

Parking Lot Layout for LineLazer[™] V HP Auto Series with LazerGuide[™] 2000^{3A8102A}

For the application of line striping materials. For professional use only. For outdoor use only. Not for use in explosive atmospheres or hazardous locations.

Maximum Operating Pressure: 3300 psi (22.8 MPa, 228 bar)



Important Safety Instructions

Read all warnings and instructions in this manual and in related manuals. Be familiar with the controls and the proper usage of the equipment. Save these instructions.



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NOTE: For Best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.

LineLazer V Auto-Layout System



GUN SETUP

For parking lot layout applications, it is recommended that GUN 1 is placed on the right side of the striper and GUN 2 is placed on the left side. It is also important that the guns are placed straight across from one another slightly in front of the front tire.

STALL CALCULATOR OFFSET

- 1. Back the striper up to the curb or START reference dot near the curb, then measure the distance from the curb or START reference dot to the LazerGuide 1700 Start/Stop Laser under your spray gun.
- 2. In the STALL CALCULATOR screen, input this value as the offset (x) value by using (. Store this value

by holding $\begin{bmatrix} D \end{bmatrix}$ for 2 seconds so you can use this for your future layout jobs.

Calibration

Minimum 24 ft precision course



CALIBRATION

- 1. Lay out a steel measuring tape (minimum 25 ft, maximum 100 ft).
- 2. Line up the striper parallel to the tape measure with the LazerGuide 1700 Start/Stop Laser at the 1 ft mark.
- 3. Go to the **CALIBRATION** screen on the LiveLook display and select your calibration distance (24 ft in this example).
- 4. Press the **REMOTE SWITCH** and move the LazerGuide 1700 Start/Stop Laser along the tape measure and stop at the measurement 1 ft beyond the inputted measurement on the display to take into account that you started on the 1 ft mark.

NOTE: The LiveLook display is measuring in both the forward and backwards direction so if you go past the FINISH point you can back up the striper before pressing the **GUN TRIGGER CONTROL** button to subtract from the measurement.

5. To verify your calibration, go to measure mode (see page 5).

To calibrate LazerGuide 2000, see manual 3A5294 or the LazerGuide 2000 Setup & Calibration video.

Measure Mode

Used for measuring and marking specific distances



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MEASURE MODE

- 1. Go to the **MEASURE MODE** screen on the LiveLook display.
- 2. Put the LazerGuide 1700 Start/Stop Laser on your START point and press the **GUN TRIGGER CONTROL** button.
- 3. Move the striper in a straight line to the FINISH point and press the **GUN TRIGGER CONTROL** button when the LazerGuide 1700 Start/Stop Laser is directly over the FINISH point.

At any time while in **MEASURE MODE**, if an Auto gun is set to active, momentarily hold down **GUN TRIGGER CONTROL** to apply a dot. Holding down **GUN TRIGGER CONTROL** will produce continuous dotted line with 1 foot dot spacing when moving, used for pre-marking.

NOTE: The striper measures moving forward or reverse.

Basic Stall Layout: Layout Mode

Establishing START and FINISH reference dots

NOTE: For best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



- 1. Go to **LAYOUT MODE** on LiveLook display and select the depth of your stall as the **STALL SIZE**. In this case, we are selecting 18 ft from the inside curb.
- 2. Set Gun 1 or 2 to active by pressing the 1 or 2 button on the display so that the red LED is lit.
- 3. Line the LazerGuide 1700 Start/Stop Laser up with the inside curb. Press the **GUN TRIGGER CONTROL** button to place your curb START reference dot and then move the striper away from the curb until the second START reference dot is placed 18 ft from the inside curb in this example.
- 4. Press the GUN TRIGGER CONTROL button to stop placing additional reference dots.
- 5. Move the striper to the other end of the parking lot area and repeat steps 2 through 4 to the place the two FINISH reference dots.
- 6. Set the LazerGuide 2000 Target Box at the FINISH reference dot facing the START reference dot.

