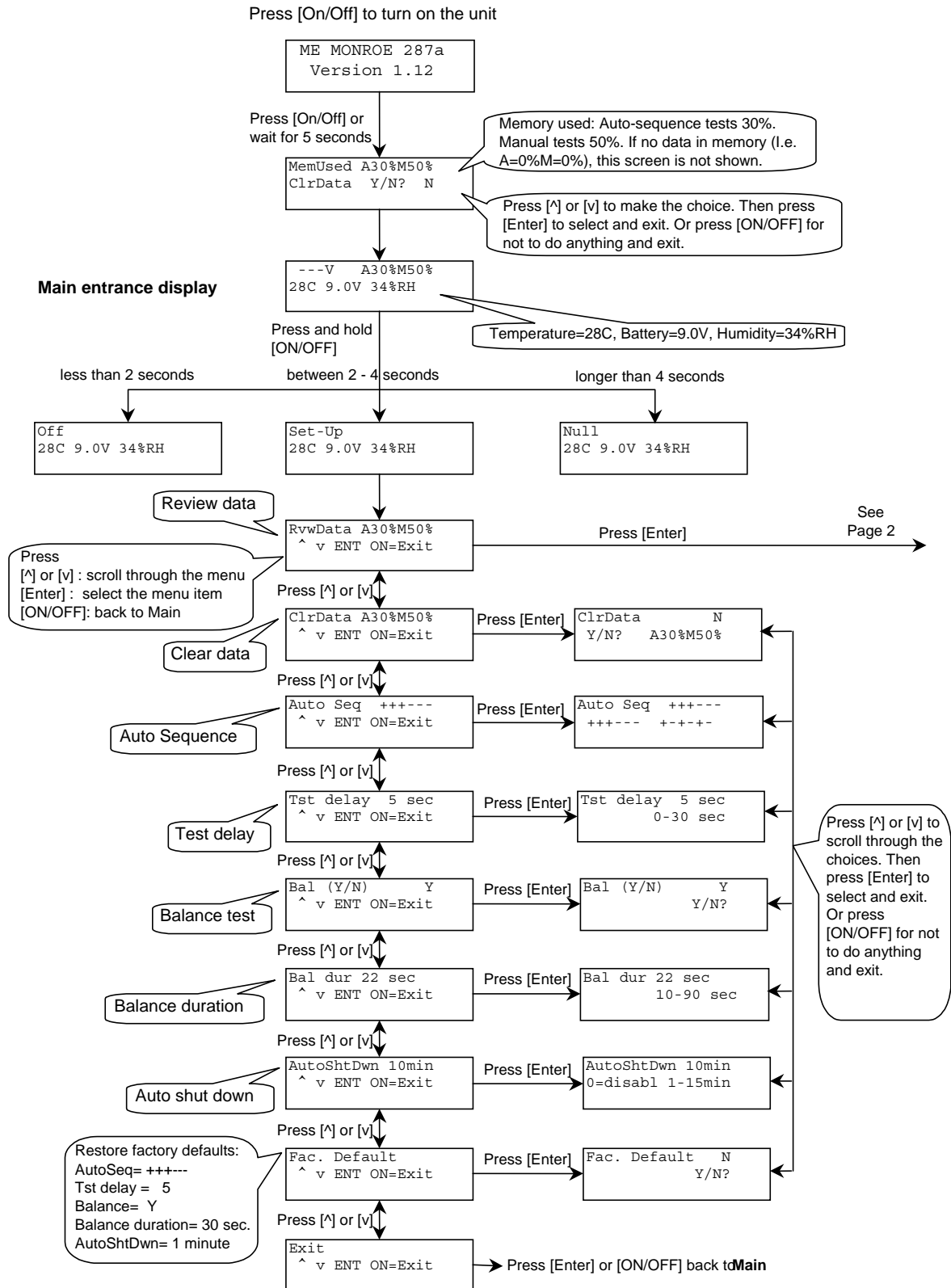
