



A higher level of performance

## Notice - Major Sultan Acoustic Wave Software Update (Summary)

**Amplifier Software v5.78**

**Transducer Software v4.90**

**Released to Production 16 March 2012**

- Improved overall Gain structure to reduce installation problems and simplify unit setup
- Improved Echo elimination & tracking logic
- Eliminate 'high level locking' problems
- Minimise overall use of Gain
- Improve tracking window functionality
- Lower tracking response times & updated application speeds
- Simplify unit setup for customer - many new applications with simple or custom speed options
- Use of 'Hawk' knowledge for settings in specialty applications
- Increase pulsing speeds for 2 wire liquid based applications
- Refined menu options
- Reduce field support requirements

### **Software Menu Change**

- TX Setup has been replaced by 'Advanced' Menu
- Gain has been renamed to Gain4
- Distance Step and Gain Step now correctly labelled Dist Step3 and Gain Step3

### **App Type Changes**

There is now a wide list of application types the user can select. The fill rate and empty rate can now be selected as Fast, Medium, Slow or Custom as well as an option to 'View' the currently selected speeds. The full listing is on the following page.

### **Version Compatibility**

Any current Sultan Amplifier and Transducer can be flashed to the new software. You must flash both transducer and amplifier. After flashing perform an 'Amp Reset' (Quickstart) and 'TX Reset' (Advanced) before selection any new software options.

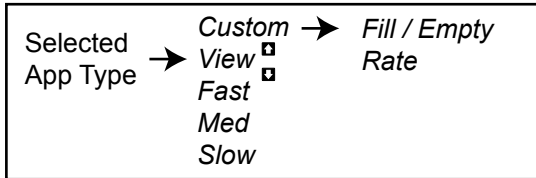
**The Amplifier cannot be reverted from 5.78 to any older version.** This will create memory corruptions.

The Transducer software can be reverted from 4.89 to older versions for testing. It is not recommended to do this for field release due to potential bugs.



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## Application Types



To access the currently programmed settings select 'view'. The factory selected settings for each are as follows in metres per hour:

### Bin Level

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	10m/h	Empty	10m/h

### Cement

Fast	Fill	20m/h	Empty	20m/h
Med	Fill	10m/h	Empty	10m/h
Slow	Fill	5m/h	Empty	5m/h

### Coal

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	10m/h	Empty	10m/h

### Conveyor

Fast	Fill	6000m/h	Empty	6000m/h
Med	Fill	3000m/h	Empty	3000m/h
Slow	Fill	1000m/h	Empty	1000m/h

### Crusher

Fast	Fill	800m/h	Empty	800m/h
Med	Fill	200m/h	Empty	200m/h
Slow	Fill	20m/h	Empty	20m/h

### Detection

Fast	Fill	6000m/h	Empty	6000m/h
Med	Fill	3000m/h	Empty	3000m/h
Slow	Fill	1000m/h	Empty	1000m/h

### Iron Ore

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	5m/h	Empty	5m/h

### Liquids

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	5m/h	Empty	5m/h

### Agitated Liquids

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	60m/h	Empty	60m/h
Slow	Fill	10m/h	Empty	10m/h

### Agitated Liquids

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	10m/h	Empty	10m/h

### Ore

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	5m/h	Empty	5m/h

### Plastics

Fast	Fill	20m/h	Empty	20m/h
Med	Fill	10m/h	Empty	10m/h
Slow	Fill	5m/h	Empty	5m/h

### Positioning

Fast	Fill	4000m/h	Empty	4000m/h
Med	Fill	2000m/h	Empty	2000m/h
Slow	Fill	1000m/h	Empty	1000m/h

### Powder

Fast	Fill	30m/h	Empty	30m/h
Med	Fill	15m/h	Empty	15m/h
Slow	Fill	5m/h	Empty	5m/h

### Reflective

Fast	Fill	20m/h	Empty	20m/h
Med	Fill	10m/h	Empty	10m/h
Slow	Fill	5m/h	Empty	5m/h

### ROM Bin

Fast	Fill	1200m/h	Empty	400m/h
Med	Fill	700m/h	Empty	250m/h
Slow	Fill	300m/h	Empty	100m/h

### Silo Level

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	10m/h	Empty	10m/h

### Slurry

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	20m/h	Empty	20m/h

### Solids

Fast	Fill	100m/h	Empty	100m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	10m/h	Empty	10m/h

### Stockpile

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	20m/h	Empty	20m/h

### Sump

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	40m/h	Empty	40m/h
Slow	Fill	10m/h	Empty	10m/h

### Process Sump

Fast	Fill	1000m/h	Empty	1000m/h
Med	Fill	300m/h	Empty	300m/h
Slow	Fill	20m/h	Empty	20m/h

### Tank Level

Fast	Fill	200m/h	Empty	200m/h
Med	Fill	50m/h	Empty	50m/h
Slow	Fill	5m/h	Empty	5m/h