Basic Stall Layout: Stall Calculator

Measure for automatic calculation or select desired stall size



STALL CALCULATOR

- 1. Move the striper to the START point. Line up the LazerGuide 1700 Start/Stop Laser with the START reference dot and align the LazerGuide 2000 Laser with the Target Box. **NOTE:** Make sure that you calibrate your LazerGuide 2000 as shown in manual 3A5294 or the 'LazerGuide 2000 Setup & Calibration video.
- 2. Go to the **STALL CALCULATOR** screen on the LiveLook display, choose your nominal stall width (in this case we chose 9 ft) and then press the **GUN TRIGGER CONTROL** button to start measuring. Move the striper toward the FINISH reference dot while keeping the LazerGuide 2000 Laser lined up with the Target Box.
- 3. Once you reach the FINISH reference dot press the GUN TRIGGER CONTROL button to stop measuring. NOTE: The LiveLook display is measuring in both the forward and backwards direction so if you go past the FINISH reference dot, you can back up the striper before pressing the GUN TRIGGER CONTROL button to subtract from the measurement.
- 4. Use the UP/DOWN arrows to adjust the number of stalls desired (In the example shown, we measured 144.48 ft and choose 16 stalls each with a width of 9.03 ft). **NOTE:** The LiveLook display automatically transfers the calculated **STALL SIZE** from the **STALL CALCULATOR** to the **LAYOUT MODE** screen.

Basic Stall Layout: Layout Mode

Mark dots at beginning of each stall



- 1. Move the striper back to the START point. Line up the LazerGuide 1700 Start/Stop Laser with the START reference dot and align the LazerGuide 2000 Laser with the Target Box.
- 2. Press the **GUN TRIGGER CONTROL** button to start laying dots at the defined width (9.03 ft in this example). Move the striper toward the FINISH reference dot while keeping the LazerGuide 2000 Laser lined up with the Target Box.
- 3. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.

Basic Stall Layout: Stall Calculator

Mark dots near the curb



- 1. Move the striper such that the LazerGuide 1700 Start/Stop Laser is at the curb to the left in the illustration shown above and **GUN 2** (left gun) is on the START reference dot while the striper is facing the left curb.
- 2. Press the **GUN TRIGGER CONTROL** button and then back up while following the bottom curb until you make a second dot (at 9.03 ft in this example).
- 3. Press the **GUN TRIGGER CONTROL** button to stop laying additional dots.
- 4. Rotate the striper 180 degrees such that the LazerGuide 1700 Start/Stop Laser is directly over the reference dot that you just laid.
- 5. Press the **GUN TRIGGER CONTROL** button to start laying dots at the defined width (9.03 ft in this example). Move the striper toward the FINISH reference dot while following the curb.
- 6. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.

Basic Stall Layout: Striping Mode

Paint lines (connect the dots)



STRIPING MODE

Connect the dots with your striper. Use the Target Box if needed.

Island Stall Layout: Layout Mode

Establish the START/FINISH reference dots



- 1. Define the CENTER of the cement island on both ends of the island stalls that you plan to lay out either using **MEASURE MODE** on the LiveLook display or a tape measure.
- 2. Establish your stall START and FINISH reference dots by using the **LAYOUT MODE** and measuring from the CENTER reference dot (in this example, we are measuring 18 ft from the CENTER reference dots).
- 3. Set the LazerGuide 2000 Target Box at one of the FINISH reference dots facing the corresponding START reference dot.

Island Stall Layout: Stall Calculator

Measure for automatic calculation or select desired stall size

NOTE: For best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



STALL CALCULATOR

- 1. Move the striper to the START point. Line up the LazerGuide 1700 Start/Stop Laser with the START reference dot and align the LazerGuide 2000 Laser with the Target Box. **NOTE:** Make sure that you calibrate you Lazer-Guide 2000 as shown in manual 3A5294 or the 'LazerGuide 2000 Setup & Calibration' video.
- Go to the STALL CALCULATOR screen on the LiveLook display, choose your nominal stall width (in this case we chose 9 ft) and then press the GUN TRIGGER CONTROL button to start measuring. Move the striper toward the FINISH reference dot while keeping the LazerGuide 2000 Laser lined up with the Target Box.
- 3. Once you reach the FINISH reference dot, press the GUN TRIGGER CONTROL button to stop measuring. NOTE: The LiveLook display is measuring in both the forward and backwards direction so if you go past the FINISH reference dot, you can back up the striper before pressing the GUN TRIGGER CONTROL button to subtract from the measurement.
- 4. Use the UP/DOWN arrows to adjust the number of stalls desired (In the example shown, we measured 288.64 ft and choose 32 stalls each with a width of 9.02 ft). **NOTE:** The LiveLook display automatically transfers the calculated **STALL SIZE** from the **STALL CALCULATOR** to the **LAYOUT MODE** screen.

Island Stall Layout: Layout Mode

Place dots at the beginning and the end of each stall line

NOTE: For best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



- 1. Move the striper back to the same START point and line up the LazerGuide 1700 Start/Stop Laser with the START reference dot and align the LazerGuide 2000 Laser with the Target Box.
- 2. Press the **GUN TRIGGER CONTROL** button to start laying dots at the defined width (9.02 ft in this example). Move the striper toward the FINISH reference dot while keeping the LazerGuide 2000 Laser lined up with the Target Box.
- 3. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.
- 4. Repeat steps 1 through 3 to define the other end of your double stalls.

