



Understanding Return Times (Loop Times)

Disclaimers

Elite-ID Electronic Systems manufacture equipment used to track staffing attendances.

A number of reports are generated from that data that can be used to make staffing, management and other decisions from.

It is important to understand that Elite-ID Electronic Systems are not qualified in Risk Management and make no claims about the use of any system or equipment in that regard.

The discussions included herein are summations of information about how some clients of Elite-ID Electronic Systems are using various equipment.

About Return Times

The term "Return Time" refers to the average duration between attendances of a staff member at a location. It is the number of minutes.

This is also sometimes called a "Loop Time" – meaning the amount of time on average till a staff member returns on their "patrolling loop" back to the same location.

For example, if the return time is "15" then the location is attended on average every 15 minutes during the period over which the average is taken.

Return times are best used to compare performances. This is a simple number and easy to understand and rank locations around a site against.

Important : the Return Time value is an average only. It is useful to compare staffing performances. In general, if the return time is higher then staff are attending less – and if lower then they are attending more.

From a risk management point of view, the lower the return time, the more staff are attending and the conclusion is often drawn that there is less "risk" at that location (ie. Staff clean and keep the location safe better).

Calculation Of Return Time

If you take the number of minutes in the time frame you are interested in (eg. Trading hours or a working shift) and divide the number of attendances into it, you get the average return time.

For example; for an 8 hour day (9am till 5pm) that is 480 minutes. If staff attend 20 times, that results in a 24 minute return time.

A common requirement is "15 minute return times". In that case staff must attend 4 times per hour for 8 hours and that is 32 times.

Elite Reporter and Return Times

Elite Reporter requires that you enter a time table that determines when during each day of the week that you want to calculate return times for. This table has the start and finishing times for each day of the week in it, as well as a filtering time.

The filtering time is used to eliminate rapid-repeat hits caused by multiple staff attending the same locations only a few seconds or one or two apart (more later).

When a report is generated, Elite Reporter will only count attendances within the start and finish times and calculates the average minutes between the times accordingly.

Filter Time

This unique innovation by Elite-ID is designed to make the risk time calculation of Return Time “more fair”, particularly when the Voyager Radio System is being used.

For example, if a staff member hits the same button twice in 30 seconds, should that be considered two “units of risk reduction” or one? What if three staff attend the same location at the same time?

Another example; a cleaner hits a button on entering a toilet block and then again on leaving it 30 seconds later. Is this two units of risk reduction or one? What if the cleaner stays there for 3 minutes cleaning, or longer?

These are where the filter is used.

Set the filter to 3 minutes and it accepts the first hit but no more for the next 2 minutes. You can tailor this to suit your requirements – we recommend values in the 1 to 3 minute range as being “fair” to both staff and client (3 minutes is 20% of 15 minutes!).

iButton™ Risk Times

Return Times for iButton™ systems show the average minutes between times that the staff touch their data wand onto iButtons™.

If a filter is used, then it ignores attendances of staff that happen too close together (eg. Hitting the button a number of times in a minute).

Voyager Radio System Risk Times

The Voyager Radio System is very different to an iButton™ system. It generates a vast amount of data that much more truly shows all staff attendances.

Going back to basics;

1. An attendance is generated when a staff member enters a radio zone. This is called an “In”.
2. An attendance is generated after a staff member leaves a radio zone. This is called an “Out”.
3. The “In” and “Out” data is intended to simulate a staff member hitting an iButton™ as they enter and area and then again as they leave.
4. Note that the staff member must leave the zone for 20 seconds or more to be logged out of that zone. The time of last reception of data in that zone is logged. This 20 seconds delay is called the “dwell time”.
5. The Voyager Radio Wands track multiple radio zones and will not be confused by moving rapidly between zones.
6. A “Repeat” is generated for every 10 consecutive minutes that the staff member stays within the radio zone.
7. The centre visits report shows the type of hit – “In”, “Out”, “Rpt” and “Btn” (for an iButton™).
8. If two, three, four or more staff walk side by side through a radio zone, they all generate an “In” , an “Out” and any other radio attendance logging data.

It is important therefore to ensure in the Voyager System that the "Filter" time is in fact used and set appropriately.

Very Low Return Times

It is becoming common for some clients to demand very low return times in places such as food courts. It is assumed that their intention is to ensure that food courts are kept clean and tidy.

The Voyager Radio System is the only way this can be realistically achieved and we believe that it must be done in a particular way if return times are meant to be meaningful.

This information is tailored around food courts but can be applied to other types of areas as well.

In Food Courts;

1. There should be TWO Pulsars in the area, one on each side of the area and NOT in or near corridors where other staff pass through.
2. The Pulsars should only be logged by staff working in the food court or other staff passing through the general area within the food court.
3. The Pulsars should be set to short or medium range.

If these conditions are met then;

1. The return time indicates only, or mainly, food court staff who are working in the food court. It is a measure of food court performance.
2. The arrangement of having two Pulsars at opposite sides of the Food Court shows that staff are moving between different locations in the food court.
3. The short range logging of the Pulsars ensures that staff moving around the food court are logged in, then logged out, then logged in, then logged out etc as they move around performing their duties.

Return Time Problems

If your return times are too high there is little Elite-ID can do for you other than check your use of the system as follows;

1. Print a location attendance report. This will very quickly show your attendance trends. You will see trends for start and finish times, gaps between attendances, and frequency of attendances.
2. Check the clock in your Unloader. If it is not correct (set to daylight saving incorrectly for example) then the Wand clocks will be wrong and hence the attendance logging will be an hour out of step and hence won't match your Risk Times.
3. Check the error batches. If there is a lot of data in them then it won't be in your report and will make your times worse.
4. Check that your wands have been unloaded, your unloaded has been extracted to the PC and that you have imported all your data.