

**SynapseTM “Smart Cable”
for IBM 468X/9X
Interface Guide**

70-13784-01

Revision D

March 2001

For the following Model Configurations:

STI30-XXXX

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Symbol Technologies, Inc.

One Symbol Plaza

Holtsville, N.Y. 11742-1300

<http://www.symbol.com>

Introduction

The Synapse™ “Smart Cable” family provides connection to many host systems by simply changing the Synapse cable, so your scanner can interface to virtually any host.

The Synapse cable you’ve purchased provides connection to the IBM 468X/9X.

Programming

There are two types of parameters used to program your system: scanner parameters, contained in your scanner programming guide, and interface (Synapse) parameters, provided in this guide. Both types of parameters are stored in the scanner.

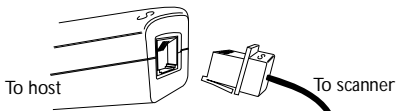
The default for each Synapse parameter is identified under the default bar code. If you’re using the default settings, you only need to scan a host bar code when you are first using the unit in order to set up the correct port address for the IBM 468x/469x.* The programming bar codes in this guide can not be used to program other Synapse cables (cables that are not an STI30-XXXX).

*If you’re using the LS 9100 scanner, the **ENABLE LS 9100 COMMUNICATION** bar code on page 3 must also be scanned.

Setup Steps

Setting up Synapse is easy:

1. First, power down your host.
2. Plug your Synapse module into the scanning cable with the "S"-shaped graphics aligned.



If you need to disconnect the cable from your Synapse module, squeeze the cable at the "S" and pull it from the module.

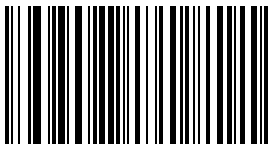
3. Connect the scanning cable to the scanner.
4. Plug the Synapse connector into the appropriate port on the host.
5. If necessary, plug the power supply in the Synapse power jack, and the other end into an AC outlet.
6. Power up your host.
7. If you are using an LS 9100 scanner, scan the **ENABLE LS 9100 COMMUNICATION** bar code on page 3.
8. To change your host, scan a bar code on pages 4 - 5.

See page 3 to reset defaults. For advanced parameter and default features, see pages 6 - 8.

If you're having any problems with your system, see *What If...* on page 9.

Set Synapse Defaults

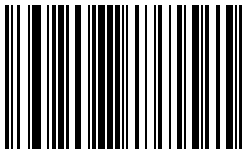
Scan the bar code below to set defaults for the parameters in this guide. See page 8 for advanced Synapse Default options.



Set Synapse IBM 468X/9X Defaults

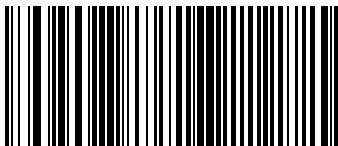
Enable LS 9100 Communication

If you're using an LS 9100, scan the bar code below to communicate with Synapse. You'll hear a warble beep. If, after using Synapse, a non-Synapse interface is enabled in your LS 9100 scanner, this bar code will need to be scanned again to re-enable the Synapse interface.

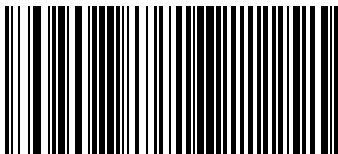


Enable LS 9100 Communication

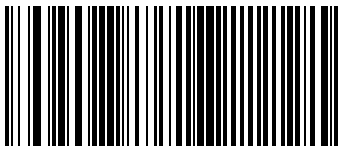
Host Selection



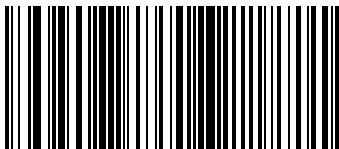
No Host (Default)



Non-IBM Scanner Emulation (Port 5B)



Hand-held Scanner Emulation (Port 9B)



**Table-top Scanner Emulation
(Port 9C/9E/17)**

Advanced Features

Select Parameter Set

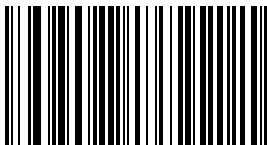
This option allows you to store different parameter settings for each place the scanner is used, as well as to select a parameter set once it is programmed.

Programming Parameter Sets

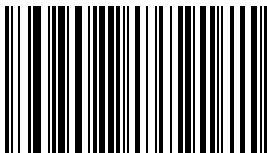
To program the parameter set where the scanner is connected to a host, scan a Select Parameter Set bar code, then scan the parameter options in this guide needed for this set. **Note:** Because Parameter Set 1 is the default, you don't need to scan this bar code - the first group of parameters you select will automatically be designated Parameter Set 1.

