Network Portable Dryer Software Revisions

VERSION NUMBER:	1.19	STEVE LOGUE	Sept 11 2003
DISPLAY BOARD CHANGES:	Use Version 1.19		

1) Changed temperature based moisture control's differential from 2 degrees F to 1 degree F on either side of setpoint.

IO BOARD CHANGES:	NONE - presently using 1.18
HEATER BOARD CHANGES:	Use Version 1.19

1) Extended timer for airflow detection from 10 seconds to 20 seconds.

VERSION NUMBER:	1.18	DATE OF CHANGES:	Oct 8,2002
DISPLAY BOARD CHANGES:			

1) The ability to Calibrate the Bushel Per Hour and Total Bushels was implemented. Access it in the Dryer Setup (Modify + Power).
2) A small Buffer was inserted to stabilize the switch from HI to LOW Fire on the Burner Temperature Control.

IO BOARD CHANGES:	YES – You must now use 1.18
HEATER BOARD CHANGES:	YES – You must now use 1.18

VERSION NUMBER:	1.17	DATE OF CHANGES:	Sept 10,2002
DISPLAY BOARD CHANGES:			

1) Warnings are no longer allowed to be displayed while setting the date, but will continue after exiting setup.
2) The software now checks to make sure that the dryer must be set to EndFill, DualFill, or CenterFill load, with EndFill being the default value.
3) While changing a Timer or Delay setting pushing and holding the UP or DOWN Arrow Key will start changing in minutes rather then seconds.
4) While changing a Timer or Delay setting pushing Reset will not return the setting to its default setting.
5) Also added software to limit timer values to the following list of maximums:

Dry Timer	-> 200 Minutes	Load Cleanout Delay	-> 10 Minutes
Cool Timer	-> 60 Minutes	Unload Cleanout Delay	-> 10 Minutes
Unload Timer	-> 60 Minutes	Fan Delay	-> 10 Seconds
Out of Grain Timer	-> 60 Minutes	Meter Roll Reverse Timer	-> 10 Minutes
Load Delay	-> 10 Minutes	Meter Roll Forward Timer	-> 120 Minutes

6) Pressing the RESET button while in the timer edit mode will load that particular timer with its respective value from below.

Dry Timer	-> 60 Minutes	Load Cleanout Delay	-> 1 Minutes
Cool Timer	-> 20 Minutes	Unload Cleanout Delay	-> 1 Minutes
Unload Timer	-> 10 Minutes	Fan Delay	-> 3 Seconds
Out of Grain Timer	-> 8 Minutes	Meter Roll Reverse Timer	-> 5 Minutes
Load Delay	-> 2 Minutes	Meter Roll Forward Timer	-> 12 Hours

IO BOARD CHANGES:	NONE - presently using 1.09
HEATER BOARD CHANGES:	NONE - presently using 1.12

VERSION NUMBER:	1.16	DATE OF CHANGES:	September 4, 2002
DISPLAY BOARD CHANGES:			

1) The default values should now be as specified in version 1.11: HI/OFF burner mode has a default burner differential of 3 degrees F, and burner mode HI/LOW has a default burner differential mode of 1 degree F.
2) Per Virgil Rhodes the maximum differential is 10 degrees F, which used to be 24.

IO BOARD CHANGES:	NONE - presently using 1.09
HEATER BOARD CHANGES:	NONE - presently using 1.12

VERSION NUMBER:	1.15	DATE OF CHANGES:	May 15,2002
DISPLAY BOARD CHANGES:			

1) Errors reported by Fan/Heaters should be more reliable, but user should notice no change.

IO BOARD CHANGES:	NONE - presently using 1.09
HEATER BOARD CHANGES:	NONE - presently using 1.12

VERSION NUMBER:	1.14	DATE OF CHANGES:	March 25,2002
DISPLAY BOARD CHANGES:			

1) Changed software so mercoids were recognized on an export dryer with a 'Z' in the model number selected.
So no jumping or rewiring of existing dryer will be necessary.

IO BOARD CHANGES:	NONE - presently using 1.09
HEATER BOARD CHANGES:	NONE - presently using 1.12

VERSION NUMBER:	1.13	DATE OF CHANGES:	Still testing.
DISPLAY BOARD CHANGES:			

1) Added software so this could be used as a Farm Fans dryers. You enter an 'F' as the first character of the model number line and that selects this as a FF dryer. A few selection screens will follow for setup of the dryer.

IO BOARD CHANGES:	NONE - presently using 1.09
HEATER BOARD CHANGES:	NONE - presently using 1.12

VERSION NUMBER:	1.12	DATE OF CHANGES:	Still testing.
DISPLAY BOARD CHANGES:			

1) Added software to help with thermistor open and short problems.

IO BOARD CHANGES:	NONE - presently using 1.09

HEATER BOARD CHANGES: 1.12

1) Added software to remove thermistor open and short problems.

