acc advanced computer controls, inc.

ShackMaster 100

MIC   POWER   TRANSMIT   PHONE   OUTGOING   INCOMING   READ   LOAD   ANSWER   VOLUME

MESSAGES

Take your shack with you – anywhere – through remote control over the air or over the phone.

ShackMaster™ is an amateur radio station accessory which allows you to use your home station without having to be there.

Crossband Linking and Telephone Access – New Windows to the World

Now you can remotely control your home station using Touch-Tone commands over the air* or over the phone. Link through your home equipment to the HF bands (and to VHF and UHF frequencies as well). Scan the bands, change modes, select antennas, turn gear on and off – all from your Touch-Tone keypad. Check into nets, work skeds, ragchew and DX without being tied down to the shack.

Crossband linking lets you operate your home station through a VHF/UHF link – either simplex or through a repeater. Or call home on the phone to **telephone access** your station – just like being there.

Fire up a rig . . . punch in a frequency . . . tune around . . . and go to transmit all with remote control Touch-Tone commands. And your commands are confirmed in *ShackMaster's* synthesized speech, so you're **always** sure what you're doing. Even select antennas and rotate your beam with *ShackMaster's* remote control outputs. And when operating crossband, *ShackMaster's* talking S-meter will tell you how well you're getting into your home station.

BSR X-10 Interface–Control Your World

ShackMaster interfaces with BSR's X-10 home control system[1], which controls 120 volt line operated devices by signalling over the power lines to lamp and appliance modules located throughout the house. Touch-Tone commands from your radio or over the telephone tell *ShackMaster* to signal the BSR equipment, allowing you to remotely control your shack and other devices around the house. Turn your HF rig on and off, or the linear, or the air conditioner!

Keep In Touch

ShackMaster's **electronic mailbox** lets you keep in touch with your family or friends when you're away – even if they're away too. **You** enter Touch-Tone commands from your transceiver or telephone and **they** press the buttons on the front panel. Messages are in easy to understand synthesized speech. The mailbox is designed to be easy for anyone to use. To enter message number six from the front panel ("All is OK"), your family member presses the Load Messages button six times – *ShackMaster* confirms that they've entered the message they want in synthesized speech. You can check in later and receive your messages over the air, erase them, and load response messages if you like, such as, "I will be home late". The green Incoming Messages indicator lights up, and a press of the Read button delivers your message home.

ShackMaster also lets you communicate conveniently with your family when they **are** home. The remotely controlled intercom, **ShackPatch**™, works just like an autopatch, but doesn't use the phone! Instead of the phone line, **ShackPatch** uses the speaker and microphone in your shack. Just bring up **ShackPatch** with a Touch-Tone command. *ShackMaster* rings in your shack, similar to a phone, and can be answered by anyone by pressing the **ShackPatch** Answer button. From there, the patch proceeds with push-to-talk synchronized exchanges. A programmable control window keeps you in complete remote control* of your station at all times. No transmissions from your station are permitted except in response to **your** remote control commands.

Many autopatches that you'd like to make are to home – **ShackPatch** lets you talk directly with your family without the need to go through a repeater. Perhaps your repeater doesn't have a patch. Or the repeater's often too busy when you'd like to call home. Just slide over to a simplex frequency and ring **ShackPatch**. Or call in through a repeater for greater range. Check in with your spouse, the kids, or the baby-sitter!

ShackMaster also includes **PersonalPatch**™, a simplex autopatch work-a-like, which allows you to make phone calls through your home phone*. **PersonalPatch** is there for those really important phone calls like reporting an accident on the road.

Easy to Interface

ShackMaster is easy to interface – in many cases it's just patch cords. Unlike repeaters, no expensive duplexers or special rf equipment is needed. Just your existing home station.

Built-in High Performance

ShackMaster is a high technology product designed with lots of room to grow. For example, it's controlled by a heavy duty 8085 microprocessor with lots of addressable memory –not discrete logic or a skimpy single chip processor. And since it's controlled by software, ACC will supply new capabilities that you can install just by changing a PROM. *ShackMaster* includes **three** RS-232 I/O ports, for support of station peripherals with serial interfaces. And it includes the very best synthesized speech available, with an extensive vocabulary to effectively tell you what it's doing.

You may not need **all** of *ShackMaster's* capabilities right away, but you have lots to choose from. For example, ShackPatch, the Electronic Mailbox, and BSR X-10 Shack Control let you keep in touch with the family and control home equipment. All you need is a single transceiver connected to *ShackMaster*. Add frequency control of the rig through a serial port (where supported by the radio) or with our Frequency Control Board option, and effectively access and control the rig from the telephone. Add your HF rig and work crossband, or access the low bands from the phone. And, of course, PersonalPatch just requires a transceiver and your home phone.

*Operating above 220.5 MHz; see FCC §97.61(d). For a complete discussion of the rules relating *ShackMaster*, see "ShackMaster and the Rules" in the Owner's Manual.

[1] Requires Heathkit GD-1530 BSR X10 to RS-232 Interface.

ShackMaster lets you take it with you!

Features

- **Crossband linking**
  - Supports 3 transceivers
    1 - HF transceiver
    2 - VHF/UHF transceivers
  - Frequency and mode control through serial ports when supported by transceiver, or Frequency Control boards available as accessories for certain other transceivers.*
  - Squelch or VOX control from transceivers
  - Two transceivers available from either VHF/UHF channel
  - Full duplex operation of HF transceiver supported using both VHF/UHF transceivers
  - Talking S-meter for control transceiver
  - Remote control logic outputs for switching functions such as antenna, power level, etc.

