1. Save and Exit from the Previous Study

IPRECI	O Management S	oftware IM	5-300	itor(N) Customizai	7) Registrat	ion/P) Lo	naugao(i.) Holp(H)	
lr se	ifusior tting	n Prc	otocol				Inguage() Help(g)	
	Study Name Fet	3	Study ID	Feb3	Study Start	StartAll	Study Stop	bortAll
	Group1	Group2	Group3	Group4	Group 5	Group 6		
	Animal ID	Weight [9]	Pump ID	Administration Sta Time	rt Start 1	Abort	Status	
	4X0297	25	4X0297	2015/02/03 14:00	Start	Abort	Programming	
	<pre> sack</pre>						4	Complete



It will be impossible to re-program the pumps until then.

3. Option of Erasing the Pump Data

Host IP : 192.168	3.1.10 Disconnec
PumpID	CalibrationFactor
4X0306	1123
4X0298	1139
4X0297	1090
4X0304	1082
4X0303	1123
	Delete Delete Al





490031 STATE_ACTIVATED 400301 STATE_ACTIVATED 400300 STATE_ACTIVATED 400299 STATE_ACTIVATED 400298 STATE_ACTIVATED 400297 STATE_ACTIVATED 400306 STATE_ACTIVATED 400306 STATE_ACTIVATED 400305 STATE_ACTIVATED 400306 STATE_ACTIVATED 400305 STATE_ERROR 400302 STATE_ERROR 400302 STATE_ACTIVATED	Pump ID	Condition
4X0301 STATE_ACTIVATED 4X0300 STATE_ACTIVATED 4X0299 STATE_ACTIVATED 4X0299 STATE_ACTIVATED 4X0306 STATE_LUSED 4X0306 STATE_LUSED 4X0306 STATE_LUSED 4X0306 STATE_LUSED 4X0305 STATE_LUSED 4X0303 STATE_LERROR 4X0302 STATE_ACTIVATED	490031	STATE_ACTIVATED
4X0300 STATE_ACTIVATED 4X0299 STATE_ACTIVATED 4X0298 STATE_ACTIVATED 4X0297 STATE_USED 4X0306 STATE_LOTIVATED 4X0305 STATE_USED 4X0304 STATE_USED 4X0305 STATE_ERROR 4X0302 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0301	STATE_ACTIVATED
4X0299 STATE_ACTIVATED 4X0298 STATE_ACTIVATED 4X0297 STATE_USED 4X0306 STATE_ACTIVATED 4X0305 STATE_USED 4X0304 STATE_USED 4X0305 STATE_ERROR 4X0302 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0300	STATE_ACTIVATED
4X0298 STATE_ACTIVATED 4X0297 STATE_ACTIVATED 4X0306 STATE_ACTIVATED 4X0304 STATE_ACTIVATED 4X0305 STATE_ERROR 4X0303 STATE_ERROR 4X0302 STATE_ERROR 4X0302 STATE_CON	4X0299	STATE_ACTIVATED
STATE_USED 4X0306 STATE_ACTIVATED 4X0304 STATE_USED 4X0305 STATE_ERROR 4X0303 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0298	STATE_ACTIVATED
4X0306 STATE_ACTIVATED 4X0304 STATE_USED 4X0305 STATE_ERROR 4X0303 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0297	STATE_USED
4X0304 STATE_USED 4X0305 STATE_ERROR 4X0303 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0306	STATE_ACTIVATED
STATE_ERROR 4X0303 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0304	STATE_USED
4X0303 STATE_ERROR 4X0302 STATE_ACTIVATED	4X0305	STATE_ERROR
4X0302 STATE_ACTIVATED	4X0303	STATE_ERROR
	4X0302	STATE_ACTIVATED

Pg. 47
1 Open "Utility Pump Data

Utility Pump Database Manager

abase Manager" and select Load to check the pump status.

Chose State Activated v from the pull down menu and apply only to all pumps you plan to re-use.

Click Save and close the window.



Make sure to close the iPRECIO Application before running this application

4. Start IMS-300 iPRECIO Application to start a new study by re-programming pumps



Start a new study new study.

Support Materials of iPRECIO®

User's Manual Pg.48

Utility Pump BaseStation Manager

It is not necessary to erase the pump data in the UCD-300 to re-program the pumps. If erased, it will mean the pumps will need to be re-detected to be programmed/used.

