



Introducing QuickSyn Interface Accessories

Three separate interface accessories are available for QuickSyn Synthesizers. These accessories are available as kits. All three utilize the QuickSyn Synthesizer's SPI connector. The MFSW-ACC07 kit enables an RS232 connection; the MFSW-ACC08 kit enables the use of an Ethernet connection; and the MFSW-ACC09 kit allows GPIB control.

In This Document . . .

This document describes the contents of accessory kits MFSW-ACC07, MFSW-ACC08, and MFSW-ACC09 and provides steps for connecting the kit components to the QuickSyn Synthesizer. In addition, software parameter settings are also discussed for each kit.

MFSW-ACC07 RS232 Cable Kit
MFSW-ACC08 Ethernet Adapter Kit
MFSW-ACC09 GPIB Adapter Kit

MFSW-ACC07 RS232 Cable Kit

The MFSW-ACC07 RS232 Cable Kit allows you to connect a QuickSyn Synthesizer to an RS232 serial port on a PC or other equipment with a standard RS232 serial port. The cable has a 9-pin D-SUB receptacle connector that can be plugged directly into the RS232 serial port on your control device without having to use a null-modem connector. The cable also includes DC bias connections for the synthesizer with convenient banana plugs to connect to your power supply.

Unpack Hardware

Unpack contents and verify that everything is included:

- Cable assembly, RS232
- *QuickSyn Special Interface Guide* (this document)

MFSW-ACC07 Connection Instructions

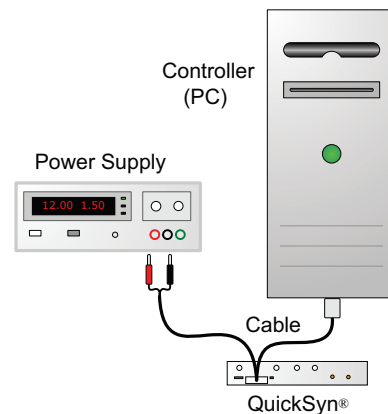


Figure 1 RS232 cable assembly connection configuration

1. With the PC already turned on, connect the 9-pin D-SUB connector to your PC's RS232 port.

2. Ensure that the power supply is turned off before connecting to it, then verify voltage of power supply is set between +12 V and +12.5 V. Connect red and black banana plugs to corresponding connectors on the power supply.

WARNING

Voltages less than +12 V at the synthesizer connector may result in malfunction, and voltages in excess of +15 V may damage the synthesizer.

3. Connect the SPI connector to the QuickSyn Synthesizer, and turn on the power supply.
4. Start the QuickSyn Soft Front Panel software.

NOTE

QuickSyn Soft Front Panel software below version 1.0.21 will not support QuickSyn interface accessories.

A Locate QuickSyn Device dialog box similar to the one shown in Figure 2 will appear.

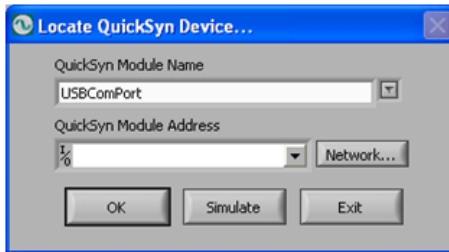


Figure 2 Locate QuickSyn Device dialog box

5. Enter a name such as “Serial” in the QuickSyn Module Name field. If no name is entered, the default name will be “USBComPort.”
6. Select the drop-down button in the QuickSyn Module Address field. Select the COM port to which the synthesizer is connected, then select **OK** to enable control of the synthesizer.

Serial (COM) Port Parameters

If you intend to write your own software to control the QuickSyn Synthesizer through a serial port, the COM port parameters are 115200 baud, 8 bits, no parity, 1 stop bit, and flow control must be disabled. A termination character must be included for each command (13, 0x0D). Also note that the members of the COM port DCB structure shown below must be set correctly.

```
dcB.fRtsControl = RTS_CONTROL_DISABLE;  
dcB.fDtrControl = DTR_CONTROL_DISABLE;
```

MFSW-ACC08 Ethernet Adapter Kit

The MFSW-ACC08 Ethernet Adapter Kit allows you to connect a QuickSyn Synthesizer to your network. The cable has a 9-pin D-SUB receptacle connector that connects to an Ethernet Adapter. The cable also includes DC bias connections for the synthesizer with convenient banana plugs to connect to your power supply. The DC bias used for the synthesizer will also provide power for the Ethernet adapter.

Unpack Hardware

Unpack contents and verify that everything is included:

- Adapter, Ethernet
- Cable assembly, DC bias w/Ethernet connector
- *QuickSyn Special Interface Guide* (this document)

MFSW-ACC08 Connection Instructions

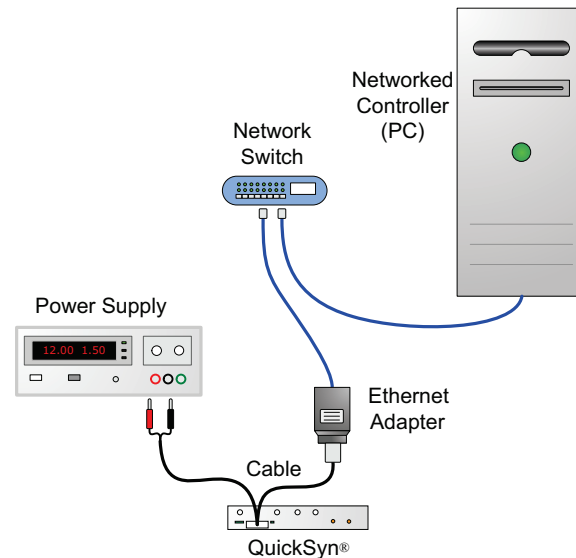


Figure 3 Ethernet adapter connection configuration

QuickSyn Special Interface Guide

1. Connect the 9-pin D-SUB connector to the Ethernet adapter.
2. Connect the Ethernet RJ45 connector to the network or network switch.
3. Ensure that the power supply is turned off before connecting to it, then verify voltage of power supply is set between +12 V and +12.5 V. Connect red and black banana plugs to corresponding connectors on the power supply.

