

## Specifications:

### Power Pack

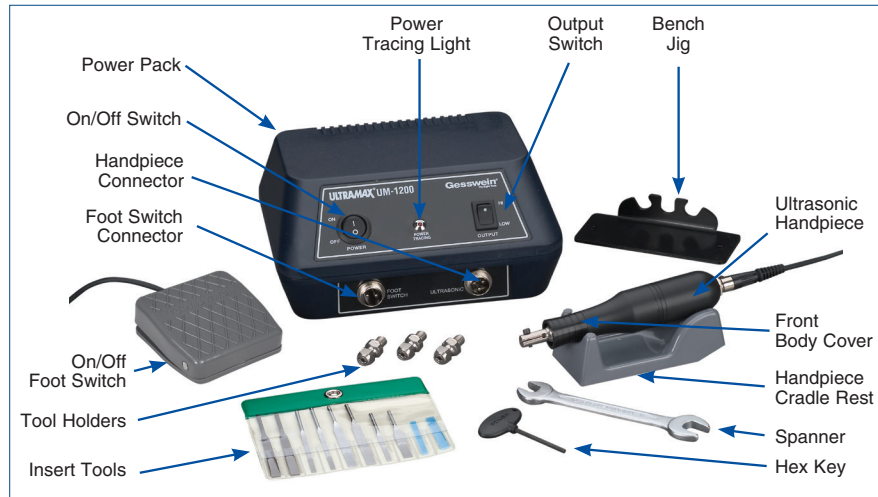
Power Output . . . . . 39W  
Vibration Frequency . . . . . 18~25kHz  
Stroke Amplitude . . . . . 10~35µm  
Frequency Adjustment . . . . Automatic feedback system  
Power Supply . . . . . AC90~240V, 50/60Hz  
Power Consumption . . . . . 46W  
Output Level . . . . . Two-level  
Dimensions . . . . . 7½"W x 5½"D x 3½"H  
Net Wt. . . . . 1 lb., 9 oz.

### Handpiece

Cord Length . . . . . 59" (straight)  
Screw Thread . . . . . .8mm  
Dimensions . . . . . 5"L x 1⅜" dia., tapering to ¾" dia.  
Net Wt. . . . . 6.5 oz.

## Components:

1. Power Pack
2. Power Pack AC Cord
3. Ultrasonic Handpiece
4. Handpiece Cord
5. Handpiece Cradle Rest
6. On/Off Foot Switch
7. Insert Tools (see inside)
8. Two ø3mm Tool Holders
9. One 1.1mm Tool Holder
10. Bench Jig
11. Spanner
12. Hex Key
13. 2.0A Fuse



# Instruction Manual

for

# ULTRAMAX

## UM-1200

## Ultrasonic Polishing System

### #500-1200



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#890-2079 1017



# UM-1200 Ultrasonic Polishing System

In order to operate this system correctly and maximize performance, please read the following instructions carefully before using.

## Features:

- Maximum output of 39W, two-level selection (high and low)
- Compact, lightweight power pack
- Extended-use capability
- Auto-feedback system
- Power-suspending system
- Ergonomic handpiece
- Easy-to-change tools and tool holders

## Operating Instructions:

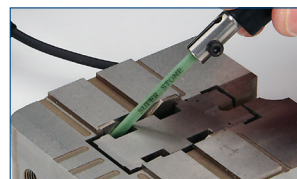
1. Make sure that the power pack On/Off switch is in the "Off" position.
2. Mount tool (i.e., diamond file, ceramic stone) in the appropriate tool holder, and use Hex Key to tighten it. Connect tool holder to handpiece, and tighten snugly using Spanner and **Bench Jig** (see 2 below), being very careful not to over-tighten. Connect handpiece cord to handpiece, then to power pack.
3. Connect the On/Off foot switch to the power pack. Flip the power pack On/Off switch to the

"On" position, and the power tracing light will flash red until the foot switch is fully depressed.

