Chapter 1

Overview

1

Announcing the ProLINE-RoadRunner
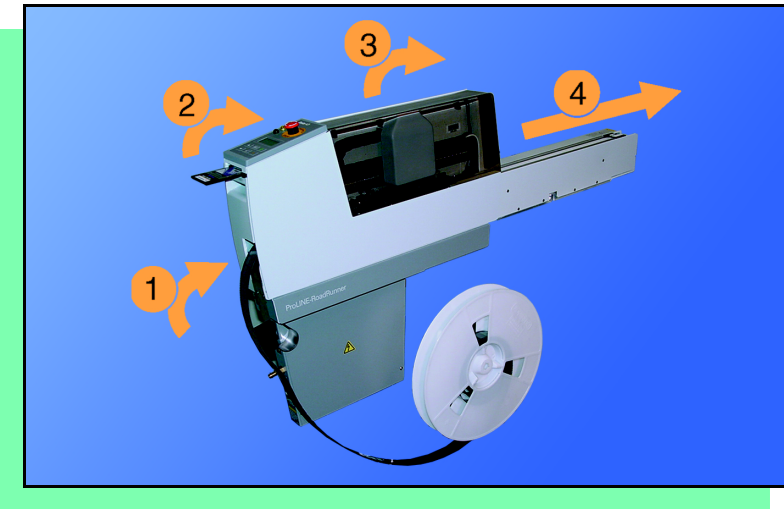
Data I/O is proud to introduce a revolutionary new inline solution for high-volume programming of electronic products.
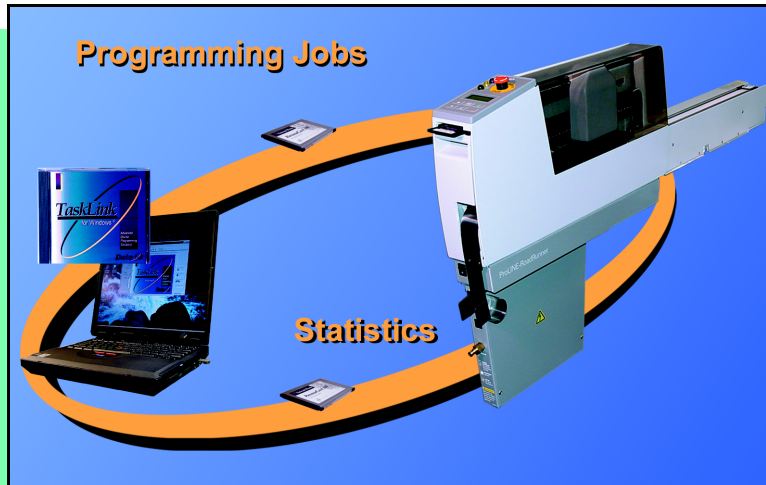
The ProLINE-RoadRunner

1. **Takes programmable devices from a reel.**

2. **Places them in sockets and programs them with your data.**

3. **Places them on a conveyor belt.**

4. **Delivers them to the pick point of an assembly machine.**

Jobs and Statistics

TaskLink™ for Windows® is required to process devices on the ProLINE-RoadRunner.

TaskLink controls quality, analyzes statistics, and allows you to create and manage a jobs database.

PCMCIA cards are used to transfer jobs and statistics between TaskLink and the ProLINE-RoadRunner.

For more information on TaskLink, see the TaskLink for Windows Online Help.

External View
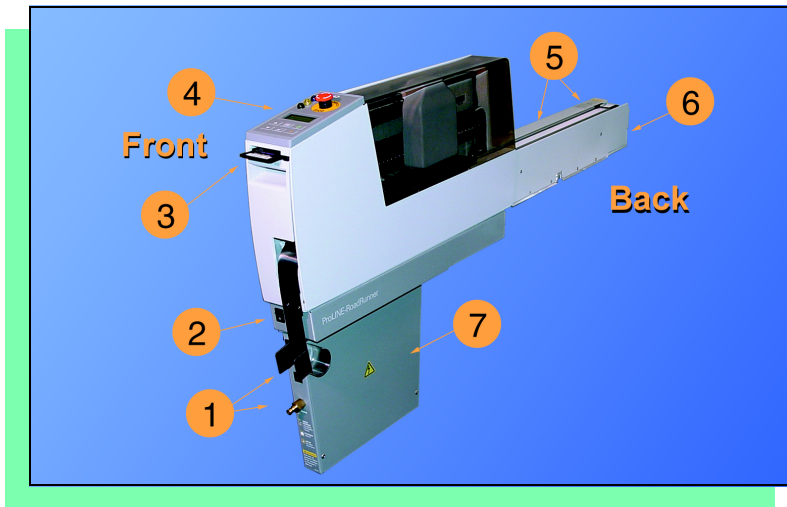
1. **Power and Air Connections**

