by Cybernetic Solutions Unit 11, 20 Keon Parade Thomastown Victoria 3074

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### Installation Notes: Page 1 of 4

## MachineMinder



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for Brunswick GS pinsetters with Base Guard package.

MachineMinder is a system of components that link together to create a safer Pinspotter or Pinsetter machine.

Cutout-2 is the first stage towards compliance with AS4024.1-2006, the Australian Machine Safety Standard. This Standard is similar in most respects to other modern international standards for machine safety.







#### **Operation and Procedure**

During normal operation, the MachineMinder Cutout-2 status LED will show GREEN.

If the MachineMinder IR beam at the front of the machine pair is blocked, the MachineMinder Cutout-2 status LED will FLASH BLUE. This indicates E-Stop mode and will cause the Safety Interface box to sense an E-Stop condition. This will disconnect power from the GS machine chassis.

Before attempting to restart the Pinsetter pair, check to see that the IR beam is no longer blocked and that the machines are safe. It is recommended that the MachineMinder Cutout-2 module is mounted on the curtain wall, so that the operator has a clear view of the front area of the machines when performing a reset.

Restarting the Pinsetter is a 2 STEP process:

1. Press the RESET button on the MachineMinder Cutout-2 module. The status LED should return to GREEN.

Note: if all MachineMinder Cutout-2 modules have been subject to a global E-Stop (ie from a remote E-Stop button that will shut down all machines), the status LED will FLASH RED. Resetting the remote E-Stop button will reset all the MachineMinder modules to their normal (GREEN LED) condition.

2. Press the RESET button on the Safety Interface Box or the Rear Start Switch

#### **Monthly Testing Procedure**

- 1. All machines running
- 2. Ensure Green LED is lit in all MachineMinder Cutout-2 modules
- 3. Place a hand or other item to block the IR beam on each lane pair
- 4. Ensure that pair of lanes turns off
- 5. Indicator in Cutout-2 Module should be FLASHING BLUE
- 6. Push RESET button on Cutout-2 Module indicator should turn GREEN
- 7. Push either the RESET button on the interface box or the Rear Start Switch
- 8. Turn off machines as required

#### **Monthly Inspection Procedure**

- 1. Check all IR beams for damage and alignment
- 2. Check all IR reflectors for damage and alignment
- 3. Check all cables and connectors for damage and security

by Cybernetic Solutions

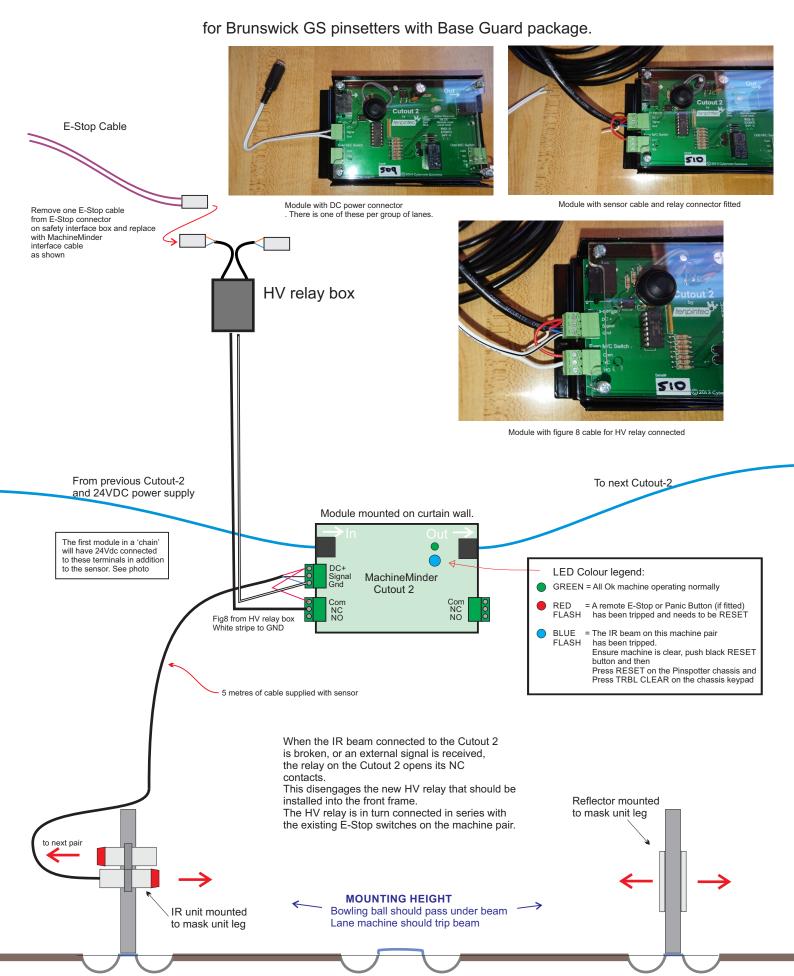
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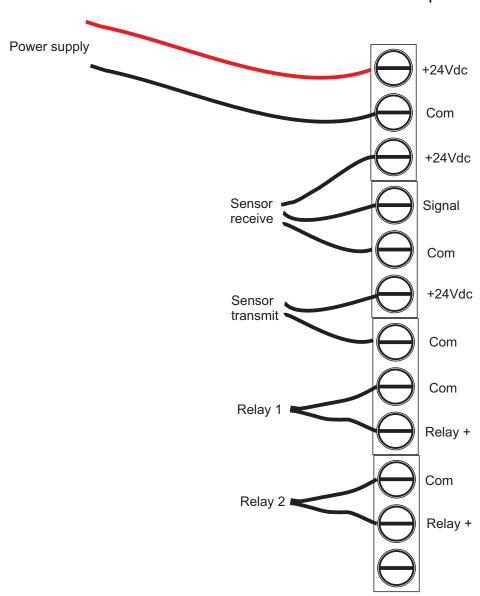
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# MachineMinder