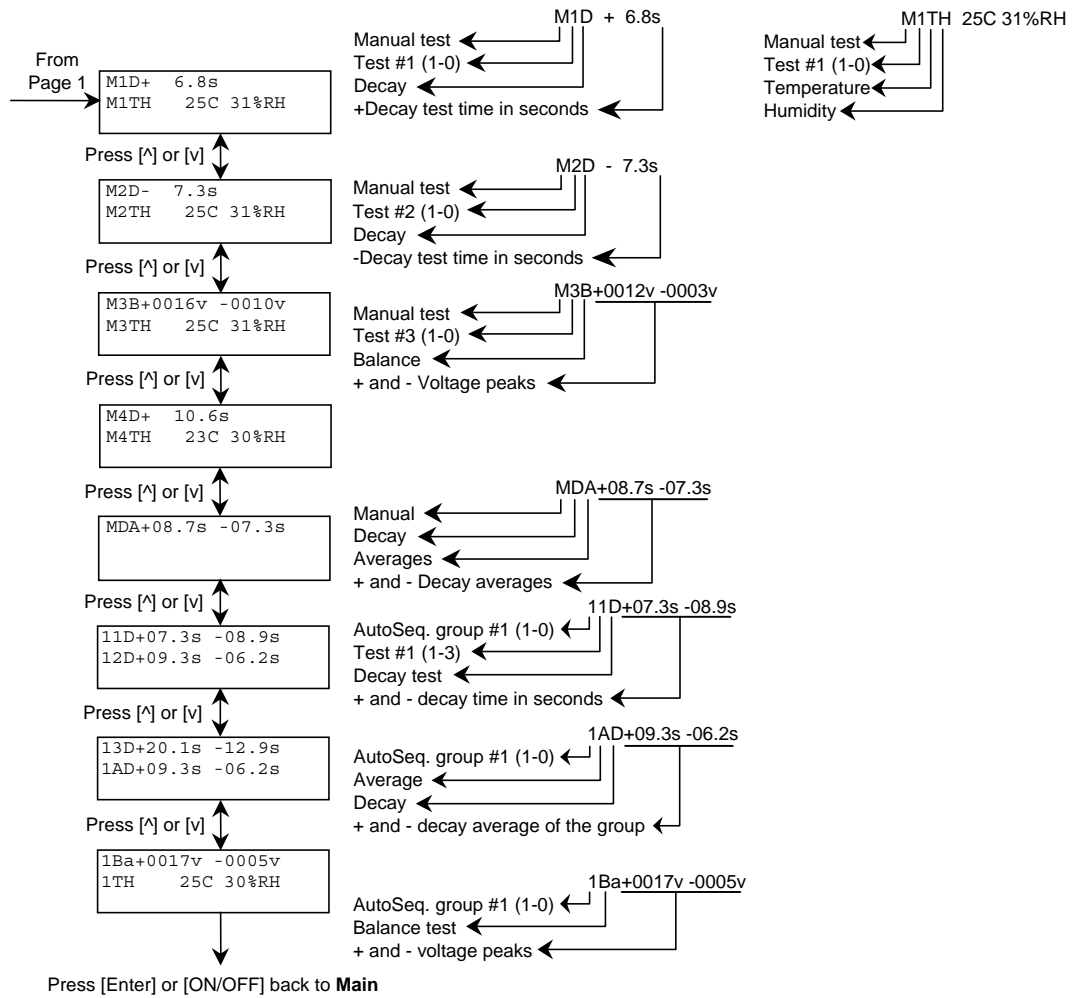