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-----------------------------------------------------------------------
VERSION NUMBER:          1.11     DATE OF CHANGES:       August 10, 2001
DISPLAY BOARD CHANGES:
1)        ON/OFF burner differential defaults to 1 degree, and HI/LO defaults to 3 degree.
2)        Moisture control differential is now 1 degree.
3)        Added diesel burner software, so that model number activates the diesel option.
IO BOARD CHANGES:              NONE - presently using 1.09
HEATER BOARD CHANGES:  1.11
1)        Added software for diesel burner.
-----------------------------------------------------------------------
VERSION NUMBER:          1.10A    DATE OF CHANGES:       Aug 26, 2001
DISPLAY BOARD CHANGES:         Allowed plenum temp go be set to 240 F.  Allowed grain temp to be set to 200 F.
IO BOARD CHANGES:              NONE
HEATER BOARD CHANGES:          Allowed plenum temp to go to 240 F.  Allowed grain temp to go to 200 F.
-----------------------------------------------------------------------
VERSION NUMBER:          1.10     DATE OF CHANGES:       November 7, 2000
DISPLAY BOARD CHANGES:         NONE
IO BOARD CHANGES:              NONE
HEATER BOARD CHANGES:
1) Fixed on/off cycle that didn't work in 1.09.
-----------------------------------------------------------------------
VERSION NUMBER:          1.09     DATE OF CHANGES:       Oct 5, 2000
DISPLAY BOARD CHANGES:         NONE
IO BOARD CHANGES:              NONE
HEATER BOARD CHANGES:
1)        Changed software so that grain temperature reading no longer gets "stuck" at 127 F when the plenum temp is much lower than the grain temp.
2)        Version number is now displayed when the board first powers up.
-----------------------------------------------------------------------
VERSION NUMBER:          1.08     DATE OF CHANGES:       Sept 14, 2000
DISPLAY BOARD CHANGES:
1)        Changed software so that when J2-13 loses 12VDC the system gives a warning indicating that the air system failed.
IO BOARD CHANGES:              NONE
HEATER BOARD CHANGES:          NONE
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* Up until this point network dryer boards (heater, io, display) were have been allowed to have different software version numbers.  After
* DISPLAY VERSION 1.07 all software will be released as a set with the same version number for each board.  For example, when 1.08 is
* released the following files will represent this change:
*              HEAT         1.08
*              DISPLAY      1.08
*              I/O          1.08
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-----------------------------------------------------------------------
VERSION NUMBER:          1.07     DATE OF CHANGES:       Sept 13, 2000
1)        Changed the software for Plant Design so instead of having a refill timer the dryer would simply stop the unload system and the burners until the upper
          level  mercury switch was again satisfied.
-----------------------------------------------------------------------
VERSION NUMBER:          1.06     DATE OF CHANGES:       Aug 2, 2000
1)        Made the exit delays on the setup screens longer so the users may think slower.
-----------------------------------------------------------------------
VERSION NUMBER:          1.05     DATE OF CHANGES:       JULY 28, 2000
1)        Added software for the multiple dryer network for Plant Design.  There is now a setup screen for selecting a dryer's address – each dryer on a multiple
          dryer network must have its own unique address.  If a dryer is not on a network set this selection to zero (backward compatibility.)  If Dryer is not on a
          network set this selection to zero for backward compatibility.
-----------------------------------------------------------------------
VERSION NUMBER:          1.04     DATE OF CHANGES:       JULY 2000
1)        This feature was updated in version 1.07
          Plant Design (California) ask for a system which would start a timer, called the refill timer, when the out of grain timer expired.  During the duration of
          the refill timer the heaters and the unload system would shutoff while the load system continued to run.  If the system refilled during this time the dryer
          would restart the burners and the unload and continue as usual, otherwise if the refill timer expired there would be an out of grain warning issued.  This
          is an option under the "modify while power on" button. Terminals J4-9 and J4-11 serve as dry contacts that will pulse while the refill timer is running
          to warn of a potential out of grain shutdown.
2)        Added three speed meter roll selection.  But will cause dryer  to cycle full unload speed and off – do not use.
-----------------------------------------------------------------------
VERSION NUMBER:          1.03     DATE OF CHANGES:       JULY 2000
1)        If air switches have been disabled they will be reactivated after power has been lost to the dryer and then restored.
2)        To disable the air switch turn on power to the dryer while holding in on the grain temp and plenum temp buttons.
3)        Most of the settings for the dryer may be changed by holding in on the modify button and turning on power to the dryer.  It may be password protected.
          The 3 used so far have been 1234, 1515, and 1010.

4)        The most commonly used setup screens reside under the setup button.  This can only be accessed while the dryer is stopped.
5)        Holding in on the dry and cool buttons while turning on power to the dryer will reset the warning history.
6)        Speaking of the warning history, it will now hold 250 recorded warnings instead of 25 per Virgil R.
7)        The ability to disable metering roll warnings is now available.
8)        Metering roll reverse is also an option with two timers determining the duty cycle of operation between forward and reverse.
9)        User message is now displayed on the introduction screen.

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VERSION NUMBER:          1.02     DATE OF CHANGES:       JUNE 1999 -- 1ST RELEASE
1)        Added on/off burner selection.
2)        If burner fails to light while on/off is selected it will try two more times to do so before sending an ignition failure warning.
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