WARNING

Voltages less than +12 V at the synthesizer connector may result in malfunction, and voltages in excess of +15 V may damage the synthesizer.

4. Connect the SPI connector to the QuickSyn Synthesizer, and turn on the power supply.
5. Start the QuickSyn Soft Front Panel software.

NOTE

QuickSyn Soft Front Panel software below version 1.0.21 will not support QuickSyn interface accessories.

A Locate QuickSyn Device dialog box similar to the one shown in Figure 4 will appear.

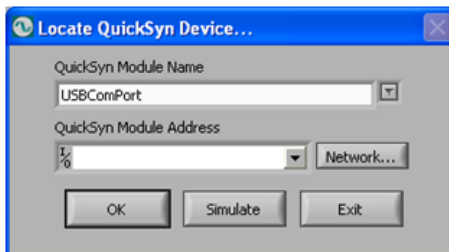


Figure 4 Locate QuickSyn Device dialog box

5. Enter a name such as “Ethernet” in the QuickSyn Module Name field. If no name is entered, the default name will be “USBComPort.”
6. Select **Network** then select the Ethernet MAC ID of your adapter. The Ethernet MAC ID is located on the label of the Ethernet adapter, then select **OK** to enable control of the synthesizer.

Ethernet Parameters

If you intend to write your own software to control the QuickSyn Synthesizer through a network, the Ethernet adapter is configured to use DHCP for automatic IP address assignment (requires DHCP server) and communicates via a TCP/IP socket on port 10001. The Ethernet adapter address can be found on your network by broadcasting a UDP packet containing F6 on port 30718 then listening for responses containing F7 on port 28674. If you would like to change these default settings, please contact technical support.

QuickSyn Special Interface Guide

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MFSW-ACC09 GPIB Adapter Kit

The MFSW-ACC09 GPIB Adapter Kit allows you to connect a QuickSyn Synthesizer to a GPIB controller. The cable has a 9-pin D-SUB receptacle connector that connects to a GPIB adapter. The cable also includes DC bias connections for the synthesizer with convenient banana plugs to connect to your power supply.

Unpack Hardware

Unpack contents and verify that everything is included:

- Adapter, GPIB
- Cable assembly, DC bias GPIB/RS232 connector
- *QuickSyn Special Interface Guide* (this document)

NOTE

Country-specific power cord is not included.

MFSW-ACC09 Connection Instructions

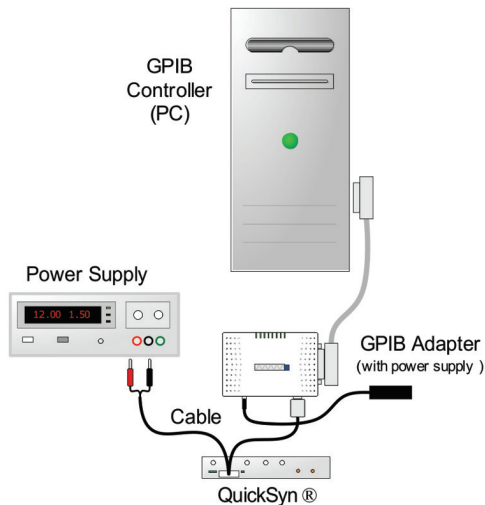


Figure 5 GPIB adapter connection configuration

QuickSyn Special Interface Guide

1. Connect the 9-pin D-SUB connector to the GPIB adapter.
2. Connect the GPIB adapter to your GPIB controller.
3. Ensure that the power supply is turned off before connecting to it, then verify voltage of power supply is set between +12 V and +12.5 V. Connect red and black banana plugs to corresponding connectors on the power supply.

WARNING

Voltages less than +12 V at the synthesizer connector may result in malfunction, and voltages in excess of +15 V may damage the synthesizer.

4. Connect the SPI connector to the QuickSyn Synthesizer, and turn on the power supply.
5. Start the QuickSyn Soft Front Panel software.

NOTE

QuickSyn Soft Front Panel software below version 1.0.21 does not support QuickSyn interface accessories.

A Locate QuickSyn Device dialog box similar to the one shown in Figure 6 will appear.

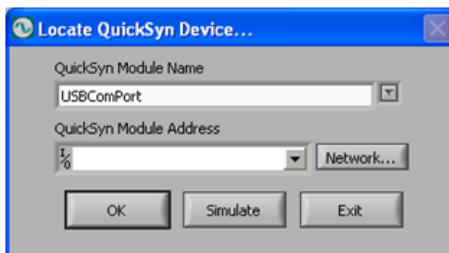


Figure 6 Locate QuickSyn Device dialog box

5. Enter a name such as “GPIB” in the QuickSyn Module Name field. If no name is entered, the default name will be “USBComPort.”
6. Select the drop-down button in the QuickSyn Module Address field. Select the GPIB address of your GPIB adaptor, then select **OK** to enable control of the synthesizer.

GPIB Parameters

If you intend to write your own software to control the QuickSyn Synthesizer through a GPIB port, the default address is 5. If you experience any communication problems, ensure that the GPIB adapter is recognized by the GPIB controller. If you would like to change the default GPIB address, please contact technical support.

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