

Title:	Communication Protocol Guidelines				
Owner:	Mario Rosso			Document:	CP-1464
Revision	Date	Pages	Approval		
E	6/23/08	4	John Ellenberger		

1. Purpose

The purpose of this procedure is to provide a guideline and process for distribution of Pelco communications protocols.

2. Scope

This procedure shall apply to all Pelco personnel who have direct contact with customers.

3. Procedure

3.1. Background

It is Pelco's policy to encourage other manufacturers to interface with our products. When this happens, there is a greater chance of our product being specified into a job. We do not, as a matter of course, discriminate against manufacturers who compete with us on minor portions of our line (such as phone line television) in providing protocols.

There are liabilities associated with the distribution of protocols that must be recognized:

- We do not provide extensive programming support to other manufacturers for implementing the protocols. People who are "in over their heads" often waste a lot of our Engineering resources.
- When we change any protocol that others rely on for interface, it could require redevelopment on their (or our) part to maintain the interface. Problems with customers frequently occur in this area. The fix is usually a patchwork solution, which eventually compounds the problem. This type of misunderstanding is often damaging to our reputation, even if we are not at fault.
- There are many possible ways to interface with our products. Depending upon the interface, the skill level of the programmer, and the company's ability to test, there is a very real possibility for foreign equipment to cause problems with the operation of the Pelco system. Our technical support staff frequently has to ask customers to disconnect interfaces with non-Pelco equipment in the process of troubleshooting systems. When the problem turns out to be the fault of the interface, the customer still expects us to solve the problem. This is very time consuming and problematic.

3.2. Requested Copies of Communications Protocols

All customer or manufacturer requests for copies of communications protocols should be forwarded to a representative of the Technical Solutions Matrix Support group of the Product Quality & Support department.

3.3. Identify Protocol Being Requested and Determine Validity of Request

Technical Solutions Matrix Support Team personnel shall evaluate the merit and validity of all protocol requests and, if deemed appropriate for distribution, identify which protocol is best suited to accomplish the customer's objectives.

3.4. Purpose of Protocol

To control a matrix, the ASCII protocol is most suitable. To directly control a dome or telemetry receiver, the "D" protocol is most suitable. Many people ask for our keyboard protocol, because this seems like the logical place to interface, not because they specifically need it. We do not make keyboard protocols available as public documents as they are proprietary standards that are difficult to use and often cause problems with the operation of our products. The ASCII protocol is easy to understand, it is relatively free from changes, and supports everything an outside OEM needs to control in our systems. If it is explained to the customer that the ASCII protocol was developed and is supported specifically for this purpose, the requesting party will generally prefer this approach. It is safe to assume that our industry partners and customers would prefer having a stable, supported interface for the same reason we would.

3.5. Registration & Distribution of Non-Proprietary Protocol Documents

3.5.1. Processing Non-proprietary Protocol Requests and Registration

Non-proprietary protocols include Pelco D, Pelco G, and ASCII.

After evaluating the validity of a protocol distribution request, and determining which non-proprietary protocol is to be distributed, a Technical Solutions Matrix Support Team representative shall direct the requesting customer to the protocol registration webpage (http://www.pelco.com/protocols/registerprotocol.aspx).

Once there, the requestor will be prompted to provide registration information before he or she is allowed to receive protocol materials. Required information includes:

- First and last name
- Title
- Company name
- Complete address information including country and postal code
- Contact telephone number
- Contact e-mail address
- Reason for request
- Protocol being requested

All registration information will be collected via this web interface and stored in a SQL database for tracking and analytical purposes, and to facilitate any future customer contact regarding protocol updates.

Protocol files are available in Adobe Acrobat (.PDF) format.

3.5.2. Distribution Processing

Upon completion of the registration process, an automatically generated e-mail message will be sent to the requestor, using the address the requestor provided in the registration form. The requested protocol documents will be included in this e-mail as an attachment.

Protocol documents may be printed and either faxed or mailed directly, in the event the requestor is unable to receive a protocol file via the method described above.

3.6. Proprietary Protocol Requests

Any requests for protected or proprietary protocols including, but not limited to, Pelco P or Coaxitron protocols should be referred to the Global Technical Support Director of Product Support for evaluation of the business and technical reasons why the use of these unpublished protocols is required and is in the best interests of Pelco. Final approval for distribution of non-published protocols will require the consent of the Global Technical Support Director or Vice President of the Product Quality & Support department. A Non-Disclosure Agreement (NDA), signed by both the requesting party and a management representative of Product Support, is also required for distribution of proprietary protocol documents. Requests for proprietary protocols should be discouraged and avoided if at all possible, and will be granted only in extreme cases of need or opportunity.

Should it be determined that access to a proprietary protocol may be merited, a Technical Solutions Matrix Support Team representative may direct the requesting party to the following webpage, (http://www.pelco.com/protocols/requestprotocol.aspx). Here, requestors can petition for access to a proprietary protocol by registering their request in the fields provided on the page. Contact and justification information will be gathered via the web interface and stored in a similar fashion to that of non-proprietary protocol requests.

In place of the e-mail distribution mechanism presented in the non-proprietary protocol page, submission of registrant's information will generate an instant e-mail alert to the appropriate, assigned Product Support representative. The assigned representative will forward the request to Product Support Management and coordinate contact with the requesting party pending review of the request.

The following cases and resulting actions are possible in the disposition of proprietary protocols:

- Case 1: Request is denied after completion of review.
- Action 1: A Product Support representative shall contact the requestor via electronic or postal mail stating the disposition of the request and providing a formal response explaining the reasons for refusal.
- Case 2: Request is approved after completion of review.
- Action 2: A Product Support representative shall contact the requestor via electronic
 or postal mail with a formal response announcing the approval of the request, issue
 the appropriate NDA document, and any supporting documentation prescribed by
 Product Support management.

3.6.1. Distribution of Proprietary Protocols

Upon receipt, review, and approval of the signed NDA (and any supporting documents) by Product Support Management, a representative of Product Support will distribute the approved protocol documents to the requesting party via electronic or postal mail. In the event that both internal and external versions of a proprietary protocol exit, only the external version may be distributed to the requesting customer.

3.6.2. Distribution Authority

Employees are not authorized to distribute protocol documents (other than the public ASCII, G or D documents described above), even if they believe that an NDA is in effect. Distribution of these documents outside of the company is

handled strictly through the Product Support Department with the approval of the Global Technical Support Director or the Vice President of Product Quality & Support. Employees found in violation of this procedure are subject to disciplinary action or dismissal.

4. Reason for Reissue

Revision C (2/3/00): Modify section 3.2.2

Revision D (12/28/06): Revised entire procedure and departmental ownership (Mario Rosso,

Product Support)

Revision E (6/23/08): Revised entire procedure to reflect new organizational structure,

removal of Customer Support Information Services (CSIS) as control point for protocol distribution, and added language related to external

and internal protocols (Mario Rosso, Product Support)