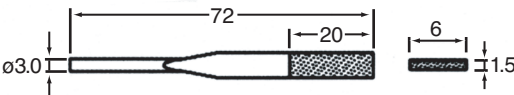
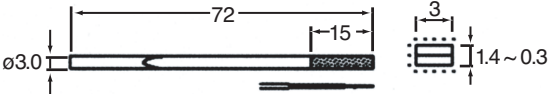
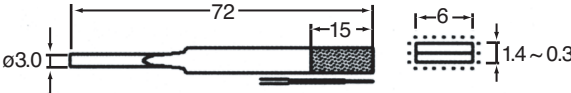
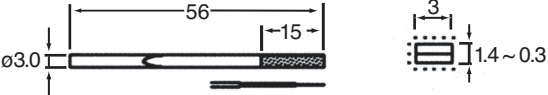
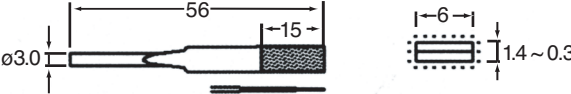
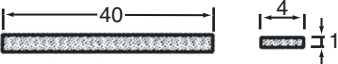
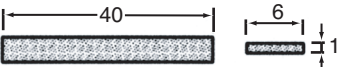
4. When the foot switch is depressed, the power pack traces output and checks the tool in the handpiece, and the power tracing light turns solid red to signal that resonance frequency is set and the system is ready to use.
5. Removing your foot from the switch shuts the handpiece off and causes the power tracing light to flash. With your foot off the switch, you are sending no power to the handpiece, so it stays cool over the course of polishing.

## Important Notes:

1. Make sure that the power pack On/Off switch is in the "Off" position before changing tools or tool holders.
2. When changing a tool or tool holder, you **MUST** use Bench Jig to avoid damaging handpiece transducer wires. Please follow these steps:
  - a) Turn and take off the front body cover of the handpiece.
  - b) Secure handpiece in Bench Jig slot. Use Hex Key to tighten or loosen a tool in tool holder. **NEVER** tighten or loosen tool or tool holder without using Bench Jig—this can turn ultrasonic horn in handpiece sheath, damaging wires connected to horn and/or creating an open-wire condition.
3. If the power tracing light keeps flashing, try the following:
  - a) Make sure that the tool is firmly mounted in the tool holder.
  - b) Check that there is no dust or foreign matter between the handpiece and tool holder.
  - c) Inspect the handpiece, handpiece cord and tool holder for excessive wear or damage.
4. Please spend some time to experiment and learn which tool is best suited for each job and which tool side yields optimal results.



## Abrasive Tools:

Sintered Diamond Files		Grit	Part No.	Qty.	
		200 400	500-0126 500-0127	1 1	
Electroplated Diamond Files		Grit	Part No.	Qty.	
		200 400	241-0820 241-0821	1 1	
		200 400	241-0823 241-0824	1 1	
		200	241-0814	1	
		400	241-0818	1	
Ceramic Stones		Color	Grit	Part No.	Qty.
		Blue	800	355-0765	1
		Blue	800	355-0766	1
Complete Abrasive Tools Set			500-0140		
Consists of 2 sintered and 6 plated diamond tools and 2 ceramic stones.					

## Tool Holders:

Round	Round tool	Part No.	Qty.
	1.0mm round tool	500-0134	2
	2.0mm round tool	500-0135	
	2.35mm round tool	500-0136	1
	3.0mm round tool	500-0109*	
	1/8" round tool	500-0137	1
Flat	Flat Tool	Part No.	Qty.
	0.5mm flat tool	500-0111	1
	0.8mm flat tool	500-0131	
	1.0mm flat tool	500-0108*	1
	2.0mm flat tool	500-0132	
	3.0mm flat tool	500-0110	1
	1/8" flat tool	500-0133	

\*Supplied with ULTRAMAX UM-1200.