

Remote Alarm Controller for Series IV

Purpose

This technical bulletin describes the procedures for installation of the optional **Remote Alarm Controller** (Part No. 720A3901) for **Series IV** instruments.

Explanation

The **Remote Alarm Controller** indicates normal and over-triggering at a remote site. Use an optional extension cable to extend the length of the input cable; the output from the terminal block of the **Remote Alarm Controller** box can be used to run long distances to drive an external alarm. The **Alarm Levels** within the monitor setup menu controls the triggering of the **Remote Alarm Controller** based on the levels set for **Vibration** or **Pressure**. The remote alarm sounds two alarms: **warning** and **alarm**. The warning alarm sounds when Event activity exceeds the **Vibration Trigger Level** or **Pressure Trigger Level**. The **Vibration Alarm Level** and/or the **Pressure Alarm Level** can be set to a higher level than the **Geophone Trigger Level** and the **Pressure Trigger Level**. This allows for the triggering of a second alarm at the higher level.

For example, in pile driving operations the remote alarm triggers a warning when activity exceeds the trigger level for the geophone, notifying the operator that the pile driving activity has exceeded the set level. The second alarm triggers when activity exceeds the **Vibration Alarm Trigger Level**, set to a higher level, notifying the operator that operations should cease immediately.

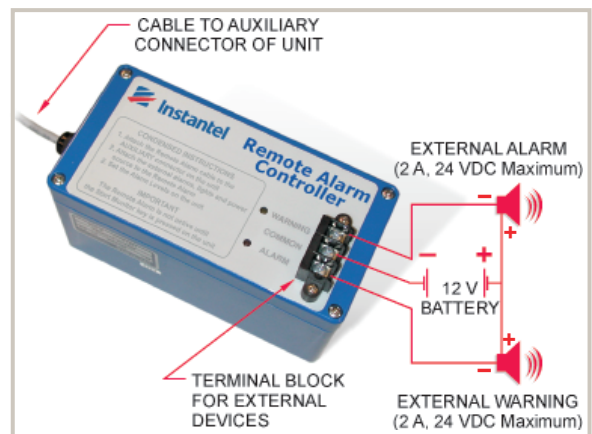
Equipment Required

1. **Series IV** Unit
2. **Remote Alarm Controller** (Part No. 720A3901)
3. External Alarm with Power Source (required - not supplied)
4. Optional **Series IV** Extension Cable, Connector Kit (Part No. 720A3801)
5. Optional **Series IV Remote Alarm/RS-232 Splitter Cable**. Used when both a **Remote Alarm Controller** and a modem must be connected to the monitor at the same time (Part No. 720A4001)

Installation of the Remote Alarm

Connecting to the Monitor

Connect the **Remote Alarm Controller** to the **AUXILIARY** connector on the **Series IV** unit. An optional extension cable (Part No. 720A3801) may be used to increase the distance between the **Remote Alarm Controller** and the monitor.



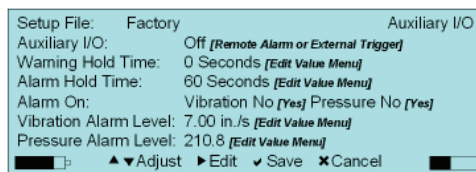
Alarm Connection

The output post available on the terminal block is a switch only. The user must supply the external power to drive the load. When using an external warning device, the common terminal is the ground or minus side of the external load-power source combination. Normally, one side of the load connects to one of the outside terminals, the other side of the load connects to the positive side of the power supply. The negative side of the power supply connects to the common terminal.