Island Stall Layout: Striping Mode



ti28368a DRAWING NOT TO SCALE

STRIPING MODE

Connect the dots. Use the Target Box as needed.

NOTE: If doing multiple island stalls where the stalls are lined up, you can save time by marking the first START reference dot and the final FINISH reference dot and use the skip-line feature on the LiveLook display. For example if you want 18 ft deep stalls and a 24 ft drive path, you would select 36 ft line/24 ft skip.

Radius Stall Layout: Layout Mode

Establish perimeter reference line for start of stalls

NOTE: For best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



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- 1. Go to LAYOUT MODE on LiveLook display and select the depth of your stall as the STALL SIZE. In this case, we are selecting 18 ft from the inside curb.
- 2. Set Gun 1 or 2 to active by pressing the 1 or 2 button on the display so that the red LED is lit.
- 3. Line the LazerGuide 1700 Start/Stop Laser up with the inside curb and press the GUN TRIGGER CONTROL button and then move the striper away from the curb until the outer radius reference dot is placed - 18 ft from the inside curb in this example.
- 4. Press the **GUN TRIGGER CONTROL** button to stop placing additional reference dots.
- 5. Repeat steps 3 and 4 to put down enough reference dots as to define a good enough reference line for the start of your stalls.

Radius Stall Layout: Stall Calculator

Measure inner radius distance



STALL CALCULATOR

- 1. Move the striper to the START point at the inner curb and line up the LazerGuide 1700 Start/Stop Laser with the START point. **NOTE:** If you cannot get the LazerGuide 1700 up to the START point because of a curb then use the **STALL CALCULATOR OFFSET** feature (shown on page 3).
- 2. Go to the **STALL CALCULATOR** screen on the LiveLook display, select your nominal stall width (in this example we chose 9 ft) and then press the **GUN TRIGGER CONTROL** button to start measuring. Move the striper toward the FINISH point while following the inner curb with the LazerGuide 1700 Start/Stop Laser.
- 3. Once you reach the FINISH point press the **GUN TRIGGER CONTROL** button to stop measuring. **NOTE:** The LiveLook display is measuring in both the forward and backwards direction so if you go past the FINISH reference dot, you can back up the striper before pressing the **GUN TRIGGER CONTROL** button to subtract from the measurement.
- 4. Use the UP/DOWN arrows to adjust the number of stalls desired (In the example shown, we measured 144.48 ft and choose 16 stalls each with a width of 9.03 ft). **NOTE:** The LiveLook display automatically transfers the calculated **STALL SIZE** from the **STALL CALCULATOR** to the **LAYOUT MODE** screen.

Radius Stall Layout: Layout Mode

Mark dots at end of each stall



- 1. Move the striper such that the LazerGuide 1700 Start/Stop Laser is at the curb to the left in the illustration shown above and GUN 2 (left gun) is on the START reference dot while the striper is facing the left curb.
- 2. Press the **GUN TRIGGER CONTROL** button and then back up while following the bottom curb until you make a second dot (at 9.03 ft in this example).
- 3. Press the **GUN TRIGGER CONTROL** button to stop laying additional dots.
- 4. Rotate the striper 180 degrees such that the LazerGuide 1700 Start/Stop Laser is directly over the reference dot that you just laid.
- 5. Press the **GUN TRIGGER CONTROL** button to start laying dots at the defined width (9.03 ft in this example). Move the striper toward the FINISH reference dot while following the curb.
- 6. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.

Radius Stall Layout: Stall Calculator

Measure outer perimeter distance



STALL CALCULATOR

- 1. Move the striper to the START point of the stalls (18 ft from the inner curb in this example) and line up the LazerGuide 1700 Start/Stop Laser with the START point.
- 2. Go to the **STALL CALCULATOR** screen on the LiveLook display and then press the **GUN TRIGGER CONTROL** button to start measuring. Move the striper toward the FINISH point while following the reference line created earlier (18 ft from the inner curb in this example) with the LazerGuide 1700 Start/Stop Laser.
- 3. Once you reach the FINISH point press the **GUN TRIGGER CONTROL** button to stop measuring. **NOTE:** The LiveLook display is measuring in both the forward and backwards direction so if you go past the FINISH reference dot, you can back up the striper before pressing the **GUN TRIGGER CONTROL** button to subtract from the measurement.
- 4. Use the UP/DOWN arrows to adjust the number of stalls to match the number of stalls you selected when measuring the inner curb radius (16 stalls in this example). The stall width will be certainly be different than stall width at the curb but don't worry about that you just need to match the same number of stalls (in this example the total distance measured was 162.24 ft and the stall width is 10.14 ft). NOTE: The LiveLook display automatically transfers the calculated STALL SIZE from the STALL CALCULATOR to the LAYOUT MODE screen.

