f Make sure that relevant hydroacoustic systems connected to the EK80 are synchronized.

2 Test the synchronization when EK80 operates in *Slave* mode.

a Make sure that the synchronization system is connected.

b On the **Setup** menu, select **Installation**.

c Select **Synchronization**.

d Record the communication parameters in the result table.

e Select synchronization mode.

f Select the synchronization delay.

g Make sure that the EK80 operates normally when triggered by the remote synchronization system.

Result

Sensor	Source system	Port
Synchronization	Arg C 5V	Com5

Requirements	Results
The external synchronization system is connected to provide trigger pulses (if relevant).	ok
The EK80 operates in *Slave* mode.	ok
The EK80 operates in *Master* mode.	ok
Relevant communication parameters are recorded.	ok
Date and signature:	7/10/2014

Related topics

Customer acceptance form, page 49
Secondary procedures, page 50

8 If possible, use another instrument to verify that the information provided by the EK80 is correct.

9 Fill in the result tables.

Result

Port	Baud rate	Protocol
com 2	19200	NMEA

X Offset	Y Offset	Z Offset
9.538	0.660	0,231

Rotation Around X	Rotation Around Y	Rotation Around Z
-179.6878	0.0456	-0,2378

Requirements	Results
Motion compensation is operational.	ok
The compensated values are shown.	ok
Date and signature:	[signature] 7/10/2021

Related topics

Customer acceptance form, page 49
Secondary procedures, page 50

Verifying the communication with a synchronization system

Whenever more than one hydroacoustic system is installed on a vessel, interference may occur. The EK80 offers functionality for remote transmit synchronization. It can be set up to operate in either *Master* or *Slave* mode. Synchronization is required in order to avoid interference if the EK80 is used simultaneously with other hydroacoustic instruments within the same frequency range. You do not need to do this test if the EK80 shall only operate in *Standalone* mode.

Prerequisites

The EK80 is installed as specified in the EK80 *Installation manual*. To make sure that the the interface is functional, a relevant synchronization system must be connected to the EK80.

- The EK80 system is turned on and operates normally.
- For "slave" operation, a remote system (for example *K-Sync* or *Simrad TU40*) must be available to provide trigger pulses.
- For "master" operation, a remote hydroacoustic system (sonar, echo sounder) is connected. This remote system must be set up in "slave" mode.
- The vessel is berthed.

Neither tools nor instruments are required.

Context

Whenever more than one hydroacoustic system is installed on a vessel, interference may occur. To avoid interference, you have these options:

- The systems are all connected to a common synchronization system.
- One of the acoustic systems is set up as "master", and controls the transmissions on the other systems.

Procedure

1 Test the synchronization when EK80 operates in *Master* mode.

   a On the **Setup** menu, select **Installation**.

   b Select **Synchronization**.

   c Record the communication parameters in the result table.

   d Select synchronization mode.

   e Select the synchronization delay.

Customer acceptance form

Fill in and sign this form for formal acceptance of the Simrad EK80 system.

The Simrad EK80 system is (*tick relevant column*):		
Accepted	**Accepted with comments**	**Not accepted**

Vessel/Customer	R/V Atlantis
Place and date	DAKOTA CREEK, Anacortes, WA 7/10/2021
Comments	

Test done by (name)	**Company/Position**	**Date and signature**
Adam Hughes-Hooton	Kongsberg / Field Eng.	7/10/2021

Test accepted by (name)	**Company/Position**	**Date and signature**
ALLISON HEATER	WHOI / SSSG	7/10/21

When this test procedure has been completed with all relevant signatures and applicable forms filled in, the document must be sent to the Simrad Support Department at Strandpromenaden 50, P.O.Box 111, 3191 Horten, Norway. Alternatively, scan all the pages to PDF using minimum 200 DPI resolution, and send the file to simrad.support@simrad.com.