- **Telephone Access**
  - Touch-Tone control
  - Access to any of three transceivers
  - Control of BSR X-10 system, Electronic Mailbox, etc.

- **BSR X-10 Shack Control**
  - Touch-Tone control from command transceiver or telephone
  - Serial port interface to Heathkit GD-1530
  - On, off, bright, dim, all on, system off

- **Electronic Mailbox**
  - Ten predefined synthesized speech messages
  - Messages loaded, retrieved, and canceled over the air or phone with Touch-Tone, from the front panel with push-buttons
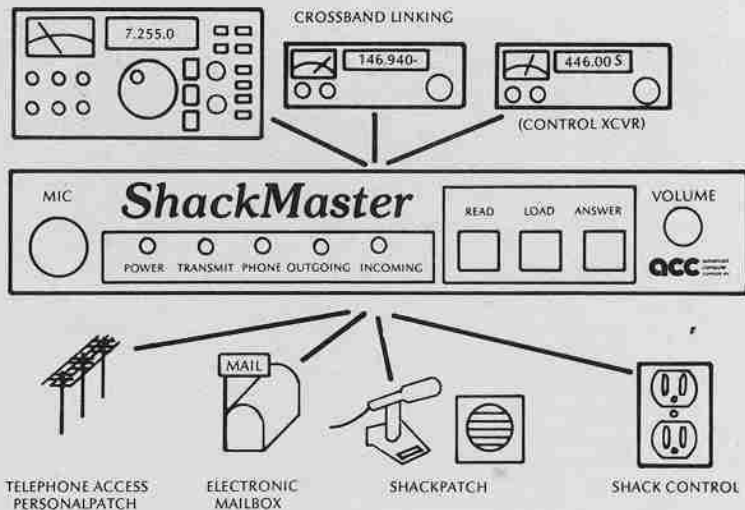
- **ShackPatch**
  - Remotely controlled intercom into the shack
  - Completely controlled by the amateur at all times
  - Programmable control window timing
  - ShackPatch "rings" in the shack like a phone, is answered with a front panel button

- **PersonalPatch**
  - Simplex autopatch for originating telephone calls through home phone while mobile or portable
  - Programmable timing for "sampling" to "VOX" type operation

* Supports transceivers with provisions for external control. See price list for transceivers supported.

Specifications

Transceiver support:
PTT, COS or VOX, audio in and out
Adjustments–receive and transmit audio levels
Frequency/mode control for certain transceivers*

Touch-Tone Programmable:
Call sign
Command codes, up to 6 digits
Autodial telephone number
Control transceiver frequency memories
Timing parameters
Functions enable/disable
Non-volatile E^2PROM storage

Speech Synthesizer:
High quality male voice, identical to ACC's RC-850/RC-85 Repeater Controllers

Audio Inputs (from transceivers)
3, high impedance, adjustable level, capacitively coupled

Audio Outputs (to transceivers)
3, adjustable level, capacitively coupled

VOX System:
Microcomputer controlled, VOX detection on transceivers and phone audio

Talking S-Meter:
0-5 volt dc input range, S0-S9

Serial Ports: 3 RS-232 I/O

Audio Connectors: RCA phono

Logic Connector: DB-25

Speaker Connector: Submin. phone

Mic Connector: 8 pin (ICOM compatible)
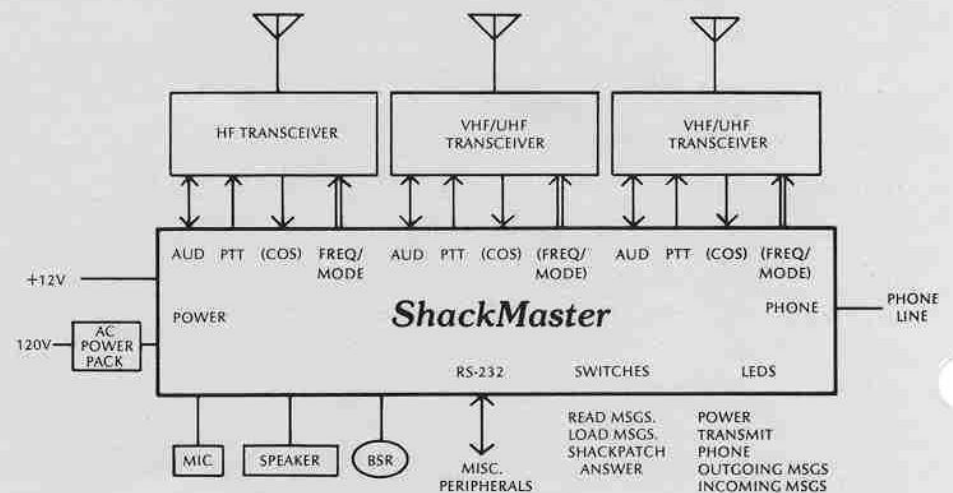
Power: 12V dc @ 400 mA, or 120V ac with optional AC Power Pack

Size: 11.25"W x 7.5"D x 1.5"H

Accessories

- AC power pack (not required if 12 volts dc available)
- Frequency Control boards (see current price list for radios supported)
- Rotor Control Board (mounts inside Hygain CD-45 or Ham IV control unit)

Specifications subject to change without notice.

ShackMaster, ShackPatch, and PersonalPatch are trademarks of Advanced Computer Controls, Inc.