1 Erasing the Pump Data in UCD-300: Open "Utility Pump BaseStation Manager" and select/click Connect and Get Pump List .

Click Delete All and wait until process completed. Then close the program.

The pump data not erased, communication with the pump will be Carried out at the KVO step and/or Infusion Protocol Setting.



You can request for our support materials

http://www.iprecio.com/support/

of your interest from

Compatibility test

Compatible solvents/vehicles for iPRECIO®

Frequently Asked Questions <FAQ>

-This FAQ incorporates the most frequent question and answers for iPRECIO[®] pumps.

Technical / Surgical Note



Bibliography New publications

Videos



http://www.iprecio.com/video/smp300/



You will have to manually calculate remaining battery life for this

When intending to reprogram pumps, recommended to estimate battery life of both studies in one <Group ID/Profile> if possible.

Make sure that the battery is shorter than in the group profile window. Remaining battery life here is calculated as new.

The iPRECIO[®] is for use in Laboratory Animal Research ONLY. Not for human use.



1-3-25, Koishikawa, Bunkyo-ku, Tokyo, 112-0002 JAPAN CORPORATION Phone: +81-3-3816-0851 Fax: +81-3-3814-508

Windows Update:

Change settings to download updates but let me choose whether to install them.

SMP/IMS-300 Model



Micro infusion pump **ipre**io[®]



r computer,	
_	
rators	
Properties	
sword	
Apply	

PC settings:

- Please TURN OFF the screen saver.
- Go to control panel and change the Power option as "Never Sleep Mode'
- Please set the user account as Administrators" (see picture left)

Study Header : Start a New Study

Pumps and Animals setting : Animal Setting, Pump Assignment

(Pump Activation/ Detection)



This guide does not replace reviewing the iPRECIO® User Manual thoroughly. It assumes prior knowledge of iPRECIO[®] use. Some minor steps may have been omitted due to space constraints. If in doubt, refer to the manual,

								Jser's Ma Pg. 24	anual
) iPRECI	O Management So	ftware IMS-300						• ×	
File(E)	InfusionProfile()	NetworkSetting(W)	Monitor(M)	Customize(Z)	Registratio	n(R) Language(L) Hel	Ip(H)		
C	iPR	E©IO				Managemer	nt Softw IMS-3	are 300	
			Stu	dy Heade	r				
	Study Information								
	Study Name (*			Stu	idy ID (*)				
	User (*)		-	Sh	idy Date (*)	2014/10/22 17:59			
	Remark								
							Next >>		
								.::	

Study Information:

Required Fields: ———	Examples:
Study Name	Example February 7th
Study ID	February 7th
Select the User	John Smith (Select your name

Register at least one operator and customize fields with animals, strains, etc., prior to starting a new study. Refer to manual as required.

After completing all the fields, Next>>



Pumps can only be detected and programmed after being turned on.

After filling the pumps to the catheter distal ends, activate pumps, by pushing down the black button with a blunt pointed tool like a pair of forceps. *Firmly hold pump down with finger(s) and press down firmly to Power ON.

Take care not to damage silicon coating. Make sure to "Activate" all pumps. *Detect pumps before inputting the animal info. *Once pumps detected, assign to animal ID.

	Name Feh3	Study I	Eeb3									
otady	vanie 1 eus	Olduyin										
Anima	Is Number of	Animals 8	Set	Age	Unit	week(s)	•					
Copy	Paste Del	ete Dete	ect									
Anima (*)	IID Weight[g] (*)	Pump ID 🔺	Cal. Factor	Sex		Age	Animal Species		Animal	Strain	Admir Route	histration
4X0297	25	4X0297	1090	Male	-	8	mouse	-	b6	-	ip	-
4X0298	25	4X0298	1139	Male	¥	8	mouse		b6		ip	-
4X0299	25	4X0299	1147	Male	-	8	mouse	-	b6	-	ip	-
4X0302	25	4X0302	1131	Male	-	8	mouse	-	b6	-	lp	-
4X0303	25	4X0303	1123	Male	٣	8	mouse		b6	-	ip	-
4X0304	25	4X0304	1082	Male	-	8	mouse	-	b6	-	ip	-
4X0305	25	4X0305	1180	Male	v	8	mouse	•	b6		ip	-
	25	4X0306	1123	Male		8	mouse		b6		lin	

Required Fields: ——	Examples:	
Number of Animals	8	
Detect	Click "Detect	" button assign pump
Animal ID	4X0302	
Weight	25 g	
Age	8 weeks	
Sex	Male	
Species	Mouse	
Strain	B6	
Administration Route	i.p.	

