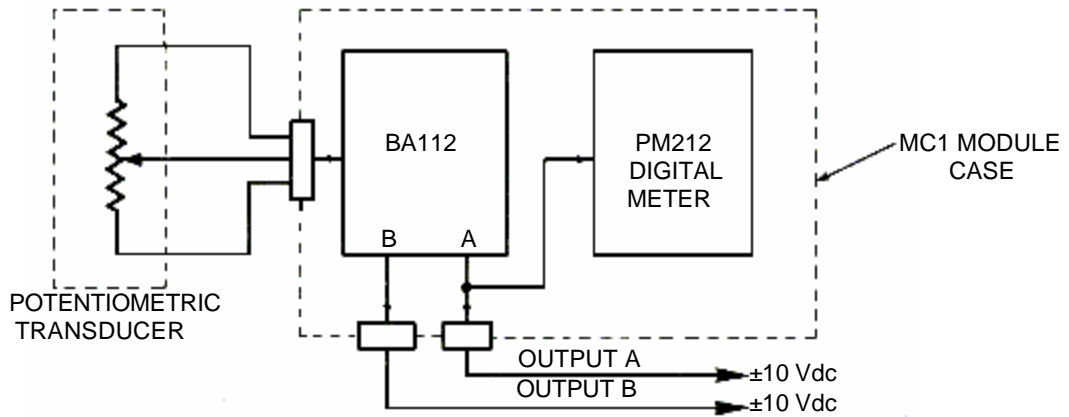
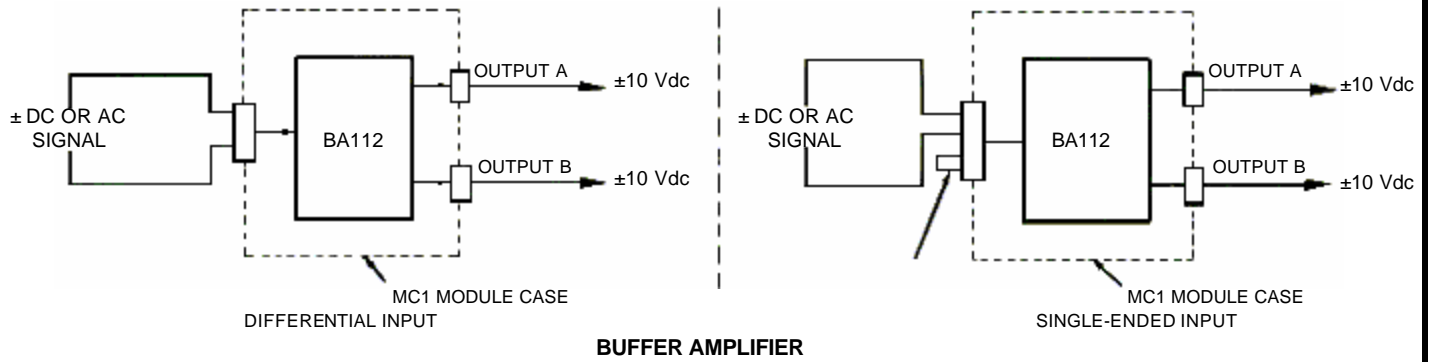
### Input:

Max S.E. Input	Gain Setting	Max. Diff. Input
$\pm 12V$	0.2	10 V
$\pm 12V$	1.0	10 V
$\pm 6V$	10.0	1 V

Unit is not damaged by momentary application of 115 V.

<b>Input impedance:</b>	22 megohms, each input to circuit ground Gain: 10, 1.0 and 0.2, switch selectable
<b>Gain Vernier:</b>	Provides 0 to 100% adjustment at each gain setting by 10-turn potentiometer with calibrated dial
<b>Output:</b>	+10 V at 10 mA max. No damage if output terminals shorted
<b>Output Impedance:</b>	Less than 10 ohms
<b>Frequency Response:</b>	Flat DC to 10 kHz
<b>Common Mode Rejection:</b>	60 dB typical, DC to 1 kHz. May be further increased by internal adjustment
<b>Zero Offset Voltage:</b>	Nominally zero, possible small change with gain settings Separate internal adjustment at each amplifier stage
<b>Input Bias Current:</b>	0.02 $\mu A$ typical, each input
<b>Temperature:</b>	
<b>Range:</b>	0°F to +160°F
<b>Zero Shift:</b>	$\pm 20 \mu V/^\circ F$ referred to input
<b>Span Shift:</b>	0.005%/°F

## TYPICAL APPLICATIONS



### Accessories

P/N 7616-2 Plug-In Module Connection Extender



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