# Revit MEP UK DB Schedule Sample

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This is a far as I got for generating a UK Style Panel Schedule from Revit MEP.

The first problem to get over is to match the RME circuit numbers with the conventions. Consider the simple panel below that has 18 slots. In Revit MEP the odd number circuits (1,3,5,…) are listed on the left side of the panel, whilst the even number circuits (2,4,6,…) are listed on the right. In the UK the convention is to use circuit codes that group in three’s the match the phasing, and are typically named: 1L1, 1L2, 1L3, 2L1, 2L2, 2L3, 3L1…. and a 3 phase circuit example would be 6L123 for circuits 14, 16 & 18, as illustrated below:

|  |  |  |  |
| --- | --- | --- | --- |
| Left | | Right | |
| Num | Code | Num | Code |
| 1 | 1L1 | 2 | 4L1 |
| 3 | 1L2 | 4 | 4L2 |
| 5 | 1L3 | 6 | 4L3 |
| 7 | 2L1 | 8 | 5L1 |
| 9 | 2L2 | 10 | 5L2 |
| 11 | 2L3 | 12 | 5L3 |
| 13 | 3L1 | 14 |  |
| 15 | 3L2 | 16 | 6L123 |
| 17 | 3L3 | 18 |  |

The .Net c# sample comes with two commands:

* Add Circuit References – assigns UK style circuit references
* Panel Schedule Export – exports the circuits to an Excel spreadsheet

## Add Circuit References

To provide the circuit number to code mapping, this sample sets the value of the “Circuit Ref” shared parameter that has been added to circuits and light fittings. Ideally, the “Circuit Ref” parameter should be added to all objects with a electrical connector as well as wires, so that you can tag what circuit they are on.

After running the command you will simply be asked to select the appropriate panel.

If you’re using the supplied dataset, this shared parameter has already been added to circuits and light fittings through the Project Parameters, but if you use an alternative Revit project, you’ll have to add this parameter manually.

For this to work, the panel needs to have an even number of circuits that is also divisible by 3, for example 6, 12, 18, 24, 48 etc.

If any changes are made to the number of circuits or their position in the panel, this command will be to be re-run to re-assign the codes.

## Panel Schedule Export

Once the circuit references have been set-up, you can then use the ‘Panel Schedule Export’ command to extract the data to an Excel spreadsheet. As with the ‘Add Circuit References’ command, you will be prompted to select the appropriate panel.

After picking the panel, you will then be prompted to select an Excel spreadsheet and this sample is hard coded to use the cell positions in the PanelSchedule.xls that is included with the sample. For example, the following cell positions are used:

* O3 – Panel Name
* H5 – Number of ways (slots)
* A12, A13, A14 etc – Circuit Reference
* B12, B13, B14 etc – Circuit description
* J12, J13, J14 etc – Number of points (devices)
* K12, K13, K14 etc – Cable Size PH (saved as shared parameter “CableSize\_PH”)
* L12, L13, L14 etc – Cable Size CPC (saved as shared parameter “CableSize\_CPC”)
* Q12, Q13, Q14 etc – Circuit rating

This could be improved by adding tags that are searched for and replaced, but if you want to change the current hardcoded method, look for calls to exportToExcel in CreateDbSchedule.cs, for example:

exportToExcel(ws, "O", 3, panelName);