2. **Power Switch**

3. **PCMCIA Card Slot**

4. **Control Panel**

5. **Conveyor Belt**

6. **Mechanical Interface to Assembly Machine**

7. **Electronics Enclosure**

Internal Components

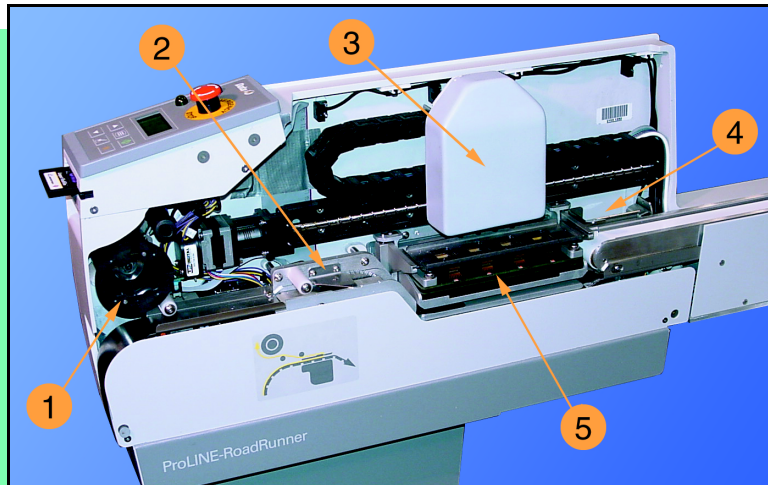1. **Cover Tape Takeup Reel**

2. **Tape Advance Module**

3. **PNP Probes and Precisor**

4. **Reject Bin**

5. **Socket Adapter, Actuator Plate, and Programmer**

Control Panel Lights
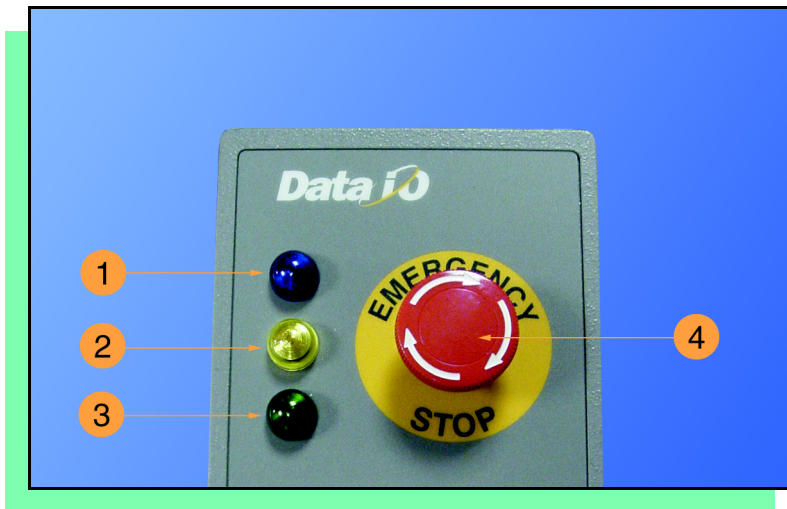
1. **Blue - Stop Indicator.
   User intervention is required, or
   the unit is paused.**

   **Do not remove PCMCIA card
   unless blue light is lit.**

2. **Yellow - Caution Indicator.
   Correct a problem or the
   machine will stop.**

3. **Green - Run Indicator.
   <u>Lit</u>: A job is running.
   <u>Flashing</u>: Programmed devices
   are not yet at the pick point.**

4. **Emergency Stop - Press to stop
   the robot motors in an
   emergency. Twist to resume
   motion.**