Supplementary Manual  
for  
Model 287a  
Ionizer Performance Analyzer

287a-1/100A  
V1.12  
P/N 0345006  
101107

# IPA 287a Display and Operational Chart





## Manual Plus Decay Test (press [^] button less than 2 seconds)

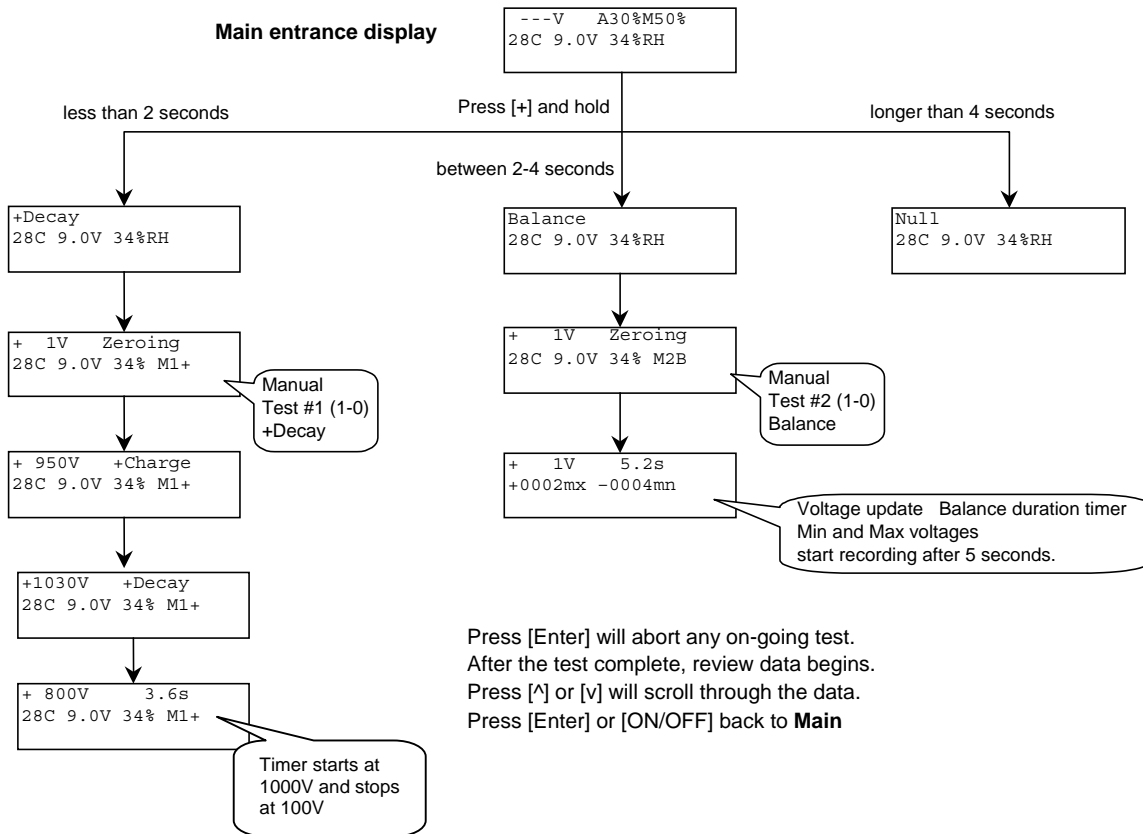
The 287 unit will start by zeroing then Charge to over +1050V, then Decay.

The decay timer starts at +1000V and stops at +100V.

## Manual Balance Test (press and hold [^] or [v] button for 2-4 seconds)

The 287 will start by zeroing, then Balance for the time duration. Start recording Min and Max voltage levels after 5 seconds.

Up to 10 Manual test results can be stored in memory. They are named M1 thru M0 where M0 is the 10<sup>th</sup> test.



