SOUNDLIGHT
The DMX Company

APPNOTE

RDM-FF01-1

FOR OEM USE AND DEVELOPERS ONLY

Features available from RDM Module 5.0 onward

AN RDM-FF01-1 How to set permanent LOCK OPTIONS

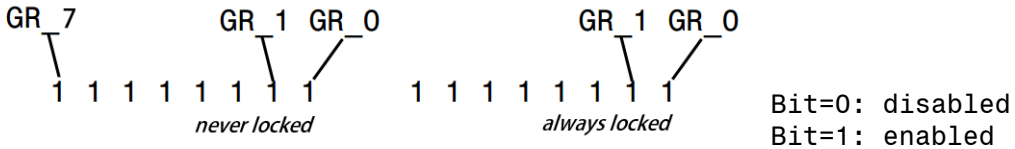
The FACTORY settings allow to permanently lock PIDs (independent of LOCK MODE setting) or exclude PIDs from LOCK MODE. This makes it possible to prevent access to specific configuration data at factory or OEM level.

PERMANENTLY LOCK PIDS

PIDs are organized in 16 groups (0...F) with the first character of the PID defining the PID group. Example: PID 0343 „CURVE“ belongs to group 0, while PID 1010 (POWER STATE) belongs to group 1. PID 8440 (OUTPUT POLARITY) belongs to group 8. Additionally, some commonly used PIDs can be manages separately.

1. LOWER BLOCK

This refers to PIDs 0000..7FFF (PID groups 0...7). The first byte sets the „locking disabled“ mask, while the second byte sets the „always locked“ mask.



FFF0 <Never Lock> <Permanent Lock>.

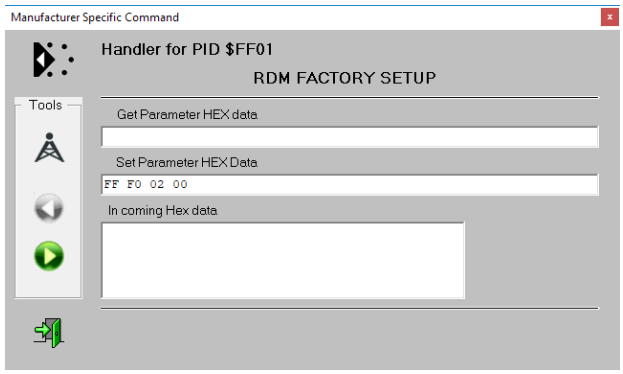
Example:

To permanently lock all PIDs of group 1 (e.g. PIDs 1010 and 1040), the command string would read: FFF0 00 02

To permanently exclude all PIDs of group 1 (e.g. PIDs 1010 and 1040) from the locking mechanism, the command string would read: FFF0 02 00

Groups are identified by 16 Bits (2 Bytes). Set the appropriate Bit to 0 to permanently lock all PIDs belonging to this group.

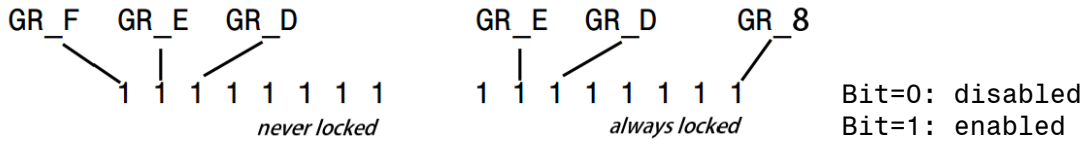
Please note:
When using both options, a PERMANENT LOCK will always prevail.



pictured: writing masks for PIDS 0000...7FFF

2. UPPER BLOCK

This refers to PIDs 8000..FFFF (PID groups 8...F). The first byte sets the „locking disabled“ mask, while the second byte sets the „always locked“ mask.



FFF1 <Never Lock> <Permanent Lock>.

Example:

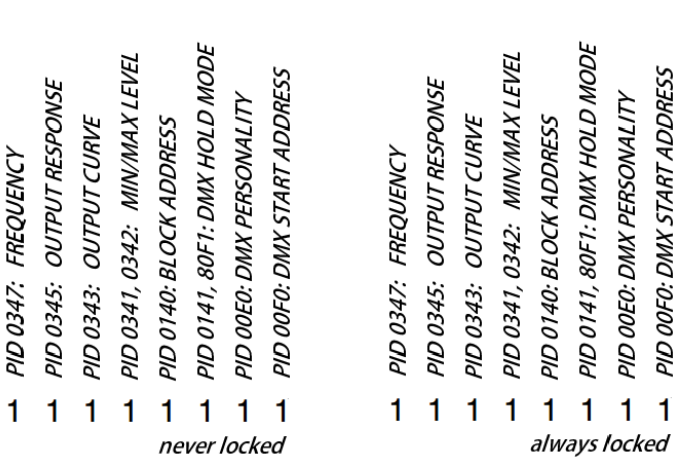
To permanently lock all PIDs of group C (e.g. PIDs COCO, COFO etc.), the command string would read: FFF1 00 10

To permanently exclude all PIDs of group C (e.g. PIDs COCO, COFO etc.) from the locking mechanism, the command string would read: FFF1 10 00

Groups are identified by 16 Bits (2 Bytes). Set the appropriate Bit to 0 to permanently lock all PIDs belonging to this group.

Please note:
When using both options, a PERMANENT LOCK will always prevail.

3. SPECIAL PIDS BLOCK



This refers to special PIDs (see table).
The first byte sets the „locking disabled“ mask, while the second byte sets the „always locked“ mask.

Bit=0: disabled
Bit=1: enabled

FFF2 <Never Lock> <Permanent Lock>.

Example:

To permanently lock access to the start address, the command string would read: FFF2 00 01

To permanently exclude the DMX personality and tghe DMX start address from the locking mechanism, the command string would read: FFF2 03 00

Please note:
When using both options, a PERMANENT LOCK will always prevail.
The special PIDs are excluded from the group masks (Lower Block and Upper Block).

4. RESET ALL PARAMETERS TO FACTORY DEFAULTS

LOCK PIN, LOCK STATE, the PERMANENT LOCK and NEVEL LOCK masks can be reset to factory settings. This will clear all settings, and allows to get inaccessible devices back to work.

To reset all parameters, enter command:

<Manufacturer ID> FFFF