Eagle Signal *brand*

Frequently Asked Questions (FAQ's)

How do I pick the right timer for my application?

There are a number of *Form, Fit and Function* considerations to take into account in selecting the right timer for your specific application need. To help get you started, please refer to the Technology Overview Section under the "Products and Solutions" section of this website to learn about the various Electric, Electromechanical and Electronic timers that are available to you and how to select the right timer technology for your needs.

When and why should I use a (Eagle-Signal) timer versus a (Veeder-Root) counter?

Choose a timer for time based tracking applications (*e.g. elapsed time, run time, process or event time)* versus a counter for materials based "counting" type tracking applications (e.g. item batch counting, cut-to-length measurement, etc).

How do I install and mount my timer?

Every Eagle-Signal timer is shipped with an installation manual that provides instructions on how to properly install and mount your timer unit. To ensure the optimum performance and operation of your timer, it is important to read and understand ALL manual instructions.

Eagle-Signal mounting options can be *back of panel, rear-mount, base / surface mount or panel / DIN rail mounted* - depending on the model. Eagle-Signal timers also vary in their wiring and connection options as well, including choice of flying leads to screw terminal or wire harness variety depending on the model. Hence, it is advisable to refer to your User Manual for instructions on how to install and mount your timer unit to the machinery in your specific application.

What is the timer supposed to do?

Eagle-Signal timers are used throughout manufacturing from run-time to production and/in related event process applications designed to monitor and track time based applications. Before selecting a timer model, it is important to know what function you want the timer to accomplish - specifically do you want it to monitor elapsed time or also perform an output function (e.g. alarm, etc).

To assist you in timer selection, please refer to the "Timer Selection" Section under the "Products and Solutions" section of this website to learn about what criteria is important in selecting the right timer technology for you application need.

What count functionality, degree of accuracy or count mode digits does your application require?

Eagle Signal timer functionality varies by model but can be one of the following varieties in their functional capability - *e.g. Time/Totalizer, Preset/Pre-determining, Elapsed time indicator or a Repeat Cycle Timer.* Users must determine what count functionality is best suited for their application need. Refer to the detailed product specifications about your timer provided within this site to be sure that the timer you select is designed to function within your application parameters, e.g. the display type (LED/LCD), the number of digits and degree of accuracy that you require.

Why is count speed important to my application?

Eagle Signal timer model speeds range from 2.5 kHz, 5 kHz, 7.5 kHz and 10 kHz to as high as 40 kHz on some timer models requiring users to check model specifications to ensure compliance with their application need(s).

Why is operating voltage important in timer selection?

Operating voltage is an important factor to consider as it relates directly to your application, particularly the machinery you want the timer to integrate into. Eagle-Signal voltage options include: 110-200V, battery operated or mechanical (no battery). Say your Eagle Signal battery is supposed to integrate with a car battery - then the timer voltage you would require would need to be 12V versus 110-220V to ensure the proper operation and optimum performance of your timer in that type of application.

To assist you in timer selection, please refer to the "Timer Selection" Section under the "Products and Solutions" section of this website to learn about what criteria is important in selecting the right timer technology for you application need.

Why is size important in timer selection?

By size, we are referring to the mounting and enclosure requirements of your timer. Electonic timers typically come in diverse standard DIN sizes including 1/32, 1/16 or 1/8 DIN. Eagle-Signal mechanical timers have a foot or base plate that is designed to mount on a piece of machinery. Similarly, electro-mechanical and rotary timers have NO DIN sizes, but rotary timers like mechanical timers, also have a foot or base plate designed to mount to something. In addition to panel size and mounting options, display size (e.g. large digit versus small digit model) is also important to consider as is the mounting of the timer to the machine so that it remains clearly visible to the operator for production monitoring.

To assist you in timer selection, please refer to the "Timer Selection" Section under the "Products and Solutions" section of this website to learn about what criteria is important in selecting the right timer technology for you application need.

What type of counter do I need?

Counters come in three basic application types, *totalizer, preset and batch.* A totalizer is used when you are simply counting individual events, pieces or parts. A preset counter incorporates an output or outputs that activate when a predetermined count value is achieved. This function would be used when you are measuring length and need to cut or stop the process at a particular value or when you need to count to a value and then signal another piece of control equipment. The third type of counter is a batch counter that is another version of a preset counter however the batch counter also counts each time the preset value is reached. In essence the batch counter is two counters in one. The first a standard preset counter and second a built in counter that can count and monitor how many times the initial preset has been achieved.

Do I need an LCD or LED display?

Deciding which type of display to use is typically determined by the ambient light available in a particular application. If the area where the display will be located is a low light area an LED display would provide increased visibility. However, in bright light, such as sunlight or strong interior lighting directed at the display, an LED can "wash out" or be indistinguishable to the operator. In these cases an LCD display would be utilized because LCD displays "reflect" the ambient light and actually increase their contrast as the brightness of the light increases.

What is scaling?

Scaling is a mechanism where the incoming counts can be multiplied by a fixed value or constant that is programmed in the counter. This scaling factor can adjust the incoming count pulses to represent different engineering units. For example; if a wheel had four spokes and you where counting the spokes with a sensor but wanted to count revolutions, you would use a factor of .2500 as the scaling value. .2500 X 4 = 1 revolution.