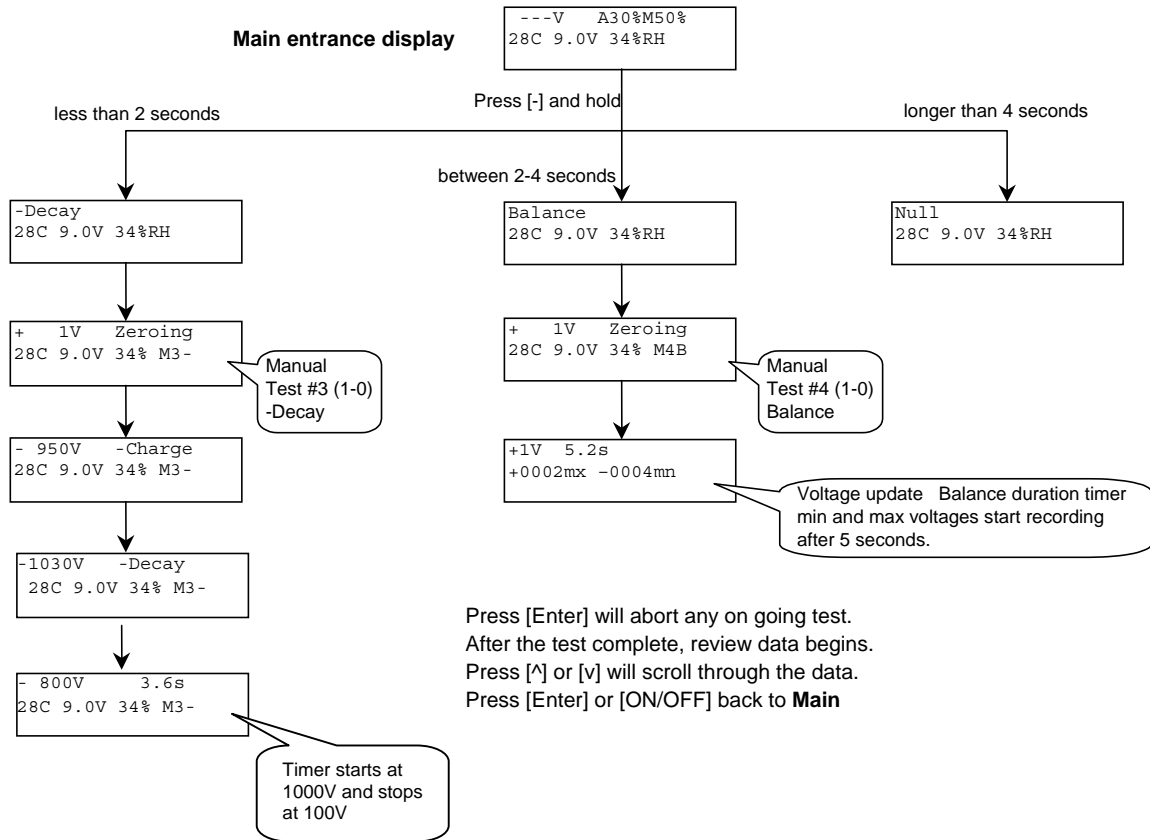
## Manual Minus Decay Test (press [v] button less than 2 seconds)

The 287 unit will start by zeroing then Charge to over +1050V, then Decay.

The decay timer starts at +1000V and stops at +100V.

## Manual Balance Test (press and hold [^] or [v] button for 2-4 seconds)

The 287 will start by zeroing, then Balance for the time duration. Start recording Min and Max peaks after 5 seconds.



