IPD Preset Locking Guide

IPD has a Developer Mode of access designed for the creation of "LOCKED PRESETS" and Hardware Access.

This mode gives additional access to the following settings and allows a higher level Operator to deny access by the "lower" operator levels.

The Operator hierarchy is as follows *(1 being the highest level):*

1. Developer Access
2. Admin Access (currently not used by Lab.gruppen)
3. User Access (default operating mode)
4. Locked Access (this is when the unit is locked by a User password from software or front panel)

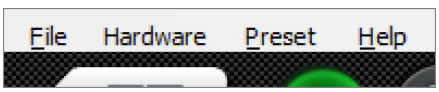
The additional settings that can be controlled/locked when in Developer Mode are:

1. Input Compressor/RMS Limiter
2. Input Peak Limiter
3. Output Compressor/RMS Limiter
4. Output Peak Limiter
5. Password Settings
6. Preset Lock Settings for Admin, User, Locked Rights
7. Hardware Operator Access/Locked Rights
8. Hardware Operator Passwords

Accessing Developer Mode

Developer Mode applies specifically to an individual unit. To access Developer Mode you must first connect to the unit and enter the unit by clicking the Mixer button. Here the password must be entered from the Hardware menu. This password is "ipdopen" (lower case, no quotation marks).

When entering this password, the software will reopen the window in developer mode. This adds the following item Preset to the Top Menu bar as shown below:



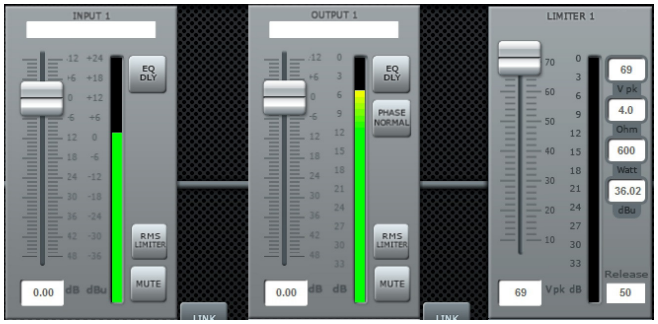
Developer Mode allows access to the additional features listed above. Use this with caution as setting a password other than "ipdopen" will be stored with any preset on the device or computer and can only be reopened with the correct password. Lab.gruppen do not have a decoding or unlocking tool, so any preset created with this password will be locked permanently should you forget the password.

Exiting Developer Mode

To exit Developer Mode enter a password lower in the list of operators. The default password for User Access is "Password". If you have changed the User password, enter this now; otherwise enter the default password to return to default shipping state - User Mode.

Levels Window

In the Levels window the small buttons labelled "RMS Limiter" will now be displayed as well as the "Release" of the peak limiter.



To access a RMS Limiter (input or output), click on the "RMS Limiter" button.

This will then take you to the Compressor/ RMS Limiter window where you can specify settings to perform functions like Compression /RMS limiting and Peak Limiting.

The controls and metering available in the Compressor/RMS Limiter Block are:

- Threshold
- Attack
- Hold
- Release
- Ratio
- Makeup Gain
- VU of the Input Signal in dBu
- GR – Gain Reduction Meter in dB

Suggested Compressor Profiles

Below are the suggested Profiles for Output Compressor settings:

	SUB	LF	HF	FULL RANGE (DEFAULT)
ATTACK	100	50	10	20
HOLD	20	10	2	10
RELEASE	100	50	10	50
RATIO	20	20	15	20

Suggested: Threshold for the Compressor should be set to the same value dBu as the Peak limiter

Suggested: Peak Limiter – To define the limiter threshold, use the loudspeaker's stated program power in the Watts field (highlighted in yellow below) related to the nominal impedance of the speaker.

EXAMPLE

In the picture example the settings for our speaker are:



Watt (yellow field) is 600 W and the Impedance is 4 ohms nominal. This gives a Vpk of 69 = 1200 W peak and a dBu of 36.02 for the threshold

Therefore in the Compressor Settings the Threshold would be set to 36 dBu.

This is a recommended starting point for setting your limiter. Optimum setting will of course vary based on speaker characteristics, preferences and other variables.

Preset Locking / Access Rights

This section is important to understand as it is fundamental to locking presets as well as the unit functionality.

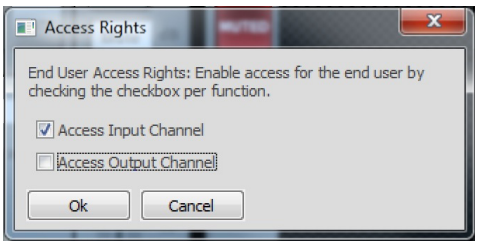
There are two areas of Password Control for IPD.

1. PRESET
2. HARDWARE

Preset Functions

This is split into two areas – Password and Access Rights

- Password – defines a password for User and/or Admin
- Access Rights - Defines what you wish to allow/deny access to when the preset is locked per Operator Level. A check box system is in operation for each Operator Level.



Checking a box allows access to the functions even though the preset is locked.

Input Access = Input Level, Input EQ, Input Name

Output Access = Output Level*, Output EQ, Output Name, Output Limiter, Crossover

Compressor Functions are only accessible in Developer Mode and will be locked in Admin and User Operator Modes.

Unchecking the box locks the functions so that the Access is restricted when in the Operator Mode. To regain access a higher operator level password must be specified which allows access to these functions.

*If the preset are made using Operating Mode: STEREO, the Output levels will remain accessible even though Output Access is locked out.

IMPORTANT CLARIFICATION

For Preset Locking, the Operator in Developer Mode can specify what elements are locked from the lower operator levels as well as the "locking passwords" stored with the preset for Admin and Developer. (User password is stored on the Hardware as it is the default and lowest level operator.)

Typing in a password other than the default "ipdopen" for Developer Password will store this custom password with the preset. This means that this custom password must be used to unlock the preset and re-enter developer mode for that preset.

Setting a password for Admin will enable the Admin mode for that preset. Admin mode allows the developer to define a separate set of Locked Rights above the User Access Rights.

Example: You may wish that the User operator level not control Input or Output Functions but wish an "Admin" operator have access to Input Functions and not Output Functions.

Hardware

A separate set of Passwords and User Access rights stored on the Hardware Unit can be specified by the Developer. Remember these are not stored with the preset; only on the device currently connected and in focus/under control will store this data.

Developer Additional Hardware Access:

1. Passwords (for all access levels – Admin, User, Locked)
2. Operator Access Rights (for all access levels – Admin, User, Locked)
3. Configure: Read Only Preset Range (Preset 1 in the Unit is always locked as default)

How to lock and store a preset with User Access Rights Denied:

1. Enter Developer Mode
2. Make the Settings you require to Inputs, Outputs, Limiters, Compressors, Channel Names etc.
3. Go to Preset > Access Rights (make selection for Admin, User for the Input and Output Access)
4. Enter a new password for Developer (and other Operator modes) if desired; otherwise default passwords for the preset will be used.
5. Store the settings to the computer or device.

To check the settings are locked, enter the default User Password: "Password" – This will now deny access to the unchecked functions you defined in Access Rights in step 3. Do this for all access modes to verify your settings.