Radius Stall Layout: Layout Mode

Place evenly spaced dots at beginning of each stall



- 1. Move the striper back to the START point of the stalls (18 ft from the inner curb in this example) and line up the LazerGuide 1700 Start/Stop Laser with the START point.
- 2. Press the **GUN TRIGGER CONTROL** button to start laying dots at the defined width (10.14 ft in this example). Move the striper toward the FINISH reference dot while keeping the LazerGuide 1700 Start/Stop Laser lined up with the perimeter reference line.
- 3. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.

Radius Stall Layout: Striping Mode

Paint Lines



STRIPING MODE

Connect the dots with your striper. Use the Target Box if needed.

Angle Stall Layout: Parking Mode

START/FINISH reference dots

NOTE: For best results, always rod in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



PARKING MODE:

- 1. Define the CENTER of the cement island on both ends of the island stalls that you plan to lay out either using **MEASURE MODE** on the LiveLook display or a tape measure.
- 2. Establish your stall START and FINISH reference dots by using the **LAYOUT MODE** and measuring from the CENTER reference dot (in this example, we are measuring 18 ft from the CENTER reference dots).
- 3. Set the LazerGuide 2000 Target Box at one of the FINISH reference dots facing the corresponding START reference dot.

Angle Stall Layout: Angle Calculation

Set up LiveLook Display



ANGLE CALCULATION

- 1. Go to **LAYOUT MODE ANGLE CALC** on LiveLook display and adjust the desired ANGLE, STALL DEPTH and STALL SIZE. **NOTE:** The system will automatically calculate the "offset" and "dot spacing".
- Press B to transfer the "dot spacing" to LAYOUT MODE and press C to transfer "offset distance" to LAYOUT MODE. NOTE: The system does not transfer any number from the ANGLE CALC to the LAYOUT MODE screen if E is pressed.

Angle Stall Layout: Layout Mode

Mark dots at end of each stall



- 1. Move the striper to one of the START points and line up the LazerGuide 1700 Start/Stop Laser with the START reference dot and align the LazerGuide 2000 Laser with the Target Box.
- 2. Press the **GUN TRIGGER CONTROL** button to start laying dots. Move the striper toward the FINISH reference dot while keeping the LazerGuide 2000 Laser lined up with the Target Box.
- 3. Press the **GUN TRIGGER CONTROL** button after the last FINISH reference dot is reached to stop laying additional dots.
- 4. Move the Target Box to the second FINISH point and move the striper to the second START point. Repeat steps 2 and 3.

Angle Stall Layout: Striping Mode

Paint Lines (connect the dots)



ti28378a DRAWING NOT TO SCALE

STRIPING MODE

Connect the dots with your striper. Use the Target Box if needed.

Cross Hatch Layout: Layout Mode

Establish the boundary and apply dots at desired spacing

NOTE: For best results, always dot in the same direction.

NOTE: Minimum engine RPM for placing dots is 2600.



- 1. Set gun to active. Press GUN TRIGGER CONTROL to START and FINISH dots.
- 2. Adjust STALL SIZE to achieve desired cross hatch spacing.
- 3. Place dots around perimeter of area.

Cross Hatch Layout: Striping Mode

Paint lines (connect the dots)



STRIPING MODE

Connect the dots with your striper. Use the Target Box if needed.

NOTE: Paint interior by connecting the dots. If ends are rounded as shown, make sure you establish this before painting.

Cross Hatch Layout: Striping Mode

Paint perimeter (connect the dots)



STRIPING MODE

Paint the perimeter.

Marker Mode Layout: Center Lines and Lane Lines Mode

Paint lines (connect the dots)



MARKER MODE:

Automatic marker layout example shows typical lane line layout for reflective markers. Set space sizes up to 8 consecutive measurements. By leaving zeros in any space, AutoLayout will skip to the next measurement in a continuous loop.

OTHER USES:

- Multiple spaced handicap stall layout
- Double line stalls

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

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Graco Information

For the latest information about Graco products, visit www.graco.com.

For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call 1-800-690-2894 to identify the nearest distributor.

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A8102

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