Enabling a Parameter Set

To enable the set you'll be using after it's programmed, scan that Select Parameter Set bar code.



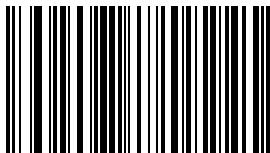
Parameter Set 1
(Default)



Parameter Set 2

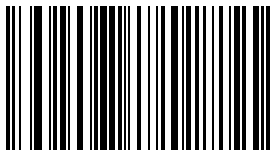
Set Synapse Defaults (Advanced)

Scan the following bar code to set defaults for the current parameter set.



Set Synapse IBM 468X/9X Defaults:
Current Parameter Set

Scan the bar code below to set defaults for all Synapse cable types and parameter sets.



Set Synapse Defaults:
All Cables And Parameter Sets

What If...

What If...	Then...
Synapse parameters are not working?	<p>Make sure you're using the correct Interface Guide.</p> <p>Make sure you've selected the correct parameter set.</p> <p>If you scanned a Set Defaults bar code from your scanner manual, re-enter your Synapse parameters.</p>
<p>No data transmits,</p> <p>or</p> <p>Incorrect data transmits, or you hear a lo/lo/lo/lo beep?</p>	<p>If you're using an LS 9100, scan ENABLE LS 9100 INTERFACE.</p> <p>Check cable connection to scanner and host.</p>
Scanner displays erratic behavior (laser doesn't come on, scanner emits frequent beeps)?	Check with scanner's Product Reference Guide to make sure scanner can communicate with Synapse.
Lo/hi/lo/hi beep sequence sounds?	Parameter storage space in the scanner is full. Scan a Set Synapse Defaults bar code from page 3 or 8 for cables no longer in use.

See the next page if you're still having trouble.

Service Information

Before you use the unit, it must be configured to operate in your facility's network and run your applications.

If you have a problem running your unit or using your equipment, contact your facility's Technical or Systems Support. If there is a problem with the equipment, they will contact the Symbol Support Center:

United States	1-800-653-5350	Canada	905-629-7226
United Kingdom	0800 328 2424	Asia/Pacific	337-6588
Australia	1-800-672-906	Austria	1-505-5794
Denmark	7020-1718	Finland	9 5407 580
France	01-40-96-52-21	Germany	6074-49020
Italy	2-484441	Mexico	5-520-1835
Netherlands	315-271700	Norway	66810600
South Africa	11-4405668	Spain	9-1-320-39-09
Sweden	84452900		
Latin America Sales Support		1-800-347-0178 Inside US	
		+1-561-483-1275 Outside US	
Europe/Mid-East Distributor Operations		Contact local distributor or call	
		+44 208-945 7360	

Warranty

Symbol Technologies, Inc. ("Symbol") manufactures its hardware products in accordance with industry-standard practices. Symbol warrants that for a period of twelve (12) months from date of shipment, products will be free from defects in materials and workmanship.

This warranty is provided to the original owner only and is not transferable to any third party. It shall not apply to any product (i) which has been repaired or altered unless done or approved by Symbol, (ii) which has not been maintained in accordance with any operating or handling instructions supplied by Symbol, (iii) which has been subjected to unusual physical or electrical stress, misuse, abuse, power shortage, negligence or accident or (iv) which has

been used other than in accordance with the product operating and handling instructions. Preventive maintenance is the responsibility of customer and is not covered under this warranty.

Wear items and accessories having a Symbol serial number, will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

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Wear items and accessories having a Symbol serial number, will carry a 90-day limited warranty. Non-serialized items will carry a 30-day limited warranty.

Warranty Coverage and Procedure

During the warranty period, Symbol will repair or replace defective products returned to Symbol's manufacturing plant in the US. For warranty service in North America, call the Symbol Support Center at 1-800-653-5350. International customers should contact the local Symbol office or support center. If warranty service is required, Symbol will issue a Return Material Authorization Number. Products must be shipped in the original or comparable packaging, shipping and insurance charges prepaid. Symbol will ship the repaired or replacement product freight and insurance prepaid in North America. Shipments from the US or other locations will be made F.O.B. Symbol's manufacturing plant.

Symbol will use new or refurbished parts at its discretion and will own all parts removed from repaired products. Customer will pay for the replacement product in case it does not return the replaced product to Symbol within 3 days of receipt of the replacement product. The process for return and customer's charges will be in

accordance with Symbol's Exchange Policy in effect at the time of the exchange.

