

WINCH OPERATORS PANEL

AMS4A040, AMS4A041



This panel is designed to acquire and display depth, tension, and magnetic mark data from a wireline logging winch unit. The panel provides the operator a means to monitor depth and tension data and make adjustments to the data as necessary.

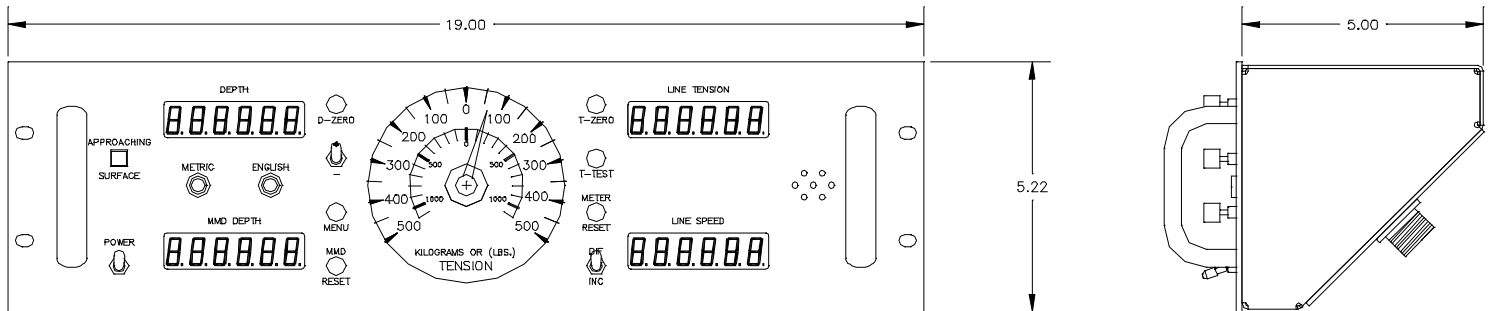
Depth is displayed from data provided from an encoder mounted on a measuring device. Tension data can be provided by a load pin mounted in the measuring device or a derrick mounted load cell.

The encoder quadrature pulses, tension data, and magnetic marks are passed through to the acquisition system. ASCII data for all of the inputs is also available via an RS232 or RS485 port.

FEATURE DESCRIPTION

- **Digital displays for depth, line speed, tension and magnetic marks (or CCL offset).**
- **Analog incremental tension meter, 4 inch (108 mm) dia., 270 degree**
- **Differential or Incremental tension zero push button switch**
- **Excessive tension and differential tension alarm settings allow operator to set tension alarms to predetermined values. Contact closure is provided for winch shutdown.**
- **Zero Depth button - sets depth to 0. Depressing button again resets depth to previous setting. Only works when line speed is zero**
- **Approaching surface alarm.**
- **Depth adjust up or down switches. Only works when winch is stopped.**
- **Load cell zero & calibrate controls. Only works when there is no load on cable.**
- **Depth & tension saved in non-volatile memory at power loss.**
- **Outputs for Magnetic Marks, Tension and Encoder to interface to an acquisition system.**
- **RS232 or RS485 Interface for additional control and data outputs.**
- **Can be set to display either English or Metric units or a combination of English and Metric units (i.e. depth in feet, tension in KG).**

SPECIFICATIONS



Height:	5.25" (3 U)
Width:	19" (standard Retma rack mount width)
Depth:	5"
Input Power:	12 – 24 vdc +/- 10%

USER FEATURES

Depth display:	Displays depth in feet or meters. Feet = 99999.9, Met = 9999.99
Line Tension display:	Displays total line tension in pounds or kilograms
Line Speed display:	Displays line speed in feet per minute or meters per minute
MMD display:	Displays depth that last mark was detected
Tension meter:	Displays differential or incremental tension. Meter is dual scale, both English and Metric.
English / Metric:	Two LEDs are mounted on the front panel to indicate if panel is in English or Metric mode.
D-Zero button:	Resets the depth to zero.
T-Zero button:	Resets the tension to zero.
T-Test button:	Performs a tension test.

- Dif / Inc switch:** Sets the analog tension meter to either differential tension or incremental tension.
- Meter Reset switch:** Resets the analog tension display to its center (zero) value. It will re-zero in both differential and incremental modes.
- Approaching Surface:** The approaching surface alarm will sound when the depth is less than the approaching surface alarm setting. This switch resets the alarm.

Several other functions are provided by this panel. The parameters for the functions can be changed by the operator. The panel will display certain parameter values by pressing the menu button. The parameter is displayed on the MMD display and the parameter value is displayed on the Line Speed display.

Some of the user changeable parameters are:

- Cable size:** Changes load pin scale factors and wheel size parameters as necessary
- Tension Alarm:** Sets the over tension and differential tension warning alarms
- Tension Shutdown:** Sets the value at which the winch can be automatically shutdown
- Depth Adjust:** Can automatically add or subtract depth
- Depth Alarm:** Warns the operator when the tool is approaching surface
- MMD Window:** Adjusts the width of the magnetic mark detection window
- MMD Detect:** Selects either weak or strong marks
- Encoder:** Selects encoder pulse per revolution values and direction
- Eng – Metric units:** Selects type of measurement units for depth, tension, and line speed.
- Head type:** Sets parameters for different types of measuring heads and load cells
- MMD Playback:** Can play back magnetic mark depths