



**ST 30**

The ST 30 is a single channel system with dial control featuring IntelliHeat. The system is packaged with the TD-100 ThermoDrive Soldering Iron or can be purchased as a Power Source only and combined with any of 4 optional handpieces. The ST 30 improves quality, reduces costs and eliminates the maintenance and calibration hassles associated with other systems. The heavy-duty metal housing makes this system the ideal choice for the harshest environments and the sloped face of the front panel is a standard feature for ease of use. An optional mounting bracket (P/N 1321-0609-P1) is available to mount the system under a work-bench or shelf, preserving precious bench top space. The optional Instant-SetBack Cubby is available for the TD-100 ThermoDrive Soldering Iron to extend tip life, especially beneficial when Lead Free solders are used.

**Features**

- IntelliHeat Control Technology
- °C/°F Temperature Scales
- Temperature Adjustment Lockout
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Can be mounted under workbench or shelf with optional bracket 1321-0609-P1



**ST 50**

The ST 50 is a single channel, digital power supply that is available with the TD-100 ThermoDrive Soldering Iron or PS-90 SensaTemp Soldering Iron. The ST 50 can also be purchased as a Power Source only and combined with any of 4 optional handpieces. The programmable features of the ST 50 cannot be found anywhere on similarly priced systems! The ST 50 improves quality, reduces costs and eliminates the maintenance and calibration hassles associated with other systems. The ST 50 features IntelliHeat Control Technology. The heavy-duty, durable metal housing ensures years of service and the sloped face of the front panel is a standard feature for ease of use. An optional mounting bracket (P/N 1321-0609-P1) is available to mount the system under a work-bench or shelf, preserving precious bench top space. The optional Instant-SetBack Cubby is available for the TD-100 ThermoDrive Soldering Iron to extend tip life, especially beneficial when Lead Free solders are used.

**Features**

- IntelliHeat Control Technology
- Digital Display & Keypad
- °C/°F display options
- Password lockout
- Temperature Setback
- Auto-Off
- Definable operating temperature range
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Can be mounted under workbench or shelf with optional bracket 1321-0609-P1



**ST 70**

The ST 70 is a single channel system that is controlled by POWER MODULES™ and comes with the ThermoDrive Soldering Iron (TD-100). The system can also be purchased as a Power Source only and combined with any of 4 optional IntelliHeat handpieces. The ST 70 is the easiest to operate. Simply select the performance level you desire, plug in the appropriate Power Module and the system takes care of the rest! The ST 70 improves quality, reduces costs while protecting your process. The heavy-duty metal housing makes this system the ideal choice for the harshest environments and the sloped face of the front panel is a standard feature for ease of use. An optional mounting bracket (P/N 1321-0609-P1) is available to mount the system under a work-bench or shelf, preserving precious bench top space. The optional Instant-SetBack Cubby is available for the TD-100 ThermoDrive Soldering Iron to extend tip life, especially beneficial when Lead Free solders are used.

**Features**

- IntelliHeat Control Technology
- Performance level lockout (if Power Module is removed the system is shut down.)
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Can be mounted under workbench or shelf with optional bracket 1321-0609-P1
- Supplied with 6.5, 7 and 7.5 Power Modules



POWER MODULE	PART NUMBER	COLOR
Heat Level 5	1207-0446-01-P1	Green
Heat Level 5.5	1207-0446-02-P1	Blue
Heat Level 6	1207-0446-03-P1	Orange
Heat Level 6.5	1207-0446-04-P1	Gold
Heat Level 7	1207-0446-05-P1	Red
Heat Level 7.5	1207-0446-06-P1	Purple
Heat Level 8	1207-0446-07-P1	Black
Heat Level 8.5	1207-0446-08-P1	Silver



