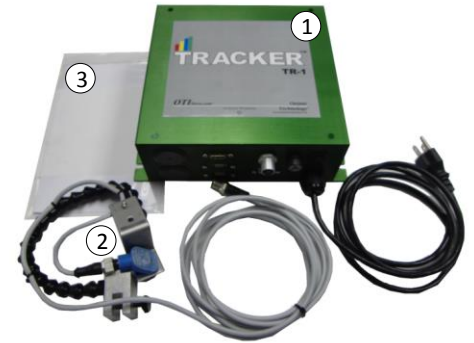


COMPONENTS RECEIVED

1. **Tracker™** Control Box: Part Number - OT-60002 TR1
2. Sensor Assembly:
 - a. Diffuse Reflective Sensor: Part Number - OT-6000208
 - b. Sensor Cable: Part Number - OT-6000209
 - c. Mounting Assembly: Part Number - OT-6000213
3. Manual: Available On-Line

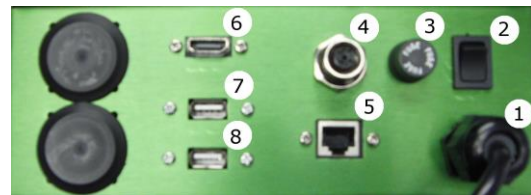


COMPONENTS NOT INCLUDED

1. HDMI Monitor or TV (720p or compatible)
2. Keyboard and Mouse (USB Cable or Wireless USB)
3. HDMI Cable

CONNECTION PANEL

1. 115 Volt, 50/60Hz, 2 Amp Power Cord
2. Power On/Off Switch
3. Fuse Holder (Fuse Size 500ma FA)
4. M12 Sensor Plug (4 wire, 24V, PNP)
5. Female Ethernet Port (Wired)
6. Female HDMI Standard Port (720p or compatible)
7. Female USB 2.0 Port (Wired or Wireless)
8. Female USB 2.0 Port (Wired or Wireless)



INSTALLATION

1. Plug in user provided keyboard and mouse. **Must be plugged in prior to power up.**
2. Plug in user provided HDMI Cable to **Tracker™** controller.
3. Plug in HDMI Cable to 720p TV/Monitor. **Note which HDMI Input Number. Must be plugged in prior to power up.**
4. Mount included **Tracker™** Sensor to manual or automated production line in a position best suited to track the line process.
 - a. Sensor provided has an approximate 2 inch range.
 - b. Ensure when **powered up** the sensor light is flashing yellow for each product as it passes down the line.
 - i. If Sensor Light is steady on then it is reflecting on a background object.
 - ii. If Sensor Light does not turn yellow at all it is not “seeing” or reflecting off any object.
 - iii. Reposition as necessary.
5. Plug in **Tracker™** controller power cord to standard 115V wall outlet.

6. Turn On TV/Monitor and **set to correct HDMI Input Number.**
7. Switch **Tracker™** controller On.
8. **Tracker™** will Power Up in about 15 seconds. **Tracker™** screen will display on TV/Monitor.
9. Verify Sensor is working properly and is in correct position per instruction 4 above. On power up if sensor is in correct position, the **Detected Count** field on the screen will be incrementing – **this is normal.**
10. The **Detected Count** field will **increment at all times** when the **Tracker™** Controller is powered up and the Sensor is detecting objects. The **Detected Speed** field will display **line speed at all times** when the **Tracker™** controller is powered up and the **Sensor** is detecting objects. This is true when system is in **Start** or **Stop** mode. The **Detected Count** field will reset to (“0”) zero when the **Clear** button is clicked on.

TRACKER™ OPERATIONS

1. Quick Start Guide:

- a. If desired enter any optional Machine, Operator, Job ID information in the **Update Run Information** screen, with left mouse click on the **Update Info** button. Left mouse click **OK** to save.
- b. Enter the optional **Job Size** in the **Update Run Information Screen**. Left mouse click **OK** to save.
- c. Enter the optional **Target Speed** with left mouse click on **Set Target**
- d. Left mouse click on the **Clear** Button to (“0”) zero **Detected Count** and **Target Counts** fields.
- e. Left mouse click on the **Start** Button
- f. Start the manual or automated production line the **Tracker™** system is attached to.
- g. **Tracker™** will display **Detected Speed**, **Detected Count**, **Target Speed** (if entered), **Target Counts** (if Target Speed entered), **Job Size** (if entered), **Counts % On Target** (if **Target Speed** entered), **Job % Complete** (if **Job Size** entered), **Speed % On Target** (if **Target Speed** entered), **Machine**, **Operator**, and **Job ID** information (if entered).
- h. Left mouse click the **Stop** button when job is complete.



