

# DRILL DEPTH SYSTEM

PART NO. DIBL



## BRIEF SYSTEM DESCRIPTION

### *Operator Information Feedback*

Our Depth System provides valuable information via an operator Touch Screen such as:

- The actual bit depth
- Maximum depth of the hole
- Rate of penetration
- Pull-down Pressure
- Rotation Pressure
- Rotary Head Speed
- Number of Rods on the drill string

### *Machine Protection*

1. Pipe in Hole Protection to prevent damaged drill pipe.
2. Automatic Pipe Support Park
3. Pipe Support Swing out inhibit
4. Has the ability to monitor a few extra alarms if required

### *Third Party Interface*

The system is also capable of streaming whole data at predetermined intervals to third parties such as Modular Mining or Leica.

The depth system can be fitted to most rotary blast hole drilling rigs using the appropriate sensors for the application.

## MINIMUM OPERATOR INTERVENTION

The only input required from the operator is to push the START HOLE button on the Touch Screen once the drill bit has been lowered to ground level.

Once the system is activated it will automatically add and subtract pipes without any further operator intervention for the duration of the hole.

**PIPE IN HOLE PROTECTION**

The Depth System can be wired into the machine to prevent the operator from tramming (and if required, lowering the drill from the jacks) until all pipes on the drill string are removed from the ground.

An override button is provided on the Touch Screen which will allow an operator to bypass the tram inhibit if required. The bypass function will automatically reset next time the operator enters Drill mode (this prevents the operator leaving it in the bypassed condition) and will log on the screen that the bypass had been activated.

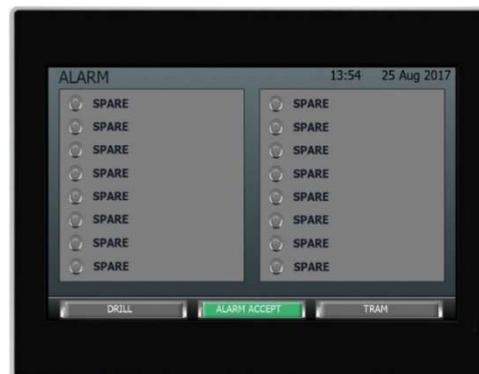
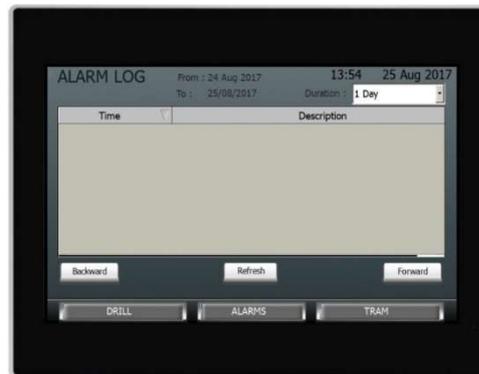
**AUTOMATIC PIPE SUPPORT PARK**

The Depth System can be wired into the machine to automatically stop feed and park the pipe support if the Rotary Head is near the pipe support and it is not already parked.

**PIPE SUPPORT SWING INHIBIT**

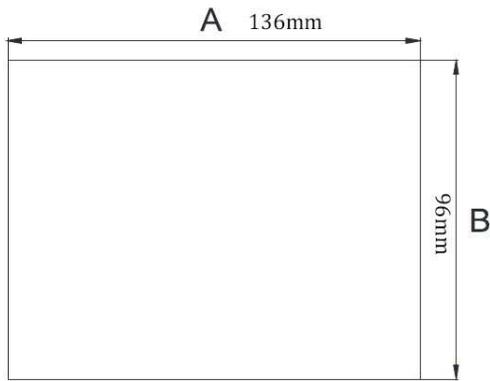
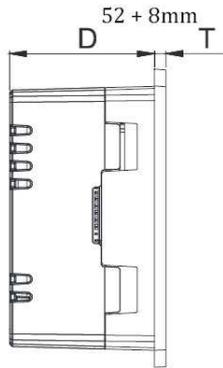
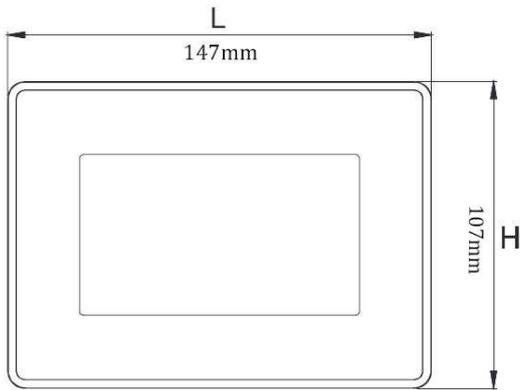
The Depth System can be wired into the machine to prevent the operator from moving the pipe support into the path of the Rotary Head if the Rotary Head is below a certain set point.

**SCREEN SHOTS**



INPUTS		OUTPUTS
SPARE	SPARE	SPARE
ROD COUNT SWITCH	LADDER SWITCH	SPARE
TRAM SWITCH	LEFT FRONT JACK SW	FEED SLOW SPEED
MAST TILT SWITCH	RIGHT FRONT JACK SW	PIPE RACK SWING OK
SPARE	LEFT REAR JACK SW	LASER POWER ON
DECK WRENCH IN SW	RIGHT REAR JACK SW	TRAM INTERLOCK RELAY
DECK WRENCH OUT SW	PIPE SUPPORT PARKED	JACK INTERLOCK RELAY
KEY SWITCH	PIPE RACK PARKED	HEAD CLEAR LIGHT
SPARE	SPARE	PIPE SUPPORT PARK
SPARE	SPARE	PIPE SUPPORT OK
		DECK WRENCH INHIBIT

**DIMENSIONS**

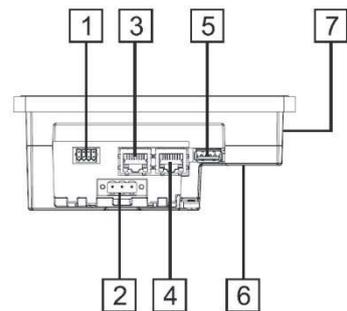


Cut-out



**SPECIFICATIONS**

Supply	10 to 32Vdc
Protection	IP66 Front / IP20 Rear
Operating Temperature	-20 to +70°C



- 1 Serial port
- 2 Power supply
- 3 Ethernet port 1 (10/100 Mb)
- 4 Ethernet port 0 (10/100 Mb)
- 5 USB port 1
- 6 Expansion slots for plug-in modules
- 7 SD Card slot