# PACE REWORK AND REPAIR

## ST SYSTEM SPECIFICATIONS

SPECIFICATIONS	ST 25	ST 30	ST 50	ST 70	ST 100
System with TD-100 115v	N/A	8007-0499	8007-0500	8007-0504	8007-0525
System with PS-90 115v	8007-0528	N/A	N/A	N/A	N/A
Power Source Only 115v	8007-0529	8007-0497	8007-0501	8007-0505	8007-0524
System with TD-100 230v	N/A	8007-0512	8007-0514	8007-0518	8007-0527
System with PS-90 230v	8007-0510	N/A	N/A	N/A	N/A
Power Source Only 230v	8007-0511	8007-0513	8007-0515	8007-0519	8007-0526
Power Requirements	97-127 VAC, 50/60 Hz, 90 Watts max. 197-253 VAC, 50/60 Hz, 90 Watts max.				
Dimensions	104mm H x 130mm W x 152mm D (4.1" H x 5.1" W x 6.0" D)			135mm H x 165mm W x 260mm D (5.3" H x 6.5" W x 9.25" D)	
Weight	2.3 Kg (5 lbs.)			5 Kg (11 lbs.)	
Control	Dial	Dial	LED Display	Power Module	LED Display & Keypad
Control Technology	SensaTemp		IntelliHeat		
Tip to Ground Resistance	2 ohms or less				
Temperature Accuracy	Meets or exceeds ANSI-I-STD			N/A	Meets or exceeds ANSI-I-STD 001
Absolute Temperature Stability	± 1.1 °C (± 2 °F) at idle tip temp.				
Temperature Range	176 °C to 482 °C (350 ° to 900 °F)	Tip Heater Cartridge Technology Handpieces = 205° to 454°C (400° to 850°F) SensaTemp Technology Handpieces = 176° (Dial) or 37°C (Digital Display) to 482°C (350° (Dial) or 100° (Digital Display) to 900°F)			
System Can be Calibrated	Yes				

SPECIFICATIONS	ST 65	ST 75	ST 115
System 115v	8007-0502	8007-0506	8007-0508
Power Source Only 115v	8007-0503	8007-0507	8007-0509
System 230v	8007-0516	8007-0520	8007-0522
Power Source Only 230v	8007-0517	8007-0521	8007-0523
Power Requirements	97-127 VAC, 50/60 Hz, 90 Watts max. 197-253 VAC, 50/60 Hz, 90 Watts max.	97-127 VAC, 50/60 Hz, 120 Watts max. 197-253 VAC, 50/60 Hz, 120 Watts max.	
Dimensions	104mm H x 130mm W x 152mm D (4.1" H x 5.1" W x 6.0" D)	88mm H x 171mm W x 254mm D (3.5" H x 6.75" W x 10" D)	
Weight	2.3 Kg (5 lbs.)	4 Kg (9 lbs.)	
Control	Dial	Dial	LED Display
Control Technology	IntelliHeat		
Tip to Ground Resistance	2 ohms or less		
Temperature Accuracy	Meets or exceeds ANSI-I-STD		
Absolute Temperature Stability	± 1.1 °C (± 2 °F) at idle tip temp.		
Temperature Range	Tip Heater Cartridge Technology Handpieces = 205° to 454°C (400° to 850°F) SensaTemp Technology Handpieces = 176° (Dial) or 37°C (Digital Display) to 482°C (350° (Dial) or 100° (Digital Display) to 900°F)	Tip Heater Cartridge Compatible Handpieces = 232° to 454°C (450° to 850°F) nominal SensaTemp Compatible Handpieces = 176° to 482°C (350° to 900°F) nominal	
System Can be Calibrated	Yes		
Vacuum/Pressure Source Type	Compressed Air Powered Venturi	Self Contained Pump	
Vacuum Rise Time	150 ms Average		
Vacuum (Nominal)	20 in Hg max		
Flow Control Valve	Coarse Adjustment	High Precision Needle Valve	
Pressure (Nominal)	18 p.s.i. max		
Air Flow (Nominal)	8 slpm max		



# INTELLIHEAT COMPATIBLE HANDPIECES

TIP-HEATER CARTRIDGE HANDPIECES

PERFECT FOR LEAD FREE

## TD-100 THERMO-DRIVE® SOLDERING IRON



The **TD-100 Thermo-Drive®** Soldering Iron is the only iron crafted by a team of surgical instrument engineers and is uniquely designed to eliminate operator fatigue, improve control and enhance productivity in demanding soldering applications. The TD-100 uses a patented Tip-Heater Cartridge that is the best performing and lowest priced Tip-Heater Cartridge on the market today! Almost 100 soldering tip geometries are available as well as over 30 surface mount removal tips. **See Pages 18-21** for tip selection.



Shown with optional comfort grip 6993-0241-P1

## MT-100 MINITWEEZ™



The only high capacity, micro tweezer (**MT-100 MiniTweez™**) on the market today features soft comfort grips, the smallest stroke available, and its tweezing action mimics the natural motion of the human hand to eliminate hand fatigue. With 10 styles of component removal tips available the MT-100 is one of the most versatile component removal tweezers and our tips cost less than half of our competitors! **See Page 22** for tip selection.



