# MIRI Low Resolution Spectroscopy

| Program, Obs only 1 expspec | Comment |
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| Template Specific Information | |
| 602 1 | MIRI Low Resolution Spectroscopy template exists |
| 602 1 | Field: Acquisition Target choose from list |
| 602 1 | Field: Acquisition Filter chose from list |
| 602 1 | Field: Acquisition Readout Pattern choose from list |
| 602 1 | Field: Acquisition Number of Groups/Integrations choose from list |
| 602 1 | Field: Acquisition Number of Integrations/Exposure 1 only allowed value |
| 602 1 | Field: Subarray choose FULL or SUBPRISM |
| 6582 3 | Field: Dither Type choose from list |
| 6582 3 | Field: Number of Spectral Steps 1,2,3… |
| 6582 3 | Field: Spectral Step Offset any positive number |
| 6582 3 | Field: Number of Spatial Steps 1,2,3… |
| 6582 3 | Field: Spatial Step Offset any positive number |
| 602 1 | Field: Readout Pattern choose from list |
| 602 1 | Field: Number of Groups/Integration number |
| 602 1 | Field: Number of Integrations/Exposure number |
| 602 1 | Field: Number of Exposures/Dither number |
| Target Acquisition | |
| 602 2 | Science target generally used for acquisition |
| 602 1 | Offset star may be used for target acquisition |
| Acquisition Target | |
| 602 1 | if offset star select ACQUISITION TARGET NAME from list targets previously entered |
| | if Solar System Target acq target must be self |
| 602 9 | if no targ acq needed select NONE |
| 903 31 | ACQUISITION TARGET name should always be present and defaulted to prime target for the observation |
| 602 6 | Warning if Acq and Science target too far apart |
| 602 1, 6 | LRS will use FULL Subarray (FULL, SLITLESSPRISM) |
| Acquisition Target Filter | |
| 602 3 | F560W |
| 602 1 | F1000W |
| 602 4 | F1500W |
| 602 2 | FND |
| Acquisition Readout Pattern | |
| 602 1 (903 31) | FAST (default) |
| 602 3 | FASTGRPAVG |
| Acquisition Number of Groups/Integration | |
| 602 1 | 5 |
| 602 2 | 7 |
| 602 3 | 9 |
| 602 4 | 11 |
| 602 5 | 13 |

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| 602 6 | 19 |
| 602 7 | 27 |
| 602 8 | 39 |
| 602 11 | 57 |
| 602 12 | 85 |
| 602 13 | 99 |
| Acquisition Number of Integrations/Exposure | |
| 602 1 | 1 only allowed value |
| Science Exposures | |
| Subarray | |
| 602 1 | FULL |
| 602 6 | SLITLESSPRISM |
| 602 10 | TSO sr must have NO PARALLEL |
| Dither Specifications | |
| 602 1 | Dither pattern doesn't apply to acquisition image |
| 602 6 | No Dither Pattern for SUBPRISM unless LAP |
| Dither Type | |
| 602 6 | PATTERN TYPE: NONE |
| 602 1 | PATTERN TYPE: ALONG SLIT NOD |
| 6582 3 | PATTERN TYPE: MAPPING |
| Mapping Parameters | |
| 6582 3 | SPECTRAL STEPS: 1, 2, 3, … |
| 6582 3 | SPECTRAL STEP OFFSET: units are arcseconds |
| 6582 3 | SPECTRAL STEP OFFSET: any positive floating point value |
| 6582 3 | NUMBER OF SPATIAL STEPS: 1, 2, 3, … |
| 6582 3 | SPATIAL STEP OFFSET: units are arcseconds |
| 6582 3 | SPATIAL STEP OFFSET: any positive floating point value |
| Readout Pattern | |
| 602 10 (903 31) | FAST (default) |
| 602 4 | SLOW |
| 602 6 | FASTGRPAVG LAP |
| 602 6 | SLOW only allowed with SUBARRAY=FULL |
| Number of Groups/Integration | |
| 602 10, 903 32 | must be > 2 legal, illegal |
| 903 39 | FASTGRPAVG, recommended at least 4 |
| 903 36-38 | SLOW 2-4 allowed but not recommended |
| 903 33-35 | FAST 2-4 allowed but not recommended |
| Number of Integrations/Exposure | |
| 903 31 | 1 (default) |
| 903 40 | nondefault |
| Number of Exposures/Dither | |
| 903 31 | 1 (default) |
| 903 41 | > 1 NO PARALLEL required |
| Dither | |
| 602 10 | SLITLESSPRISM: NONE |
| Dither LAP only | |
| 637 1 | SLITLESSPRISM: 1PIXEL_SLIT_SCAN |
| 637 2 | SLITLESSPRISM: 2PIXEL_SLIT_SCAN |
| 637 3 | SLITLESSPRISM: 7PIXEL_SLIT_SCAN |

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| 637 4 | SLITLESSPRISM: 7X3_PIXEL_MAP_CENTER |
| 637 5 | SLITLESSPRISM: 7X3_PIXEL_MAP_NOD1 |
| 637 6 | SLITLESSPRISM: 7X3_PIXEL_MAP_NOD2 |
| 637 7 | SLITLESSPRISM: INTRAPIXEL_SLIT_SCAN_CENTER |
| 637 8 | SLITLESSPRISM: INTRAPIXEL_SLIT_SCAN_NOD1 |
| 637 9 | SLITLESSPRISM: INTRAPIXEL_SLIT_SCAN_NOD2 |
| 637 10 | SLITLESSPRISM: LONG_CROSS_SCAN_CENTER |
| 637 11 | SLITLESSPRISM: LONG_CROSS_SCAN_NOD1 |
| 637 12 | SLITLESSPRISM: LONG_CROSS_SCAN_NOD2 |
| 637 13 | SLITLESSPRISM:SHORT_CROSS_SCAN_CENTER |
| 637 14 | SLITLESSPRISM: SHORT_CROSS_SCAN_NOD1 |
| 637 15 | SLITLESSPRISM: SHORT_CROSS_SCAN_NOD2 |
| 637 16 | SLITLESSPRISM: 1PIXEL_SLITLESS_SCAN_LONG |
| 637 17 | SLITLESSPRISM: 1PIXEL_SLITLESS_SCAN_SHORT |
| 637 18 | SLITLESSPRISM: 2PIXEL_SLITLESS_SCAN_SHORT |
| 637 19 | SLITLESSPRISM: 7X3_PIXEL_MAP_CENTER |
| 637 20 | SLITLESSPRISM: 7PIXEL_9X3_MAP_SLITLESS |
| 637 21 | SLITLESSPRISM: 5PIXEL_8X4_MAP_SLITLESS |
| 637 22 | SLITLESSPRISM: 7PIXEL_SLITLESS_SCAN |
| 637 23 | SLITLESSPRISM: 5PIXEL_SLITLESS_SCAN |