## Auto Sequence Group Test (press [AUTO] button less than 2 seconds)

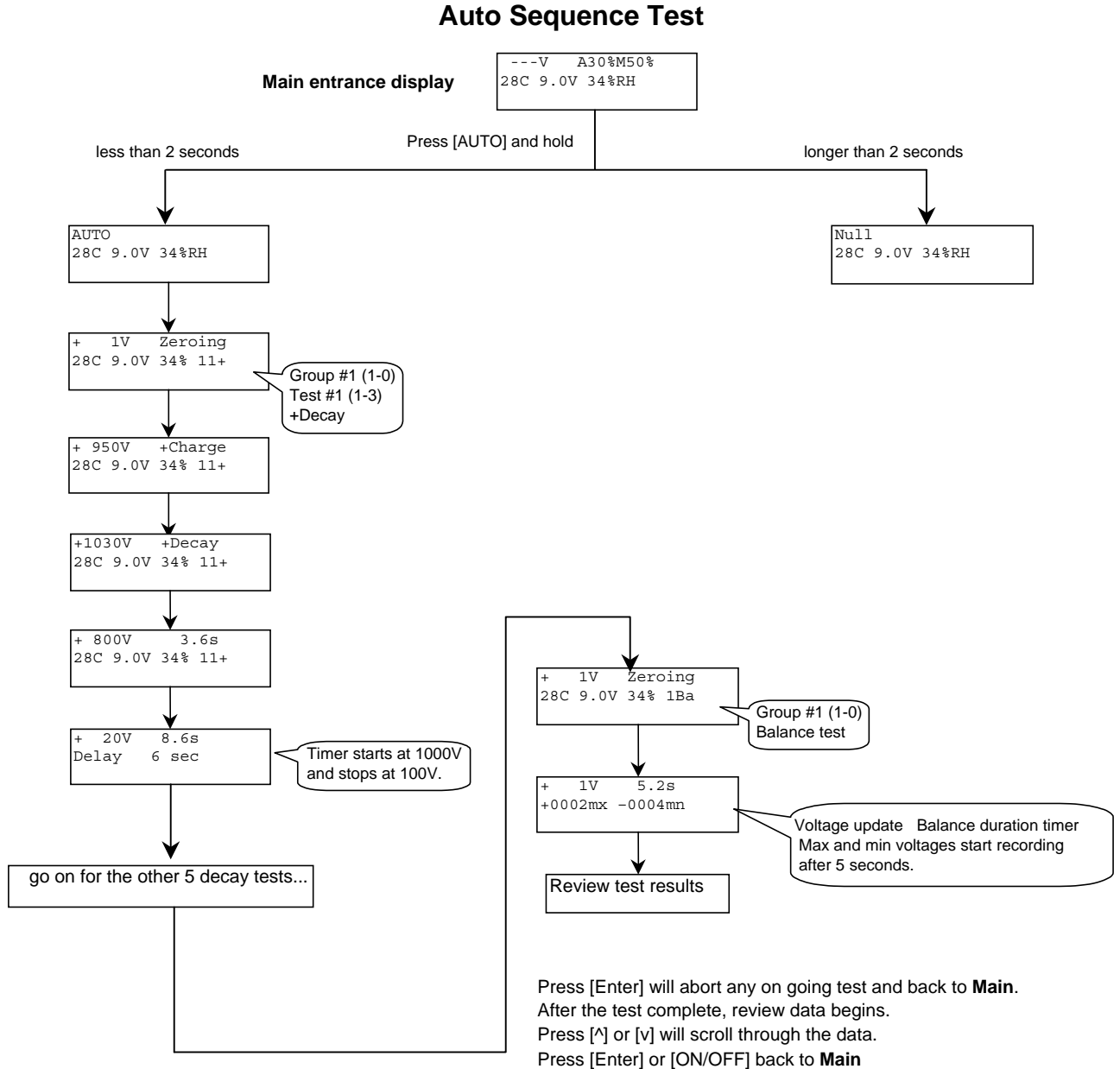
The 287 unit will perform up to 10 groups of automatic test sequences and store the results in memory. Groups are named 1 thru 0 where 0 is the 10<sup>th</sup>. Each group has 3 +decay, 3-decay, and an optional balance test. The sequence can be set in the Set-Up Menu.

**Decay test:** Zeroing to <5V, Charge to over +/-1050V, then Decay.

The decay timer starts at +/-1000V and stops at +/-100V.

**Balance Test:** Zeroing to <5V, then Balance for the time duration. Start recording Voltage peaks after 5 seconds.

The delay time between the tests can be set in the Set-Up Menu.



## Error Messages

## What to do...

```
Battery Low 6.2V  
Off in 5 sec.
```

Change the battery.

```
---V A30%M50%  
28C 9.0V Er%RH
```

Humidity is out of 10% - 90% range or sensor failure. If sensor failure, contact factory for repair.

```
+1012V +Charge  
Unable to charge
```

Unable to charge to 1050V. Make sure nothing is contacting the charge plate and the standoffs underneath are clean. This may also be caused by too much load on the plate. Press enter to return to the main screen. Remove the 287 from the ionizer and recheck. If problem persists contact the manufacturer for calibration.

```
+ 216V 200.s  
Decay failed
```

Decay time out at 200 seconds, and the plate reading is still above 100V. Check your ionizer. Recommend using Monroe Model 288

```
EEProm Fail
```

Contact factory.