2. Update Run Information Screen:

- a. To Enter the **Update Run Information** screen, left mouse click on the **Update Info** button.
- b. Optional: Enter alpha-numeric **Machine ID**, **Operator ID**, and **Job ID**. Any characters accepted. Fields can be left blank. Information in these fields will be saved with the job file.



- c. Optional: Enter numeric only **Job Size**. Information in this field will be saved with the job file.
- d. To Save: left mouse click on **OK. Update Run Information** screen will close and entered data will display on TV/Monitor in their respective fields.

3. Update Target Speed Screen

- a. To enter the **Update Target Speed** screen, left mouse click on the **Set Target** button.
- b. Optional: Enter numeric only **Target Speed** as a rate per hour. For example: 100 per hour or 6,000 per hour. Information in this field will be saved with the job file.
- c. To Save: left mouse click on **OK** button. **Set Target** screen will close and entered data will display on TV/Monitor in the **Target Speed** field.
- d. **Target Speed** field only displays as a rate per hour.
- e. **Target Counts** field: Based on entered **Target Speed**, the **Tracker™** system will calculate the number of pieces that should have been produced at this **Target Speed** from the **Start** of the job, and will display and update this value in the **Target Counts** field.
 - i. This calculated value is also commonly referred to as the **TAKT** value.
 - ii. If the job has not been started, the **Target Counts** field will display the number ("0") zero.
 - iii. The **Target Counts** field can be reset to ("0") zero at any time by clicking on the **Clear** button – this is true if system is in **Start** or **Stop** mode.
 - iv. The **Target Counts** field will continue to increment at the calculated rate for as long as the system is in **Start** mode. Even if the production line is stopped and the **Detected Counts** is no longer incrementing.
- f. Please refer to readily available on-line **Lean Manufacturing and 5S** information for best practices and use of the **Target Speed** and **Target Counts** (TAKT) fields.



4. Start and Stop Mode

- a. On power up the **Tracker™** system is in **Stop** Mode.
- b. **Stop** Mode is identified by the **red background** behind the **Detected Speed** and **Detected Counts** fields.
- c. To enter the **Start** Mode, left mouse click on the **Start** button.
- d. The **Start** Mode is identified by **no color** behind the **Detected Speed** and **Detected Counts** fields.
- e. To exit the **Start** Mode and enter the **Stop** Mode, left mouse click on the **Stop** button.
- f. When the **Start** button is clicked on, the red background behind the **Detected** fields will turn off, and the **Target Counts** will start incrementing.

- i. **Target Counts** will start incrementing from the last calculated number displayed.
 - ii. For example, if **Target Counts** displays the number 398 and system is in Stop mode. When **Start** button is clicked on the **Target Counts** will next display 399.
 - iii. **Please note:** If you want to start **Target Counts** at (“0”) zero, left mouse click on the **Clear** button, then left mouse click on the **Start** button.
- g. When the **Stop** button is clicked on, the red background behind the **Detected** fields will turn on, and the **Target Counts** will stop incrementing. The last **Target Counts** number will remain on the screen until:
- i. The **Clear** button is clicked on to turn **Target Counts** to (“0”) zero, or
 - ii. The **Start** button is clicked on to start incrementing from last saved number.

5. Clear Button

When **Clear** button is clicked on with left mouse button:

- a. **Detected Counts** turns to (“0”) zero. **Please note:** if the production line is running the **Tracker™** sensor will continue to detect counts and the **Detected Counts** field will continue to increment starting over from (“0”) zero.
- b. **Target Counts** turns to (“0”) zero. **Please note:** if the system is in **Start** mode, the **Target Counts** will start incrementing again from (“0”) zero. If the system is in **Stop** mode, the **Target Counts** will stay at (“0”) zero until system is placed in **Start** mode.

