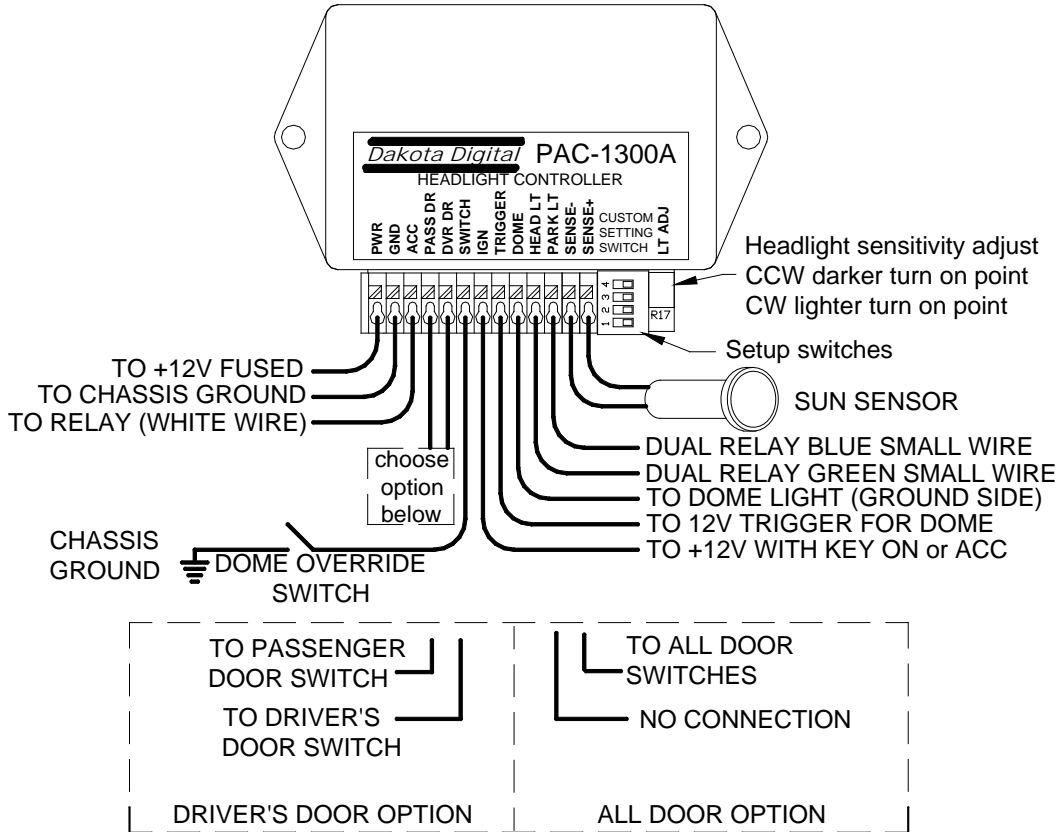


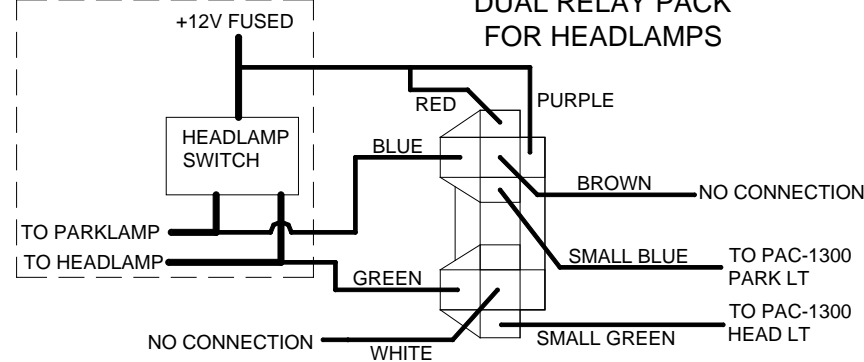
# Dakota Digital

## PAC-1300A

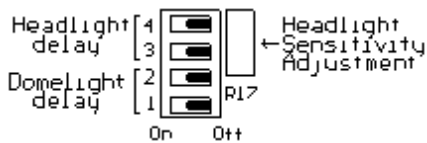
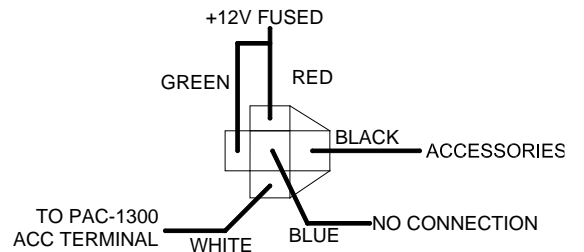
### RETAINED ACCESSORY WITH DOME AND HEADLIGHT CONTROL