Control Panel Buttons
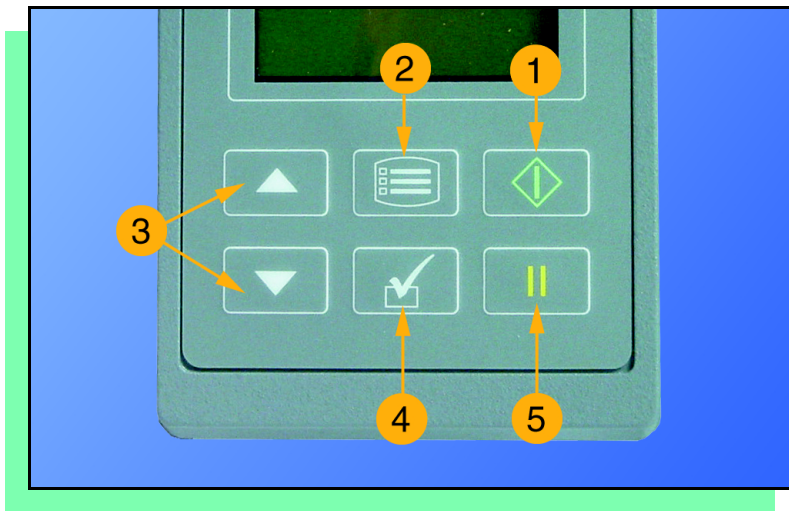
1. **Run - start or resume the chosen job.**

2. **Menu - exit from the current menu or message, showing either the next message or the previous menu.**

3. **Up and Down - move through menu items.**

4. **Choose - select menu items.**

5. **Pause - interrupt the job without cancelling it.**

Operator Menus

JOB	
VIEW	**Name: Job1** **Device: 28F010** **Checksum: A673** **Adapter: TSOP 48**
RESULTS	**Passed: 411** **Rejected: 2** **Job Yield: 99.5** **Parts/Hour: 450** **Down time: 0** **Availabie:** **MCBI:** **Skt1 Yield: 99.9** **Skt2 Yield: 99.9** **Skt3 Yield: 99.9** **Skt4 Yield: 99.9** **Skt Cycles: 1643** **Belt Empty: 0**
END	**End of job**

ADVANCE POCKET
Advances tape in increments of one tape pocket.

ALIGN POCKET
Advances pocket center to alignment mark.

PURGE
Removes parts from sockets and probes.

SOCKET
Socket 1: Disabled
Socket 2: Enabled
Socket 3: Enabled
Socket 4: Enabled

Operator menus are visible on the ProLINE-RoadRunner control panel, and can be navigated by using the Up and Down Arrow buttons.

If lost in the menu, press the menu button. The menu button will eventually return you to the top level menu.

Supervisor Menus

JOB

SELECT	Job 1
	Job2
	Job3

HOME

Performs the homing operation

SYSTEM

TIME	Hour: 23
	Minute: 59
	Month: 12
	Day: 31
	Year: 2000
ODOMETER	Hours: 9999
	Running: 9999
	Parts: 9999
UPDATE SW	Performs update procedure
MACHINE ID	System ID used by TaskLink

OPERATION

JOB	Pick Retries: 2
	Error Limit: 0
	Pocket Pitch: 4
HEAD	Velocity: 250
	Accel: 800
PROBES	Puff: 100
	Pick: 100
	Place: 100
	Travel: 250
TEACH	Tape: -40.63
	Skt 1: -26.75
	Reject: -166.37
	Belt: -182.25

DIAGNOSTICS

Performs Programmer and Robot Diagnostics

EVENT LOG

Displays the event history

View the Supervisor Menus by inserting a PCMCIA card with supervisor authority.

For more information on supervisor authorization, refer to the TaskLink Online Help, or the ProLINE-RoadRunner Service Manual.

Warnings and Cautions

	Compressed Air	**Point air hoses away from body. Always wear approved eye protection.**
	Loud Noise	**Sound pressure levels can exceed 85db. Always wear hearing protection in close proximity.**
	High Voltage	**Turn power off before removing electronics cover.**
	Heavy Object	**This equipment weighs approximately 35 lbs (15Kg). Do not drop. Mount only with approved hardware.**
	Moving Parts	**Pinch warning. Keep hands away from moving parts.**
	Electrostatic Discharge	**Electrostatic Discharge (ESD) may cause damage. Discharge static against a common ground.**