DSC100
(Dual Slide Controller)
KIB/Newmar
12/15/2006

FACTORY SET SOFT LIMITS (PROGRAM MODE):

Soft limits must be set before user operation will be allowed to enter. If soft limits are unset all LED's will be flashing on board. To enter the program mode press the program switch, the program led will be the only one lit. Note that in this mode the user switch is inactive. Also note in this mode that motors will move independently.

Begin by pressing the program switch, program led will light. Press either the extend or retract switches to move the slide room to the desired soft limit position. Once in the desired soft limit position press and hold the program switch followed by the direction that is to be set, the retract or extend led will light to show that the direction has been programmed, release switches. Any of the four direction switches can be pressed while the program switch is held, be aware that individual motors are not being set, but both motors are being set at the same time. If the soft limit needs changed or was set accidentally just un program the soft limit the same way that they were programmed. Note that if at any point the slide room motors slip or jump, both directions will need to be reprogrammed.

USER OPERATION MODE:

In this mode only the user switch is active. When the slide switch is pressed and held in the extend position the paddle-locks, if equipped, will unlock completely before the wall begins to move. As soon as the paddle locks have fully unlocked the wall will instantly begin to extend until the factory set extend soft limits are reached, or until an obstruction is encountered. When the slide switch is pressed and held in the retract position the wall will begin to retract until the factory set retract soft limits are reached, or until an obstruction is encountered. Once retract soft limits are reached the paddle-locks, if equipped, will begin to lock until individually they reach end of travel.

There are some unseen safety features that might be encountered. The first one is the slide room motors only move if the user switch is pressed, if for any reason the user releases the switch the system will stop. The second is that the wall must travel the factory set distances on retract before the paddle-locks, if equipped, will lock. If for some reason the paddle-locks do not lock on retract, extend the room to the soft limits and try again. The third is the control board is constantly monitoring the current of the motors, if an obstruction is reached the room will stop. The room will start where it stopped on the next switch press, but it is advised to walk around the slide room inside and out and look for obstruction, because the next switch press will allow more current to overcome the obstruction. The forth is that the motors are constantly being compensated to keep the rooms square, it is normal that one motor may stop while the other motor continues to move. The fifth is if the ignition is on the slide room will only be allowed to move in.

ENCODER ERROR MODE:

Encoder error mode will occur when one of the two encoders send bad or no information to the DSC_100 board, this is represented by the COMP SIDE A and/or B LED flashing constantly. While in this mode current and encoder info are ignored, this allows the user the chance to manually reposition the wall. To get out of this mode press the program switch, this should only be done after the problem has been solved, otherwise the unit will return the encoder error mode. After pressing the program button the soft limits must be reset, failure to do this will result in a misaligned room with unknown soft limits.

TROUBLESHOOTING:

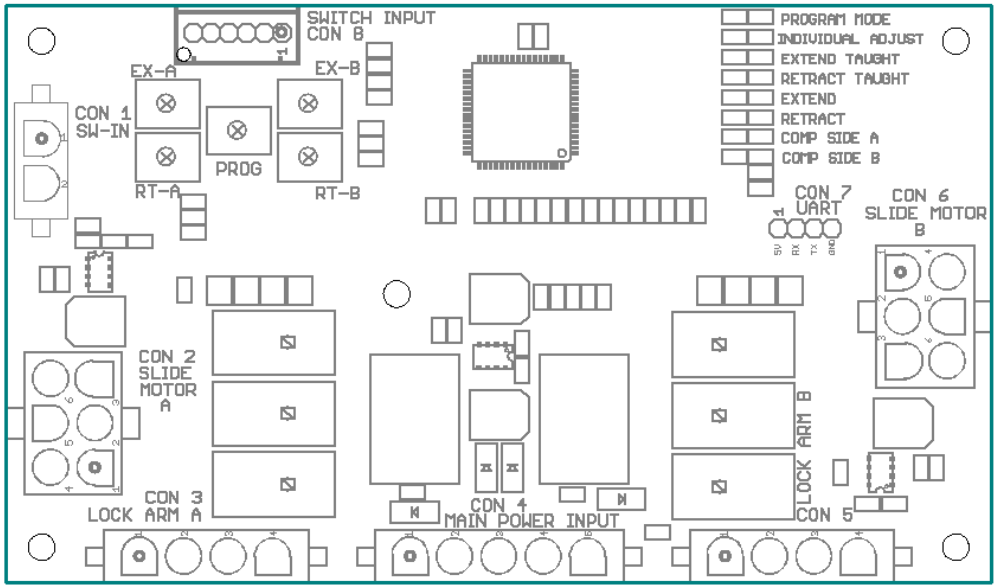
Problem	Cause	Solution
Slide room will not move by user switch and the individual adjust LED is flashing while switch is held.	Battery is to low	Recharge batteries.
Slide room will not move and all LED's are flashing.	The soft limits have not been taught.	Teach soft limits.
While the wall is moving the COMPA and/or B LED flickers.	Motors are compensating speed to keep the room square.	There is no problem this is normal.
The retract or the extend LED flashes.	The ignition is turned on.	Turn the ignition off.
LED COMP A and/or B are flashing constantly.	There has been an encoder error.	Press both retract switches until room is fully retracted, then seek survive.
Extend LED is lit while switch is pressed, but slide room is not moving.	Paddle locks have not unlocked fully.	Check all paddle lock wires and motors. If unit does not have paddle locks check for two red jumpers on control board.
Paddle locks never lock.	Paddle lock motors are not working.	Check paddle lock wires.