Monitor Setup

Follow the directions below to set the **Alarm Levels**:

1. From the **Main Display**, press the **Setup** key to access the **Main Menu**.
2. Press the **Down Arrow** key on the unit to highlight the **View/Edit Current Setup** menu option. Press the **Enter** key to enter this menu.
3. Press the **Down Arrow** key until the **Auxiliary I/O** selection is highlighted. Press the **Right Arrow** key to enter this menu.
4. Press the **Right Arrow** key to change the **Auxiliary I/O** selection to **Remote Alarm**, as shown below (the bold text in brackets “[...]” represents the options when the **Right Arrow** key is pressed after highlighting the selection):

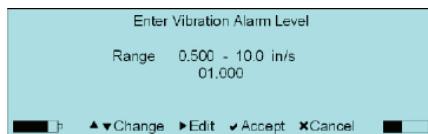


5. Determine how long you want the **Warning Alarm** and **Alarm Hold Time** to sound, and enter a value in the field to the right of these features by using the **Right Arrow** key to access the value editing field. Press the **Up** or **Down Arrow** key to change the value in each field. Jump between the fields by using the **Right** or **Left Arrow** keys. Press the **Enter** key to **Save** the edits to each selection.

NOTE: The **Warning Alarm** and **Alarm Hold Time** have a 300 second time limit (5 minutes), or if it is set to 0, the unit must be manually reset. The **Remote Alarm Controller** is not active until the **Start Monitor** key is pressed on the unit.

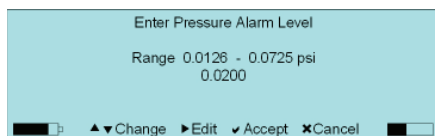


6. Highlight the **Alarm On** option and press the **Right Arrow** key to change the options for which sensor(s) you want to trigger the alarm. Each key press will provide a new setting option.
7. To set the **Vibration Level** value, use the **Down Arrow** key to highlight the option, and then the **Right Arrow** key to enter the edit menu, as shown below:



NOTE: If you are using a Minimate Pro 6 monitor with two geophones attached, then there are two options to set the **Vibration Alarm Level** for each geophone attached.

8. Press the **Right Arrow** key to move the cursor within the value field, and the **Up** or **Down Arrow** key to **Change** the value setting.
9. Press the **Enter** key to **Accept** the new setting, or the **Cancel** key to exit the menu without saving the changes.
10. To set the **Pressure Level** value, use the **Down Arrow** key to highlight the option, and then the **Right Arrow** key to enter the edit menu, as shown below:



NOTE: If you are using a Minimate Pro 6 monitor with a geophone and a microphone attached, then there are options to edit the levels for both sensors.

11. Press the **Right Arrow** key to move the cursor within the value field, and the **Up** or **Down Arrow** key to **Change** the value setting.
12. Press the **Enter** key to **Accept** the new setting, or the **Cancel** key to exit the menu without saving the changes.
13. Within the **Edit Current Setup** menu, press the **Enter** key to **Save** the new **Auxiliary I/O** settings, or the **Cancel** key to exit the menu without saving the changes.

Alarm Indicators

Warning Alarm – yellow LED with a pulsed sound from the internal warning device.

Alarm – red LED with a constant sound from the internal warning device.

External Devices – external alarm devices are optional.

Warranty

InstanTel's products are warranted against defects in materials and workmanship and shall perform in accordance with published specifications for a period of ninety days. This warranty is void if the protective heatshrink is removed from the cables. The company makes no warranty, expressed or implied of fitness for purpose, merchantability or function of the products. InstanTel does not represent that any product will prevent bodily injury or damage to property.

Should a product fail to operate to these specifications within the warranty period it shall be repaired or replaced free of charge. This warranty is void if the equipment has been dismantled, altered or abused in any way. Authority to return the product must be obtained from InstanTel prior to shipment. Shipping charges to InstanTel's factory will be paid by the customer and InstanTel shall pay for the return freight.

InstanTel assumes no responsibility for damages of any description resulting from the operation or use of its products. Since it is impossible to anticipate all of the conditions under which its products will be used, either by themselves or in conjunction with other products, InstanTel cannot accept responsibility for the results unless it has entered into a contract for services which clearly define such an extension of responsibility and liability. InstanTel retains the right to change specifications without notice.

CE EC Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.



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720U3901 Rev 01 - Product Specifications are Subject to Change