ACP | Series 2.0

(ACP-300, ACP-500 & ACP-900)
Programming Manual

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ACP 2.0 GENERAL OPERATION

The ACP automatically routes incoming calls using tone recognition. Upon detecting the phone company's incoming ring voltage, the ACP answers the call and begins its screening process. During this time, the ACP is listening for tone based routing instructions. If the ACP hears the industry standard CNG tone generated by a sending Fax device, the call is immediately and automatically routed to the designated fax port (Device port 2) without ringing the attached phones or other attached devices.

Each device port of the ACP has its own programmable DTMF security access code. This allows each device port to be independently addressed and prevents unauthorized access. Each separate security code can be programmed to any number up to 7 digits, using any of the numbers found on a telephone key pad, including the * and # characters. During an Incoming call, if the ACP detects a DTMF security access code, the call is then immediately and automatically routed to the appropriate device port.

In the absence of a CNG (Fax) tone or security access code, the ACP will ring the Device port 1 (Default).

Outgoing calls can be placed from any device port as if it were attached to a dedicated line. Only one device at a time can actively use the telephone line. When the line is in use by one device, other devices attempting to access the line for an outgoing call will receive a busy signal. With special programming, this feature can be overridden in an emergency or situation where you would like to give a particular device priority. (*Reference Register 07 & 08*)

7 SEGMENT DISPLAY – Displays the number of the Device Port in use or being addressed. Also, will display register values when reading values from memory.

ACP PROGRAM REGISTERS

The ACP has been designed to perform several operations which are integral to the proper function of your total communications system. These operations are controlled by programmable values which are stored in files called "registers". Each register contains enough memory to hold factory preset default values and "custom" values that allow the ACP to operate to your specifications. The following is a short description of each register function, program capacity and factory preset default values.

REGISTER 01 - Mode Flags

This register controls 8 features or operating modes performed by the ACP. Each "flag" or feature can be turned on/off and is programmed as a string of bit information. Zero (0) denotes "off" and one (1) denotes "on". ***** When programming this register, you must enter all Flag (Bit) values.** The Mode Flags are factory preset to the following:

Flag 1 (Bit7)	Caller ID Store and Forward	1 (on)	CID will be captured when unit answers. CID data will be sent 1 time, after the first ring, when a device port is addressed.
Flag 2 (Bit 6)	Fax Tone Detect to Device 2	1 (on)	If fax tone is detected, call will be transferred to device 2.
Flag 3 (Bit 5)	Night Watch Mode	0 (off)	Allows calls to automatically be transferred to the specified port if not answered within a certain number of rings.
Flag 4 (Bit 4)	Additional Detect Time	0 (off)	Increases the time in which tones can be detected before ringing the default port by 4 seconds.
Flag 5 (Bit 3)	Protected Hook Flash	0 (off)	For any KSU that does not allow DTMF once a call is answered.
Flag 6 (Bit 2)	Busy Signal	1 (on)	Determines if a device trying to access the line when the line is already in use will hear a busy tone or dead air.
Flag 7 (Bit 1)	Enable Multi-Port Polling	0 (off)	Allows transfer to another device when communication with the first device addressed is complete.
Flag 8 (Bit 0)	Night Watch Mode to Device 3	0 (off)	Determines if night watch transfers are transferred to device 3. (Default night watch port is device 2)

REGISTER 02 - Cadence On Time

This register can range from 1 to 6 in one-half seconds and controls the amount of "ring" time in the ring cadence, Factory preset to 4 (2 seconds).

REGISTER 03- Cadence Off Time

This register can range from 1 to 15 in one-half seconds and controls the length of silent time between each ring, Factory preset to 8 (4 seconds).

REGISTER 04 - Maximum Number of Rings to a Device

This register can range from 1 to 99 and controls the amount of rings sent to a device port. Factory preset to 8 rings.

REGISTER 05 - Night Watch Mode Trip Rings

This register contains the number of rings that are required to trip the Night Watch Mode function. After an incoming call has been screened, the number of rings to the phone port are counted, and if the phone is not answered in "X" rings, this call and all future calls will be diverted to the Device port 2. This register can range from 1 to 15. Factory preset is 5 rings.

REGISTER 06 - Night Watch Mode Rings

This register contains the number of rings to the Device 1 port after Night Watch Mode (Register 05) has been activated. This number is usually less than register 05 but can range from 1 to 15. Factory preset is 2 rings.