6. Percentage Fields

- a. **Counts % On Target** field: This displays the ratio between **Detected Counts** and **Target Counts** as a (%) percentage. Formula is $\text{Detected Counts}/\text{Target Counts}$.
 - i. For 0 to 79% background is Red.
 - ii. For 80 to 94% background is Yellow.
 - iii. For 95 % and greater background is Green.
 - iv. **Please note:** if you place system is in Stop mode and click on Clear to set **Target Counts** to (“0”) zero, the **Counts % On Target** field will remain at (“0”) zero.
- b. **Speed % On Target** field: This displays the ratio between **Detected Speed** and **Target Speed** as a (%) percentage. Formula is $\text{Detected Speed}/\text{Target Speed}$.
 - i. For 0 to 79% background is Red.
 - ii. For 80 to 94% background is Yellow.
 - iii. For 95 % and greater background is Green.
 - iv. **Please note:** If the production line is stopped and the sensor does not detect an object for about 15 seconds the **Speed % On Target** field will turn to (“0”) zero.
- c. **Job % Complete** field: This displays the ratio between **Detected Counts** and **Job Size** as a (%) percentage. Formula is $\text{Detected Counts}/\text{Job Size}$.
 - i. For 0 to 99% background is Green.
 - ii. For 100% and greater background is Red.

- iii. **Please note:** if no *Job Size* is entered the *Job % Complete* field remains at (“0”) zero.
- d. **Please note:** All percentage fields will continue to calculate and display if system is in both the Start and the Stop modes, unless otherwise note above.

7. ANDON LIGHTS

There are (4) **Andon Lights** on the *Tracker™* screen, one in each corner of the screen. Please refer to readily available on-line **Lean Manufacturing and 5S** information for best practices and use of the **Andon Lights**.

- a. Each **Andon Light** has (3) states: Off, Steady On, and Blinking On.
- b. To change the state of the **Andon Light**, position mouse pointer over the **Andon Light** and with each left mouse click the state will change from **Off**, to **Steady On**, to **Blinking On**, then to **Off** again. Pattern is repeated.
- c. In the **Off** state, the color is faintly displayed so the operator knows where each color is located.
 - i. **Green** Andon Light: Upper Left
 - ii. **Red** Andon Light: Upper Right
 - iii. **Blue** Andon Light: Lower Left
 - iv. **Yellow** Andon Light: Lower Right

TROUBLE SHOOTING

Please note: all Tracker™ Systems are fully inspected prior to shipment and will ship in good working condition.

1. Ensure TV/Monitor is a 720p or compatible monitor. The *Tracker™* will work with higher resolution TV/Monitors, including 1080 systems, that can display 720p.
2. Ensure HDMI cable is working and correctly connected to the *Tracker™* system and to the TV/Monitor.
3. Ensure TV/Monitor is turned on and set to the HDMI input that the HDMI cable from the *Tracker™* system is plugged into.
4. If *Tracker™* screen does not display, ensure steps 1, 2, and 3 above are correct. Turn *Tracker™* system off for 20 seconds, then turn on again.
5. If mouse or keyboard do not work: verify they are plugged in or wireless USB fob is plugged in. Turn *Tracker™* off for 20 seconds, then turn on again. *Tracker™* system cannot be On when plugging in the USB or HDMI devices. The *Tracker™* system needs to “discover” these devices when turning on or booting up.
6. If Sensor does not light up when hand placed in front, ensure the sensor cable is properly connected and screwed into sensor connector on back of the *Tracker™*. Ensure sensor cable is properly connected and screwed into the sensor.

Technical Information

1. Power Requirements: 115V, 50/60Hz, 500ma FA
2. HDMI Connection: 720p or equivalent, Type A, Full Size Female Connector
3. USB Connection: 2.0, wired and wireless, Type A Female Connector
4. Sensor: Diffuse Reflective, PNP, 12 to 24 VDC, (24 Volt Provided By **Tracker™**), 50mm (2") range.
5. Sensor Connection: M12 Connector. Pin 1: Power, Pin 3: Ground/Common, Pin 4: Signal. Any style compatible sensor or relay input can replace provided sensor.
6. If utilizing a relay input, please note we provide the 24VDC power that needs to go through the dry contact side of user provided relay. Does not matter if user provided relay contacts are Normally Open or Normally Closed. **Tracker™** will detect state change.