

# HINDSIGHT 20/20      Model: HS-400N

## Total Product Orientation

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### Physical Product

**Purpose**                      Promote collision avoidance by *delivering benefits to help improve driver awareness*

- Alert the driver (enabling driver to react and bring the vehicle to a stop)
- Quantify distance of the vehicle to the obstacle

**Description**              Ultrasonic rear-obstacle detection & proximity system; overview of components:

- Ultrasonic transceiver detectors - *mounted on exterior rear of vehicle*
- Heavy-duty steel & rubber mounting brackets - *mounted on exterior rear of vehicle*
- Shielded coaxial cabling - *mounted on exterior and under-carriage of vehicle*
- Epoxy-potted control box - *mounted on exterior and under-carriage of vehicle*
- 7-Way Plug w/ Heavy-Duty Wire Coil - *mounted on exterior of power vehicle*
- 7-Way Receptacle - *mounted on exterior of trailer*
- Display box - *mounted as an in cab control, readily accessible by driver*

**How HS20/20 Works**      Upon powering the vehicle's reverse-light electrical circuit

1. Error check is performed - a single beep indicates system is functioning properly
2. Transducers emit ultrasonic sound waves at 40kHz
3. Transducers continuously detects for ultrasonic sound waves *reflections*
4. Every 100 milliseconds, the control box processes data gathered by transducers to determine if the reflected sound waves indicate a presence of obstacles within the field of detection, measuring the distance of the obstacle from the detector to +/- 1"
5. When the control box determines an obstacle is within the field of detection, it sends information to the driver via the in-cab display box.
  - In-cab display box communicates alert and quantification information to the driver with audio (three tones) and visual LED lights with graduation marks

### Brand Name

**Hindsight 20/20:**

- Is recognized by members of NHTSA in SAE study as #1 in Detection of Pedestrians
- Is the brand of choice for many of the largest and most prestigious fleets in the United States
- Continues to sell strong, since 1993
- Is designed and built tough for HEAVY-DUTY private commercial, utility, transit, and other harsh & demanding fleet applications
- Is the market's *PROFESSIONAL VALUE* rear-obstacle detection and proximity solution

### Company's Image

**Sonar Safety Systems, Inc.:**

- Is registered as a California Corporation and is based out of Santa Fe Springs since 1993
- Wholly-owned subsidiary of TANHAY, a \$200M multinational headquartered in Seoul, Korea
- One of eight subsidiaries; focused on Transportation Safety, one of TANHAY's six business areas
- Stands behind its product offerings, practicing a Customer-for-Life philosophy



## Pre & Post Sales Service

### **Sonar Safety Systems, Inc.:**

- Maintains a diversified staff of seasoned professional Sales & Service and credentialed Engineers to ensure SSSI's client's enjoy both pre and post sales experiences of the highest quality
- Offers a Hindsight 20/20 Partnership program to clients purchasing as little as 100 units per year

## Warranty

### **Sonar Safety Systems, Inc.:**

- Offers a one (1) year warranty on all parts
- Offers extended warranty programs to Hindsight 20/20 Partner Clients

## Instructions for Use

### **Hindsight 20/20:**

- Includes a printed Installation and Use Guide with every system sold
- Offers a customizable In-Cab Driver Information Card to all Hindsight 20/20 Partnership program clients at no additional charge

## Accessories

### **Sonar Safety Systems, Inc.:**

- Maintains a well-stocked warehouse of replacement parts and equipment
- Offers special product demonstration kits to distribution channel partners
- Is open-minded to consider product modification and/or development projects catering to the unique application needs of our fleet clients

## Package

### **Hindsight 20/20:**

- Is shipped standard in an attractive four-color box facilitating a professional showroom display

