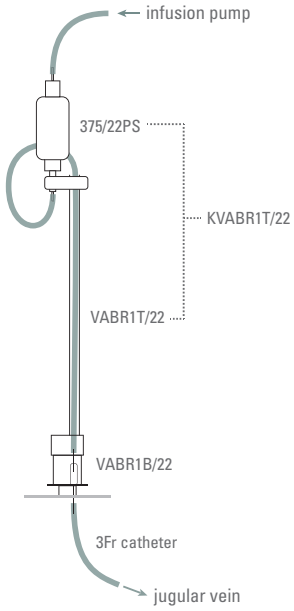
RAT INFUSION

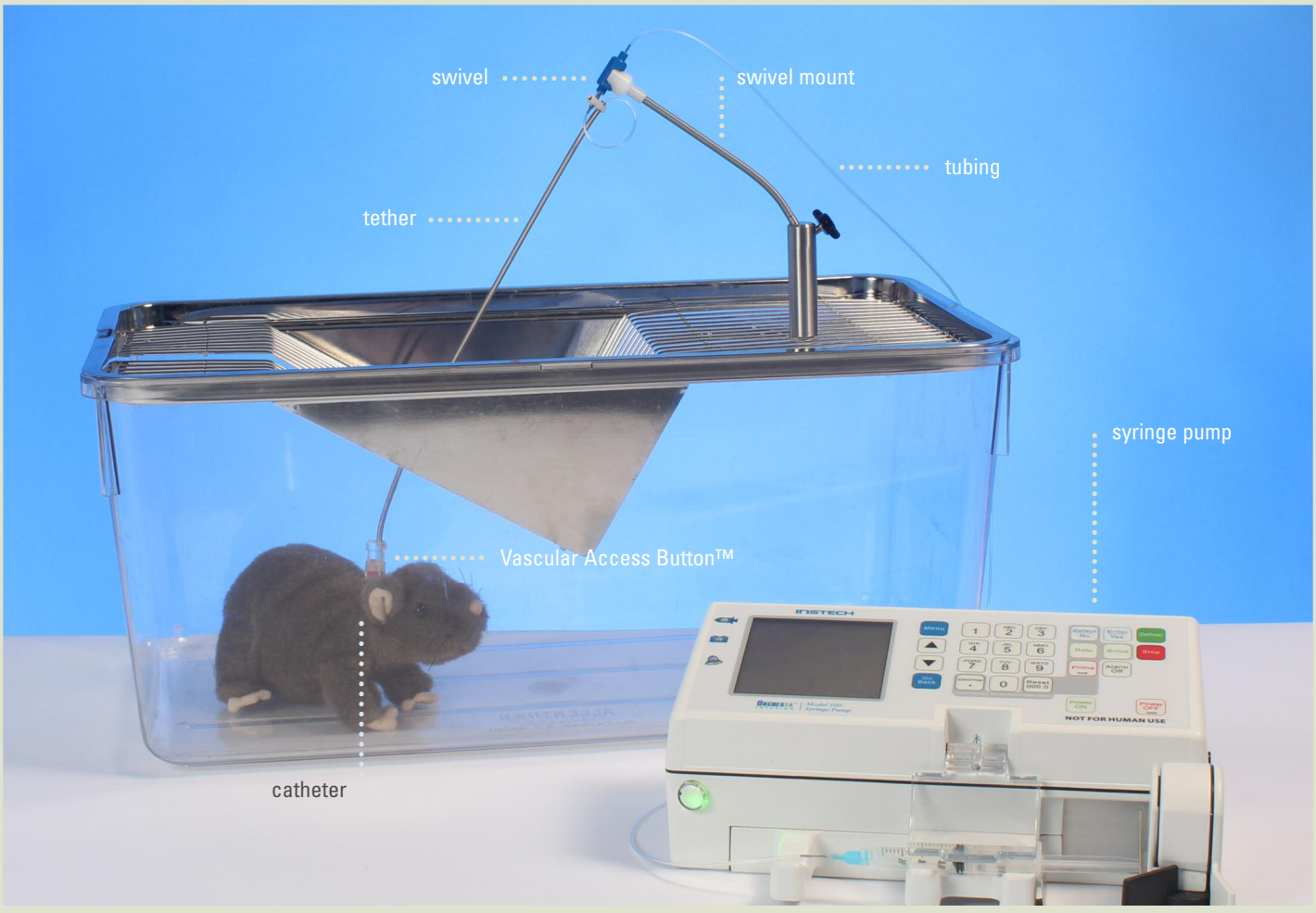
Continuous intravenous infusion of rats is the most common application of Instech's equipment. A basic system includes a catheter, exteriorization device, tether, swivel, swivel-to-cage mount and infusion pump.

