



Change in Photometry Lockin data structure following Doric Neuroscience Studio v6.3 upgrade

Application Note

Version 1.0.0

Change in data structure: rationale

First and foremost, Lock-In is a preset configuration that simultaneously creates the analog input and output channels needed to record demodulated photometry signals.

Our initial naming predate version 5 of Doric Neuroscience Studio software and has caused significant confusion, with users having trouble distinguishing **AIN01xAOUT01-LockIn** from **AIN01xAOUT02-LockIn** channels (isosbestic and signal of interest) and so on. With new product developments, we decided to simplify and uniformize the file structure of demodulated signals and group all demodulated from one excitation light (Analog Out) to a single dataset. Users of Doric's Basic Photometry Systems (Fig. 1.1) are affected by this change in Lock-In data structure.

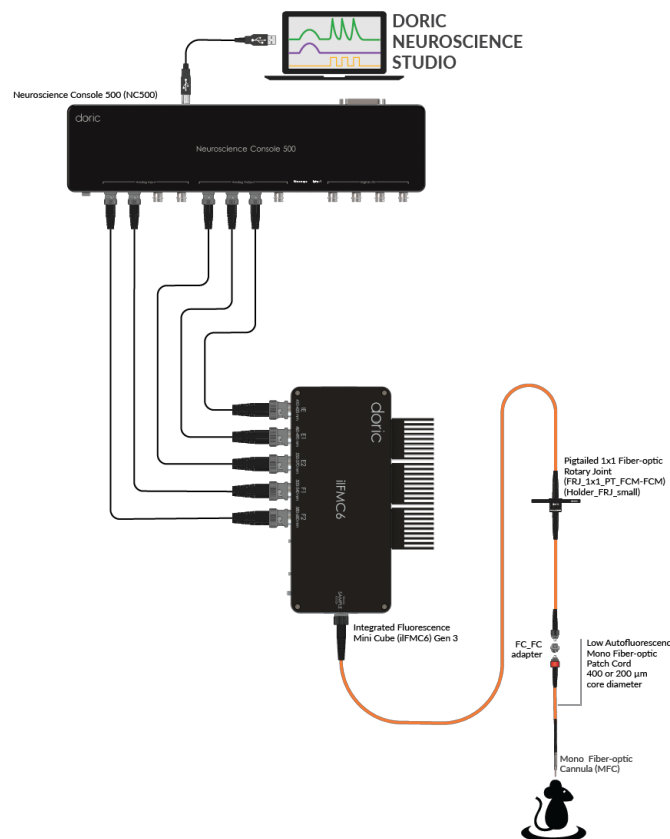


Figure 1.1: Basic Fiber Photometry System

Change description

The **AIN#xAOUT#-LockIn** channel folder containing the **Value** and **Time** vectors associated with the demodulated channel is renamed as **LockInAOUT#**, keeping only the name associated with Analog Output channel. The Value folder within takes the names of the **AIN#** channel associated with the original name.

The structures are as follow:

- Original format in DNS v6.0.x to 6.2.x (Fig. 2.1, left):
/DataAcquisition/FPConsole/Signals/Series0001/AIN01xAOUT01-LockIn/Values
- Updated format since DNS v6.3.x (Fig. 2.1, right):
/DataAcquisition/FPConsole/Signals/Series0001/LockInAOUT1/AIN01

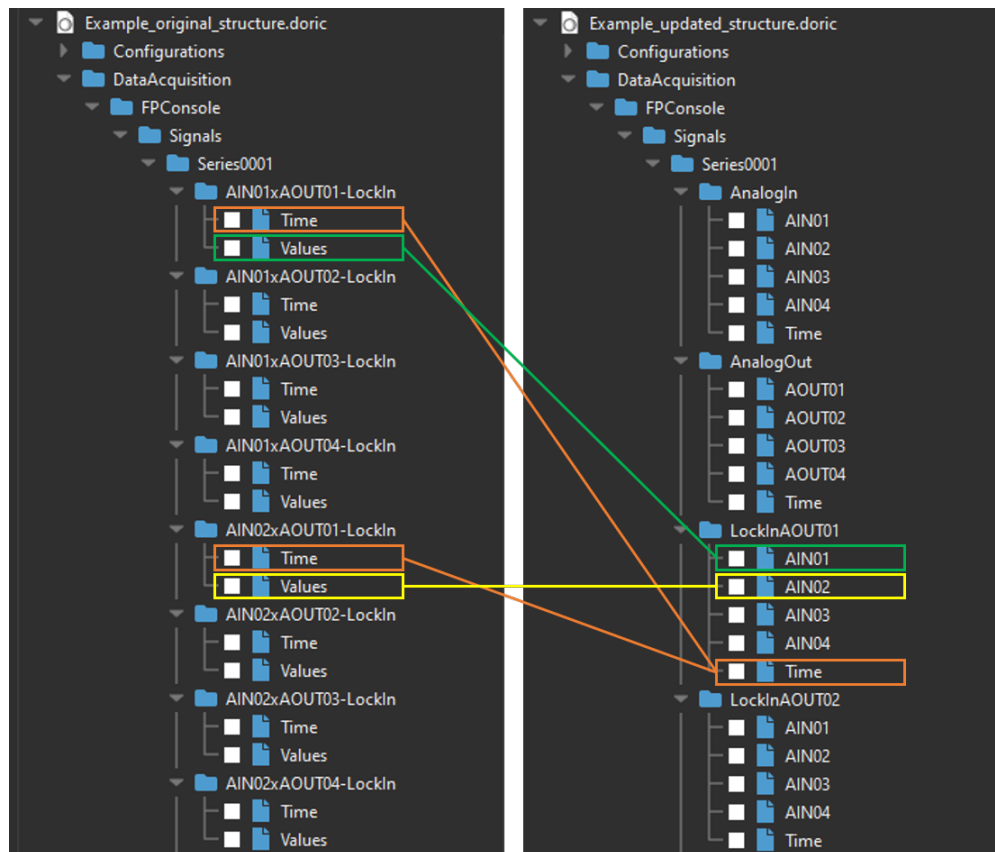


Figure 2.1: Photometry data format (Lock-In mode): original format in DNS v6.0.x to 6.2.x (left) and updated format since DNS v6.3.x (right)