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BEC SYSTEMS INTEGRATION



## TECHNOLOGY

# VOICE-DIRECTED

### VOICE-DIRECTED TECHNOLOGY

As companies strive to perfect their business operations, many organisations are turning to Voice systems. Voice-Directed Technology is becoming increasingly popular due to its versatility and ease of use. The fact that it creates a hands-free, eyes-free environment makes the technology even more appealing.

There are two fundamental parts to Voice. These are Speech Synthesis and Recognition. Speech Synthesis is the simulation of human speech where written information is translated into sound by a computer. Speech Recognition focuses on the computer's ability to interpret and analyse words and human speech patterns. Combined together, the technologies provide companies with a powerful tool through which productivity and accuracy are improved.

Voice Technology can be used for a wide range of applications ranging from Automated Data Collection to Picking, Receiving, Replenishment and Quality Control. The most common of these is Order-Picking where the potential for improvement is vast.



### THE SOLUTION

BEC's Voice Solution typically comprises of SIGMA, data capture hardware and a radio frequency infrastructure.

SIGMA is an Automated Identification and Data Capture (AIDC) solution developed by BEC (Systems Integration) Ltd. The software operates across an 802.11 compliant RF network and gives companies real-time control over all aspects of inventory. BEC's product handles the communications between the host system and users, processing transaction information and voice-dialogue. It provides both Voice and Data Capture functionality for a wide range of applications.

SIGMA uses state of the art, Voice-Directed hardware which utilise advanced speech synthesis and recognition technologies. Workers are provided with a wearable computer, headset and microphone. At the start of a shift, jobs are loaded onto the computer along with a user profile. Spoken commands are then issued through the headset instructing the worker how to complete each transaction. The user verbally confirms each stage has been successfully completed by reading back the required data such as the quantity or barcode's check digit. This confirmation is transmitted back to the host system to provide real-time updates for Key personnel.

The solution can easily be integrated into a company's existing systems. It supports mixed technology environments by providing voice functionality for batch and RF handheld terminals. In this way, workers can complete the same set of transactions on any device.

### BENEFITS

Ideally used for intensive manual handling and vehicle operation, Voice Technology is extremely versatile. Improvements in accuracy and productivity are immediately visible where workers complete repetitive tasks or keyboard input is difficult.

Studies have shown that productivity, particularly in areas such as order-picking, can increase by 10-15% due to the hands-free, eyes-free conditions. Workers are no longer distracted by screen data and the need to hold/transfer data capture terminals.

Combined with BEC's product SIGMA, an implementation of Voice-Directed Technology includes further benefits:

- Real-time stock updates - that provide accurate, up-to-date information which in turn can trigger replenishment requests
- Improved service levels - resulting from immediate availability of information
- Minimal Training - as the devices are easy to use
- Less damage to hardware due to workers being able to wear the Voice-Directed devices
- Improved safety due to hands-free, eyes-free operation
- RSI issues are eliminated
- Cycle counting can be built into replenishment tasks