**[ Feeder\_API\_Refernce ]**

**Control command**

**■ stop\_feeding(self, ID = 'F-01')**

- 기능: 지정된 급이기(I**D**)의 급이 중지

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

**■ stop\_feeding\_all(self)**

- 기능: 모든 급이기의 급이 중지

**■ manual\_feeding(self, pace, dist, amount, ID = 'F-01')**

- 기능: 지정된 급이기(ID)에 대해 수동으로 급이 시작 (반자동)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| pace | float | 3 (kg/min) | required |
| dist | float | 3 (m) | required |
| amount | float | 15.5 (kg) | required |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

**■ manual\_feeding\_all(self, pace, dist, amount)**

- 기능: 모든 급이기에게 수동으로 급이 시작(반자동)

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| pace | float | 3 (kg/min) | required |
| dist | float | 3 (m) | required |
| amount | float | 15.5 (kg) | required |

- Parameter

**Set command**

**■ set\_feeding\_plan(self, plan, ID = 'F-01')**

- 기능: 지정된 급이기(ID)에 자동 급이 계획 설정

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| plan | dict | {0 : {'start time' : '09:00',  'pace' : 50, 'spread' : 1.5,  'feed amount' : 1.5},  1 : {'start time' : '16:00',  'pace' : 0, 'spread' : 1.5,  'feed amount' : 1.5}} | required |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

**■ set\_feeding\_plan\_all(self, allplan)**

- 기능: 모든 급이기에 대한 급이 계획 설정

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| allplan | dict | {‘**F-01’** : {0:{'start time' : '09:00',  'pace' : 50, 'spread' : 1.5,  'feed amount' : 1.5},  1:{'start time' : '16:00',  'pace' : 0, 'spread' : 1.5,  'feed amount' : 1.5}},  ~ }},  ‘**F-10**’ : {0:{'start time' : '09:00',  'pace' : 50, 'spread':1.5,  'feed amount' : 1.5},  1:{'start time' : '16:00',  'pace' : 0, 'spread' : 1.5,  'feed amount' : 1.5} | required |

- Parameter

**■ set\_feeder\_ID(self,addr, id)**

- 현재 사용되지 않으며, 추후 필요한 경우 급이기 ID를 설정(변경)

**■ set\_feeding\_mode(self, mode = 'auto', ID = 'F-01')**

- 기능: 지정된 급이기(ID)에 대한 급이 모드 변경

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| mode | str | ‘stop’, ‘manual’, ‘auto’ | 'auto’ |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

**■ set\_feeding\_mode\_all(self, mode = 'auto')**

- 기능: 모든 급이기에 대한 급이 모드 변경

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| mode | str | ‘stop’, ‘manual’, ‘auto’ | 'auto’ |

- Parameter

**■ set\_feed\_size(self, size, ID = 'F-01')**

- 기능: 지정된 급이기(ID)의 사료 크기 설정

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| size | int | 3(호) | required |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

**■ set\_feed\_size\_all(self, size)**

- 기능: 모든 급이기에 대한 사료 크기 변경

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| size | int | 3(호) | required |

- Parameter

**Get command**

**■ get\_feeder\_info(self, ID = 'F-01')**

- 기능: 지정된 급이기(ID)에 대한 정보를 반환

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| info[ID] | dict | {’feeder\_ID’ : ’F-01’,  ’feed\_size’ : 3, ’remains’ : 10,  ’feed\_motor\_ouput’ : 0,  ’spread\_motor\_ouput’ : 0,  ’feed\_mode’ : ’stop’,  ’event’ : {‘remains\_state’ : ‘enough’,  ‘motor\_state’ : ‘stop’},  ‘connectivity’ : False} |

- Return

**■ get\_feeder\_info\_all(self)**

- 기능: 모든 급이기에 대한 정보를 반환

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| info | dict | {‘F-01’ : {‘feeder\_ID’ : ‘F-01’,  ‘feed\_size’ : 3, ‘remains’ : 10,  ‘feed\_motor\_ouput’ : 0,  ‘spread\_motor\_ouput’ : 0,  ‘feed\_mode’ : ‘stop’,  ‘event’ : {‘remains\_state’ : ‘enough’,  ‘motor\_state’ : ‘stop’},  ‘connectivity’ : False},  ~ }},  ‘F-10’ : {‘feeder\_ID’ : ‘F-10’,  ‘feed\_size’ : 3, ‘remains’ : 10,  ‘feed\_motor\_ouput’ : 0,  ‘spread\_motor\_ouput’ : 0,  ‘feed\_mode’ : ‘stop’,  ‘event’ : {‘remains\_state’ : ‘enough’,  ‘motor\_state’ : ‘stop’},  ‘connectivity’ : False}} |

- Return

**■ get\_online\_feeder\_list(self)**

- 기능: 현재 연결 중인 모든 급이기의 ID 리스트 반환

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| feeder\_list\_online | list | [‘F-01’, ‘F-03’] |

- Return

**■ get\_feeder\_state(self, ID = 'F-01')**

- 기능: 지정된 급이기(ID)에 대한 connectivity 상태 반환

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Type | Description | Default |
| ID | str | ‘F-01’ ~ 'F-10' | 'F-01’ |

- Parameter

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| self.feeder\_state\_list[ID] | bool | True / False |

- Return

**■ get\_feeder\_state\_all(self)**

- 기능: 모든 급이기에 대한 connectivity 상태 반환

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| self.feeder\_state\_list | dict | {‘F-01’ : True, ‘F-02’ : True, ‘F-03’ : False, ~~} |

- Return

**■ get\_feeding\_plan\_all(self)**

- 기능: 모든 급이기에 대한 auto feeding plan 반환

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| self.feeding\_auto\_plan | dict | {"F-01": {0:{'start time' : '09:00','pace' : 50,'spread':1.5,  'feed amount' : 1.5},  1:{'start time' : '16:00','pace' : 0,'spread':1.5,  'feed amount' : 1.5}},  …  "F-10": {0:{'start time' : '09:00','pace' : 50,'spread':1.5,  'feed amount' : 1.5},  1:{'start time' : '16:00','pace' : 0,'spread':1.5,  'feed amount' : 1.5}}} |

- Return