#### STANDARD AUTOMOTIVE WIRING



#### SINGLE RELAY FOR ACCESSORIES



#### SWITCH POSITION/SETTING CHART

SW1	SW2	SW3	SW4	Setting
OFF	OFF			Dome delay off.
ON	OFF			Dome delay of 15 seconds
OFF	ON			Dome delay of 30 seconds
ON	ON			Dome delay of 45 seconds
		OFF	OFF	Headlight delay off.
		ON	OFF	Headlight delay of 30 seconds
		OFF	ON	Headlight delay of 1 minute
		ON	ON	Headlight delay of 2 minutes

Turning the HEADLIGHT adjustment clockwise increases the sensitivity and will cause the headlights to turn on when it is brighter. Counter clockwise will cause the lights to turn on when it is darker.

## OPERATION AND FEATURES

- **Automatic headlight feature**

The automatic headlight feature uses a signal from the supplied light sensor to turn the headlights on automatically when it becomes dark. The sensitivity of this sensor can be adjusted with the pot on the PAC-1300 module. After the key is turned off, this feature will keep the headlights on for the delay set by the selection switches. If the wiring diagram is followed, placing your headlight switch to the OFF position will engage the auto function. Turning the headlight switch to park or headlight will allow the park or headlights to be manually turned on, overriding the PAC-1300 module.

- **Dome light feature**

The dome light feature will quickly fade the dome light on whenever a door is opened or the key is turned off. The dome light is kept on after the door is closed for the delay time selected by the switches. After this delay, the dome will slowly fade out. If the doors are left open for an extended period of time, the dome light will automatically shut off to reduce battery drain.

- **Retained accessory power**

The retained accessory power feature allows the accessories to be operated for up to 20 minutes after the key is turned off. These accessories may include the radio, power windows or any other accessory placed under the module's control. If a door is opened before the 20 minutes, the power to the accessories is removed.

- **Battery monitoring**

This module also has internal low battery voltage monitoring. If the battery voltage should drop too low during retained accessory operation, power is removed from the accessories and the headlights to reduce the battery drain.

- **Override switch**

An override switch is provided to allow the dome light or automatic headlight feature to manually be disabled. If the button is pressed when the dome light is on, the dome light will shut off and stay off until either the button is pressed again or the key has been turned to the on position resetting the dome override condition. If the button is pressed when the automatic headlights are on, the auto headlight feature is disabled until another button press, or the key is cycled off to on.

- **Remote door lock trigger input**

A positive trigger input is provided to turn the dome light on with an input from remote door unlock module. When this input is given a +12V pulse, the dome light is turned on for the set dome delay. If no other action occurs, the dome will fade out after the delay.

## INSTALLATION

The PAC-1300 has the option of shutting off the accessories with the opening of any door, or only with the opening of the driver's door. This option is selected during installation by the way the module is wired into the vehicle.

- **For the driver's door only option:**

Wire ONLY the driver's door switch to the driver's door terminal on the controller. Wire the other switches to the passenger door terminal. Wire the dome light to the dome terminal.

- **To allow any door to shut off the accessories:**

Wire all door switches to the driver's door terminal. Leave the passenger door terminal empty. Wire the dome light to the dome terminal.

## INSTALLATION NOTES:

### ***Read before installation!***

- **Accessories powered by the PAC-1300 relay MUST be removed from their original power connection before being connected to the relay.** The PAC-1300 will not function properly if this is not done and damage may occur to the device or the vehicle's electrical system.
- The wire between the dome light and the door switches must be cut for the dome light feature to function properly. The dome light wire should **only** be connected to the PAC-1300 unit.

## **INSTALLATION NOTES (Continued):**

- The GREEN and RED wires of the accessory relay and the POWER terminal on the PAC-1300 should be connected, through a fuse, to a constant +12V circuit. There needs to be a constant 12 volts on these wires or the PAC-1300 will not function.
- The IGNITION terminal should be connected to a circuit that has 12 volts when the key is in accessory. This circuit can not be powered by the PAC-1300's relay. This will cause the PAC-1300 to malfunction.
- If 12V trigger for remote door unlock is not used, leave TRIGGER terminal empty.