CON 8
BYPASS SWITCH INPUT
1 - EXTEND A / MOVE
2 - RETRACT A
3 - EXTAND B
4 - RETRACT B
5 - PROGRAM
6 - GND

470 ohm
OUT
IN

CON 1
SWITCH INPUT
1 - Switch send
2 - Switch Receive

CON 2
SLIDE MOTOR A
1 - Slide motor A (+)
2 - Slide motor A (-)
ENCODER A
3 - Encoder A GND
4 - Encoder OUT A
5 - Encoder OUT B
6 - Encoder A power



BOARD DIM
5.55" x 3.25"

CON 7
KIB UART PORT
1 - 5V DC
2 - READ
3 - WRITE
4 - GND

CON 6
SLIDE MOTOR B
1 - Slide motor B (+)
2 - Slide motor B (-)
ENCODER B
3 - Encoder B GND
4 - Encoder OUT A
5 - Encoder OUT B
6 - Encoder B power

CON 3
LOCK ARM A
1 - LIMIT SW SEND
2 - LIMIT SW RECEIVE
3 - LOCK ARM (+)
4 - LOCK ARM (-)

CON 4
MAIN POWER INPUT
1 - FUSED MOTOR A
2 - GROUND MOTOR A
3 - IGNITION
4 - GROUND MOTOR B
5 - FUSED MOTOR B

CON 5
LOCK ARM B
1 - LIMIT SW SEND
2 - LIMIT SW RECEIVE
3 - LOCK ARM (+)
4 - LOCK ARM (-)