## THERMOPIK® 100



The newest tool for SMT component removal the **ThermoPik® 100**. The TP-100 is designed to reflow and remove QFPs in seconds. The integrated vacuum pik lifts the component from the PCB upon reflow. Based on our unique MT-100 handpiece, there isn't another SMT removal tool that is more comfortable in your hand. Over 10 styles of tips are available. **See Page 22** for tip selection.





# HANDPIECE & POWER SOURCE CHARTS

Part Number includes handpiece and standard cubby

HANDPIECE	DESCRIPTION	PART NUMBERS
TD-100 Thermo-Drive Iron	The most responsive soldering iron available. Uses tip-heater cartridges.	6993-0263-P1
TD-100 N	A nitrogen compatible version of the TD-100. Requires 6993-0271-P1.	6993-0272-P1
TD-100 with Instant SetBack Cubby	A kit containing the TD-100 and Instant SetBack Cubby	6993-0281-P1
MT-100 MiniTweez	Tip-heater cartridge based tweezer for 2 sided SMD removal.	6993-0264-P1
TP-100 ThermoPik	QFP removal tool with integrated component vacuum pick to lift reflowed component.	6993-0280-P1
PS-90 Universal Soldering Iron	Our famous High Capacity Soldering Iron for the most demanding applications.	6993-0267-P1
PS-90 N	A nitrogen compatible version of the PS-90.	6993-0274-P1
SX-90 Sodr-X-Tractor	The latest innovation in desoldering. Features disposable or reuseable solder traps.	6993-0266-P1
TT-65 ThermoTweez	High capacity tweezer for large or small SMDs.	6993-0268-P1
TJ-85 ThermoJet	A foot-pedal activated precision air pencil for the installation or removal of SMDs.	6993-0270-P1
SX-90 Heat Sleeve	Maintains comfortable temperature in heavy use applications.	6993-0229-P1
Instant Setback Cubby for TD-100*	Reduces tip temperature when iron is not in use.	6019-0071-P1
Nitrogen Regulator Accessory	Controls the flow of nitrogen to tip.	6993-0271-P1
N <sub>2</sub> Manifold Kit	Connect up to 10 N <sub>2</sub> irons to a single N <sub>2</sub> source.	6993-0277-P1

\*Does not include Handpiece

## CHOOSE THE RIGHT INTELLIHEAT HANDPIECE FOR YOUR APPLICATION

	Tip Heater Cartridge Technology Handpieces			SensaTemp Technology Handpieces			
	TD-100	MT-100	TP-100	PS-90	SX-90	TT-65	TJ-85
Handpiece Kits (includes handpiece and tool stand)	6993-0263-P1 6993-0281-P1	6993-0264-P1	6993-0280-P1	6993-0267-P1	6993-0266-P1	6993-0268-P1	6993-0270-P1
Handpiece Only Part Number	6010-0147-P1	6010-0148-P1	6010-0158-P1	6010-0150-P1	6010-0149-P1	6010-0151-P1	6010-0153-P1
High Cycle Soldering	✓			✓			
Standard Soldering	✓			✓			
High Mass Soldering				✓			
Micro Soldering	✓						
Chip Installation	✓	✓		✓		✓	✓
Solder Wicking	✓			✓			✓
Thru-Hole Desoldering					✓		
SMT Land Preparation	✓			✓	✓		✓
Solder Removal from Lands					✓		
Large SMD Removal			✓			✓	
Standard SMD Removal	✓	✓	✓	✓		✓	
Micro SMD Removal	✓	✓		✓		✓	✓
Large Component Installations*	✓			✓			✓
Standard Component Installations*	✓			✓			✓
Micro Component Installations*	✓			✓			✓

\*with Solder Paste

## INTELLIHEAT POWER SOURCE & HANDPIECE COMPATABILITY

TIP-HEATER CARTRIDGE HANDPIECES	Power Source Options - ST and MBT Systems								
	ST 30	ST 50	ST 65	ST 70	ST 75	ST 100	ST 115	MBT 301	MBT 350
• TD-100	★	★	✓	★	✓	★	✓	★	★
• MT-100	✓	✓	✓	✓	✓	✓	✓	✓	★
• TP-100			✓		✓		✓	✓	✓
SENSATEMP HANDPIECES	ST 30	ST 50	ST 65	ST 70	ST 75	ST 100	ST 115	MBT 301	MBT 350
• PS-90	✓	✓	✓	✓	✓	✓	✓	✓	✓
• SX-90			★		★		★	★	★
• TT-65	✓	✓	✓	✓	✓	✓	✓	✓	✓
• TJ-85					✓		✓	✓	✓

✓ = Optional Handpiece ★ = Standard handpiece packaged with System