Output Impedance levels for the DS360 Function Generator

It is possible to get various output impedance levels from the DS360 Function Generator by choosing different combinations of internal impedance and amplitude.

By setting the amplitude to 1/2x or 2x in some conditions, the DS360 has the following output impedances.

Unbalanced
25 Ω   (set to unbal HiZ, normal amplitude)
50 Ω   (set to unbal 50 Ω, normal amplitude)
75 Ω   (set to bal 150 Ω, 2x amplitude)
300 Ω (set to bal 600 Ω, 2x amplitude)
600 Ω (set to unbal 600 Ω, normal amplitude)

Balanced
50 Ω   (set to bal HiZ, normal amplitude)
100 Ω (set to 50 Ω unbal, 1/2 normal amplitude)
150 Ω (set to bal 150 Ω, normal amplitude)
600 Ω (set to bal 600 Ω, normal amplitude)
1200 Ω (set to unbal 600 Ω, 1/2 normal amplitude)

By changing some resistors, you can get 150 Ω unbal
& 300 Ω bal. You will need to set the amplitude to 1/2 or 2x in a few cases:

Change R623, R630 to 453 Ohm, 1/2W
Change R624, R631to 464 Ohm, 1/2W
(or all resistors can be changed to 453 Ω, for a 1% error)

This will provide the following impedances:

Unbalanced
25 Ω   (set to unbal HiZ, normal amplitude)
150 Ω (set to unbal 50 Ω, normal amplitude)
75 Ω   (set to bal 150 Ω, 2x amplitude)
300 Ω (set to bal 600 Ω, 2x amplitude)
600 Ω (set to unbal 600 Ω, normal amplitude)

Balanced
50 Ω   (set to bal HiZ, normal amplitude)
300 Ω (set to 50 Ω unbal, 1/2 amplitude)
150 Ω (set to bal 150 Ω, normal amplitude)

600 Ω (set to bal 600 Ω, normal amplitude)
1200 Ω (set to unbal 600 Ω, 1/2 normal amp)