KIB/Newmar DUAL SLIDE CONTROLLER

Drawn by: John Brown
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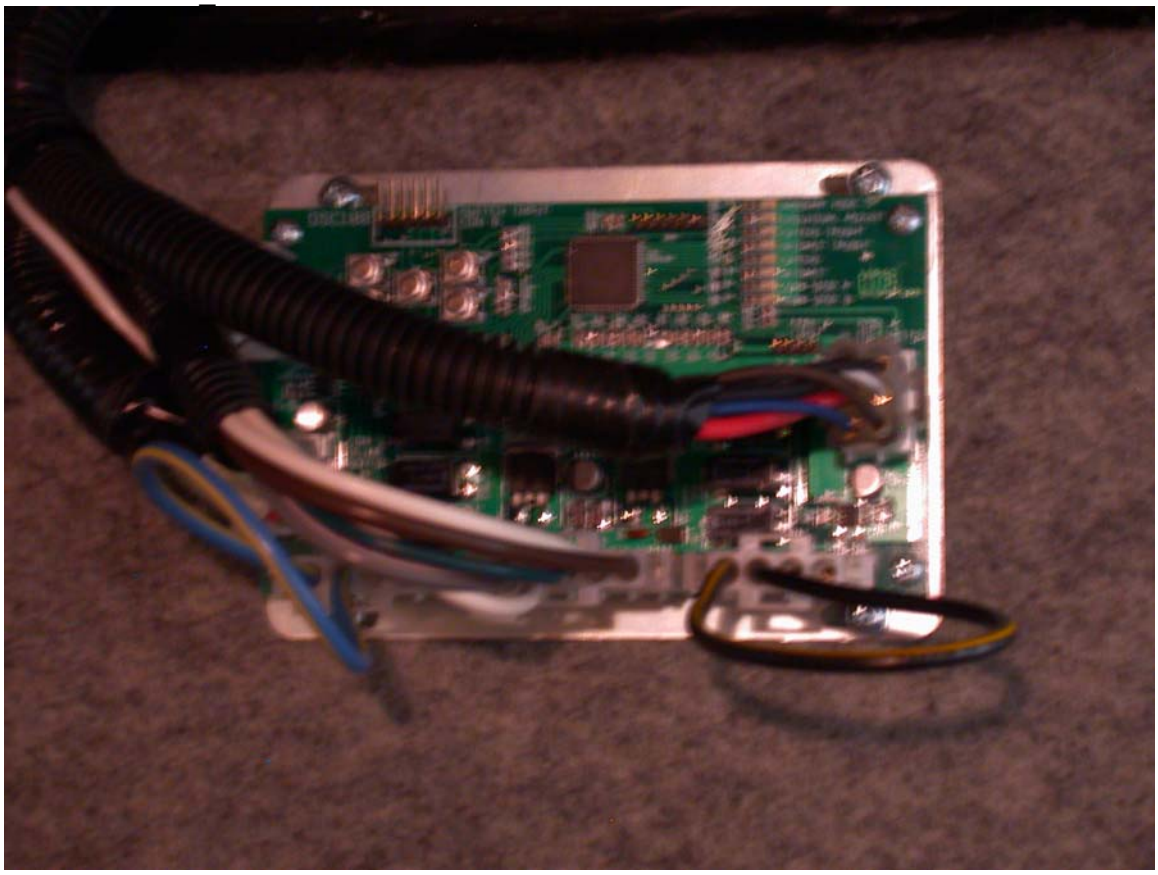
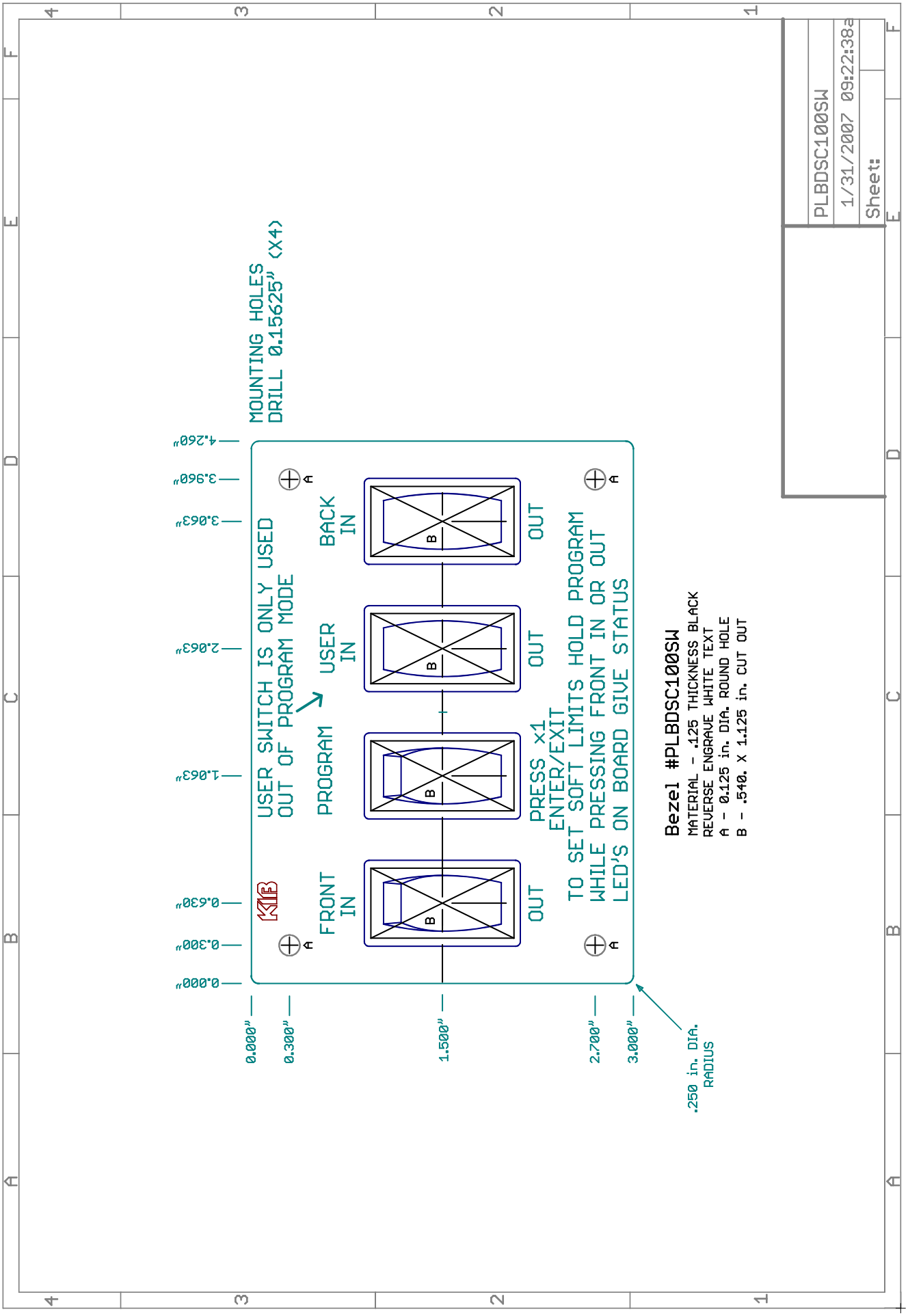
Picture of DSC_100 in RF





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