Use copy and paste as required to fill fields like weight, age, After completing all the fields, Next>> . If <<Back to previous menu, pumps will need to be detected again.

٦	User's Manual	
1	Pg. 24-27	

O IPRECIO Management Sc	ftware DHS-300	a	
KVO setting	NetworkSytting()) Monton()) Customize() Regist	nimi Linguije() Heb(j)	
KVO Setting	Animal ID : 🔯	KVO Skip	
Film Cale (Jahr) Animal Last Ammal Las	back Maree Inter Maree Cold-Take (C-3.55 mr.) Cold-ter inter Counter and Lingh Cold-ter inter Counter and Lingh Cold-ter Counter And Cold-ter Cold-ter Take Cold-ter Cold-ter Take Cold-ter	Cashidi U 00 M 00 M 00 SA 00 Freq Conset Long	
<< Back	Comms Avait	usion Protocol >> Next >>	Make sure to check "Ena box in Dead Volume Setti
Req	uired Fields: –	Examples	3:

User's Manual Pg.**28-30/**Pg.**34-37**

KVO Flow Rate	1 uL/hr(s)	
KVO Duration	72 hrs	
Dead Volume Settings (Fill in the catheter diameter and le	Diameter 0.55mm	Length 25mn
Flushing-rate for Dead V	/olume 10 uL/h	·

► Flushing Duration is automatically calculated

After completing all the fields, Start KVO

To confirm when KVO starts correctly, check the information and the color of the Pump Status Column.

No color Standby

Red Color Application software is ready to send the schedule to UCD-300. low color UCD-300 has been received the schedule from application software. Green color Pumps have received KVO schedule and programming completed. KVO will start within 1-2 min.

Same process and color coding for Administrating (and Flushing)



1) KVO programming started with some pumps started and some in process 2) All pumps KVO step programmed

3 KVO step Finished/Completed and ready for programming

onopo.	
Step7:	
Step8:	
Step9:	
Step10;	
Step11:	
Step12:	
Step13:	
Step14:	
Step15:	
6 Comms Ava	i
<u></u>	
Infusio	ľ
O IPRECIO Management :	x
File(E) InfusionProfile(1
Infusior	
setting	
- Study Informat	0
Study Name F6	ò

Group In	dormation
Group I	D Gree
Weight	Range (g)
Clear	84
Animal ID	Weight
400297	25
400256	25
400259	25
400302	25
400303	25
400304	25
400305	25
400306	25

Re Adı Set



Group Profile:

Concentration 1 Concentration 1 Step1: 1 Step2: 0 Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	1.0 ↓ usion Amou 10.0 ↓ 0.0 ↓ 7.0 ↓ 0.0 ↓ 5.0 ↓	t Duratio	yn Rei Rei Rei Rei Rei Rei Rei Rei Rei Rei	Repeat Sett	0.0 ing Times 15 0 0 0 0 0 0 0 0 0 0	∼ 25.0 ♥	Dose Range Start Time 00:00:00	~
infu Step1: 1 Step2: 0 Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	usion Amou 10.0 € 0.0 € 7.0 € 0.0 € 5.0 €	nt Duratio 1.0 4.0 1.0 4.0 1.0 1.0	on v v	Repeat Sett	ting Times 15 -	Repeat End	Start Time 00:00:00	End Time
intu Step1: 1 Step2: 0 Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	Usion Amou 10.0 + 0.0 + 7.0 + 0.0 + 5.0 + 10.0 +	1.0 1.0 1.0 1.0 1.0 4.0 1.0	n × ×	Repeat Start	Times 15 -	Repeat End	Start Time 00:00:00	End Time
Step1: 1 Step2: 0 Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	10.0 x 0.0 x 7.0 x 0.0 x 5.0 x 10.0 x 10	1.0 4.0 1.0 4.0			15 ♥ 0 ↓ 0 ↓		00:00:00	
Step2: 0 Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	0.0 × 7.0 × 0.0 × 5.0 ×	4.0 1.0 4.0	*		0 *			
Step3: 7 Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	7.0 🔹 0.0 📚	1.0 4.0 1.0	\$ \$		0			
Step4: 0 Step5: 5 Step6: 0 Step7: 1 Step8: 0	0.0 🜩	4.0	\$					
Step5: 5 Step6: 0 Step7: 1 Step8: 0	5.0 🖨	1.0			0			
Step6: 0 Step7: 1 Step8: 0	Let 1		\$		0			
Step7: 1 Step8: 0	0.0	13.0	-		0	V		15.00:00:00
Step8; 0	10.0 😂	1.0	-		0 🚔		15.00:00:00	15.01:00:00
	0.0 😂	0.0	-		0 🖨		15.01:00:00	15.01:00:00
Step9: 0	0.0	0.0	×		0			
Step10: 0	0.0	0.0	×		0			
Step11: 0	0.0 🗘	0.0	*		0 ÷			
Step12: 0	0.0	0.0	*		0			
Step13: 0	0.0	0.0	×		0 *			
Step14: 0	0.0	0.0	×		0			
Step15: 0	0.0 🗘	0.0	*		0			