You have several options with a rat system: reusable or disposable components, tethers that attach to a harness worn by the rat or to a button that is surgically implanted, and a range of catheters depending on the vessel or organ you need to access.

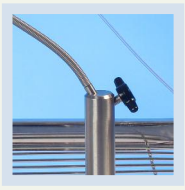
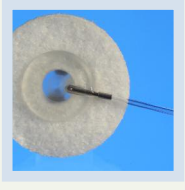
Use a Harvard Apparatus 11 Elite syringe pump for most basic experiments; for GLP studies use the advanced OrchesTA™ model 100 syringe pump.

www.instechlabs.com/Infusion/systems/single.php

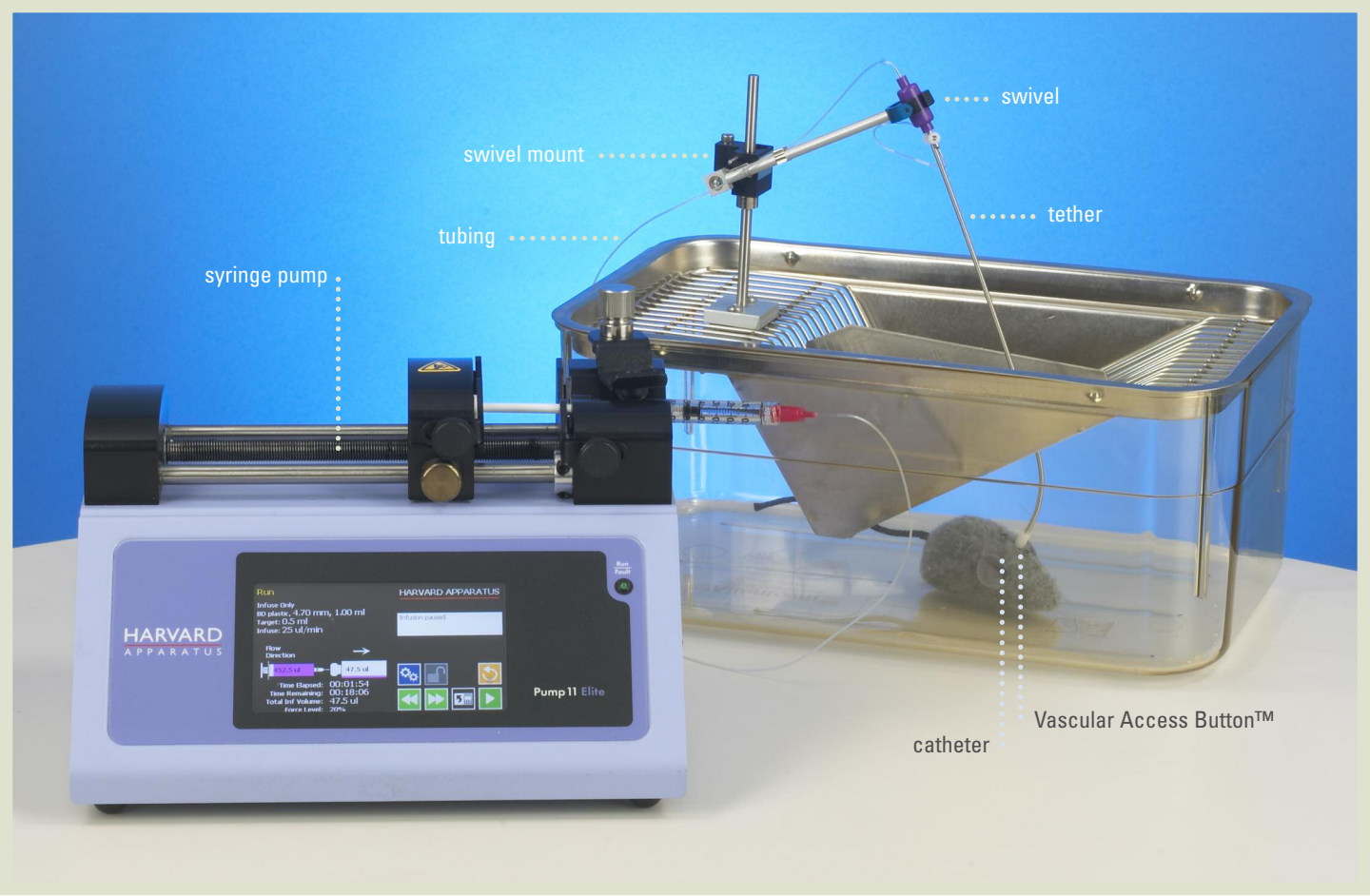




SYSTEM COMPONENTS

	AS SHOWN	ALTERNATIVES
PUMP	 OR-100-0001 (p54) OrchesTA syringe pump	 HA1100 (p56) Harvard Apparatus pump
SWIVEL	 375/22PS (p39) Plastic swivel, 1ch, 22ga	 375/22 (p40) Stainless steel swivel, 1ch, 22ga
SWIVEL MOUNT	 CM375KRP (p45) Spring balanced mount	 CM375BS (p45) Counter-balanced mount