REGISTER 07 – Emergency Barge In

This register contains the mask that determines if Devices 1, 2, 3, and 4 can barge in and gain access to the telephone line by going off-hook during a call. The four mask bits can be set to any combination of values, allowing all, some, or none of Devices 1 through 4 access to the line during an emergency or to just have priority. *** **When programming this register, you must enter all Flag (Bit) values.** The flags are preset to the following:

Flag 1 (Bit 3)   Device 4 Barge-in Mask   0 (off)

Flag 2 (Bit 2)   Device 3 Barge-in Mask   0 (off)

Flag 3 (Bit 1)   Device 2 Barge-in Mask   0 (off)

Flag 4 (Bit 0)   Device 1 Barge-in Mask   0 (off)

Register 8 must also be set to a positive number to activate barge-in.

REGISTER 08 - Barge-In Time

This register contains the amount of time that a device must be off-hook to "barge-in" on a call. The range of this register is 0 (off) to 15 with a 1/4 second multiplier for each digit. Factory preset to 0 (off).

REGISTER 09 - Security Programming Time Window

This register contains the number of minutes that the ACP will accept the programming code once power has been applied to the unit. The range of this register is 0 to 15. Factory preset to 0 (allows programming at all times).

REGISTER 10 - Seizure Time/ On Hook Time

Seizure Time- When Multiple-port polling is enabled, the value of this register determines the maximum number of seconds the ACP will hold the phone line during a multiple polling sequence after a device has been disconnected.

On Hook Time – When Emergency Barge In is enabled, the value of this register determines the number of ¼ seconds the ACP will put the line "On Hook" when a device is seizing the line using the emergency barge in feature.

The range of this register is 1 to 99.   Factory preset to 25 (no ring back is provided to caller during this time). **Example: If Register 10 is set to a value of 2 then Seizure Time is 2 seconds and On Hook Time is ½ second**

(Note: ACP-900 utilizes Registers 11-15 plus 26-29. ACP-500 uses Registers 11-15, and ACP-300 utilizes Registers only 11-13 for Device Security Access Codes.

REGISTER 11 - Security Access Code for Device Port 1

Contains the security access code for Device Port 1. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 11.

REGISTER 12 - Security Access Code for Device Port 2

Contains the security access code for Device Port 2. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 22.

REGISTER 13 - Security Access Code for Device Port 3

Contains the security access code for Device Port 3. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 33.

REGISTER 14 - Security Access Code for Device Port 4

Contains the security access code for Device Port 4. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 44.

REGISTER 15 Security Access Code for Device Port 5

Contains the security access code for Device Port 5. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 55.

REGISTER 16 - Multiple Polling Code

This register contains the multiple polling code (MPC). The MPC should be placed at the beginning or end of a security access code. After a device has completed its communication and if the correct MPC is detected, the ACP will seize the line. This process allows communication with multiple devices (multiple polling) with one call. The register must contain two digits. Factory preset to ##.

REGISTER 26 Security Access Code for Device Port 6

Contains the security access code for Device Port 6. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 66.

REGISTER 27 Security Access Code for Device Port 7

Contains the security access code for Device Port 7. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 77.

REGISTER 28 Security Access Code for Device Port 8

Contains the security access code for Device Port 8. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 88.

REGISTER 29 Security Access Code for Device Port 9

Contains the security access code for Device Port 9. This register holds up to 7 digits ranging from 0 to 9, * and #. Factory preset to 99.

WARNING: For registers 11 through 15 and 26 through 29, DO NOT program any of the security access codes to segments of the programming code (**7764#).

TO ENTER PROGRAMMING MODE

To enter programming mode, pick up the receiver of the phone that is plugged into Device Port 1 and dial **7764#. You should then hear 3 high pitched beeps. This confirms entry into programming mode.

To program individual registers, press the register number you wish to program followed immediately by the value desired (as an example: 023 to set register 02 to a value of 3). If an error in entry is detected, a single low pitch beep will be heard followed by a short space, then 3 quick high beeps. The 3 quick high beeps tell you to proceed.

TO RESET ALL REGISTER VALUES TO FACTORY PRESET

Press 60 while in programming mode to reset all registers to factory defaults.

TO READ VALUES FROM MEMORY

To read the value of a single register, press * followed by the two-digit register number.

TO WRITE PROGRAMS TO MEMORY

Press 80 while in programming mode. This should always be done when you are satisfied with the information you have programmed.

TO EXIT PROGRAMMING MODE

Press 90 while in programming mode.

IMPORTANT: The ACP _MUST_ be the first device on the phone line for proper operation. In a rollover sequence, install the ACP on the last line of rollover.

Note: Device Port 2 is the default fax port (can be used as a modem port).