

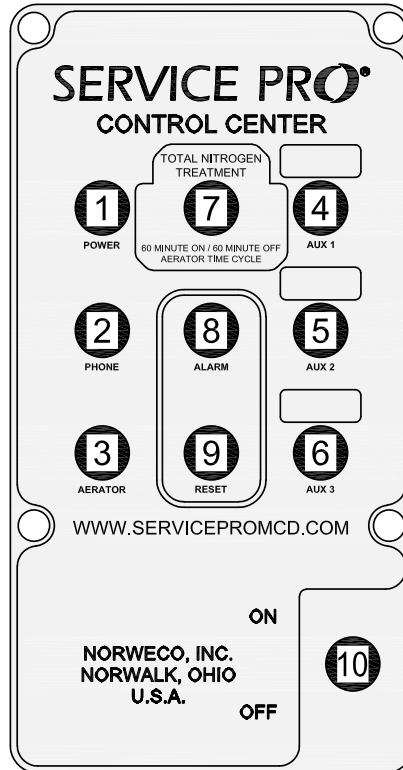
TNT SERVICE PRO®

CONTROL CENTER WITH MCD TECHNOLOGY

QUICK START GUIDE

PRE-START UP AND INSTALLATION CHECKLIST

- Turn off breaker at household power panel.
- Turn off the recessed power switch on lower right of Service Pro control center.
- Gently remove Service Pro panel insert.
CAUTION: Do not pull out too far - it may loosen the wire connections.
- Verify that the four pin power connector is properly wired and plugged in (see wiring schematic inside panel cover).
- Be sure phone line is plugged in.
- Check four yellow wire nuts to ensure tight connection.
- Check auxiliary alarm wiring (if any) to be sure the terminals are properly crimped and plugged in at the correct location(s).
- Check conduit openings to be sure they are "duct sealed" to prevent corrosive vapors from entering the enclosure.
- Check to ensure phone line grommet is properly installed. On outdoor installations, phone line must be outdoor rated and, for NEMA 3R compliance 1/8" knockout hole in bottom of control enclosure must be opened to vent moisture from inside the enclosure.
- Gently reinstall insert into control enclosure. Be sure insert is fully seated.



- Top center on panel - Time clock. Not adjustable.
 - Factory preset. System cycles automatically one hour on and one hour off.
- Middle center on panel - Red alarm light
 - Not lit during normal operation. This light is used to monitor system functions as follows:

Condition	Light Flash Pattern
Successful commissioning	Flash 10 short
Alarm test	Flash 10 short
Service visit start	
Service visit end	
Phone line not plugged in	Flash 1 short, 1 long pause 3 sec. & repeat
Phone line in use in home	Flash 2 short, 1 long pause 3 sec. & repeat
Number called is busy	Flash 3 short, 1 long pause 3 sec. & repeat
Remote monitoring error	Flash 4 short, 1 long pause 3 sec. & repeat
Phone service termination	Flash 4 short, 1 long pause 3 sec. & repeat
Panel communication error	Flash 5 short, 1 long pause 3 sec. & repeat
Aerator under current	Flash 2 short pause 3 sec. & repeat
Aerator open motor	Flash 2 short pause 3 sec. & repeat
Aerator over current Auxiliary one, two, three	Flash evenly until serviced

PANEL COMPONENT IDENTIFICATION AND FUNCTION

There are a total of ten separate components visible on the control panel. See sketch above.

- Top left on panel - Green power light
 - Should always be lit when breaker in household panel is turned on and Service Pro recessed power switch is turned on.
- Middle left on panel - Yellow phone light
 - Lit only when phone line is in use.
- Bottom left on panel - Red aerator light
 - Lit only when aerator has malfunctioned.
- Top right on panel - Red auxiliary input light (AUX 1)
 - Lit only when optional treatment device number one needs service.
- Middle right on panel - Red auxiliary input light (AUX 2)
 - Lit only when optional treatment device number two needs service.
- Bottom right on panel - Red auxiliary input light (AUX 3)
 - Lit only when optional treatment device number three needs service.

- Bottom center on panel - Reset button
 - The reset button is used to perform a variety of functions as follows:

Condition	Function
Reset aerator and restart timed run cycle	Turns off alarm light and buzzer and restarts aerator
Alarm test	Actuates alarm light and buzzer
Service visit begins	Records start of service call
Service visit ends	Records end of service call
Commission call	Triggers call for commissioning
Decommissioning	Shuts off remote monitoring feature
Silence alarms	Shuts off alarm buzzer and light

- Lower right on panel - Recessed power switch
 - On/off selector switch for power to panel.

QUICK START GUIDE (Cont.)