n Protocol setting:

NetworkSetting()) Verifor()) Customize() Registration(3) Language() Help()	
A STATE OF A	
Protocol	
Study ID Fe03 Number of Groups 6	
p 5 Compound ID / Name abc Concentration 1 signif	
20 ~ 25 Dose Range 0.005 ~ 0.4 [up/kght]	
Group 5 - 2015/02/03 14:00 (* Stapper 0 17 jmin)	
[6] Pump ID Group ID Flow Rate Total Dead Volume [u] Plushing Start Time Administration Start Time	
4X0297 Group1 10.0 10.752 2015/02/03 12:55 2015/02/03 14:00	
4K0298 Group1 10.0 10.752 2015/02/03 12:55 2015/02/03 14:00	
4x0299 Group2 10.0 9.564 2015/02/03 13:02 2015/02/03 14:00	Enours that sufficient times for
400302 Group3 10.0 9.564 201502/03 13:02 2015/02/03 14:00	Ensure that sufficient time for
4K0303 Group4 10.0 8.376 2015/02/03 13:09 2015/02/03 14:00	
4K0304 Group4 10.0 8.376 2015/02/03 13:09 2015/02/03 14:00	the flushing step to be completed
4x0305 Group 5 10.0 7.188 2015/02/03 13:15 2015/02/03 14:00	the maching stop to be completed
460308 01600 5 10.0 7.188 15/02/03 13:18 2015/02/03 14:00	before Administration Start time

quired Fields: ———	Examples:
ministration Start Time	2015/02/05 14:00
Assign Group ID to each animals.	Group 1

Set/Assign Group ID/Group Profile:

- Infusion Profile and Administration Start Time.
- ▶ Based on Flushing rate and Duration from Dead Volume Setting, Flushing Start Time is Calculated
- Make sure that there is sufficient time for pumps to be programmed and
- that the **Flushing Start Time** calculated is not in the past.

Once all pumps have been assigned a Group ID and Starts time, select/click Next>>

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	🙃 lr	nfusion Amount	Duration
- Examples:	Step1:	10.0 🚖	1.0 🜩
Group B	Step2:	0.0	4.0
	Step3:	7.0 ≑	1.0 ≑
Ang II	Step4:	0.0	4.0
1.0 ug/ml	Step5:	5.0 🜩	1.0
20.0-25.0g	Step6:	0.0	13.0 🌩
	Step7:	10.0 🚔	1.0 🜩

6 Select unit for Infusion, Time Units and Comms Avail.

6 Program required steps with infusion amount, Duration, No. of Repeats, Repeat Start and End as required

7 Repeat Start Checkbox Step1, Repeat Stop Checkbox Step6, Times 15

Required Fields

Compound ID

8 Concentration

4 Weight Range

🚺 Group ID

Repeat Setting 🕖 Repeat Start Times 🗹 15 ≑

KVO within Administration Step in Infusion Profile/Gr (completely pre-programmed)



When using the application to calculate the dead volumes, open Dead Volume Setting and input the correct Diameter and Length of catheter. Record the Dead Volumes, Dead volume flushing-rates and Flushing durations. Dead volume flushing-rates and durations required for Group ID/Group Profile programming. They will be used in <Step 3> in Group ID/Infusion Profile

Study Name Fel	3	Study ID	Feb3	Study Start	StartAll	Study Stop AbortAll			Start	StartAll	Study Stop AbortAll
Group1	Group2	Group3	Group4	Group 5	Group 6		, U)		Group 6	
Animal ID	Weight [g]	Pump ID	Administration Start Time	Start	Abort	Status		H		Abort	Status
	25	4X0297	2015/02/03 14:00	Start	Abort	Programming			n	Abort	Administering
400298	25	4X0298	2015/02/03 14:00	Start	Abort	Programmed			rt	Abort	Administerion

1) On Next>> Animals/Pumps are separated into Group ID Tabs. Start All to start programming pumps with protocols.

