



# Programmable Clock Oscillators

Simple user interface, no programming skills required.  
Less than 2 sec. Programming time.  
Point and Click click verification.



10/9/2002

ECS, Inc. International 1-800-237-1041 [www.ecsxtal.com](http://www.ecsxtal.com)

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This is a photo of the programmer without the PC



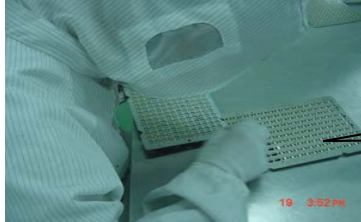
## Overview

- ⇒ ECS's "**New**" in house programming center began shipping a series of four separate packaged "**Twice Programmable**" clock oscillators in the fall of 2001. **Please see specification details on our web site.**
- ⇒ Understanding the need that our OEM design center customers have for "**quick delivery**" for new designs, ECS will program in-house or direct you to an existing programming center so that your designs can be completed in house in the shortest time possible.
- ⇒ This product can be programmed at 3.3 Volts or 5.0 Volt. It is also available in an **extended temperature range** (-40~+85C) and meets jitter from 100ps~250ps depending on the package type.
- ⇒ Product is programmed within "**Seconds**". Designed to minimize **jitter and phase noise**.
- ⇒ Frequency range is from **1.000~150.00Mhz** depending on the package type.
- ⇒ Cost Effective

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The operator is preparing to seal the ECS-P73/75 Series of Programmable Clocks



# Product Features

All of the following products are “twice programmable” and will operate from -40-+85C

- ⇒ ECS-P53/55: 3.2x5mm SMD package, Twice Programmable, 3.3 Volt/5.0 Volt, 1-125 MHz, CMOS/TTL outputs, Fast Rise and Fall times.
- ⇒ ECS-P73/P75: 5X7mm SMD package, Twice Programmable, 3.3 Volt/5.0 Volt, 1-150 MHz, CMOS/TTL outputs, Fast Rise and Fall times.
- ⇒ ECS-P83/P85: 8 Pin Dip Through-Hole package, Twice Programmable, 3.3 Volt/5.0 Volt, 1-150 MHz, CMOS/TTL outputs, Fast Rise and Fall times.
- ⇒ ECS-P143/P145: 14 Pin Dip Through-Hole package, Twice Programmable, 3.3 Volt/5.0 Volt, 1-150 MHz, CMOS/TTL outputs, Fast Rise and Fall times.



This is a photo of the production facility in Korea where the UPO's are produced.



## Customer Programming

- ⇒ ECS is “strongly encouraging” our customers to set up their own “**Programming Centers**” so you generate the clock frequency that you need within seconds to complete your design. *Please contact your sales representative for price and details.*
- ⇒ ECS furnishes the programmer and the UPO (Un-Programmed Oscillator) in the four packages offered.
- ⇒ The appropriate fixtures (2) for the surface mount packaged product and instructions for operation.
- ⇒ Standard serial port connection to a Windows based PC running 98SE or NT software.
- ⇒ This programmer will be up-gradable to program TCXO's and VCXO's in the very near future.

(PC and Windows software supplied by Customer)  
(The system is fully upgradable for future VCXO and TCXO programming needs)

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