TETHER	 VABR1T/22 (p28) Vascular Access Button tether VABR1B/22 Vascular Access Button, 1ch, 22ga	 VAH95T (p31) Vascular Access Harness tether VAH95AB Vascular Access Harness, 1ch
CATHETER (many other options available)	 C30PU-RJV1303 (p21) Rat JVC, 3Fr	 C30PU-RFV1308 (p21) Rat FVC, 3Fr

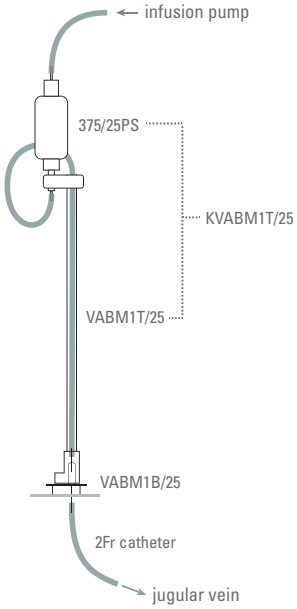
MOUSE INFUSION



Choose your equipment carefully when setting up continuous mouse infusion studies. A typical mouse can turn a swivel with no more than 0.025oz-in of frictional torque. Instech has three models that meet this specification: a 25ga stainless steel model, a 25ga plastic model, and the 375/D/22LT dual channel model. Always use a spring counter-balanced lever arm to remove the weight of the tether from the mouse.

Instech's mouse catheters are designed for mouse anatomy on one end and, on the other, to connect to a Vascular Access Button™ for reliable exteriorization and simple connection to a tether, swivel and syringe pump.

