
Contents

1	Global Variables in Patchmaster	1
1.1	Introduction	1
1.2	PGF Parameters	1
1.3	Values	2

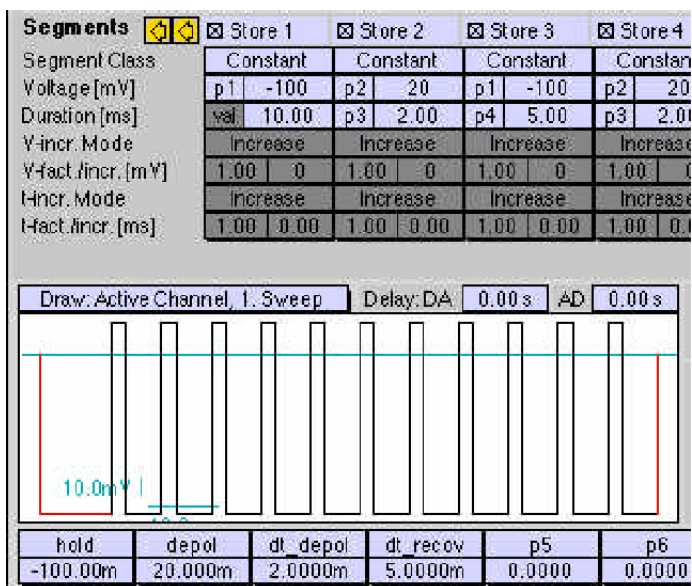
1. Global Variables in Patchmaster

1.1 Introduction

There are two types of global variables in PATCHMASTER that are accessible by the user – **PGF Parameters** and **Values**. We will shortly outline how these parameters can be used, which features they enable, and how they can facilitate various tasks.

1.2 PGF Parameters

These Parameters p1..p10 are stored in a pgf pool file. They can be edited in the **Pulse Generator** or can be set via the **Protocol Editor**. These parameters are used to facilitate input for Durations of Voltages in Segments of the pulse protocol. E.g., if a pulse protocol consists of a train of pulses to the same voltage, this voltage could be specified via a parameter. Editing of this parameter will then be of effect for many segments without extra editing of segments. In the **Pulse Generator** the names for the parameters can be specified in order to remember what they are supposed to be used for.



The example below shows how a train of pulses can be specified with parameters. Note that parameters to be used in the **Pulse Generator** have to be given in SI units, i.e. in volts and s (not mV and ms).

1.3 Values

Values (0-15) are used for calculations in the **Protocol Editor** and in the **Online Analysis**. In addition, they are used to exchange information between these two program modules. By setting values in the **Online Analysis** and by reading values in the **Protocol Editor** (in a conditional event **IF ... THEN**), the protocol can respond to an analysis result. In addition, values can be set in the **Protocol Editor**.

Set a value in the **Protocol Editor**:

Set Value Skip Delay

Value-4 =

Set a value in the **Online Analysis** (e.g. store an analysis result for later use in a calculation such as normalization or background subtraction):

Analysis Functions

1 2 3 4

X-, Y-seg. Offset Trace # Notebook

Cursor Bounds (%) Fit

Analysis Functions

1 2 3 4

X-, Y-seg. Offset Trace # Notebook

Cursor Bounds (%)

Read a value in the **Online Analysis** (e.g. to read a previously stored analysis result and use it for another calculation):

IF ... THEN Skip Delay

Source	Channel	Op.	Value
<input type="text" value="Value"/>	<input type="text" value="Value-0"/>	<input type="text" value="<"/>	<input type="text" value="1.5000"/>

Read a value in a conditional event of the **Protocol Editor** (e.g. read a previously stored analysis result and compare it to a specified value (here 1.5) to make a decision in an experiment such as "Break" or "Continue with execution of a specified Pulse protocol".):