



Information regarding pid files

OpenRDM uses pid files to access device specific functions.

Usually these files are created automatically by reading the „parameter description“ from the device. If the description is not available, the pid file has to be created manually.

Copy an existing pid file and rename it with the pid to be described. The file can be opened with any editor and has the following layout:

PID=	RDM parameter ID (hex format)
SIZE=	number of bytes in one GET_RESPONSE or SET message
DATA_TYPE=	type of values (ascii, byte, word,...)
CMD_CLASS=	read-only, write-only, both
TYPE=	(not supported)
UNIT=	measurement unit (i.e. kg or m)
PREFIX=	(not supported)
MIN=	minimum limit
MAX=	maximum limit
DEFAULT=	default value (not used)
NAME=	Name of the function; displayed in the DropDown

The values are defined by the ESTA E1.20 standard. The following tables are required to create valid pid files.

However - I recommend that you buy the standard to get the complete picture...

ESTA defined PIDs

GET Allowed	SET Allowed	RDM Parameter ID's (Slot 21-22)	Value
		Category – Network Management	
		DISC_UNIQUE_BRANCH	0x0001
		DISC_MUTE	0x0002
		DISC_UN_MUTE	0x0003
✓		PROXIED_DEVICES	0x0010
✓		PROXIED_DEVICE_COUNT	0x0011
✓	✓	COMMS_STATUS	0x0015
		Category - Status Collection	
✓		QUEUED_MESSAGE	0x0020
✓		STATUS_MESSAGES	0x0030
✓		STATUS_ID_DESCRIPTION	0x0031
	✓	CLEAR_STATUS_ID	0x0032
✓	✓	SUB_DEVICE_STATUS_REPORT_THRESHOLD	0x0033
		Category - RDM Information	
✓		SUPPORTED_PARAMETERS	0x0050
✓		PARAMETER_DESCRIPTION	0x0051
		Category – Product Information	
✓		DEVICE_INFO	0x0060
✓		PRODUCT_DETAIL_ID_LIST	0x0070
✓		DEVICE_MODEL_DESCRIPTION	0x0080
✓		MANUFACTURER_LABEL	0x0081
✓	✓	DEVICE_LABEL	0x0082
✓	✓	FACTORY_DEFAULTS	0x0090
✓		LANGUAGE_CAPABILITIES	0x00A0
✓	✓	LANGUAGE	0x00B0
✓		SOFTWARE_VERSION_LABEL	0x00C0
✓		BOOT_SOFTWARE_VERSION_ID	0x00C1
✓		BOOT_SOFTWARE_VERSION_LABEL	0x00C2
		Category - DMX512 Setup	
✓	✓	DMX_PERSONALITY	0x00E0
✓		DMX_PERSONALITY_DESCRIPTION	0x00E1
✓	✓	DMX_START_ADDRESS	0x00F0
✓		SLOT_INFO	0x0120
✓		SLOT_DESCRIPTION	0x0121
✓		DEFAULT_SLOT_VALUE	0x0122
		Category – Sensors	0x02xx
✓		SENSOR_DEFINITION	0x0200
✓	✓	SENSOR_VALUE	0x0201

GET Allowed	SET Allowed	RDM Parameter ID's (Slot 21-22)	Value
	✓	RECORD_SENSORS	0x0202
		Category – Dimmer Settings	0x03xx
		Category – Power/Lamp Settings	0x04xx
✓	✓	DEVICE_HOURS	0x0400
✓	✓	LAMP_HOURS	0x0401
✓	✓	LAMP_STRIKES	0x0402
✓	✓	LAMP_STATE	0x0403
✓	✓	LAMP_ON_MODE	0x0404
✓	✓	DEVICE_POWER_CYCLES	0x0405
		Category - Display Settings	0x05xx
✓	✓	DISPLAY_INVERT	0x0500
✓	✓	DISPLAY_LEVEL	0x0501
		Category – Configuration	0x06xx
✓	✓	PAN_INVERT	0x0600
✓	✓	TILT_INVERT	0x0601
✓	✓	PAN_TILT_SWAP	0x0602
✓	✓	REAL_TIME_CLOCK	0x0603
		Category – Control	0x10xx
✓	✓	IDENTIFY_DEVICE	0x1000
	✓	RESET_DEVICE	0x1001
✓	✓	POWER_STATE	0x1010
✓	✓	PERFORM_SELFTEST	0x1020
✓		SELF_TEST_DESCRIPTION	0x1021
	✓	CAPTURE_PRESET	0x1030
✓	✓	PRESET_PLAYBACK	0x1031
		ESTA Reserved Future RDM Development	0x7FE0-0x7FFF
		Manufacturer-Specific PIDs	0x8000-0xFFDF
		ESTA Reserved Future RDM Development	0xFFE0-0xFFFF

ESTA defined data types

Table A-15: Data Type Define

Data Type Defines	Value
DS_NOT_DEFINED	0x00
DS_BIT_FIELD	0x01
DS_ASCII	0x02
DS_UNSIGNED_BYTE	0x03
DS_SIGNED_BYTE	0x04
DS_UNSIGNED_WORD	0x05
DS_SIGNED_WORD	0x06
DS_UNSIGNED_DWORD	0x07
DS_SIGNED_DWORD	0x08
Manufacturer-Specific Data Types	0x80 – 0xDF

ESTA defined command classes

Command Class Defines	Value	Description
CC_GET	0x01	PID supports GET only
CC_SET	0x02	PID supports SET only
CC_GET_SET	0x03	PID supports GET & SET

ESTA defined units

Sensor Unit Defines	Value
UNITS_NONE	0x00
UNITS_CENTIGRADE	0x01
UNITS_VOLTS_DC	0x02
UNITS_VOLTS_AC_PEAK	0x03
UNITS_VOLTS_AC_RMS	0x04
UNITS_AMPERE_DC	0x05
UNITS_AMPERE_AC_PEAK	0x06
UNITS_AMPERE_AC_RMS	0x07
UNITS_HERTZ	0x08
UNITS_OHM	0x09
UNITS_WATT	0x0A
UNITS_KILOGRAM	0x0B
UNITS_METERS	0x0C
UNITS_METERS_SQUARED	0x0D
UNITS_METERS_CUBED	0x0E
UNITS_KILOGRAMMES_PER_METER_CUBED	0x0F
UNITS_METERS_PER_SECOND	0x10
UNITS_METERS_PER_SECOND_SQUARED	0x11
UNITS_NEWTON	0x12
UNITS_JOULE	0x13
UNITS_PASCAL	0x14
UNITS_SECOND	0x15
UNITS_DEGREE	0x16
UNITS_STERADIAN	0x17
UNITS_CANDELA	0x18
UNITS_LUMEN	0x19
UNITS_LUX	0x1A
UNITS_IRE	0x1B
UNITS_BYTE	0x1C
Manufacturer-Specific Units	0x80 – 0xFF