**Note:** The sunlight sensor must be mounted in the dash directly under the windshield for proper operation. This sensor must be able to "see" the current lighting conditions. If it does not, the automatic headlight feature may malfunction.

## **SETUP**

The PAC-1300 has 4 DIP switches and an adjustment pot to allow the user to customize the features. These are located on the lower right corner of the unit. The dip switches control the delay of the headlight and dome light. The chart on the front page describes the switch settings.

- The headlight adjustment controls the light level at which the automatic headlights turn on. Turning this control clockwise with a small screw driver will cause the headlights to turn on in brighter conditions. Counter-clockwise will cause the headlights to turn on at a darker point.
- The dome delay and headlight delay are independent. For example, using the switch patterns in the table, the dome could be set to have no delay (1 and 2 off) while the headlights could be set to have the maximum delay (3 and 4 on). The delay switches can be set at any time.

**NOTE:** New settings will not go into effect until the controller has updated these settings internally from the switches. To update the settings, turn the key on then off. The dome and headlight delays will now be updated.

### **Adjusting the light sensitivity of the automatic headlight feature**

The automatic headlight feature may be adjusted over a range of light levels. This allows the headlights to come on early in the twilight or later on toward evening. To adjust this sensitivity, it is recommended that the vehicle be in the light level at which the lights are to turn on.

1. Fully turn the headlight adjustment screw counter clockwise until it stops.
2. Turn ignition on.
3. Slowly turn the headlight adjustment screw clockwise until the headlights turn on. Lights should be set.
4. If, after driving, it is found that the lights should turn on sooner, adjust the headlight adjustment screw slightly in the clockwise direction. Turn counter clockwise for a later (darker) turn on time.

**NOTE:** *It is recommended that the headlight adjustment be left accessible until you are completely satisfied with the headlight operation. This allows ease of adjustment of the automatic headlight sensitivity.*

## **TROUBLESHOOTING TIPS**

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
Accessories only stay on for a short time after key is turned off	Poor ground on module	Reconnect to better ground
	Battery marginally low	Check battery and charging system
Accessories don't come on after key is off	Shorted door switch	Check wires for short to ground
	Dome light switch on	Turn off dome light switch
	Battery is very low	Check battery and charging system
Accessories don't come on at all, even with key on.	Blown fuse on +12V constant circuit	Check accessory circuit for shorts and replace fuse.
	IGNITION terminal wire broken/not connected	Check wire for breaks and proper connection to +12V key on source
	Poor ground on module	Reconnect to better ground

PROBLEM	CAUSE	SOLUTION
Accessories don't shut off when door opened (key off)	Door switch not connected to ground or wire broken	Check ground on door switch. Replace broken wire to switch
	IGNITION wire being fed by accessory relay	Separate all accessory connections to relay from the rest of vehicle circuitry move IGNITION wire to location with +12V only with key on.
Accessories shut off when passenger door is opened. (for driver's door off option).	Wire from driver's door switch still connected to dome light circuit	Cut wire between dome light and driver's door switch. The only wire to driver's door switch should be from the DVR DR terminal (for driver's door shut off option)
	Driver's door switch and passenger door switches still connected	Cut wire between driver's door and passenger door switches.
Dome doesn't fade on and stays on much longer than set delay	Dome light still connected to door switches.	Cut wire between dome light and door switches.
Dome always on with key on.	Dash dome light switch on	Turn off dome light switch
	Passenger or driver's door input is shorted to ground	Check wire for short and replace/reroute wire to fix short
Dome doesn't delay after door close, even though delay selected on switches	Switch settings need to be updated internally	Cycle key to on then back off.
Headlights are always on when key is on	Light sensitivity adjustment too sensitive	Readjust sensitivity pot to desired light level
	Sensor cannot get accurate reading of light conditions	Ensure that sensor is mounted in dash aimed toward windshield and that it is not covered up.
	Sensor connection to PAC-1300 is poor	Check for and repair broken connections from sensor to PAC-1300. Ensure that both sensor wires go to PAC-1300 sensor terminals.

## **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 24 Month 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 within 24 MONTHS FROM THE DATE OF PURCHASE, 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 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.

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. Any action for breach of any warranty hereunder, including any implied warranty of merchantability, must be brought within a period of 24 months from date of original purchase. 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.

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