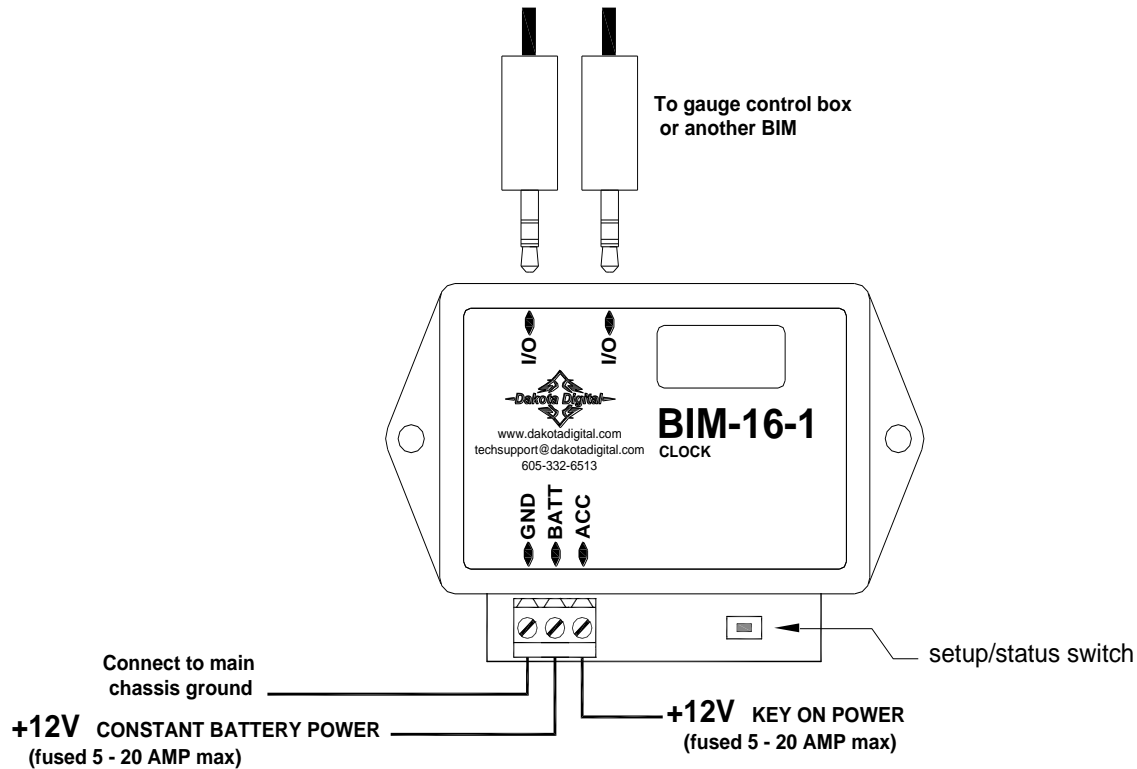




## BIM-16-1 Clock Bus Interface Module



This Bus Interface Module has a constant battery power input and an accessory input. The battery power keeps the clock running and the accessory input powers the bus interface port. There are two interface (I/O) ports on the module. Either one can be connected to the gauge system or to another module, allowing several units to be daisy chained together. Do not connect the I/O port to anything other than a Dakota Digital gauge or BIM. Do not mount the module in the engine compartment; it should be mounted in interior of the vehicle.

Each BIM needs a unique ID number assigned to it. It can be assigned an ID from 1 – 16, or turned off. The factory default ID number is 7. The clock can run in 12 hour or 24 hour format. The factory default time format is 12 hour.

**To set or change the ID numbers and the time format:**

- Hold the switch beside the BIM terminal strip while turning the key on. The BIM display will show the current revision code while this is held.
- Release the switch. The display will show “-[-”.
- Press the switch. The BIM display will show “[- 1”.
- Release the switch. The display will show the current ID for channel 1.
- Press and release the switch to change the setting from 1- 15 or OFF.
- Press and hold the switch to save the setting. The BIM display will show “12H” or “24H”.
- Release the switch. This is the current time format.
- Press and release the switch to change between 12 hour and 24 hour format.
- Press and hold the switch to save the setting. The BIM will restart with the new settings.

