Installation parameters and settings

#IIP datagram —> install_txt

This is the description of the installation parameters and settings in the #IIP datagram.

Operator System Controller Versions (OSCV)

Operator may provide the information about Operator Controller versions.

Note

The text from Operator controller should not be long, maximum is 500 characters.

Note

The text may contain name and version for controller and operators name or other relevant information.

Description		Note
Operator Controller version	OSCV=	Controller Information
Controller name and version	a–a,	

Multibeam System software versions description

Description	Example	Note
Multi Beam System	EMXV:a–a,	EM 2040 / EM 2040C / EM 2040PM / EM 712 / EM 124 / EM 304
PU id type	PU_0,	PU_0 = Stand alone, PU_1 = Master, PU_2 = Slave
PU serial number	SN=xxxx,	
IP address and subnet mask	157.237.20.40:0xffffff000,	
Command TCPIP port	UDP=1997,	
CPU type	TYPE=a-a,	a-a = CPU descriptor
SW versions for the system	VERSIONS: a-a VERSIONS-END,	a-a = A list all SW version as seen in the SW Upgrade application
Sonar head or transceiver serial numbers	SERIALno: TX:xxxx RX:xxxx, SERIALno-END,	TX / RX for EM 2040 sonar heads

Multi-beam echo sounder system

The EM 2040 configuration for this installation. Examples for system are “Single Tx single Rx”, “Single Rx dual Tx”.

EM 2040

```
SYSTEM:Single Tx single Rx,
```

Installations parameter and settings for transducers.

The distance offset units are meter, positive direction for X (along forwards), Y (starboard across) and Z (vertical downwards). The angle offset are degrees for R (roll), P (pitch) and H (heading). Time offset is in seconds for D (time delay).

Example is default setting for install offset and system settings

```
TRAI_TX1:N=1234;X=0.00;Y=0.00;Z=0.00;R=0.00;P=0.00;H=0.00;S=0.7;
 IPX=0.00000;IPY=-0.05540;IPZ=-0.01200;
 ICX=0.00000;ICY=0.01315,ICZ=-0.00600;
 ISX=0.00000;ISY=0.05540;ISZ=-0.01200,

TRAI_TX2:N=1235;X=0.00;Y=0.00;Z=0.00;R=0.00;P=0.00;H=0.00;S=0.7;
 IPX=0.00000;IPY=-0.05540;IPZ=-0.01200;
 ICX=0.00000;ICY=0.01315,ICZ=-0.00600;
 ISX=0.00000;ISY=0.05540;ISZ=-0.01200,

TRAI_RX1:N=2345;X=0.00;Y=0.00;Z=0.00;R=0.00;P=0.00;H=0.00;G=0.00;
 IX=0.01100;IY=0.00000;IZ=-0.00600,

TRAI_RX2:N=2456;X=0.00;Y=0.00;Z=0.00;R=0.00;P=0.00;H=0.00;G=0.00;
 IX=0.01100;IY=0.00000;IZ=-0.00600,
```

Note

N = serial number or 0 - unknown.

X = forwards, in meter.
Y = attward starboard, in meter.
Z = vertical down, in meter.
R = roll offset, in degrees.
P = pitch offset, in degrees.
H = heading offset, in degrees.
G = gain, in dB.
S = sounder size in degrees, in degrees.
Internal lever arms.
IPX, IPY, IPZ = Array offset for Port side of sonar head in meter.
ICX, ICY, ICZ = Array offset for Centre of sonar head in meter.
ISX, ISY, ISZ = Array offset for Starboard side of sonar in meter.
IX, IY, IX = Array offset for sonar head in meter.
ITX, ITY, ITZ = TX Array offset for sonar head in meter.
IRX, IRY, IRZ = RX Array offset for sonar head in meter.

TRAI_n:H around 0.00, sounder mounted heading forward,
TRAI_n:H around 180.00, sounder mounted heading backwards.

Installations parameter and settings for position.

```
POSI_1:X=0.00;Y=0.00;Z=0.00;D=0.00;G=WGS84:T=PU;C=On;
F=GGA;Q=Off;I=Serial port 1;U=ACTIVE,

POSI_2:X=0.00;Y=0.00;Z=0.00;D=0.00;G=WGS84:T=PU;C=Off;
F=GGK-3-12-13-14-15-16-17;Q=On;I=NO;U=PASSIVE,

POSI_3:U=NOT_SET,
```

Note

X = forwards, in meter.
Y = athwart starboard, in meter.
Z = vertical down, in meter.
D = time delay, in sec.
G = datum
T = time stamp from PU / POS
C = compensation for motion On / Off.
F = data format, with quality settings from operator (optional).
Q = Quality check On / Off.(Will be off when operator has set quality settings).
I = input source
U = ACTIVE / PASSIVE / NOT_SET

Installation parameters and settings for Motion sensor

```
ATTI_1:X=0.00;Y=0.00;Z=0.00;R=0.00;P=0.00;H=0.00;D=0.00;M=RP;F=EMA;
I=Serial port 2;U=ACTIVE,
```

```
ATTI_2:NOT_SET,
```

Note

X = forwards, in meter.
Y = athwart starboard, in meter.
Z = vertical down, in meter.
R = roll offset, in degrees.
P = pitch offset, in degrees.
H = heading offset, in degrees.
D = time delay, in sec.
M = motion ref.plan RP / HO
F = data format
I = input source
U = use ACTIVE / PASSIVE / NOT_SET

Installation parameters and settings for Clock sensor and PU time synchronisation.

```
CLCK:F=ZDA;S=POS;A=OFF;I=NO;Q=OK,
```

Note

F = data format
S = synchronisation source for internal clock(1)
A = 1PPS setting: ON_RISE / ON_FALL / OFF
I = Clock input source (2)
Q = OK / NO_SYNC if internal clock has been synchronised or not

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Installations parameter and settings for depth/pressure.

```
DPHI:X=0.00;Y=0.00;Z=0.00;D=0.00;O=0.00;S=0.00;A=OFF;F=SIG;I=COM_3;U=PASSIVE,
```

Note

X = forwards, in meter.
Y = athwart starboard, in meter.
Z = vertical down, in meter.
D = time delay, in sec.
O = offset, in meter.
S = scale, .
A = added heave ON / OFF
F = data format
I = Input source
U = use ACTIVE / PASSIVE / NOT_SET

Installation parameters and settings for System

```
EMXI:SSNL=NORMAL;SWLZ=0.00,
```

Note

SSNL = ships noise level, NORMAL / HIGH / VERY HIGH
SWLZ = water line vertical location, in meter.