for Brunswick GS pinsetters with Base Guard package.

#### GS Base Guard Extra terminal strip



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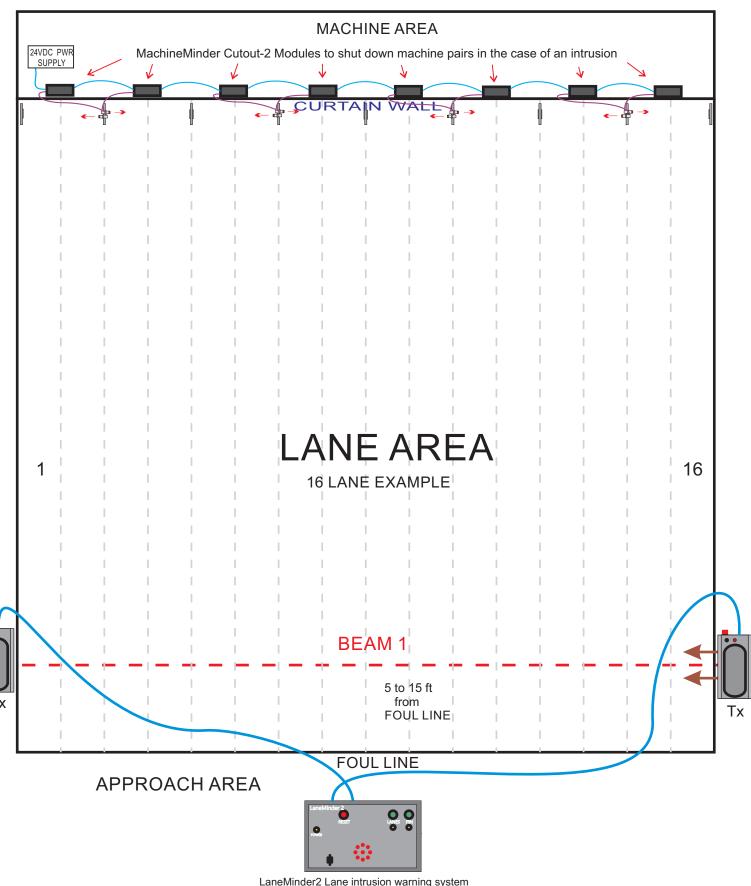
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## MachineMinder



MachineMinder Cutout-2 Modules mount to the curtain wall above and between each pair of machines. The Modules are daisy-chained together with Cat-5 cables to supply 24VDC power, shut-down and reset signal. Entering either machine of a pair from the front will break the IR beam and shut down that pair. Note: Guards need to be in place to stop a person moving to the next pair of machines once behind the mask units.



LaneMinder2 Lane intrusion warning system - not connected to MachineMinder safety system