

Input Range Codes

| Code | Range | ASCII | (-55dBu to +18dBu in 1dB steps, not all steps are shown) |
|------|----------|-------|---|
| 31 | -71.0 | | (minimum Noise range possible on MiniSonic) |
| 30 | -70.0 | | |
| 40 | -60.0 | | |
| 45 | -55.0 | (| |
| 50 | -50.0 | 2 | (nominal Noise range in stand-alone use, covering -40 to -70dB) |
| 60 | -40.0dB | < | (nominal Distortion range in stand-alone use covering -30 to -60) |
| 69 | -31.0 | E | (minumum Level range possible on MiniSonic) |
| 70 | -30.0 | F | |
| 80 | -20.0 | P | |
| 90 | -10.0 | Z | (ASCII values are useful for testing) |
| 100 | -0.0dBu | d | |
| 101 | +1.0 | e | |
| 102 | +2.0 | f | |
| 103 | | g | |
| 104 | | h | |
| 105 | +5.0 | i | |
| 106 | | j | |
| 107 | | k | |
| 108 | | l | |
| 109 | | m | |
| 110 | +10.0 | n | |
| 111 | | o | |
| 112 | | p | |
| 113 | | q | |
| 114 | | r | |
| 115 | +15.0 | s | |
| 116 | | t | |
| 117 | | u | |
| 118 | +18.0dBu | v | 185 would be +50dB (plenty)! |

The values shown represent the input level needed to read 0dB on the MiniSonic scale. All Level and Noise values returned now take account of the Range setting, but not the reference level. Note that the Range settings can go 40dB lower for noise and distortion since the CCIR filter has 40dB gain.

Actual Input Level = (Level value in dB) + (Offset value in dB) - 200

Note the subtraction of 200 because each returned value is centred on 100 nominal .

This scheme avoids the use of negative numbers which would involve using the msb with possible compromise to the SyncLink synchronising system.

There is no concept of 10dB ranges when the Minisonic is used in stand-alone mode, and so autoranging is replaced by the Normalise command which sets the Offset in 1dB increments. Range and offset are separate settings but are to some extent interchangeable concepts. Range is set and returned to. Offset is stored for relative readings, and can be switched in or out. All ranges, in 1dB steps are available under remote control. Note, though, that range has to be chosen carefully in Distortion mode to avoid overload of the front end. Thus it is permissible to use the -10dB range with 0dB in, but -20 would overload (only 18dB headroom in front end).