www.instechlabs.com/Infusion/systems/singlemice.php



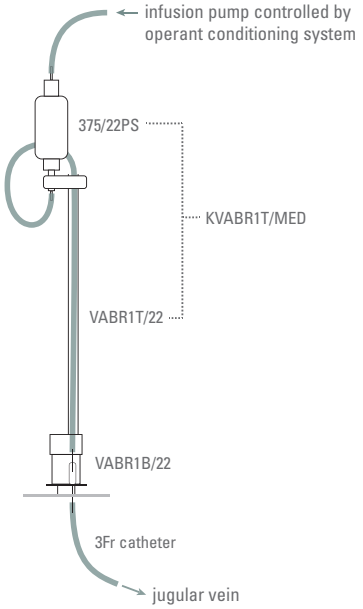
SYSTEM COMPONENTS

	AS SHOWN	ALTERNATIVES
PUMP		
	HA1100 (p56) Harvard Apparatus pump	OR-100-0001 (p54) OrchesTA syringe pump
SWIVEL		
	375/25PS (p39) Plastic swivel, 1ch, 25ga	375/25 (p40) Stainless steel swivel, 1ch, 25ga
SWIVEL MOUNT		
	SMCLA (p46) Counter-balanced lever arm	
TETHER		
	VABM1T/25 (p33) Vascular Access Button tether VABM1B/25 Vascular Access Button, 1ch, 25ga	VABM1T/25 (p33) Vascular Access Button tether VABM1B/22 Vascular Access Button, 1ch, 22ga
CATHETER (many other options available)		
	C20PU-MJV1617 (p23) Mouse JVC, 2Fr	C10PU-MFV1301 (p23) Mouse FVC, 1-3Fr

IV SELF ADMINISTRATION

Rat

Operant chambers shown are courtesy of Med Associates, Inc.



Instech swivels, tethers and balance arms are used with operant behavior systems for IV self administration studies. A lever press or nose poke will trigger an IV dose from a syringe pump.

Instech's Vascular Access Buttons were originally developed for self-administration studies because of long-term patency and the simplicity of moving animals into and out of the operant chamber.

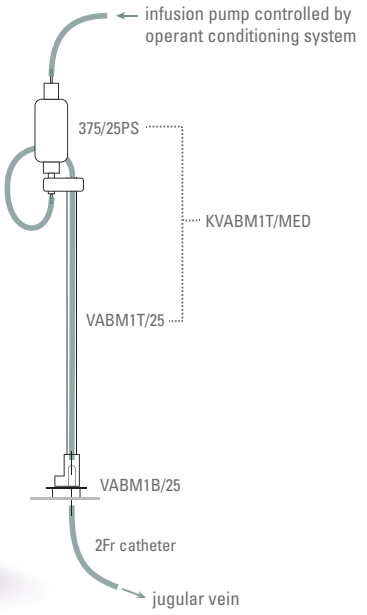
www.instechlabs.com/Infusion/systems/selfadministration-rat.php

www.instechlabs.com/Infusion/systems/selfadministration-mouse.php

Connection Options for IV Self Administration

	RAT	MOUSE
BUTTON	 VABR1B/22 - quick connecting - closed system - group housing possible	 VABM1B/25 - quick connecting - closed system - group housing possible
HARNESS	 VAH95AB - quick connecting - closed system	

Mouse



IV SELF-ADMINISTRATION SYSTEMS

		COMPATIBLE INSTECH EQUIPMENT	
MANUFACTURER	OPERANT CHAMBER*	MOUNT (p46)	SWIVEL & TETHER (p27, 39)
Med Associates, Inc. St. Albans VT, USA www.med-associates.com	MED-008-CT-B1 Basic rat self administration test package	MCLA/MED	KVABR1T/MED, VABR1B/22
	MED-307A-CT-B1 Basic mouse self administration test package	SMCLA/MED	KVABM1T/MED, VABM1B/25
TSE Systems GmbH Bad Homburg, Germany www.tse-systems.com	PhenoMaster Behavior Operant behavior home cage monitoring system - for rats - for mice	 CM375BS SMCLA	 375/22, VABR1T/22, VABR1B/22 375/25, VABM1B/25, VABM1T/25
Coulbourn Instruments Whitehall PA, USA www.coulbourn.com	Habitest Modular Test Cages - for rats - for mice	 MCLA/COUL SMCLA/COUL	 KVABR1T/MED, VABR1B/22 KVABM1T/MED, VABM1B/25
Panlab, S.L. Barcelona, Spain www.panlab.com	Modular Self Administration Boxes		

* Operant chamber system information provided for reference only. Order directly from the manufacturer.