Customer accepts full responsibility for its software and data including the appropriate backup thereof.

Repair or replacement of a product during warranty will not extend the original warranty term.

Symbol's Customer Service organization offers an array of service plans, such as on-site, depot, or phone support, that can be implemented to meet customer's special operational requirements and are available at a substantial discount during warranty period.

General

Except for the warranties stated above, Symbol disclaims all warranties, express or implied, on products furnished hereunder, including without limitation implied warranties of merchantability and fitness for a particular purpose. The stated express warranties are in lieu of all obligations or liabilities on part of Symbol for damages, including without limitation, special, indirect, or consequential damages arising out of or in connection with the use or performance of the product.

Seller's liability for damages to buyer or others resulting from the use of any product, shall in no way exceed the purchase price of said product, except in instances of injury to persons or property.

Some states (or jurisdictions) do not allow the exclusion or limitation of incidental or consequential damages, so the proceeding exclusion or limitation may not apply to you.

Regulatory Information

Patents

This product is covered by one or more of the following U.S. and foreign Patents:

U.S. Patent No. 4,460,120; 4,496,831; 4,593,186; 4,603,262; 4,607,156; 4,652,750; 4,673,805; 4,736,095; 4,758,717; 4,816,660; 4,845,350; 4,896,026; 4,897,532; 4,923,281; 4,933,538; 4,992,717; 5,015,833; 5,017,765; 5,021,641; 5,029,183; 5,047,617; 5,103,461; 5,113,445; 5,130,520; 5,140,144; 5,142,550; 5,149,950; 5,157,687; 5,168,148; 5,168,149; 5,180,904; 5,216,232; 5,229,591; 5,230,088;

5,235,167; 5,243,655; 5,247,162; 5,250,791; 5,250,792;
5,260,553; 5,262,627; 5,262,628; 5,266,787; 5,278,398;
5,280,162; 5,280,163; 5,280,164; 5,280,498; 5,304,786;
5,304,788; 5,306,900; 5,321,246; 5,324,924; 5,337,361;
5,367,151; 5,373,148; 5,378,882; 5,396,053; 5,396,055;
5,399,846; 5,408,081; 5,410,139; 5,410,140; 5,412,198;
5,418,812; 5,420,411; 5,436,440; 5,444,231; 5,449,891;
5,449,893; 5,468,949; 5,471,042; 5,478,998; 5,479,000;
5,479,002; 5,479,441; 5,504,322; 5,519,577; 5,528,621;
5,532,469; 5,543,610; 5,545,889; 5,552,592; 5,557,093;
5,578,810; 5,581,070; 5,589,679; 5,589,680; 5,608,202;
5,612,531; 5,619,028; 5,627,359; 5,637,852; 5,664,229;
5,668,803; 5,675,139; 5,693,929; 5,698,835; 5,705,800;
5,714,746; 5,723,851; 5,734,152; 5,734,153; 5,742,043;
5,745,794; 5,754,587; 5,762,516; 5,763,863; 5,767,500;
5,789,728; 5,789,731; 5,808,287; 5,811,785; 5,811,787;
5,815,811; 5,821,519; 5,821,520; 5,823,812; 5,828,050;
5,850,078; 5,861,615; 5,874,720; 5,875,415; 5,900,617;
5,902,989; 5,907,146; 5,912,450; 5,914,478; 5,917,173;
5,920,059; 5,923,025; 5,929,420; 5,945,658; 5,945,659;
5,946,194; 5,959,285; 6,002,918; 6,021,947; 6,047,892;
6,050,491; 6,053,413; 6,056,200; 6,065,678; 6,067,297;
6,068,190; 6,082,621; 6,084,528; 6,088,482; 6,092,725;
6,101,483; 6,102,293; 6,104,620; 6,114,712; 6,115,678;
6,119,944; 6,123,265; 6,131,814; 6,138,180; 6,142,379;
D305,885; D341,584; D344,501; D359,483; D362,453;
D363,700; D363,918; D370,478; D383,124; D391,250;
D405,077; D406,581; D414,171; D414,172; D418,500;
D419,548; D423,468; D424,035 D431,158; D430,159; D431,562.
Invention No. 55,358; 62,539; 69,060; 69,187 (Taiwan); No.
1,601,796; 1,907,875; 1,955,269 (Japan). European Patent
367,299; 414,281; 367,300; 367,298; UK 2,072,832; France 81/
03938; Italy 1,138,713.
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