

IOP 017C.1
Effective Date: 1/179/2020
Replaces IOP 017C.0
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U.S. Fish and Wildlife Service
Marquette Biological Station
3090 Wright Street
Marquette, Michigan 49855
U.S.A.

and

U.S. Fish and Wildlife Service
Ludington Biological Station
5050 Commerce Drive
Ludington, Michigan 49431
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and

Fisheries and Oceans Canada
Sea Lamprey Control Centre
1219 Queen Street East
Sault Ste. Marie, Ontario P6A 2E5
Canada

INSTRUMENT OPERATING PROCEDURE

INSTRUMENT:

Stream Flow Current Meter Sensor

MODEL:

AquaPulse Impulse Counter/Timer

MANUFACTURER:

Rickly Hydrological Co.

PRECAUTIONS:

Unit is water resistant only. Take precautions to avoid excess rain exposure.
If dropped in water, open back cover and dry with a hair dryer as soon as possible.

POTENTIAL INTERFERENCES

Dirty or corroded phone plug on gauging rod. Clean with steel wool.
If battery is low, the decimal point in the time display will turn off. Open battery compartment on back of computer and replace 9-volt alkaline battery.
If display locks up, disconnect and reconnect battery and resume operation.

SAFETY

No special safety concerns

PROCEDURES:

1. Connect the AquaPulse to the top of the wading rod.
2. Press the **ON/SELECT** button to turn unit on.
3. Press the **ON/SELECT** button to cycle through time intervals until you get to either 100 or 200 seconds.
4. Place current meter at desired location in the stream and press “**Count/Stop**” to begin the counting process. The unit will begin counting after the first impulse and the time and revolutions will be displayed.
5. After at least 40 seconds has elapsed and the number of revolutions reaches one of the numbers on the standard rating table (3, 7, 10, 15, 20, etc.), press the **Count/Stop** button. The revolution will be displayed in the **Count** window and the time will be displayed in the **Time** window. Record the revolutions and time (rounded to the nearest second) on a discharge measurement form.
6. Use the USGS Standard Rating Table 2 to find the velocity. Record velocity on a discharge measurement form.
7. Go back to step 3 for next measurement.

MAINTENANCE:

Replace battery when needed.
Wipe with dry soft cloth before storing.

REFERENCES:

Rickly Hydrological Co. AquaPulse Impulse Counter/Timer Instruction Manual.

This procedure has been reviewed and approved by the undersigned representative of the U.S. Fish and Wildlife Service.

REVIEWED/APPROVED _____ DATE _____
Field Supervisor (U.S.)