**The time is set up through the gauge display system.**

**Only VFD3/3X controls with a plastic case support adding BIM's.**

**For VFD3, VFD3X, and VHX systems follow these steps:**

- Make sure the BIM units are all connected to the gauge control box with the 3.5mm data cables.
- Hold the SW1 switch from the gauge system control box while turning the key on. The message display should show SETUP.
- Release SW1.
- Press and release SW1 until BIM is shown on the message display.
- Press and hold SW1. The message display should show SCAN followed by the number of BIM channels detected. Release SW1.
- If 0 is shown, check all connections and then press and hold SW1 with SCAN shown to retry reading the modules.
- Otherwise, if any other number is shown, press and release SW1 until SETUP is shown.
- Press and hold SW1 until the speed display shows “ - ” or the message changes.
- Release SW1. On the VFD3 systems the message display will show the label assigned to the first channel found and the speed display will show “C” followed by the channel ID number. On the VHX systems the message display will show “CH” followed by the channel ID number on one line and the label currently assigned on the second line.
- Press and release SW1 until the desired channel ID number is shown.
- Press and hold SW1. The message display will show “LABEL”.
- Release SW1. The message display will show the label assigned to this channel.
- The label cannot be changed. Press and hold SW1. The message display will show the current time.
- Release SW1. The message display will show the current time and the hours will flash.
- Press and release SW1 to change the hours.
- Press and hold SW1 until the speed display shows “ - ”.
- Release SW1. The message display will show the current time and the minutes will flash.
- Press and release SW1 to change the minutes to the desired value.
- Press and hold SW1. The message display will now show “DONE”.
- This can be repeated for additional channels, or the key can be turned off to exit setup.

### Troubleshooting quick tips:

While the BIM is operating, the dot in the upper left corner of the display will indicate the status. On steady indicates the accessory power is on but not receiving any bus activity. Flashing slowly indicates it is communicating on the bus. If the switch is pressed while the accessory power is off the dot will flash rapidly until the switch is released. To see the sensor and channel status on the BIM display, press and hold the switch while the accessory power is on. The display will cycle through two screens. The first will show the BIM input status. 'E' indicates there is a bus ID conflict on that channel ID. '-' indicates that it is connected properly. If the input is turned off the digit will be blank. The second screen will show the ID assigned to it.

### Troubleshooting guide.

Problem	Possible cause	Solution
Sensor does not show on gauge readout. BIM will not light up at all.	BATT terminal does not have power.	Connect to a location that has constant battery power.
	ACC terminal does not have power.	Connect to a location that has switched accessory power.
	GND terminal does not have a good ground.	Connect to a different ground location.
	Module is damaged.	Return for service. (see instructions)
Sensor does not show on gauge readout. BIM has a steady dot lit	Interface cable is not connected.	Connect the supplied 3.5mm data cable between the BIM unit and the gauge control box.
	Interface cable is loose.	Make sure both ends of the cable are seated in securely.
	On VHX systems, the BIM display for this channel is disabled.	Follow instructions in VHX manual to enable the BIM display screen.
	Another BIM is set with the same channel IDs.	Test module works when connected to control box alone. Change ID's on one of the modules so each module uses unique IDs.
BIM display shows "BB:B"	Data cable is damaged.	Inspect and replace 3.5mm data cable.
	Another module on the bus is damaged or connected improperly.	Inspect other modules on the data bus.

## **SERVICE AND REPAIR**

DAKOTA DIGITAL offers complete service and repair of its product line. In addition, technical consultation is available to help you work through any questions or problems you may be having installing one of our products. Please read through the Troubleshooting Guide. There, you will find the solution to most problems.

**Should you ever need to send the unit back for repairs, please call our technical support line, (605) 332-6513, to request a Return Merchandise Authorization number.** Package the product in a good quality box along with plenty of packing material. Ship the product by UPS or insured Parcel Post. Be sure to include the RMA number on the package, and include a complete description of the problem with RMA number, your full name and address (street address preferred), and a telephone number where you can be reached during the day. Any returns for warranty work must include a copy of the dated sales receipt from your place of purchase. Send no money. We will bill you after repair.

## **Dakota Digital Limited Lifetime Warranty**

DAKOTA DIGITAL warrants to the ORIGINAL PURCHASER of this product that should it, under normal use and condition, be proven defective in material or workmanship for the lifetime of the original vehicle it was installed in, such defect(s) will be repaired or replaced at Dakota Digital's option.

This warranty does not cover nor extend to damage to the vehicle's systems, and does not cover diagnosis, removal or reinstallation of the product. This Warranty does not apply to any product or part thereof which in the opinion of the Company has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident. Dakota Digital assumes no responsibility for loss of time, vehicle use, owner inconvenience nor related expenses.

Dakota Digital will cover the return standard freight once the product has been evaluated for warranty consideration, however the incoming transportation is to be covered by the owner.

This Warranty is in lieu of all other expressed warranties or liabilities. Any implied warranties, including any implied warranty of merchantability, shall be limited to the duration of this written warranty. No person or representative is authorized to assume, for Dakota Digital, any liability other than expressed herein in connection with the sale of this product.

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



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