(2) All Animals/Pumps programmed (Light Green and Green) prior to Flushing Start

Time will start administrating as programmed. Pumps will now start to infuse as programmed. Pumps are ready for implantation when pump status is Green (Administering)



KVO setting	NetworkSettingsgo	Menter(<u>M</u>) C	KVO Starf Button	KVO Abort Button		Infusion Protocol option is
Animal List Animal D b c c d e	Weight (g) 25 25 25 25 25 25	Pump1D 448302 448303 448304 448305 448305	Dead Volume Setting Dead Volume Setting Dead Volume Setting Dead Volume Setting Dead Volume Setting Dead Volume Setting	Abort Button Abort Abort Abort Abort Abort Abort	Pump Status State by State by State by State by State by State by State by	If KVO Skip checkbox selected V , Infusion Protoc is greyed out.

2. Alternatively. Skip KVO by checking the KVO skip box and click Next>>

Calculate the dead volume using the application software or excel file

Group ID G	roup C	Ce	macund I	abc		Intur	den.	uth: 0	Tow Rat	• (6
Concentration	0.1	0	ugimi) +	We	oht Ranze	20.0	÷	~ 25	0 🗐	Dos
1010					Repeat S	etting				
KVO I	rfusion.	Amount	Duration	-	Repeat St	at Tim	8	Repea	End	Stat
Ship1;	0.5	۵.	72.0	2		0	÷			000
Ship2;	0.0	۵.	1.0	9		0	÷			3.01
Shp3:	1.0	\$	1.1	\$	13	0	÷			3.01
Ship-4;	0.0	\$	0.5	\$	13	0	÷			3.03
Step5:	10.0	÷	1.0	÷	2	15	÷			3.03
Step6:	0.0	-	4.0			0		10		
Step7:	7.0	-	1.0			0		1		
Step8:	0.0	÷	4.0			0		1		
Step9:	5.0	÷	1.0	-		0				
Step10;	0.0	÷	13.0	-		0		2		
Step11:	10.0	÷	1.0	\$		0	٥			18.0
Step12:	0.0	+	0.0	\$		0	٥			18.0
Step13:	0.0	+	0.0			0				
Step14:	0.0		0.0			٥				
Step15:	0.0		0.0		•	0				

Required Fields: —

Step1: KVO Flow Rate Step2: Exchange time Step3: Flushing time

For example, Infusion Protocol setting from "4. Infusion Protocol Setting" Step 1: 10 ul 1 hour, Step 2: 0ul 4 hours...

> If Dead Volumes, Flushing-rates and durations are shown in administration step, it will be necessary to uncheck Enable in Dead Volume Setting for those pumps/animals Alternatively, use Infusion Protocol option.



🙆 Dead Volume Setting

Outlet Tube (ID: 0.55 mm)

Total Dead Volume

Flushing Duration

OK

Flushing Rate for Dead Volume

Dead Volume

Inner Volume

Animal ID : c

Volume

which is provided in installation CD. Then input the flushing information into Step3. **Exchange Time:** A stop is usually programmed so that pumps can be filled accurately and this would give most accurate results.

oup	ID	\prod	User's Manual
oup			1 Pg. 36-37

ing				
		6	uL	
	(ID:0.55mm)		uL	
	Inner Diameter	0.55	mm	
	Length	20	mm	
)		10.752	uL	
Dead Volume		10	uL/hr	
		65	min	

Example from Excel File Provided for the Dead Volume Setting calculations

Make calculations as appropriate. If all animals have the same dead volumes and have the same dead volume flushing rate, then only one calculation required. If not, calculate as required.

	- X -
• Time [t	u(s) •
lose Range	~ -
Start Time	End Time
00:00:00	3.00.00.00
3.00:00:00	3.01:00:00
3.01:00:00	3.02.06.00
3.02:06:00	3.02.36.00
3.0236:00	
	18.02:36:00
18.02.36.00	18.03:35:00
18.03.36.00	18.03:36:00
ОК	Cancel

Add the KVO into the group profile: step1-3

	Examples:	
Э	0.5 uL/hr	72 hrs
)	0 uL/hr	1 hr
	1 uL/hr	1.1 hrs

Step4: Drug Administration Infusion Step will start from here.