

PROGRAMMING THE 9000SE & 9100SXT

PRESSING THE <EXTRA CYCLE> BUTTON ADVANCES TO THE NEXT PROGRAMMING STEP, PRESSING THE <UP> OR <DOWN> BUTTON CHANGES THE VALUE ENTERED

Set the time display to 12:01 PM (VERY IMPORTANT - IF YOU DO NOT SET TO **12:01 PM** YOU DO NOT ENTER MASTER PROGRAMMING MODE, MAKE SURE THE LED IS DISPLAYED THAT SHOWS **PM**)

PRESS <EXTRA CYCLE> TO EXIT TIME OF DAY MODE

PRESS AND HOLD <UP> AND <DOWN> BUTTONS SIMULTANEOUSLY FOR 5 SECONDS TO ENTER MASTER PROGRAMMING MODE

STEP 1 - SELECT GALLONS (GAL)

STEP 2 – SELECT STANDARD DOWN/UP, SINGLE BACKWASH (St1b)

STEP 3 – REGENERATION TYPE, SELECT EITHER METER IMMEDIATE OR METER DELAYED. (METER IMMEDIATE IS FI, METER DELAYED IS Fd)

Selecting "Meter Immediate" means that an automatic regeneration cycle will occur whenever the capacity of the system is exhausted – this can happen at any time throughout the day. It is more common to select the "Meter Delayed" function that will initiate a regeneration at a selected time. Meter delayed allows the softener to regenerate during a period of low water usage, like during the early morning.

STEP 4 – SELECT TWO-TANK SYSTEM (2)

STEP 5 – TANK IN SERVICE (EITHER U1 OR U2 IS ACCEPTABLE)

STEP 6 – UNIT CAPACITY
24,000 GRAIN = 24
32,000 GRAIN = 32
48,000 GRAIN = 48
64,000 GRAIN = 64

STEP 7 – FEEDWATER HARDNESS – ENTER THE HARDNESS VALUE OF YOUR WATER IN GRAINS PER GALLON (GPG)

STEP 8 – SELECT SAFETY FACTOR MODE (FS)

STEP 9 – ENTER 20% SAFETY FACTOR (20)

STEP 10 - REGENERATION DAY OVERRIDE (DO) - ENTER THE DAY (IF DESIRED) YOU WANT TO FORCE A REGENERATION

The "Regeneration Day Override" feature will force a regeneration on the day as entered, even if the unit did not meter enough water consumption so as to required an automatic regeneration. A common setting is 10 days - some defeat this setting and leave at the factory default value of 0 days so that no override occurs.

STEP 11 - SET REGENERATION TIME (RT). DEFAULT TIME OF REGENERATION IS 2:00 AM, ADJUST TIME AS DESIRED.

STEP 12 REGENERATION CYCLE STEP PROGRAMMING (12 POUNDS SALT/FT3)

(24,000 GRAIN CAPACITY)

BW, REGENERATION CYCLE STEP #3, 10 MINUTES (10)
BD, REGENERATION CYCLE STEP #1, 60 MINUTES (60)
RR, REGENERATION CYCLE STEP #4, 10 MINUTES (10)
BF, REGENERATION CYCLE STEP #2, 6 MINUTES (6)

(32,000 GRAIN CAPACITY)

BW, REGENERATION CYCLE STEP #3, 10 MINUTES (10)
BD, REGENERATION CYCLE STEP #1, 60 MINUTES (60)
RR, REGENERATION CYCLE STEP #4, 10 MINUTES (10)
BF, REGENERATION CYCLE STEP #2, 6 MINUTES (8)

(48,000 GRAIN CAPACITY)

BW, REGENERATION CYCLE STEP #3, 10 MINUTES (10)
BD, REGENERATION CYCLE STEP #1, 60 MINUTES (60)
RR, REGENERATION CYCLE STEP #4, 10 MINUTES (10)
BF, REGENERATION CYCLE STEP #2, 6 MINUTES (12)

(64,000 GRAIN CAPACITY)

BW, REGENERATION CYCLE STEP #3, 10 MINUTES (10)
BD, REGENERATION CYCLE STEP #1, 60 MINUTES (60)
RR, REGENERATION CYCLE STEP #4, 10 MINUTES (10)
BF, REGENERATION CYCLE STEP #2, 6 MINUTES (16)

STEP 13 - FLOW METER TYPE

3/4 INCH 9000 & 9100 - (t0.7) TURBINE

1.0 INCH 9000 & 9100 - (P1.0) PADDLE WHEEL METER

EXIT MASTER PROGRAMMING

UNDERSTANDING THE BRINING PROCESS

Your softener is equipped with a 0.5 GPM BLFC flow control. Your softener can be set for brining at about 12 pounds per cubic foot.

24,000 grain = 3/4 cubic feet of resin

32,000 grain = 1.0 cubic foot of resin

48,000 grain = 1.5 cubic feet of resin

64,000 grain = 2.0 cubic feet of resin

A 48,000 capacity water softener grain example:

Three (3) pounds of salt will dissolve into a gallon of water - so to have 18 pounds of salt (12 pounds x 1.5 cubic feet) you need to have brine refill at 12 minutes to refill the brine tank with 6 gallons of water (6 gallons at 3 pounds of salt per gallon = 18 pounds).

Default settings are fine for backwash, brine draw/slow rinse and rapid rinse.

Step 12 (as above)

BW = 10 minutes (backwash position) - flushes/cleans the resin bed

BD = 60 minutes (brine draw/slow rinse) - draws brine solution into the resin bed

RR = 10 minutes (rapid rinse) - rinses excess brine from resin bed

BF = 12 minutes (refill) - refill brine tank with water

Adjust setting BF as required for your capacity softener.