COMMISSIONING THE PANEL'S TELEMETRY SYSTEM

The commissioning process electronically registers the Service Pro panel with the web based remote monitoring center at www.servicepromcd.com. Once commissioned, the panel is capable of automatically placing calls to the remote monitoring center. First, turn the breaker in the household power panel to the on position and verify that the recessed power switch on the lower right of the Service Pro control center is in the off position. Next, press the reset button and keep it depressed while turning the recessed power switch in the Service Pro panel to the on position. Continue to hold in until the yellow light flashes once. Release the reset button. The yellow light will come on indicating the Service Pro control center is calling the remote monitoring center to commission the panel. When the light goes out, the unit has been commissioned. If commissioning is successful, the red alarm light (middle center) will flash 10 short flashes and stop as verification. If commissioning is unsuccessful, the alarm light will flash a pattern of short and long flashes followed by a long pause and repeat the pattern. Refer to the table in item 8 on the previous page for troubleshooting information. Conduct an alarm test to verify commissioning was successful. If the yellow phone light does not illuminate during the alarm test, recommission the panel. If the homeowner uses DSL for Internet service, a communication error can occur during commissioning. This can be resolved by installing a DSL filter on the phone line going into the Service Pro panel. If digital telephone service (VOIP) is used, make sure to connect the telephone line downstream of the digital/analog converter. Some VOIP systems may not be compatible with Service Pro.

RECORDING SERVICE VISITS AND TESTING ALARMS

Time spent on a service visit is important to all parties involved. This includes, but is not limited to builders, licensed distributors, installers, sponsored service providers, regulatory personnel and homeowners. The Service Pro control center will record the duration of each service visit and provide a permanent record (on the Service Pro website) of the time spent at each service visit.

To record the beginning of each service visit:

1. Press and hold in the reset button for at least 5 seconds.
2. After the alarm light in the center of the panel flashes and the alarm buzzer sounds, release the reset button. The yellow phone light will now turn on (testing of the alarm light and alarm buzzer has now been completed).
3. The panel now calls the remote monitoring center to record the time the service visit started.
4. The phone light will turn off when the call is complete.
5. Conduct the normal Singulair system service as outlined in the "Singulair System Service Manual" and any other service that may be needed on auxiliary equipment.

To record the end of each service visit:

6. Press and hold in the reset button for at least 5 seconds.
7. After the alarm light in the center of the panel flashes

and the alarm buzzer sounds, release the reset button. The yellow phone light will now turn on.

8. The panel will call the remote monitoring center to record the time the service visit ended.

Upon completion of service work, fill out the door hanger service record and deliver it to the homeowner or hang the service record form on the door.

AUXILIARY EQUIPMENT IDENTIFICATION LABELS

Be sure to properly label all auxiliary equipment inputs. An assortment of weather resistant, adhesive backed labels, as shown here, has been preprinted and included with the panel. Select the correct preprinted labels and install above appropriate auxiliary lights on panel insert. Label unused AUX inputs NOT IN USE. Extra labels may be used for identification of individual components throughout the wastewater facility. Use ball point pen only on blank labels where needed. Do not discard extra labels while at jobsite.

SERVICE PRO [®]			
CONTROL CENTER			
AERATOR #1	AERATOR #2	AERATOR #3	ELAPSED TIME METER
DENITRIFICATION PUMP	DOSE PUMP	DRIP PUMP	PUMP TEMP SENSOR
INFLUENT PUMP ALARM	INFLUENT PUMP HIGH WATER	INFLUENT PUMP LOW WATER	RECIRCULATION PUMP
EFFLUENT PUMP ALARM	EFFLUENT PUMP HIGH WATER	EFFLUENT PUMP LOW WATER	SPRAY PUMP
FILTER #1	FILTER #2	FILTER #3	BACKWASH PUMP
FLOAT #1	FLOAT #2	FLOAT #3	FLOW METER
HIGH WATER #1	HIGH WATER #2	HIGH WATER #3	CONDUCTIVITY LEVEL CONTROL
LOW WATER #1	LOW WATER #2	LOW WATER #3	BIO-KINETIC MAINTENANCE
ALARM	AIR FLOW ALARM	UV SYSTEM	UV LIGHT TRANSMITTANCE
DISSOLVED OXYGEN	DISSOLVED SOLIDS	HEAVY METALS	OX RED POT (ORP)
pH HIGH	pH LOW	SUSPENDED SOLIDS	TURBIDITY
CHEMCHECK #1	CHEMCHECK #2	CHEMCHECK #3	CHLORINE ALARM
CHLORINATION #1	CHLORINATION #2	CHLORINATION #3	CHLORINE RESIDUAL
DECHLORINATION #1	DECHLORINATION #2	DECHLORINATION #3	DECHLORINATION ALARM
NOT IN USE	NOT IN USE	NOT IN USE	DISINFECTION SYSTEM
OTHER:	OTHER:	OTHER:	COMPOSITE SAMPLER

USE TO LABEL AUXILIARY ALARM INPUTS
SEE SERVICE PRO CONTROL CENTER QUICK START GUIDE
USE BALL POINT PEN ONLY

WWW.SERVICEPROMCD.COM ©MCMXCIX

WARNING: The Service Pro control center is designed to monitor residential wastewater treatment equipment only. Connection of household appliances or other unauthorized equipment may damage equipment and void the warranty.

 Engineering the future of water and wastewater treatment	NORWECO, INC. NORWALK, OHIO U.S.A. 44857 www.norweco.com
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